

Addendum to the Final
Environmental Impact Report

**MONTEREY BAY
SHORES RESORT**

SCH# 97091005



October 2008

PREFACE

PURPOSE OF THE ADDENDUM

The California Environmental Quality Act (CEQA) recognizes that between the date that an environmental document is completed and the date that the project is fully implemented, one or more of the following changes may occur: (1) the project may change, be modified or revised; (2) the environmental setting in which the project is located may change, becoming more or less sensitive with respect to specific resources; (3) laws, regulations, or policies may change in ways that may impact the environment; and/or (4) new or previously unknown information can arise. Before proceeding with a project, CEQA requires the Lead Agency to evaluate these changes to determine whether or not they affect the conclusions in the environmental document.

In December 1998, the City of Sand City, as the Lead Agency under CEQA, adopted a resolution approving the Coastal Development Permit for the Monterey Bay Shores Resort that was the subject of a certified Final Environmental Impact Report (SCH# 97091005) (1998 MBS FEIR). The Final Environmental Impact Report prepared for the project analyzed a 597-unit mixed use resort and residential development. The Coastal Development Permit (CDP) approved by Sand City (City) allowed for the development of a 495-unit mixed use resort that consisted of a 217-room hotel, a 100-unit vacation ownership resort club, 133 residential condominiums, 45 visitor-serving units available in a rental pool, auxiliary facilities including a restaurant, conference rooms, and other commercial auxiliary facilities, open space, public access trails and recreation area, and a minimum of 10.2 acres of restored and stabilized sand dune habitat. Sand City conditioned its approval of the resort on compliance with 59 conditions that were required to be met prior to construction on the site. The original environmental document was unsuccessfully challenged on CEQA grounds in a legal proceeding.

The CDP was initially overturned by the California Coastal Commission (Commission) in an administrative appeal of the City's determination; however, the First Appellate District Court of Appeal ruled that the Commission's denial of the CDP was improper, that the project site was not an environmentally sensitive habitat area (ESHA), and that the Commission must rehear the CDP application based on the standards set forth in the Local Coastal Program Plan (LCP) certified by the Commission. In preparation for the rehearing before the California Coastal Commission and in order to seek to address the Commission staff's concerns, the project applicant, Security National Guaranty, Inc., has proposed a reduced "ecoresort" project of 341 units which includes a reconfigured design and sustainable design elements.

The purpose of this Addendum is to reevaluate the environmental impacts of the Monterey Bay Shores Resort in compliance with CEQA Guidelines §15162 and based on the modifications made to the proposed project to address the concerns raised by the California Coastal Commission staff. The CEQA Guidelines §15162 state that when an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Section 15164 of the CEQA Guidelines states that the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in §15162 (see above) calling for preparation of a subsequent EIR have occurred. CEQA Guidelines §15164(c) states that an addendum need not be circulated for public review. The Addendum will be provided to the Coastal Commission to assist staff and the commissioners in evaluating the revised project and its impacts. Although not legally required, as stated above, the Addendum will be available to the public as part of the Coastal Commission review.

Based on a review of the proposed revised project description, project site conditions (both as they existed at the time that the 1998 MBS FEIR was prepared and as updated during this review), and the attached analysis and discussion and related reports and updates, no supplemental or subsequent EIR to the 1998 MBS FEIR is required, because no new significant impacts or substantially greater or more severe significant impacts would result from changes in the Project; because there have been no changes in circumstances in the project area that would result in new significant environmental impacts or substantially more severe impacts; and because no new information has come to light that would indicate the potential for new significant impacts or substantially more severe impacts than were discussed in the 1998 MBS FEIR or new mitigation measures or alternatives that would substantially reduce impacts but which the project proponents decline to adopt. Therefore, no further evaluation is required, and no Supplemental or Subsequent EIR is needed pursuant to CEQA Guidelines §15162, and an Addendum has therefore appropriately been prepared, pursuant to §15164.

TABLE OF CONTENTS

PREFACE	1
SECTION 1 INTRODUCTION AND PURPOSE	5
SECTION 2 PROJECT INFORMATION.....	7
2.1 PROJECT TITLE	7
2.2 PROJECT LOCATION.....	7
2.3 PROJECT PROPONENT.....	7
2.4 LEAD AGENCY CONTACT	7
2.5 ASSESSOR'S PARCEL NUMBER	7
SECTION 3 PROJECT DESCRIPTION.....	11
3.1 OVERVIEW OF THE PROJECT	11
3.2 CURRENT SITE DESCRIPTION	11
3.3 PROPOSED REVISED PROJECT	13
SECTION 4 ENVIRONMENTAL CHECKLIST, IMPACTS, AND MITIGATION	22
4.1 AESTHETICS	23
4.2 AGRICULTURAL RESOURCES.....	33
4.3 AIR QUALITY	34
4.4 BIOLOGICAL RESOURCES.....	40
4.5 CULTURAL RESOURCES.....	55
4.6 GEOLOGY AND SOILS	56
4.7 HAZARDS AND HAZARDOUS MATERIALS	61
4.8 HYDROLOGY AND WATER QUALITY	65
4.9 LAND USE	73
4.10 MINERAL RESOURCES.....	77
4.11 NOISE AND VIBRATION.....	78
4.12 POPULATION AND HOUSING	82
4.13 PUBLIC SERVICES	84
4.14 RECREATION.....	88
4.15 TRANSPORTATION	89
4.16 UTILITIES AND SERVICE SYSTEMS.....	107
4.17 MANDATORY FINDINGS OF SIGNIFICANCE.....	111
SECTION 5 REFERENCES	118
SECTION 6 LEAD AGENCY AND CONSULTANTS.....	120

Figures

Figure 1: Regional Map.....	8
Figure 2: Vicinity Map	9
Figure 3: Aerial Photograph with Surrounding Land Uses	10
Figure 4: Conceptual Site Plan	12
Figure 5: Layout of Building and Facility Uses	15
Figure 6: Land Use Easements	17
Figure 7: Proposed Building Design	21
Figure 8: Sand City Local Coastal Program Visual Resources Map.....	24
Figure 9: Photosimulation View Locations.....	27
Figure 10: Photosimulation – View 1.....	28
Figure 11: Photosimulation – View 2.....	29
Figure 12: Photosimulation – View 3.....	30
Figure 13: Existing Roadway Network and Study Intersections.....	90

Tables

Table 3.1-1	Project Development Comparison	11
Table 4.0-1	Letter Codes of Environmental Issues	22
Table 4.3-1	Major Criteria Air Pollutants and Standards.....	35
Table 4.4-1	Comparison Of Project Impacts to Vegetation and Special Status Species.....	45
Table 4.4-2	Comparison of Restoration and Mitigation Measures	46
Table 4.4-3	Comparison of Project Impacts and Mitigation Recommendations	46
Table 4.13-1	School Enrollment and Capacity.....	85
Table 4.15-1	Signalized Intersection Level of Service Definitions Using Average Control Vehicular Delay	91
Table 4.15-2	Unsignalized Intersection Level of Service Definitions	92
Table 4.15-3	Freeway Mainline LOS Criteria.....	93
Table 4.15-4	Existing and Background Intersection Levels of Service	94
Table 4.15-5	Existing and Background Freeway Segment Levels of Service	95
Table 4.15-6	Project Trip Generation.....	99
Table 4.15-7	Summary of 1998 and 2008 Project Intersection Levels of Service.....	101
Table 4.15-8	Summary of 1998 and 2008 Freeway Segment Levels of Service	103
Table 4.15-9	Trip Generation Comparison	104
Table 4.15-10	Project Parking Requirements.....	105
Table 4.17-1	Summary of 1998 and 2008 Cumulative Intersection Levels of Service	112
Table 4.17-2	Summary of 1998 and 2008 Cumulative Freeway Segment Levels of Service.....	113

Appendices

Appendix A	Judgment and Decision, Cal-Am Water v. City of Seaside, Case #M66343(2006)
Appendix B	Biotic Assessment
Appendix C	Peer Reviews of Biotic Assessment
Appendix D	Coastal Recession Memorandum
Appendix E	Monterey Bay Shores Master Set of Conditions of Approval
Appendix F	Focused Transportation Impact Analysis

SECTION 1 INTRODUCTION AND PURPOSE

This Addendum to the certified 1998 Monterey Bay Shores Final Environmental Impact Report (1998 MBS FEIR) is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 *et. seq.*), and the regulations and policies of the City of Sand City.

This Addendum evaluates the potential environmental impacts that might reasonably be anticipated to result from the development of a revised mixed use resort and residential development project on a 39.04-acre ocean-front site in Sand City. The proposed revised project consists of a 341-unit mixed use ecoresort and residential development on the site of a former sand mining operation owned and operated by Lonestar Industries.

The City of Sand City is the Lead Agency under CEQA and has prepared this Addendum to address the environmental impacts of the proposed revised project.

Tiering of the Environmental Review

In accordance with CEQA, Public Resources Code §21093(a) and §21093(b) and CEQA Guidelines §15152(a), the 1998 Monterey Bay Shores Resort FEIR tiered off the certified environmental impact report prepared for the Sand City Redevelopment Project Area (Redevelopment Plan EIR) and Plan (SCH# 1987012704).

CEQA, at Public Resources Code §21093(b), provides that environmental impact reports shall be tiered “whenever feasible, as determined by the lead agency.” “Tiering” refers to using the analysis of general matters contained in a broader Environmental Impact Report (EIR) (such as one prepared for a general plan or policy statement) in subsequent EIRs or Initial Studies/Negative Declarations on narrower projects; and concentrating the later environmental review on the issues specific to the later project [CEQA Guidelines §15152(a)].

Tiering is appropriate when it helps a public agency to focus on issues at each level of environmental review and to avoid or eliminate duplicative analysis of environmental effects examined in previous environmental impact reports [CEQA Guidelines §21093 (a)].

The Redevelopment Plan EIR generally described the environmental impacts and mitigation measures that would occur during the 40-year life of the Redevelopment Plan. The environmental review process for the 1998 MBS FEIR was considered to be tiered in order to avoid repetitive discussion of issues covered in the Redevelopment Plan EIR and to focus the project EIR on issues ripe for decision in relation to the proposed project as a component of the Plan.

The amount of resort and residential development currently proposed on the site is substantially smaller than the project analyzed in the certified 1998 MBS FEIR. As analyzed below, constructing a reduced amount of residential and commercial development on the project site is anticipated to result in no greater impact than those previously identified in the certified 1998 MBS FEIR.

The CEQA Guidelines (§15164 and §15162) describe the process for evaluating the potential significance of new information. The process can reach one of three conclusions:

1. The new information does not result in the identification of a new significant environmental impact not already addressed in the FEIR, and it does not identify a substantial increase in the

- magnitude of a previously-identified significant environmental impact. Therefore, no additional environmental review beyond the Addendum is required.
2. The new information does result in identification of a new significant environmental impact not previously disclosed in the FEIR and/or it identifies a substantial increase in the magnitude of a previously-identified significant environmental impact. Therefore, preparation of a Supplemental EIR is required.
 3. In order to make a determination of whether the existing FEIR is adequate or whether preparation of a Supplemental EIR is warranted, further technical studies are required.

Sand City as the Lead Agency under CEQA will make the final determination as to the significance of new information presented in this Addendum.

Document Availability

All previous FEIRs mentioned above are available for public review in the City of Sand City Planning Department located at 1 Sylvan Park, Sand City, California, Monday through Thursday during normal business hours.

SECTION 2 PROJECT INFORMATION

2.1 PROJECT TITLE

Monterey Bay Shores Resort

2.2 PROJECT LOCATION

The 39.04-acre oceanfront project site is located on the former Lonestar sand mine property in Sand City (refer to Figures 1 and 2).

2.3 PROJECT PROPONENT

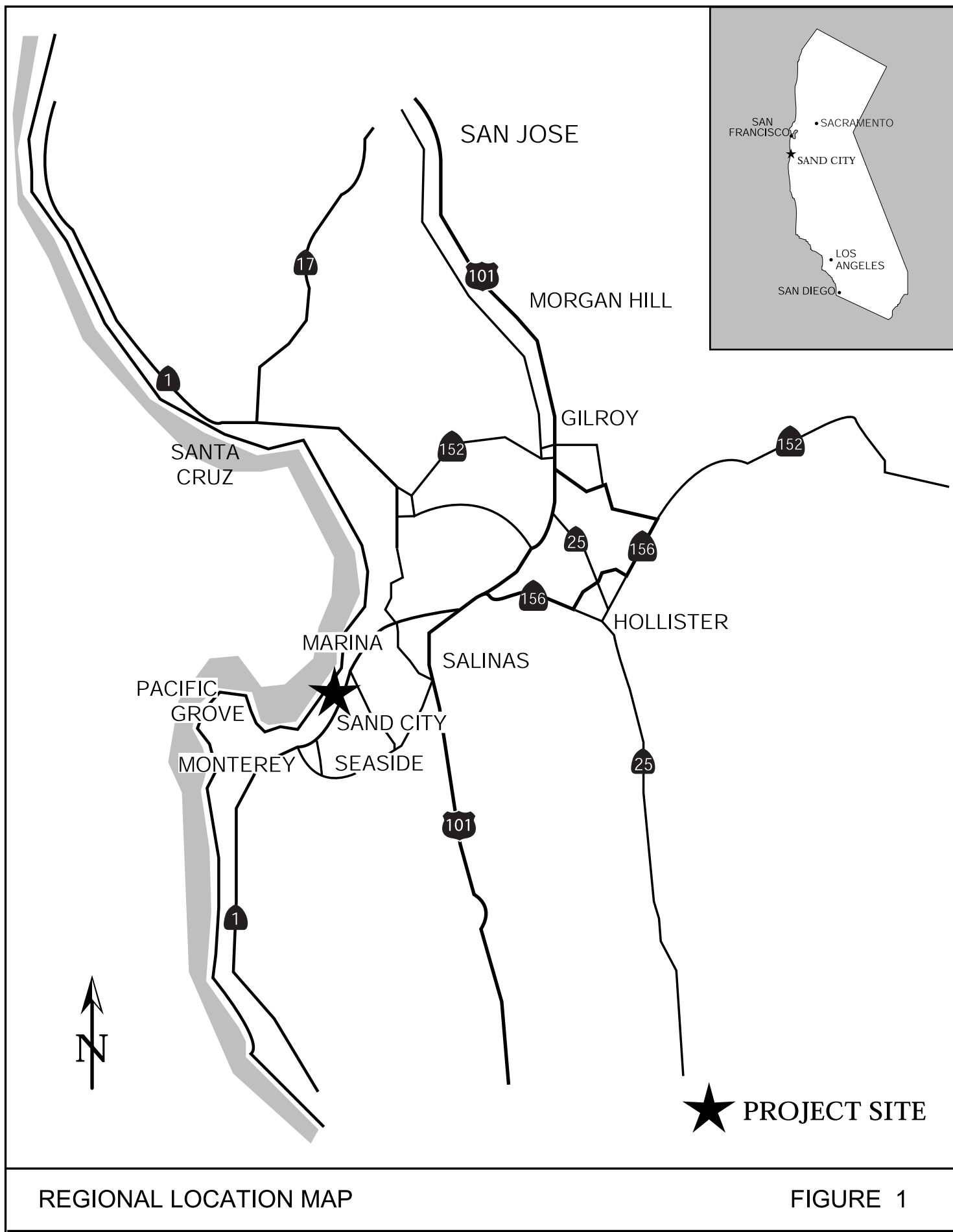
Security National Guaranty, Inc.
Ed Ghandour, President
505 Montgomery Street, Suite 1150
San Francisco, CA 94111
(415) 874-3121

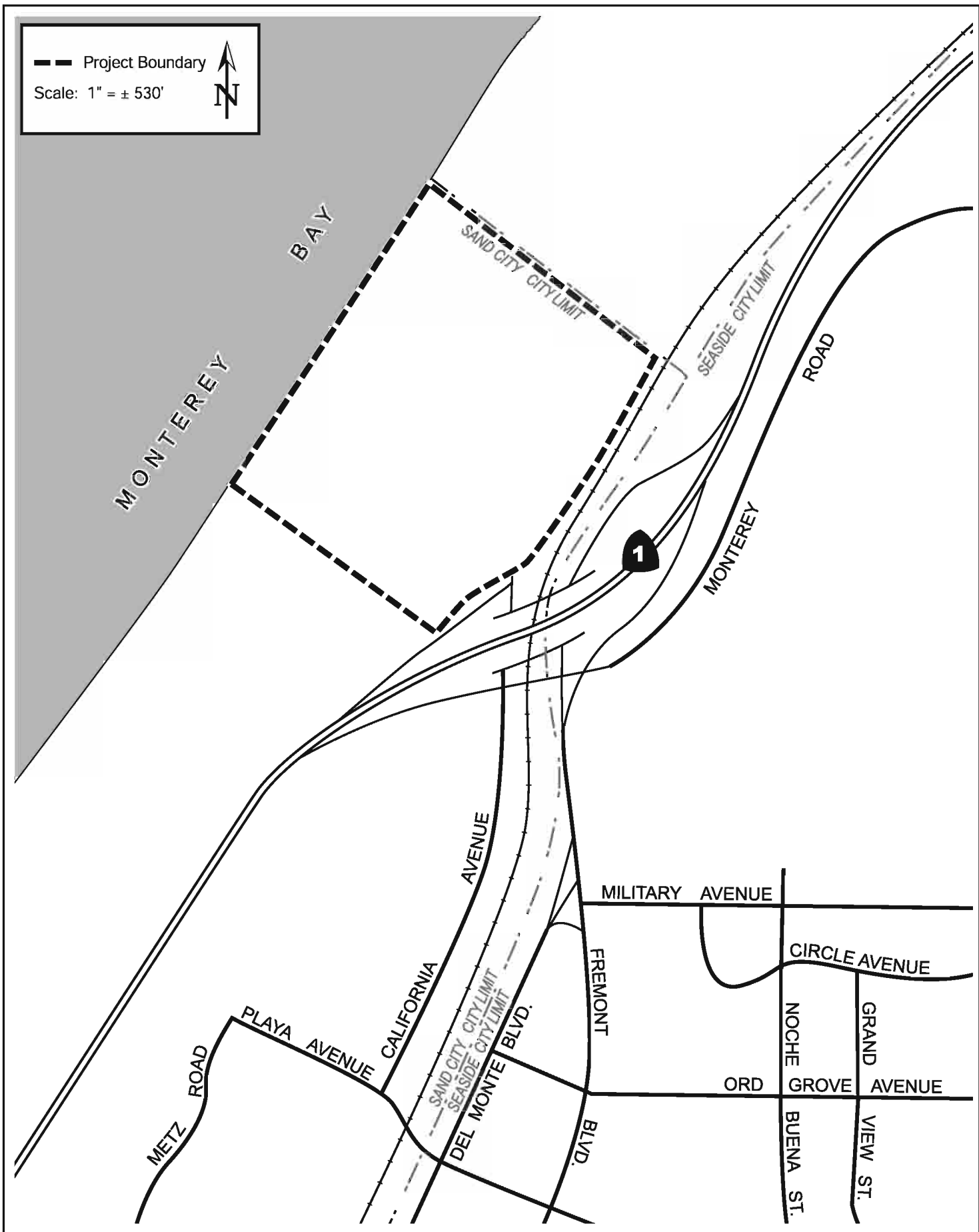
2.4 LEAD AGENCY CONTACT

City of Sand City
Community Development Department
Steve Matarazzo, Director
1 Sylvan Park
Sand City, CA 93955
(831) 394-6700

2.5 ASSESSOR'S PARCEL NUMBER

011-501-014





VICINITY MAP

FIGURE 2



AERIAL PHOTOGRAPH & SURROUNDING LAND USES

FIGURE 3

SECTION 3 PROJECT DESCRIPTION

3.1 OVERVIEW OF THE PROJECT

The revised project proposes the construction of a 341-unit mixed use “ecoresort” with a residential component on the site which is designed with the intention of improving the site ecosystem’s functionality, biodiversity and community. The project site was previously used for sand mining by Lonestar Industries and is currently remains degraded from 60 years of sand mining. The site has a gross area of 39.04 acres, of which approximately 32 acres lie above the mean high tide line. The resort would include the following uses: (1) a 161-room hotel; (2) 46 visitor-serving condominium units (rental pool) located south of the reception area; (3) 42 visitor-serving condominium units (rental pool) located north of the reception area; (4) 92 residential condominium units; (5) auxiliary facilities including a restaurant, conference facilities and rooms and wellness spa; and (6) open space, public access and parking, trails, and habitat and dune restoration. The amount of development analyzed in the 1998 MBS FEIR, the reduced amount of development approved by Sand City on the site, and the reduced amount of development currently proposed on the site is shown in Table 3.1-1.

Table 3.1-1 Project Development Comparison			
Unit Type	Analyzed Development 1998 MBS FEIR	Approved Project Development	Proposed Revised Project Development
Hotel Room	228 rooms	217 rooms	161 rooms
Vacation Ownership Resort Unit	132 units	100 units	0 units
Visitor-Serving Condominium Unit (rental pool)	76 units	45 units	88 units
Residential Condominium Unit	161 units	133 units	92 units
Total	597 units	495 units	341 units

3.2 CURRENT SITE DESCRIPTION

The project site consists principally of disturbed bare sand and dunes that remain from a sand mining operation by Lone Star/Pacific Cement Aggregates which occurred for 60 years, until the end of 1986.

Approximately 1,495 linear feet of the Monterey Bay shoreline borders the site to the west.

The parcel’s existing topography is extremely irregular as a result of intensive sand mining activities that left a sand pit with a depth of 7.5 feet mean sea level (MSL) in the southern half of the site and a sand dune, 161 feet above MSL, located in the southern corner of the site (refer to Figure 4). Historically, the sand dunes on this site were part of a contiguous system of dunes beginning just south of the site and stretching north along the shoreline for approximately ten miles to the mouth of the Salinas River. A bluff, rising from 20 to 50 feet MSL, separates the beach from the northern portion of the site.

3.3 PROPOSED REVISED PROJECT

3.3.1 Site Preparation

Of the site's 32 acres above the mean high tide line, 28.3 acres would be modified by grading, excavation, and recontouring, including rehabilitation and stabilization of the sand dunes impacted by sand mining. The beach area below 20 feet MSL and the area along the northern property line of the site set aside for buckwheat protection would not be subject to any grading, which will assist in avoiding any potential sensitive species in those areas.

The remainder of the site will be recontoured for construction of the proposed buildings and infrastructure, the restored and stabilized sand dunes, and the restored coastal habitat, as shown in Figure 4. At project completion, the maximum elevation on the site would be 145 feet above MSL at the southeast corner of the site, which would be recontoured for dune stabilization. The highest sand dune on the site currently is 161 feet MSL. Another sand dune would reach 105 feet MSL on the northeast portion of the project site, replacing an existing sand dune which is approximately 126 feet above MSL. Dunes at the northeast corner of the site would be slightly modified to conform to the elevation of dunes north of the site, on the State Parks' property, in order to re-establish a contiguous system of dunes in this area.

Although the revised project would still require substantial grading to recontour the site, the revised project has been modified to reduce the required off-haul of sand to approximately 420,000 cubic yards. The excess sand results from (1) moving the project back to the 75-year setback line (using conservative global warming and sea level rise estimates) which exceeds the LCP requirement; and (2) locating the garages under the structures in conformance with the LCP policy of encouraging underground parking. This modification addresses concerns that the previous design called for hauling 880,000 cubic yards of sand off-site by substantially reducing that number for the revised project.

3.3.2 Revised Project Design

The design objective of the revised Monterey Bay Shores ecoresort is to utilize an ecologically innovative approach to the built environment and to coastal development, which integrates an understanding of the site conditions and site capacity into an ecological design that sets high standards in sustainability. Dune topography, plant assemblages and ecological functions would be restored on the site to counteract decades of degradation due to mining operations. The modified Monterey Bay Shores ecoresort would include development of a 161-room hotel, 46 visitor-serving residential condominium units (rental pool) located south of the reception area, 42 visitor-serving condominium units (rental pool) located north of the reception area, and 92 residential condominium units. Auxiliary facilities proposed include a restaurant and bar, wellness spa, and conference and meeting rooms. The project also includes open space, public access trails, and dune and habitat restoration areas. The proposed development would be located centrally on the project site (subject to an increased setback from the mean high tide line) and oriented toward Monterey Bay.

The physical conditions that influenced the layout of the project include the required shoreline setback requirements and goals, the topography of the site, dune stabilization and restoration requirements and goals, and the locations of sensitive dune habitat and habitat restoration goals. In addition, the site design took into account the land use regulations and policies set forth by the City of Sand City and the City's Local Coastal Program Land Use Plan certified by the California Coastal Commission (including amendments to the LCP), which require the provision of public access to the

shoreline and public recreation opportunities, open space, establishment of dune stabilization and habitat restoration areas, limitations on the height of the structures, and protection of specific views of Monterey Bay.

The revised project emphasizes visitor-serving uses, as those are a priority in the certified LCP. The ecoresort is also consistent with the LCP policies which encourage facilities that provide services to address a range of visitor needs and in a way that is consistent with preserving and enhancing the natural coastal resources.

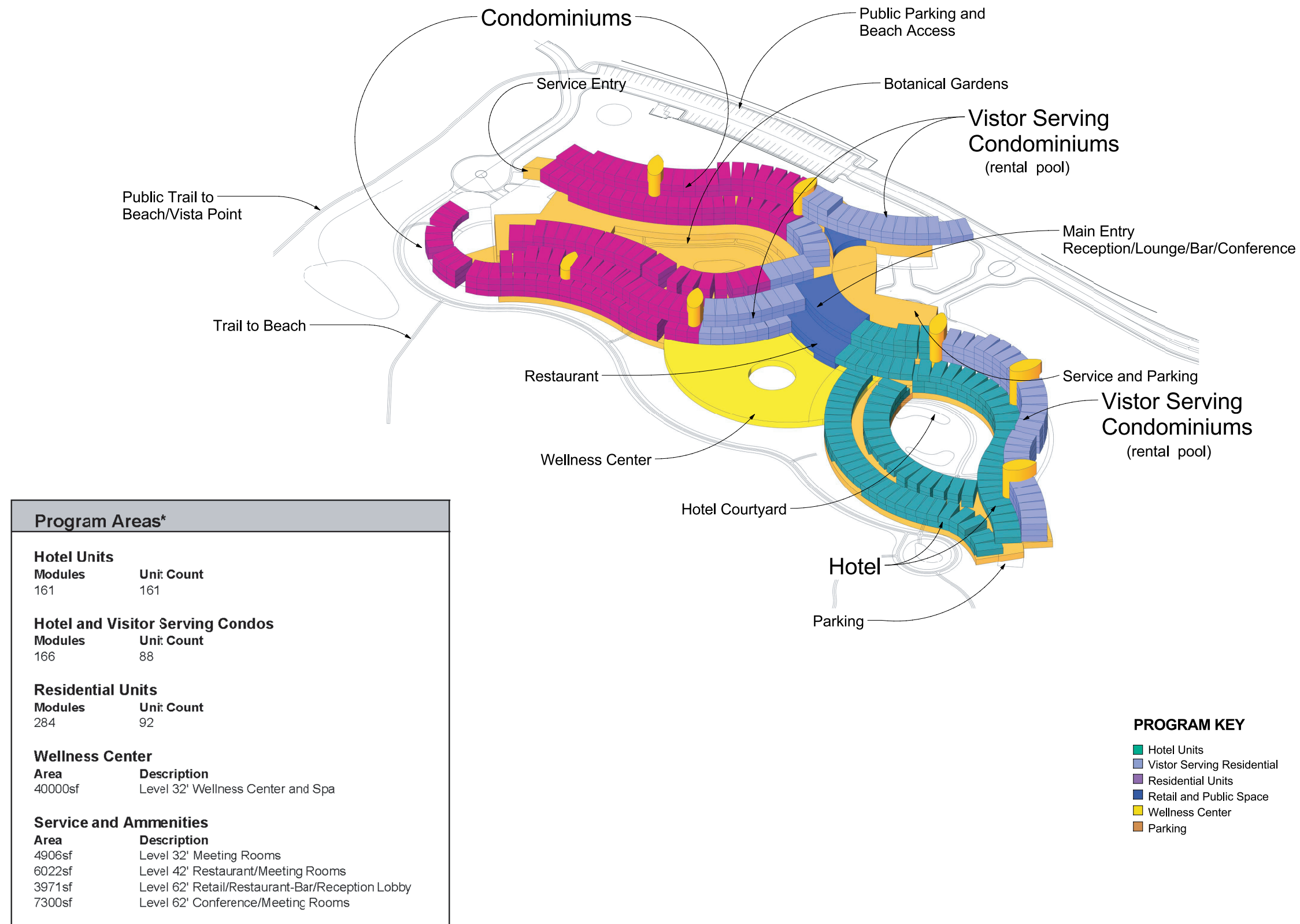
Building and Facility Layout

The proposed development would be built “into the dunes” on the site in order to mimic the dune environment, reduce the project’s impacts to views of the site and of the Monterey Bay, and reduce noise impacts to the project, all of which are consistent with the policies of the LCP. The resort architectural forms are intended to conform to the topography, shore orientation and scale of natural dune formations. The proposed hotel, resort, and condominium units all would be integrated into what appears as one building. The proposed buildings on the site would be constructed in a stepped fashion to fit the dune topography (refer to Figures 4, 5, and 7). The main entry and reception area would be at the elevation of 62 feet above MSL providing access both to the residential portion on the north and hotel/resort portion on the south of the building. The highest building elevation, a living roof, would not exceed 112 feet above MSL. The residential units including visitor serving residential units would be located on the northern end of the proposed buildings and the hotel/resort units would be located in the central and southern portions of the proposed buildings (refer to Figure 5).

Location of Uses

The proposed lowest elevation of the resort buildings would be located at 32 feet above MSL and would be developed with the wellness center, described below. In general, the hotel and rental pool condominium units would be located south of the reception area and the residential and visitor-serving residential condominiums would be located north of the reception area. In each section there may be intermixing of the unit types at different elevations. The reception area would be at the elevation of 62 feet above MSL and would serve as an access passageway to the restaurant and conference rooms, which would be at the elevation of 52 feet above MSL, and the wellness spa, and the guest and living areas to the south and north, which would be at the elevation of 32 feet above MSL.

The proposed wellness center/spa would be located in the center of the resort at an elevation of 32 feet above MSL, and include a yoga pavilion in the center of the spa as well as workshop areas. To the south of the wellness space would be situated the 161 hotel rooms and the visitor-serving condominium rental pool units as well as the hotel court yard, pools, and the guests gathering places. The units would be stepped up to match the dune topography in separate buildings from 32 feet to 92 feet above MSL. The residential condominiums and the visitor-serving condominiums would be located to the north of the wellness spa starting at an elevation of 32 feet above MSL and would be stepped up to match the dune topography also in separate buildings to 102 feet above MSL elevation. The residential section would have its own courtyard with botanical gardens and a pool situated in the center. Access from both ends of the resort to the reception, restaurant, conference rooms, and meeting rooms could be accomplished by using the atrium gardens or walkways on top of the living roofs. Delivery truck access would be next to the residential access on the north side.



Source: BSA Architects, October 2008.

LAYOUT OF BUILDING AND FACILITY USES

FIGURE 5

Each of the buildings located at an elevation of 62 feet above MSL provide for vertical circulation, daylighting and ventilation towers.

A small biofiltration pond is located on the east side of the parking garages. A retention pond would be located between the residential complex and the public trail to the beach (refer to Figure 4).

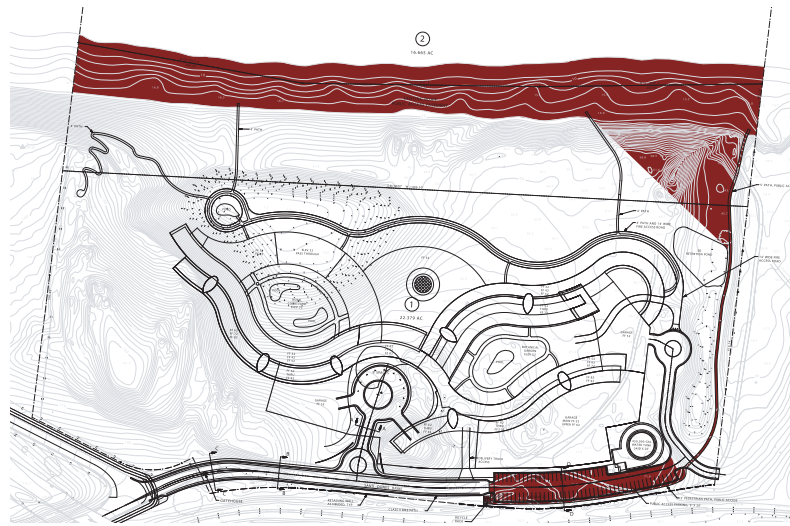
Site Access and Parking

Vehicular access to the project site would be provided from an extension of Sand Dunes Drive. The main entrance to the proposed building would be located approximately 436 feet from the current terminus of California Avenue. The main entrance would provide access to the building lobby and two underground parking garages, one located to the south and one to the north. A second parking garage access, as well as delivery truck access, would be provided on the north end of the site (refer to Figure 4). Sand Dunes Drive would be extended approximately 780 feet at which point it would become a private access driveway (except for the public parking spaces which will be open during the day).

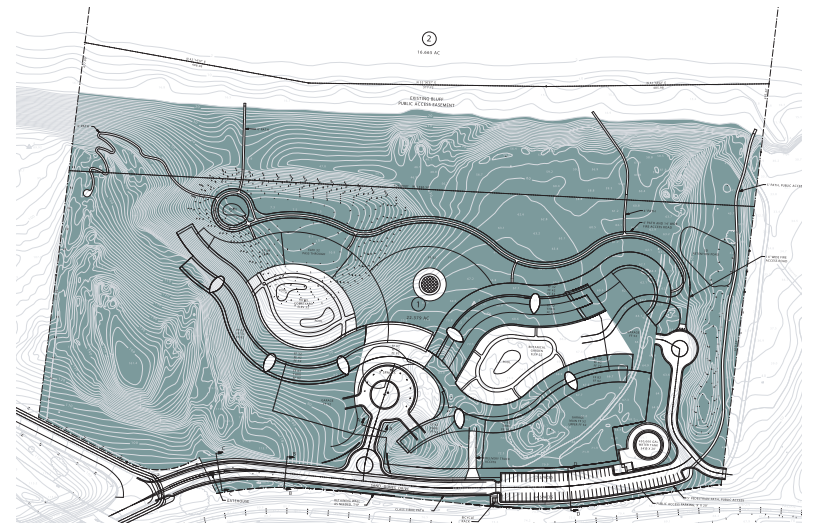
The proposed underground parking garage on the southeast portion of the site would be located behind and below the hotel and visitor-serving condominium units. This parking garage would provide approximately 220 parking spaces for the proposed development. The second, larger parking garage would be located on the northeastern portion of the site. This 473-space parking garage would be two levels and located below the residential and visitor-serving condominiums. Nine additional parking spaces would be located along the roundabout at the main entry to the building. An additional 70 public parking spaces would be located along the private driveway on the northeast side of the project site. The revised project was designed, consistent with the LCP, with roads and pathways that conform to the natural contours of the site. The revised project also provides maximum covered and underground parking, which fulfills the LCP policy of encouraging a layout that buffers parking from Monterey Bay.

Public Access

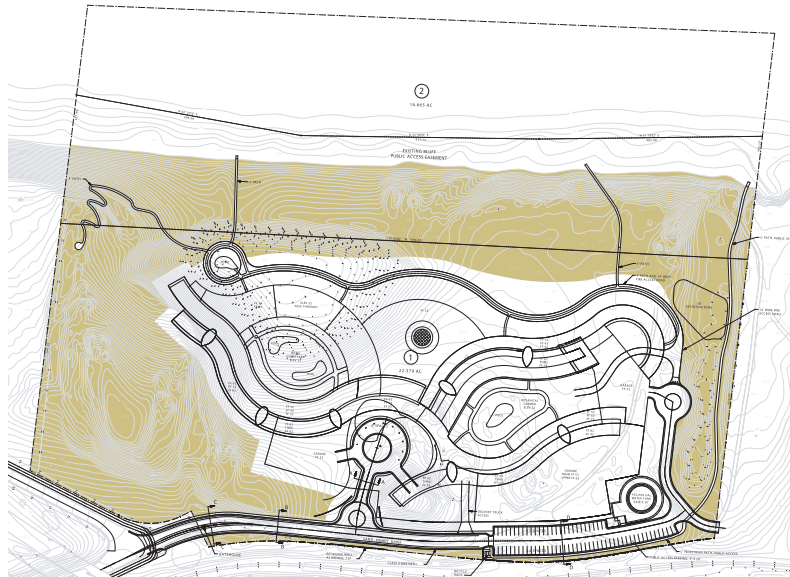
A public access easement is proposed over the private driveway and parking areas on the east portion of the site (refer to Figure 6). A public access pathway, with a vista point, would be provided from the parking areas to the beach. Access ways are designed away from the large dune areas that are proposed for stabilization and/or restoration. Pathways would be created to avoid and protect restored vegetation. A public easement would cover the entire beach area below 20 feet MSL to ensure lateral access along the coast on dry sand. Vertical access to the shore has been provided at three locations on the site to prevent crowding and overuse of coastal resources on the site. All public access would be coordinated and controlled, based on recommendations of a retained on-site biologist, to avoid or minimize impacts to plover nesting areas during the plover nesting season (refer to *Section 4.4 Biological Resources*). A gate operated by the resort would be located on Sand Dunes Drive and would be open to the public during daylight hours, as required by a deed restriction on the property. The revised project includes parking for public access at a rate of ten (10) percent above the total parking provided for the resort development (refer to *Section 4.15 Transportation*). The public parking areas are largely screened from public viewpoints by landscaping and dune restoration. A bike path is also proposed along the eastern property boundary of the site adjacent to the Sand Dunes Drive extension, which would connect to the regional bike path.



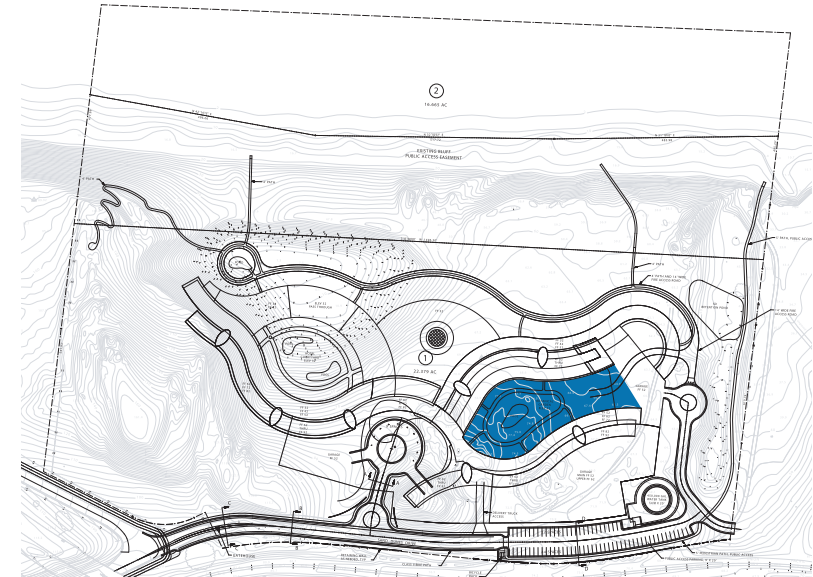
Public Access Easement 5.69 Acres



Habitat Restoration 23.22 Acres



Conservation Easement 13.85 Acres



Botanic Garden 0.92 Acres

The project proposes a 5.69-acre public access easement on the site that would connect the public parking area at the northeast corner of the site with the beach and vista point through a trail located along the northern property line. A 13.85-acre conservation easement would surround the proposed buildings on the site. Visitors would be allowed within some areas of the conservation easement associated with public access, subject to restrictions needed to protect potential plover nesting or other sensitive species.

Utilities and Infrastructure

The proposed project would obtain utility services from the Seaside County Sanitation District, California American (Cal-Am) Water Company, Pacific Gas & Electric and other service providers.

Sanitary Sewer

An eight-inch sanitary sewer line would be located along the ocean side of the proposed project and would connect with a sewage lift station in the southwest portion of the project site. The lift station would connect with a four-inch sanitary sewer force main through the project site out to the Sand Dunes Drive extension. The sanitary sewer line would be extended in California Avenue to an existing six-inch main sewer line at the Edgewater Shopping Center.

“Graywater”¹ would be treated on-site and reused in toilets and irrigation. The project would use a combination of mechanical and biological waste treatment systems to treat and reuse wastewater within the site. The systems would combine aerobic and anaerobic technologies such as advanced fixed media, microbacteria digestion, hydroponics, and constructed wetlands in order to meet the requirements of State Health Regulations (Title 22 of the California Code of Regulations) for re-use. Surplus graywater would be discharged to bioswales after being treated.

Water Supply and Service

Water service would be provided for the revised project by the local water utility, Cal-Am Water Company (Cal-Am), through the pumping of groundwater from the Seaside Groundwater Basin. Cal-Am would provide water service through an operation and maintenance agreement with the property owner. Cal-Am is seeking approval from the California Public Utilities Commission to have the project site annexed into Cal-Am’s service area. Once the project site is annexed into the Cal-Am service area, water lines would be extended from the Edgewater Shopping Center to the project site and the project site’s groundwater allocation (as adjudicated) would be pumped from Cal-Am’s existing Peralta wells through a subsequent operating agreement. The arrangement with Cal Am is being implemented to minimize impacts to the Seaside Groundwater Basin by making the groundwater withdrawal further inland.

The proposed use of groundwater is consistent with the current management plan for the Seaside Groundwater Basin. In 2006, the Monterey County Superior Court issued a final, binding judgment and decision (Appendix A) that (1) adjudicated the legal entitlements to water within the basin; (2) imposed a “physical solution,” which is a term in water law referring to a court-imposed management plan to monitor and manage the groundwater for long-term sustainability; and (3) established a “watermaster” to develop, modify and implement the groundwater management plan. In implementing the “physical solution,” the court considered and balanced uses and projected uses,

¹ Graywater is wastewater from kitchens, baths, and laundry facilities that can be reused or recycled with minimal or no treatment for landscape irrigation and other non-potable uses.

as well as impacts on the basin, in order to address and remedy any exceedance of the natural safe yield. Specifically, the judgment states “the physical solution set forth by this judgment is intended to ultimately reduce the drawdown of the aquifer to the level of the natural safe yield.”

In the adjudication, the court confirmed that the current owner of the property, Security National Guaranty, Inc., is entitled to 149 acre-feet of groundwater per year from the basin. Under the judgment, Security National Guaranty, Inc. has priority rights to use its legal entitlement of water. Thus, in the event that groundwater levels decline or are otherwise impacted for any reason and withdrawal reductions are mandated, non-priority users must reduce their use of the groundwater as needed, down to zero, before any of Security National Guaranty Inc.’s 149-acre feet of water can be reduced. Specifically, the judgment provides that Security National Guaranty Inc. has “a prior and paramount right over those Parties Producing under the Standard Production Allocation to produce the amount set forth in Table 2 (149 acre-feet annually) in perpetuity, and said Alternative Production shall not be subject to any reductions under Section III.B.2 or at such times as the Watermaster determines to reduce the Operating Yield...”. Since Security National Guaranty Inc. has the described priority protection in the court’s judgment, Security National Guaranty, Inc. has a secure, long-term supply of water for the project that is unlikely to be reduced even if the groundwater basin is subject to substantially reduced withdrawal.

The applicant also would be required to apply for a water distribution permit from the Monterey Peninsula Water Management District.

In the event the site is not annexed into Cal-Am’s service area, the project would enter into an operating and maintenance agreement with Cal-Am (or another licensed operator) to service the project by pumping groundwater from the owner’s existing on-site well in accordance with the Monterey County Superior Court judgment, as described above, which gives Security National Guaranty, Inc. a priority right to its 149-acre feet for annual production. The project would include an optional 250,000 gallon water tank at the northeast corner of the site for storage and fire suppression purposes. The court-imposed physical solution presently balances the rights and uses of non-priority and priority users of the Seaside Groundwater Basin.

Potable water would be used for drinking water and the restaurant on-site as well as showers, laundry, spa, and pool uses. Rain water would be collected in cisterns located in the parking garage and retention ponds and used to supplement on-site water use for all non-potable uses including showers, toilets, laundry, spa, and swimming pool(s).

Gas and Electric, Cable, Telephone and Internet Service (Dry Utilities)

Gas and electric service would be provided to the site by Pacific Gas & Electric (PG&E). Currently PG&E’s electric service is provided through overhead lines in the project area. The project proposes that dry utilities to be installed underground in joint utility trenches throughout the site as allowed under local building codes.

The revised project would utilize cutting-edge energy demand reducing technologies as well as incorporate on-site alternative energy sources in order to reduce overall energy use, decrease fossil fuel use, and decrease the project’s carbon footprint. The resort has integrated a design process that ensures that the resort’s orientation to the sun and wind creates optimal energy efficiency. The resort will use extensive passive systems and natural ventilation to cut dependence on mechanical systems. The project has been designed to optimize daylighting to reduce the need for internal lights. The project proposes to generate electricity on the site using solar photovoltaic panels and high-

efficiency ground-mounted horizontal-axis wind turbines. Geothermal heat pumps would provide heating and cooling for the resort. The proposed system would eliminate the need for boilers, cooling towers, and other mechanical systems.

The south facing sloping roofs of the buildings would include solar photovoltaic panels that connect together. Passive solar hot water heating would also be used by the project and would be provided using evacuated solar tube collectors mounted on the green living roof. The low profile, horizontal mounted, wind turbines would rest on the living green roofs in selected areas. The wind turbines harness the kinetic energy from the wind to create electrical power. The turbines are noise and vibration free, and are designed to be safe for birds through the use of protective enclosures around the slow-moving blades. The design also harnesses multi-directional and gusting winds. Geothermal heat pumps used for the project would be energy efficient and use the ground as a heat source and heat sink, eliminating the need for conventional boilers and cooling towers mounted on the roof.

Storm Drainage

The revised project proposes to capture stormwater for on-site use and allow infiltration on the site. The revised project includes cisterns and two retention ponds, one located on the northwest portion of the site and one located on the east portion of the site adjacent to Sand Dunes Drive. A bioswale would be located adjacent to the retention pond on the northwest portion of the site. Storm drainage lines ranging from 12 inches to 24 inches would be located throughout the site. Since the project is designed to avoid stormwater runoff, the project would not connect with off-site storm drainage lines and would not discharge stormwater from the site. These storm drainage lines instead would be directed to the retention ponds and cisterns on-site.

Architectural Design

The project proposes a modern, sustainable design that would meet or exceed the requirements of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Platinum rating, which is the highest rating in the LEED program (refer to Figure 7). The proposed building would maximize energy efficiency, generate renewable wind and solar electricity, and reduce energy needs through the use of daylighting and natural ventilation. No potable water would be used for landscape irrigation as described above, which would reduce the water demand of the resort during the life of the project. "Living green roofs" would be used throughout the project to contribute to the total restored habitat and minimize impervious surfaces on the site. The living green roofs also provide greater insulation than traditional roofs which would increase the energy efficiency of the resort and reduce the revised project's carbon footprint. Low and non-volatile organic compound (VOC) emitting materials and sustainable materials (comprised of local and regional products) would be used in the proposed building. Biofiltration through interior living walls would also further reduce VOC levels in the interior environment by more than 50 percent.



Source: BSA Architects, 7/108.

PROPOSED BUILDING DESIGN

FIGURE 7

SECTION 4 ENVIRONMENTAL CHECKLIST, IMPACTS, AND MITIGATION

In accordance with CEQA §21093(b) and CEQA Guidelines §15152(a), this Addendum tiers off the City of Sand City Monterey Bay Shores Final Environmental Impact Report (1998 MBS FEIR) that was certified in December 1998. The 1998 MBS FEIR prepared for the project analyzed a 597-unit mixed use resort and residential development. The approved Coastal Development Permit allowed for the development of a 495-unit mixed use resort that consisted of a 217-room hotel, a 100-unit vacation ownership resort club, 133 residential condominiums, 45 visitor-serving units available in a rental pool, auxiliary facilities including a restaurant, conference rooms, and other commercial auxiliary facilities, open space, public access trails and recreation area, and a minimum of 10.2 acres of restored and stabilized sand dune habitat. The previously proposed resort was approved subject to 59 conditions that were required to be met prior to construction on the site.

This section, *Section 4 Environmental Checklist, Impacts, and Mitigation Measures*, describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, was used to compare the environmental impacts of the “Proposed Revised Project” with those of the “Approved Project” (i.e., development evaluated and approved by Sand City using the 1998 MBS FEIR) and to identify whether the proposed project would likely result in new significant environmental impacts. The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section.

In addition, each impact is numbered using an alpha-numerical system that identifies the environmental issue. For example, **Impact HAZ-1**, denotes the first impact in the hazards and hazardous materials section. Mitigation measures and conclusions are also numbered to correspond to the impacts they address. For example, **MM HAZ-1.1** refers to the mitigation measure for the first impact in the hazards and hazardous materials section. The letter codes used to identify environmental issues are as follows:

Table 4.0-1 Letter Codes of Environmental Issues	
Letter Code	Environmental Issue
AES	Aesthetics
AG	Agricultural Resources
AQ	Air Quality
BIO	Biological Resources
CULT	Cultural Resources
GEO	Geology and Soils
HM	Hazards and Hazardous Materials
HYD	Hydrology and Water Quality
LU	Land Use
MR	Mineral Resources
NOI	Noise
PH	Population and Housing
PS	Public Services
REC	Recreation
TRANS	Transportation
UTIL	Utilities and Service Systems

4.1 AESTHETICS

4.1.1 Setting

4.1.1.1 *Project Site*

The approximately 39-acre project site is located between State Route 1 (SR 1), also known as Highway 1, and the Monterey Bay, northwest of the southbound on-ramp to SR 1 from California Avenue (refer to Figures 2 and 3). The project site is currently vacant and was formerly used for sand mining by Lonestar Industries. The project site has irregular topography consisting of sandy beach, bluffs and sand dunes. Portions of the site can be seen by motorists traveling on Highway 1, by visitors of the parks to the northeast and southwest, by boaters on the Monterey Bay, by pedestrians along the shoreline, and observers across the Peninsula in and around the City of Monterey.

The Local Coastal Program's Land Use Plan (LCP) identifies the northwest corner of the site as an open view corridor. The location of the open view corridor is identified and shown on Figure 8.

4.1.1.2 *Surrounding Area*

The project site is surrounded by parklands to the north and south, SR 1 to the east, and the Monterey Bay to the west. The project site is located within the Monterey Peninsula urbanized area. Urban uses in the project area include a major regional big "box" shopping center and residential development in the City of Seaside located east of SR 1 (refer to Figure 3). The parkland is mostly undeveloped with the exception of the coastal bike trail. Seaside High School also is located southeast of the project site on the opposite side of SR 1.

4.1.1.3 *Scenic Vistas*

The LCP designates one scenic vista point on the project site (providing views of the Monterey Bay and Peninsula). The LCP-designated scenic vista point is shown on Figure 8.

SAND CITY LOCAL COASTAL PROGRAM VISUAL RESOURCES MAP

FIGURE 8

4.1.2 Environmental Checklist and Discussion

AESTHETICS						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
5) Increase the amount of shading on public open space (e.g., parks, plazas, and/or school yards)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.1.2.1 Views and View Corridors

In the certified LCP, view corridors are established in various locations along the Sand City shoreline based upon existing views of the Monterey Bay and Peninsula. One open view corridor is located on the northwest corner of the site, as shown in Figure 8. The certified LCP also states that stationary views, such as vista points, are a valuable alternative to view corridors for the protection of visual resources and underscores the importance of balancing resources. According to the LCP, degradation of views results from improperly sited, designed or landscaped developments.

The previously approved project was found to affect six of eight views analyzed, although only one of the views is designated in the LCP. Of those six views, three locations were updated with photosimulations of the current project. The location of the three views analyzed are shown in Figure 10.

The three locations included in this analysis were considered representative views of the previously impacted viewpoints of the approved project. View 1 is representative of photo points 2-4 from the certified 1998 MBS FEIR and is the only view that crosses the site’s LCP-designated open view corridor. Photo points 5 and 8 from the 1998 MBS FEIR showed no impacts or beneficial impacts and those determinations have not changed. Photo point 1 captures primarily Fort Ord Dunes State Park to the north (no water views) and, therefore, was not reanalyzed. Photo points 6 and 7 from the certified 1998 MBS FEIR were reanalyzed as Views 2 and 3, respectively.

Of the photosimulations completed for the currently proposed project, View 1 (Figure 10) includes the location of the open view corridor identified in the LCP in the northwest corner of the project site. View 1 would not be altered by the revised project. Currently, the highest elevation in this area of the site is 62 feet above mean sea level (MSL). The roofs of the buildings in this area of the site

would not exceed 62 feet MSL. An existing sand dune on the northeasterly boundary of the project site would remain in its existing location. The rooftops on the project site would be vegetated with dune plant species which would further reduce the visibility of the project from SR 1. The blue water views of Monterey Bay over the open view corridor would be preserved with the revised project. Thus, the revised project would result in less impact to the LCP identified open view corridor than those previously identified in the certified 1998 MBS FEIR.

The photosimulation of the project in View 2 (Figure 11), which is not a designated view corridor in the LCP, is the northbound side window view (90 degrees) opposite the project site. The View 2 photosimulation shows that views of Monterey Bay would be impeded or blocked by the dune restoration and reconstruction required by the certified LCP, as amended. The proposed dune restoration would serve to shield the project site and would be planted with coastal dune species to provide for additional habitat restoration on the site. As a result, the redesign achieves the LCP's policies of softening the view of the site from SR 1 – with green roofs with coastal dunes and plants – and ensuring the visibility of the project buildings from the highway is reduced.

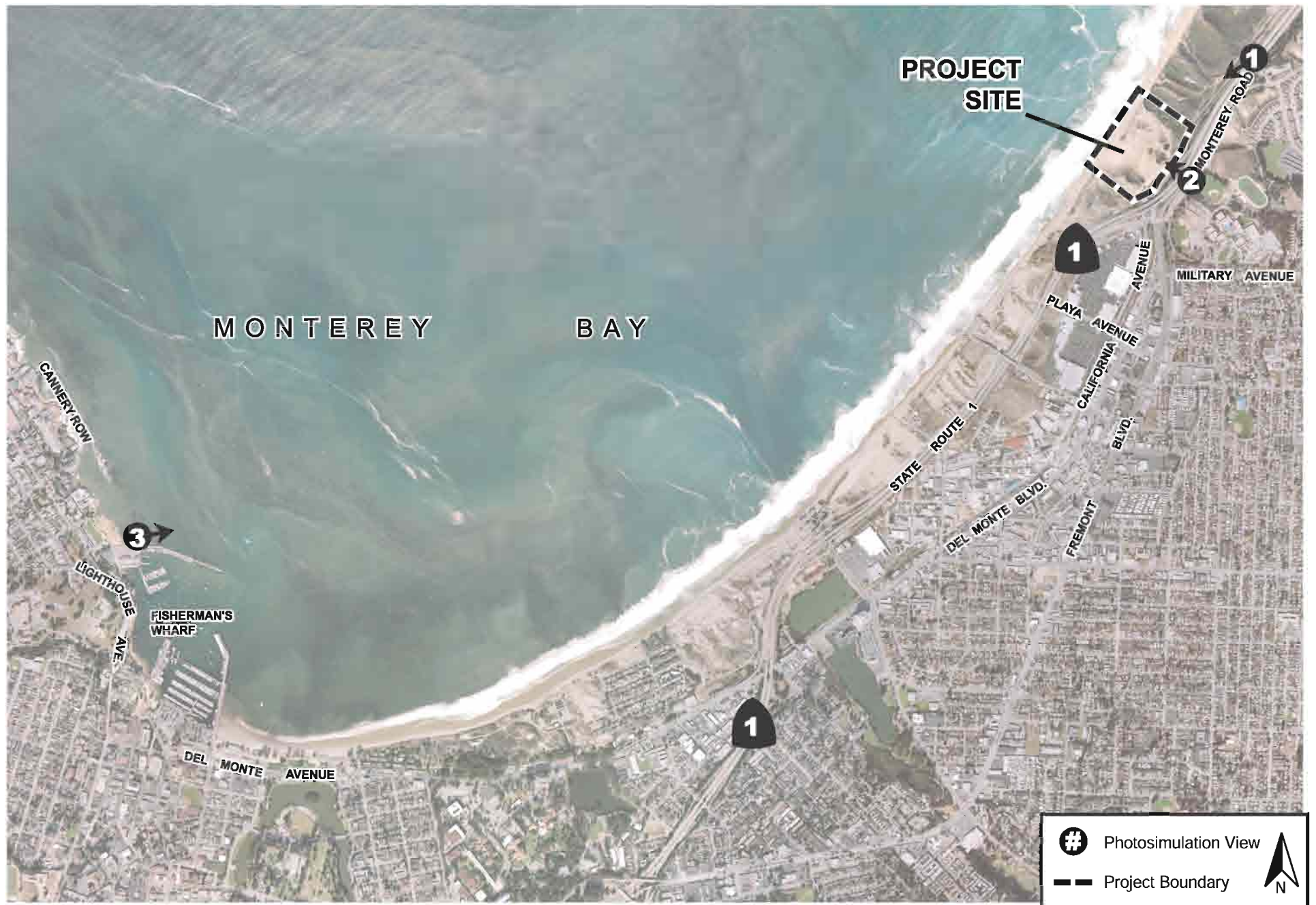
The previously approved project was also found to obstruct views in this location and, therefore, the revised project would not result in any new impact to this view than previously identified in the certified 1998 MBS FEIR. This view corridor, however, is not a protected view corridor in the LCP. The proposed project would result in the same view impacts as the previously approved project. The previously approved project was conditioned to provide final architectural plans for the project to the City's Design Review Committee for review and approval prior to the issuance of building permits.

The photosimulation of the project in View 3 (Figure 12), taken from the Coast Guard Station in Monterey approximately 16,400 feet southwest of the site, shows the project site is unlikely to be seen during typical weather conditions in Monterey. Like the previously approved project, the revised project would not result in any impact to views of the Monterey Bay from the Coast Guard Station and, therefore, the project would also not result in any new impact to this view than previously identified in the certified 1998 MBS FEIR.

Impact AES-1: The revised project would impede the View 2 side window (90 degree) view of Monterey Bay due to the height of a reconstructed and restored dune which is the same impact previously identified in the certified 1998 MBS FEIR. The character of the impact differs because in the revised project, resort buildings would not be visible but rather would appear as restored vegetated coastal dunes. **(Same Significant Impact as Approved Project)**

Mitigation Measures: The following mitigation measure was identified as part of the certified 1998 MBS FEIR and would be a condition of the proposed ecoresort project:

MM AES-1.1: The applicant shall submit the project plans to the Design Review Committee (DRC) and incorporate the changes to the project required by the DRC. The final plans will be reviewed and approved by the Community Development Director prior to the issuance of a building permit for the project to ensure that view impacts are minimized to the extent feasible.



PHOTOSIMULATION VIEW LOCATIONS

FIGURE 9



EXISTING



WITH PROJECT



EXISTING



WITH PROJECT



EXISTING



WITH PROJECT

4.1.2.2 *On-Site Public Vista Point*

The previously approved project included a public vista point located at the north end of the site within the public access easement which is consistent with the vista point location identified in the LCP (refer to Figure 8). The approved project was conditioned to provide a gazebo-type structure at the public vista point which would shelter ten people and include a minimum of two benches. The revised project would also provide a public vista within a public access easement consistent with the location identified in the LCP. The project redesign, however, seeks to minimize view impacts due to the placement of on-site structures and give the site a more natural look and feel. The revised project, therefore, is not proposing a sheltered public vista point.

Impact AES-2: The currently proposed revised project would provide access to the public beach which would provide a public vista point with views of the Monterey Bay consistent with the LCP. **(No New Impact)**

4.1.2.3 *Project Design and Compatibility with Surrounding Development*

The buildings proposed by the previously approved project were found to be of a height and bulk that was not entirely compatible with the surrounding landscape due to the relative scale and design of the buildings which did not conform to the slopes of the existing and proposed sand dunes on the site. The currently proposed ecoresort project has been redesigned to mimic the dunes and has been reduced from 10 stories to a cluster of buildings from one story to a maximum of four stories from the restored dune grade. The project would be stepped down into the site to further reduce its height and view impacts. As identified in the LCP, the proposed ecoresort project would be subject to the Design Review Committee and final plans would be reviewed and approved by the Community Development Director prior to issuance of a building permit. For these reasons, the project design would result in less design and visual compatibility impacts than those identified in the certified 1998 MBS FEIR.

4.1.2.4 *Light and Glare Impacts*

The proposed revised project would introduce additional light and glare into the project area given that the project site is currently vacant. There is no development currently on the site or directly to the north or south that is illuminated. The revised project includes low profile and localized exterior lighting to minimize spillover of light from the project on surrounding properties and Monterey Bay. Some exterior lighting, such as the project signage, would be visible from State Route 1. In accordance with the previous conditions of approval for the approved project, the revised project would be required to submit a detailed Lighting Plan and Management Program for review to the DRC. The plan would require review and approval by the Community Development Director prior to the issuance of building permits for the project. The proposed project would not result in any greater light or glare impacts than were identified in the certified 1998 MBS FEIR.

4.1.2.5 *Shade and Shadow*

The public beach area of the project site is currently shaded in the morning from the existing bluffs on the site. The proposed ecoresort project would be stepped down into the site and, therefore, would not result in any greater shade and shadow impacts than the previously approved project analyzed in the certified 1998 MBS FEIR.

4.1.3 **Conclusion**

Impact AES-1: The proposed project, with the implementation of the mitigation measures identified above, would not result in any new or more significant view impacts than those addressed in the certified 1998 MBS FEIR. **(No New Impact)**

Impact AES-2: The currently proposed revised project would provide access to the public beach which would provide a public vista point with views of the Monterey Bay consistent with the LCP. **(No New Impact)**

4.2 AGRICULTURAL RESOURCES

4.2.1 Setting

According to the Monterey County Important Farmland 2006 map, the project site is designated as *Other Land*. *Other Land* is defined as land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

Currently, the project site is not developed and not used for agricultural purposes. The site is not the subject of a Williamson Act contract. The site is located on a disturbed site near urban development, and there is no property used for agricultural purposes adjacent to the project site.

4.2.2 Environmental Checklist and Discussion

AGRICULTURAL RESOURCES						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,3
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

As discussed above, the project site is not designated as farmland or used for agricultural purposes. For these reasons, the proposed project would not result in any impacts to farmland.

The proposed project would not result in any new or more significant impacts to agricultural resources than were described in the previously certified 1998 MBS FEIR.

4.2.3 Conclusion

The proposed project would not result in impacts to farmland. **(No New Impact)**

4.3 AIR QUALITY

4.3.1 Setting

4.3.1.1 *Introduction*

The Monterey Bay Unified Air Pollution Control District (MBUAPCD) shares responsibility with the California Air Resources Board (CARB) for ensuring that the state and national ambient air quality standards are met within the North Central Coast Air Basin (NCCAB). State law assigns local air districts the primary responsibility for control of air pollution from stationary sources while reserving to the CARB control of mobile sources. The District is responsible for developing regulations governing emissions of air pollution, permitting and inspecting stationary sources, monitoring air quality and air quality planning activities.

The *2008 Air Quality Management Plan* (2008 AQMP) for the Monterey Bay Region is the current regional air quality plan. The District has published a draft update to the AQMP currently undergoing public review. The goal of the AQMP is to improve air quality through tighter industry controls, cleaner cars and trucks, cleaner fuels, and increased commute alternatives.

4.3.1.2 *Current Ambient Air Quality Standards and Attainment Status*

As a result of the federal and California Clean Air Acts, the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for what are commonly referred to as “criteria pollutants,” because they set the criteria for attainment of good air quality. Criteria pollutants include carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and particulate matter. In general, these standards have not changed substantially since the certification of the 1998 MBS FEIR; however, in some cases the California standards have become more stringent since 1998. The MBUAPCD, however, has changed only the VOC and nitrogen oxide standards of significance. Table 3.8-1 lists these pollutants, their sources and effects, and the related standards. Ambient air quality standards that have changed since certification of the 1998 MBS FEIR are shown in italics.

The project is located within the North Central Coast Air Basin (NCCAB), which is comprised of Santa Cruz, San Benito and Monterey Counties. The MBUAPCD operates a network of monitoring sites within its jurisdiction. The monitoring station closest to the project site is located in Salinas, approximately 12 miles northeast of Sand City. This site monitors ozone, PM₁₀, PM_{2.5}, carbon monoxide and nitrogen dioxide. During the three year period 2004-2006 the federal/state ambient air quality standards for these pollutants were all met, with the exception of a single exceedance of the state PM₁₀ standard in 2006.

Under the federal Clean Air Act, the NCCAB was designated a maintenance area for the federal 1-hour ozone standard (the 1-hour standard is now revoked) in 1997 after meeting the federal 1-hour standard in 1990. The maintenance area designation means that it was previously a non-attainment area but that it achieved attainment status and had a maintenance plan approved under the Clean Air Act in 1994.

The NCCAB is designated as unclassified/attainment for the federal 8-hour ozone standard. While no federal plan for attaining the federal 8-hour standard is required under the federal Clean Air Act, a revision to the 1994 maintenance plan for the 1-hour standard is required in order to demonstrate

how the new 8-hour standard is to be maintained. The required maintenance plan for the 8-hour standard was adopted in May 2007.²

Table 4.3-1 Major Criteria Air Pollutants and Standards						
	Pollutant					
	Ozone	Carbon Monoxide	Nitrogen Dioxide	Sulfur Dioxide	PM₁₀	PM_{2.5}
Health Effects	Eye irritation, respiratory function impairment	Aggravation of cardio-vascular disease, fatigue, headache, confusion, dizziness, can be fatal	Increased risk of acute and chronic respiratory disease	Aggravation of lung disease, increased risk of acute and chronic respiratory disease	Aggravation of chronic disease and heart/lung disease symptoms	Aggravation of chronic disease and heart/lung disease symptoms
Major Sources	Combustion sources, evaporation of solvents and fuels	Combustion of fuel, combustion of wood in stoves and fireplaces	Motor vehicle exhaust, industrial processes, fossil-fueled power plants	Diesel exhaust, oil power plants, industrial processes	Combustion, cars, field burning, factories, unpaved roads, construction	Combustion, cars, field burning, factories, unpaved roads, construction
Federal Primary Standard	1-hr: n/a 8-hr: .08ppm	1-hr: 35ppm 8-hr: 9ppm	1-hr: n/a AA: .05ppm	1-hr: n/a 24-hr: .14ppm AA: .03ppm	24-hr: 150 µg/m ³ AA: n/a	24-hr: 35 µg/m ³ AA: 15 µg/m ³
State Standard	1-hr: .09ppm 8-hr: .07ppm	1-hr: 20ppm 8-hr: 9ppm	1-hr: .18ppm AA: .03ppm	1-hr: .25ppm 24-hr: .04ppm	24-hr: 50 µg/m ³ AA: 20 µg/m ³	24-hr: n/a AA: 12 µg/m ³
NCCAB Attainment Status	federal (8-hr) – U/A state (8-hr) – N state (1-hr) – N	federal – U/A state – A	federal – U/A state – A	A	federal – U/A state – N	federal – U/A state – A
Attainment Status: A = attainment, N = nonattainment, U = Unclassified, M = Maintenance PM10 = particulate matter, 10 microns in size PM2.5 = particulate matter, 2.5 microns in size ppm = parts per million µg/m ³ = micrograms per cubic meter AA = annual average 1-hr = 1-hour average 8-hr = 8-hour average 24-hr = 24-hour average n/a = not applicable Source: California Air Resources Board, Ambient Air Quality Standards, February 2007.						

4.3.1.2 Sensitive Receptors

Sensitive receptors are defined as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These types of land uses include residences, schools playgrounds, child care centers, retirement homes, convalescent homes, hospitals and medical clinics. The closest sensitive receptor to the site, although at a considerable distance east of the project site, is Seaside High School.

² Monterey Bay Unified Air Pollution Control District. 2007 Federal Maintenance Plan for Maintaining the National Ozone Standard in the Monterey Bay Region. May 9, 2007.

4.3.2 Environmental Checklist and Discussion

AIR QUALITY						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,5,6
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,5
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2,5
4) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,5
5) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.3.2.1 Air Quality Management Plan

In order to be found consistent with the AQMP, a project must be consistent with the forecasts for residential and non-residential population related activities. The previously approved project was reviewed for consistency with the *1997 Air Quality Management Plan* (1997 AQMP) and the proposed 304 hotel, condo-hotel, and visitor-serving condominium units were found to be consistent with the projected additional hotel/motel rooms assumed between 1990 and 2005. The previously proposed 293 units for rental and long-term residential uses were reviewed by the Association of Monterey Bay Area Governments (AMBAG) and found to be consistent with the *1997 Regional Population and Employment Forecast* (1997 Regional Forecast) used in the 1997 AQMP. The 1997 Regional Forecast projected the Monterey County total 2010 population to be 472,562 which was used in the 1997 AQMP.

As noted, since the certification of the 1998 MBS FEIR the MBUAPCD has developed new air quality management plans, most recently in June 2008. The revised, smaller proposed project includes 248 hotel and visitor-serving condominium units (rental pool).

The redevelopment of the site has been envisioned for visitor-serving commercial uses for many years, as identified in the City’s General Plan (2002) and certified Local Coastal Program (1982) as amended. The project therefore appears to be accounted for in the current hotel/motel room count projected for the County in the 2008 AQMP. The 2008 AQMP significantly reduced the total population projections for Sand City, from approximately 1,541 to 370 in 2010. The MBUAPCD *CEQA Air Quality Guidelines* state an individual project’s population should be compared with countywide forecasts for Monterey County. The Monterey County total 2010 population is projected

to be 464,847 in the 2008 AQMP or approximately 7,715 less people than the 472,562 projected Monterey County 2010 population identified by AMBAG in the 1997 Regional Forecast. The proposed project, therefore, would be consistent with the current AQMP. **(Less Impact than Approved Project)**

4.3.2.2 *Comparison of Thresholds of Significance*

The thresholds used by the MBUAPCD to determine the significance of a project's contribution to regional air pollution and local air pollution have generally remained the same since the 1998 MBS FEIR was adopted. The thresholds for a significant increase in reactive organic gases (ROGs), also known as volatile organic compounds (VOCs), and nitrogen oxides (NO_x) have decreased from 150 pounds per day to 137 pounds per day. All other significance thresholds have remained the same.

4.3.2.3 *Regional and Local Impacts*

The certified 1998 MBS FEIR identified a project-generated increase of 80.5 pounds of ROGs per day, 87.4 pounds of NO_x per day, and 10.8 pounds of PM₁₀ per day. The proposed increase in regional emissions from the previously approved project did not result in a significant regional air quality impact based on the MBUAPCD standards and would not result in a significant regional air quality impact under current standards. The proposed revised project would construct a substantially reduced number of units and is designed to reduce energy use on the project site, which would result in reduced regional emissions of criteria pollutants. The revised project, therefore, would result in less impact than the previously approved project. **(Less Impact than Approved Project)**

The previously approved project did not result in significant local air quality impacts from carbon monoxide emissions. The proposed project would construct a substantially reduced number of units on the project site and, therefore, would not result in a significant local air quality impact from carbon monoxide emissions. **(Less Impact than Approved Project)**

4.3.2.4 *Construction-Related Impacts*

Construction activities could temporarily affect local air quality. Construction activities such as demolition, earthmoving, construction vehicle traffic and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that could affect local and regional air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-water based paints, thinners, some insulating materials, and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

Construction dust could affect local air quality at various times during construction of the project. The windy climate of the area creates high potential for wind-blown sand.

The revised project should result in reduced construction impacts for a number of reasons. Site preparation would require off-haul of approximately 420,000 cubic yards of sand from the site which represents a substantial reduction as compared to 880,000 cubic yards of sand previously proposed for removal under the approved project. The project would disturb approximately 28 acres of the site as part of project construction which is three (3) acres less disturbed area than the approved project which would also serve to reduce potential dust and construction vehicle emissions from construction-related activities. Finally, the revised project would (1) emphasize sustainable, local and regional products; (2) utilize construction methods that reduce impacts (such as pre-fabrication

modules on site); (3) reduce construction waste through recycling; (4) use batch processing of cement on site to reduce truck and haul trips; and (5) employ advanced, smart construction technologies designed to reduce construction impacts.

Although reduced construction impacts are expected compared to the previously approved project, the potential effects of construction activities would continue to be dust generation and locally elevated levels of suspended particulates on or very near the site and along streets providing access to the site.

The development of the proposed project could contribute to the significant construction-related, short-term air quality impacts identified in the certified 1998 MBS FEIR. The proposed project would not, however, result in any new or more significant construction-related air quality impacts than were described in the certified 1998 MBS FEIR.

Impact AQ-1: The project would result in short-term, construction-related air quality impacts. **(Same Significant Impact as Approved Project)**

Mitigation Measure: The following mitigation measures were identified as part of the certified 1998 MBS FEIR and are proposed by the revised project:

MM AQ-2.1: The Monterey Bay Unified Air Pollution Control District has identified construction practices as feasible mitigation measures to control dust and PM₁₀ during grading and excavation of the site. Most of these measures assume that the site has a soil surface that easily generates dust. The measures considered most effective for sites entirely covered by sand, include the following:

- Water all active construction areas at least twice daily as necessary to maintain a standard of no visible dust plumes.
- Cover all trucks hauling dirt, sand, or other loose materials if necessary to maintain the standard of no spillage on public streets.
- Cover or water inactive storage piles as necessary to maintain the standard of no visible dust plumes.
- Install wheel washers or other effective mechanism at the entrance to the construction site for all existing trucks, if necessary to prevent trucks from carrying sand and dirt off-site.
- Sweep streets regularly to remove sand carried out from the construction site or dropped from trucks.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District shall be visible to ensure compliance with Rule 402 (Nuisance).

4.3.3 Conclusion

Impact AQ-1: Similar to the previously approved project, with the implementation of the identified mitigation measures during construction activities, the air quality impacts that would be caused by the proposed project would be reduced to a level that is less than significant. **(No New Impact)**

4.4 BIOLOGICAL RESOURCES

The following discussion is based on a Biotic Assessment prepared for the proposed project by *Zander Associates* in August 2008. A copy of this report is included as Appendix B to this Addendum. The discussion of the western snowy plover is also based on memoranda prepared by *URS Corporation* and *Wildlife Science International, Inc.* A copy of these memoranda is included as Appendix C in this Addendum.

4.4.1 Setting

The City of Sand City certified the MBS FEIR in October 1998. The certified FEIR for the approved project evaluated impacts to biological resources resulting from a mixed-use resort with a residential component on the approximately 32 acres of the site above the mean high tide line.

The 1998 MBS FEIR identified the following nine potentially significant impacts if no mitigation was implemented. First, the removal of 2.6 acres of the federally designated “threatened” Monterey (*Chorizanthe pungens* var. *pungens*) was considered significant. Second, the potential for migratory birds and their nests to be displaced or harmed during the beach replenishment program was considered a significant impact. Third, the loss of approximately 58 sea cliff buckwheat plants, which is considered habitat for the federally endangered Smith’s blue butterfly (*Euphilotes enoptes smithi*), was considered a significant impact. Fourth, the loss of habitat used for nesting (surveyed from 1989-2008, nests were observed from 1989-1997, no nests were observed from 1998-2007, and nests were observed on the lower beach and Sand City coastline in 2008) by the federally designated “threatened” Pacific coast population of the western snowy plover (*Charadrius alexandrinus*) was considered significant. Fifth, a short-term construction activity impact was considered a possible significant impact to plover nesting. Sixth, the deposition of sand on the beach and strand was considered significant in that it could reduce plover nesting. Seventh, increased human activity due to the resort was considered potentially significant because it could cause loss of plover nests. Eighth, significant adverse cumulative effects on sensitive species and sensitive dune and coastal strand habitats were expected due to increased beach access. Ninth, lighting that might spill over into plover nesting areas was considered a potentially significant impact.

The 1998 MBS FEIR included mitigation measures to reduce all of these impacts to a less than significant level.

Since 1998, there have been changes in the project design, building layout and size; changes in the on-the-ground biological resources and distribution, and changes in the regulatory environment overseeing the protection of the sensitive species at issue.

First, with respect to the project design, building layout and size, the revised project will be set back a substantially greater distance (as discussed elsewhere in this Addendum) from the mean high tide line than the approved project. This results in a greater buffer between the resort buildings and the beach where plovers most frequently nested in the 1990s. Likewise, the most long-lasting construction activities will be set back further from the beach, thus reducing potential impacts to plovers and other migratory birds, if any nest there in the future. The revised project also will not haul any sand off-site and thus the sand deposition called for in the approved project (and considered a significant impact to birds) will not be implemented. The shift of the construction activities and the elimination of sand deposition will help reduce the temporary and long-term impacts to any potential plover habitat or breeding activity. The redesign of the project also will include landscape elements near the beach that will seek to re-attract the plover to the area. This will be an improvement over

existing conditions, where there is no active landscape management to attract plover nesting. In addition, the revised project has been redesigned specifically to avoid take of any seacliff buckwheat plants on the project site, thus preserving potential habitat for the Smith's blue butterfly.

Second, since 1998, there have been additional biological surveys completed on the project site to update the data on existing conditions. For example, in 2006 and again in 2008, biologists undertook revised vegetation mapping and directed surveys for Monterey spineflower and seacliff and coast buckwheat which are host plants for the Smith's blue butterfly. Both these surveys were completed by *EMC Planning Group*. The results of the survey are discussed below.

In addition, beginning in 2005, the City of Sand City has sponsored annual systematic breeding season surveys of the Sand City coastline for the western snowy plover. These surveys were and continue to be conducted by *PRBO Conservation Science*, the consulting branch of the Point Reyes Bird Observatory (PRBO), under contract to *Zander Associates*. Annual PRBO reports show no nesting or breeding between 2000 and 2005 on the Sand City coastline, including the project site. In the Sand City sponsored surveys, no nests were observed anywhere along the Sand City shoreline between 2005 and 2007, including the project site. In 2008, one successful nest (i.e., with fledged and banded chicks) was sighted on the project site, in the northwest corner lower beach area (outside of the revised project development envelope). Also during 2008, an additional nest was sighted elsewhere on the Sand City coastline, as were three perceived "nesting attempts." Biologists specializing in the plover have documented that, since the mid-1990s, the western snowy plover has had its most successful nesting in the Moss Landing area located approximately 16 miles north of the project site. Annual reports by PRBO have indicated a steady decline in nesting western snowy plovers in the north Monterey and Sand City shoreline area, including the project site. For the overall area, PRBO reported a total of 13 plover nests in 1995, seven nests in 1996, four nests in 1997, four nests in 1998, and two nests in 1999. In 2000, only one nest was reported but the nesting attempt was unsuccessful (on the Fort Ord Dunes State Park property line). No additional nests were observed in the area from 2000 until 2008 when the nests described above were identified along the Sand City shoreline. Thus, during the past 13 years plover nesting on the site has declined, unrelated to development. Nevertheless, the lower beach of the site and vicinity remain potential viable nesting habitat. The clear center of plover nesting activity along the Monterey Bay shoreline is located at the Moss Landing Salt Ponds managed by PRBO. According to PRBO, "the former salt ponds at the Moss Landing Wildlife Area have emerged as the most productive habitat for snowy plovers in the Monterey Region." (Page, 1999.) Plover nesting also has been observed with higher frequency along the northerly shoreline boundary of former Fort Ord and the City of Marina.

Third, there have been several regulatory changes regarding the sensitive species previously identified on the project site. First, in September 2005, the U.S. Fish and Wildlife Service removed the site, and the entire Sand City coastline within the Monterey critical habitat unit, from the critical habitat designation for the western snowy plover. Second, in December 2007, the U.S. Fish and Wildlife Service determined that the project site should not be included in the final revised critical habitat designation for the Monterey spineflower. Third, in January 2008, the California Court of Appeal, First Appellate District, overturned the California Coastal Commission's previous finding that the entire project site is environmentally sensitive habitat area (ESHA) under the Coastal Act and the certified Sand City LCP. The Court of Appeal ruled that the Commission unlawfully declared the site to be "all ESHA." The Court of Appeal further held that the Sand City LCP certified by the Coastal Commission does not deem any portion of the project site to be ESHA and that the Coastal Commission must review the proposed project under the existing standards in the certified Sand City LCP. (*Security National Guaranty, Inc. v. California Coastal Commission* [2008] 152 Cal.App.4th 770.) The Commission did not seek review by the California Supreme Court and the ruling is now

final and binding. Therefore, for the purposes of this analysis, the site is not considered ESHA under the LCP and the development constraints applied to ESHA do not apply to the site. Finally, the project site is not otherwise located within an adopted or planned habitat conservation plan or other approved or planned regional or state habitat conservation plan or NCCP.

4.4.1.1 *Special-Status Plants and Animals*

Special-status plants and animals include species listed under state and federal Endangered Species Acts as rare, threatened, or endangered (or identified as a candidate species), animals designated as Species of Special Concern by the California Department of Fish and Game, and plants listed in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California.

As noted, since 1998, there have been some minor changes in the nature and extent of the vegetation types on the project site and in the distribution and abundance of Monterey spineflower and the host plants for the Smith's blue butterfly. The nature and extent of the vegetation has changed slightly from the time of the 1998 MBS FEIR; those changes have mostly resulted in the degradation of habitat due to the increased dominance of nonnative and invasive iceplant in numerous areas on the site. The iceplant has encroached into areas of pioneer dune and bare sand and has caused a reduction in the extent of coastal scrub species. A decline in the number of buckwheat plants that serve as host plants for the endangered Smith's blue butterfly has also occurred, likely due to competition for space and nutrient resources from the iceplant. The remaining buckwheat plants continue to be localized along the swale on the northern property line of the site.

There has been some increase in the area containing Monterey spineflower, but the plants are mostly low density and found in the general area as recorded in 1997 (in the northwestern quarter of the site). The annual variability of Monterey spineflower populations can be dramatic depending on the amount of rainfall, temperature range and other environmental factors. Also, the species readily colonizes disturbed areas. For these reasons, the increase recorded in 2008 is not considered a substantial change compared to conditions reported in the certified 1998 MBS FEIR.

As noted above, western snowy plover breeding activity along the Sand City coastline showed a continuous decline from 1996 through 2007. In September 2005, the U.S. Fish and Wildlife Service removed the Sand City coastline from the designation of critical habitat for the western snowy plover. No nests were found between 2000 and 2007 in the area. So far in 2008, one nest was identified on the lower beach portion of the project site and some nesting activity was observed elsewhere on the Sand City coastline. The 1998 MBS FEIR identified potentially suitable plover nesting and brooding habitat on the project site along the beach and flat inland plateau north of the sand pit along the bluff. The 1998 MBS FEIR also identified the site as historical (1989-1997) nesting habitat for plover. Since that time, plover nesting has not been known to occur except in the instances noted above. Both of these conclusions remain true for the site, however, as it continues to provide open sandy areas above the high tide line with direct access to the bay.

4.4.2 Environmental Checklist and Discussion

BIOLOGICAL RESOURCES						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,7
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,7
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,7
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,7

4.4.2.1 *Special-Status Plant and Animal Species*

The revised ecoresort project will modify approximately 28 acres above the mean high tide line through grading, excavation, and recontouring, compared with approximately 31 acres for the previously approved project (a net reduction of approximately three acres). As noted in the 1998 MBS FEIR and above, much of this area is degraded and invasive iceplant has continued to expand. Unlike the previous plan, the revised project will balance grading on-site and, therefore, there is no longer a proposal to distribute additional sand excavated from the property in the coastal strand habitat for beach replenishment.

Most of the existing vegetation will be removed during construction, except in the northern portion of the site where there are elements of coastal scrub, including seacliff buckwheat plants. All of these buckwheat plants are located outside of the grading envelope and the applicant is proposing to avoid removing them in order to preserve their potential to support Smith's blue butterfly.

Habitat restoration is a major component of the revised project. Approximately 23.2 acres will be restored to foredune, secondary dune, back dune, wetland and coastal bluff habitat. This includes approximately 4.3 acres of living "green roof" (dune coastal plant community) that will emulate coastal bluff habitat by having shallow soils and plants that are adapted to wind and salt spray. Of the 23.2 acres to be restored to native habitat, approximately 14 acres around the periphery of the development will be placed in a conservation easement and protected in perpetuity. A public access easement will be designated on approximately six (6) acres of the site, primarily to provide public access to the vista point, beach, and coastal strand areas. Three trails, one public and two associated with the ecoresort, will direct access out to the beach in a similar configuration as proposed by the previously approved plan.

The revised project will include on-site alternative energy generation facilities which were not part of the approved project and, therefore, were not analyzed in the 1998 MBS FEIR. However, these facilities will be incorporated into the structural and design elements of the buildings and geothermal will be underground. Roof-mounted, low profile, horizontal wind turbines will be installed in protective enclosures to reduce potential impacts to birds and other wildlife. These facilities are not expected to result in any impacts on biological resources not already identified for the previous project.

A comparison of the effects of the revised project on biological resources with those identified for the project analyzed in the 1998 EIR is provided in Table 4.4-1.

Table 4.4-1 Comparison of Project Impacts to Vegetation and Special Status Species				
Resource	Total Area Existing on Site in 1997	Approximate Area Proposed to be Removed/Affected by Previous Project (as defined in 1998 FEIR)	Total Area Existing on Site in 2006	Approximate Area Proposed to be Removed/Affected by Revised Project
<i>Vegetation Types</i>				
Coastal Strand	4.2	4.2 acres	3.8 acres	2 acres
Pioneer Dune	9.2	9.2 acres	8.2 acres	8.2 acres
Coastal Scrub / Iceplant Mix	2.8	2.6 acres	1.1 acres	0.6 acre
Iceplant Dominated	2.1	1.9 acres	7.8 acres	7.3 acres
Ruderal/Disturbed	2.1	1.6 acres	0.6 acre	0.6 acre
Bare Sand	11.6	11.2 acres	10.1 acres	9.1 acres
Total	32 acres	30.7 acres	31.6 acres	27.8 acres
<i>Special Status Species</i>				
Smith's blue butterfly hostplants (buckwheat)	58 plants	58 plants	40 plants	0 plants
Monterey spineflower	2.8 acres	2.6 acres	3.4 acres	3.4 acres
Western snowy plover	not quantified	removal of historic nesting habitat	not quantified	removal of historic nesting habitat

The applicant proposes to restore approximately 1.4 acres of coastal dune scrub habitat including the area where seacliff buckwheat plants will be avoided during construction, to provide suitable opportunities for use by Smith's blue butterfly. Iceplant that is currently encroaching on the existing buckwheat plants will be eradicated and approximately 400 buckwheat plants, propagated from seed collected on site or nearby, would be introduced. Monterey spineflower will also be reestablished over approximately 3.4 acres of the restoration areas. Prior to grading and construction, seed will be collected from plants to be removed in the development area and introduced into appropriate restoration areas on completion of grading.

Based on the available data, the revised project will not result in any impacts on biological resources not identified for the previous project. It will restore more native vegetation and it will increase the amount of habitat available for Smith's blue butterfly, without disturbing the existing buckwheat plants. It will also reestablish Monterey spineflower at a minimum 1:1 ratio (same as the previous project), it will include adaptive management of the beach, strand and foredune areas on the property to protect nesting snowy plovers, and it will dedicate conservation easements over restored habitat outside of the developed area. These measures are comparable to those incorporated into the previous project and will help reduce effects on biological resources.

Table 4.4-2 provides a summary of the proposed restoration and mitigation measures incorporated into the revised ecoresort project.

Table 4.4-2
Comparison of Restoration and Mitigation Measures

Measure	Proposal in Previous Project	Proposal in Revised Project
Restoration of native habitat	12.8 acres	23.2 acres
Creation/management of nesting habitat for snowy plover	4 acres of beach/strand and 7 acres of foredune dedicated to plover	2 acre protection zone, plus up to 5 acre dynamic expanding area if birds are found to be nesting, and adaptive management of beach, strand, and foredune
Creation of habitat for Smith's blue butterfly	3.9 acres	Full avoidance of existing 40 plants, plus establishment of plants resulting in 1.4 acres of preserved buckwheat
Reestablish Monterey spineflower	3 acres	3.4 acres of increased density
Dedication of Conservation Easement	10.2 acres	13.9 acres

The 1998 MBS FEIR identified several impacts on biological resources that were less than significant and some significant or potentially significant if unmitigated. Significant impacts were all reduced to a less than significant level with incorporation of mitigation measures proposed by the project and/or recommended in the 1998 MBS FEIR. Since the impacts of the revised project are the same as, or less than the previous project, and the mitigation plan is being revised to account for the redesign, changed site conditions and changed regulatory environment, a comparison of the findings for the previous project was made with the revised project. The mitigation recommendations in the 1998 MBS FEIR for significant or potentially significant impacts were evaluated to determine their applicability to the revised project. The results of this evaluation are summarized in Table 4.4-3.

Table 4.4-3
Comparison of Findings and Mitigation

Impacts Identified in 1998 FEIR		Comparison to Revised Project		Mitigation Measures for Revised Project
Impact	Finding	Impact	Finding	
Removal of 30.7 acres of plant communities	Less than significant	Similar or less due to 3 acre decrease in grading and due to expansion of restored coastal habitat to more than 23 acres	Same	No additional recommended in light of similar impact, decreased grading and increased habitat restoration
Removal of 2.6 acres Monterey Spineflower	Significant if unmitigated	Similar	Same	3.4 acres restored.* No additional mitigation recommended.
Removal of 13 acres of wildlife habitat	Less than significant due to degraded	Similar or less due to 3 acre decrease in	Same	No additional mitigation recommended

Table 4.4-3 Comparison of Findings and Mitigation				
Impacts Identified in 1998 FEIR		Comparison to Revised Project		Mitigation Measures for Revised Project
Impact	Finding	Impact	Finding	
	quality of habitat	grading and due to expansion of restored coastal habitat to more than 23 acres		
Disturbance of +30 acres of site's wildlife habitat for 2-3 years during construction	Less than significant due to temporary and reversible nature	Similar or less due to "green" construction techniques, elimination of sand removal and deposition, and expansion of building setback from mean high tide line	Same	No additional mitigation recommended
Potential displacement or harm to migratory birds/nests during project construction.	Potentially Significant Impact if Unmitigated	Similar or less due to "green" construction techniques, elimination of sand removal and deposition, and expansion of building setback from mean high tide line	Same	No additional mitigation recommended
Loss of 58 buckwheat plants that provide habitat for Smith's blue butterfly	Potentially Significant Impact if Unmitigated	Less given revised project's avoidance of all buckwheat plants plus prevention of further iceplant invasion	Same	No additional mitigation recommended, although the revised project proposes planting an additional 400 buckwheat plants
Removal of historic western snowy plover nesting habitat	Potentially Significant Impact if Unmitigated	Similar or less given the decline in plover nesting on the site, and increased	Same	Annual establishment of +2 acre protection zone; dynamic expansion of protection zone of up to 5 acres if nests observed on site; adaptive

Table 4.4-3 Comparison of Findings and Mitigation				
Impacts Identified in 1998 FEIR		Comparison to Revised Project		Mitigation Measures for Revised Project
Impact	Finding	Impact	Finding	
		building setbacks		management and monitoring on beach strand and foredune area. The full revised mitigation program is detailed below.* No additional mitigation recommended.
Project construction activities lasting for 2-3 years will disturb areas where snowy plover has nested in the past	Potentially Significant Impact if Unmitigated	Similar or less given the decline in plover nesting on the site, “green” construction techniques, elimination of sand removal and deposition, and increased building setbacks	Same	Biologist to conduct pre-construction surveys and direct activities away from active nests. The revised mitigation plan is detailed below.* Applicant to provide detailed mitigation language similar to 1998 MBS FEIR.
Deposition of sand on the beach and strand would cover historic plover nesting sites and could reduce nesting.	Potentially Significant Impact if Unmitigated	Less impact since no beach replenishment proposed	No Impact	No mitigation necessary because sand haul and deposition is being abandoned.
Increased human activity on project site could cause loss of plover nests on beach and strand	Potentially Significant Impact if Unmitigated	Similar	Same	On-site biologist to implement adaptive management and education program. The revised mitigation plan is detailed below.*
Increased use of beach areas adjacent to site would add cumulatively to expected increases in beach use that would result from other proposed developments	Potentially Significant Impact if Unmitigated	Similar	Same	On-site biologist to implement adaptive management and education program, and coordinate with adjacent landowners and City. The revised mitigation plan is detailed below.*

**Table 4.4-3
Comparison of Findings and Mitigation**

Impacts Identified in 1998 FEIR		Comparison to Revised Project		Mitigation Measures for Revised Project
Impact	Finding	Impact	Finding	
Lighting provided for the development could spill over into the plover nesting areas and may disturb the plovers and facilitate increased predation of the species	Potentially Significant Impact if Unmitigated	Similar, although revised project design and lighting may result in less potential impact	Same	Same or substantially equivalent as required in 1998 MBS FEIR for previous project.
Notes: * Mitigation proposed by revised project.				

Migratory Birds

Project construction in the coastal strand could result in the loss of nests of migratory birds, including those specifically protected by the Migratory Bird Treaty Act. Actions which harm them would be considered a significant adverse impact. Migratory birds that have been observed at the site, or in the vicinity, that nest in the coastal strand area include western snowy plover, killdeer, arctic loon, surf scoter, and western gull. Consistent with the certified 1998 MBS FEIR, the proposed revised project will implement the pre-construction survey mitigation measures required for the previously approved project which will reduce this impact to a less than significant level. Any potential impact would be further reduced in the revised project due to an expanded setback of the structures from the mean high tide line and the elimination of all off-site hauling (totaling 880,000 cubic yards) and deposition for beach replenishment. **(No New Impact)**

Monterey Spineflower

The proposed revised project will reestablish Monterey spineflower at a minimum 1:1 ratio (same as the previous project). Monterey spineflower will be reestablished in approximately 3.4 acres of the restoration areas by collecting and propagating seed from plants to be removed in the development area. This exceeds the 3.0-acre reestablishment area proposed by the approved project. **(No New Impact)**

Smith's Blue Butterfly

The proposed revised project proposes full avoidance and thus no take of the remaining 40 buckwheat plants on site. In addition, the revised project will restore more native vegetation and it will increase the amount of habitat available for Smith's blue butterfly, without disturbing the existing buckwheat plants. Restoration of approximately 1.4 acres of coastal dune scrub habitat suitable for use by Smith's blue butterfly is proposed through the collection of seed, propagation, and installation of 400 seacliff buckwheat plants. The proposed project, therefore is avoiding the impact identified for the previously approved project. **(Less Impact than Approved Project)**

Western Snowy Plover

The proposed revised project will incorporate management of the beach, strand, and foredune on the property during the nesting/breeding season to protect nesting snowy plovers, and it will dedicate a conservation easement over the restored habitat outside of the developed area. The revised project proposes a plover mitigation program consisting of the following elements which are described in greater detail in the subsequent paragraphs:

- Pre-Construction Surveys and Construction Monitoring
- Pre-Construction Conference with Equipment Operators and Field Supervisors
- Preservation and Establishment of a Managed 2-Acre Nesting Protection Zone
- Nesting Protection Zone Expansion Per Biologist Recommendation
- Adaptive Management and Access Plan
- Establishment of Conservation Easements
- Annual Review of Resort Operations on Biological Conditions
- Mandatory Employee Biological Resource Education
- Predator Management Plan
- Coordination with Sand City and State Parks on Plover Management
- Fifteen Percent Allocation of Environmental Trust Funds to Plover Protection

Pre-Construction Surveys and Construction Monitoring: Prior to the issuance of a building or grading permit for the revised project, the applicant shall enter into an agreement with a qualified biologist approved by the U.S. Fish and Wildlife Service to provide on-site surveys monitoring for any western snowy plover nests during the prime nesting season. The retained biologist shall conduct surveys along the sandy beach and strand habitat prior to construction if the construction is expected to begin or continue during prime plover nesting season. If any plover nesting is observed on site, the biologist will immediately establish exclosures around the nesting area during fledging, along with appropriate signage and protective measures to avoid take of the plover. The biologist and construction manager will be responsible for directing construction activities away from beach and strand areas if active nests are found.

Pre-Construction Conference: A pre-construction conference will be held with all equipment operators and field supervisors to educate them on plover and sensitive species sighting, location and avoidance. All equipment operators and field supervisors will be required to sign an acknowledgement that they have been advised of sensitive species on site and how to address them.

Preservation and Establishment of Dynamic 2-Acre Nesting Protection Zone:³ Based on consultations with the retained biologist, the applicant will establish (upon opening of the resort) an initial 2-acre “nesting protection zone” on the sandy beach and/or strand in a way designed to attract plovers to nest during the annual nesting season. The area will preserve potential nesting habitat. The 2-acre area will be “free-floating” or dynamic, meaning that its location would or could change each nesting season based on recommendations of the retained biologist, balancing public access. The biologist will consider past nesting, weather events, predation threats, and on-the-ground

³ This mitigation measure is designed to recognize that it is impossible to predict if, or where, the plover may return to the site for nesting; to increase the opportunity for new nesting an effort the mitigation plan provides a secure opportunity for the plover to nest, combined with measures to protect nests – while balancing the Coastal Act requirement of providing adequate public access to the coast.

biological and habitat conditions and factors in selecting the initial area and in deciding whether to divide the 2-acres into different locations and area sizes on the sandy beach and strand.

Dynamic Nesting Protection Zone Expansion Mechanism: If the biologist identifies numerous plover nests, the 2-acre nesting protection zone will be relocated or expanded, if necessary, for the protection of the plover nest(s), balancing public access with the plover protection. In such an event, if necessary, additional expansion area of up to five acres will be provided within the area bounded by the 10 MSL contour line on the sandy beach, the 2058 bluff crest recession line, and the two resort beach trails on the north and south(with a 25' buffer), respectively.

Adaptive Management and Access Plan: Based on consultations with the retained biologist and the City of Sand City, the applicant will prepare an adaptive management and access plan for the nesting season, designed to respond to biological conditions as they change on the site from year-to-year, and as the dynamic nesting protection zone shifts and/or expands from year-to-year. The access plan will include strategically-placed educational and directional signage, pet restrictions, provisions for fencing, as necessary, and the creation and establishment, and in-season adjustment of enhanced coastal strand habitat area designed to re-attract plover nesting. Lighting at the resort is being designed to minimize impacts to wildlife, including the plover. Beach-raking would be prohibited and a litter control plan would be implemented. The plan would also include measures to control iceplant or European beachgrass which can interfere with or diminish plover habitat.

Establishment of Conservation Easements: The project applicant proposes several conservation easements on the property, which will also ensure long-term protection of the plover habitat.

Annual Resort Operations Review: The retained biologist will review the resort operations affecting the biological conditions prior to the annual plover nesting season to recommend adjustments, where feasible, in resort operations to promote plover nesting.

Mandatory Employee Biological Education. Upon hiring, each employee will be required to complete an educational seminar on the site's biological resources including the plover and plover protection plan.

Predator Management Plan: Recognizing more recent studies indicating that predators represent a greater threat to plovers than previously thought (and often a greater threat than human activities), the applicant will prepare a predator management plan to help ensure that plovers nesting on the site are protected from predation to the extent feasible.

Coordination with Sand City and State Parks on Plover Management: The applicant proposes a coordination program with the City and State Parks for plover protection along the Sand City coastline. Thus, the retained biologist would work with Sand City and State Parks officials to ensure that protection efforts are mutually re-enforcing. Part of the required coordination would include evaluation of obtaining conservation easements or other habitat protection agreements with neighboring landowners designed to enhance the existing plover protection. As noted below, 15 percent of the Monterey Bay Shores Environmental Trust funds would be available to assist the City in covering costs of the coordination effort, including the purchase of additional conservation easements if the City decided after study that such a purchase would be beneficial and feasible.

Use of Fifteen Percent of Monterey Bay Shores Environmental Trust Funds for Plover Protection: The applicant has committed a portion of the net revenues from the resort to be set aside in a trust administered by local environmental groups and the City of Sand City. The trust funds will

be committed to restoring and enhancing the environment of the Monterey Peninsula. The City of Sand City (subject to final City Council approval) has agreed to contribute to the trust an amount equal to ½ percent from the transient occupancy tax to be collected by the City from the resort annually. Fifteen percent of the annual trust funds expended would be restricted to on-site western snowy plover recovery efforts (for as long as the plover remained a species listed under the Endangered Species Act).

Deletion and/or Modification of Certain Mitigation Measures

As noted, the applicant proposes a revised plover mitigation approach that focuses on active and adaptive management rather than on static set aside areas. As discussed, the changes in the mitigation plan reflect the documented decline in plover nesting on the site during the interim ten years, the removal of the site from plover critical habitat by the U.S. Fish and Wildlife Service, new information on the effectiveness of active and adaptive management programs for plover recovery, and a recognition of the tension between providing a safe area to re-attract plovers to the site, while at the same time providing public access as required by the Coastal Act.

In particular, because the site is not designated plover critical habitat, because the on site nesting activity has diminished since 1998, and because the plover has consistently migrated its nesting activity 16 miles north to Moss Landing since the mid-1990s, the ecoresort construction or operation is not expected to result in “take” of the plover. Likewise, these factors suggest that the construction and operation (with the proposed mitigation measures) would not significantly impair plover essential behavior patterns such as breeding on the site.

The revised plover mitigation measures described above would provide functionally equivalent or better protection to the plover than the previous plan and thus would allow for the deletion and/or modification of the following mitigation measures in the approved project.

The previously proposed area dedicated to plover nesting habitat mitigation (which included the beach and lesser suitable plover habitat) would be replaced with the preservation and establishment of a 2-acre dynamic plover nesting zone and free-floating automatic expansion of that nesting zone (up to five acres) if the retained biologist identifies plover nesting on the property’s sandy beach and strand. Combined with an active and adaptive management plan (including proactive habitat enhancement during the plover season to adjust to changes in the environment from weather or other events), and the additional mitigation measures described above, the revised plan is estimated to be the functional equivalent of the previous set aside. The plan is designed to expand the area to match the actual plover nesting area and thus is expected to provide an equivalent protection if the plovers return. Based on information generated in the last 13 years, implementation of the proposed active and adaptive management approach is more likely to actually attract plovers to nest when compared to a static set aside area, even if the set aside area is initially larger. In addition, the previously set aside area is not feasible given the applicant’s obligation to provide adequate public access as required by the Coastal Act.

For the reasons described above, the applicant proposes substituting the habitat conservation plan with the habitat protection plan (HPP). The mitigation measures described above as part of an adaptive management and access plan would be included in the HPP, which would be enforceable by the City of Sand City. Staff for the City recommends this change in its initial condition, subject to City Council approval. Because of the decline in plover nesting on site, the documented movement of plover nesting north to the Moss Landing area, and the U.S. Fish and Wildlife Service’s decision to remove the Sand City coastline from the critical habitat designation for the plover, the likelihood

of take or incidental take of the plover has declined markedly during the past decade. Take is not expected, nor is the construction or operation of the ecoresort expected to significantly impair plover essential behavior patterns. As a result, an incidental take permit is not expected to be required, with the proposed mitigation measures and HPP (see below).

The modification of the coordination/management strategy for plover protection with Sand City recognizes that the City has now abandoned its effort to implement a City-wide HCP, in part in light of the movement of plover nesting north to the Moss Landing area. Thus, previous mitigation related to that effort (i.e., requiring the applicant to participate in it) is now infeasible. The HPP protections and requirements would serve as the functional equivalent of the HCP. The U.S. Fish and Wildlife Service, even in the absence of an HCP or incidental take permit, would retain enforcement authority to prohibit or remedy “take” under the federal Endangered Species Act. The coordination strategy mitigation for the revised project will continue to emphasize coordination of protection strategies and the identification and acquisition of additional off-site conservation easements along the Sand City coastline. The revised strategy identifies a specific funding source, i.e., the Monterey Bay Shores Environmental Trust Fund. On balance and in light of the changed conditions noted above, the reliance on the HPP rather than an HCP is unlikely to result in an increased impact to the plover; and the revised strategy is equivalent to the previous strategy.

For the reasons specified, the revised mitigation measures and plan appear to be the functional equivalent of, or better than, the initial plan. The modification and/or partial deletion of mitigation measures is warranted and will not result in new significant impacts.

Revised Habitat Protection Plan

The mitigation measures to address biological resource impacts would be incorporated into a separate Habitat Protection Plan (HPP), submitted by the applicant, and approved by the City of Sand City. The prior approved project included an HPP, but that plan would be replaced with the proposed revised HPP in light of the project modifications, changed biological and regulatory conditions, and new mitigation approach described above.

With these mitigation measures, the revised project will not result in impacts that are greater than those identified in the 1998 MBS FEIR.

Impact BIO-1: The revised project will modify certain mitigation measures for the western snowy plover from the 1998 MBS FEIR, but is combined with an adaptive management plan and other mitigation; it will also substitute a revised HPP for the HCP/incidental take permit and make adjustments to management strategies. **(Same Significant Impact As Approved Project)**

Mitigation Measures: Implementation of the following mitigation measures (more fully described above) will reduce the revised project’s impacts to the western snowy plover and potential habitat to a less than significant level:

MM BIO-1.1: Pre-Construction Surveys and Construction Monitoring; Pre-Construction Conference; Establishment of Dynamic 2-Acre Nesting Protection Zone; Dynamic Nesting Protection Zone Expansion Mechanism; Adaptive Management and Access Plan; Establishment of Conservation Easements; Annual Resort Operations Review; Mandatory Employee Biological

Education; Predator Management Plan; Coordination with Sand City and State Parks on Plover Management; Use of Fifteen Percent of Monterey Bay Shores Environmental Trust Funds for Plover Protection.

4.4.3 Conclusion

Impact BIO-1: The revised project, with the implementation of the adaptive management program including revised mitigation measures will not result in a substantial increase in impacts to western snowy plover. **(Same Impact as Approved Project)**

Impact BIO-2: Any potential impacts created by on-site alternative energy systems would be less than significant due to design features, i.e, covered, horizontal wind turbines. **(New Less Than Significant Impact)**

4.5 CULTURAL RESOURCES

4.5.1 Setting

The certified 1998 MBS FEIR identified no areas with potential prehistoric resources on the project site. The northern end of Sand City was examined by Archaeological Consulting in 1981 as part of the planning process for the Local Coastal Program's Land Use Plan. No evidence of surface cultural deposits was identified. The Sand City General Plan 2002-2017 states the southwestern coastal portion of the City is the one potential area of archaeological sensitivity in the City. There are no historic resources of any significance located in Sand City.

4.5.2 Environmental Checklist and Discussion

CULTURAL RESOURCES						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
Would the project:						
1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,4
2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,4
3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
4) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

There are no known significant prehistoric archaeological or historic resources on the project site and, therefore, the project is not anticipated to result in any impact to cultural resources. The proposed ecoresort project would adhere to the mitigation measures included in the certified 1998 MBS FEIR in the event human remains are discovered during project construction.

4.5.3 Conclusion

With incorporation of the mitigation measure identified in the certified 1998 MBS FEIR, in the unlikely event archaeological resources are found on the project site, the impact to those resources would be mitigated to a less than significant level and would not result in any new or more significant impacts to cultural resources. **(No New Impact)**

4.6 GEOLOGY AND SOILS

The following is based in part on a Coastal Recession Memorandum prepared by *Haro, Kasunich, and Associates, Inc.* in June 2008. A copy of this memorandum is included as Appendix D in this Addendum.

4.6.1 Setting

4.6.1.1 *Regional Geology*

The regional geology affecting the project site has not changed since the certification of the 1998 MBS FEIR. Sand City is located on a geologic unit called the Salinian block that lies over granitic basement rock. This structural unit is bounded by the San Andreas Fault on the northeast and the Palo Colorado-San Gregorio fault on the southwest and is approximately 50 miles wide and 300 miles long. On either side of the Salinian block are marine deposits of the Franciscan Assemblage.

The dune deposits of the Quaternary Age are the only units that can be observed at the ground surface. The dunes on the site are part of the Monterey Bay Dune Complex, a system of dunes that stretches on the north from the Salinas River south to the Canyon Del Rey.

Seismicity

The project site is located in a region that is seismically active and there is a high probability that a major earthquake will occur during the economic life of the proposed project. There are several active faults in the Monterey region with the potential to produce shaking at the Monterey Bay Shores' site. There are no active faults located on the project site.

Site Conditions

The site has a history of sand mining operations beginning in 1921 with the Pratt Building Materials Company. Mining operations occurred across the site including in the surf zone during the 1960s. The existing large pit was first identified in aerials of the site in 1985 with a smaller pit to the north excavated in 1976. These pits have since been partially filled although the larger pit is still visible on the project site. The younger dune deposits on the southern end of the site that were not disturbed by mining operations are estimated to have a maximum thickness of approximately 100 feet.

Groundwater

Static groundwater appears to be located several feet above MSL in the eastern portion of the site, with a gradient along the western boundary of the site toward sea level. The groundwater level at the site influenced by tidal fluctuation and is recharged by precipitation.

Shoreline Recession and Bluff Stability

In 1990, the City of Sand City adopted a shoreline erosion study completed by Moffatt & Nichol Engineers. The study contained an estimate of shoreline positions for 50, 75, and 100 years and recommended a methodology for identifying appropriate setbacks for shoreline development. The factors affecting erosion taken into account in the Moffatt & Nichol study included natural recession, sea level rise, and extreme, short-term beach fluctuations. The erosion study completed by Moffatt & Nichol Engineers was updated by Haro, Kasunich, and Associates in December 2003 and included

a procedure to determine the 50-year estimated dune crest recession setback line which uses more conservative estimates on the projected sea level rise during the coming decades than the previous methodology used in the certified 1998 MBS FEIR. For planning purposes, Sand City uses the updated methodology to identify a 50-year setback line for development along the Sand City coastline (refer to Figure 4). From the early 1990s to date, topographical studies have shown accretion rather than recession of the shoreline on the project site.

Storm Wave Design and Run-up

Wave run-up is a function of tidal conditions, storm severity, wave size, wave period, short term sea level increases and long term sea level rise. During severe coastal storms, large surf will run-up the sandy beach. Wave run-up analysis along the Sand City coastline has determined that areas below 32 feet NGVD⁴ may be subject to wave impact and damage by flooding.

4.6.2 Environmental Checklist and Discussion

GEOLOGY AND SOILS						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:						
a) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
b) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
c) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
d) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
2) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
3) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2

⁴ National Geodetic Vertical Datum (NGVD) is a national datum referenced to 21 tide gages in the U.S. This vertical measure of elevation is more consistent than mean sea level (MSL) which is the arithmetic mean of the hourly tide cycles and varies locally. For the purpose of this analysis, the two systems of vertical measure are considered to be basically equivalent.

GEOLOGY AND SOILS						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

4.6.2.1 Seismicity

As previously discussed, the project site is located in a seismically active region, and therefore, strong seismic-related ground shaking would be expected during the lifetime of the proposed project. Ground shaking could damage buildings and other proposed structures, and threaten the welfare of future visitors and residents. A final geotechnical report will be required and prepared in conjunction with the final design of the buildings and final bearing capacity of the buildings load determined at the time the final design-level geotechnical report is completed.

Areas with unsuitable fill materials, such as the pits, shall be cleared of all such material and backfilled with engineered fill. The potential for liquefaction in the undisturbed sand deposits on the site is minimal; however, liquefaction could occur along the coastal bluffs, particularly at the contact between the looser and relatively pervious young dune deposits that overlie the older dune deposits.

The project would not result in any new or more significant seismic-related hazards than were described in the 1998 MBS FEIR.

Impact GEO-1: The proposed project would be subject to strong-seismic ground shaking that could expose people and the proposed buildings to substantial seismic hazards. **(Same Significant Impact as Approved Project)**

Mitigation Measures: The project shall implement the following mitigation measures, consistent with the certified 1998 MBS FEIR and project conditions of approval, to reduce seismic hazards to a less than significant level:

MM GEO-1.1: A final geotechnical investigation shall be submitted to, and approved by the City Engineer prior to recordation of the final map. Recommendations of the geotechnical report shall be required conditions to building permit approval for all phases of the project and a note on the final map shall include this requirement, citing that the report is on file at the Sand City City Hall.

MM GEO-1.2: Building permits are required for all buildings as well as for other structures where required by the Uniform Building Code (UBC). Prior to the issuance of building permits, plans for the specific design and construction of the

buildings for which the permit is issued shall be approved by the City Building Official, and to the extent necessary by the City Engineer. The plan shall meet the requirements for seismic safety outlined in the UBC and incorporate the recommendations of the geotechnical investigation and soils report for the site.

4.6.2.2 Soils

The project site contains some fill that was deposited on the site in an uncontrolled manner. Based on the past geologic and geotechnical reports prepared for the site and previously approved project this fill material shall be removed.

The project would not result in any new or more significant soil related impacts than were described in the 1998 MBS FEIR.

Impact GEO-2: The proposed project may contain unsuitable fill material that could impact buildings on the site. **(Same Significant Impact as Approved Project)**

Mitigation Measures: The project shall implement the following mitigation measures, consistent with the certified 1998 MBS FEIR and project conditions of approval, to reduce soil impacts to a less than significant level:

MM GEO-2.1: The proposed project shall be designed in conformance with the recommendations in a design-level geotechnical report prepared for the project (refer to MM GEO-1.1 and -1.2).

4.6.2.3 Storm Wave Run-up and Tsunamis

The proposed revised buildings on the project site have been set back landward of the estimated 75-year bluff crest recession line as calculated by the project civil engineers using the methodology updated in 2003. The proposed setback is landward of, and thus more conservative than, the 50-year estimated recession line setback required by the City of Sand City using the updated 2003 methodology (refer to Figure 4). The project setback was further reviewed to analyze it in the event of greater sea level rise. The supplemental analysis performed by *Haro, Kasunich, and Associates, Inc.* also indicated the project setback is at least a 70 year or greater setback.

The revised project also proposes less sand off-haul from the site than the previously approved project. The revised project would require the removal of approximately 420,000 cubic yards of sand from the site as compared to the previously approved project which required removal of 880,000 cubic yards of sand. The revised quantity of sand off-haul required for the project, similar to the approved project, would not result in impacts to the revised project from shoreline erosion.

The revised project does not contain buildings that would be located in the Tsunami Hazard Zone.

The project is consistent with LCP policies and would not result in any new or more significant impacts related to coastal recession and tsunami than were described in the 1998 MBS FEIR. **(No New Impact)**

4.6.3 Conclusion

Impact GEO-1: The proposed project, with the implementation of the above mitigation measures, would not result in any new or more significant seismic related impacts than those addressed in the certified 1998 MBS FEIR. **(No New Impact)**

Impact GEO-2: The proposed project, with the implementation of the above mitigation measures, would not result in any new or more significant geology related impacts than those addressed in the certified 1998 MBS FEIR. **(No New Impact)**

4.7 HAZARDS AND HAZARDOUS MATERIALS

4.7.1 Setting

4.7.1.1 *Background Information*

Hazardous materials encompass a wide range of substances, including both naturally-occurring and man-made substances. Examples include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing. Determining if such substances are present on or near project sites is important because, by definition, exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology. Since the proposed project would introduce a significant community of human beings onto the project site, it is relevant to determine what risks might be incurred.

Due to the fact that these substances are toxic to humans and/or the ecosystem, there are multiple regulatory programs in place that are designed to minimize the chance for unintended releases and/or exposures to occur. Other programs set forth remediation requirements at sites where contamination has occurred.

4.7.1.2 *Potential On-Site Sources of Contamination*

Site Mining Reclamation

The site was previously used for sand mining. A Reclamation Plan was prepared by Lone Star Industries, Inc. (revised August 19, 1986) for the site when mining operations ceased as required by the California Surface Mining and Reclamation Act and City Ordinance 84-3. Structures requiring removal from the site at that time included a 1,200 gallon underground storage tank (UST) that was registered with the State Water Resources Control Board and Monterey County Department of Health. The site has been vacant since the mining operations ceased.

4.7.1.3 *Potential Off-site Sources of Contamination*

The uses surrounding the project site have not substantially changed since the 1998 MBS FEIR was certified.

Regulatory Agency Database Report

A regulatory agency database report documenting potential sites with hazardous materials activity within ¼ mile of the project site was reviewed for the approved project. The sites listed represented those with reported cases of accidents involving hazardous materials, permitted treatment, storage, and disposal facilities, landfill, sites under review by regulatory agencies, and the locations of leaking underground storage tanks. Sixteen (16) sites were identified in the regulatory agency database report, of which 14 were located on the former Fort Ord military facility.

The Ford Ord military facility continues to undergo remediation activities for contaminated soil and groundwater sites. As discussed in the certified 1998 MBS FEIR, groundwater contamination has been delineated on the Fort Ord military facility and none of the contamination extends off the facility. In addition, lead contamination was identified within the firing range along the Fort Ord shoreline; however, the extent of the impacted area did not reach over the southern property at the

northern boundary of the MBS project site. Since certification of the 1998 MBS FEIR contamination in the firing range area has been remediated.⁵

Since certification of the 1998 MBS FEIR, no known spills have been identified or reported, from nearby land uses, that would impact the project site.

Regional Landfill

The 25-acre property adjacent to the project site's southern boundary is a former regional landfill that has been restored by the Monterey Peninsula Park District for dune restoration and park uses. In 1996, a plan to reconfigure the former landfill was implemented as a result of shoreline erosion that had exposed waste in the site's shoreline bluff.⁶ The reconfiguration of the former landfill involved removing waste so that it would be located beyond the projected future shoreline position. A new cell was constructed to hold the waste and the waste was covered with two feet of sand.

Approximately 5,000 cubic yards of waste from the landfill extended on to the southern property line of the project site. As part of the landfill reconfiguration in 1996, the waste was removed and disposed of off-site by a contractor for the California Integrated Waste Management Board. No known additional issues have arisen regarding the landfill since 1996.

4.7.2 Environmental Checklist and Discussion

HAZARDS AND HAZARDOUS MATERIALS						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
Would the project:						
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

⁵ Former Fort Ord Environmental Cleanup. Cleanup Programs. <http://www.fortordcleanup.com/cleanupprgrm/oeprogram.asp> April 17, 2008.

⁶ California Integrated Waste Management Board. Operation Plan – Sand City Dump Reconfiguration Project. February 1996.

HAZARDS AND HAZARDOUS MATERIALS						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

4.7.2.1 *Potential On-Site Sources of Contamination*

In approximately 1986, previous sand mining equipment, including an underground storage tank, related to the mining operations on the site was removed in accordance with a Mining Reclamation Plan prepared for the site. No evidence of soil or groundwater contamination from the previous mining operations was encountered on the site. Therefore, no significant hazardous materials related impacts are expected as a result of on-site contamination from previous sand mining activities. **(No New Impact)**

4.7.2.2 *Potential Off-Site Sources of Contamination*

The former Fort Ord military facility is currently undergoing remediation. Lead contamination in the coastal firing range has been remediated since certification of the 1998 MBS FEIR. Groundwater contamination on the Fort Ord property does not extend to the MBS project site. Waste that previously extended onto the southern property line of site from the former landfill south of the project site was removed in 1996 and capped. The land uses surrounding the project have not changed substantially since approval of the previously proposed project. No other sources of hazardous materials contamination with the potential to impact the project site have been identified.

In 2008, the property owner undertook a Phase I Environmental Site Assessment, which revealed no contamination on site. **(No New Impact)**

4.7.3 Conclusion

The proposed project would not be subject to substantially greater or different hazardous materials impacts than those identified in the certified 1998 MBS FEIR. **(No New Impact)**

4.8 HYDROLOGY AND WATER QUALITY

4.8.1 Setting

The existing drainage on the site is unchanged since certification of the 1998 MBS FEIR; however, regulatory requirements related to stormwater runoff have changed as discussed in *Section 4.8.1.4* below.

The project site is located adjacent to Monterey Bay which is a primary factor in analyzing the project's potential impacts on water resources. The project has the potential to result in stormwater pollution, salt water intrusion into groundwater, and flooding.

4.8.1.1 *Drainage*

The project site is presently vacant and contains no drainage facilities. The irregular topography of the site including the sand pit in the southwestern portion of the project site results in an uneven drainage pattern. Stormwater currently percolates into the sandy soil of the site and little stormwater runoff enters the bay as surface water runoff. Because Sand City is principally located on sand dunes, most stormwater percolates into the soil.

The quality of stormwater runoff from developed areas is typically degraded through contact with automotive-related contaminants along streets and parking lots, as well as other urban sources of contaminants. The storm drainage system that serves the developed portions of Sand City discharges stormwater runoff to the surf zone of Monterey Bay.

4.8.1.2 *Groundwater*

The Seaside Groundwater Basin has been relied upon to serve the needs of the Monterey Peninsula and the City of Sand City since State Order 95-10 was issued in 1995. The order limited the ability of California American Water (Cal-Am) to draw water from the Carmel River, and directed the company to maximize its diversions from the Seaside Groundwater Basin instead.

In 2003, Cal-Am sought a court adjudication and management plan to address strains on the groundwater basin. The Monterey County Superior Court issued a decision and judgment in 2006 that adjudicated the basin, made factual determinations and implemented a “physical solution” which is a Court supervised groundwater management plan. The “physical solution” was implemented to address various issues including that production from the basin was exceeding the natural safe yield (California American Water v. City of Seaside, Case Number M66343, 2006). The court's ruling establishes the “natural safe yield” for the potable water-bearing aquifers of the Seaside Groundwater Basin and requires pumping in those aquifers to be reduced to the natural safe yield level over time. The judgment also mandated the preparation and implementation of a Seaside Basin Monitoring and Management Plan. The purpose of the Monitoring and Management Plan is to monitor the existing and future condition of the basin and to manage the basin as a perpetual source of water for beneficial uses. Actions that will be taken under the Monitoring and Management Plan include: monitoring of current yield conditions and the threat of potential seawater intrusion into the coastal subarea of the basin; development and import of supplemental water supplies for the purpose of eliminating excess pumping in the basin and the associated threat of seawater intrusion; and establishment of procedures that will be implemented to address seawater intrusion. The court's decision allows the current rates of pumping to continue for three years after which a ten percent

reduction in pumping will be required every third year to reduce and eventually eliminate the exceedance conditions.

In the adjudication, the court confirmed that the current owner of the property, Security National Guaranty, Inc., is entitled to 149 acre-feet of groundwater per year from the basin. Under the judgment, Security National Guaranty, Inc. has priority rights to use its legal entitlement of water. Thus, in the event that groundwater levels decline or are otherwise impacted for any reason and withdrawal reductions are mandated, non-priority users must reduce their use of the groundwater as needed, down to zero, before any of Security National's 149-acre feet of water can be reduced. Specifically, the judgment provides that the owner has "a prior and paramount right over those Parties Producing under the Standard Production Allocation to produce the amount set forth in Table 2 (149 acre-feet annually) in perpetuity, and said Alternative Production shall not be subject to any reductions under Section III.B.2 or at such times as the Watermaster determines to reduce the Operating Yield ..." (refer to Section B (3), 2006 Judgment of the Monterey County Superior Court). In the judgment, "Major Standard Production Allocations" parties include Cal-Am and the City of Seaside. Since Security National Guaranty, Inc. has the described priority protection in the court's judgment, the revised project has a secure, long-term supply of water that is unlikely to be impacted even if the groundwater basin is subject to substantially reduced withdrawal.

The court also approved a plan to monitor for any saltwater intrusion into the groundwater basin. The monitoring occurs using long-standing monitoring wells, including two monitoring wells on the project site. Historical records to date show there has been no evidence of saltwater intrusion. The court considered extensive hydrology data in evaluating potential environmental impacts including saltwater intrusion. Monitoring wells on the project site would continue to be used to collect groundwater data.

The current basin management will be assisted by the approved Sand City reverse osmosis desalination facility, currently under construction. The desalination facility will eventually supply the City with 300 acre-feet of potable water from the Aromas Sands aquifer of the Seaside Groundwater Basin. This additional production will help relieve pressure on the basin and provide an additional water source.

4.8.1.3 *Flooding*

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM), the project site is located within Zones C, an area with minimal flood risk, and Zone A, an area subject to inundation by the 100-year flood.⁷ The area subject to inundation covers a band of approximately 100 feet inland from the shoreline where no development is currently proposed. The potential for site inundation from storm wave run-up and tsunamis is discussed in *Section 4.6 Geology and Soils*.

⁷ Federal Emergency Management Agency. Flood Insurance Rate Map Community Panel No. 0604350001A. June 3, 1986.

4.8.1.4 Regulatory Requirements

Overview

The major federal legislation governing water quality is the Clean Water Act, as amended by the Water Quality Act of 1987. The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for water quality management nationwide.

Monterey Regional Storm Water Management Program (MRSWMP)

The Cities of Monterey, Carmel-by-the-Sea, Del Rey Oaks, Sand City, Seaside, Marina, Pacific Grove, and the County of Monterey are the eight co-permittees of the Monterey Regional Storm Water Management Program (MRSWMP) which was reviewed and approved by the Regional Water Quality Control Board (RWQCB) in September 2006. The purpose of the MRSWMP is to implement and enforce a series of Best Management Practices (BMPs) in order to conform to Phase II of the National Pollution Discharge Elimination System (NPDES) permit for medium and large municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater. These BMPs are designed to reduce the discharge of pollutants from the municipal separate storm sewer systems to the “maximum extent practicable,” both to protect water quality and to satisfy the appropriate water quality requirements of the federal Clean Water Act. The achievement of these objectives is gauged using a series of measurable goals, which also are contained in the MRSWMP.

The Phase II NPDES Program is intended to address potentially adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of storm water discharges that have the greatest likelihood of causing continued environmental degradation. The environmental problems associated with discharges from MS4s in urbanized areas and discharges resulting from construction activity include pesticides, fertilizers, oils, litter and other debris, and sediment. Stormwater discharges from MS4s in urbanized areas are a concern because of the potential for these discharges to contain pollutants. Concentrated development in urbanized areas substantially increases impervious surfaces, such as city streets, driveways, parking lots, and sidewalks, on which pollutants from concentrated human activities can settle and remain until a storm event washes them into nearby storm drains. The MRSWMP requires that construction site stormwater runoff control programs be prepared and post-construction BMPs be implemented on development sites greater than one (1) acre in size.

4.8.2 Environmental Checklist and Discussion

HYDROLOGY AND WATER QUALITY						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project: 1) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

HYDROLOGY AND WATER QUALITY						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
6) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
7) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
10) Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

4.8.2.1 *Drainage*

The proposed project would add some impervious surfaces to the project site but proposes to capture stormwater for on-site use and allow infiltration on the site. The approved project would create 7.30 acres of impervious surfaces whereas the revised project proposes 1.98 acres of impervious surfaces. The project includes two retention ponds, one located on the northwest portion of the site and one located on the east portion of the site adjacent to Sand Dunes Drive. A bioswale would be located adjacent to the retention pond on the northwest portion of the site. Storm drainage lines ranging from 12 inches to 24 inches would be located throughout the site. The project would not connect with off-site storm drainage lines in order to discharge stormwater from the site. Rain water is proposed to supplement on-site water use for all non-potable uses including showers, toilets, laundry, spa, and swimming pools. The project would not discharge water to a municipal storm sewer system and no storm water outfalls are proposed from the site to Monterey Bay.

The proposed project would reduce the amount of impervious surfaces on the site when compared to the approved project and, therefore, would not result in any new or more significant drainage impacts than were described in the certified 1998 MBS FEIR. **(Less Impact than Approved Project)**

4.8.2.2 *Groundwater*

The project site has an existing well on-site and a water use entitlement from the Seaside Groundwater Basin adjudication for 149 acre-feet per year. The revised project would create an estimated demand of approximately 63.8 acre-feet of water per year as compared to the approved project which had an estimated water demand range of approximately 99 to 125 acre-feet per year. The estimated water demand for the revised project includes a conservative estimate of 1.2 acre-feet of water per year for landscape purposes although all landscaping water needs are proposed to be met using graywater. In addition, the project would require approximately 12.5 acre-feet of water to establish plants within the first year after planting on the site. The quantity of water necessary to establish plants would not be required on an on-going basis and is not included in the annual water demand for the project. The project applicant has applied for a water distribution permit from the Monterey Peninsula Water Management District (MPWMD) and estimates annual water use to be approximately 63.8 acre-feet per year, but seeks a permit to use up to 90 acre-feet per year. This figure remains below the 149 acre-feet authorized by the physical solution imposed by the court and thus is legally permissible. Although the project is estimated to use 63.8 acre-feet per year, this Addendum evaluates impacts as if the full 90 acre-feet per year applied for were actually used which would allow for the use of 8.1 acre-feet of potable water for landscaping in the event the proposed graywater systems fail. The potential use of 90 acre-feet of water per year is significantly less than the water demand range of 99 to 125 acre-feet per year estimated to be needed in the certified 1998 MBS FEIR for the approved project. Thus, the water use impacts of the proposed project would be less than those identified in the certified 1998 MBS FEIR. In addition to the reduction in water use, the groundwater impacts of the proposed project are expected to be reduced compared to the previously approved project, because the Seaside Groundwater Basin is now managed via a “physical solution” under the auspices of the Monterey County Superior Court, which has balanced the rights, needs and impacts of water production by other users within the basin.

As described earlier in this Addendum, the revised project would contract with Cal-Am Water Company (Cal-Am) to provide water service to the project using the property’s water entitlement. The water supply for the project would be pumped from Cal-Am’s Peralta wells which are further inland than the site’s well, thus reducing the potential for salt water intrusion. The project would

direct excess graywater and stormwater runoff to infiltration swales which will contribute to groundwater recharge.

Thus, the proposed revised project would result in substantially reduced water demand from the basin than the approved project. The demand is likely to be approximately two-thirds to one-half of the demand range of the approved project and in the worst case (i.e., if the total 90 acre-feet were used); the demand would be nine to 35 acre-feet less per year than the approved project. These figures include a ten percent “buffer” built into the estimated demand and thus are conservative (i.e., the water demand is not expected to be as much as estimated). Based on this substantial water use reduction, combined with the Court ordered physical solution and monitoring and management plan to secure the long term sustainability of the basin, the revised project would not result in any new or more significant hydrology impacts than were described in the certified 1998 MBS FEIR. **(Less Impact than Approved Project)**

4.8.2.3 *Flooding*

According to the Federal Emergency Management Agency’s (FEMA) Flood Insurance Rate Map (FIRM), the portions of the project site proposed for development are located within Zone C, an area with minimal flood risk. The proposed development would not be subject to flooding, and would not result in any new or more significant flooding impacts than were described in the certified 1998 MBS FEIR. **(No New Impact)**

4.8.2.4 *Water Quality*

Construction-Related Impacts

Construction of the proposed project, as well as grading and excavation activities, may result in temporary impacts to surface water quality. Construction of the proposed project also would result in a disturbance to the underlying soils, thereby increasing the potential for sedimentation and erosion. Pollutants such as oil, grease, and heavy metals released during the operation of heavy equipment during construction could be adhered to the sediments and/or carried directly by stormwater into Monterey Bay. Construction activities on sites where more than one (1) acre would be disturbed are subject to the permitting requirements of the National Pollution Discharge Elimination System (NPDES). The project would adhere to the NPDES permit through conformance with the Monterey Regional Storm Water Management Program (MRSWMP) which requires the preparation of a construction site stormwater runoff control program.

When disturbance to underlying soils occurs, the surface runoff that flows across the site may contain sediments that are ultimately discharged into the storm drain system.

The development of the proposed project would contribute to the significant construction-related water quality impacts identified in the certified 1998 MBS FEIR. The proposed project would not result in any new or more significant construction-related water quality impacts than were described in the certified 1998 MBS FEIR.

Impact HYD-1: The proposed project would result in the same construction-related water quality impacts as the approved project. **(Same Significant Impact as Approved Project)**

Mitigation Measure: The Storm Water Pollution Prevention Plan (SWPPP) for the revised project includes the following measures to reduce the construction-related water quality impacts of the project to a less than significant level:

MM HYD-1.1: The project will comply with the NPDES General Construction Activity Storm Water Permit administered by the Regional Water Quality Control Board. Prior to construction grading the applicant will file a Notice of Intent (NOI) to comply with the General Permit and prepare a Storm Water Pollution Prevention Plan that addresses measures that will be included in the project to minimize and control construction-related runoff. The following measures will be included in the SWPPP:

- Preserve existing vegetation where required and when feasible.
- Apply temporary soil stabilization (erosion control) to remaining active and non-active areas as required by the Construction Site BMPs Manual and the Special Provisions and as necessary to maintain effectiveness.
- Implement temporary soil stabilization measures at regular intervals throughout the defined rainy season to achieve and maintain the project's disturbed soil area requirements. Temporary soil stabilization will be implemented 20 days prior to the defined rainy season.
- Stabilize non-active areas within 14 days of cessation of construction activities.
- Control erosion in concentrated flow paths by applying erosion control blankets, check dams, erosion control seeding, and lining swales as required.
- Apply seed to areas deemed substantially complete by the project engineer during the defined rainy season.
- Apply permanent erosion control to all remaining disturbed soil areas as required at the completion of construction.
- A stabilized construction entrance/exit will be used to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- A tire wash area will be installed at the stabilized construction entrance/exit point to remove sediment from tires and under carriages and to prevent sediment from being transported onto public roadways.
- Street sweeping and vacuuming will be used to remove tracked soil particles from paved roads to prevent the sediment from entering a storm drain or watercourse.
- Wind erosion or dust control will be achieved by applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities.

Post-Construction Impacts

Storm water from urban uses contains metals, pesticides, herbicides, and other contaminants such as oil, grease, lead, and animal waste. Runoff from the proposed project may contain increased oil and grease from parked vehicles. The proposed project would capture storm water runoff from the site for reuse on-site and infiltration into the aquifer. The development of the proposed project could result in similar post-construction water quality impacts as identified in the certified 1998 MBS FEIR and would be subject to the MRSWMP approved in 2006. Although the project would not connect to

the Sand City storm sewer system it would still be subject to the implementation of BMPs which are included in the project as proposed.

Impact HYD-2: The proposed project has the potential to increase pollutant loads associated with urban development in storm water runoff. **(Same Significant Impact as Approved Project)**

Mitigation Measures: The project will comply with the MRSWMP through the implementation of the following measures included in the certified 1998 MBS FEIR and as amended in the SWPPP for the revised project:

MM HYD-2.1: Submit a copy of the Storm Water Pollution Prevention Plan to the City of Sand City for approval by the City Engineer along with the project building permit application.

MM HYD-2.2: The project will treat storm water runoff through the use of bioswales and lined ditches, permanent erosion control including seeding and planting, and outlet protection.

MM HYD-2.3: A final drainage analysis for the storm water collection system and bioswales shall be submitted for approval to the City Engineer.

MM HYD-2.4: Plans for storm water treatment system shall be submitted for approval by the City Engineer.

MM HYD-2.5: An operation and maintenance plan shall be prepared and submitted to the City Engineer for approval of the storm water treatment system.

MM HYD-2.6: The site drainage plan shall address all required water pollution control measures for preventing direct discharges into the Monterey Bay and Monterey Bay National Marine Sanctuary.

4.8.3 Conclusion

Impact HYD-1: The proposed project, with the implementation of the above measures, would not result in any new or more significant construction-related water quality impacts than those addressed in the certified 1998 MBS FEIR. **(No New Impact)**

Impact HYD-2: The proposed project, with the implementation of the above measures, would not result in any new or more significant post-construction water quality impacts than those addressed in the certified 1998 MBS FEIR. **(No New Impact)**

4.9 LAND USE

4.9.1 Setting

4.9.1.1 *Existing Land Use*

The City of Sand City is located within the urbanized portion of the Monterey Peninsula. Approximately one-half of Sand City, including the project site, is located within the area designated as the coastal zone by the Coastal Act. The land uses in the City's coastal zone consist both of publicly and privately-owned vacant land along the shoreline, with industrial and commercial uses located inland, east of State Route 1 (Highway 1). Several sites along the City's coastline, including the MBS site, were previously used for heavy industrial uses and remain degraded. Sand City's Redevelopment Plan and land use plans set a goal of redeveloping these sites for visitor-serving uses.

The project site is located at the northern border of the City, on the shoreline of the Monterey Bay. The site's beach is part of the continuous sandy shoreline that stretches 16 miles from Moss Landing Harbor south to the City of Monterey. The shoreline in the vicinity of the project site is undeveloped, although past sand mining on site and sand mining and landfill uses occurred in the vicinity of the site.

The land uses adjacent to the site have not changed substantially since certification of the 1998 MBS FEIR with the exception of the formal establishment of Fort Ord Dunes State Park by the California Department of Parks and Recreation, which was anticipated in the analysis of the approved project in the 1998 MBS FEIR.

4.9.1.2 *Land Use Plans*

Sand City's Local Coastal Program

The land use policies contained in Sand City's Local Coastal Program Land Use Plan (LCP) were formulated to implement the Coastal Act's policies related to future land use and development. As part of the LCP, the City divided its coastal zone into land use designations aimed at balancing the Coastal Act's goals and the City's need to eliminate blight created by past industrial uses within the coastal zone. The project site is now divided into four separate land use designations: *Visitor-Serving Commercial*, *Visitor-Serving Residential*, *Medium-Density Residential*, and *Public Recreation*. The *Visitor-Serving Commercial* designation permits land uses including hotel/vacation clubs/timeshares, motels, accessory shops, public recreation, and food service establishments. Hotel and motel uses would be limited to a maximum of 375 units. The *Visitor-Serving Residential*, *Medium Density* designation allows clustered multi-family residential structures at a medium density of a maximum of 25 dwelling units per acre (DU/AC) subject to length of stay restrictions contained in the LCP. The *Residential, Medium Density* allows multi-family units at a medium density of a maximum of 25 DU/AC. The *Public Recreation* designation allows parks, picnic areas, parking areas, public vista points, sandy beaches, and access ways.

The height restrictions in the coastal zone are 36 feet above the existing grade in general and in particular for residential development, and 45 feet above the existing grade for visitor-serving hotels. The project site's topography is irregular and, therefore, the building envelope was determined by locating the existing grade and applying the maximum height permitted by the LCP. The existing site topography has not substantially changed since certification of the 1998 MBS FEIR.

4.9.1.3 *Other Plans*

The project site is not part of a habitat conservation plan or natural community conservation plan and none are planned in the project area.

4.9.1.4 *Development Constraints*

Physical conditions on or adjacent to the project site that could affect the suitability of the site for the proposed development include the following:

- Geologic and soil conditions, including erosion potential and wave run-up;
- Provision of view corridors;
- Site topography;
- Availability of water; and
- The presence of sensitive species and habitat areas.

The physical conditions on the site affecting development are discussed in their respective sections of this Addendum as well as in the certified 1998 MBS FEIR. The geologic and soil conditions and site topography affecting the proposed project are discussed in detail in *Section 4.6 Geology and Soils*. The project's conformance with the view corridor restrictions identified in the LCP is discussed in detail in *Section 4.1 Aesthetics*. The availability of water to serve the site is discussed in detail in *Sections 4.8 Hydrology and Water Quality* and *Section 4.16 Utilities and Service Systems*. The sensitive species and habitat areas on the site are discussed in *Section 4.4 Biological Resources*.

4.9.2 Environmental Checklist and Discussion

LAND USE						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
Would the project:						
1) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,7

4.9.2.1 *Conformance with Land Use Plans*

The proposed project will implement the current land use designations contained in the Local Coastal Program's Land Use Plan. The design of the revised project seeks to balance the visitor-serving resort development with the natural resources of the site, consistent with LCP policies. The proposed *Visitor-Serving Commercial* uses would have a density of 16 DU/AC. The *Visitor-Serving Residential, Medium Density* and *Residential, Medium Density* use areas of the site would have an average density of approximately 14 DU/AC, however, neither of these land uses individually would exceed their allowed densities. The proposed project conforms to the maximum densities allowed in the LCP and, therefore, would be consistent with the existing land use designations for the site. The revised project proposes to include facilities that provide services to address a range of visitor needs.

The revised project incorporates ecological design and layout elements that achieve the LCP's requirements and goals. As discussed elsewhere in this Addendum, the revised project achieves the LCP's public access policies and goals by providing public access on the lateral beach. The LCP-designated vista point is included to "take full advantage of views to and across the Bay." Vertical access to the shore is provided through three beach trails so as to prevent crowding and misuse of coastal resources. The access paths are designed to take advantage of restored dunes and coastal landforms to blend in with the visual character of the site and project area. The access paths are guided away from large stabilized and restored dune areas to avoid and protect restored vegetation. The pathways are also designed to protect private property owners' rights in the residential units, but also to ensure public access is open during daylight hours. The revised project provides adequate parking for public access at a rate of ten (10) percent above the total parking. The revised project also provides a bike path that would connect to the regional bike path.

The project proposes a 5.69-acre public access easement on the site that would connect the public parking area at the northeast corner of the site with the beach and vista point through a trail located along the northern property line of the site. A 13.85-acre conservation easement would surround the proposed buildings on the site. The conservation easement area exceeds the size of the conservation easement proposed by the previously approved project. Visitors would be allowed within some areas of the conservation easement. The public access easement proposed by the project is approximately one-half acre smaller than the previously proposed easement and approximately 1.7 acres smaller than the area of the site designated *Public Recreation*, however, the increased conservation easement would exceed this reduction in the public access easement area and is considered consistent with the *Public Recreation* land use designation.

As described in the individual subject areas of this Addendum, the project conforms to the LCP in the following ways. The revised project avoids the tsunami runup zone. The project minimizes the loss of visual resources; protects the view corridor and vista point; encourages and uses native plants in the landscaping; uses restored dunes as visual and noise barriers and to enhance visual resources; avoids a rigid formal road layout; uses primarily underground parking; creates a layout that buffers parking from the water; softens the view of the site from Highway One – with living green roofs populated with coastal dune plant species; stabilizes and restores dunes; reduces water consumption by 50 percent; reduces energy consumption by 50 percent; creates extensive restored coastal dune habitat; ensures safe delivery loading, and provides public access and recreation.

The size of the approved project is reduced from 495 units to 341 units which has allowed the bulk and height of the project to be substantially reduced. The project topography shows the maximum elevations on the project site at the highest location of proposed hotel and residential buildings is approximately 76-80 feet. The flat vegetated roofs of the proposed hotel buildings on the site would

be approximately 112 feet and, therefore, will conform to the height limits contained in the LCP for hotel uses. The flat roofs of the residential buildings on the site would also not exceed 112 feet and therefore conform to the height limit contained in the LCP for residential uses. The project proposes to excavate some areas of the site to lower existing grade and, therefore, the absolute height of some buildings including underground garages, from finished grade to roof ridge, would be greater than 45 and 36 feet but would not exceed the LCP height limits measured from existing grade.

The proposed project would not result in any new or more significant land use impacts related to conformance with the LCP than were described in the certified 1998 MBS FEIR. **(No New Impact)**

Land Use Compatibility

The project site is situated between the property owned by the Monterey Peninsula Regional Park District (MPRPD) to the south and Fort Ord Dunes State Park to the north. Although the proposed resort would consist of a different land use type from the park uses to the north and south, the proposed uses and density are consistent with Sand City's Local Coastal Program and the objectives of the City's Memorandum of Understanding (MOU) with the MPRPD and the California Department of Parks and Recreation in terms of both use, intensity, and location.⁸ The proposed buildings would be located approximately 150 feet from the northern property line and approximately 350 feet from the southern property line. Both proposed setbacks exceed the setbacks of the previously approved project on the site. The currently proposed project has been redesigned to utilize the existing contours of the site to minimize excavation, utilize living green roofs to provide additional habitat area, and generally mimic the dune environment to the extent feasible.

The proposed project would not result in any new or more significant land use compatibility impacts than were described in the certified 1998 MBS FEIR. **(No New Impact)**

Loss of Open Space

The proposed project would convert 32 acres of the site that are currently privately-owned open space, degraded by former sand mining operations, into a resort with a hotel, and visitor-serving and residential condominiums. The project would change degraded vacant lands with a natural character to an urban developed site. The project has been redesigned to be compatible, to the maximum extent feasible, with the natural dune environment of the site and project area. The revised project will integrate, preserve, and restore the coastal dune habitat on the site. Consistent with the LCP, the revised project would also provide vertical and lateral public access to the site that does not presently exist. The proposed revised project is consistent with the City's LCP and MOU. Substantial open space exists in the project area including the MPRPD land to the south (consisting of 25 acres) and Fort Ord Dunes State Park to the north (consisting of approximately 1,000 acres) such that the loss of the degraded open space on this site would not be significant.

The proposed project would not result in any new or more significant land use impacts from the loss of open space than were described in the certified 1998 MBS FEIR. **(No New Impact)**

4.9.3 Conclusion

The proposed project will not result in any new or more significant land use impacts than those addressed in the 1998 MBS FEIR. **(No New Impact)**

⁸ The effectiveness of the MOU in terms of State Parks' powers has been questioned by the Court of Appeal.

4.10 MINERAL RESOURCES

4.10.1 Setting

According to the *Sand City General Plan 2002 – 2017*, all sand mining operations in the City have ceased and there are no other mineral extraction operations in the City. The project site was used for sand mining for approximately 60 years, which ended in 1986.

The City has no mineral areas of statewide or regionwide significance as designated by the California Department of Conservation, Division of Mines and Geology. In 1987, the Division of Mines and Geology published *Special Report 146 Part IV: Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area* which identified the known or inferred mineral potential of lands within Sand City. The project site was identified as an area containing discovered mineral deposits.

4.10.2 Environmental Checklist and Discussion

MINERAL RESOURCES						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,4
2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,4

The City’s General Plan considers sand mining operations as incompatible with other existing and/or planned development including state and regional parks, resort developments, and housing. Sand mining operations also conflict with other City goals such as restoring and enhancing coastal habitat and improving the overall appearance of the City.

The proposed project would not result in any new or more significant mineral resource impacts than were described in the certified 1998 MBS FEIR. **(No New Impact)**

4.10.3 Conclusion

The proposed project would not result in any new or more significant mineral resource impacts than were described in the certified 1998 MBS FEIR. **(No New Impact)**

4.11 NOISE AND VIBRATION

4.11.1 Setting

The ambient noise conditions and regulatory requirements regarding noise have not changed substantially since the certification of the 1998 MBS FEIR.

Regulatory Setting

Sand City General Plan 2002 – 2017

The Noise Element of the Sand City General Plan establishes noise policies for new development. Residential and hotel land uses are considered normally compatible in noise environments up to 60 dBA DNL. Where noise levels exceed 60 dBA DNL, mitigation measures are required to ensure that residential outdoor use areas meet the 60 dBA DNL exterior standard and that interior noise levels are maintained at or below 45 dBA DNL.

Section 1208 of the 2007 California Building Code

New multi-family housing, including hotels, is subject to the environmental noise limits set forth in Appendix Chapter 1208A.8.4 of the California Building Code. The noise limit is a maximum interior noise level of 45 dBA DNL. Where exterior noise levels exceed 60 dBA DNL, a report must be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the noise limit.

4.11.1.1 *Existing Noise Conditions*

The project site is located on the Monterey Bay, west of State Route 1 (SR 1). Traffic noise from SR 1 and ocean waves are the predominant sources of noise on the project site. Based on noise measurements⁹ taken south of the project site at another proposed resort location within Sand City located adjacent to SR 1, the noise levels on the site have not substantially changed since certification of the 1998 MBS FEIR. The highest estimated average noise level on the site in 1997 was approximately 73 dBA DNL for locations with a clear line of site of SR 1. The sand dunes also act to reduce noise levels from the freeway in areas behind the dunes. Noise levels behind the dunes were measured at 59 dBA DNL. The locations of the project site closest to Monterey Bay experience an estimated DNL of 63 to 69 dBA DNL due to ocean waves.

⁹ Illingworth & Rodkin, Inc. Sand City Resort Hotel Project Environmental Noise Assessment. May 30, 2007.

4.11.2 Environmental Checklist and Discussion

NOISE AND VIBRATION						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project result in:						
1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,9, 10
6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.11.2.1 Impacts to the Project**Ambient Noise Levels**

Where existing or future noise levels exceed levels considered “satisfactory” in the Sand City General Plan, the project would result in a significant impact. The ambient noise levels on the project site exceed the ambient noise level standard for residential and hotel use of 60 dBA DNL identified in the *Sand City General Plan 2002 – 2017*. However, due to the shielding provided by the proposed site design and restored dunes, the resort will experience reduced noise levels and outdoor recreational space is not anticipated to exceed the exterior noise standards identified in the City’s General Plan due to traffic noise from SR 1. Ambient noise levels due to ocean waves have not substantially changed since preparation of the 1998 MBS FEIR.

Aircraft-generated noise levels from the Monterey Peninsula Airport on the project site^{10,11} are not anticipated to exceed the noise standards of San Jose City for the proposed use of a resort and, therefore, the project would not be significantly impacted by aircraft noise from the Monterey Peninsula Airport.

The ambient noise conditions and regulatory requirements regarding noise have not changed substantially since the certification of the 1998 MBS FEIR.

Impact NOI-1: Portions of the hotel and residential units would be exposed to noise levels greater than 60 dBA DNL which exceeds the interior noise level standards of the State and City of San Jose. **(Same Significant Impact as Approved Project)**

Mitigation Measures: The following mitigation measures identified as part of the certified 1998 MBS FEIR, and modified to current code, will be implemented by the proposed project:

MM NOI-1.1: A design-level acoustical analysis is required by the 2007 California Building Code to confirm that interior noise levels at the resort would be reduced to 45 dBA DNL or lower for all proposed residential and hotel units. The specific determination of what treatments would be necessary will be conducted on a unit-by-unit basis at the design stage. Results of this analysis, including the description of noise control treatments, will be submitted to the City along with the building plan and approved prior to issuance of a building permit.

4.11.2.2 *Impacts from the Project*

Project Traffic-Generated Noise

The previously calculated traffic noise level increases due to the approved project indicated that the increases would be less than one (1) dBA DNL. The change in noise levels at sensitive receptors would have to be three (3) dBA DNL in order to be perceptible. The currently proposed project would result in less than half the number of vehicle trips of the approved project and, therefore, would not substantially increase noise levels in the project area. **(No New Impact)**

Construction Noise

Construction activities produce temporary noise impacts. Since these impacts are short-term and vary considerably from day to day, they are evaluated differently than operational impacts. Where construction activities are predicted to cause prolonged interference with normal outdoor speech activities at noise sensitive areas, the impact would be considered significant. Although the project would generate substantial construction noise, the nearest noise-sensitive areas are located more than 500 feet from the site on the east side of SR 1. It is unlikely that construction noise would be heard at any existing residences or noise-sensitive use areas given traffic noise on SR 1 and the distance from the site of sensitive receptors. **(No New Impact)**

¹⁰ Coffman Associates. Monterey Peninsula Airport 14 CFR Part 150 Noise Exposure Map Update. 2007. <http://www.coffmanassociates.com/public/Monterey/> Accessed: July 7, 2008.

¹¹ County of Monterey. 21st Century Monterey County General Plan Public Review Draft. Map HS-8A. January 2004. http://www.co.monterey.ca.us/gpu/Reports/0104/maps/chapter6_hs8a.pdf Accessed: July 7, 2008.

4.11.3 Conclusion

Impact NOI-1: The proposed project, with the implementation of the above mitigation measures, would not result in any new or more significant interior noise level impacts than those addressed in the certified 1998 MBS FEIR. **(No New Impact)**

4.12 POPULATION AND HOUSING

4.12.1 Setting

The current and future population and housing estimates and assumptions have not substantially increased since the certification of the 1998 MBS FEIR. Currently, there are no residential uses on-site. The Association of Monterey Bay Area Governments (AMBAG) estimated a population of 1,807¹² by 2020 in the City of Sand City at the time the previous project EIR was certified. No estimate of housing units was provided in AMBAG's 1997 forecast. The currently adopted AMBAG forecast estimates a population in Sand City of approximately 1,498¹³ by 2015. The number of housing units in Sand City is expected to reach 670¹⁴ by 2015. Sand City is assumed to reach buildout of the community in 2015 and population and housing forecasts would not increase above 1,498 persons and 670 units through 2035.

4.12.2 Environmental Checklist and Discussion

POPULATION AND HOUSING						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as "Approved Project"	Less Impact than "Approved Project"	Information Source(s)/ Discussion Location
Would the project:						
1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

Population and housing conditions on the site have not changed substantially since the certification of the 1998 MBS FEIR. There are no existing housing units or people living on the project. The project, therefore, would not displace any existing housing units or people. **(No New Impact)**

The proposed project would induce population growth through the construction of new residential condominium units. The currently proposed project includes 92 residential condominium units, or 69 fewer units than the previously approved project. The project would also provide access to a contiguous 0.45-acre parcel owned by the applicant that is located adjacent to the northeastern corner of the project site. The project does not propose to develop this property; however, providing access

¹² Association of Monterey Bay Area Governments. 1997 Regional Population and Employment Forecast for Monterey, San Benito, and Santa Cruz Counties Final Report. November 1997.

¹³ Association of Monterey Bay Area Governments. Monterey Bay Area 2008 Regional Forecast: Population, Housing Unit and Employment Projections for Monterey, San Benito, and Santa Cruz Counties to the Year 2035. June 11, 2008. <http://www.ambag.org/publications/reports/Transportation/2008Forecast.pdf> Accessed: July 7, 2008.

¹⁴ Ibid.

to this parcel may induce future development on this site which is anticipated to be a single-family house. Development of this adjacent parcel would be limited by its size but would be growth inducing since it is outside the existing Urban Service Area. Future development proposed on this property would be a separate discretionary action and subject to further environmental review. The growth inducing impacts due to development of this adjacent parcel are the same as those identified in the certified 1998 MBS FEIR. The proposed project, however, due to its reduction in the number of housing units proposed would be less growth inducing than the previously approved project. **(Less Impact than the Approved Project)**

4.12.3 Conclusion

The proposed project would not result in any new or more significant population and housing impacts than were described in the certified 1998 MBS FEIR. **(No New Impact)**

4.13 PUBLIC SERVICES

4.13.1 Setting

4.13.1.1 *Fire Protection*

Fire protection is provided in the City of Sand City by the City of Monterey Fire Department from Fire Station 3, located in Monterey at 401 Dela Vina Avenue. This station would provide first response in the event of an emergency at the site. The response time to the site is approximately five to seven minutes. Additional personnel and equipment are available from other stations depending upon the size and characteristics of the emergency.

The Fire Department would also respond to medical and/or hazardous materials-related emergencies. In the event of a hazardous materials emergency, the City of Monterey Fire Department has a mutual aid agreement with the Seaside Navy Post-Graduate School and the Salinas Fire Department.

Sand City currently has an Insurance Service Office (ISO) rating of three on a scale of one to nine, with one being the best rating. The rating is dependent upon items such as the proximity of fire hydrants, size of water lines, and distance to the fire protection agency. Due to the high level of service and flexibility provided through contractual arrangement between Sand City and the Monterey Fire Department, Sand City has no plans or identified need to develop its own Fire Department. Buildout of the City's General Plan is not anticipated to result in the need for a new fire station within the City limits.

4.13.1.2 *Police Protection*

The City of Sand City Police Department currently provides police protection services within the City limits, including the project site. The Sand City Police Department currently employs a police chief, three sergeants, and five patrol officers. Response times are three to five minutes for emergency calls and five minutes for other calls. Backup police services are provided by the City of Seaside and Monterey Police Departments. Police officers respond to all emergencies at the site including medical emergencies such as drowning.

4.13.1.3 *Schools*

The Monterey Peninsula Unified School District serves the project area for grades K-12. Students living in the City of Sand City would attend Ord Terrace Elementary School for grades K-5; Fitch Middle School for grades 6-8; and Seaside High School for grades 9-12. The existing capacity of the school facilities serving the project as identified in the certified 1998 MBS FEIR and the current enrollment in the identified local schools is provided in Table 4.13-1.

**Table 4.13-1
School Enrollment and Capacity**

School	Number of Classrooms	Average Student/Teacher Ratio	2006/2007 Enrollment	Remaining Capacity
Ord Terrace Elementary	30	Varied	589	116 ¹
Fitch Middle	42	1:30.5	802	479
Seaside High	48	1:30.5	1,355	109
Sources: City of Sand City. <u>Monterey Bay Shores Resort Final Environmental Impact Report</u> . October 1998. Education Data Partnership. <u>Fiscal, Demographic, and Performance Data on California's K-12 Schools</u> . Revised June 30, 2008. Monterey Peninsula Unified School District. <u>Administration – District Information</u> . Revised June 2, 2008. http://www.mpusd.k12.ca.us/admin1.html#CLASS%20SIZE Accessed: July 7, 2008. Notes: ¹ Assumes five classrooms per grade with grades K-3 staffed at one teacher per 20 students and grades 4-5 staffed at one teacher per 30.5 students.				

4.13.1.4 *Parks*

The City of Sand City currently has one City park located adjacent to City Hall. The park has picnic and playground facilities in a naturalized dune environment. Sand City does not have standards for neighborhood and community parks; however, many other California cities have adopted a standard of between three to five acres of parkland per 1,000 residents. Based on this standard, the City falls short of providing for the park needs of the public, however, due to the availability of beach area, Sand City has adequate recreational space.

In April 1996, Sand City, along with the California Department of Parks and Recreation, Monterey Peninsula Regional Park District (MPRPD), and the Sand City Redevelopment Agency, signed a Memorandum of Understanding (MOU) concerning land use on the Sand City coastline. The MOU allows for certain development, including the subject development, to occur on the Sand City coastline north of Tioga Avenue while permitting the continued acquisition of land on the coast for a proposed state park south of the project site.

4.13.2 Environmental Checklist and Discussion

PUBLIC SERVICES						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:						
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.13.2.1 Fire Protection

The site currently supports little vegetation making the potential for wildfires at the site very low. Fire protection services are, therefore, mostly limited to medical emergencies, such as drowning. The potential additional fire hazards posed by the project would be reduced by designing the project in accordance with the Uniform Fire Code, and installing access roads that facilitate emergency response vehicles. Implementation of fire hazard prevention measures, including a fire protection plan, would be confirmed by the City of Monterey Fire Department during the City of Sand City’s review of the project’s building permit application. The previously approved project was conditioned to develop a design-level fire protection plan, including the provision of adequate fire flows with hydrants at the required spacing, installation of sprinklers, fire equipment access, and the designation of fire lanes which would require review and approval of the City’s Fire Marshall prior to the issuance of building permits for any buildings on the site (refer to Appendix E).

The incidence of medical emergencies on the site would increase as a result of the proposed project due to the number of people that would visit the resort and the proposed residences. The approved project was previously found not to require additional personnel or equipment and, due to the reduced size of the currently proposed project, no additional equipment or personnel are anticipated to be necessary to serve the current project. The proposed project would result in less of an impact on fire services than the approved project. **(Less Impact than the Approved Project)**

4.13.2.2 Police Protection

The proposed project would increase the demand for police services to a lesser extent than the previously approved project. The previously approved project was found to increase demand such that three new patrol officers would be required. Specialized equipment was also found to be

necessary to respond to future emergencies on the beach, such as drowning, which included an all terrain vehicle for emergency medical responses. The approved project was conditioned to provide a mitigation fee to cover the cost to provide police service to the project site prior to the generation of sales tax and Transient Occupancy Taxes sufficient to cover the cost of services (refer to Appendix E). The proposed project would result in less of an impact on police services than the approved project. **(Less Impact than the Approved Project)**

4.13.2.3 *Schools*

Based on the previously certified 1998 MBS FEIR, the schools students of the proposed development would attend have additional capacity using the current student/teacher ratios identified by the school district. Assuming an average condominium unit size of two bedrooms, the proposed project would generate 0.4 K-12 students per unit or 36 students. Of these 36 students, 60 percent (22 students) would attend Ord Terrace Elementary School, 20 percent (seven students) would attend Fitch Middle School, and 20 percent (seven students) would attend Seaside High School. Based on the average student/teacher ratio identified by the district, and the number of classrooms and student generation rate provided by the district in the certified 1998 MBS FEIR, the 92 condominium units proposed by the revised project would result in less impact than the approved project. In accordance with Government Code §65996, the proposed project would be subject to the payment of the statutory school impact fee to offset the increased demands on school facilities caused by the project. **(Less Impact than the Approved Project)**

4.13.2.4 *Park*

The proposed project includes 92 residential condominium units. Residents of the proposed project would have access to the recreational facilities provided at the site as well as the public beach, totaling in excess of seven (7) acres. The public access, vista point, and beach access would provide additional access for the public to recreation lands in the project area. The project, therefore, would not result in the need for additional parks facilities than those currently provided in the City. **(New Less than Significant Impact)**

4.13.3 Conclusion

The proposed project, due to its reduced size, would result in less of an impact than those identified in the certified 1998 MBS FEIR for the currently approved development on the site. **(No New Impact)**

4.14 RECREATION

4.14.1 Setting

The City of Sand City currently has one City park located adjacent to City Hall. The park has picnic and playground facilities in a naturalized dune environment. Sand City does not have standards for neighborhood and community parks; however, many other California cities have adopted a standard of between three (3) to five (5) acres of parkland per 1,000 residents. Based on this standard, the City falls short of providing for the park needs of the public, however, due to the availability of beach area, Sand City has adequate recreational space.

In April 1996, Sand City, along with the California Department of Parks and Recreation, Monterey Peninsula Regional Park District (MPRPD), and the Sand City Redevelopment Agency, signed a Memorandum of Understanding (MOU) concerning land use on the Sand City coastline. The MOU allows for certain development to occur on the Sand City coastline north of Tioga Avenue, including the subject development, while permitting the continued acquisition of land on the coast for a proposed state park, south of the project site.

4.14.2 Environmental Checklist and Discussion

RECREATION						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2

The proposed project includes 92 residential condominium units. Residents of the proposed project would have access to the recreational facilities provided at the site as well as the public beach, totaling in excess of seven (7) acres. The public access, vista point, and beach access would provide additional access for the public to recreation lands in the project area. The project; therefore, would not result in the need for additional parks facilities than those currently provided in the City. **(New Less than Significant Impact)**

4.14.3 Conclusion

Due to the reduced size of the project and the location adjacent to a public beach, the project would not result in the need for additional parks facilities than those currently provided in the City. **(New Less than Significant Impact)**

4.15 TRANSPORTATION

The following discussion is based on a focused Transportation Impact Analysis prepared by *Fehr & Peers* in August 2008. A copy of this report is included as Appendix F in this Addendum.

4.15.1 Setting

4.15.1.1 *Existing Roadway Network*

The project site location and surrounding regional and local roadway network is shown in Figure 13. The same nine intersections and two freeway segments that were evaluated in the 1998 MBS FEIR were evaluated for the currently proposed project. These intersections and freeway segments are identified below:

Intersections

1. California Avenue/State Route 1 (SR 1) Southbound On-Ramp
2. California Avenue/SR 1 Northbound Off-Ramp
3. Fremont Boulevard/SR 1 Southbound Off-Ramp/Northbound On-Ramp
4. California Avenue/Playa Avenue
5. Del Monte Boulevard/Playa Avenue (City of Seaside)
6. Del Monte Boulevard/Tioga Avenue (City of Seaside)
7. Fremont Boulevard/Military Avenue-Del Monte Boulevard (City of Seaside)
8. Fremont Boulevard/Ord Grove Avenue (City of Seaside)
9. Fremont Boulevard/Playa Avenue (City of Seaside)

Freeway Segments

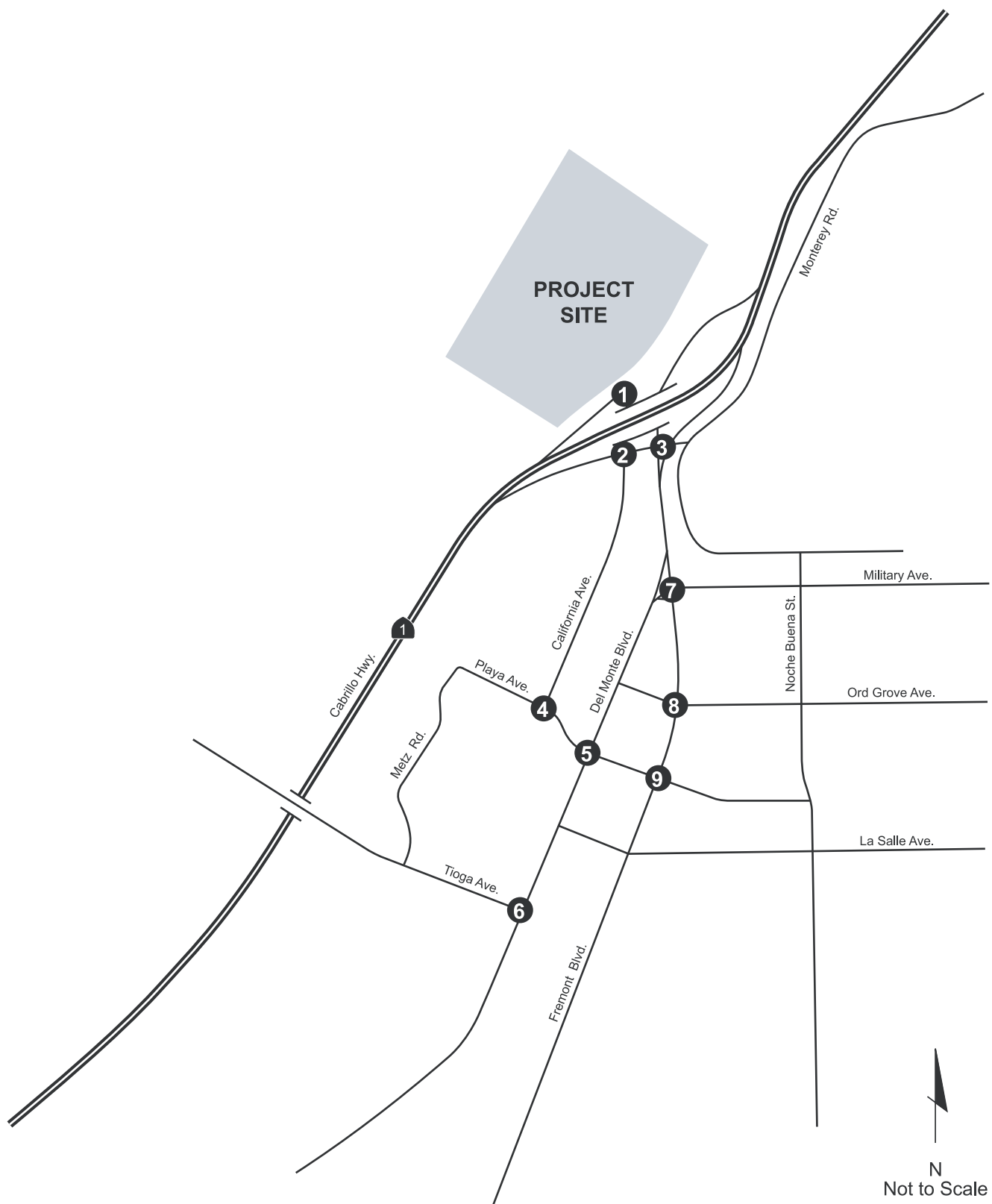
- State Route 1 (SR 1) between Canyon Del Rey (SR 218) and Fremont Boulevard
- State Route 1 (SR 1) between Fremont Boulevard and Main Gate

4.15.1.2 *Existing Bicycle and Pedestrian Facilities*

A regional Class I bicycle path passes just outside the proposed project entrance. The existing Class I path extends from Castroville to Carmel. The nearest sidewalks to the project site are located on the south side of Monterey Road and on Fremont Boulevard and California Avenue south of Monterey Road.

4.15.1.3 *Transit Service*

Bus service in the project area is provided by Monterey-Salinas Transit. The project area is served by Lines 2X, 16, 20, and 55. Line 2X provides service from the Salinas Transit Center to the Lodge at Pebble Beach via the Marina Transit Exchange, Edgewater Transit Exchange, and the Monterey Transit Plaza. Line 16 provides service from the Monterey Transit Plaza to the Marina Transit Plaza, via the Edgewater Transit Exchange and Cal State University Monterey Bay. Line 20 provides service from Salinas Transit Center to Monterey Transit Plaza via the Marina Transit Exchange and Edgewater Transit Exchange. Line 55 provides service from Monterey to San José via the Edgewater Transit Exchange, Prunedale Park & Ride, and Gilroy and Morgan Hill Caltrain Stations.



LEGEND:

① = Study Intersections

PROJECT LOCATION AND STUDY INTERSECTIONS

FIGURE 13

4.15.1.4 Level of Service Methodology

The operations of the nine study intersections and two freeway segments were evaluated during the weekday morning (AM) and evening (PM) peak periods.

Signalized Intersections

The operation of the intersections and roadway segments were evaluated using Level of Service (LOS) calculations. Level of service is a quantitative measure of an intersection's operations, ranging from LOS A, or free-flow conditions, to LOS F, or over-saturated conditions. The identified LOS calculations in the 1998 MBS FEIR were based on the methodology presented in the 1994 Highway Capacity Manual, while the LOS identified in this Addendum is based on the methodology presented in the updated 2000 Highway Capacity Manual (HCM). The 2000 HCM modifies the LOS thresholds and the methodology for calculating LOS which are shown in Table 4.15-1.

Table 4.15-1 Signalized Intersection Level of Service Definitions Using Average Control Vehicular Delay		
Level of Service	Description	Average Control Delay Per Vehicle(Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0
Source: Transportation Research Board, <i>Highway Capacity Manual</i> , 2000.		

Signalized Intersection Level of Service Standards

The acceptable levels of service for signalized intersections vary by jurisdiction and agency in the project area. The Sand City General Plan specifies that a minimum LOS D is desired for all intersections within the City. The City of Seaside specifies that a minimum LOS C should be maintained for all signalized intersections. Ramp junctions of SR 1 are under Caltrans' jurisdiction and LOS standard of between LOS C and LOS D and maintenance of the existing LOS for intersections operating at less than LOS C.

Unsignalized Intersections

Unsignalized intersections (all-way stop controlled and side-street stop controlled) are evaluated using the HCM – Special Report 209 (Chapter 17) methodologies. Operations are defined by the average control delay per vehicle (measured in seconds) for each stop-controlled movement. This incorporates delay associated with deceleration, acceleration, stopping, and moving up in the queue. For side-street stop controlled intersections, the delay reported in this study is represented for the worst-case minor street approach and the average intersection delay for the intersection. For all-way stop controlled intersections, the level of service is represented by the average control delay for the whole intersection. Table 4.15-2 summarizes the relationship between delay and LOS for unsignalized intersections.

Table 4.15-2 Unsignalized Intersection Level of Service Definitions		
Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Little or no delay.	10.0 or less
B	Short traffic delays.	10.1 to 15.0
C	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0
E	Very long traffic delays.	35.1 to 50.0
F	Stop and go conditions.	Greater than 50.0
Source: Transportation Research Board, <i>Highway Capacity Manual – Special Report 209, 2000.</i>		

Unsignalized Intersection Level of Service Standards

The acceptable levels of service for unsignalized intersections vary by jurisdiction and agency in the project area. In Sand City, a significant impact would occur if the LOS D threshold is exceeded at an unsignalized intersection and the intersection conditions justify the installation of a traffic signal. The City of Seaside specifies that a minimum LOS C should be maintained for all-way stop controlled intersections and that LOS E should be maintained for all side-street stop controlled intersections.

Freeway Segments

Freeway mainline segments were evaluated using the method presented in Caltrans' *Guide for the Preparation of Traffic Impact Studies* (December 2002). Caltrans' analysis procedure is based on the density of the traffic flow using methods described in the 2000 HCM. Density is expressed in vehicles per mile per lane. Table 4.15-3, on the following page, presents the range of densities for freeway mainline segment levels of service.

**Table 4.15-3
Freeway Mainline LOS Criteria**

Level of Service	Description	Density¹
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	11.1 to 18
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	18.1 to 26.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	26.1 to 35.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	35.1 to 45.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	**
Note: ¹ Density in passenger vehicles per mile per lane (veh/mi/ln). **Demand flow exceeds capacity. Source: Transportation Research Board, <i>Highway Capacity Manual</i> , 2000.		

Freeway Segment Level of Service Standards

The acceptable level of service for freeway segment varies by jurisdiction and agency in the project area. A significant impact in Sand City would occur if the LOS D threshold is exceeded due to project traffic on a roadway segment. Caltrans defines the LOS standards for state operated facilities such as freeways. Caltrans' LOS standard for freeway segments is between LOS C and LOS D and maintenance of the existing LOS for freeway segments exceeding LOS C.

4.15.1.5 Existing and Background Conditions

Existing and Background Intersection Levels of Service

Existing peak-hour volumes, lane configurations, and intersection controls were used to calculate levels of service for each of the study intersections under Existing Conditions. Background traffic volumes were estimated by adding estimates of traffic generated by approved, but not yet constructed projects, in the vicinity of the site to existing volumes. A list of the approved, but not yet constructed projects, was obtained from the City of Sand City and the City of Seaside. The detailed trip generation table for the background trips is included in Appendix F. The results of the existing intersection level of service analysis are shown in Table 4.15-4.

Table 4.15-4
Existing and Background Intersection Levels of Service

Intersection		Traffic Control	Peak Hour	Existing		Background	
				Delay ¹	LOS ²	Delay ¹	LOS ²
1	California Avenue/SR 1 Southbound On-Ramp**	Side-street stop	AM	N/A ³	N/A ³	N/A ³	N/A ³
			PM				
2	California Avenue/SR 1 Northbound Off-Ramp**	Signal	AM	32.6	C	32.1	C
			PM	45.3	D	44.6	D
3	Fremont Blvd./SR 1 SB Off-Ramp/NB On-Ramp**	Signal	AM	53.6	D	86.5	F
			PM	93.0	F	168.7	F
4	California Avenue/Playa Avenue	All-way stop	AM	8.8	A	9.5	A
			PM	23.2	C	41.3	E
5	Del Monte Boulevard/Playa Avenue*	Signal	AM	16.0	B	17.0	B
			PM	18.1	B	19.7	C
6	Del Monte Boulevard/Tioga Avenue*	Signal	AM	8.1	A	11.2	B
			PM	14.8	B	13.4	B
7	Fremont Blvd./Military Ave.-Del Monte Blvd.*	Side-street stop	AM	20.1 (2.0)	C (A)	34.3 (3.6)	D (A)
			PM	165.2 (33.6)	F (C)	391.2 (80.2)	F (F)
8	Fremont Blvd./Ord Grove Avenue*	Signal	AM	15.8	B	21.9	C
			PM	16.9	B	17.5	B
9	Fremont Boulevard/Playa Avenue*	Signal	AM	9.6	A	9.7	A
			PM	18.3	B	22.2	C

Notes:

¹ Whole intersection weighted average total delay for signalized and all-way stop-controlled intersections (expressed in seconds per vehicle). For side-street stop controlled intersections, delays for worst movement and average intersection delay are shown: worst movement (intersection average).

² LOS calculations performed using the 2000 *Highway Capacity Manual* delay methodology for signalized and unsignalized intersections.

³ Under Existing and Background Conditions this intersection has no opposing movements and therefore operates at LOS A. Under Project Conditions California Avenue is extended to form a T-intersection.

* Denotes City of Seaside intersection

** Denotes Caltrans intersection.

Unacceptable operations are designated in **bold** type.

Existing and Background Freeway Segment Levels of Service

Year 2005 peak hour volumes for SR 1 south of the Canyon Del Rey Boulevard (SR 218) interchange were the most recent available counts available from Caltrans. Volumes for the SR 1 study segments north of the Canyon Del Rey Boulevard (SR 218) interchange were derived using these 2005 volumes and the ramp volumes from intersection turning movement counts collected in 2006. Similar to the intersection volumes, background freeway volumes were estimated by adding estimates of traffic generated by approved, but not yet constructed, projects in the vicinity of the site to existing volumes. The results of the existing freeway segment level of service analysis are shown in Table 4.15-5.

Table 4.15-5
Existing and Background Freeway Segment Levels of Service

Roadway Segment	Facility Type	Peak Hour	Existing			Background		
			Volume	Density ¹	LOS ²	Volume	Density ¹	LOS ²
SR 1 from Fremont Blvd to Ord Main Entrance (NB)	6-lane Fwy.	AM	1,875	10.3	A	2,340	12.9	B
		PM	4,561	25.2	C	5,145	29.0	D
SR 1 from Fremont Blvd. to Ord Main Entrance (SB)	6-lane Fwy.	AM	4,319	23.8	C	4,657	25.8	C
		PM	2,707	14.9	B	3,447	19.0	C
SR 1 from SR 218 to Fremont Blvd. (NB)	4-lane Fwy.	AM	1,585	13.1	B	2,018	16.7	B
		PM	3,977	36.4	E	4,513	n/a	F
SR 1 from SR 218 to Fremont Blvd. (SB)	4-lane Fwy.	AM	3,675	31.9	D	4,053	37.7	E
		PM	2,226	18.4	C	2,903	24.0	C

Notes: ¹Density in passenger vehicles per mile per lane (veh/mi/ln). Densities greater than 45 veh/mi/ln result in a breakdown inflow (LOS F conditions) and no density is reported (n/a).

²Freeway LOS analyzed using HCS+ software package that in addition to freeway volumes, incorporates location-specific characteristics including posted speed limit, percent of truck and bus traffic, and type of terrain.

Unacceptable operations are indicated in **bold** type.

Source: Fehr & Peers, (2008)

4.15.1.6 *Transportation Agency for Monterey County (TAMC)*

Regional Development Impact Fee

The Transportation Agency for Monterey County (TAMC) is a 23-member agency, which consists of local officials from each of its incorporated cities and five county supervisorial districts, as well as ex officio members from six public agencies. The ex officio members include CalTrans and AMBAG among others. In 2004, TAMC prepared and released the *Nexus Study for a Regional Development Impact Fee*. The regional development impact fee program is intended to reduce traffic congestion, improve the level of service and mitigate regional and cumulative traffic impacts created by new development. The fee program sought to come up with a fair share impact fee based on the type and intensity of new development. In 2006, TAMC updated and revised the development impact fee program (Appendix F). The new program has been adopted and becomes effective in August 2008.

The updated study used the Association of Monterey Bay Area Government Travel Demand Model in order to determine future traffic conditions and develop the program's traffic improvement project list.

As the *Regional Impact Fee Nexus Study Update* prepared for TAMC indicates, the impact fee program seeks to raise more than \$328 million (in 2007 dollars) to compensate for future development impact on Monterey County roads and fund the fair share portion of the improvements based on land use type. The funding would be combined with other sources to fund county traffic mitigation improvements.

4.15.2 Environmental Checklist and Discussion

TRANSPORTATION/TRAFFIC						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Cause an increase in traffic which 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 of roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,11
2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,11
3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
5) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
6) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,11
7) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.15.2.1 Significant Impact Criteria

The minimum acceptable LOS standards for intersections and roadway segments vary based on their classification (type of facility) and jurisdiction that controls the transportation facility. The LOS standards and significance thresholds listed below apply to the analysis of the proposed project and are used to determine project level impacts and develop appropriate mitigation measures, if necessary.

City of Sand City

A significant impact in Sand City would occur if the LOS D threshold is exceeded due to project traffic on a roadway segment or signalized intersection. At unsignalized intersections, a significant impact would occur if the LOS D threshold is exceeded and the intersection conditions justify the installation of a traffic signal.

City of Seaside

According to Seaside's General Plan, a significant impact at a signalized study intersection in the City of Seaside is defined to occur under the following scenarios:

- The addition of project traffic causes operations to deteriorate from an acceptable level (LOS C or better) to an unacceptable level (LOS D, LOS E, or LOS F), or
- The addition of project traffic increases the average delay more than 2.0 seconds at intersections operating at LOS D, or
- The addition of project traffic increases the average delay by more than 1.0 second at intersections operating at LOS E or LOS F.

A significant impact at an unsignalized study intersection in the City of Seaside is defined to occur under the following scenarios:

- The addition of project traffic causes operations to deteriorate from an acceptable level (LOS E or better for two-way stop control, LOS C or better for all-way stop control) to an unacceptable level (LOS F for two-way stop control, LOS D for all-way stop control), or
- The addition of project traffic exacerbates the unacceptable operations (LOS F for two-way stop control or LOS D for all-way stop control), and
- The Caltrans peak-hour volume signal warrant is met.

Freeway Segment Levels of Service

City of Sand City

The City of Sand City's LOS standard for all roadway segments is LOS D and, therefore, any reduction below LOS D for freeway segments would be significant.

California Department of Transportation (CalTrans)

Caltrans defines the LOS standards for state operated facilities. Caltrans defines the following LOS standards:

- Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D, or
- If an existing State-operated facility is operating at less than LOS C, the existing measure of effectiveness (MOE) should be maintained.

Impacts are defined to occur when the addition of project traffic:

- Causes operations to deteriorate from an acceptable level (LOS C) to an unacceptable level (LOS D or worse), or
- Causes operations to deteriorate from the existing unacceptable LOS and MOE.

For the purpose of the proposed project, mainline segments of SR 1 and ramp junctions are under the jurisdiction of Caltrans and evaluated based on this LOS threshold. The MOE applied for the analysis of Caltrans-operated facilities are control delay per vehicle (sec/veh) for intersection operations and density (pc/mi/lane) for freeway mainline operations. Freeway impacts based on Sand City's LOS standard are provided solely for informational purposes.

4.15.2.2 *Project Conditions*

Project conditions were determined by adding to background conditions the trips estimated to be generated by the revised project. The amount of traffic associated with the project was estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the amount of traffic entering and exiting the site was estimated on a daily and peak-hour basis. As part of the project trip distribution, the direction of vehicles used to approach and depart the site was estimated. The trips were then assigned to specific street segments and intersection turning movements.

Trip Generation

Trip generation was calculated using rates from the Institute of Transportation Engineers (ITE) Trip Generation (7th Edition) and the San Diego Association of Governments' (SANDAG) Traffic Generators (April 2002). While neither of these resources includes a land use category for condominium hotels, they do include similar uses.

ITE's residential condominiums/townhomes trip generation rate was used to estimate trips resulting from the proposed residential condominiums.

The rates provided for residential condominiums/townhomes, low-rise apartments, and resort hotels were compared to determine which rate was most appropriate for the proposed condominium hotel. The total trip generation rates for these uses are similar, but the proportion of trips going in and out are different. The rates for the residential uses (i.e. condominiums and apartments) show most trips leaving in the morning and returning in the evening, while the hotel rates show most trips arriving in the morning and leaving in the evening. For the hotel, the high rate of trips inbound during the AM peak and outbound during the PM peak reflects employee trips to/from the hotel, trips which are not adequately captured by the residential land use trip rates. The proposed revised project would cater to vacationers, who typically make more daily trips than residents, but tend to spread their trips throughout the day. SANDAG's resort hotel land use was selected for use in the analysis because it is slightly more conservative than ITE's resort hotel rates, and because its rates have been obtained by surveying similar sites in California.

Trips generated by the meeting room, wellness spa, bar, and restaurant are incorporated in the resort hotel rate and were assumed to remain internal to the project site, as most users of these facilities would be hotel or condominium guests. Trip generation estimates for the proposed project are presented below in Table 4.15-6. The proposed project is estimated to generate approximately 2,032 daily trips, 117 morning peak hour trips (51 inbound, 66 outbound) and 155 evening peak hour trips (76 inbound and 79 outbound).

**Table 4.15-6
Project Trip Generation**

Land Use	Size ² (units)	Trip Rates			Number of Trips						
		Daily	AM	PM	Daily	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Condominium Hotel ¹	56	6.56	0.33	0.46	367	11	7	18	10	16	26
Resort Hotel ¹	162	6.56	0.33	0.46	1,063	32	21	53	30	45	75
Condominium	138	4.36	0.33	0.39	602	8	38	46	36	18	54
New Project Trips					2,032	51	66	117	76	79	155
Notes:											
¹ Rates are based on Resort Hotel from San Diego Trip Generators, San Diego Association of Governments (April 2002). Rates are based on assumed 80 percent occupancy of rooms, which based on industry standards is considered full occupancy. VSR rental pool.											
² The Traffic Impact Analysis was completed based on a higher number and different mix of units than currently proposed for the project site. Based on the higher number of units analyzed this analysis is considered conservative in its identification of impacts. Sources: ITE Trip Generation, 7th Edition; SANDAG Traffic Generators (Hotel); Fehr & Peers, 2008											

Trip Distribution and Assignment

The direction trips use to approach and depart from the site were estimated based on the trip distribution used in the 1998 MBS FEIR. Trips generated by the proposed project were assigned to the roadway system based on the directions of approach and departure determined in the trip distribution. Project-generated trips were added to background traffic volumes to estimate volumes under Project Conditions.

Project Intersection Levels of Service

As shown in Table 4.15-7, many of the study intersections operate at acceptable levels of service during one or both peak periods under project conditions. The following intersections would operate at unacceptable LOS under project conditions:

- California Avenue/SR 1 NB Off-Ramp (LOS D during PM peak hour)
- Fremont Boulevard/SR 1 SB Off-Ramp/NB On-Ramp (LOS E during AM peak hour, LOS F during PM peak hour)
- California Avenue/Playa Avenue (LOS F during PM peak hour)
- Fremont Boulevard/Military Avenue-Del Monte Boulevard (LOS F during PM peak hour)

Based on Caltrans' impact criteria, the project would not result in a significant impact at the California Avenue/SR1 NB Off-Ramp intersection, since the addition of project traffic does not degrade the intersection's LOS and MOE as compared to background conditions.

Based on Caltran's impact criteria, the project would have a significant impact at the Fremont Boulevard/SR 1 SB Off-Ramp/NB On-Ramp intersection during both peak periods since it degrades the operations of an intersection already operating at an unacceptable LOS D or worse. Additionally, based on the City Seaside's impact criteria, the project would have a significant impact at the Fremont Boulevard/Military Avenue-Del Monte Boulevard intersection since the addition of project traffic exacerbates unacceptable LOS and the Caltrans peak-hour volume signal warrant is met.

In 2004, TAMC prepared and released the Nexus Study for a Regional Development Impact Fee. The regional development impact fee program is intended to reduce traffic congestion, improve the

level of service and mitigate regional and cumulative traffic impacts created by new development. The fee program sought to come up with a fair way to assess impact fees based on the type and intensity of new development. In 2006, TAMC updated and revised the development impact fee program. The new program has been adopted and becomes effective in August 2008.

The State Route 1 widening project for Sand City and Seaside originated in the State Route 1 Project Study Report (PSR) completed in 2002. The PSR was approved by Caltrans and it identifies improvements for the Fremont Boulevard/SR 1 SB Off-Ramp/NB On-Ramp intersection and the Fremont Boulevard/Military Avenue-Del Monte Boulevard intersection. This project is included in the Regional Transportation Development Impact Fee program that is managed by the Transportation Agency for Monterey County (TAMC). The improvements include eliminating the east leg of the Fremont Boulevard and Monterey Road intersection, prohibiting left-turns from Fremont Boulevard to Monterey Road, realigning Monterey Road to connect with Fremont Boulevard at Military Avenue, realigning and signalizing the Fremont Boulevard/Del Monte Boulevard/ Military Avenue intersection, and widening State Route 1 south of the Fremont Boulevard interchange.

The revised project would also have a significant impact at the California Avenue/Playa Avenue intersection during the PM peak hour based on the City of Sand City's impact criteria. The addition of project traffic exacerbates unacceptable LOS and the Caltrans peak-hour volume signal warrant is met. The peak-hour warrant calculation sheets are contained in Appendix F. Signalization of this intersection is required to reduce the impact to a less than significant level.

Table 4.15-7
Summary of 1998 and 2008 Project Intersection Levels of Service

Intersection		Peak Hour	1998 Project Conditions			2008 Project Conditions		
			Traffic Control	Delay ¹	LOS ²	Traffic Control	Delay ¹	LOS ³
1	California Avenue/SR 1 Southbound On-Ramp***	AM	Side-street stop	4.6	A	Side-street stop	6.4	A
		PM		4.2	A		8.5	A
2	California Avenue/SR 1 Northbound Off-Ramp***	AM	Signal	20.6	C	Signal	34.1	C
		PM		28.7	D		44.5	D
3	Fremont Blvd./SR 1 SB Off-Ramp/NB On-Ramp***	AM	Signal	39.8	D	Signal	86.1	E
		PM		37.7	D		169.2	F
4	California Avenue/Playa Avenue	AM	All-way stop	2.6	A	All-way stop	9.8	A
		PM		17.6	C		49.0	E
5	Del Monte Boulevard/Playa Avenue*	AM	Signal	10.1	B	Signal	16.6	B
		PM		9.8	B		20.0	B
6	Del Monte Boulevard/Tioga Avenue*	AM	Signal	7.7	A	Signal	11.2	A
		PM		7.6	A		14.5	B
7	Fremont Blvd./Military Ave.-Del Monte Blvd.*	AM	Side-street stop	>60	F	Side-street stop	34.9 (3.7)	D (A)
		PM		>60	F		393.9 (80.6)	F (F)
8	Fremont Blvd./Ord Grove Avenue*	AM	Signal	7.8	B	Signal	21.9	B
		PM		8.5	B		17.7	B
9	Fremont Boulevard/Playa Avenue*	AM	Side-street stop	37.5	E	Signal	10.2	B
		PM		59.5	F		23.3	C

Notes:

¹ Whole intersection weighted average total delay for signalized and all-way stop-controlled intersections (expressed in seconds per vehicle). For side-street stop controlled intersections, delays for worst movement and average intersection delay are shown: worst movement (intersection average).

² LOS calculations performed using the 1994 Highway Capacity Manual delay methodology for signalized and unsignalized intersections.

³ LOS calculations performed using the 2000 Highway Capacity Manual delay methodology for signalized and unsignalized intersections.

* Denotes City of Seaside intersection

**Denotes Caltrans intersection

Unacceptable operations are designated in **bold** type.

Significant impacts are indicated in **bold & italic** type.

Source: Associated Transportation Engineers, (1998); Fehr & Peers, 2008.

Impact TRANS-1: The proposed project will result in new potentially significant impacts to Fremont Boulevard/SR 1 SB Off-Ramp/NB On-Ramp (LOS E during AM peak hour, LOS F during PM peak hour), California Avenue/Playa Avenue (LOS F during PM peak hour), and Fremont Boulevard/Military Avenue-Del Monte Boulevard (LOS F during PM peak hour). (**New Potentially Significant Impact**)

Mitigation Measures: Implementation of the following mitigation measures will reduce the project's intersection LOS impacts to a less than significant level:

MM TRANS-1.1: The proposed project will be required to contribute to the Regional Development Impact Fee Program to mitigate impacts to the Fremont Boulevard/SR 1 SB Off-Ramp/NB On-Ramp intersection. The final amount

to be contributed by the project will be determined at the time building permits are issued for the project. The identified improvements would mitigate the LOS at this intersection to LOS A in the AM peak hour and LOS C in the PM peak hour.

MM TRANS-1.2: The proposed project will be required to install a signal at the intersection of California Avenue/Playa Avenue in order to reduce the LOS impacts of the project to a less than significant level. The installation of a traffic signal at this intersection would mitigate the LOS at this intersection to LOS B during both peak hours.

MM TRANS-1.3: The proposed project will be required to contribute to the Regional Development Impact Fee Program to mitigate impacts to the intersection of Fremont Boulevard/Military Avenue-Del Monte Boulevard in order to reduce the LOS impacts of the project to a less than significant level. The identified improvements would mitigate the LOS at this intersection to LOS C during the AM peak hour and LOS D during the PM peak hour.

Freeway Segment Level of Service

Project trips were added to the background volumes to derive freeway volumes for project conditions. As shown in Table 4.15-8, many of the study freeway segments operate at an acceptable level of service during both peak periods under project conditions. The following freeway segments would operate unacceptably under project conditions:

- Northbound SR 1 from Fremont Boulevard to Ord Main Entrance (LOS D during PM peak hour)
- Northbound SR 1 from State Route 218 to Fremont Boulevard (LOS F during PM peak hour)
- Southbound SR 1 from State Route 218 to Fremont Boulevard (LOS E during AM peak hour)

Though the northbound SR 1 segment between Fremont Boulevard and the Ord Main Entrance is projected to operate at unacceptable LOS D during the PM peak hour, the density is not projected to change with the addition of the 12 project trips and, therefore, this impact is less than significant.

Based on Caltrans' impact criteria, the project would have a significant impact on the northbound and southbound SR 1 segment between State Route 218 and Fremont Boulevard, since the density increases due to the addition of project trips on these freeway segments are already operating at unacceptable levels of service.

Caltrans approved the State Route 1 Project Study Report (PSR) in 2002, which identified improvements on SR 1 between SR 218 and Fremont Boulevard. This project is included in the Regional Development Impact Fee Program that TAMC is managing. The improvements include widening this section of State Route 1 from four to six lanes.

Table 4.15-8
Summary of 1998 and 2008 Project Freeway Segment Levels of Service

Roadway Segment	Facility Type	Peak Hour	1998		2008		
			Volume	LOS ¹	Volume	Density ²	LOS ¹
SR 1 from Fremont Blvd to Ord Main Entrance (NB)	6-lane Fwy.	AM	1,990	A	2,350	12.9	B
		PM	4,000	C	5,157	29.0	D
SR 1 from Fremont Blvd. to Ord Main Entrance (SB)	6-lane Fwy.	AM	4,000	C	4,665	25.8	C
		PM	2,995	B	3,459	19.0	C
SR 1 from SR 218 to Fremont Blvd. (NB)	4-lane Fwy.	AM	1,720	B	2,036	16.8	B
		PM	3,685	D	4,540	<i>n/a</i>	F
SR 1 from SR 218 to Fremont Blvd. (SB)	4-lane Fwy.	AM	4,000	E	4,076	38.1	E
		PM	2,670	C	2,931	24.2	C

Notes: ¹ Freeway LOS analyzed using HCS+ software package that in addition to freeway volumes incorporates location-specific characteristics including posted speed limit, percent of truck and bus traffic, and type of terrain.
² Density in passenger vehicles per mile per lane (veh/mi/ln). Densities greater than 45 veh/mi/ln result in a breakdown inflow and LOS F conditions (no density is reported).
 Unacceptable operations are indicated in **bold** type.
 Significant impacts are identified in **bold & italic** type.
 Source: Fehr & Peers, (2008)

Impact TRANS-2: The proposed project will result in significant impacts to Northbound SR 1 from Route 218 to Fremont Boulevard (LOS F during PM peak hour) and Southbound SR 1 from Route 218 to Fremont Boulevard (LOS E during AM peak hour). (**New Potentially Significant Impact**)

Mitigation Measures: Implementation of the following mitigation measures will reduce the project's freeway segment LOS impacts to a less than significant level:

MM TRANS-2.1: The proposed project will be required to contribute to the approved Regional Development Impact Fee Program that TAMC is managing. The project applicant will be required to pay a fair-share contribution to the Regional Development Impact Fee based on the program's fee schedule. The identified improvements would mitigate the LOS on these freeway segments to LOS C. (**Less than Significant Impact with Mitigation**)

4.15.2.2 *Comparison of 1998 and 2008 Levels of Service*

Trip Generation

The traffic impact analysis for the previously proposed 597-unit proposal that was the subject of the certified 1998 MBS FEIR was based on development of 228 hotel units, 132 vacation ownership units, and 237 residential and visitor-serving condominium units. The revised project traffic impact analysis was based on development of 218 hotel units and 138 residential units; however, since this time the currently proposed project has been reduced to 341 total units. The revised project represents a decrease of 256 units from the project analyzed in the 1998 MBS FEIR. The project that was the subject of the 1998 MBS EIR was later approved for a 495-unit mixed-use resort. Table 4.15-9 compares the trip generation for the 1998 MBS FEIR and the currently proposed project. The revised project is estimated to generate 2,799 fewer daily trips, 204 fewer AM peak hour trips, and 225 fewer PM peak hour trips than the development analyzed in the certified 1998 MBS FEIR.

The 1998 FEIR applied ITE's residential condominium/townhome trip generation rates to the condominium component of the proposed project. However, as discussed above, the rental pool condominiums would cater to vacationers, who typically make more daily trips than residents and spread their trips throughout the day. The ITE residential condominium/townhome rates have higher outbound trip generation in the morning and inbound trip generation in the evening, which are reflective of typical peak-hour commute trips. Therefore, the average rate per unit used for the current project TIA is slightly lower than that in the 1998 FEIR.

**Table 4.15-9
Trip Generation Comparison**

Project	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
1998 Final EIR ¹ (597-unit resort)	4,831	N/A ³	N/A ³	321	N/A ³	N/A ³	380
2008 Update ² (356-unit resort)	2,032	51	66	117	76	79	155
Difference (1998 minus 2008 results)	2,799	N/A ³	N/A ³	204	N/A ³	N/A ³	225
Notes:							
¹ Trip generation based on results presented in <i>Monterey Bay Shores Resort Final Environmental Impact Report</i> (1998).							
² Trip generation based on results presented in Table 4.15-6.							
³ No in-out splits were presented in <i>Monterey Bay Shores Final Environmental Impact Report</i> (1998).							
Sources: Associated Transportation Engineers, 1998; Fehr & Peers, 2008							

Intersection and Freeway Segment Levels of Service

A comparison of the project intersection and freeway segment levels of service for the previously approved project analyzed in the certified 1998 MBS FEIR and the revised project is included in Appendix F of this Addendum.

4.15.2.3 Parking and Site Access

As proposed, the revised project would provide 772 parking spaces spread throughout the project site in surface and underground lots. Chapter 18.64 of Sand City's Municipal Code provides parking requirements for a variety of land uses. The code requires one space for each hotel room, 1.5 spaces per condominium, and two (2) spaces per residential unit. The code does not specify a parking requirement for a spa, but it does require one space per 300 square feet of visitor serving commercial uses, which is the land use most similar to a spa. Since the project is in the coastal zone, the project must provide an additional 10 percent of the project's total visitor-serving commercial parking for public parking, which may be located on-site or at another location that would benefit public access.

Like the trip generation estimates provided in Table 4.15-6, the parking requirements for the project restaurant, bar and meeting rooms are calculated based on the assumption that parking for these uses are included in the hotel's parking rate. Most diners at the hotel restaurant would walk to the restaurant from their residence or hotel room. Since the City of Sand City's Municipal Code only specifies parking rates for general hotels and not for resort hotels, the parking requirement for the spa was analyzed separately. The parking required for the spa has been reduced by 50 percent because most of the spa's patrons are not expected to drive to the spa. A summary of the project's required parking is shown in Table 4.15-10.

**Table 4.15-10
Project Parking Requirements**

Use	Size	Spaces Required ¹	Spaces Provided
Hotel	162 rooms	162	n/a
Visitor Serving Condo – VSR (rental pool)	56 units	84	n/a
Residential	138 units	276	n/a
Spa ²	40,000 square feet	70	n/a
Subtotal		592	702
Additional Parking Required		32	70
Total		624	772
Notes: ¹ Assumes that 50 percent of the spa patrons will walk to the spa from other locations on site.			
² Assumes parking for 1/3 of the restaurant space is accounted for in the hotel parking rate.			
VSR = Visitor-serving residential.			
Source: City of Sand City Municipal Code, Fehr & Peers, 2008			

The project, as proposed, would provide adequate parking to meet the City's code requirements. The project would provide substantially more parking (approximately 148 spaces) than the site would potentially need and would provide ten (10) percent of the project's total parking for public use. The project did not take any shared uses into consideration when evaluating their parking demand and supply. For example, the project applied the full ratio of 1 space for 300 feet of the spa, even though the primary use is intended for a hotel guest or resident who would most likely already be parked on site.

Site access is proposed via two driveways off of the proposed extension of Sand Dunes Drive. As shown in Figure 4, both entrances will have a small traffic circle to guide vehicles in the appropriate direction. It is recommended that the egress points at the driveways be stop sign controlled to give through traffic on Sand Dunes Drive the right-of-way.

4.15.2.4 Construction Impacts

Project construction would take place over an estimated period of 2.5 years. Construction staging and work to extend Sand Dunes Drive would take place entirely on the unimproved project site. Consistent with the approved project, this work will be undertaken during non-peak traffic periods.

The revised project would remove approximately 420,000 cubic yards of sand from the site. This represents a reduction of sand off-haul from the site of approximately 52 percent, compared to the previously approved project. Currently there are three options for the disposal of the sand which would add traffic trips to local streets. Off-site disposal of sand would be accomplished in one of three ways: (1) it would be sold to contractors for use in construction projects; (2) it would be provided or sold to projects identified in the AMBAG-sponsored coastal regional sediment management plan for Southern Monterey Bay to reduce beach erosion; or (3) it would be trucked off-site for disposal in landfills.

Sand would be off-hauled from the site using trucks with double trailers providing 40 cubic yards of capacity which will be a contractual obligation required by the applicant. Off-hauling sand from the site, therefore, would require approximately 10,500 round-trip truck trips. The sand off-haul from the site would occur during non-peak traffic periods. This phase of construction would take approximately two to three months assuming 200 truck loads of sand could be removed per day.

State Route 1 currently carries approximately 86,000 average daily trips (ADT) in the vicinity of the State Route 1/Fremont Boulevard interchange.¹⁵ Approximately 4.3 percent of those trips are made by trucks (3,698 ADT).

The estimated 200 truck trips per day that would occur over the sand removal phase of the project would increase the percentage of trucks using State Route 1 from the existing 4.3 percent to 5.4 percent. Similar to the approved project, the impacts of these trips on local traffic would be minimized because they would take place during non-peak traffic periods. The addition of these trips during off-peak hours, therefore, would not significantly degrade freeway operations. **(No New Impact)**

4.15.3 Conclusion

Impact TRANS-1: The proposed project, with the implementation of the above mitigation measures (MM TRANS-1.1 through MM TRANS-1.3), would reduce intersection LOS impacts to Fremont Boulevard/SR 1 SB Off-Ramp/NB On-Ramp (LOS E during AM peak hour, LOS F during PM peak hour), California Avenue/Playa Avenue (LOS F during PM peak hour), and Fremont Boulevard/Military Avenue-Del Monte Boulevard (LOS F during PM peak hour) and would not result in new or more significant impacts to the transportation system than those addressed in the certified 1998 Monterey Bay Shores Final EIR. **(No New Impact)**

Impact TRANS-2: The proposed project, with the implementation of the above mitigation measure (MM TRANS-2.1), would reduce freeway segment LOS impacts to Northbound SR 1 from State Route 218 to Fremont Boulevard (LOS F during PM peak hour) and Southbound SR 1 from State Route 218 to Fremont Boulevard (LOS E during AM peak hour) and would not result in new or more significant impacts to the transportation system than those addressed in the certified 1998 MBS FEIR. **(No New Impact)**

¹⁵ California Department of Transportation (Caltrans). Traffic and Vehicle Data Systems Unit: 2007 All Traffic Volumes on California State Highway System. <http://traffic-counts.dot.ca.gov/2007all.htm> Accessed: October 10, 2008.

4.16 UTILITIES AND SERVICE SYSTEMS

4.16.1 Setting

4.16.1.1 *Water Service*

California American Water Company (Cal-Am) pipelines provide water service to the project area. The closest Cal-Am water lines are located approximately 670 feet south of the project site at the Edgewater Shopping Center. The project has a 149 acre-foot entitlement from the Seaside Basin Groundwater adjudication.

4.16.1.2 *Sanitary Sewer/Wastewater Treatment*

Wastewater collection and treatment is provided to Sand City by the Monterey Regional Water Pollution Control Agency (MRWPCA) and the Seaside County Sanitation District (SCSD). The MRWPCA operates the Regional Sewage Treatment Plant in Marina and the SCSD maintains the collection lines and pumping stations that deliver sewage from Sand City and Seaside to MRWPCA's Seaside pumping station located west of SR 1 on the north side of Bay Avenue at Vista Del Mar. The treatment plant processes slightly under 21 million gallons per day (MGD) and has a capacity of 30 MGD; however, its existing permit limits its capacity to 25 MGD.

There is no existing sewer service west of SR 1. The nearest sanitary sewer line is an eight-inch line located in the Edgewater Shopping Center approximately 670 feet south of the project site.

4.16.1.3 *Storm Drainage*

The project site is vacant and contains no drainage facilities. The irregular topography of the site including the sand pit in the southwestern portion of the project site results in an uneven drainage pattern. Stormwater currently percolates into the sandy soil of the site and little stormwater runoff enters the bay as surface water runoff.

The storm drainage system that serves the developed portions of Sand City discharges stormwater runoff to the surf zone of Monterey Bay. Because the City is located on sand dunes, most stormwater percolates into the soil.

4.16.1.4 *Solid Waste*

Sand City is located within the jurisdiction of the Monterey Regional Waste Management District (MRWMD). Solid waste collection is currently provided by the USA Waste Management Company. Solid waste collected in Sand City is disposed of at the Marina Landfill which serves western Monterey County. The MRWMD estimates the Marina Landfill has adequate capacity for projected development on the Monterey Peninsula through 2107. The City curbside recycling program began in 1991, and by 2004 the City was diverting 59 percent of its waste.¹⁶ The City also has residential curbside collection for green waste and household hazardous waste and commercial collection of recyclables.

¹⁶ California Integrated Waste Management Board. *Jurisdiction Profile for City of Sand City*. <http://www.ciwmb.ca.gov/Profiles/Juris/JurProfile2.asp?RG=C&JURID=459&JUR=Sand+City>. Accessed July 7, 2008.

4.16.2 Environmental Checklist and Discussion

UTILITIES AND SERVICE SYSTEMS						
	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
Would the project:						
1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2
3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
6) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
7) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

4.16.2.1 Water Service

Cal-Am would provide water service to the site through an operation agreement with the property owner of an existing on-site well until such time that the California Public Utilities Commission approves an annexation of the project site into Cal-Am’s service area. Once the project site is annexed into the Cal-Am service area, water lines would be extended from an existing 12-inch water line located at the Edgewater Shopping Center to the project site and the site’s groundwater entitlement would be pumped from Cal-Am’s existing Peralta wells through a subsequent operating agreement. Based on information from Cal-Am it is expected that the site will be annexed into the Cal-Am area prior to occupancy.

The revised project would create an estimated demand for approximately 63.8 acre-feet of water per year as compared to the approved project which had an estimated water demand range of

approximately 99 to 125 acre-feet per year. The estimated water demand for the revised project includes a conservative estimate of 1.2 acre-feet of water per year for landscape purposes although all landscaping water needs are proposed to be met using graywater. In addition, the project would require approximately 12.5 acre-feet of water to establish plants within the first year after planting on the site. The quantity of water necessary to establish plants would not be required on an on-going basis and is not included in the annual water demand for the project. The project applicant has applied for a water distribution permit from the Monterey Peninsula Water Management District (MPWMD) and estimates annual water use to be approximately 63.8 acre-feet per year, but seeks a permit to use up to 90 acre-feet per year. Although the project is not expected to use 90 acre-feet per year, this Addendum evaluates impacts as if the full 90 acre-feet per year applied for were actually used. The potential use of 90 acre-feet of water per year is significantly less than the range of 99 to 125 acre-feet per year estimated to be needed in the certified 1998 MBS FEIR for the approved project.

The actual estimated water demand for the revised project is likely to be two-thirds to one-half of the approved project's estimated water demand range of 99 to 125 acre-feet per year and in the worst case (i.e., if the total 90 acre-feet were used); the demand would be nine to 35 acre-feet less per year than the approved project. These figures include a ten percent "buffer" built into the estimated demand and thus are conservative (i.e., the water demand is not expected to be as much as estimated).

An optional 250,000 gallon water storage tank may be constructed on the northeast side of the project site near the public parking area. The water storage tank would be 47 feet in diameter and 16 feet in height.

The proposed project will use substantially less water than the previously approved project and, therefore, will result in less impact than the approved project. **(Less Impact than the Approved Project)**

4.16.2.2 *Sanitary Sewer/Wastewater Treatment*

The revised proposed project would likely generate up to approximately 55.7 acre-feet of wastewater per year assuming 8.1 acre-feet per year of graywater is reused for landscaping. The previously approved project would have generated approximately 72.8 acre-feet of wastewater per year, and thus the revised project would likely result in a 23 percent reduction in wastewater generated. The applicant has applied for a water distribution permit from the Monterey Peninsula Water Management District (MPWMD) seeking a permit to use up to 90 acre-feet of water per year. The revised project further proposes the reuse of graywater on the site and is anticipated to result in substantially less water use than a conventional hotel development. Assuming a worst-case water use of up to 90 acre-feet per year and the reuse of approximately 8.1 acre-feet of graywater on the site for landscaping, without accounting for excess graywater generation beyond landscaping, the revised project's annual wastewater discharge would be approximately 81.9 acre-feet per year. The revised project would likely generate up to approximately 23 percent less wastewater than the previously approved project; however, assuming the permitted amount of 90 acre-feet per year is utilized, wastewater flows from the project would exceed estimates for the approved project.

The wastewater generated by the project is not considered a substantial increase in sewage generation due to the existing excess capacity of the sewage treatment plant. The extension of the sanitary sewer line would be located within the existing alignment of California Avenue, and therefore, construction and extension of this line is not anticipated to result in significant environmental effects.

The Seaside County Sanitation District (Sanitation District) has provided a will-serve letter for the Monterey Bay Shores ecoresort which requires the preparation of a design-stage engineering analysis to ensure proper functioning of the sewer system. If upgrades are deemed necessary as part of that analysis, they will be required to be in place prior to the project being served by the Sanitation District. It is anticipated that the existing system will be adequate to serve the project site; however, any upgrades to the system would occur in existing roadway alignments and thus are not anticipated to result in any significant environmental effects.

The revised project's wastewater generation could exceed wastewater estimates for the approved project if the project's water use reaches the total permitted amount. Given the existing excess permitted capacity of the Regional Sewage Treatment Plant, the project's increase in wastewater generation would not result in impacts to the sanitary sewer system. **(New Less than Significant Impact)**

4.16.2.3 *Storm Drainage*

The revised project would add less than five (5) percent impervious surfaces to the project site. The revised project is designed to capture all storm water for on-site use and to allow percolation on the site. The project includes two retention ponds, one located on the northwest portion of the site and one located on the east portion of the site adjacent to Sand Dunes Drive. A bioswale would be located adjacent to the retention pond on the northwest portion of the site. Storm drainage lines ranging from 12 inches to 24 inches would be located throughout the site. Due to the capture of storm water and its on-site reuse, the project would not need to connect with off-site storm drainage lines. The project would not discharge water to a municipal storm sewer system and no storm water outfalls are proposed from the site to Monterey Bay.

The revised project would not result in any new or more significant drainage impacts than were described in the certified 1998 MBS FEIR. **(No New Impact)**

4.16.2.4 *Solid Waste*

The revised project would result in less solid waste generation than the approved project based on its reduced size. The Marina Landfill and Recycling Facility received approximately 369,389 tons of solid waste in fiscal year 2004-2005 and has adequate capacity for projected development on the Monterey Peninsula through 2107.¹⁷ The revised project would not result in a substantial increase in solid waste for the landfill or negatively impact the City's ability to meet state law requiring waste diversion. **(No New Impact)**

4.16.3 Conclusion

The revised project is not anticipated to exceed the capacity of existing utility systems and will not result in new or more significant impacts to utilities and services systems than those addressed in the certified 1998 MBS FEIR. **(No New Impact)**

¹⁷ California Integrated Waste Management Board. Active Landfill Profile for Marina Landfill. Available at: <http://www.ciwmb.ca.gov/Profiles/Facility/Landfill/LFProfile1.asp?COID=27&FACID=27-AA-0010> Accessed: July 7, 2008.

4.17 MANDATORY FINDINGS OF SIGNIFICANCE

	New Potentially Significant Impact	New Less Than Significant With Mitigation Incorporated	New Less Than Significant Impact	Same Impact as “Approved Project”	Less Impact than “Approved Project”	Information Source(s)/ Discussion Location
1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2, p.21-102
2) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2, p.21-102
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2, p.21-102
4) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2, p.21-102

Discussion: With the implementation of the additional mitigation measures identified on pages 1-89 of this Addendum to the certified 1998 MBS FEIR, the revised project would not result in significant environmental impacts.

4.17.1 Cumulative Traffic

The cumulative traffic impacts of the project were reevaluated due to the identification of new significant intersection and freeway LOS impacts that were not previously identified in the certified 1998 MBS FEIR. The cumulative traffic analysis reviewed cumulative conditions with and without the project based on lists of pending projects obtained from the Cities of Seaside, Del Rey Oaks, and Marina in addition to the City of Sand City. The operations of the nine study intersections and freeway segments were evaluated during the weekday morning (AM) and evening (PM) peak periods).

4.17.1.1 Cumulative Intersection Levels of Service

The results of the cumulative LOS analysis are summarized on in Table 4.17-1. The cumulative LOS calculation sheets are included in Appendix F. Whole intersection weighted average total delay is reported for signalized and all-way stop controlled intersections. For side street stop controlled

intersections, delays for the worst movements are shown followed by the average intersections delay in parentheses.

Table 4.17-1 Summary of 1998 and 2008 Cumulative Intersection Levels of Service								
Intersection		Peak Hour	1998 Cumulative with Project Conditions			2008 Cumulative with Project Conditions		
			Traffic Control	Delay ¹	LOS ²	Traffic Control	Delay ¹	LOS ³
1	California Avenue/SR 1 Southbound On-Ramp**	AM	Side-street stop	10.1	C	Side-street stop	6.9	A
		PM		17.7	C		12.1	B
2	California Avenue/SR 1 Northbound Off-Ramp**	AM	Signal	> 60	F	Signal	34.0	C
		PM		> 60	F		49.3	D
3	Fremont Blvd./SR 1 SB Off-Ramp/NB On-Ramp**	AM	Signal	> 60	F	Signal	225.7	F
		PM		> 60	F		503.0	F
4	California Avenue/Playa Avenue	AM	All-way stop	4.5	A	All-way stop	10.6	B
		PM		> 60	F		77.9	F
5	Del Monte Boulevard/Playa Avenue*	AM	Signal	9.8	B	Signal	17.4	B
		PM		13.4	B		24.1	C
6	Del Monte Boulevard/Tioga Avenue*	AM	Signal	7.0	B	Signal	10.8	B
		PM		7.4	B		13.9	B
7	Fremont Blvd./Military Ave.-Del Monte Blvd.*	AM	Side-street stop	> 60	F	Side-street stop	242.3 (34.1)	F (C)
		PM		> 60	F		n/a	F (F)
8	Fremont Blvd./Ord Grove Avenue*	AM	Signal	8.0	B	Signal	21.5	C
		PM		10.6	B		17.3	B
9	Fremont Boulevard/Playa Avenue*	AM	Side-street stop	> 60	F	Signal	10.3	B
		PM		> 60	F		26.0	C
Notes: ¹ Whole intersection weighted average total delay for signalized and all-way stop-controlled intersections (expressed in seconds per vehicle). For side-street stop controlled intersections, delays for worst movement and average intersection delay are shown: worst movement (intersection average). ² LOS calculations performed using the 1994 Highway Capacity Manual delay methodology for signalized and unsignalized intersections. ³ LOS calculations performed using the 2000 Highway Capacity Manual delay methodology for signalized and unsignalized intersections. * Denotes City of Seaside intersection Unacceptable operations are designated in bold type. Significant impacts are indicated in bold & italic type. n/a Volumes exceed intersection operations capacity. No delay reported. Source: Associated Transportation Engineers, (1998); Fehr & Peers, 2008.								

The intersection LOS for the 1998 and 2008 analysis results under Cumulative Project Conditions are presented in Table 4.17-1. As discussed previously, under the near-term intersection LOS comparison the 1998 results were analyzed based on the methodology presented in the 1994 HCM, while the 2008 results were analyzed based on the methodology presented in the 2000 HCM. For most of the study intersections the results for the 1998 analysis are similar to the results from 2008. Both the 1998 and 2008 cumulative analyses identify impacts at the Fremont Boulevard/SR 1 SB Off-Ramp/NB On-Ramp and California Avenue/Playa Avenue intersections. However, the 2008 analysis for the cumulative scenarios results in one new significant impact at the Fremont Boulevard/Military Avenue-Del Monte Boulevard intersection that was not previously identified in the 1998 FEIR. Similarly, the 1998 MBS FEIR identifies a cumulative impact at California Avenue/SR 1 NB On-Ramp, which does not meet the significance threshold in the 2008 analysis.

Impact C-TRANS-1: The proposed project would result in a cumulatively considerable contribution to an intersection LOS impact at Fremont Boulevard/Military Avenue-Del Monte Boulevard (LOS F during PM peak hour). (**New Significant Cumulative Impact**)

Mitigation Measures: Implementation of the following mitigation measure would reduce the cumulatively considerable contribution of the project to cumulative intersection LOS impacts to a less than significant level:

MM C-TRANS-1.1: The proposed project will be required to contribute to the Regional Development Impact Fee Program to mitigate impacts to the intersection of Fremont Boulevard/Military Avenue-Del Monte Boulevard in order to reduce the cumulative LOS impacts of the project to a less than significant level. The identified improvements would mitigate the LOS at this intersection to LOS C during the AM peak hour and LOS D during the PM peak hour.

4.17.1.2 Cumulative Freeway Segment Levels of Service

The results of the freeway segment LOS analysis are shown in Table 4.17-2, below. The calculations for the freeway segment analysis are included in Appendix F.

Table 4.17-2 Summary of 1998 and 2008 Cumulative Freeway Segment Levels of Service						
Roadway Segment	Facility Type	Peak Hour	1998		2008	
			Volume	LOS	Volume	LOS
SR 1 from Fremont Blvd to Ord Main Entrance (NB)	6-lane Freeway	AM	2,160	B	2,500	B
		PM	4,195	C	<i>5,414</i>	<i>D</i>
SR 1 from Fremont Blvd. to Ord Main Entrance (SB)	6-lane Freeway	AM	4,185	C	<i>4,796</i>	<i>D</i>
		PM	3,110	B	3,730	C
SR 1 from SR 218 to Fremont Blvd. (NB)	4-lane Freeway	AM	1,900	B	2,180	B
		PM	<i>3,880</i>	<i>E</i>	<i>4,784</i>	<i>F</i>
SR 1 from SR 218 to Fremont Blvd. (SB)	4-lane Freeway	AM	<i>4,225</i>	<i>E</i>	<i>4,162</i>	<i>E</i>
		PM	2,810	C	<i>3,212</i>	<i>D</i>
Notes: ¹ Freeway LOS analyzed using HCS+ software package that in addition to freeway volumes incorporates location-specific characteristics including posted speed limit, percent of truck and bus traffic, and type of terrain. Unacceptable operations are indicated in bold type. Significant impacts are indicated in <i>bold & italic</i> type. Source: Fehr & Peers, (2008)						

The following freeway segments would operate unacceptably under cumulative with project conditions:

- Northbound SR 1 from Fremont Boulevard to Ord Main Entrance: LOS D during PM peak hour
- Southbound SR 1 from Ord Main Entrance to Fremont Boulevard: LOS D during AM peak hour
- Northbound SR 1 from State Route 218 to Fremont Boulevard: LOS F during PM peak hour
- Southbound SR 1 from State Route 218 to Fremont Boulevard: LOS E during AM peak hour and LOS D during PM peak hour

Based on Caltrans' impact criteria, the project would have a significant impact on the northbound SR 1 segment between Fremont Boulevard and the Ord Main Entrance, since the density increases due to the addition of project trips. This impact was not identified in the certified 1998 MBS FEIR and, therefore, is a new significant cumulative impact. Though the southbound SR 1 segment between Fremont Boulevard and the Ord Main Entrance is projected to operate at unacceptable LOS D during the AM peak hour, the density is not projected to change with the addition of the project trips and, therefore, this impact is less than significant.

The previously approved project resulted in a considerable contribution to a significant cumulative impact on the northbound segment of SR 1 between SR 218 and Fremont Boulevard during the PM peak hour and the southbound segment of SR 1 between SR 218 and Fremont Boulevard during the AM peak hour. The revised project, which has similar impacts, would not result in a new significant cumulative impact to either of these segments.

Based on Sand City's significance threshold of LOS D for freeway segments and similar to the certified 1998 MBS FEIR, the currently proposed project would not result in a considerable contribution to any significant freeway segment LOS impacts; however, the traffic impact analysis for the currently proposed project uses Caltrans freeway segment significance threshold of LOS C to identify project freeway segment impacts.

Impact C-TRANS-2: Based on Caltrans significance threshold of LOS C, the proposed project would result in a cumulatively considerable contribution to Northbound SR 1 from Fremont Boulevard to Ord Main Entrance (LOS D during PM peak hour). **(New Potentially Significant Impact)**

Mitigation Measures: Implementation of the following mitigation measures would reduce the cumulatively considerable contribution of the project to cumulative freeway segment LOS impacts to a less than significant level:

MM C-TRANS-2.1: The proposed project will be required to contribute to the approved TAMC Regional Development Impact Fee Program. The project applicant will be required to pay a fair-share contribution to the Regional Development Impact Fee based on the program's fee schedule. The project's contribution to the transportation impact fee will reduce the cumulative impacts of the project to a less than significant level. **(Less than Significant Impact with Mitigation)**

4.17.1.3 *Comparison of 1998 and 2008 Cumulative LOS Impacts*

As discussed in *Section 4.15.2.2*, although the proposed project was analyzed in the traffic impact analysis at 356 units, the revised project has been further reduced to 341 units which is a total reduction of 256 units from the project analyzed in the certified 1998 MBS FEIR. This 256-unit reduction in the size of the project has substantially reduced the number of trips resulting from development of the site. Since certification of the 1998 MBS FEIR and Sand City's approval of the previous project, the methodology for calculating traffic impacts has changed, the thresholds of significance for project impacts has changed, and the background conditions in the project area have changed. For most of the study intersections and freeway segments the results of the 1998 analysis and 2008 analysis are similar. A comparison of, and any discrepancies between, the previously approved project's impacts and revised project's impacts are discussed in detail in Appendix F.

4.17.2 Global Climate Change

Global climate change is the alteration of the Earth’s weather including its temperature, precipitation, and wind patterns. Global temperatures are affected by naturally occurring and anthropogenic-generated atmospheric gases, such as carbon dioxide, methane, and nitrous oxide. These gases allow sunlight into the Earth’s atmosphere, but prevent radiative heat from escaping into outer space, which is known as the “greenhouse” effect. There is a general consensus among the world’s leading climate scientists that global climate change is occurring and is likely caused by human activity.

Agencies at the international, national, state, and local levels are considering strategies to control emissions of gases that contribute to global warming. There is no comprehensive strategy that is being implemented on a global scale that addresses climate change. The State of California has created a multi-agency “Climate Action Team”, which has identified a range of strategies and the California Air Resources Board, under Assembly Bill (AB) 32, has been designated to adopt by January 1, 2009, the primary plan for reducing California’s greenhouse gas (GHG) emissions and regulations and other initiatives for reducing GHG emissions by January 1, 2011.

AB 32 requires achievement by 2020 of a statewide greenhouse gas emissions limit equivalent to 1990 emissions, and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions. By 2050, the state plans to reduce emissions to 80 percent below 1990 levels.

While the State of California has established programs to reduce greenhouse gas emissions, there are no established standards for gauging the significance of greenhouse gas emissions. Neither CEQA nor the CEQA Guidelines provide any methodology for analysis of greenhouse gases. Given the global scope of global climate change, the challenge under CEQA is for a Lead Agency to translate the issue down to the level of a CEQA document for a specific project in a way that is meaningful to the decision making process. Under CEQA, the essential questions are whether a project creates or contributes to an environmental impact or is subject to impacts from the environment in which it would occur, and what mitigation measures are available to avoid or reduce impacts.

The project would generate greenhouse gases primarily through electricity generation/use and generation of vehicle trips. Efforts to reduce the project’s greenhouse gas emissions by reducing electricity demand and reducing vehicle trips and miles, therefore, should be implemented.

The previously approved project on the site included 154 additional units than the currently proposed project. The elimination of those units will result in energy savings and reduced vehicle miles.

The project would also result in greenhouse gas emissions during construction of the ecoresort. The revised project has reduced construction greenhouse gas emissions by reducing the amount of sand off-haul from the site by 52 percent compared to the approved project. The approved project was estimated to require 40,000 truck trips to remove sand from the site while the proposed revised project is estimated to require 10,500 trips through the use of double trailers.

The revised ecoresort project would use daylighting, to the extent feasible, would use solar water heaters, and would generate electricity using photovoltaics. The project would use renewable energy (wind turbines, solar energy, and geothermal heating and cooling) to generate 30 percent of the resort’s electricity needs and would use natural ventilation to cool the project instead of using forced air mechanical ventilation. As a result, energy usage would be substantially reduced and is expected to amount to approximately one-half the use of a conventional resort of this same size. The proposed

residential condominium units are also likely to require less energy on a per unit basis than a conventional residential condominium development, thus adding housing stock that generates lower levels of greenhouse gases.

The revised project also would capture rainwater and graywater on the site for use in landscaping which would substantially reduce the project's water use.

The revised project includes living green roofs which provide substantially increased insulation when compared to traditional roofs, thus augmenting the energy efficiency of the resort.

The measures proposed by the revised project would thus substantially reduce the amount of energy consumed by the development and, therefore, reduce its greenhouse gas emissions and contribution to global climate change. The revised project was designed to reduce the energy use of the development by approximately 50 percent and, therefore, the project would not result in any substantially greater energy impact than was identified in the certified 1998 MBS FEIR. **(No New Impact)**

The proposed ecoresort would also provide educational materials for residents and hotel guests discussing strategies for reducing GHG emissions associated with their ownership or stay at the resort.

Based on the measures included in the project to reduce energy use, the proposed project would not impede the state's ability to reach the emission reduction limits/standards set forth by the State of California by Executive Order S-3-05 and AB 32. For these reasons, this project would not make a cumulatively considerable contribution to global climate change associated with greenhouse gas emissions.

4.17.2.1 Conclusion

Because it was not an issue analyzed in EIRs prepared in 1998, the subject of global climate change was not expressly discussed in the certified 1998 MBS FEIR. However, considering the reduced size of the project, the energy conservation and on-site renewable energy generation measures, and the sustainable design elements, included in the proposed development, the revised project would not result in significant unavoidable impacts or substantial new cumulative impacts associated with greenhouse gas emissions and global climate change when compared to the previously approved project. **(New Less than Significant Impact)**

Checklist Sources

1. Professional judgment and expertise of the environmental specialist preparing this assessment, based upon a review of the site and surrounding conditions, as well as a review of the project plans.
2. City of Sand City. Final Environmental Impact Report Monterey Bay Shores Resort. October 1998.
3. California Department of Conservation. Monterey County Important Farmland 2006. Map.
4. City of Sand City. General Plan 2002-2017.
5. Monterey Bay Unified Air Pollution Control District. CEQA Air Quality Guidelines. June 2004.
6. Monterey Bay Unified Air Pollution Control District. 2004 Air Quality Management Plan for the Monterey Bay Region. September 2004.
7. Zander Associates. Biotic Assessment. August 11, 2008.
8. Haro, Kasunich, and Associates, Inc. Memorandum Review of Coastal Dune Crest Recession Line Relative to the Updated Coastal Bluff Estimated Setback Criteria Adopted by the City of Sand City. June 19, 2008.
9. Coffman Associates. Monterey Peninsula Airport 14 CFR Part 150 Noise Exposure Map Update. 2007. <http://www.coffmanassociates.com/public/Monterey/> Accessed: July 7, 2008.
10. County of Monterey. 21st Century Monterey County General Plan Public Review Draft. Map HS-8A. January 2004. http://www.co.monterey.ca.us/gpu/Reports/0104/maps/chapter6_hs8a.pdf Accessed: July 7, 2008.
11. Fehr & Peers Transportation Consultants. Focused Transportation Impact Analysis for the Proposed Monterey Bay Shores Resort Project in Sand City, California. August 1, 2008.

SECTION 5 REFERENCES

Association of Monterey Bay Area Governments. 1997 Regional Population and Employment Forecast for Monterey, San Benito, and Santa Cruz Counties Final Report. November 1997.

Association of Monterey Bay Area Governments. Monterey Bay Area 2008 Regional Forecast: Population, Housing Unit and Employment Projections for Monterey, San Benito, and Santa Cruz Counties to the Year 2035. June 11, 2008. <http://www.ambag.org/publications/reports/Transportation/2008Forecast.pdf> Accessed: July 7, 2008.

California Department of Conservation. Monterey County Important Farmland 2006. Map.

California Integrated Waste Management Board. Active Landfill Profile for Marina Landfill. Available at: <http://www.ciwmb.ca.gov/Profiles/Facility/Landfill/LFProfile1.asp?COID=27&FACID=27-AA-0010> Accessed: July 7, 2008.

California Integrated Waste Management Board. Jurisdiction Profile for City of Sand City. <http://www.ciwmb.ca.gov/Profiles/Juris/JurProfile2.asp?RG=C&JURID=459&JUR=Sand+City>. Accessed: July 7, 2008.

California Integrated Waste Management Board. Operation Plan – Sand City Dump Reconfiguration Project. February 1996.

City of Sand City. Final Environmental Impact Report Monterey Bay Shores Resort. October 1998.

City of Sand City. General Plan 2002-2017.

Coffman Associates. Monterey Peninsula Airport 14 CFR Part 150 Noise Exposure Map Update. 2007. <http://www.coffmanassociates.com/public/Monterey/> Accessed: July 7, 2008.

County of Monterey. 21st Century Monterey County General Plan Public Review Draft. Map HS-8A. January 2004. http://www.co.monterey.ca.us/gpu/Reports/0104/maps/chapter6_hs8a.pdf Accessed: July 7, 2008.

Education Data Partnership. Fiscal, Demographic, and Performance Data on California's K-12 Schools. Revised June 30, 2008. <http://www.ed-data.k12.ca.us/Navigation/fsTwoPanel.asp?bottom=%2Fprofile%2Easp%3Flevel%3D06%26reportNumber%3D16> Accessed: July 7, 2008

Federal Emergency Management Agency. Flood Insurance Rate Map Community Panel No. 0604350001A. June 3, 1986.

Fehr & Peers Transportation Consultants. Focused Transportation Impact Analysis for the Proposed Monterey Bay Shores Resort Project in Sand City, California. August 1, 2008.

Former Fort Ord Environmental Cleanup. Cleanup Programs. <http://www.fortordcleanup.com/cleanupprgm/oepprogram.asp> Accessed: April 17, 2008.

Haro, Kasunich, and Associates, Inc. Memorandum Review of Coastal Dune Crest Recession Line Relative to the Updated Coastal Bluff Estimated Setback Criteria Adopted by the City of Sand City. June 19, 2008.

Illingworth & Rodkin, Inc. Sand City Resort Hotel Project Environmental Noise Assessment. May 30, 2007.

Monterey Bay Unified Air Pollution Control District. 2004 Air Quality Management Plan for the Monterey Bay Region. September 2004.

Monterey Bay Unified Air Pollution Control District. CEQA Air Quality Guidelines. June 2004.

Monterey Bay Unified Air Pollution Control District. 2007 Federal Maintenance Plan for Maintaining the National Ozone Standard in the Monterey Bay Region. May 9, 2007.

Monterey Peninsula Unified School District. Administration – District Information. Revised June 2, 2008. <http://www.mpusd.k12.ca.us/admin1.html#CLASS%20SIZE> Accessed: July 7, 2008.

URS Corporation. Monterey Bay Shores EIR Addendum, Sand City, CA. July 29, 2008.

Wildlife Science International, Inc. Review of Mitigation Measures for Potential Impacts to the Western Snowy Plover; Proposed Monterey Bay Shores Ecoresort, Sand City, California. July 29, 2008.

Zander Associates. Biotic Assessment. August 11, 2008.

SECTION 6

LEAD AGENCY AND CONSULTANTS

Lead Agency:

City of Sand City

Community Development Department
Steve Matarazzo, Director

Consultants:

David J. Powers and Associates, Inc.

Environmental Consultants and Planners
Judy Shanley, Principal
John Schwarz, Senior Project Manager
Will Burns, Project Manager
Stephanie Francis, Graphic Artist

Fehr & Peers Associates, Inc.

Transportation Consultants
Franziska Holtzman, Traffic Engineer

Haro Kasunich & Associates, Inc.

Civil Engineers
John Kasunich, Principal Geotechnical Engineer
Mark Foxx, Engineer

URS Corporation

Biological Resource Consultants
David A. Kisner, Project Biologist
John P. Larson, Project Environmental Planner

Wildlife Science International, Inc.

Biological Resource Consultants
Rob Roy Ramey II, Ph.D., President

Zander Associates

Biological Resources Consultants
Leslie Zander, Principal