

CHAPTER 1

PROPOSED PROJECT

1.0 PROPOSED PROJECT

State Route 68 is a two-lane undivided roadway constructed in the early 1940s. It serves as the primary transportation facility between State Route 1 and the City of Pacific Grove, Pebble Beach and the Community Hospital of Monterey Peninsula. Figure 1-1 presents the vicinity and location. Currently there are two 3.6 meter (m) (11.8 feet) lanes with shoulders ranging from 0.6 m (2.0 feet) and 1.2 m (3.9 feet).

In the 1980s, Monterey Peninsula cities formed the Holman Highway task force to address access problems to Community Hospital of Monterey Peninsula and levels of service along State Route 68. This task force oversaw the transportation improvements along State Route 68 from its terminus at Pacific Grove and State Route 1. Its goal, in part, was to enhance the quality of transportation services on State Route 68. Many objectives were established, a few of which included installation of a new Spanish Bay Gate, construction of a westbound lane through the Community Hospital of Monterey Peninsula intersection and addition of an eastbound lane from the Community Hospital of Monterey Peninsula entrance to the State Route 1 interchange. While some work has been completed other phases of work were incomplete and remain dormant.

The 1993 Regional Transportation Plan, adopted in 1994, recommended the widening of State Route 68 to four lanes from 0.2 km (0.1 miles) west of the Community Hospital of Monterey Peninsula intersection to south of the State Route 68 overpass at State Route 1. This project is now listed in 2005 Monterey County Regional Transportation Plan as CT017 Route 68 (Holman Highway – Access to Community Hospital). The Project Study Report for the proposed highway widening identifies several funding sources including contributions from previously identified mitigation for the Pebble Beach Company and Community Hospital of Monterey Peninsula, as well as County traffic mitigation funds. The County of Monterey has also submitted an application for additional funding from Congestion Management and Air Quality/State Transportation Improvement Program 2000 Augmentation (AB1012) Programs.

1.1 Purpose and Need

The purpose of the project is to relieve existing and future traffic congestion, improve traffic safety and traffic operations, minimize delay of emergency vehicle access to Community Hospital of Monterey Peninsula and reduce the incentive for bypass traffic through the Skyline Forest neighborhood. It would also result in improved access to the Pebble Beach entrance, Community Hospital of Monterey Peninsula and the Beverly Manor and Carmel Hill Professional Center.

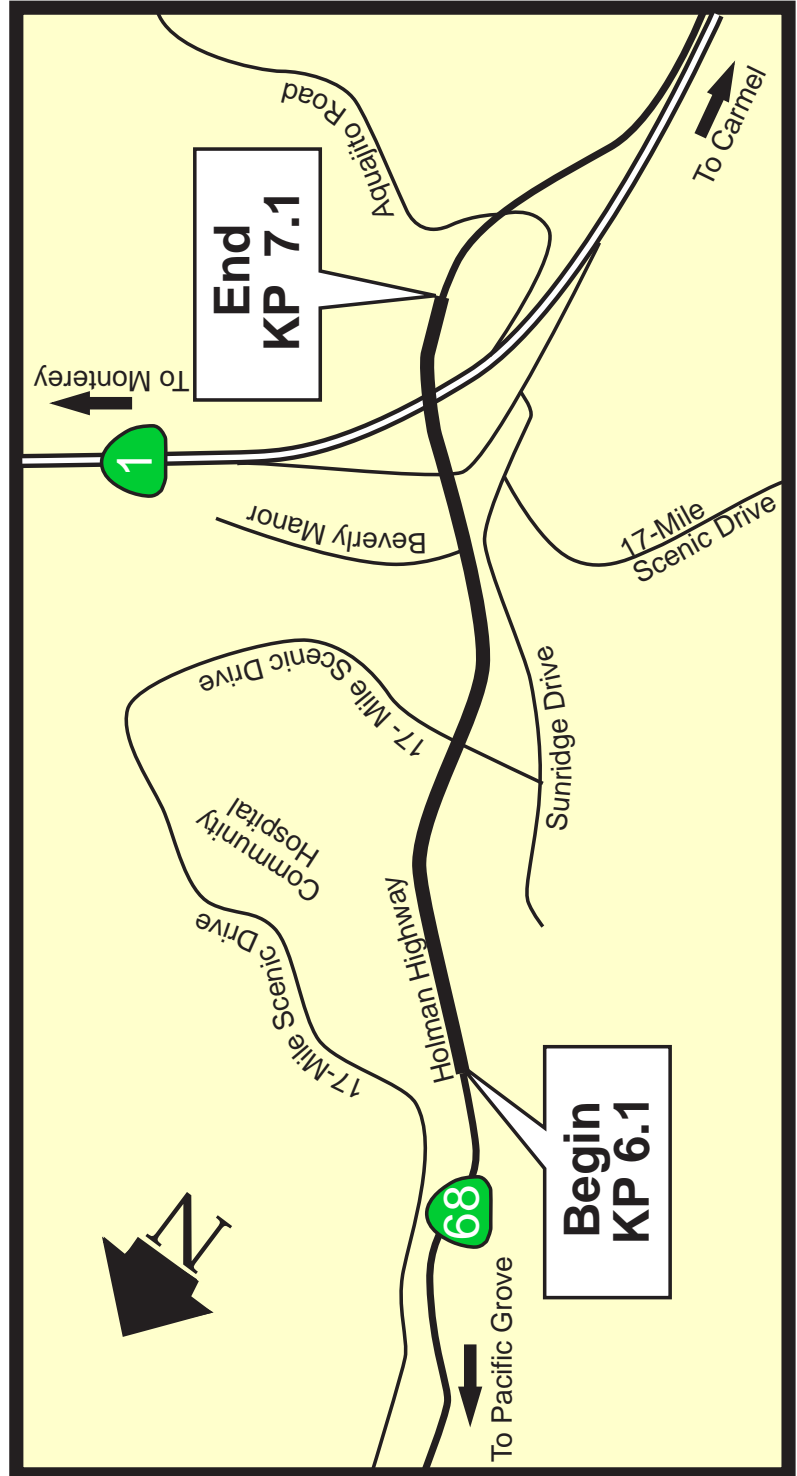
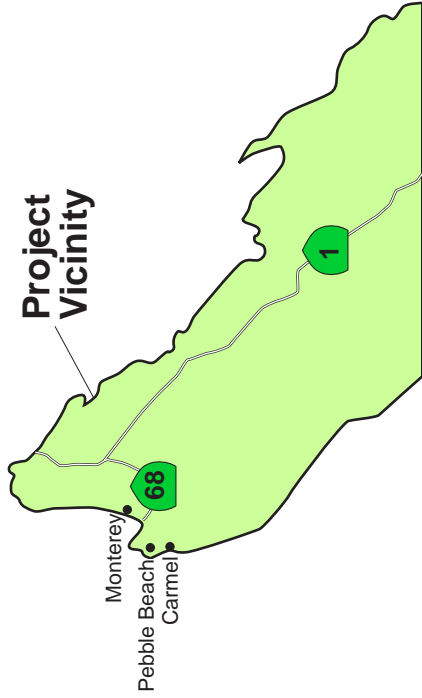
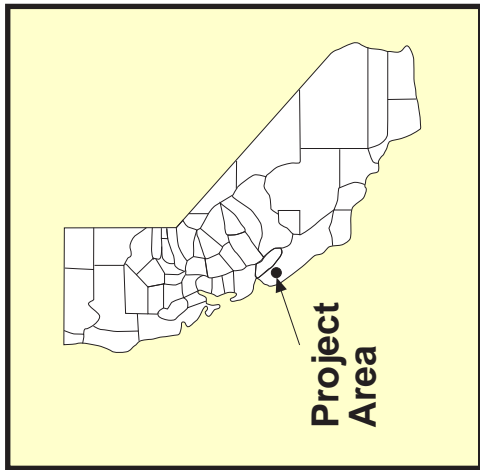


Figure 1-1. Project Vicinity and Location
(Source: Project Study Report on Route 68, November 2000 Mark Thomas & Co.)

State Route 68 is heavily congested (over 2,000 vehicles per peak hour) during the weekday afternoon period from 3pm to 6pm. Level of service is a description of operations, ranging from level of service A (indicating free-flow conditions with little or no delay) to level of service F (representing forced flow conditions and heavy delays). A summary of the existing (2003) level of service conditions on state Route 68 are shown in Table 1-1. The intersection of State Route 68/State Route 1 is operating at the worst level of service during both the AM and PM peak periods. The intersections of State Route 1 Southbound On-ramp and 17-Mile Scenic Drive and State Route 68 and Carmel Hill Professional Center have one or more movements that experience 44 or more seconds of delay. These are typically the left-turn movements that cross a major street.

Table 1-1 Existing (2003) Intersection Delay and Level of Service

Location	Control ¹	Peak Hour	Delay ²	LOS ₃
State Route 68/Community Hospital of Monterey Peninsula driveway	Signal	AM	8 seconds	A
		PM	14 seconds	B
State Route 68/Carmel Hill Professional Center	SSS	AM	>50 seconds	F
		PM	>50 seconds	F
State Route 68/State Route 1 Southbound Off-Ramp	Signal	AM	>80 seconds	F
		PM	>80 seconds	F
State Route 1 Southbound On-ramp/17-Mile Scenic Drive	SSS	AM	20 seconds	C
		PM	44 seconds	E

(Source: Fehr & Peers 2004)

Notes:

1. Signal= Signalized intersection
SSS= Side-street stop-controlled intersection
2. For signalized intersections, delay is average control delay for all vehicles. For side-street stop-controlled intersections, delay for worst movement (i.e., left turn, through, or right turn) calculated.
3. LOS = Level of service

The California Department of Transportation Accident Surveillance and Analysis System provided data for a 36 month period and are presented in Table 1-2 (Fehr & Peers 2005). Rear-end collisions are common, suggesting excessive vehicle queuing at all approaches for the signalized intersection with State Route 1 southbound ramps. Table 1-2 summarizes data provided by the California Department of Transportation Traffic Accident Surveillance and Analysis System and is presented in Table 1-2. Although there were no traffic-related fatalities, the accident rate for both State Route 68 and State Route 1 is slightly above the state average.

Table 1-2 Accident History for State Route 68 and State Route 1

Facility	Total Collisions	Fatal	Fatal + Injury	Actual Accident Rate ¹			Statewide Average Accident Rate ¹		
				Total	Fatality	Fatal + Injury	Total	Fatality	Fatal + Injury
SR 68	134	2	43	2.46	0.037	0.79	1.55	0.035	0.67
SR 1	168	0	57	1.83	0.00	0.62	1.16	0.012	0.45

Source: Fehr & Peers 2005

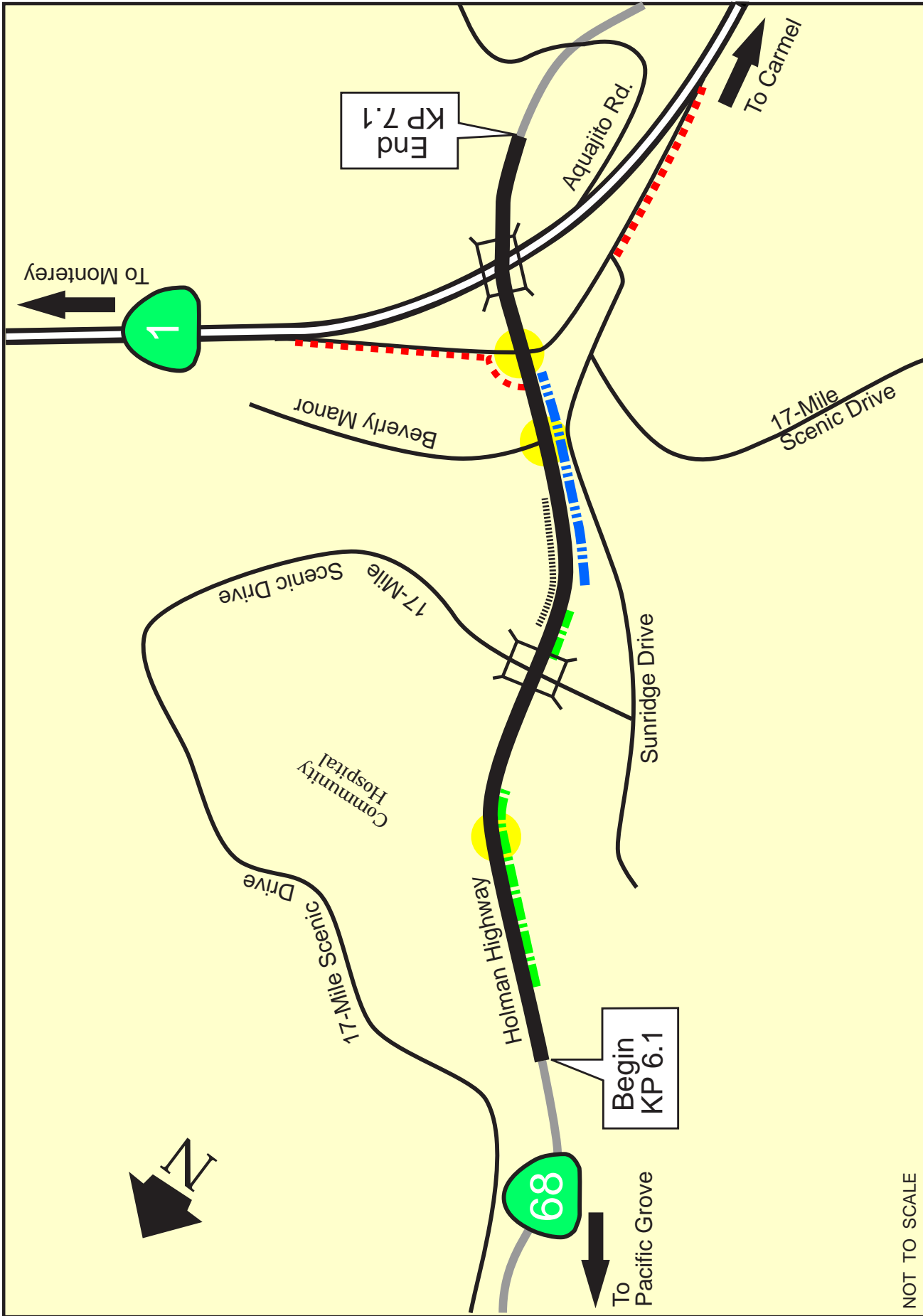
¹ Accident rates presented as collisions per million vehicle miles

Traffic forecasts representing the year 2020 show the pm peak hour traffic demand on State Route 68 reaching 2,860 vehicles. Traffic is projected to increase by 24 percent. The proposed action is needed to improve traffic safety, traffic operations, reduce rear-end collisions, and improve/reduce emergency vehicles service delays.

1.2 Project Description

There are common design features for all three build alternatives identified below. These common features are depicted in Figure 1-2 and are as follows:

- State Route 68 would be widened from approximately 0.2 km (0.1 mile) west of the Community Hospital of Monterey Peninsula entrance to the State Route 68/State Route 1 southbound ramp intersection;
- The proposed retaining walls (in 5 different areas) would be constructed at the edge of right-of-way;
- The 17-Mile Scenic Drive overcrossing would be replaced with a new bridge;
- Beverly Manor and Carmel Hill Professional Center entrance would be redesigned to prohibit left turns out of the entrance to eastbound State Route 68. Eastbound left turns from State Route 68 to the Beverly Manor and Carmel Hill Professional Center entrance and right turns in and right turns out of the entrance will be allowed;
- State Route 1 southbound off- and onramps would require widening and installation of retaining walls. The southbound offramp would require a 3 m (9.8 feet) wall. The size of the retaining wall for the onramp would be 2.4 to 3.0 m (7.87 to 9.8 feet) tall;
- The Pebble Beach Main Gate entrance would be modified;
- Two retaining walls located along the north and south sides of State Route 68 between 17-Mile Scenic Drive and Beverly Manor and Carmel Hill Professional Center entrance would receive aesthetic treatment; and
- Traffic signals at the State Route 68/State Route 1 southbound ramp and at the State Route 68/Community Hospital of Monterey Peninsula intersections would be modified.



NOT TO SCALE

Figure 1-2. General Project Features
 (Source: Project Study Report on Route 68, November 2000 Mark Thomas & Co.)

- The project will widen the shoulders along State Route 68 to 2.4 m (8 feet).
- The project will include the following striped bike lanes:
 - 1.5-m (5-foot)-wide striped bicycle lane on westbound State Route 68 at the Carmel Hills Professional Center driveway between the right-turn lane stripe and the through lane.
 - 1.5-m (5-foot)-wide striped bicycle lane on eastbound State Route 68 at the Pebble Beach Main Gate entrance between the right-turn lane stripe and the through lane.
 - 1.5-m (5-foot)-wide striped bicycle lane on the northbound Pebble Beach Main Gate exit shoulder adjacent to the right-turn lane stripe.
 - 1.5-m (5-foot)-wide striped bicycle lane on the northbound Pebble Beach Main Gate exit at State Route 68 between the right-turn lane stripe and the through lane.
 - 1.5-m (5-foot)-wide striped bicycle refuge area on the southbound State Route 1 exit ramp at State Route 68 between the right-turn median and the through lane.

1.3 Alternatives

Several alternatives were developed and considered by the State Route 68 (Holman Highway) Widening Project team (City and Caltrans staff along with engineering and environmental planning consultants [Mark Thomas and Company, Fehr & Peers Transportation Consultants, and PAR Environmental Services, Inc.]). Alternatives considered feasible are described below.

1.3.1 The “No Build” Alternative

This alternative would maintain the existing facility. There would continue to be deficient operations on State Route 68, at the State Route 68/State Route 1 interchange, and on the southbound offramp where traffic is known to back up onto the State Route 1 mainline.

By the Year 2030 it is estimated that State Route 68 and State Route 1 would experience approximately 14% and 31% growth in traffic, respectively (Fehr & Peers Transportation Consultants 2004). Emergency access to Community Hospital of Monterey Peninsula would be affected by this growth.

1.3.2 Build Alternative

1.3.2.1 Build Alternative 3 – Four Lane Facility (Proposed Project)

Build Alternative 3 would widen State Route 68 from two lanes to four lanes and is characterized by the addition of one additional lane in each direction. In the westbound direction, two lanes would be carried past the Community Hospital of Monterey Peninsula entrance and then merge to the existing one-lane approximately 183 m (600 feet) west of the Community Hospital of Monterey Peninsula entrance. In the eastbound

direction, the right lane would terminate as a mandatory right turn lane to the Pebble Beach Main Gate entrance. The geometrics are shown in Figure 1-3 (Appendix A, in sleeve). The estimated cost for this alternative is \$21.170 million including, but not limited to, construction cost (\$16.729 million) and right-of-way and utility cost (\$227,000) (Mark Thomas and Company 2000 [revised 2008]).

1.3.2.2 Ramp Variation

Ramp Variation 1 – Five Legged Intersection

This ramp variation is characterized as a five-legged intersection option that would result in all traffic movements to be brought together near the new State Route 68/State Route 1 southbound ramp intersection. All legs but the southbound State Route 1 onramp would be signalized.

1.3.3 Alternatives Considered but Eliminated from Further Discussion

The following alternatives were considered but eliminated from further study. Upon further examination, there were operational and geometric deficiencies that would result in short transitions, vehicle queues above the accepted limits, and traffic movements that were considered dangerous.

1.3.3.1 Build Alternative 1 – Three Lane Facility (Eastbound Widening)

Build Alternative 1 is characterized by widening State Route 68 from two lanes to three lanes. Widening would consist of the addition of one lane in the eastbound direction from 0.2 km (0.1 mile) west of the Community Hospital of Monterey Peninsula entrance, east to the State Route 68/State Route 1 southbound ramp intersection. This added eastbound lane would terminate as a mandatory right turn lane to the Pebble Beach Main Gate/State Route 1 southbound onramp. Retaining walls would be constructed at their ultimate locations to accommodate the four-lane future condition. The estimated cost for this alternative is \$4.95 million for construction and \$0.24 million for right-of-way, for a total capital cost of \$5.19 million (Mark Thomas and Company 2000).

1.3.3.2 Build Alternative 2 – Three Lane Facility (Westbound Widening)

Build Alternative 2 would widen State Route 68 from two lanes to three lanes and is characterized by the addition of one lane in the westbound direction from the Community Hospital of Monterey Peninsula entrance east to the State Route 68/State Route 1 southbound ramp intersection. This added westbound lane would terminate as a mandatory right turn lane to Community Hospital of Monterey Peninsula. Retaining walls would be constructed at their ultimate locations to accommodate the four-lane future condition. The estimated cost for this alternative is \$4.66 million for construction and \$0.24 million for right-of-way, for a total capital cost of \$4.91 million (Mark Thomas and Company 2000).

1.3.3.3 Ramp Variations

Ramp Variation 2 – Roundabout

This ramp variation is characterized as a traffic circle that would result in one-way circular traffic flow at the intersection of State Route 68 and the State Route 1 on-and offramps. Traffic would enter this circle in a free-flowing movement with yield at the point of entry into the circle. The southbound offramp right turn movement would bypass the roundabout.

Ramp Variation 3 – Collector-Distributor Road

This ramp variation is characterized as a State Route 1 Distributor/Collector option that would result in a new State Route 1 exit lane dedicated solely to access the Pebble Beach Main Gate. The Distributor/Collector lane would originate at the State Route 1 southbound auxiliary lane near the beginning of the exit ramp, and continue under the State Route 68 overcrossing, and conform at the Pebble Beach Main Gate entrance. This design variation allows direct, unrestricted access to the Pebble Beach Main Gate entrance from the State Route 1 southbound offramp and reduces the volume of traffic traveling through the State Route 68/State Route 1 southbound ramp intersection.

1.3.3.4 Traffic Systems Management

Traffic Systems Management was evaluated to the extent that the solution alone does not provide adequate traffic relief nor does it meet the purpose and need of this proposed project.

1.4 Permits and Approvals Needed

- Tree Removal Permit- A tree removal permit for healthy native trees with a trunk diameter in excess of six inches, measured two feet above ground, is required by the County and City of Monterey.
- The landscape plan is subject to review and approval by the Architectural Review Committee.
- Coastal Development Permit- A CDP is expected to be required to comply with the Local Coastal Program.
- Grading Permit- City/ County grading permit will be required.
- Encroachment Permit- A Caltrans encroachment permit will be needed.
- If the area of land to be graded, excavated, cleared, or otherwise disturbed will be 0.4 ha (1 acre) or more, or if the area is under 0.4 ha (1 acre) and the construction

project is part of a larger common plan of development or sale, a National Pollution Discharge Elimination System General Construction Permit will be required. As part of this application, a Notice of Intent and payment of fees must be submitted to the Storm Water Permit Unit, Division of Water Quality at the State Water Resources Control Board. This general permit requires development and implementation of a Storm Water Pollution Prevention Plan emphasizing Best Management Practices.