Section 3.7

Transportation and Circulation

Introduction

This section analyzes the proposed program's potential effects related to transportation and circulation. The key source of data used in the preparation of this section is the *Traffic Study for the Carmel Valley Master Plan* prepared by DKS Associates (DKS 2007a) and appended to this EIR as Appendix F. This section includes a review of existing conditions based on the traffic study completed for the proposed program. Analyses of the environmental impacts of the proposed roadway improvements are discussed, and where feasible, mitigation measures are recommended to minimize or avoid potentially significant impacts.

Environmental Setting

Regional Access

Regional access to the program area is provided by Highway 1, Carmel Valley Road, and Laureles Grade. Descriptions of regional access roads are given below. Figure 3.7-1 depicts the regional and local transportation network in Carmel Valley.

Highway 1 (State Route 1)

Highway 1 (SR 1) runs in the north-south direction as it passes through Carmel before becoming a freeway in Monterey. It includes two lanes of travel (one in each direction) south of Carmel Valley Road. North of Carmel Valley Road, SR 1 provides three travel lanes (two in the northbound direction and one lane in the southbound direction) until Ocean Avenue. SR 1 provides access to the program area via Carmel Valley Road and Rio Road.

State Highway 68

State Highway 68 runs in the east-west direction and includes two lanes of travel (one in each direction) between SR 1 and the Toro Regional Park area. North of the Toro Regional Park area, State Highway 68 includes four-lanes of travel (two in each direction). State Highway 68 provides access to the program area via Laureles Grade.

Carmel Valley Road

Carmel Valley Road is a two to four-lane major arterial facility providing travel in the east-west direction; it extends from SR 1 in the west, through Carmel Valley to Arroyo Seco Road in the east. Carmel Valley Road has posted speed limits between 15 to 55 miles per hour (mph).

Laureles Grade

Laureles Grade extends from Carmel Valley Road, in the south, to Highway 68, in the north. In the program area, Laureles Grade runs in the north-south direction, and includes two-lanes of travel (one in each direction).

Local Access

Local access to the program area is provided by Rio Road and Carmel Rancho Boulevard. Descriptions of local access roads are provided below.

Rio Road

Rio Road is a two- to four-lane local street with an east-west direction of travel that extends from Val Verde Drive in the east to its terminus at Junipero Avenue in the west, where it becomes 13th Avenue in the City of Carmel-by-the-Sea. It has a posted speed limit of 25 mph.

Carmel Rancho Boulevard

Carmel Rancho Boulevard is a four-lane local street with a north-south travel direction. It extends from Rio Road in the south to its terminus at Carmel Valley Road where it becomes Carmel Knolls Drive. Carmel Rancho Boulevard has a posted speed limit of 35 mph.

Existing Traffic Conditions

Intersection Level of Service

Level of service (LOS) is a common measure of traffic service that uses letters A through F (least to most traffic congestion, respectively) to indicate the amount of congestion and delay. The LOS evaluation indicates the degree of congestion that occurs during peak travel periods and is the principal measure of roadway performance. The LOS concept was developed to correlate numerical traffic volumes to subjective descriptions of traffic performance at intersections, which are the controlling bottlenecks of traffic flow. In general practice, LOS A indicates free flow conditions, while LOS B and C signify stable conditions with acceptable delays. LOS D is typically considered acceptable for peak hours in urban areas, with average delays in the range of 35 to 55 seconds. LOS E is approaching capacity and LOS F represents conditions at or above capacity, with average delays over 80 seconds.

Monterey County uses the *2000 Highway Capacity Manual* (HCM) operations method for analysis of intersection levels of service for both unsignalized and signalized intersections.

A total of seven intersections were studied for the proposed program. Figure 3.7-2 illustrates the existing lane geometry and traffic control of each of the study intersections. Figure 3.7-3 illustrates the existing A.M. and P.M. peak hour volumes. The intersections and their corresponding existing LOS are presented in Table 3.7-1, below.

Table 3.7-1. Intersection Level of Service—Existing Conditions (2005)

#	Intersection Name	A.M. Peak		P.M. Peak	
		Avg. Delay	LOS[1]	Avg. Delay	LOS[1]
1	Highway One & Carmel Valley Road (S)	16.5	B	20.6	C
2	Carmel Rancho Boulevard & Carmel Valley Road (S)	17.5	B	22.0	C
3	Highway One & Rio Road (S)	28.7	C	30.2	C
4	Crossroads Driveway & Rio Road (S)	9.9	A	11.2	B
5	Carmel Center Place & Rio Road (S)	6.2	A	8.7	A
6	Carmel Rancho Boulevard & Rio Road[2] (U)	3.5	A	7.9	B
7	Laureles Grade & Carmel Valley Road[2](U)	46.3	E	>50	F

Notes: Average Delay in seconds per vehicle

[1] LOS: Level of Service.

[2] Unsignalized Intersections: Delay is Worst Approach Delay In seconds per vehicle.

(S): Signalized intersection; (U): Unsignalized intersection.

Signalized Intersections

Both A.M. peak hour (7 to 9 A.M.) and P.M. peak hour (4 to 6 P.M.) intersection level of service calculations were collected for four of the seven existing study intersections from the County. To supplement data provided by the County, new weekday intersection turning movement counts were collected by DKS at the remaining intersections, listed below:

- Crossroads Driveway & Rio Road;
- Carmel Center Place & Rio Road; and
- Laureles Grade & Carmel Valley Road.

All five of the signalized intersections that were studied operated at LOS C or better in both the A.M. and P.M. peak hours.

Unsignalized Intersections

At unsignalized intersections, each approach to the intersection was evaluated separately and assigned a LOS. The LOS is based on the average delay at the worst approach for two-way stop controlled intersections, in seconds per vehicle. Total delay is defined as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. This time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position.

A peak-hour volume warrant (per the MUTCD California Supplement) was performed for the studied unsignalized intersections. Based on the analysis results, the intersection of Laureles Grade / Carmel Valley Road satisfied the warrant under the existing conditions for both the A.M. and P.M. peak hours. The intersection of Carmel Rancho Boulevard/Rio Road does not satisfy the peak-hour warrant criteria.

Roadway Segment Analysis

A roadway segment analysis was also performed for ten roadway segments along Carmel Valley Road using the average daily traffic (ADT) volumes and the two-lane or multi-lane HCM Methodology.

For the purpose of this analysis, Carmel Valley Road was categorized as a Class II Facility. As defined in the *Highway Capacity Manual*, a Class II facility consists of a "two-lane highway on which motorists do not necessarily expect to travel at high speeds. Two-lane highways that function as access routes to Class I facilities, serve as scenic or recreational routes that are not primary arterials, or pass through rugged terrain generally are assigned to Class II. Class II facilities most often serve relatively short trips, the beginning and ending portions of longer trips, or trips for which sightseeing plays a significant role." The multi-lane roadway segment of Carmel Valley Road between SR 1 and Rancho San Carlos was also categorized as a Class II facility. For two-lane highways, level of service is evaluated based on the "percent time-spent following" as opposed to multi-lane highways, where level of service is evaluated based on vehicle density. Table 3.7-2 provides the LOS criteria for two-lane and multi-lane highways.

Table 3.7-2. Two-Lane and Multi-Lane Highway—LOS Criteria

	Two-Lane[1]	Multi-Lane[2]
Level of Service	Percent Time-Spent Following (PTSF)	Density (pc/mi/ln)
A	<= 40	<= 11
B	> 40 to 55	> 11 to 18
C	> 55 to 70	> 18 to 26
D	> 70 to 85	> 26 to 35
E	> 85	> 35 to 41
F	See note 3	> 41

Notes:

[1] Highway Capacity Manual, Transportation Research Board, 2000, Exhibit 20-4, Class II Facility.

[2] Highway Capacity Manual, Transportation Research Board, 2000, Exhibit 21-2—Facility with FFS of 55 mph.

[3] LOS F applies whenever the flow rate exceeds the roadway segment capacity.

The County provided 2005 ADT volumes for each of the ten roadway segments, as well as 24-hour threshold volumes. A detailed description of each roadway segment is provided below.

Segment 1—East of Holman Road

This roadway segment along Carmel Valley Road consists of two (2) travel lanes, one in each direction. East of Holman Road, the posted speed limit is 55 mph and no shoulders are provided.

Segment 2—Holman Road to Esquiline Road

This roadway segment along Carmel Valley Road consists of two (2) travel lanes, one in each direction. The posted speed limit is 35 mph and no shoulders are provided. Shoulders are provided in certain areas.

Segment 3—Esquiline Road to Ford Road

This roadway segment along Carmel Valley Road consists of two (2) travel lanes, one in each direction. The posted speed limit is 25 mph and no shoulders are provided. Transit stops for MST Line 24 are provided near the Ford Road intersection. Shoulders are provided in certain areas.

Segment 4—Ford Road to Laureles Grade

This roadway segment along Carmel Valley Road consists of two (2) travel lanes, one in each direction. The posted speed limit is 35 mph and no shoulders are provided. Transit stops for MST Line 24 are provided. Shoulders are provided in certain areas.

Segment 5—Laureles Grade to Robinson Canyon Road

This roadway segment along Carmel Valley Road consists of two (2) travel lanes, one in each direction. In the westbound direction, the posted speed limit is 50 mph west of Laureles Grade to Miramonte Road. West of Miramonte Road the posted speed limit is 55 mph until Haldorn Road. Just west of Haldorn Road the posted speed limit is 45 mph. In the eastbound direction, the posted speed limit is 55 mph. Transit stops for MST Line 24 are provided.

Segment 6—Robinson Canyon Road to Schulte Road

This roadway segment along Carmel Valley Road consists of two (2) travel lanes, one in each direction. In the westbound direction, the posted speed limit is 50 mph between Robinson Canyon Road and Loma Del Rey and 45 mph west of Loma Del Rey until Schulte Road. A flashing 25 mph posted speed limit is located near the Carmel Adult School and St. Philips Lutheran Church. In the eastbound direction, the posted speed limit is 50 mph between Schulte Road and Mercurio Doud Road. East of Mercurio Doud Road the posted speed limit is 45 mph. Transit stops for MST Line 24 are provided.

Segment 7—Schulte Road to Rancho San Carlos Road

This roadway segment along Carmel Valley Road consists of two (2) lanes of travel (one lane in each direction) with a two-way left turn lane provided along the center of the roadway between Valley Green Drive and the farm driveway. Left-turn pockets are provided for vehicular turns at the intersections of Cañada Way and Valley Green Drive, as well as, at the farm entrance, near St. Philips

Lutheran Church and Schulte Road. The two-way left turn lane continues east of the fire station to Schulte Road. Carmel Valley Road has a posted speed limit of 45 mph in the eastbound direction and a 50 mph in the westbound direction. Bike lanes and transit stops are provided along this segment of Carmel Valley Road. Pedestrian facilities within this segment include sidewalks and crosswalks. Crosswalks are located west of the St. Philips Lutheran Church and accommodate pedestrian movements within the immediate vicinity. Pedestrian access to transit facilities is hampered by the lack of continuous sidewalks and walkways to transit stops.

Segment 8—Rancho San Carlos Road to Rio Road

This roadway segment along Carmel Valley Road consists of four (4) lanes of travel between Rio Road and Via Petra—Del Mesa Drive (two lanes in each direction). East of Via Petra—Del Mesa Drive, Carmel Valley Road becomes a two-lane (one lane in each direction) roadway with a two-way left turn lane provided along the center of the roadway. The two-lane roadway runs until it intersects with Rancho San Carlos. The posted speed limit is 55 mph. Signalized intersections include Via Mallorca and Rancho San Carlos. Left-turn pockets are provided for vehicular turns at the intersections of Rio Road, Martin Canyon Road, Via Mallorca, Via Petra, and Rancho San Carlos.

Pedestrian facilities within this segment include sidewalks, crosswalks, and pedestrian signals. Crosswalks and pedestrian signals at both of the signalized intersections accommodate pedestrian movements within the immediate vicinity. Ramps are provided at the signalized intersections for disabled person access. Pedestrian access to transit facilities is impeded by the lack of sidewalks and walkways to transit stops.

Segment 9—Rio Road to Carmel Rancho Boulevard

This roadway segment along Carmel Valley Road consists of four (4) travel lanes, two in each direction. The posted speed limit is 45 mph with a 25 mph posted speed limit enforced near Carmel Middle School. Signalized intersections include Carmel Rancho Boulevard and Carmel Valley Middle School. Left-turn pockets are provided for vehicular turns at the intersections of Carmel Rancho Boulevard, Rio Vista Drive, Carmel Middle School, and Rio Road.

Pedestrian facilities within this segment include sidewalks, crosswalks, and pedestrian signals. Crosswalks and pedestrian signals at both of the signalized intersections accommodate pedestrian movements within the immediate vicinity. Ramps are provided at the signalized intersections for disabled person access. Pedestrian access to transit facilities is hampered by the lack of continuous sidewalks and walkways to transit stops.

Segment 10—Highway 1 to Carmel Rancho Boulevard

This roadway segment along Carmel Valley Road consists of four (4) travel lanes, two in each direction. The posted speed limit is 45 mph. Signalized intersections include Carmel Rancho Boulevard and Highway 1. Left-turn pockets are provided for vehicular turns at the intersections of Carmel Rancho Boulevard and Highway 1.

Pedestrian facilities within this segment include sidewalks, crosswalks, and pedestrian signals. Crosswalks and pedestrian signals are provided at Carmel Valley Road and Carmel Rancho Boulevard–Carmel Knolls Drive. Crosswalks accommodate pedestrian movements within the immediate vicinity. Ramps are provided at the signalized intersections for disabled person access. There are no sidewalks or walkways to aid pedestrian access to transit stops.

Roadways Segment Operations

Table 3.7-3 provides a comparison analysis of existing ADT volumes for each of the roadway segments. Nine of the ten roadway segments in the study area currently operate below the acceptable threshold. The exception is the roadway segment (Segment 7) between Schulte Road and Rancho San Carlos Road.

Table 3.7-3. Roadway Segment—Existing ADT Monitoring

#	Roadway Segment	Lanes	24-Hr Threshold Volume	ADT 2005	Threshold Exceeded
1	East of Holman Road	2	8,487	3,774	No
2	Holman Road to Esquiline Road	2	6,835	4,260	No
3	Esquiline Road to Ford Road	2	N/A	8,651	No
4	Ford Road to Laureles Grade	2	11,600	11,589	No
5	Laureles Grade to Robinson Canyon Road	2	12,752	11,739	No
6	Robinson Canyon Road to Schulte Road	2	15,499	14,736	No
7	Schulte Road to Rancho San Carlos Road	2	16,340	16,694	**Yes**
8	Rancho San Carlos to Rio Road	4	48,487	21,010	No
9	Rio Road to Carmel Rancho Boulevard	4	51,401	25,484	No
10	Carmel Rancho Boulevard to Highway One	4	N/A	23,847	No

: Monterey County Department of Public Works, data e-mailed September 2006.

Tables 3.7-4 and Table 3.7-5 provide an existing conditions LOS comparison analysis for each of the studied two-lane and multi-lane roadway segments, respectively. Under the existing condition, all roadway segments operate at acceptable levels of service defined by CVMP policy (see discussion below).

Table 3.7-4. Two-Lane Roadway Segment—Existing Condition (2005) LOS Analysis

Segment	To/From	A.M. Peak			P.M. Peak		
		2-Way Vol.	PTSF[1]	LOS	2-Way Vol.	PTSF[1]	LOS
1	East of Holman	373	32.46	A	430	37.98	A
2	Holman Road to Esquiline Road	390	32.39	A	473	39.50	A
3	Esquiline Road to Ford Road	774	55.81	C	790	54.57	A
4	Ford Road to Laureles Grade	1,114	68.00	C	1,112	66.60	C
5	Laureles Grade to Robinson Canyon Road	1,074	70.00	D	1,158	68.77	C
6	Robinson Canyon Road to Schulte Road	1,445	76.42	D	1,430	74.92	D
7	Schulte Road to Rancho San Carlos Road	1,629	82.98	D	1,556	76.75	D

Note: [1]PTSF: Percent Time-Spent Following.

Table 3.7-5. Multi-Lane Roadway Segment—Existing Condition (2005) LOS Analysis

Segment	To/From	Direction	A.M. Peak				P.M. Peak			
			Volume (vph)	Flow Rate (pcphpl)	Density[1]	LOS	Volume (vph)	Flow Rate (pcphpl)	Density[1]	LOS
8	Rancho San Carlos to Rio Road	EB	769	470	7.53	A	1,034	550	10.00	A
		WB	937	586	10.65	A	874	475	8.64	A
9	Rio Road to Carmel Rancho Boulevard	EB	1,028	579	10.53	A	1,272	650	11.82	B
		WB	1,273	757	13.76	B	1,098	646	11.75	B
10	Carmel Rancho Boulevard to Hwy One	EB	1,106	621	11.29	B	1,030	575	10.45	A
		WB	904	601	10.93	A	1,089	662	12.01	B

Note: Density in passenger cars per mile per lane.

Regulatory Setting

Local Policies

Monterey County General Plan

According to Monterey County Public Works *Guide for the Preparation of Traffic Impact Studies* (Monterey County 2003), an acceptable level of service is LOS C for signalized intersections and LOS E for unsignalized intersections.

The current 1982 *General Plan* establishes a LOS standard of C for County road segments. However, the *General Plan* allows Area Plans to set different standards than the *General Plan*, which are described below for CVMP road segments.

Carmel Valley Master Plan

Within the CVMP area, the LOS standard for roadway segments was previously established by CVMP Policy 39.3.2.1.

Policy 39.3.2.1 To implement traffic standards to provide adequate streets and highways in Carmel Valley, the County shall conduct and implement the following:

a.) Twice yearly monitoring by Public Works (in June and October) of average daily traffic at 12 locations identified in the Keith Higgins report in Carmel Valley on Carmel Valley Road, Carmel Rancho Boulevard and Rio Road.

b.) A yearly evaluation report (December) prepared jointly by the Public Works and Planning Departments to indicate segments approaching a traffic volume which would lower existing level service and which would compare average daily traffic (ADT) counts with service volumes for levels of service.

c.) Public hearings to be held in January immediately following a December report in (b) above in which only 100 or less ADT remain before a lower level of service would be reached for any of the 12 segments described on figure B-1 of EIR 85-002 on the Carmel Valley Master Plan.

d.) With respect to those 12 identified road segments that are at level of service (LOS) C or below, approval of development will be deferred if the approval would significantly impact roads in [t]he Carmel Valley Master Plan area which are at level of service (LOS) C or below unless and until an EIR is prepared which includes mitigation measures necessary to raise the LOS to an acceptable level and appropriate findings as permitted by law are made which may include a statement of overriding considerations. For purposes of this policy, “acceptable level” shall mean, at a minimum, baseline LOS as contained in the Carmel Valley Master Plan EIR. To defer

approval if there is significant impact means that, at a minimum, the County will not approve development without such an EIR where the traffic created by the development would impact the level of service along any segment of Carmel Valley Road (as defined in the Keith Higgins Traffic Report which is part of the Environmental Impact Report (EIR) for the Carmel Valley Master Plan "CVMP") to the point where the level of service would fall to the next lower level. As for those road segments which are at LOS C, D and E, this would, at a minimum, occur when the LOS F, this would occur when it would cause a significant impact and worsening of traffic conditions as compared with the present condition. Specific findings will be made with each project and may depend on the type and location of any proposed development. Cumulative traffic impacts from development in areas outside the CVMP area must be considered and will cause the same result as development within the plan area.

This policy establishes the roadway segment standard as LOS C, except for those segments that were LOS D or lower as of the time of the traffic study for the 1986 EIR on CVMP. According to the 1986 study (CVMP Traffic Analysis, Keith B. Higgins), the baseline LOS along Carmel Valley Road is as follows (LOS standards are noted applying the CVMP policy noted above in parentheses):

- Holman Road to Ford Road (Segments 2 and 3)—Operated at LOS C or better in 1986 (standard of LOS C)
- Ford Road to Rancho San Carlos Road (Segments 4, 5, 6, and 7)—Operated at LOS D in 1986 (standard of LOS D)
- Rancho San Carlos Road to Carmel Ranch Boulevard (Segments 8 and 9)—Operated at LOS C or better in 1986 (standard of LOS C)
- Carmel Rancho Boulevard and SR1 (Segment 10)—This portion of Carmel Valley Road operated at LOS E in 1986 (standard of LOS E).

Criteria for Determining Significance

The State CEQA Guidelines, applicable local plans and policies, the Association of Monterey Bay Area Governments' (AMBAG) land use assumptions, and available information regarding assumed buildout of the CVMP were used to evaluate the impacts on transportation and circulation resulting from the proposed program. A more detailed transportation and circulation impact analysis would be required during development of plans for individual specific projects. The proposed program would be considered significant under the following conditions:

A. Intersection Operations

Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in

either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections). An acceptable level of service is LOS C for signalized intersections and LOS E for unsignalized intersections.

B. Roadway Segment LOS

Exceed, either individually or cumulatively, the LOS standard established by the County for designated roads or highways.

This criteria is applied as follows:

- Holman Road to Ford Road (Segments 2 and 3)— LOS C
- Ford Road to Rancho San Carlos Road (Segments 4, 5, 6, and 7)— LOS D
- Rancho San Carlos Road to Carmel Ranch Boulevard (Segments 8 and 9)— LOS C
- Carmel Rancho Boulevard and SR1 (Segment 10)— LOS E.

C. Roadway Hazards and Emergency Access

Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) and/or result in inadequate emergency access.

D. Parking Capacity

Result in inadequate parking capacity.

E. Alternative Transportation Plans and Policies

Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Impacts and Mitigation Measures

A. Intersection Operations

Impact T-1: Substantial Increase in Traffic at Project Intersections Relative to the Existing Traffic Load and Capacity (Less Than Significant)

With existing and proposed development under the CVMP, there would be an expected increase in vehicular traffic on roadways due to growth within and

outside of Carmel Valley. The intersections and their corresponding levels of service under the proposed transportation improvements are presented in Table 3.7-6. The forecasting methodology for 2030 conditions are presented in Appendix F.

Table 3.7-6. Proposed Program—2030 LOS Summary

#	Intersection Name	A.M. Peak			P.M. Peak		
		Avg. Delay	LOS[1] (2030)	LOS[1] (2005)	Avg. Delay	LOS[1] (2030)	LOS[1] (2005)
1	Highway One & Carmel Valley Road	23.8	C	B	26.4	C	C
2	Carmel Rancho Boulevard & Carmel Valley Road	19.6	B	B	33.5	C	C
3	Highway One & Rio Road	29.8	C	C	38.0	D	C
4	Crossroads Driveway & Rio Road	9.2	A	A	10.5	B	B
5	Carmel Center Place & Rio Road	5.6	A	A	7.9	A	A
6	Carmel Rancho Boulevard & Rio Road[2]	10.1	B	A	14.4	B	B
7	Laureles Grade & Carmel Valley Road[2]	15.6	C	E	10.1	C	F

Source: DKS Associates, July 2007.

Average Delay in seconds per vehicle.

[1] LOS: Level of Service.

[2] Unsignalized Intersections, Delay is Worst Approach Delay In seconds per vehicle.

The proposed improvements under the program assume implementation of a partial grade separation improvement of the southbound left turn movement at the unsignalized intersection of Laureles Grade and Carmel Valley Road. With implementation of the proposed roadway improvements, all study intersections would operate at acceptable levels of service with the exception of Highway 1 and Rio Road.

At Highway One/Rio Road, the intersection would continue to operate at LOS C in the A.M. peak hour, but without improvement, would decline from an existing LOS C to LOS D in the P.M peak hour. The Transportation Agency for Monterey County (TAMC) is planning an improvement to the Highway One/Rio Road intersection that is expected to take place before projected CVMP buildout. The planned improvement includes an additional lane on Highway One northbound from this intersection and additional turning lanes. Traffic evaluation of this proposed improvement has not been completed yet, it is likely that the improvement will result in acceptable levels of service. This improvement is included as part of the Highway 1 Carmel Area Operational Improvements in the

TAMC Regional Fee Program (Source: Draft TAMC Regional Traffic Impact Fee Project Information, 9/29/2003 and Monterey County Public Works Department).

The Capital Improvement Program (CIP) in the 1991 EIR includes projects that have not been initiated, which includes a proposed extension of Rio Road. However, this extension would not be necessary since diversion of traffic from Rio Road towards Highway 1 would not be required to improve LOS to acceptable levels in existing or future traffic conditions. These impacts are considered **less-than-significant**.

B. Roadway Segment LOS

Impact T-2: Violation (Cumulatively) of the LOS Standard Established by County for Segment 3 - Esquiline Road to Ford Road (Significant and Unavoidable)

Without the program, growth within and outside the CVMP area would result in a lowering of the level of service by 2030 along four study area roadway segments below the established LOS standards:

- Esquiline Road to Ford Road (Segment 3) – This segment would operate at LOS D in both the A.M. and P.M. peak hour.
- Robinson Canyon Road to Laureles Grade (Segment 5) – This segment would operate at LOS E in the A.M and P.M. peak period.
- Schulte Road to Robinson Canyon Road (Segment 6) – This segment would operate at LOS E in both the A.M. and P.M. peak period.
- Rancho San Carlos Road to Schulte Road (Segment 7) –This segment would operate at LOS E in both the A.M. and P.M. peak period.

The proposed program would incorporate CIP and additional improvements along three of the deficient roadway segments; however, none of these improvements would help improve the deficient levels of service along Segment 3:

- Esquiline Road to Ford Road (Segment 3) – This segment would operate at LOS D in both the A.M. and P.M. peak hour with or without the program.
- Robinson Canyon Road to Laureles Grade (Segment 5) – This segment would operate at LOS D in the A.M and P. M. peak period.
- Schulte Road to Robinson Canyon Road (Segment 6) – This segment would operate at LOS D in both the A.M. and P.M. peak period.
- Rancho San Carlos Road to Schulte Road (Segment 7) – This segment would operate at LOS D in both the A.M. and P.M. peak period.

The roadway segment from Esquiline Road to Ford Road (Segment 3), which travels through the Carmel Valley Village, would require different mitigation other than proposed under the CIP to improve deficient LOS. The CIP lists an

extended left-turn pocket lane along Carmel Valley Road in the Carmel Valley Village area. Exclusive left-turn pocket lanes and medians would have a positive effect on the average travel speed of the segment but would not affect the LOS because the LOS is based upon roadway volumes. Passing lanes would improve the LOS from LOS D to LOS B in both the A.M. and P.M. peak hours; however, passing lanes in the 25 mph-designated zone in the Carmel Valley Village would create safety hazards for left-turns and is considered infeasible. Thus, improvement through the Carmel Valley Village along Carmel Valley Road would likely require a 4-lane facility to allow through traffic as well as local access. This widening would change the character of the Village, would create potential conflicts with pedestrian road crossings, would require right-of-way access, and may require removal of buildings and or trees that would change the character of the Village. Thus a 4-lane facility is not considered to be compatible with the CVMP goals and policies, and this mitigation is not recommended.

Another potential mitigation approach would be to route Carmel Valley Road through traffic along side streets such as Via Contenta Drive and/or Ford Road. While technically feasible, this would result in increased traffic through residential side streets that would create land use incompatibilities and thus the mitigation is not recommended.

Instead of physical improvements, it may be more appropriate given the character of the Village area, to change the LOS standard for roadway Segment 3 from LOS C to LOS D. While a lower standard, such a standard would be consistent with the existing standard for the segments of Carmel Valley Road heading westward (Segments 4, 5, 6, and 7) which are all LOS D.

Since no feasible mitigation measures have been identified to improve the LOS for Segment 3 to the currently acceptable level, unless the County finds that physical improvements (such as Carmel Valley Road widening or routing of through traffic on side roads) are consistent with CVMP goals and policies, this impact is considered **significant and unavoidable**.

C. Roadway Hazards and Emergency Access

Impact T-3: Potential Alteration of Present Patterns of Vehicular Circulation, Increased Traffic Delay, and Increased Roadway Hazards During Construction of Specific Projects (Less than Significant with Mitigation)

Construction of specific projects under the proposed program could involve shoulder widening, addition of passing lanes, construction of a grade separation at Laureles Grade and Carmel Valley Road, new turnouts, intersection signalization activities, bike lane upgrades, and other safety improvements. Consequently, construction activities could result in lane or road closures, detours, closure of bikeway facilities, and addition of construction trucks and equipment on the surrounding roadway system, which could affect the normal vehicular circulation patterns, cause temporary traffic delays, and/or result in introduction of roadway hazards leading to decreased mobility of emergency

access vehicles in the program area. These impacts are considered significant, however, implementation of **Mitigation Measure T-3.1** would reduce these impacts to a **less-than-significant** level.

Mitigation Measure T-3.1: Develop and Implement a Traffic Control Plan

The County or its designated contractor shall develop a traffic control plan for individual construction projects under the Traffic Improvement Program. The plan(s) should identify but not be limited to, emergency vehicle access routes, temporary lane closures, anticipated traffic delay timing and locations, and any construction staging areas within or adjacent to existing rights-of-way. Project contractors should submit the plan(s) for approval by all appropriate County departments at least 30 working days before work begins.

D. Parking Capacity

Impact T-4: Cause Inadequate Parking Capacity (Less than Significant)

The proposed program does not include provision for parking lots or facilities, or alterations to existing facilities. Construction activities within developed areas could potentially use existing lots or facilities for equipment storage or staging; however, such activities would be short-term and construction related. Therefore, this impact is considered **less-than-significant**.

E. Alternative Transportation Plans and Policies

Impact T-5: Conflict with Alternative Transportation Plans and Policies (No Impact)

The proposed program includes upgrading all new traffic improvements within the Carmel Valley Road corridor to Class 2 Bike Lanes. This action would support alternative transportation in the program area. Therefore, the proposed program would not conflict with adopted policies, plans, or programs supporting alternative transportation within the program area and there is **no impact**.