

4.13 TRANSPORTATION/CIRCULATION

This section analyzes impacts to the local transportation and circulation system, including long-term impacts associated with operation of the Project. The analysis is based primarily on a traffic study for the Project prepared by Associated Traffic Engineers (ATE), dated January 29, 2016 and a Pre-Construction Soil Removal Phase Traffic Impact Analysis Memorandum prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November 30, 2015. These reports are included in Appendix I.

4.13.1 Setting

The Project site is located on the east side of S. Los Carneros Road north of the Calle Koral intersection in the western area of the City of Goleta. The 17.36-gross acre site is currently vacant and undeveloped. The Project proposes the construction of 132 senior apartment units, 228 apartment units, and a 2-acre park. Access to the Project site would be provided via three driveways on Camino Vista, which extends along the southern frontage of the site.

a. Existing Street System. Primary regional access to the study area is provided by U.S. 101 via Los Carneros Road. U.S. 101 generally runs in a north-south direction throughout California; however, in the Santa Barbara County area, it runs in an east-west direction. The circulation system in the study area is comprised of regional highways, arterial roadways and residential streets. The principal components of this street network are discussed in the following text and shown in relation to the Project site in Figure 4.13-1.

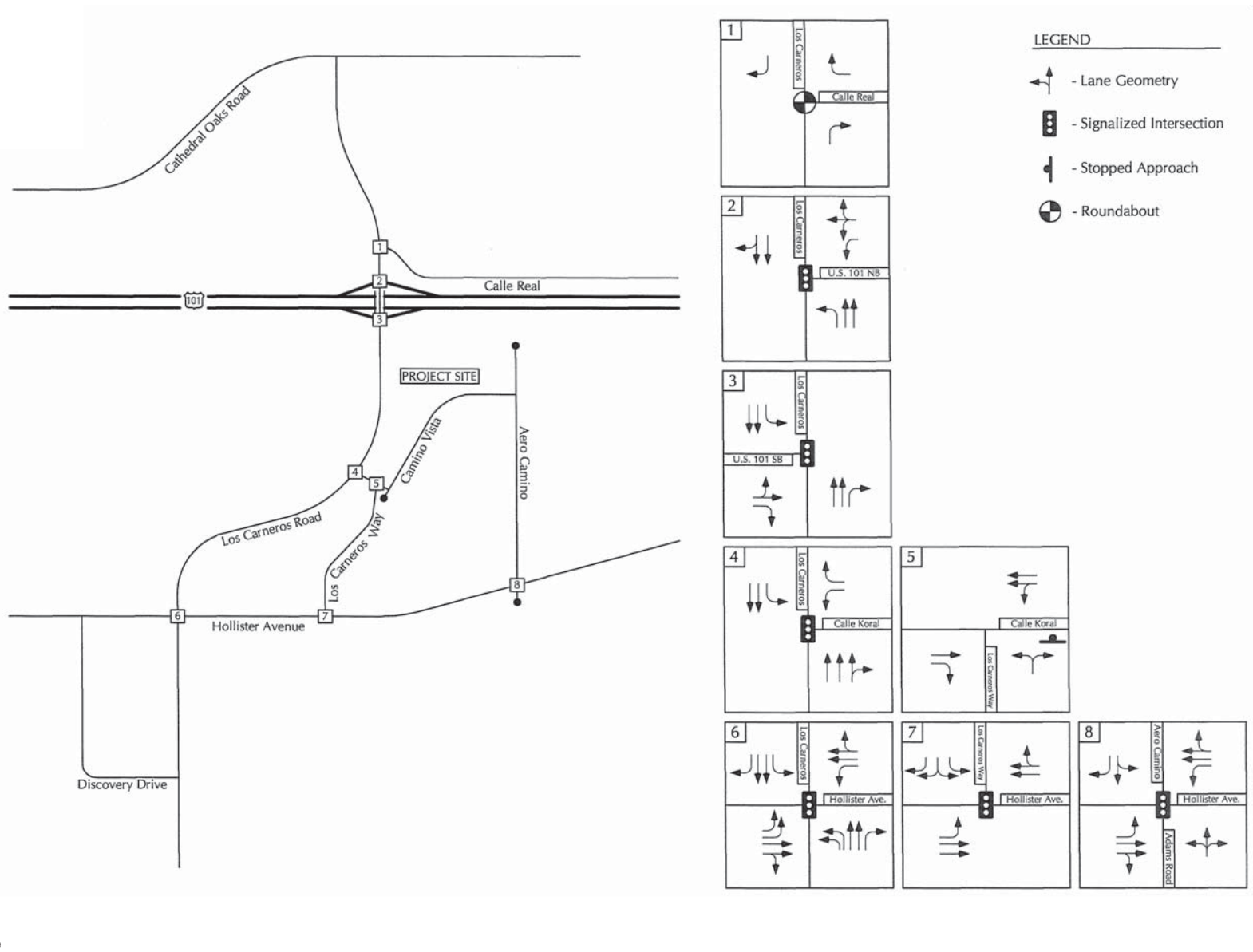
U.S. Highway 101 (U.S. 101), located north of the Project site, is a multi-lane interstate highway serving the Pacific Coast between Los Angeles and the state of Washington. This freeway is the principal route between the City of Goleta and the adjacent cities of Santa Barbara, Carpinteria, and Ventura to the south; and the cities of Buellton and Santa Maria to the north. Access to U.S. 101 would be provided via the Los Carneros Road interchange.

Hollister Avenue, located south of the Project site, is an arterial roadway that serves as the main east-west surface street through the community of Goleta. Hollister Avenue is a 4-lane divided arterial with on-street bike lanes. Within the Study Area, Hollister Avenue is signalized at Los Carneros Road, Los Carneros Way, and Aero Camino intersections.

Los Carneros Road, located west of the Project site, is a north-south arterial street. North of Hollister Avenue, Los Carneros Road extends as 4- to 5-lane roadway connecting with the U.S. 101 interchange and continues north as a 2-lane roadway to its terminus at Cathedral Oaks Road. Los Carneros Road has recently been widened to 4-lanes south of Hollister Avenue to Discovery Drive. South of Discovery Drive, Los Carneros Road continues as a 2-lane roadway and provides access to the Isla Vista-UCSB area. Within the study area, Los Carneros Road is signalized at the U.S. 101 Northbound Ramp, Southbound Ramp, Calle Koral, and Hollister Avenue intersections.

Los Carneros Way is a 2-lane road located south of the Project site that extends between Calle Koral and Hollister Avenue. Los Carneros Way is stop controlled at the Calle Koral intersection, and the Hollister Avenue/Los Carneros Way intersection is controlled by traffic signals.





Source: Associated Transportation Engineers, 2015.

Intersection Lane Geometry and Traffic Controls

Figure 4.13-1

City of Goleta

Calle Koral, located southwest of the Project site, is a 2-lane road that extends from Los Carneros Road to Camino Vista. The Calle Koral/Los Carneros Road intersection is controlled by traffic signals and the Calle Koral/Camino Vista intersection is uncontrolled.

Aero Camino, located east of the Project site, is a 2-lane road that serves the existing industrial land uses and extends north from Hollister Avenue to its terminus south of U.S. 101. The Hollister Avenue/Aero Camino intersection is controlled by traffic signals.

Camino Vista, located along the southern frontage of the Project site, is a 2-lane road that extends easterly from Calle Koral serving the Willow Springs I and Willow Springs II apartment complexes. The segment of Camino Vista between the Willow Springs II apartments and Aero Camino has recently been constructed as part of the Willow Springs II development and is now open for public travel.

Recently Constructed Improvements. The City of Goleta recently finished replacing the Los Carneros Road bridge over the Union Pacific Railroad adjacent to the U.S. 101 interchange. The new bridge includes a dedicated right-turn lane for the northbound approach of Los Carneros Road to the U.S. 101 Southbound On-Ramp and two travel lanes in both directions. The right-turn lane extends northerly from Calle Koral to the U.S. 101 Southbound On-Ramp. Los Carneros Road was also widened south of the Calle Koral intersection to provide three northbound travel lanes. The Project also installed Class II bike lanes on Los Carneros Road in both directions.

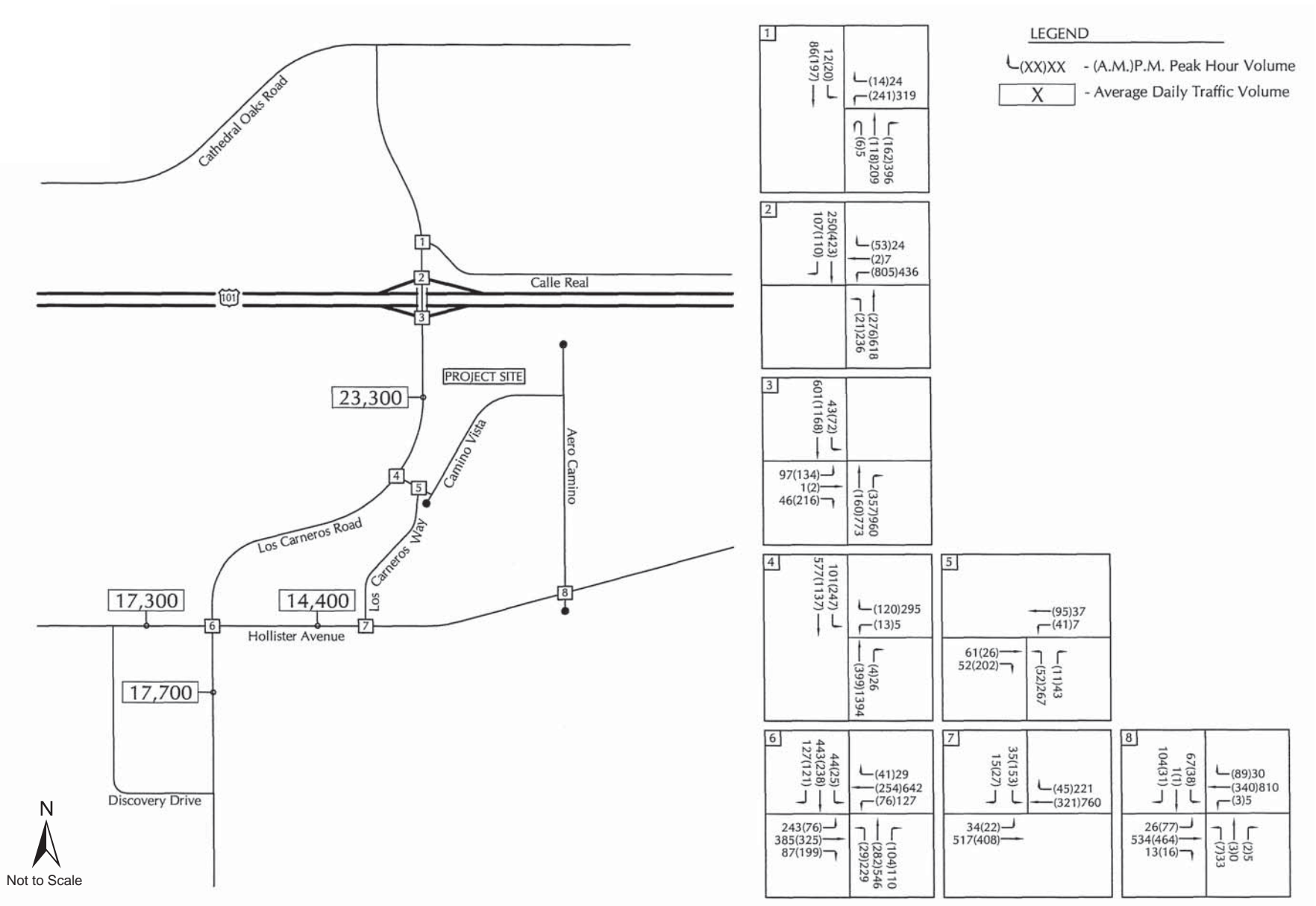
The segment of Camino Vista between Calle Koral and Aero Camino was recently constructed as part of the Willow Springs II development. This new roadway segment is now open for public travel and provides a new travel route from the Aero Camino corridor to the Los Carneros Road interchange.

b. Existing Traffic Volumes and Levels of Service. The following sections present the existing peak hour traffic volumes at intersections in the study area, the existing average daily traffic (ADT) volumes for the street segments, a description of the methodology used to analyze the intersection and roadway segment traffic conditions, and the resulting level of service at each location under existing conditions.

Existing Roadway Segment Volumes. Figure 4.13-2 shows the existing ADT volumes for the study area roadways. Existing roadway volumes were obtained from counts conducted by ATE in 2013 (refer to Appendix I). It should be noted that the ATE traffic study identifies project conditions at the time the Notice of Preparation was prepared in accordance with CEQA Guidelines Section 15125(a). The operational characteristics of the study area roadways were analyzed based on the City of Goleta engineering roadway design capacities. Table 4.13-1 shows the existing ADT volumes and the City's Acceptable Capacity thresholds for the key roadways in the Project study area.

The data in Table 4.13-1 show the existing (2013) roadway volumes on the study area roadway segments. Based on this data, these roadways carry volume within the City of Goleta's Acceptable Capacity designations.





Source: Associated Transportation Engineers, 2015.

Existing Traffic Volumes

Figure 4.13-2

**Table 4.13-1
Existing Roadway Operations**

Roadway Segment	Roadway Classification	Geometry	Acceptable Capacity	Existing ADT
Los Carneros Road south of U.S. 101 SB Ramp ^a	Major Arterial	5-Lane	47,000	23,300
Los Carneros Road south of Hollister Avenue ^b	Major Arterial	4-lane	34,000	17,700
Hollister Avenue west of Los Carneros Road	Major Arterial	4-Lane	34,000	17,300
Hollister Avenue east of Los Carneros Road	Major Arterial	4-Lane	34,000	14,400

(a) Roadway recently widened to 5-lanes between U.S. 101 and Calle Koral.

(b) Roadway recently widened to 4-lanes between Hollister Avenue and Discovery Drive.

Existing Intersection Operations/Levels of Service. Because traffic flow on urban arterials is most constrained at intersections, detailed traffic flow analyses focus on the operating conditions of critical intersections during peak travel periods. In rating intersection operations, “Levels of Service” (LOS) A through F are used, with LOS A indicating free flow operations and LOS F indicating congested operations. The City of Goleta has established LOS C as the minimum acceptable operating standard for intersections. Table 4.13-2 presents the LOS criteria for intersections.

**Table 4.13-2
Level of Service Criteria for Intersections**

LOS	Signalized intersections (V/C Ratio)	Unsignalized intersections (Sec. of delay)	Definition
A	< 0.60	≤ 10	Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.
B	0.61 – 0.70	> 10 and ≤ 15	Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.
C	0.71- 0.80	> 15 and ≤ 25	Conditions of stable flow, delays are low to moderate, full use of peak direction signal phases is experienced.
D	0.81 – 0.90	> 25 and ≤ 35	Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.
E	0.91 – 1.00	> 35 and ≤ 50	Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.
F	> 1.00	> 50	Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

Source: Highway Capacity Manual, 2000 Edition.

Peak hour volumes for the study area intersections were obtained from traffic counts conducted in 2012 and 2013 (refer to Appendix I). Figure 4.13-1 presents the existing lane geometry and traffic controls for the study area intersections. Figure 4.13-2 shows the existing peak hour turning movements for the study area intersections. Levels of service were calculated for the signalized intersections using the “Intersection Capacity Utilization” (ICU) methodology. Levels of service for the stop-sign controlled and



roundabout intersections were calculated using the methodology outlined in the Highway Capacity Manual (HCM). Table 4.13-3 presents the existing levels of service for the study area intersections.

**Table 4.13-3
Existing Intersection Levels of Service**

Intersection	Control	A.M. Peak		P.M. Peak	
		ICU/Delay	LOS	ICU/Delay	LOS
Los Carneros Road/Calle Real ^a	Roundabout	6.4 sec.	LOS A	9.4 sec.	LOS A
Los Carneros Rd/U.S. 101 NB Ramp	Signal	0.54	LOS A	0.49	LOS A
Los Carneros Rd/U.S. 101 SB Ramp ^b	Signal	0.55	LOS A	0.72	LOS C
Los Carneros Road/Calle Koral ^b	Signal	0.46	LOS A	0.51	LOS A
Calle Koral/Los Carneros Way ^a	Stop Sign	8.3 sec.	LOS A	9.8 sec.	LOS A
Calle Koral/Camino Vista	Yield	N/A	N/A	N/A	N/A
Los Carneros Road/Hollister Avenue	Signal	0.39	LOS A	0.59	LOS A
Los Carneros Way/Hollister Avenue	Signal	0.28	LOS A	0.43	LOS A
Aero Camino/Hollister Avenue	Signal	0.31	LOS A	0.44	LOS A

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

(b) LOS assumes recently-completed improvements.

The data presented in Table 4.13-3 show that all of the study area intersections currently operate at LOS C or better during the A.M. and P.M. peak hour periods. These operations are considered acceptable based on the City's LOS C operating standard.

c. Existing Transit System and Bicycle Infrastructure. The Santa Barbara Metropolitan Transit District (MTD) provides local bus service for the region. The nearest bus stops to the Project site are located on Hollister Avenue at the Aero Camino intersection (approximately 0.3 miles south of the Project site). The existing bus stops are served by MTD Lines 6 and 12x, which provide transit service to/from downtown Santa Barbara to the Old Town Goleta and Camino Real Marketplace areas. Data published on the MTD website indicate that in November 2015, Line 6 carried an average of 33.9 passengers per operating hour, which is slightly below the system wide average of 35.7 passengers per operating hour, and Line 12x carried an average of 36.3 passengers per operating hour, which is slightly higher than the system wide average. The data also shows that both routes experienced 4-10 “at capacity” loads and 3-4 “too full to board” loads during the month of November 2015 (MTD data are included in the Technical Appendix to the ATE traffic study, Appendix I). Census data collected in 2010 show that 5% of commuters in the Goleta area utilize public transportation (census data are included in the Technical Appendix to the ATE traffic study, Appendix I).

Class II bicycle lanes are currently provided along both sides of Camino Vista adjacent to the Project site. The Camino Vista bicycle lanes connect to the existing Class II bicycle lanes provided on Calle Koral, Los Carneros Road, and Hollister Avenue. Census data collected in 2010 show that 6% of commuters in the Goleta travel to work on bicycles (census data are included in the Technical Appendix to the ATE traffic study, Appendix I).



4.13.2 Impact Analysis

a. Methodology and Significance Thresholds. This section describes how the potential for Project-generated traffic impacts were determined.

Project-Generated Traffic Projections. Trip generation estimates were calculated for the Project using the rates contained in the Institute of Transportation Engineers (ITE) Trip Generation Manual 9th Edition and traffic counts conducted at the existing Willow Springs I apartment complex, located just south of the Project site (refer to Appendix I). For the senior apartments, the trip generation analysis is based on the ITE rates for Senior Adult Housing (ITE Land Use Code #252). For the apartments, the analysis uses the ITE Apartment rates (ITE Land Use Code #220) to calculate average daily trips.

Cumulative Traffic Projections. Cumulative traffic volumes were forecast using the City's traffic model. The cumulative forecasts include traffic generated by the approved and pending projects proposed within the City of Goleta (refer to Appendix I) as well as development of the UCSB Long Range Development Plan (LRDP), the Santa Barbara Airport Specific Plan and terminal expansion, and regional growth in the Goleta-Santa Barbara area.

Congestion Management Program Analysis. The Santa Barbara County Association of Governments (SBCAG) has developed a set of traffic impact thresholds to assess the impacts of land use decisions made by local jurisdictions on regional transportation facilities located within the Congestion Management Program (CMP) roadway system. The following guidelines were developed by SBCAG to determine the significance of Project-generated traffic impacts on the regional CMP system.

1. For any roadway or intersection operating at LOS A or B, a decrease of two levels of service resulting from the addition of project-generated traffic.
2. For any roadway or intersection operating at LOS C, project-added traffic that results in LOS D or worse.
3. For intersections within the CMP system with existing congestion, the following table defines significant impacts.

Level of Service	Project-Added Peak Hour Trips
LOS D	20
LOS E	10
LOS F	10

4. For Highway or Highway segments with existing congestion, the following table defines significant impacts.

Level of Service	Project-Added Peak Hour Trips
LOS D	100
LOS E	50
LOS F	50



Significance Thresholds. Based on Appendix G of the *CEQA Guidelines*, a significant impact related to public services could occur under the following scenarios:

1. *Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?*
2. *Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*
3. *Would the project result in a change in air traffic pattern, including either an increase in traffic levels or a change in location that results in substantial safety risks?*
4. *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*
5. *Would the project result in inadequate emergency access?*
6. *Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

Impacts associated with air traffic patterns, design hazards, and emergency access, which are addressed in CEQA Appendix G Thresholds 3, 4, and 5 were determined to be less than significant, and are discussed in Section 4.15, *Effects Found Not to be Significant*.

In order to assess whether these thresholds are exceeded, the City of Goleta's CEQA traffic impact thresholds were used for this analysis, and include the following criteria:

- A. The project would result in a significant impact on transportation and circulation if project traffic increases the volume to capacity (V/C) ratio at local intersections by the values provided in Table 4.13-4.
- B. The project's access to a major road or arterial road would require access that would create an unsafe situation, a new traffic signal, or major revisions to an existing traffic signal.
- C. The project would add traffic to a roadway that has design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure) that would become a potential safety problem with the addition of project traffic.
- D. Project traffic would utilize a substantial portion of an intersection's capacity where the intersection is currently operating at acceptable levels of service, but with cumulative traffic would degrade to or approach LOS D (V/C 0.80) or lower. Substantial is defined as a minimum change of 0.03 for an intersection which would operate from 0.80 to 0.85, a change of 0.02 for an intersection which would operate from 0.86 to 0.90 and a change of 0.01 for an intersection which would operate greater than 0.90 (LOS E or worse).



**Table 4.13-4
 Significant Changes in Level of Service**

Level of Service (including Project)	Increase in V/C or Trips Greater Than
A	0.20
B	0.15
C	0.10
Or the addition of	
D	15 trips
E	10 trips
F	5 trips

b. Project Impacts and Mitigation Measures.

Trip Generation. A.M. and P.M. peak hour trip rates for the apartment units were developed from driveway counts conducted at the existing Willow Springs I apartments (refer to Appendix I). These rates better reflect local data and are slightly higher than the ITE average rates for apartment units. Table 4.13-5 presents the trip generation estimates for the Project.

As shown in Table 4.13-5, the Project would generate an estimated 1,970 average daily trips, 174 A.M. peak hour trips, and 183 P.M. peak hour trips.

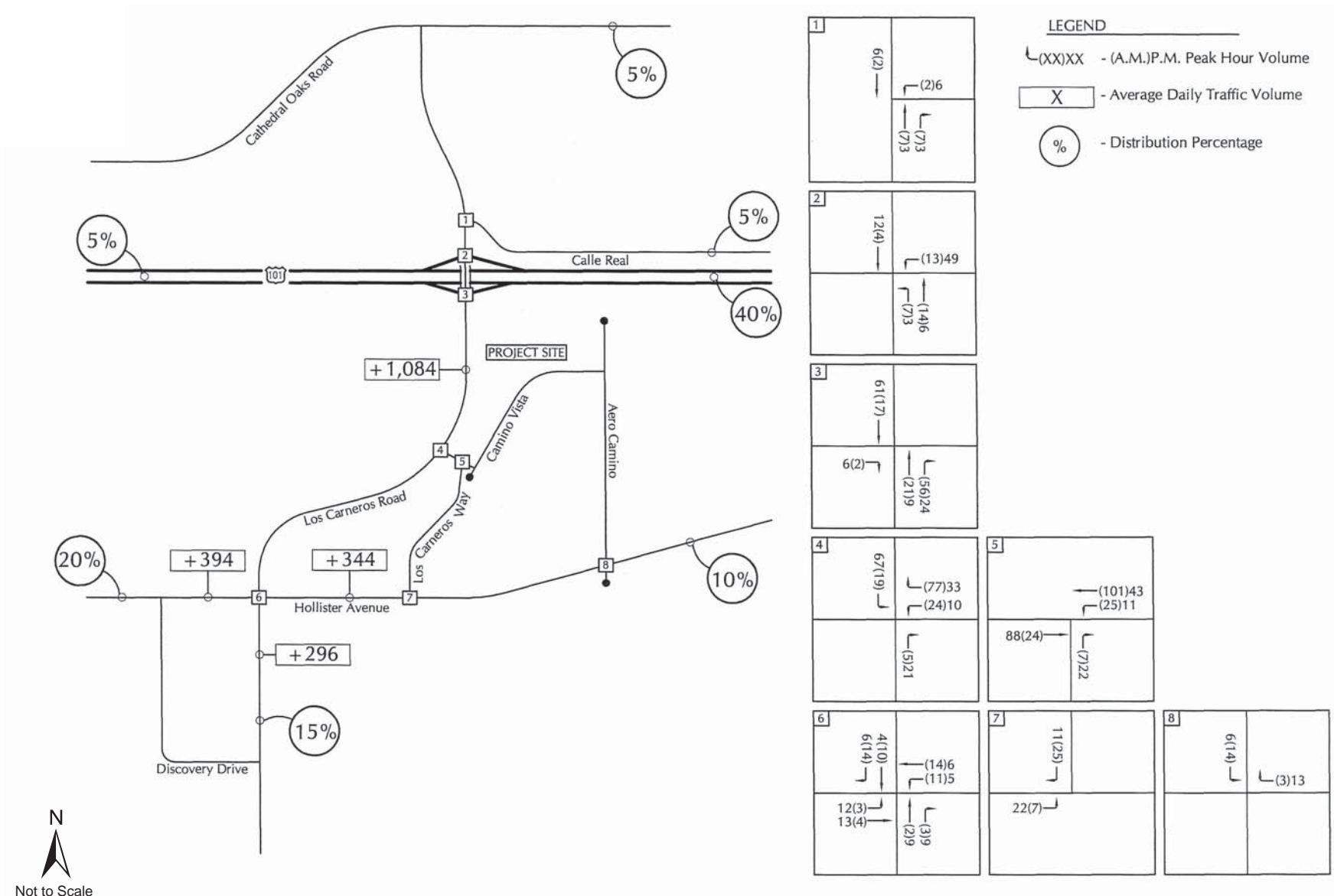
**Table 4.13-5
 Project Trip Generation**

Land Use	Size	Average Daily		A.M. Peak Hour		P.M. Peak Hour	
		Rate	Trips	Rate	Trips (In/Out)	Rate	Trips (In/Out)
Senior Apartments	132 units	3.44	454	0.20	26 (9/17)	0.25	33 (18/15)
Apartments ^a	228 units	6.65	1,516	0.65	148 (25/123)	0.66	150 (105/45)
Totals	360 units		1,970		174 (34/140)		183 (123/60)

(a) ADT rate based on ITE average rate for Apartments, A.M. and P.M. rates based on Willow Springs I study.

Trip Distribution. Trip distribution percentages were developed for the Project based on existing traffic patterns observed at the Willow Springs I apartment complex. The distribution pattern assumes recent improvements to the local roadway network, including the extension of Camino Vista from Calle Koral to Aero Camino, which was recently constructed as part of the Willow Springs II Project and is now open for vehicular access. Traffic from the Project site would leave the site via Calle Koral, and then travel either north on Los Carneros Road toward U.S. 101, Calle Real, and Cathedral Oaks, or south on Los Carneros Road toward Hollister Avenue. Table 4.13-6 presents the trip distribution percentages developed for the Project. Figure 4.13-3 shows the trip distribution pattern and shows the assignment of Project-added traffic.





Source: Associated Transportation Engineers, 2015.

Project Trip Distribution and Assignment

Figure 4.13-3
 City of Goleta

**Table 4.13-6
 Project Trip Distribution**

Origin/Destination	Direction	Percentage
U.S. 101	East	40%
	West	5%
Hollister Avenue	East ^a	10%
	West	20%
Los Carneros Road	South of Hollister	15%
Cathedral Oaks Road	East	5%
Calle Real	East	5%
Total		100%

(a) Via Aero Camino.

Impact T-1 Project-generated traffic would increase existing traffic volumes on area roadways. Roadway volumes would remain within the City's Acceptable Capacity ratings. Impacts related to roadway segment volume increases would be Class III, less than significant [Threshold 1].

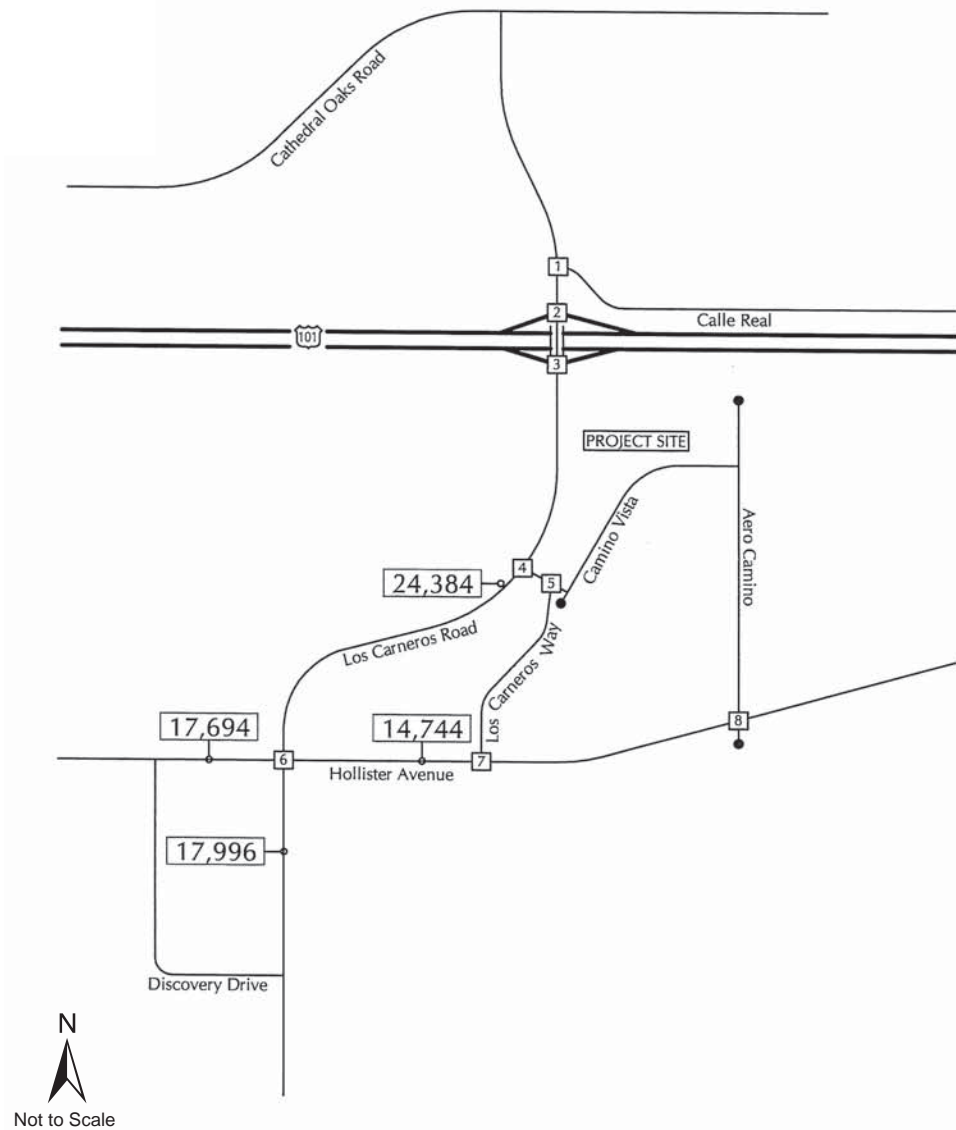
As shown in Table 4.13-5, the Project would generate an estimated 1,970 daily trips, including 174 trips during A.M. peak hours and 183 trips during P.M. peak hours. Figure 4.13-4 shows the estimated ADT volumes on roadways near the Project site after adding Project-generated traffic to existing traffic. Table 4.13-7 presents the Existing and Existing + Project roadway volumes and identifies the potential impacts of the Project's traffic additions based on the City of Goleta's Acceptable Capacity thresholds.

The data presented in Table 4.13-7 show that the Existing + Project roadway volumes would remain within the City's Acceptable Capacity ratings with the addition of Project traffic. The Project would therefore not generate Project-specific impacts to the study-area roadway segments.

**Table 4.13-7
 Existing + Project Roadway Volumes**

Roadway Segment	Acceptable Capacity	Existing ADT	Existing + Project ADT	% Change	Significant Impact?
Los Carneros Road south of U.S. 101 SB Ramp	47,000	23,300	24,384	4.7%	No
Los Carneros Road south of Hollister Avenue	34,000	17,700	17,996	1.7%	No
Hollister Avenue west of Los Carneros Road	34,000	17,300	17,694	2.3%	No
Hollister Avenue east of Los Carneros Road	34,000	14,400	14,744	2.4%	No





N
 Not to Scale

LEGEND

└(XX)XX - (A.M.)P.M. Peak Hour Volume
 X - Average Daily Traffic Volume

1	12(20) 92(199)	└(14)24 └(243)325	└(169)399 └(125)212 └(6)5
2	262(427) 107(110)	└(53)24 └(2)7 └(818)485	└(290)624 └(28)239
3	43(72) 662(1185)	└(181)782	└(413)984 └(181)782
4	168(266) 577(1137)	└(197)328 └(37)15	└(9)47 └(399)1394
5		└(208)122 └(66)18	└(18)65 └(40)225
6	44(23) 447(248) 133(133)	└(41)29 └(268)648 └(87)132	└(107)119 └(28)4555 └(29)229
7	25(122) 26(52)	└(33)179 └(321)760	56(29) 517(408)
8	73(52) 1(1) 62(19)	└(92)43 └(340)810 └(3)5	└(2)5 └(3)0 └(7)33
	17,694		
	17,996		
	24,384		
	14,744		

Source: Associated Transportation Engineers, 2015.

Existing+Project Traffic Volumes

Figure 4.13-4
 City of Goleta

Mitigation Measures. Mitigation is not required because impacts would be less than significant.

Residual Impact. Impacts would be less than significant without mitigation.

Impact T-2 **Project-generated traffic would increase existing turning volumes at intersections in the study area. However, Existing + Project traffic levels at intersections would operate at LOS C or better. Impacts would be Class III, less than significant [Threshold 1].**

Existing Plus Project Intersection Operations. Levels of service were calculated for the study-area intersections assuming the Existing + Project traffic volumes presented on Figure 4.13-4. As noted previously, the calculations assume completion of the Los Carneros Road Overhead Bridge Replacement Project that was recently completed, and the opening of the Camino Vista extension from Calle Koral to Aero Camino. The Camino Vista extension provides a new connection between Aero Camino and the Los Carneros Road interchange that alters the existing traffic patterns within the study area. These traffic patterns are accounted for in the analysis (refer to Appendix I). Table 4.13-8 compares the Existing and Existing+ Project levels of service and identifies Project-specific impacts for intersections during the A.M. peak hours based on City thresholds.

Table 4.13-9 compares the Existing and Existing + Project levels of service and identifies Project-specific impacts for intersections during P.M. peak hours based on City thresholds.

The data presented in Table 4.13-8 and Table 4.13-9 show that the study area intersections are forecast to operate at LOS C or better with the addition of Project traffic during both the A.M. and P.M. peak hours. The Project would not generate significant impacts to the study-area intersections based on the City's Project-specific traffic impact thresholds.

Village at Los Carneros Project Improvements. The Village at Los Carneros Project is programmed to build the western leg of the Los Carneros Road/Calle Koral intersection in order to provide access to that Project site. Levels of service were calculated for the Los Carneros Road/Calle Koral intersection assuming completion of the western leg to determine the effects of Project traffic on the intersection (refer to Appendix I). Table 4.13-10 presents the Existing+ Project levels of service for the Los Carneros Road/Calle Koral intersection assuming construction of the western leg.



**Table 4.13-8
Existing + Project Intersection Operations – A.M. Peak Hour**

Intersection	Existing		Existing + Project		Project-Added		Significant Impact?
	ICU/delay	LOS	ICU/delay	LOS	Trips	V/C	
Los Carneros Road/Calle Real	6.4 sec	LOS A	6.5 sec	LOS A	18	0.020	No
Los Carneros Road/U.S. 101 NB Ramp	0.54	LOS A	0.55	LOS A	38	0.011	No
Los Carneros Road/U.S. 101 SB Ramp ^a	0.55	LOSA	0.56	LOSA	96	0.005	No
Los Carneros Road/Calle Koral	0.46	LOS A	0.46	LOS A	125	0.001	No
Calle Koral/Los Carneros Way	8.1 sec	LOS A	8.3 sec	LOS A	157	0.040	No
Calle Koral/Camino Vista ^b	N/A	N/A	N/A	N/A	157	N/A	No
Hollister Avenue/Los Carneros Road	0.39	LOS A	0.40	LOS A	61	0.008	No
Hollister Avenue/Los Carneros Way ^b	0.26	LOS A	0.27	LOS A	32	0.006	No
Hollister Avenue/Aero Camino ^b	0.29	LOS A	0.30	LOS A	17	0.009	No

(a) Assumes completion of the Los Carneros Road Overhead Bridge Replacement Project.

(b) Level of Service not applicable, no conflicting movements.

**Table 4.13-9
Existing + Project Intersection Operations – P.M. Peak Hour**

Intersection	Existing		Existing + Project		Project-Added		Significant Impact?
	ICU/delay	LOS	ICU/delay	LOS	Trips	V/C	
Los Carneros Road/Calle Real	9.4 sec	LOS A	9.5 sec	LOS A	18	0.020	No
Los Carneros Road/U.S. 101 NB Ramp	0.49	LOS A	0.51	LOS A	70	0.021	No
Los Carneros Road/U.S. 101 SB Ramp ^a	0.72	LOSC	0.73	LOSC	100	0.013	No
Los Carneros Road/Calle Koral	0.51	LOS B	0.56	LOS C	131	0.052	No
Calle Koral/Los Carneros Way	9.5 sec	LOS A	10.2 sec	LOS B	164	0.072	No
Calle Koral/Camino Vista ^b	N/A	N/A	N/A	N/A	164	N/A	No
Hollister Avenue/Los Carneros Road	0.59	LOS A	0.60	LOS A	64	0.008	No
Hollister Avenue/Los Carneros Way ^b	0.42	LOS A	0.43	LOS A	33	0.015	No
Hollister Avenue/Aero Camino ^b	0.44	LOS A	0.44	LOS A	19	0.006	No

(a) Assumes completion of the Los Carneros Road Overhead Bridge Replacement Project.

(b) Level of Service not applicable, no conflicting movements.

**Table 4.13-10
Existing + Project Levels of Service –
Los Carneros Road/Calle Koral Intersection w/ Western Leg**

Intersection	Existing		Existing + Project		Project-Added Trips	Significant Impact?
	ICU/delay	LOS	ICU/delay	LOS		
Los Carneros Road/Calle Real – A.M.	0.59	LOS A	0.61	LOS B	125	No
Los Carneros Road/Calle Real – P.M.	0.57	LOS A	0.62	LOS B	131	No



The data presented in Table 4.13-10 indicate that the Los Carneros Road/Calle Koral Intersection with the western leg is forecast to operate at LOS B during the peak hour periods with Existing+ Project traffic volumes. Therefore, the Project would not generate significant impacts to this location.

Mitigation Measures. Mitigation is not required because impacts would be less than significant.

Residual Impact. Impacts would be less than significant without mitigation.

Impact T-3 **Three intersections and a highway segment in the CMP network are located in the vicinity of the Project site. With the addition of Project-generated traffic to existing traffic volumes, CMP intersections are forecast to operate at LOS C or better. Therefore, impacts to the CMP network would be Class III, less than significant [Threshold 2].**

Potential Intersection Impacts. The Los Carneros Road/U.S. 101 NB Ramps, Los Carneros Road/U.S. 101 SB Ramps, and Los Carneros Road/Hollister Avenue intersections are located within the CMP network. As shown on Table 4.13-8 and Table 4.13-9, the CMP intersections are forecast to operate at LOS C or better with Existing+ Project traffic volumes. Therefore, the Project would not generate a significant impact to the CMP network based on CMP impact criteria.

Potential Freeway Impacts. The Project is forecast to add 9 P.M. peak hour trips to U.S. 101 north of Los Carneros Road and 73 P.M. peak hour trips to U.S. 101 south of Los Carneros Road. The CMP threshold for freeway impacts is 50 trips for segments operating at LOS E or LOS F and 100 trips for segments operating at LOS D. Data provided by SBCAG indicates that the segment of U.S. 101 between Los Carneros Road and Fairview Avenue currently operates at LOS C (refer to Appendix I). Based on these CMP impact criteria, the Project would not generate a significant impact to the freeway segment located between Los Carneros Road and Fairview Avenue.

Mitigation Measures. Mitigation is not required because impacts would be less than significant.

Residual Impact. Impacts would be less than significant without mitigation.

Impact T-4 **The Project would generate additional demand for public transit services and alternative transportation infrastructure. The Project would not substantially increase transit ridership or impact the operations of bicycle facilities in the Project site vicinity. Impacts to alternative transportation would be Class III, less than significant [Threshold 6].**

The Project would generate an estimated 776 residents, which would increase demand for alternative transportation facilities.

Transit. Census data collected in 2010 show that 5% of commuters in the Goleta area utilize public transportation (refer to Appendix I). Therefore, the Project would result in approximately 11 new transit users during the peak periods (7:00 to 9:00 A.M. and 4:00 to 6:00 P.M.) (refer to Appendix I). There are currently 22 busses that serve the site during the weekday peak hour periods; thus, the Project would add less than 1 rider per bus. The new bus riders generated by the Project would not



measurably impact the operations of the transit routes that serve the site. Therefore, impacts related to transit would be less than significant.

Bicycling. The Project would result in approximately 14 new bicycle riders that would commute during the peak hour periods (refer to Appendix I). The Project would facilitate bicycle riding among site residents by providing a bicycle parking area at each residential building and the recreational building with a total of approximately 77 bicycle parking spaces. An additional 8 bicycle parking spaces would be provided at the park. The increase in bicycle ridership generated by the Project would not significantly impact the operations of the bicycle facilities in the vicinity of the Project site. Therefore, impacts related to bicycling and bicycling infrastructure would be less than significant.

Mitigation Measures. Mitigation is not required because impacts would be less than significant.

Residual Impact. Impacts would be less than significant without mitigation.

Impact T-5 **Pre-Construction soil export activity would add temporary employee and heavy truck trips to intersections in the Project vicinity. Affected intersections would continue to operate at LOS C or better under the Existing + Project and Cumulative scenarios. However, haul trucks using Aero Camino east of the Project site may result in traffic impacts. Therefore, traffic impacts due to pre-construction soil hauling would be Class II, significant but mitigable [Threshold 1].**

As described in Section 2.0, *Project Description*, the Project would require 115,000 cubic yards (CY) of soil export prior to construction. The removal of this soil is expected to follow one of two pre-construction export scenarios:

1. Revised Pre-Construction Export Scenario 1: Total of 25,556 one-way haul truck trips (12,778 round truck trips) assuming a truck capacity of 9 CY (typically 3- to 4-axle trucks) over a 27-week export phase.
2. Revised Pre-Construction Export Scenario 2: Total of 11,500 one-way haul truck trips (5,750 round truck trips) assuming a truck capacity of 20 CY (typically 4- to 5-axle trucks) over a 24-week export phase.

Heavy truck trips contribute to both traffic congestion and wear & tear on area roadways. Potential traffic impacts associated with the pre-construction soil hauling are described below. Wear & tear on area roadways does not constitute an environmental impact under CEQA. The applicant would be required by the City to pay their fair share contribution to repairing wear & tear associated with the pre-construction soil hauling activity as a condition of approval for the Project.

Trip Generation. Soil hauling activities would also require three workers on site to load material and two trucks driven to the site daily. LLG prepared a Pre-Construction Soil Removal Phase Traffic Impact Analysis for the Project in November 2015 (refer to Appendix I). For this analysis, the Project trip generation forecast was based on the development of employee and truck forecasts given the expected hauling capacities as well as the application of passenger car equivalency (PCE) factors. The forecast of employee vehicle trips was provided and accounts for the employees that will be on-site during the soil removal phase. Three inbound trips during the A.M. peak hour and three outbound trips



during the P.M. peak hour are anticipated for the employees. In developing the forecast of truck trip generation, several factors were taken into consideration:

- Hours of Hauling Operation (8:30 A.M. to 3:30 P.M. on weekdays)
- Capacity of Haul Trucks (9 or 20 CY per truck)
- Application of PCE Factors (2.0 or 3.0)
- Amount of Anticipated Export (115,000 cy)

Based on information provided by the City, a maximum of 12 inbound and 12 outbound truck trips per hour are expected using trucks with a hauling capacity of 9 CY while a maximum of six inbound and six outbound truck trips per hour are expected using trucks with a 20 cubic yard hauling capacity. In order to account for the effect that trucks have on overall intersection operations, PCE factors were accounted for in the analysis of potential short-term traffic impacts. Based on a review of the size of haul trucks expected to be utilized, a PCE factor of 2.0 or 3.0 was incorporated into the traffic analysis (i.e., it is assumed that a single 9 cubic yard haul truck has the same overall effect on traffic operations as two passenger cars and that a single 20 cubic yard haul truck has the same overall effect on traffic operations as three passenger cars). This assumption is conservative and accounts for the heavy vehicle type and slower speeds when fully loaded. The traffic generation forecast for the pre-construction soil removal phase is summarized in Table 4.13-11.

**Table 4.13-11
 Pre-Construction Soil Removal Phase Trip Generation ¹**

Land Use	Daily Trip Ends ²	A.M. Peak Hour Volumes ²			P.M. Peak Hour Volumes ²		
		In	Out	Total	In	Out	Total
[A] Employees	6	3	0	3	0	3	3
[B] 9 CY Truck Trips (unadjusted) ³	192	12	12	24	12	12	24
[C] 20 CY Truck Trips (unadjusted) ⁴	96	6	6	12	6	6	12
[D] PCE Adjusted 9 CY Truck Trips ⁵	384	24	24	48	24	24	48
[E] PCE Adjusted 20 CY Truck Trips ⁶	288	18	18	36	18	18	36
Net Increase with 9 CY Trucks ([A] + [D])	390	27	24	51	24	27	51
Net Increase with 20 CY Trucks ([A] + [E])	294	21	18	39	18	21	39

1. Source: Based on coordination with City (a total of 115,000 CY of soil to be exported).
2. Trips are one-way traffic movements, entering or leaving.
3. Peak hour and daily truck trips were derived based on the following, using 9 CY capacity per haul truck:
 12 trucks inbound / 12 trucks outbound per hour between 8:00 A.M. and 5:00 P.M. on weekdays.
 Daily Truck Trips = 12 Peak Hour Truck Trips x 8 hours = 192 total truck trips per day (i.e., 96 inbound trips + 96 outbound trips).
4. Peak hour and daily truck trips were derived based on the following, using 20 CY capacity per haul truck:
 6 trucks inbound / 6 trucks outbound per hour between 8:00 A.M. and 5:00 P.M. on weekdays.
 Daily Truck Trips = 12 Peak Hour Truck Trips x 8 hours = 96 total truck trips per day (i.e., 48 inbound trips + 48 outbound trips).
5. A PCE factor of 2.0 was employed for analysis purposes. This accounts for the assumption that a single 9 CY capacity haul truck has the same overall effect on intersection traffic as 2.0 passenger cars.
6. A PCE factor of 3.0 was employed for analysis purposes. This accounts for the assumption that a single 20 CY capacity haul truck has the same overall effect on intersection traffic as 3.0 passenger cars.

As presented in Table 4.13-11, using haul trucks with a capacity of 9 CY, the proposed short-term soil removal phase is expected to generate 51 PCE-adjusted vehicle trips (27 inbound trips and 24 outbound trips) during the weekday A.M. peak hour, 51 PCE-adjusted vehicle trips (24 inbound trips and 27 outbound trips) during the weekday P.M. peak hour, and 390 PCE-adjusted daily trip ends during a typical weekday (195 inbound trips and 195 outbound trips). As presented in Table 4.13-11, using haul



trucks with a capacity of 20 CY, the proposed short-term soil removal phase is expected to generate 39 PCE-adjusted vehicle trips (21 inbound trips and 18 outbound trips) during the weekday A.M. peak hour, 39 PCE-adjusted vehicle trips (18 inbound trips and 21 outbound trips) during the weekday P.M. peak hour, and 294 PCE-adjusted daily trip ends during a typical weekday (147 inbound trips and 147 outbound trips). By comparison, using haul trucks with a capacity of 9 CY will provide a slightly higher and more conservative assessment of potential Project trip generation.

Project Trip Distribution and Assignment. Haul trucks are anticipated to utilize U.S. 101 to access the Project site via the Los Carneros Road interchange onto Calle Koral and Camino Vista. Based on information provided by the City, 50% of the haul trucks would access U.S. 101 to/from the south while the remaining 50% of the haul trucks would access U.S. 101 to/from the north. The following study intersections have been identified for evaluation (note: the intersection numbers/references coincide with the ATE study):

1. Los Carneros Road/U.S. 101 Northbound Ramp
2. Los Carneros Road/U.S. 101 Southbound Ramp
3. Los Carneros Road/Calle Koral
4. Los Carneros Way/Calle Koral

Based on a review of the existing traffic count data included in the ATE study, the highest one-hour total of overall traffic volumes traversing through the above study intersections generally occurs between 7:45 A.M. and 8:45 A.M. during the morning commute peak period and between 4:45 P.M. and 5:45 P.M. during the afternoon commute peak period. As stated previously, the anticipated hours of truck hauling operations during the pre-construction soil removal phase will begin at 8:00 A.M. and end at 5:00 P.M. on weekdays. Therefore, this traffic analysis provides a conservative assessment of potential impacts since only a portion of the truck hauling activities will overlap with the actual 7:45-8:45 A.M. and 4:45-5:45 P.M. commute peak hours.

Traffic Analysis. The traffic impact analyses were prepared for the study intersections using the ICU and the HCM methodologies as well as the City of Goleta's significant traffic impact criteria, consistent with the Project analysis conducted by ATE study for Project operation (Appendix I). Additionally, the existing and cumulative without Project A.M. and P.M. peak hour traffic volumes were obtained from the ATE study. Tables 4.13-12 and 4.13-13 summarize the traffic analysis assuming utilization of haul trucks with a capacity of 9 CY for the existing and cumulative analysis conditions, respectively. Tables 4.13-14 and 4.14-15 summarize the traffic analysis assuming utilization of haul trucks with a capacity of 20 CY for the existing and cumulative analysis conditions. The corresponding weekday A.M. and P.M. peak hour level of service data worksheets are contained in Appendix I.

Existing with Project Conditions. As shown in Table 4.13-12 (which assumes utilization of 9 CY haul trucks) and Table 4.13-14 (which assumes utilization of 20 CY haul trucks), application of the City of Goleta's threshold criteria to the Existing With Project scenarios indicates that the pre-construction soil removal phase is not expected to create any short-term significant traffic impacts at the four study intersections.



Table 4.13-12
Summary of Volume to Capacity Ratios and Levels of Service, A.M. and P.M. Peak Hours
Pre-Construction Soil Removal Using 9 CY Haul Trucks, Existing Traffic

Intersection	Peak Hour	[1]		[2]				
		Existing		Existing w/ Project		Change in V/C ([2]-[1])	Added Project Trips	Project Impact
		V/C or Delay	LOS	V/C or Delay	LOS			
Los Carneros Road/ U.S. 101 Northbound Ramps	A.M.	0.54	A	0.56	A	0.012	26	NO
	P.M.	0.49	A	0.50	A	0.013	26	NO
Los Carneros Road/ U.S. 101 Southbound Ramps	A.M.	0.55	A	0.55	A	0.004	51	NO
	P.M.	0.72	C	0.73	C	0.009	51	NO
Los Carneros Road/ Calle Koral	A.M.	0.46	A	0.47	A	0.010	51	NO
	P.M.	0.51	A	0.54	A	0.032	51	NO
Los Carneros Way/ Calle Koral ¹	A.M.	8.4	A	8.5	A	0.000	51	NO
	P.M.	10.5	B	10.7	B	0.015	51	NO
	A.M.	0.25		0.25				
	P.M.	0.31		0.33				

1. Two-Way Stop Control intersection.

Table 4.13-13
Summary of Volume to Capacity Ratios and Levels of Service, A.M. and P.M. Peak Hours
Pre-Construction Soil Removal Using 9 CY Haul Trucks, Cumulative Traffic

Intersection	Peak Hour	[1]		[2]			
		Cumulative w/o Project		Cumulative w/ Project		Change in V/C ([2]-[1])	Cumulative Impact
		V/C or Delay	LOS	V/C or Delay	LOS		
Los Carneros Road/ U.S. 101 Northbound Ramps	A.M.	0.68	B	0.69	B	0.012	NO
	P.M.	0.57	A	0.58	A	0.013	NO
Los Carneros Road/ U.S. 101 Southbound Ramps	A.M.	0.67	B	0.68	B	0.005	NO
	P.M.	0.84	D	0.85	D	0.008	NO
Los Carneros Road/ Calle Koral	A.M.	0.70	B	0.70	B	0.000	NO
	P.M.	0.66	B	0.69	B	0.032	NO
Los Carneros Way/ Calle Koral ¹	A.M.	11.0	B	11.3	B	0.000	NO
	P.M.	14.8	B	15.8	C	0.015	NO
	A.M.	0.40		0.40			
	P.M.	0.48		0.49			

1. Two-Way Stop Control intersection.



**Table 4.13-14
 Summary of Volume to Capacity Ratios and Levels of Service, A.M. and P.M. Peak Hours
 Pre-Construction Soil Removal Using 20 CY Haul Trucks, Existing Traffic**

Intersection	Peak Hour	[1]		[2]				
		Existing		Existing w/ Project		Change in V/C ([2]-[1])	Added Project Trips	Project Impact
		V/C or Delay	LOS	V/C or Delay	LOS			
Los Carneros Road/ U.S. 101 Northbound Ramps	A.M.	0.54	A	0.55	A	0.009	20	NO
	P.M.	0.49	A	0.50	A	0.010	20	NO
Los Carneros Road/ U.S. 101 Southbound Ramps	A.M.	0.55	A	0.55	A	0.003	39	NO
	P.M.	0.72	C	0.72	C	0.007	39	NO
Los Carneros Road/ Calle Koral	A.M.	0.46	A	0.47	A	0.006	39	NO
	P.M.	0.51	A	0.54	A	0.024	39	NO
Los Carneros Way/ Calle Koral ¹	A.M.	8.4	A	8.5	A	0.000	39	NO
	P.M.	10.5	B	10.6	B	0.011	39	NO
	A.M.	0.25		0.25				
	P.M.	0.31		0.33				

1. Two-Way Stop Control intersection.

**Table 4.13-15
 Summary of Volume to Capacity Ratios and Levels of Service, A.M. and P.M. Peak Hours
 Pre-Construction Soil Removal Using 20 CY Haul Trucks, Cumulative Traffic**

Intersection	Peak Hour	[1]		[2]			
		Cumulative w/o Project		Cumulative w/ Project		Change in V/C ([2]-[1])	Cumulative Impact
		V/C or Delay	LOS	V/C or Delay	LOS		
Los Carneros Road/ U.S. 101 Northbound Ramps	A.M.	0.68	B	0.69	B	0.009	NO
	P.M.	0.57	A	0.58	A	0.010	NO
Los Carneros Road/ U.S. 101 Southbound Ramps	A.M.	0.67	B	0.68	B	0.004	NO
	P.M.	0.84	D	0.84	D	0.006	NO
Los Carneros Road/ Calle Koral	A.M.	0.70	B	0.70	B	0.000	NO
	P.M.	0.66	B	0.68	B	0.024	NO
Los Carneros Way/ Calle Koral ¹	A.M.	11.0	B	11.3	B	0.000	NO
	P.M.	14.8	B	15.5	C	0.011	NO
	A.M.	0.40		0.40			
	P.M.	0.48		0.49			

1. Two-Way Stop Control intersection.

For informational purposes, a supplemental analysis was also prepared to evaluate the Los Carneros Road/Calle Koral intersection by incorporating the traffic associated with the Village at Los Carneros Project and the construction of the west leg of this intersection. Table 4.13-16 summarizes the corresponding traffic analyses for the existing and existing with Project conditions. The corresponding weekday A.M. and P.M. peak hour level of service data worksheets are included in Appendix I. As shown in Table 4.13-16, application of the City of Goleta’s threshold criteria to the Existing With Project scenarios indicates that the pre-construction soil removal phase is not expected to create any short-term/temporary significant traffic impacts at the Los Carneros Road/Calle Koral intersection.

Cumulative with Project Conditions. As shown in Table 4.13-13 (which assumes utilization of 9 CY haul trucks) and Table 4.13-15 (which assumes utilization of 20 CY haul trucks), application of the City of Goleta’s threshold criteria to the Cumulative With Project scenarios indicates that the pre-construction



soil removal phase is not expected to create any short-term/temporary significant contribution to cumulative impacts at the four study intersections.

**Table 4.13-16
 Summary of Volume to Capacity Ratios and Levels of Service, A.M. and P.M. Peak Hours
 Analysis of Los Carneros Road/Calle Koral Intersection Including West Leg
 Pre-Construction Soil Removal**

Intersection	Peak Hour	[1]		[2] (Utilizing 9 CY Capacity Trucks)				
		Existing		Existing w/ Project		Change in V/C ([2]-[1])	Added Project Trips	Project Impact
		V/C or Delay	LOS	V/C	LOS			
Los Carneros Way/ Calle Koral ¹	A.M.	0.59	A	0.59	A	0.000	51	NO
	P.M.	0.57	A	0.60	A	0.032	51	NO
Intersection	Peak Hour	[1]		[3] (Utilizing 20 CY Capacity Trucks)				
		Existing		Existing w/ Project		Change in V/C ([3]-[1])	Added Project Trips	Project Impact
		V/C or Delay	LOS	V/C	LOS			
Los Carneros Way/ Calle Koral ¹	A.M.	0.59	A	0.59	A	0.000	39	NO
	P.M.	0.57	A	0.59	A	0.024	39	NO

1. The Existing and Existing With Project analysis conditions also include traffic associated with the completion /occupancy of the Village at Los Carneros Project and the construction of the west leg of this intersection.

Potential Use of Aero Camino During the Pre-Construction Soil Removal Phase. Based on the traffic distribution pattern used in this analysis, haul trucks associated with the pre-construction soil removal operation have been distributed and assigned to utilize Camino Vista, Calle Koral, and Los Carneros Road for access to and from U.S. 101. As these roadways offer the most direct path of travel between the Project site and U.S. 101, use of Aero Camino east of the Project site for haul truck access is not expected. Nonetheless, if haul trucks use Aero Camino east of the Project site temporary traffic impacts in excess of those described above may result. This would be a potentially significant impact requiring mitigation.

Mitigation Measure. Mitigation Measure T-5 would reduce temporary traffic impacts during the pre-construction soil removal phase to a less than significant level.

T-5 Pre-Construction Traffic Management Control Plan. The Project applicant must submit a Pre-Construction Traffic Management Control Plan that describes the hours during which hauling may occur (presumed to be 8:30 AM to 3:30 PM), haul route, and size of trucks to be used for the pre-construction hauling activity. Construction contractors must notify truck operators that all haul trucks associated with the pre-construction soil removal phase are restricted from using Aero Camino for access to the Project site.

Plan Requirements and Timing. The Pre-Construction Traffic Management Control Plan must be reviewed and approved by City Planning and Public Works staff before issuance of a Haul Permit for the Project. The approved



haul route(s) must be used for soil hauling trips prior to construction as well as for the duration of construction.

Monitoring. City Planning and Environmental Review staff and Public Works must periodically inspect the site to ensure compliance.

Residual Impact. Implementation of Mitigation Measure T-5 would ensure that haul trucks during the pre-construction soil removal phase would not use Aero Camino east of the Project site, which would ensure that temporary traffic impacts would remain less than significant.

c. Cumulative Impacts. Cumulative traffic volumes were forecast using the City's traffic model. The cumulative forecasts include traffic generated by the approved and pending projects proposed within the City of Goleta (refer to Appendix I) as well as development of the UCSB Long Range Development Plan (LRDP), the Santa Barbara Airport Specific Plan and terminal expansion, and regional growth in the Goleta-Santa Barbara area. Cumulative ADT growth was developed by applying a 10% factor to the P.M. peak hour cumulative traffic additions to the study-area intersections. It is noted that the City's traffic model has been updated since the time the traffic study (refer to Appendix I) was first submitted. The current traffic model does not include the Target Project previously proposed in Goleta which was assumed under the initial model run. Cumulative traffic volumes are shown on Figure 4.13-5.

The planned improvements that are assumed in the City's traffic model that would affect traffic patterns within the study area include construction of the western leg at the Los Carneros Road/Calle Koral intersection to provide access to the Village at Los Carneros Project located west of the intersection.

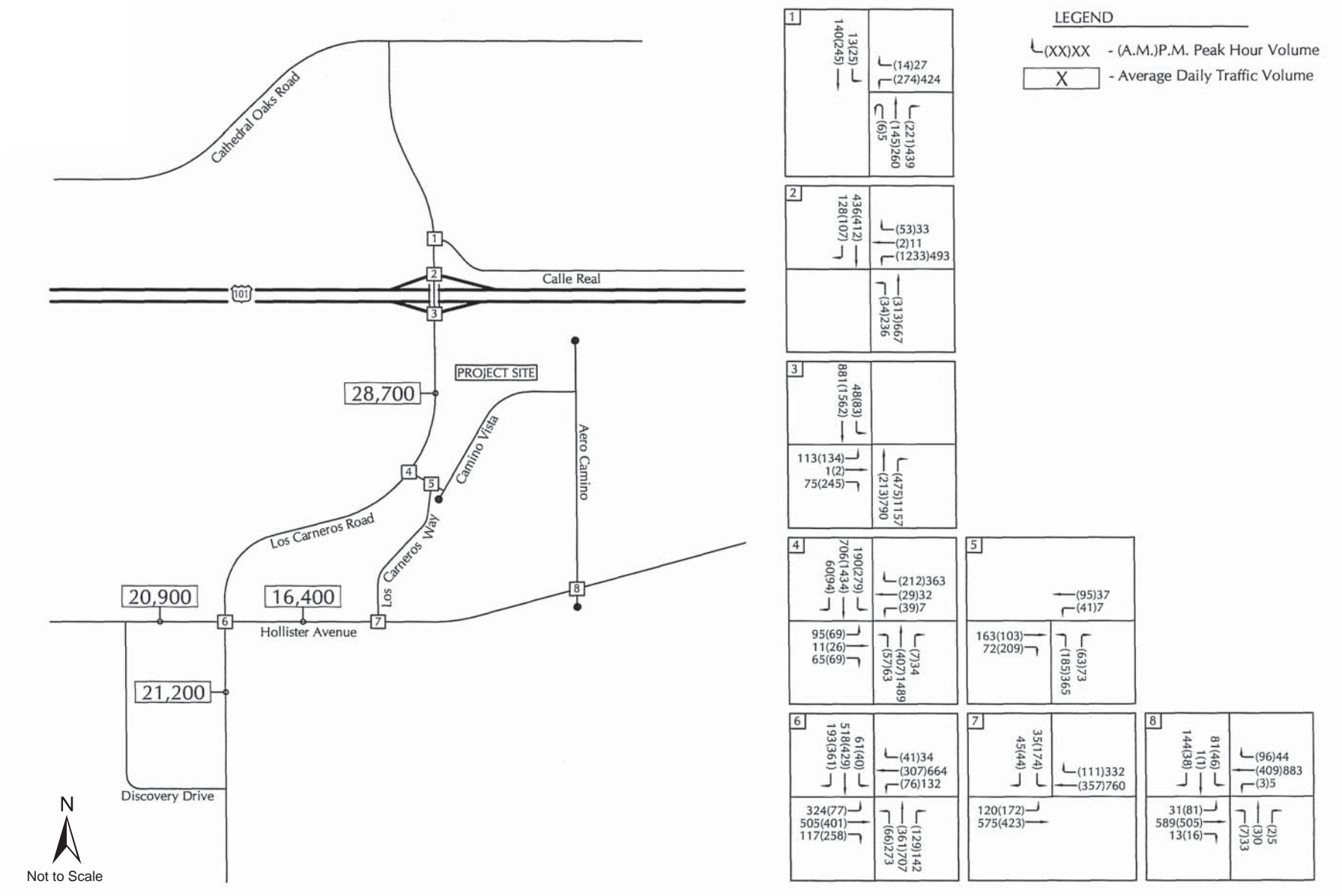
Cumulative Plus Project Roadway Segments. Average daily traffic volumes after development of cumulative projects in the Goleta area were modeled and quantified as shown in Figure 4.13-5. Cumulative + Project ADT volumes are shown on Figure 4.13-6. Table 4.13-17 compares the Cumulative and Cumulative+ Project roadway volumes and identifies the impact of Project-added traffic based on the City of Goleta's Acceptable Capacity thresholds.

Table 4.13-17 shows that the Cumulative+ Project roadway volumes would remain within the City's Acceptable Capacity ratings with the addition of Project traffic. The Project would therefore not generate cumulative impacts to the study-area roadway segments.

Table 4.13-17
Cumulative + Project Roadway Volumes

Roadway Segment	Acceptable Capacity	Cumulative ADT	Project Added ADT	Cumulative + Project ADT	% Change	Significant Impact?
Los Carneros Road south of U.S. 101 SB Ramps	47,000	28,700	1,084	29,784	3.8%	No
Los Carneros Road south of Hollister Avenue	34,000	21,200	296	23,496	1.4%	No
Hollister Avenue west of Los Carneros Road	34,000	20,900	394	21,294	1.9%	No
Hollister Avenue east of Los Carneros Road	34,000	16,400	344	16,744	2.1%	No



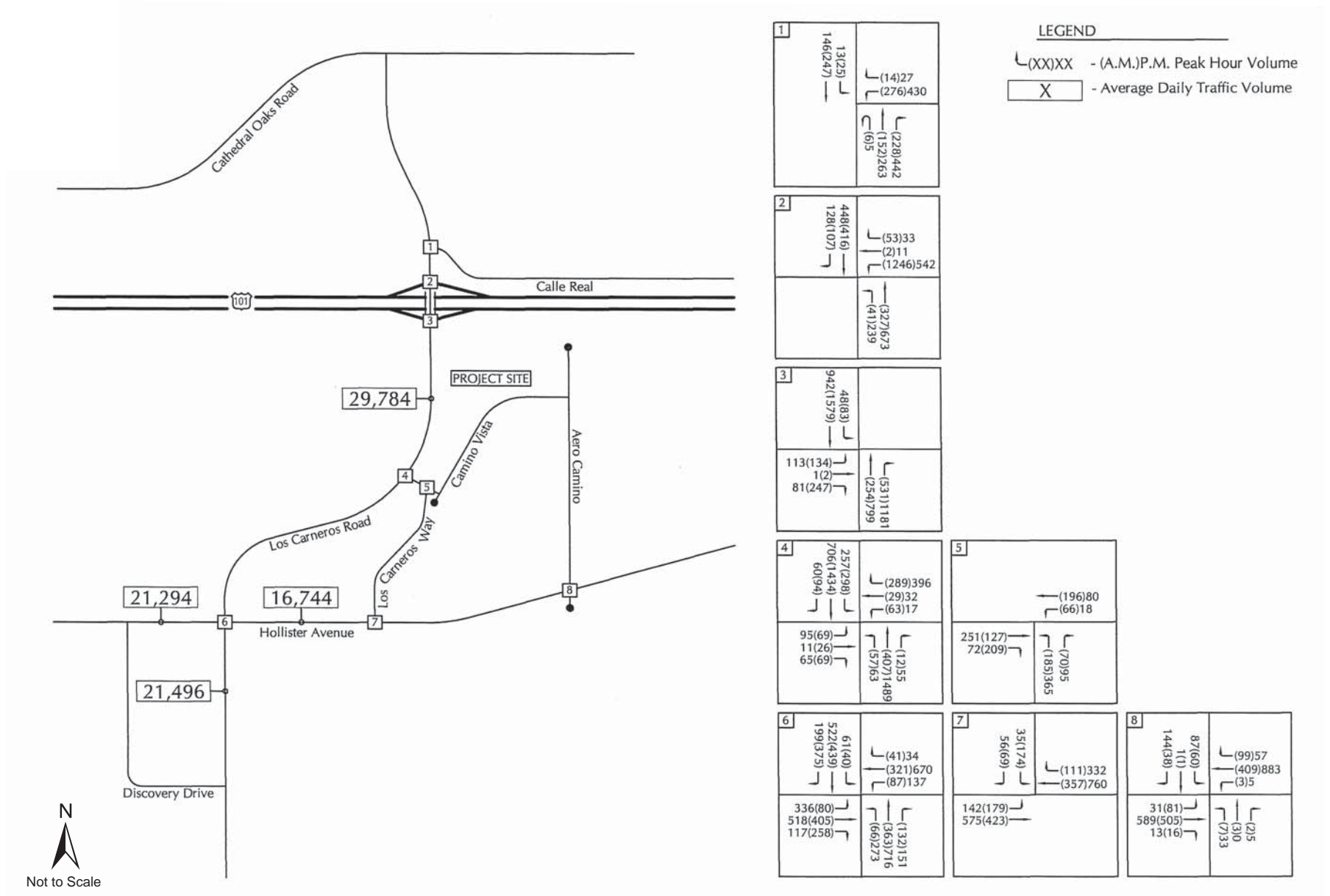


Source: Associated Transportation Engineers, 2015.

Cumulative Traffic Volumes

Figure 4.13-5
 City of Goleta

Heritage Ridge Residential Project EIR
Section 4.13 Transportation/Circulation



Source: Associated Transportation Engineers, 2015.

Cumulative+Project Traffic Volumes

Figure 4.13-6
City of Goleta

Cumulative Plus Project Intersections. Cumulative and Cumulative + Project levels of service were calculated for the study-area intersections assuming the traffic volumes presented on Figure 4.13-5 and Figure 4.13-6. Table 4.13-18 and Table 4.3-19 compare the Cumulative and Cumulative + Project levels of service and identify cumulative impacts based on City of Goleta thresholds.

Table 4.13-18 and Table 4.3-19 indicate that all of the study area intersections are forecast to operate at LOS C or better with Cumulative + Project traffic volumes during the A.M. and P.M. peak hours.

Mitigation Measures. Mitigation is not required because cumulative impacts would be less than significant.

Residual Impact. Cumulative impacts would be less than significant without mitigation.

Table 4.13-18
Cumulative + Project A.M. Peak Hour Levels of Service

Intersection	Cumulative		Cumulative + Project		Project-Added		Significant Impact?
	ICU	LOS	ICU	LOS	Trips	V/C	
Los Carneros Road/Calle Real ^a	7.3 sec	LOS A	7.5 sec	LOS A	18	0.030	No
Los Carneros Road/U.S. 101 NB Ramp	0.68	LOS B	0.69	LOS B	38	0.011	No
Los Carneros Road/U.S. 101 SB Ramp	0.67	LOS B	0.68	LOS B	96	0.005	No
Los Carneros Road/Calle Koral	0.70	LOS B	0.72	LOS C	125	0.015	No
Calle Koral/Los Carneros Way ^a	9.5 sec	LOS A	10.2 sec	LOS B	157	0.039	No
Hollister Avenue/Los Carneros Road	0.56	LOS A	0.58	LOS A	61	0.016	No
Hollister Avenue/Los Carneros Way	0.41	LOS A	0.42	LOS A	32	0.007	No
Hollister Avenue/Aero Camino	0.34	LOS A	0.35	LOS A	17	0.010	No

(a) Unsignalized intersection. Data shown is % change in entering volumes.

Table 4.13-19
Cumulative + Project P.M. Peak Hour Levels of Service

Intersection	Cumulative		Cumulative + Project		Project-Added		Significant Impact?
	ICU	LOS	ICU	LOS	Trips	V/C	
Los Carneros Road/Calle Real ^a	11.8 sec	LOS B	12.1 sec	LOS B	18	0.020	No
Los Carneros Road/U.S. 101 NB Ramp	0.57	LOS A	0.59	LOS A	70	0.020	No
Los Carneros Road/U.S. 101 SB Ramp	0.45	LOS A	0.45	LOS A	100	0.003	No
Los Carneros Road/Calle Koral	0.66	LOS B	0.71	LOS C	131	0.052	No
Calle Koral/Camino Vista ^a	12.1 sec	LOS B	14.8 sec	LOS B	164	0.072	No
Hollister Avenue/Los Carneros Road	0.62	LOS B	0.63	LOS B	64	0.010	No
Hollister Avenue/Los Carneros Way	0.52	LOS A	0.54	LOS A	33	0.015	No
Hollister Avenue/Aero Camino	0.47	LOS A	0.48	LOS A	19	0.007	No

(a) Unsignalized intersection. Data shown is % change in entering volumes.

Bolded values exceed City's LOS C operating standard.



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