Draft Environmental Impact Report

# THE COLLECTION AT MONTEREY BAY

SCH# 2006041070

Volume I of III: EIR Text



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### PREFACE

This document has been prepared by the City of Sand City as the Lead Agency in conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The purpose of this Environmental Impact Report (EIR) is to inform decision makers and the general public of the environmental effects of the proposed project.

This document provides project-level environmental review appropriate for the Collection at Monterey Bay, in accordance with CEQA Guidelines Sections 15121, 15146 and 15151.

In accordance with CEQA, an EIR provides objective information regarding the environmental consequences of the proposed project, both to the decision makers who will be considering and reviewing the proposed project, and to the general public.

The following guidelines are included in CEQA to clarify the role of an EIR:

**§15121(a). Informational Document.** An EIR is an informational document, which will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR, along with other information which may be presented to the agency.

**§15146. Degree of Specificity.** The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

(a) An EIR on a construction project will necessarily be more detailed in the specific effects of a project than will an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.

**§15151. Standards for Adequacy of an EIR.** An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently considers environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

Copies of all documents referred to in this EIR are available for public review at the Planning Department, located at One Sylvan Park, Sand City, California on weekdays during normal business hours.

#### **Summary Description of the Proposed Project**

The 26.46-acre project site is located within the City of Sand City, fronting the Monterey Bay, along the west side of State Route 1 (hereinafter SR 1 or Highway 1), north of Tioga Avenue and intersected by Playa Avenue. The project site consists of three properties: the Sterling/Calabrese property, the McDonald property, and the City's property formerly owned by Granite Construction (Assessor Parcel Numbers 011-012-001, -002, -005, and 011-501-016).

King Ventures (the applicant) proposes to develop a 342-room coastal resort on the 26.46-acre site located west of SR 1 in Sand City. For the purposes of this EIR analysis, the applicant has indicated the resort could be constructed in one (1) single phase, or up to two (2) distinct phases, as summarized further below. The reason for this includes the uncertainty over future visitor market demands in the area and the availability of financing at the time the project is prepared to proceed. This EIR analyzes the proposed project on the basis of two (2) separate phases to identify any incremental impacts from the phasing. Conversely, if the project ultimately is built in a single phase, the mitigation measures would be required in their entirety to reduce the significant environmental impacts identified in this EIR.

The first phase of the project would be built on a 7.90-acre parcel, known as the Sterling/Calabrese property, located on the north side of Tioga Avenue. This property would be developed with a 139-room hotel. The proposed hotel rooms would be grouped into approximately four clusters of three-to four-story buildings separated by surface parking lots and drive aisles. Phase II of the project would involve the construction of a coastal resort on the 16.25-acre McDonald property consisting of 203 visitor rooms, a restaurant with banquet facilities, a Tapas Bar restaurant, a bakery, a wine center, a deli juice bar, conference and meeting facilities, a health/wellness spa center, parking, and other ancillary and related improvements. Phase II would also include the public parking improvements on the 2.31-acre City property (formerly Granite Construction). The development on this portion of the site would vary from building clusters similar to those proposed on the Sterling property, to more densely clustered development towards the northern portion of the site, beginning near the Playa Avenue access to the site. The buildings on this portion of the site would be two- to five-stories in height.

#### **Summary of Impacts and Mitigation Measures**

The following information summarizes the significant effects of the proposed project and mitigation measures proposed to reduce these effects. A complete description of the project and of its impacts and proposed mitigation measures can be found in the text of the EIR, which follows this summary.

SIGNIFICANT ENVIRONMENTAL IMPACTS	MITIGATION AND AVOIDANCE MEASURES
Visual and Aes	thetic Resources
<b>Impact VA-1:</b> The proposed project would block portions of the designated view corridors on the site identified in the City's Local Coastal Program, which would be a significant visual	The following measures are proposed by the applicant to reduce the visual impacts of the project:
impact.	<b>MM VA-1.1:</b> The project includes a bike path along the ocean side of the project site to allow

SIGNIFICANT ENVIRONMENTAL	MITIGATION AND AVOIDANCE
IMPACTS	MEASURES
	public access to views of the Monterey Peninsula
	and Monterey Bay.
	<b>MM VA-1.2:</b> The project also proposes
	extending View Corridor A in the City's LCP
	100 feet further south to shift the center of the view corridor.
	<b>MM VA-1.3:</b> The project proposes to improve
	the existing vista point on the site and improve
	the vista point at the western terminus of Tioga
	Avenue.
	MM VA-1.4: The project will reduce building
	heights on the site within View Corridor B to
	comply with the City's LCP. The Hotel 1
	building's roof will be reduced in height by at
	least four feet and the Hotel 1 architectural roof
	elements (refer to Figure 13) will be reduced in
	height by at least 2.5 feet and shall not exceed
	78.5 feel NGVD. The Lobby and Conference
	eight feet and the entry towers and roofline shall
	not exceed 74.5 feet NGVD. The Lobby and
	Conference center portico shall also be reduced
	by at least one foot.
	(Less Than Significant Impact with
	Mitigation)
Tran	sportation
Impact TRANS-1: Phase I and Project	The following mitigation measures will reduce
Buildout would result in significant LOS	the traffic impacts of the project to a less than
impacts at the Fremont Boulevard/	significant level.

State Route 1/Monterey Road/Ord Avenue MM TRANS-1.1: The proposed project will be required to pay the TAMC Regional Development Impact Fee as a fair share contribution to regional transportation improvements to mitigate the project's impact at the Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue intersection to a less than significant level. (Less Than Significant Impact with **Mitigation**)

The following mitigation measure will reduce the

**Impact TRANS-2:** The proposed project

<sup>1</sup> National Geodetic Vertical Datum.

during both peak hours.

would result in significant impacts to Northbound SR 1 from SR 218 to Fremont Boulevard during the PM peak hour.

**Impact TRANS-3:** The proposed project would result in significant impacts to Southbound SR 1 from SR 218 to Fremont Boulevard during the AM peak hour.

**Impact TRANS-4:** The proposed project would result in significant impacts to Northbound SR 1 from SR 218 to Del Monte Boulevard during the PM peak hour.

**Impact TRANS-5:** The proposed project would result in significant impacts to Southbound SR 1 from SR 218 to Del Monte Boulevard during the AM peak hour.

#### MITIGATION AND AVOIDANCE MEASURES

traffic impacts of the project to a less than significant level.

**MM TRANS-2.1 & TRANS-3.1:** The proposed project will be required to pay the TAMC Regional Development Impact Fee as a fair share contribution to regional transportation improvements to mitigate the project's impact to this freeway segment to a less than significant level.

# (Less Than Significant Impact with Mitigation)

The following mitigation measure will reduce the traffic impacts of the project to a less than significant level.

**MM TRANS-4.1 & TRANS-5.1:** The proposed project will be required to pay the TAMC Regional Development Impact Fee as a fair share contribution to regional transportation improvements to mitigate the project's impact to this freeway segment to a less than significant level.

# (Less Than Significant Impact with Mitigation)

Hydrology an	d Water Quality
<b>Impact HYD-1:</b> The proposed project will be subject to wave run-up and coastal flooding over the lifetime of the development.	The following mitigation and avoidance measures will reduce the hydrology and water quality impacts of the project to a less than significant level:
	<b>MM HYD-1.1:</b> Wave run-up and coastal flooding hazards can be mitigated by the structural design of the proposed buildings, elements and facilities. Breakaway walls, flow through design, appropriate foundation types, floodproofing measures, and necessary structural force field selection should be considered prior to final project design, in accordance with FEMA guidelines. A final, design-level geotechnical investigation for the project shall be completed for the applicant by a qualified geotechnical consultant and shall be reviewed and approved by the City Engineer. (Less Than Significant Impact with Mitigation)

SIGNIFICANT ENVIRONMENTAL IMPACTS	MITIGATION AND AVOIDANCE MEASURES
Geology	and Soils
<b>Impact GEO-2:</b> Coastal erosion and recession will significantly impact elements of the project located seaward of the 50-year coastal erosion setback line.	The following mitigation and avoidance measures will be required by the City of Sand City to reduce the geology, seismicity, and soils impacts of the project to a less than significant level:
	<b>MM GEO-2.1:</b> Proposed structures situated within 20 feet landward of the 50-year erosion line shall be supported by pier and grade beam foundation systems. If a portion of any structure is to be placed on drilled or driven piers due to proximity to the 50-year erosion line, the entire structure should be supported by piers to minimize the potential for differential settlement within the building envelope (refer to Figure 18).
	<b>MM GEO-2.2:</b> Structures with perimeters situated more than 20 feet landward of the 50- year erosion line may be supported by either a pier and grade beam systems or shallow conventional spread footings bearing upon engineered fill soil matts. (A typical engineered fill soil mat consists of 24 to 36 inches of engineered fill compacted to at least 90 percent relative compaction.)
	<b>MM GEO-2.3:</b> Foundations for the buildings proposed on-site shall be designed so they are embedded into the soils below a depth where lateral support is needed during the 50-year design life of the project.
	<b>MM GEO-2.4:</b> Coastal protection structures could be constructed during the design life of the project to protect non-sacrificial project elements and facilities.
	The following measure, not included in the project, could be required by the City Council and would reduce the significant project coastal erosion and recession impacts to a less than significant level:
	<b>MM GEO-2.5:</b> The project should be partially redesigned so that structures, elements, and amenities of the development (i.e. pool, spa, etc.)

#### MITIGATION AND AVOIDANCE **MEASURES**

are all located landward of the 50-year setback line.

Portions of the project are proposed within the 50-year coastal erosion setback line and no mitigation is proposed to reduce the impacts of coastal erosion on the project to a less than significant level. The project's inconsistency with the City's required coastal erosion setback requirements would result in a significant and unmitigated impact. (Significant Impact without Mitigation)

A Design Alternative that includes removal of project structures, elements, and amenities from the 50-year coastal erosion and recession setback line is analyzed in Section 8 Alternatives of this EIR.

Impact GEO-3: Wind erosion and sand The following mitigation and avoidance deposition would likely result in project measures will be required by the City of Sand amenities being unusable over the life of the City to reduce the geology, seismicity, and soils impacts of the project to a less than significant level:

> **MM GEO-3.1:** Organic materials such as straw matts, twigs, branches and other organic debris shall be used prior to the establishment of planted dune vegetation to reduce wind erosion and sand deposition.

**MM GEO-3.2:** Sand fences shall be used to capture sand deposits caused by wind erosion. The fences should be placed to protect structures and other amenities from wind-blown sand. As the sand deposits grow, additional fences shall be used and the sand deposit shall be planted with vegetation to reduce further erosion. (Less Than Significant Impact with **Mitigation**)

#### **Biological Resources**

<b>Impact BIO-1:</b> The project would result in the	<b>MM BIO-1.1:</b> The project shall implement the
loss of several Monterey spineflower plants.	following measures proposed as part of the
Although the removal of these plants would not	Habitat Protection Plan for the site:

project.

affect the survival of the species, the loss of the individual plants of this threatened species is a significant impact.

**Impact BIO-2:** The project could result in the removal of habitat for western snowy plover and, therefore, would have a significant impact on the species.

#### MITIGATION AND AVOIDANCE MEASURES

- Revegetation and enhancement of coastal dune scrub habitat.
- Collection and propagation of seed from Monterey spineflower plants in the development area.
- Salvage of Monterey spineflower soil seedbank from the project site.
- Re-establishment of approximately 185 square feet of Monterey spineflower within the proposed foredunes on the site; a 5:1 mitigation ratio for the 37 square feet that will be lost within the building envelope.
- Pre-construction surveys for Monterey spineflower will be completed to confirm the area of impact and the required size of the mitigation area prior to the issuance of grading permits on the site.

**MM BIO-1.2:** The project shall meet the monitoring and reporting requirements, and implement the adaptive management strategy identified in the Habitat Protection Plan prepared for the site.

# (Less Than Significant Impact with Mitigation)

**MM BIO-2.1:** The project shall implement the following pre-construction measures proposed as part of the Habitat Protection Plan for the site:

- Pre-construction surveys for active breeding/nesting on the project site to avoid disturbance of individual western snowy plovers.
- Establishment of an on-site biological monitor to monitor western snowy plover activity during construction activities and to direct construction activities appropriately through consultation with the construction superintendent.
- Lighting restrictions for project facilities within and adjacent to western snowy plover habitat.

**MM BIO-2.2:** The project shall implement the following post-construction measures proposed as part of the Habitat Protection Plan for the site:

### SIGNIFICANT ENVIRONMENTAL **IMPACTS** Designation of a biological steward •

MITIGATION AND AVOIDANCE **MEASURES** 

specifically to conduct ongoing monitoring of western snowy plover activity during the breeding season (March through September) to identify presence/absence and locations of western snowy plover nests. Public access to beach areas will be regulated based on this monitoring.

Restrict beach access during breeding/nesting season, as determined necessary by the biological steward. Access would be restricted through the installation of fencing and signs as well as patrol by the biological steward.

- Prohibit off-leash dogs and campfires on • beaches to minimize disturbance of western snowy plover nests and populations. Fines and other penalties may be imposed on violators. This prohibition will remain in effect even if monitoring indicates that no plovers are using the coastal strand area.
- Prohibit use of motorized equipment to rake beaches or to remove trash or other debris from the beach. All maintenance activities in the coastal strand area should be completed by manual means.
- Develop education program to inform the public about the sensitivity of western snowy plover.
- Provide interpretive signs to describe the life history and sensitivity of western snowy plovers to the public.

**MM BIO-2.3**: The project shall meet the monitoring and reporting requirements, and implement the adaptive management strategy identified in the Habitat Protection Plan prepared for the site.

#### (Less Than Significant Impact with **Mitigation**)

The project proposes to implement the mitigation measures below to reduce the impacts of the project on Smith's blue butterflies to a less than significant level.

MM BIO-3.1: The buckwheat host plant for Smith's blue butterfly shall be included in the

Impact BIO-3: The removal of seacliff and coast buckwheat plants as a result of the project would result in significant impacts to Smith's blue butterflies and their dispersal.

Impact BIO-5: The project will remove

could result in the loss of individual black

legless lizards.

potential habitat for the black legless lizard and

#### MITIGATION AND AVOIDANCE MEASURES

plant palette for the dune areas to be reconstructed as part of the project. The planted dunes will re-establish habitat and create a movement corridor for this species on the west side of SR 1. To minimize direct impacts to the butterfly, removal of the buckwheat host plants shall occur between October and May, which is outside the species' typical flight season of June to September.

**MM BIO-3.2:** Due to the removal of buckwheat plants from the site, a Section 10(a)(1)(B) permit from the U.S. Fish and Wildlife Service will be required for the project. The permit will require replacement of approximately 0.21 acres of buckwheat plants that will be lost due to construction grading. Approval from the U.S. Fish and Wildlife Service shall be obtained prior to project construction.

# (Less Than Significant Impact with Mitigation)

The project proposes to implement the mitigation measures below to reduce the impacts of the project on black legless lizards to a less than significant level.

MM BIO-5.1: Per CDFG recommendations, impacts to black legless lizards shall be minimized through a search and relocation effort for the species within the disturbance envelope prior to construction. The search and relocation effort shall be completed as a three-pass salvage effort immediately preceding the start of construction by a qualified biologist who holds a Scientific Collecting Permit issued by CDFG. The effort shall be completed in accordance with a black legless lizard Search and Relocation Plan specific to the project that is submitted to and approved by CDFG. Pursuant to CDFG guidelines, the plan will, at a minimum: 1) specify a relocation area for the lizards that will be preserved and has habitat characteristics suitable to support the species; 2) describe the protocol for conducting the three-pass search of the project area; 3) describe the protocol for recording essential data on each captured lizard, including information such as body length, color,

SIGNIFICANT ENVIRONMENTAL IMPACTS	MITIGATION AND AVOIDANCE MEASURES
	sand temperature, capture location coordinates and release site coordinates; and 4) identify proper handling and search procedures. (Less Than Significant Impact with Mitigation)
Air	Quality
Impact AQ-3: Construction activities, such as, clearing, excavation, and grading operations, construction vehicle traffic, and wind blowing over exposed earth would generate fugitive particulate matter emissions that would temporarily affect local air quality.	<ul> <li>The following mitigation and avoidance measures will be required by the City of Sand City to reduce the air quality impacts of the project to a less than significant level:</li> <li>MM AQ-3.1: Construction contractors shall implement a dust abatement program. The following construction practices shall be included in the dust abatement program and reflected as notes on the project plans prior to issuance of grading or building permits:</li> <li>Water shall be used to control dust generation during loading materials onto trucks.</li> <li>All trucks hauling demolition debris from the site shall be covered.</li> <li>All exposed soil surfaces shall be watered at least three times daily. Frequency should be based on the type of operation, soil, and wind exposure.</li> <li>All trucks hauling dirt, sand or loose materials, shall be covered or maintain at least two (2) feet of freeboard.</li> <li>Inactive storage piles shall be covered.</li> <li>A publicly visible sign shall be posted 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</li> </ul>
	<ul> <li>Pollution Control District shall be visible to ensure compliance with Rule 402 (Nuisance)</li> <li>The above mitigations are calculated by the URBEMIS 2007 program to reduce maximum PM<sub>10</sub> construction emissions to 108.5 pounds per</li> </ul>

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	day, still above the MBUAPCD significance
	criterion of 82 pounds per day.
	<b>MM AO-3.2:</b> In order to ensure construction
	emissions are reduced below MBUAPCD's
	significance criterion, construction contracts and
	conditions of approval on building permits and
	grading permits shall specify that grading
	operations be restricted such that the area
	five acres which would reduce dust emissions
	below 82 pounds per day.
	With implementation of this measure in
	conjunction with MM AQ-3.1, the construction
	dust impacts of the project will be reduced to a
	(Less Than Significant Impact with
	Mitigation)
Noise	
Impact NOI-2: Interior noise levels would	The following mitigation measures shall be
exceed the City's adopted General Plan and	included in the project to reduce the noise
California Building Code standards for hotel	impacts of the project to a less-than-significant
units using standard construction methods.	level.
	MM NOI-2.1: Design-level acoustical analyses
	are required by the state building code to confirm
	that interior noise levels would be reduced to 45
	dBA DNL or lower. 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.
	MM NOI-2.2: Building sound insulation
	requirements will need to include the provision
	of forced-air mechanical ventilation for units
	proposed in noise environments exceeding 60
	aba DNL, so that windows could be kept closed at the occupant's discretion to control poise
	at the occupant's discretion to control hoise.
	MM NOI-2.3: Special building techniques (e.g.,
	sound-rated windows and building façade

SIGNIFICANT ENVIRONMENTAL IMPACTS	MITIGATION AND AVOIDANCE MEASURES
	treatments) may be required to maintain interior noise levels. Depending upon the final building plans, units nearest SR 1 may require sound rated windows and doors (STC 30-33) to assure that the 45 dBA DNL indoor standard is met. (Less Than Significant Impact with Mitigation)
Utilities and Service Systems	
<b>Impact UTIL-2:</b> The proposed project would not result in the need for additional wastewater treatment facilities; however, the proposed public restrooms on Tioga Avenue would conflict with water supply facilities.	The following mitigation and avoidance measure will be required by the City of Sand City to reduce the utilities and service system impacts of the project to a less than significant level: <b>MM UTIL-2.1:</b> As a condition of project approval, the proposed restrooms on Tioga Avenue shall be located on the north side of Tioga Avenue near the proposed lifeguard station. The location of these restroom facilities will reduce the impact to existing water supply facilities to a less than significant level. (Less Than Significant Impact with Mitigation)
Greenhouse Gas Emissions	
<b>Impact GHG-1</b> : The project would result in a	The following project specific mitigation

**Impact GHG-1:** The project would result in a net increase in carbon dioxide emissions annually. The project proposes a TDM program to reduce the number of vehicle trips and associated greenhouse gas emissions resulting from the project. Based on the estimated emissions from construction and operation of the proposed development, the project would result in substantial new greenhouse gas emissions and contribute to cumulative global climate change impacts. The following project specific mitigation measures will be required by the City to lessen identified significant global climate change impacts:

**MM GHG-1.1:** The City will require, as conditions of project approval, the implementation of the majority of the following measures to reduce energy use and greenhouse gas emissions:

- Incorporation of passive solar design principles
- LEED certification
- Installation of efficient lighting and lighting control systems
- Installation of energy efficient heating and cooling systems, appliances and equipment, and control systems
- Use of solar heating, automatic covers, and

#### SIGNIFICANT ENVIRONMENTAL MITIGATION AND AVOIDANCE **IMPACTS MEASURES** efficient pumps and motors for pools and spas Installation of solar, wind, and geothermal • power systems and solar hot water heaters Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls Implementation of a waste management plan requiring recycling of construction and land clearing materials MM GHG-1.2: The applicant shall prepare and implement a Greenhouse Gas Emissions Reduction Plan (GHG Plan) to offset the projectrelated incremental increase of greenhouse gas emissions exceeding 1,100 metric tons of carbon dioxide equivalents per year. Refinement of the project's estimated GHG emissions would be completed as part of the GHG Reduction Plan in order to reflect the most current and accurate data available regarding the project's estimated emissions (including emission rates). Offsets may include, but are not limited to, the following (in order of preference): 1. Incorporation of on-site measures to offset project emissions, for example through development of a renewable energy generation facility or additional energy efficiency measures. 2. Implementation of projects that would result in real, permanent, verifiable, enforceable, and additional reduction in greenhouse gas emissions. 3. Purchase of carbon credits. Carbon offset credits must be verified and registered with the Climate Registry, the Climate Action Reserve, or other source that is approved by the California Air Resources Board as being consistent with the policies and guidelines of the California Global Warming Solution Act of 2006 (AB 32). Based on current California offset credit costs (October 2012), approximately \$57,650 annually would be required for full-funding of this mitigation measure. Either a dedicated developerfunded annuity will be required or a percentage of revenue proposed by the development will need to be dedicated to pay

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	for this mitigation measure on an annual basis.
	<ul><li>AM GHG-1.1: A TDM program is proposed to reduce the number of vehicle trips and resulting GHG emissions from the project.</li><li>(Less Than Significant Impact with Mitigation)</li></ul>
<b>Impact GHG-3:</b> The proposed project would experience flooding due to expected sea level rise by the year 2100.	MM GHG-3.1: The applicant will develop an adaptive management plan to remove and/or relocate portions of the project that may be impacted by sea level rise. The project will be monitored until the year 2100 (over a 90 year period) to determine if sea level rise would impact the project in the final 40 years of that term. (Less Than Significant Impact with Mitigation)
Cumulative Impacts	
<b>Impact CUMUL-1:</b> The proposed project would result in a cumulatively considerable contribution to scenic resource impacts from resort development along the Sand City coast.	The following measure, proposed by the project, would reduce the project's contribution to significant cumulative visual and aesthetic resource impacts to a less than significant level: <b>MM CUMUL-1.1:</b> The project will reduce building heights on the site within View Corridor B to comply with the City's LCP. The Hotel 1 building's roof will be reduced in height by at least four feet and the Hotel 1 architectural roof elements (refer to Figure 13) will be reduced in height by at least 2.5 feet and shall not exceed 78.5 feet NGVD. The Lobby and Conference
	center entry towers will be reduced by at least eight feet and the entry towers and roofline shall not exceed 74.5 feet NGVD. The Lobby and Conference center portico shall also be reduced by at least one foot. (Less Than Significant Cumulative Impact with Mitigation)
<b>Impact CUMUL-2:</b> The proposed project will contribute to cumulative impacts at four	Fremont Boulevard
intersections.	As noted in Section 3.4.3.1, Caltrans approved the Highway 1 (SR 1) Project Study Report (PSR) in 2002, which identified improvements

#### MITIGATION AND AVOIDANCE MEASURES

for the intersection at the Fremont Boulevard/ State Route 1/Monterey Road/Ord Avenue intersection. Currently, this project is not fully funded, though the project is included in the Regional Development Impact Fee adopted by TAMC in August 2008. The PSR improvements would mitigate intersections impacts at the Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue intersection to a less-thansignificant-level.

**MM CUMUL-2.1:** The proposed project will be required to pay the Regional Development Impact Fee as a fair share contribution to regional transportation improvements which will mitigate the project's contribution to these cumulative intersection LOS impacts to a less than significant level.

#### California Avenue/Playa Avenue

The intersection of California Avenue/Playa Avenue would operate unacceptably under cumulative project conditions and would meet the minimum volume threshold for the peak-hour signal warrant during the PM peak hour under Phase II of the project. With implementation of Phase I of the project the intersection would operate at an acceptable LOS under cumulative conditions. Mitigation of the project impacts to less-than-significant levels requires the signalization of this four-way stop intersection.

**MM CUMUL-2.2:** The proposed project shall signalize the intersection of California Avenue and Playa Avenue.

#### California Avenue/Tioga Avenue

The intersection of California Avenue/Tioga Avenue operates unacceptably under cumulative project conditions and would meet the peak-hour volume signal warrant during the PM peak hour. Signalization of this intersection would mitigate the impact to a less-than-significant level and cause the intersection to operate at LOS A. Alternatively, the addition of an exclusive rightturn lane on the westbound approach (for a total

#### MITIGATION AND AVOIDANCE MEASURES

of one left-turn lane, one through-lane and one right-turn lane) would mitigate operations to an acceptable LOS B.

**MM CUMUL-2.3:** The proposed project shall implement improvements to the California Avenue and Tioga Avenue intersection to improve the level of service to acceptable levels.

#### SR 218/SR 1 Northbound Ramp

Signalization of the northbound ramp intersection of State Route 218/State Route 1 and adding an eastbound left-turn lane is required to mitigate the project's impact. Under cumulative project conditions, the northbound ramp is projected to operate at LOS B with this mitigation. Therefore, the signalization of the northbound ramp intersection would mitigate the impacts to less-than-significant levels.

**MM CUMUL-2.4:** The proposed project will signalize the SR 218/SR 1 northbound ramp intersection.

(Less Than Significant Cumulative Impact with Mitigation)

**MM CUMUL-3.1:** The proposed project will be required to pay the Regional Development Impact Fee as a fair share contribution to the State Route 1 PSR improvements which will mitigate the project's contribution to the cumulative impact to SR 1 from SR 218 to the Fort Ord Main Entrance to a less than significant level.

# (Less Than Significant Cumulative Impact with Mitigation)

MM CUMUL-3.2: Although no improvements are currently identified for the two segments of SR 1 from SR 218 to Del Monte Boulevard, freeway impacts can be mitigated with contribution to the Regional Development Impact Fee adopted by TAMC. (Less Than Significant Cumulative Impact with Mitigation)

**Impact CUMUL-3:** The proposed project will contribute to cumulative impacts on five roadway segments.

**Impact CUMUL-10:** The proposed project may result in impacts to buried archaeological resources during construction of a traffic signal to mitigate cumulative traffic impacts.

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The following measure, proposed by the project, would reduce the project's contribution to significant cumulative cultural resources impacts to a less than significant level:

**MM CUMUL-10.1:** In the event of the discovery of prehistoric or historic archaeological deposits, work shall be halted within 50 feet of the discovery and a qualified professional archaeologist shall examine the find and make appropriate recommendations regarding the significance of the find and the appropriate mitigation. The recommendation shall be implemented and could include collection, recordation, and analysis of any significant cultural materials.

**MM CUMUL-10.2:** In the event that human remains and/or cultural materials are found, all project-related construction shall cease within a 50-foot radius of the find in order to proceed with the testing and mitigation measures required. Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California:

- In the event of the discovery of human • remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Monterey County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials in a nearby location not subject to further subsurface disturbance.
- A final report summarizing the discovery of cultural materials shall be submitted to the

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	<ul> <li>Director of Community Development prior to issuance of occupancy permits for the project. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found, a summary of the resources analysis methodology and conclusion, and a description of the disposition/curation of the resources. The report shall verify completion of the mitigation program to the satisfaction of the Director of Community Development.</li> <li>(Less Than Significant Cumulative Impact with Mitigation)</li> </ul>

#### **Summary of Alternatives**

CEQA requires that an EIR identify alternatives to a project as it is proposed. The CEQA Guidelines specify that the EIR should identify alternatives which "will feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project". The purpose of this section is to determine whether there are alternatives of design, scope or location which will substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of the project objectives", or are more expensive. [§15126.6] Please refer to *Section 8 Alternatives* of this EIR for a complete discussion of these alternatives.

#### No Project Alternative

The CEQA Guidelines specifically require consideration of a No Project Alternative. The No Project Alternative should address both "the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services."

The project site is mostly undeveloped except for an outdoor construction/contractor storage area on the Sterling/Calabrese site and a paved coastal bike trail. Under the No Project Alternative, the project site would remain undeveloped in the near-term. This alternative would avoid all of the proposed project's significant impacts. However, it would also result in the continuation of a negative visual condition along State Route 1 due to the operation of the outdoor construction/ contractor storage area on the site. It should be noted, however, that the project site is designated in the City's General Plan and Local Coastal Program for visitor-serving commercial uses. Therefore, it is possible that other future development proposals for this site, consistent with this designation, might come forward in the future. Development of a project on the site consistent with the visitor-serving commercial use designation would likely result in and be subject to similar impacts as the proposed project.

The No Project Alternative would not meet any of the City's or applicant's objectives for the site. Overall, the No Project Alternative (assuming the existing uses continue operating on the site) would be environmentally superior to the project because it would avoid all of the project's environmental impacts.

#### **Design Alternative**

The goal of a Design Alternative would be to modify the design of the proposed resin order to reduce or avoid the project impacts. The applicant for the project has developed a site plan that could accommodate 340 visitor units when designed to reduce or avoid some of the significant impacts of the proposed project. The Design Alternative would include 16,800 square feet of conference center space, 12,000 square feet of restaurant space, and 5,000 square feet of spa facilities. One of the project's significant impacts is blockage of a designated view corridor of the Monterey Bay from southbound SR 1, due to the height of the proposed buildings. The Design Alternative could accommodate a similar number of units (340 total units) while maintaining views through the project site.

The Design Alternative would also eliminate project buildings and recreational amenities encroaching into the coastal erosion setback line. The Design Alternative would construct buildings with similar uses as the proposed project in the same general area but landward of the coastal erosion setback line. The proposed public access trail on the west side of the site, public access parking on City-owned property, vistas, Tioga Avenue restroom facilities and utility lines would continue to be located seaward of the setback line with the Design Alternative. The Design Alternative includes a 10-foot pathway located beneath the balconies of units adjacent to the coastal recession setback line that would continue to provide public access on the seaward side of the development through 2062. With the exception of the public access trail, these public amenities would require an adaptive management plan for relocation due to expected coastal erosion and sea level rise. The Design Alternative does not include a pool and spa or amphitheater seaward of the coastal erosion setback line. With the Design Alternative, it could also be feasible to amend the grading plan for the Sterling property to reduce the elevation across the seaward side of the property to 18 feet. This potential grading modification would create a uniform, straight setback line in this area and allow for construction of a pool at 18 feet in elevation instead of 30 feet in elevation as currently shown on Figure 21.

The Design Alternative would reduce the visual and aesthetic resource impacts of the project to a less than significant level since all buildings on the site would be outside the designated view corridors identified in the City's LCP (refer to Figure 22). The Design Alternative proposes a similar number of units as the project and, therefore, would result in the same intersection and roadway segment LOS impacts. The Design Alternative proposes to remove all resort buildings out of the coastal recession setback area of the site. The Design Alternative maintains the roadway alignment of the proposed project and, therefore, would have the same impacts to Smith's blue butterfly as the proposed project. All other biological impacts of the project would remain the same with construction of the Design Alternative. All other impacts of the project would be similar under this Alternative since they are generally related to the construction of any visitor-serving commercial use on the project site.

The Design Alternative would meet the City's objectives including conforming to the policies of the Local Coastal Program. The Design Alternative does not substantially alter the unit count on the site and would meet the applicant's minimum room requirements for a conference center that accommodates attendees with a minimum of 300 rooms.

The Design Alternative would reduce the visual and aesthetic resource impacts and the coastal erosion impacts of the project to a less than significant level. This alternative would not reduce the transportation impacts of the project and, therefore, the intersection LOS impacts and roadway segment impacts of the project would still require mitigation. The Design Alternative would generally meet the City's objectives for the project and would reduce some of the environmental impacts of the project related to visual and aesthetic resources and geology and soils.

#### **Location Alternative**

The CEQA Guidelines require that an EIR identify an alternative location that "would avoid or substantially lessen any of the significant effects of the project" [§15126.6 (f) (2) (A)]. The overall objective of the project is to develop a resort of at least 300 units with culinary and conference meeting space which respects the environmental constraints of the site and area, and supports the public access and visitor-serving policies of the City. The Monterey Bay Shores site is the only coastal site in the City that would support the redevelopment objectives of the City and be of suitable area to accommodate the project. Alternative locations outside the City of Sand City would not support the City's objectives of providing additional tax revenue for general municipal purposes and, therefore, were not considered further. The proposed project could be developed on the Monterey Bay Shores site, which is approximately 39.04 acres in size and could accommodate the proposed development. This site is located north of the former landfill site and west of SR 1, along the Monterey Bay.

The Monterey Bay Shores Location Alternative would be subject to the same geology and soils conditions as the proposed project site. This site would also be subject to coastal recession and wave run-up; however, because the Location Alternative site is larger, the proposed project design could be located on this site outside of the 50-year coastal erosion setback line. This alternative site would also result in similar impacts to biological resources due to the historical presence of Monterey spineflower and western snowy plover on the Monterey Bay Shores site. The proposed project could also likely be designed to avoid buckwheat plants on this alternative site. The Location Alternative would also have similar visual and aesthetic resource impacts as the proposed project. Given that access to this alternative site would be from the same roadway facilities as for the proposed project site, development of the resort project on this site would likely result in similar intersection and roadway segment LOS impacts as the project. Public amenities such as restroom facilities could be located to avoid interference with existing utilities.

The proposed project could potentially be developed on the Location Alternative site and could be designed to meet the objectives of the City and applicant for the project. The majority of the project's impacts are related to the sensitivity of the coastal environment, and therefore, location of the project on another coastal site is likely to result in similar impacts. The Monterey Bay Shores Resort was approved on the Location Alternative site in 1998 and the property owner is currently seeking necessary permits to develop a modified project on the site. It is, therefore, not known whether the applicant (King Ventures) could acquire or obtain control over this property. Given the City-approved development on the Location Alternative site, it is likely that the project could feasibly be developed on this alternative site; however, the project applicant may not be able to acquire the site given the active development proposal being pursued by the property owner.

#### **Conforming Use Alternative**

The LCP and General Plan designations for the site allow for a variety of visitor-serving commercial uses. Development of the site with an alternate use serving coastal visitors that conforms to the land use designation for the site could include the development of parkland or a visitor-serving commercial use, such as retail shops or a service station.

Development of park and recreational uses on the site would be subject to similar geology and soils impacts as the proposed project; however, proposed amenities could be located outside of the 50-year coastal erosion setback line. Proposed amenities may be subject to coastal flooding but would have a less impact given the lack of habitable structures on the site. Similar impacts to biological resources would occur due to construction of the project; however, additional acreage could be proposed for mitigation given the less intensive use of the site and ability to locate development further inland and reduce grading. The visual and aesthetic impacts of development on the site would be reduced given the lack of large buildings but noise impacts may be greater due to the lack of acoustical shielding provided by those buildings. The traffic impacts of the project would also be reduced with a park use because the site would not draw a similar number of vehicle trips. Construction on the site would result in similar dust impacts due to the need for removal of existing paving and coastal armoring on the site. Greenhouse gas emissions from the project would be less due to the lack of substantial development on the site. A park use would also be subject to sea level rise and coastal flooding over the lifetime of these facilities.

Development of a variety of commercial retail and service uses on the site is assumed to require a similar footprint as the proposed resort use. Buildings of various sizes with a mix of visitor-serving retail business uses could be developed on the site and would require improvements and amenities such as roadways, sidewalks, parking, landscaping etc. Coastal recession and wave run-up impacts would be similar to the proposed project. Impacts related to biological resources, visual and aesthetic resources, and construction dust resulting from any development of buildings on the site would be similar to the proposed project. Traffic impacts would be similar due to the large amount of traffic generation from commercial retail development. Noise impacts would be reduced due to the lack of sensitive populations using the site.

A park and open space use on the site could meet the objectives for a coastal bike trail and public access and may also allow for the restoration and stabilization of sand dunes on the site but would not meet any of the applicant's objectives for a destination resort and conference center. Development of a public park and open space use on the site would likely require the allocation of public funds for restoration of the site and construction of improvements and would provide limited revenue to the City for municipal purposes. Given the currently limited financial resources of the City, this alternative may not be financially feasible. As discussed in *Section 1 Project Description* (refer to page 26), this use is not consistent with the 1996 Memorandum of Understanding between the City of Sand City, the California Department of Parks and Recreation (CDPR), and the Monterey Peninsula Regional Park District (M.P.R.P.D.).

Development of the site with visitor-serving retail and service uses would provide some revenue to the City for municipal purposes but would not provide transient occupancy tax revenues. Commercial retail development on the site would provide limited linkage and coastal access for the public. A commercial retail use of the site would not meet most of the applicant's objectives for providing a resort and conference center with accommodations for conference attendees.

The Conforming Use Alternative involving development of a park/recreation use on the site may reduce the impacts of the project but would not meet most of the objectives of the project. The Conforming Use Alternative involving development of visitor-serving commercial retail uses on the site would likely result in similar impacts as the proposed project. The majority of the project's impacts are related to the sensitivity of the coastal environment, and therefore, construction of any substantial development providing economic benefit to the City in the form of tax revenue would result in similar impacts. The Conforming Use Alternative (commercial retail development) would meet some of the City's objectives for the project but would not substantially reduce the environmental impacts of the project and would not meet the applicant's objectives for a 300 room conference center.

#### **Environmentally Superior Alternative**

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. Based on the above discussions, the environmentally superior alternative is the No Project Alternative, because all of the project's significant environmental impacts would be avoided if no new construction occurred under this Alternative. CEQA Guidelines Section 15126.6(e)(2), however, states that "if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

While the Location Alternative and the Conforming Use Alternative would reduce or avoid some of the project's impacts, these alternatives are not considered to be feasible or meet the project objectives. Therefore, the Design Alternative would be the environmentally superior alternative because it would reduce the significant and unavoidable coastal erosion impacts of the project. The Design Alternative would also reduce the visual and aesthetic LCP view corridor impacts of the project to a less than significant level. This alternative would meet the main objectives of the applicant and the City.

#### 1.1 BACKGROUND AND SITE HISTORY

The project site is located within the municipal boundary of the City of Sand City and includes three properties: the "Sterling/Calabrese" property (approximately 7.90 acres in size); the "McDonald" property (approximately 16.25 acres in size); and the "City" property formerly owned by Granite Construction (approximately 2.31 acres in size). The McDonald property and former Granite Construction property are owned by the City of Sand City and the Sterling property is privately owned. The project site was historically used for sand mining operations and a concrete batch plant that are no longer active. Most of the site is currently undeveloped except for an outdoor construction/contractor storage area on the Sterling/Calabrese property and a coastal bike trail.

Sand City's Monterey Bay shoreline is about one and one-half miles long and consists of mostly undeveloped parcels, five of which (including two on the project site) have been used for sand mining in the past. The shoreline is characterized by sand dunes, beaches, and coastal bluffs over which views of the Monterey Bay can be seen from State Route 1 (SR 1), which is located several hundred feet to the east of the shoreline.

The primary land use control that regulates development in the project area is the City's Local Coastal Program (LCP), which consists of a Land Use Plan (LUP) and an Implementation Plan (IP). The current LCP for this portion of Sand City was adopted by the City Council in 1984 and certified by the State of California Coastal Commission in 1984. The most recent amendments to the LCP were certified by the Coastal Commission in 2004. According to the LCP, the Sterling/Calabrese property is zoned CZ-VSC-A (Coastal Zone-Visitor Serving Commercial), which allows up to 229 hotel rooms on this portion of the site, and the McDonald property is zoned CZ-VSC-B, which allows up to 375 rooms on this portion of the site. The City property (formerly Granite Construction) is also zoned CZ-VSC-B, which allows up to 141 motel rooms on this portion of the site. The city's certified LCP would allow for as many as 745 units, subject to environmental constraints also identified in the LCP.

However, based in part on a 1990 California State Coastal Commission periodic review of the City's LCP, the City supported a modified program for the site, in the form of a Memorandum of Understanding (MOU). In 1996, the City of Sand City, the California Department of Parks and Recreation (CDPR), and the Monterey Peninsula Regional Park District (M.P.R.P.D.) entered into the MOU, which supports 300 to 450 mixed hotel and visitor-serving units on the Sterling and McDonald properties, and alternative public use (parking, bike and pedestrian access, coastal viewpoint) on the City property (formerly Granite Construction). The MOU seeks to improve coastal access, preserve ocean views, restore and enhance the dune habitat, provide open space, identify ongoing funding sources to develop and maintain public facilities, and accommodations for appropriate visitor-serving commercial and residential development along the Sand City coastline. Refer to *Section 2 Consistency with Adopted Plans and Polices* and *Section 3.1 Land Use* for additional detail regarding the land use policies contained in the LCP and MOU. In 1996, as a direct result of the MOU, the Coastal Commission modified a then-pending LCP amendment to recognize the McDonald and Sterling properties as a visitor-serving building envelope where public parks would not be a permitted use.

# **1.2 PROJECT LOCATION**

The 26.46-acre project site is located within the City of Sand City, fronting the Monterey Bay, along the west side of SR 1 (Highway 1), north of Tioga Avenue and intersected by Playa Avenue. As described above, the project site consists of three properties: the Sterling/Calabrese property, the McDonald property, and the City property formerly owned by Granite Construction (Assessor Parcel Numbers 011-012-001, -002, -005, and 011-501-016). Regional and vicinity maps are shown on Figures 1 and 2, respectively. An aerial photograph, showing the surrounding land uses is provided on Figure 3.

## 1.3 DESCRIPTION OF THE PROPOSED PROJECT

### 1.3.1 Proposed Coastal Resort

King Ventures proposes to develop a 342-room coastal resort on the 26.46-acre site located west of SR 1 in Sand City.<sup>2</sup> It is anticipated that the project could be constructed in two phases. A conceptual/illustrative site plan is shown on Figure 4. Each of the components of the project is described below.

## 1.3.1.1 Phase I – Sterling/Calabrese Property

The first phase of the project would be built on a 7.90-acre parcel, known as the Sterling/Calabrese property, located on the north side of Tioga Avenue. This property would be developed with a 139-room hotel. The proposed hotel rooms would be grouped into approximately four clusters of buildings separated by surface parking lots and drive aisles.

The buildings on this portion of the site would be three- to four-stories in height designed and situated to comply with the LCP view corridor provisions (refer to *Section 3.2 Visual and Aesthetic Resources*). The lowest finished floor on this portion of the site would be a parking garage beneath the proposed units at approximately 18 feet above sea level, and the maximum building height would be approximately 78 feet above sea level. The lowest first floor units on the site would be located at a height of approximately 29.5 feet above sea level. Conceptual site sections and building elevations are shown on Figures 5 and 6, respectively.

The 139-room resort hotel will be comprised of vacation ownership units restricted in accordance with Sand City Local Coastal Plan policy 6.4.1(a). This policy restricts owner stays to a limit of 29 consecutive days and 84 total days in any one year period.

Phase I would also include the extension of Sand Dunes Drive from Playa Avenue to Tioga Avenue, construction of the supporting utility extensions to the site within Sand Dunes Drive, extension of the coastal bike trail from Playa Avenue to Tioga Avenue along Sand Dune Drive, reconstruction of the Tioga Avenue roadway including a Fire Department compliant turnaround at its westerly terminus, provision of public parking, restrooms, and a lifeguard/safety station on Tioga Avenue.

<sup>&</sup>lt;sup>2</sup> This site was previously owned by the Sand City Redevelopment Agency and is now owned by the Sand City Successor Agency due to the elimination of redevelopment in California. King Ventures had a disposition and development agreement (DDA) with the former Sand City Redevelopment Agency that has now transferred to the Sand City Successor Agency to the former redevelopment agency by operation of law. The DDA requires King Ventures to make their best efforts to complete the processing of permits to secure land use entitlement for the coastal resort and to ultimately construct the resort, as allowed by the certified Local Coastal Plan.






AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 3







#### 1.3.1.2 Phase II – McDonald Property

Phase II of the project would involve the construction of a coastal resort on the 16.25-acre McDonald property consisting of 203 visitor rooms, a restaurant with banquet facilities, a Tapas Bar restaurant, a bakery, a wine center, a deli juice bar, conference and meeting facilities, a health/wellness spa center, parking, and other ancillary and related improvements. This resort would consist of up to 95 vacation club units and a boutique-style hotel, with up to 108 units. The 95 vacation ownership units would be subject to the same rules and restrictions regarding ownership occupancies included in the Sand City LCP and identified in the description of Phase I, above. Phase II would also include the public parking improvements on the 2.31-acre City property (formerly Granite Construction). The development on this portion of the site would vary from building clusters similar to those proposed on the Sterling property, to more densely clustered development towards the northern portion of the site, beginning near the Playa Avenue access to the site (refer to Figure 4).

The buildings on this portion of the site would be two- to five-stories in height and would be designed and situated to comply with the LCP view corridor provisions (refer to *Section 3.2 Visual and Aesthetic Resources*). The lowest finished floors on the site would be a parking garage beneath the proposed hotel at approximately 18 feet above sea level and a maximum height of approximately 92 feet above sea level. The lowest first floor units on the site would be located at a height of 29.5 feet above sea level. The five-story buildings on this portion of the site would be one to two stories in height facing SR 1 with the other levels stepping down and recessed into the graded contours of the site in order to diminish their apparent visual scale. Conceptual site sections and building elevations are shown on Figures 7 and 8, respectively.

Development on the McDonald property would include an approximately 16,800 square foot conference center. An approximately 14,100 square foot wellness spa would be located along the Sand Dunes Drive extension and approximately 19,700 square feet of restaurant space (comprised of a restaurant with banquet facilities and a separate Tapas Bar restaurant and wine center) will be located on the western side of the McDonald property (refer to Figure 4). The spa is proposed for use only by hotel guests. A summary of the proposed project components is provided in Table 1.3-1.

Table 1.3-1					
Project Summary					
	McDonald Property	Sterling/ Calabrese Property	City Property	Project Total	
Area (Acres)	16.25	7.90	2.31*	26.46	
Total Visitor Units	199	139	4	342	
Conference Center	16,800 sq. ft.	0	0	16,800 sq. ft.	
Restaurant Space	19,700 sq. ft.	0	0	19,700 sq. ft.	
Spa Facilities	14,100 <sup>a</sup> sq. ft.	0	0	14,100 <sup>a</sup> sq. ft.	
Total Building Area	280,966 sq. ft.	148,766 sq. ft.	2,900 sq. ft.	432,632 sq. ft.	
Resort Parking Required	486 spaces	139 spaces	0	625 spaces	
Resort Parking Provided	408 spaces	244 spaces	0	652 spaces	
Public Parking Required	49 spaces	14 spaces	0	63 spaces	
Public Parking Provided	49 spaces**	14 spaces**	43 spaces***	106 spaces	
*The City property (formerly Granite Construction) would only contain public parking, a public restroom, and a portion of building H3. ** Fourteen public parking spaces are proposed for Tioga Avenue. Forty-nine public spaces are proposed along Sand Dunes Drive. ***Parking proposed on the City property (Granite Construction) would be available for public use at all times, but not counted towards the resort or public parking requirements. (Source: Dave Watson, King Ventures, E-mail communication, June 5, 2006.) <sup>a</sup> Square footage includes approximately 1,057 square foot deli/juice bar.					





#### **Building Setbacks**

Some of the buildings on the site are entirely landward of the coastal recession setback line; however, most of the westernmost buildings on the site are three feet seaward of the setback line (refer to Figure 4 and *Section 3.6 Geology and Soils*). A portion of the proposed pool deck and amphitheater on the McDonald property would be located within the recession setback. The coastal recession setback on the western portion of the site would vary from approximately 269 feet to 396 feet from the western property line. Buildings would be set back approximately 48 to 199 feet from the eastern (SR 1 side) property line.

The alternatives analysis in this EIR includes discussion of a Design Alternative which would remove the encroachment of the project buildings into the coastal recession setback (refer to *Section 8 Alternatives*).

#### **1.3.1.3** *Mix of Uses and Use Restrictions for Visitor Units*

As proposed, the total room count is 342 visitor-serving rooms. Of this total, 234 rooms, or 68 percent of the project would be vacation ownership units (time share/vacation club as defined by the Sand City LCP, and discussed in detail below), and 108 rooms would be traditional hotel rooms, owned by the resort owner.

As noted previously, vacation ownership units under the Sand City LCP take the form of timeshare or vacation club interests. A subdivision of these units is accomplished and an application to the California Department of Real Estate is made to secure a public report before any interest in an individual unit is sold. Under the timeshare option, the purchase of (generally) a week at a time is offered to the buyer. The buyer is permitted to purchase a week of time on a fixed date each year. The buyer has the option of changing that week's stay each year through an exchange program that typically barters or exchanges vacation periods between owners. Management of each unit will be vested with the resort operators, and payments of in-lieu fees and transient occupancy taxes will be coordinated by the operators. Management and use restrictions will be detailed in Conditions, Covenants, and Restrictions (CC&R's) recorded with a final map creating the vacation ownership unit. Under a vacation club system, the buyer is allowed to purchase a period of time, generally a week at a time, but is allowed to vary the time of year they stay in the unit, based on an advance reservation system. In the case of vacation club or timeshare occupancies as proposed at this resort, the reservations for the owners are managed through the resort operator, to insure overall occupancy restrictions are enforced, and appropriate fees for use and transient occupancy taxes are paid to the City.

Vacation owners may purchase up to 12 weeks maximum (84 days) in a single unit per year to be consistent with the Sand City LCP. Owners under the timeshare or vacation club system will be restricted to the number of days they may stay in their units each year, both in terms of the total aggregate number of days per year, and in terms of the total number of days for consecutive occupancy of the unit. As proposed, the vacation owner would be allowed to stay no more than 84 days in total in a given year, and no more than 29 consecutive days at any one time. Further, no more than one-half of the vacation owners' time may be used during the "summer" period, generally Memorial Day through and including Labor Day each year.

#### 1.3.1.4 Site Access and Parking

#### Site Access

Primary access for Phase I of the project would be from Tioga Avenue. Tioga Avenue would be reconstructed as part of the project along its existing alignment. Access to the Phase II development on the McDonald property, as well as secondary access to the entire site, would be provided from Playa Avenue and a proposed extension of Sand Dunes Drive. The Playa Avenue site access currently consists of a Class I bikeway which connects the site to Playa Avenue through an existing underpass of SR 1. The project would be required to extend the current two-lane Playa Avenue roadway which terminates on the east side of SR 1 to the project site generally along the existing alignment of the Class I bikeway under SR 1.

Currently, Sand Dunes Drive terminates at its intersection with Tioga Avenue. Sand Dunes Drive is elevated at the Tioga Avenue intersection and would be sloped down to the project grade and extended to the north across the site frontage (refer to Figure 4). The proposed extension of Sand Dunes Drive would have a curb-to-curb width of 24 feet, with two 12-foot vehicular travel lanes and sidewalks. An additional eight-foot wide paved bike path meandering through a ten- to twelve-foot wide landscape area is also proposed adjacent to the new roadway.

#### **Bicycle Path**

Bicycle facilities are divided into three classes. Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate path. Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Class III bikeways are bike routes, which are not striped, and only have signs to help guide bicyclists on recommended routes to certain locations.

An existing Class I separated bicycle path runs along the eastern portion of the site, crosses under SR 1, and connects to Playa Avenue. At Playa Avenue near SR 1, the bike path turns south on Metz Road, to the rear of the Sand Dollar shopping center, then returns westerly along Tioga Avenue to SR 1 in a Class III configuration. This bicycle path resumes at Tioga Avenue and SR 1 in a Class I configuration and continues south of the site. The project proposes to extend the Class I coastal bike path southerly from its terminus at proposed Sand Dunes Drive at Playa Avenue (on the west side of SR 1) to connect with the existing bike path located south of Tioga Avenue near the SR 1 southbound on-ramp.

As proposed with this project, the continuous Class I bike path would be located along the east side of the newly constructed Sand Dunes Drive. A secondary loop for the bike path would also be constructed along the coastal bluff within Phase II of the proposed resort and would connect to the main path at the City property (formerly Granite Construction) and to Tioga Avenue through the improvements completed during Phase I (refer to Figure 4). This alternate bike route would permit riders a more scenic route along the blufftop, if they choose, and allow them to return to the coastal bike path along Sand Dunes Drive at Tioga Avenue.

#### **Proposed Parking**

The project proposes 745 total parking spaces on the site and along Tioga Avenue (106 spaces for the public and 639 for the resort uses). Of the 639 resort parking spaces, approximately 99 surface parking spaces would be provided and 540 covered or below grade parking spaces would be

provided. The City property formerly owned by Granite Construction (APN011-501-016) located adjacent to the McDonald property would be used for public parking purposes. A total of 43 parking spaces would be provided in surface lots on this property. A total of 14 public parking spaces are proposed on the south side of Tioga Avenue. In addition, 49 of the parking spaces provided along the Sand Dunes Drive extension would be designated for public use.

#### **Proposed Public Access**

Public access to the resort and to and along the coastline is proposed to include the following:

- Public parking at the City's property formerly owned by Granite Construction (43 spaces), along the extension of Sand Dunes Drive (49 spaces), and located on Tioga Avenue (14 spaces) for a total of 106 public parking spaces
- Extension of the Class I coastal bike trail from Playa Avenue to Tioga Avenue along the proposed extension of Sand Dunes Drive
- A Class I public access trail for bikes and pedestrians located on the blufftop open space of the resort, accessed from the City property (formerly Granite Construction) public parking lot on the north and the oceanward terminus of Tioga Avenue to the south
- Access to the blufftop trails and open space through the resort will be permitted for pedestrians from Sand Dunes Drive
- Construction of a public comfort station (restrooms) and a public safety/lifeguard/parks station, both along Tioga Avenue
- Vista point overlooking the bay at the City property (formerly Granite Construction).

The project proposes the construction of a lifeguard station, public restrooms, and surface parking along the south side of Tioga Avenue as part of Phase I of the proposed development. At the north end of the project, a vista point, and additional parking are proposed on the City property (formerly Granite Construction) as part of Phase II. These improvements would allow for greater beach access on and adjacent to the site (refer to Figure 4).

The project also proposes to reconstruct, maintain, and revegetate the existing sand dune on the eastern portion of the site, near SR 1 in order to provide visual separation between the proposed resort buildings. Vegetation and erosion stabilization features would be incorporated into this dune to prevent erosion and sand migration onto and across SR 1 (refer to *Section 3.7 Biological Resources*).

Maintenance and management of the public access features would be conducted by the City of Sand City. City Public Works staff, or contract labor, will provide routine maintenance and repair and replacement of the facilities as appropriate. Public safety oversight would be the responsibility of the City's Police Department in cooperation with State Parks and Recreation. The resort will also provide general oversight of activities and conditions on the public facilities.

#### 1.3.1.5 Architectural Design

The project proposes the use of craftsman style design (refer to Figure 9).<sup>3</sup> This style has a long history of use along California's coastline, and is suited to both small coastal bungalows and larger community buildings. Additionally, the detail of craftsman style architecture generally provides opportunities to control the sense of scale in the proposed buildings.

<sup>&</sup>lt;sup>3</sup> Dave Watson, King Ventures, E-mail communication, June 6, 2006.

#### **1.3.1.6** Utilities and Infrastructure

#### Water Supply

The project proposes to obtain water for domestic purposes, irrigation, and fire flow through the City of Sand City. The estimated water demand for the completed resort project is approximately 64.4 acre-feet per year (refer to *Section 3.11 Utilities and Service Systems*). Water would be supplied to the site via the City's available resources at the time of construction of Phase I and/or Phase II.

The City approved construction of a reverse osmosis desalination facility in 2005. The facility was also approved by the California Coastal Commission in 2005, and approval extension was received in 2007. The Sand City Desalination Plant began operation in May 2010. The desalination facility supplies the City with 300 acre-feet of potable water from a shallow brackish water aquifer located near Monterey Bay. Sand City has a water entitlement from the Monterey Peninsula Water Management District (MPWMD) of 206 acre-feet per year. The project's water needs would be supplied by the desalination facility from the City's existing water entitlement.

#### Sewer Main Modifications

A 36-inch sewer force main traverses the site and may be exposed due to site grading near the proposed Sand Dunes Drive and Playa Avenue intersection. The project would modify the elevation of the sewer in its existing easement and provide a minimum of three feet of cover when the pipe is under a paved or stabilized surface and four feet of cover when the pipe is located outside of paved areas of the project. The project civil engineers met with the Monterey Regional Water Pollution Control Agency (MRWPCA) in July 2007 to review preliminary plans for the site. The engineered construction drawings would be reviewed and approved by the MRWPCA following tentative project approval. The review and approval of the proposed modifications to the sewer force main will ensure that the proposed modifications to the sewer main are consistent with the requirements of the MRWPCA.



#### **Other Utilities**

The remaining utilities, electricity, gas, telephone, and cable television, would be provided to the project site via joint underground utility trenches, constructed by the project, with service by existing providers in the area. Water lines will be extended to the site from Tioga Avenue and water lines will be constructed within the existing alignment of Playa Avenue. The proposed project will require on-site percolation facilities and/or the extension of storm drain lines from the intersection of Metz Road and Playa Avenue. Four-inch gas lines and electric power lines are located in Playa Avenue and Metz Road east of SR 1 and electric power lines are also located on Tioga Avenue west of SR 1. Gas and electric power lines will be extended to the site as part of project construction.

#### **1.3.1.7** *Proposed Sand Dune Management and Maintenance*

The project would remove the existing coastal armoring along the seaward side of the site and reconstruct the coastal foredunes on the site. The reconstructed dunes would reach approximately 25 to 45 feet in height (refer to Figures 5 and 7). The dunes will be planted with pioneer dune species and coastal scrub species in order to stabilize the dunes and mitigate wind erosion.

Stabilization of the rear dunes along the SR 1 corridor would be included in the project to keep sand from drifting into the southbound lanes of the highway.

Dune stabilization and restoration that addresses sand stabilization, landscaping and bluffs management has been developed as part of the Habitat Protection Plan (refer to Appendix E) prepared for the project. The Habitat Protection Plan provides an on-going series of restoration goals and objectives that are translated into site-specific performance standards. This comprehensive program addresses on-going monitoring criteria.

Management, repair and replacement of sand dunes and revegetation efforts will be the responsibility of the resort operation.

#### **1.3.1.8** *Proposed Habitat Management and Maintenance Programs*

The proposed buildings have been sited to avoid a wide swath of blufftop sandy areas which has reduced the footprint of development on the site and would allow approximately one-half of the site to be set aside for permanent habitat restoration and enhancement. In order to achieve a coordinated plan to restore and enhance habitats, a Habitat Protection Plan (HPP) has been generated (refer to Appendix C).

The HPP details pre-construction surveys and protocols, construction techniques and protection measures, and post-construction monitoring, management, replacement and maintenance programs. The requirements of the HPP will be the responsibility of the project applicant and subsequently the resort operators to implement. The implementation of the HPP will be monitored by City staff or their designees to independently verify the required measures are undertaken in accordance with the HPP.

#### **1.3.1.9** Proposed Transportation Demand Management Program

The proposed project will generate new vehicle trips to and from the site. The project proposes a number of Transportation Demand Management measures to reduce the number of AM and PM peak hour vehicle trips resulting from the project. The proposed measures include the following:

- Provision of on-site food and retail outlets for the convenience of guests and in order to reduce vehicle trips from the site seeking these services;
- Availability of on-demand shuttle bus services for resort guests on a 24-hour per day basis to reduce individual vehicle trips off site;
- Scheduling of regular shuttle bus service for resort guests to local attractions, such as the Monterey Bay Aquarium, Cannery Row, golf courses, etc. which are designed to meet visitors' needs and reduce individual vehicle trips off site;
- Provision of airport shuttle service for guests in need of transport to and from the Monterey Regional Airport;
- Incorporation of a public transit stop, currently envisioned to be located in the vicinity of the project entry at Playa Avenue, to facilitate employee and visitor use of local public transit (bus and/or dial-a-ride services);
- Provision of designated "van pool" parking spaces for employees that carpool to and from work;
- Institution of a "share-the-ride" program to encourage employees to carpool to and from work;
- Provision of an employee locker room with showers, lockers, dining and break rooms to allow employees to remain on site during their work schedules;
- Extension of the Coastal Bike Trail and bicycle racks to provide bicycle access and storage to encourage bicycle travel as an option to the site;
- Designation of a TDM Coordinator at the resort to manage and implement the program of Transportation Demand Measures.

#### 1.3.1.10 Lighting Plans

All lighting proposed for the project would be low voltage, low level, shielded lighting. Generally, walkway lighting would be limited to two feet to four feet above the pathways. Ground level accent lighting would be installed in parking lots instead of overhead pole lights to provide for safety without producing glare or "hot spots" of light. Buildings would have corridor and entry lighting limited to hotel room entries and primary access points.

#### 1.3.1.11 Signage Plans

Three (3) resort monument signs are planned. One sign would be located at the main resort entrance at Sand Dunes Drive and Playa Avenue. The second sign would be located near the Sand Dunes Drive and Tioga Avenue intersection. A third monument sign identifying the conference center and restaurant on the northern end of the site would be placed along Sand Dunes Drive near that facility. Ground level accent lighting would be located to illuminate these monument signs at night. Attached building identification and directional signage would not be illuminated.

#### **1.4 PROJECT OBJECTIVES**

#### 1.4.1 <u>City of Sand City Objectives for Project Site</u>

The following are the City's stated objectives for the project site:

- Provide needed property tax, sales tax, and transient occupancy tax (TOT) to the City.
- Conformance of the project to the goals, vision, policies of the Local Coastal Program (LCP) including the LCP land use designation.

- Development of a distinctive, high quality visitor-serving coastal resort consistent with General Plan goals and objectives.
- Encourage development of visitor serving facilities that provide services that meet a range of visitor needs.
- Provide visitor facilities and services open to the general public, such as dedication of sandy beach, viewing areas, and sheltered areas as a part of shorefront development projects.
- Provide adequate parking for the development as well as any public uses proposed on the site.
- Ensure provision of adequate public beach recreational areas for public use including the dedication of all sandy beach areas seaward of the toe of the dune or bluff.
- Provide an additional revenue source in the form of transient occupancy tax (TOT) for general municipal purposes.

#### 1.4.2 <u>Project Applicant's (King Ventures) Objectives</u>

The following were identified by the applicant as the project objectives:

- Develop a destination resort consisting of conference and culinary meeting space;
- Create a minimum room count (300) that meets the operator's criteria for conferencing centers and accommodations for attendees;
- Physically accommodate buildings within a terraced design that blends into the dunes, and respects the ocean front pedestrian orientation;
- Establish public access through the site via the Granite parking lot and bluff trail networks, to tie into the existing coastal bike trail and Tioga blufftop overlook and beach access;
- Create sand dune restoration and stabilization zones that build upon habitat management and enhancement, respect wave and tidal influences, and permit sand movement maintenance practices that harmonize with the flora and fauna of the site and surroundings;
- Include restaurants, bakery, wine center, spa, recreation, administration and support facilities and services for the destination resort; and
- Create a mix of uses and a development pattern that respects the environmental constraints of the site and area, supports the public access and visitor-serving policies of the City and is feasible for the developer.

#### 1.5 USES OF THE EIR

The EIR will be used to provide Sand City decision-makers and the general public with relevant environmental information regarding the project. When decision-makers are considering project-specific discretionary actions, this document will be relied upon to satisfy the requirements of the California Environmental Quality Act (CEQA) for environmental review. As previously mentioned, for CEQA purposes, Sand City is considered the Lead Agency, and in accordance with CEQA Guidelines Section 15381, the other entities listed below are Responsible Agencies. The discretionary actions necessary for the proposed project are anticipated to include, but would not be limited to, the following approvals:

- City of Sand City
  - Vesting Tentative Subdivision Map
  - Coastal Development Permit
  - Site Plan Permit
  - Design Permit

- Grading Permits
- Building Permits
- Seaside County Sanitation District
  - Authorization of connection to and use of sanitary sewer capacity
- Monterey Regional Water Pollution Control Agency (MRWPCA)
  - Sewer Connection Permit
- California Regional Water Quality Control Board
  Authorization of NPDES Permit
- California State Coastal Commission
  If Sand City's Coastal Development Permit is appealed, action related to issues raised
- California Department of Transportation, District 5
  - Encroachment Permit
- U.S. Fish and Wildlife Service
  - Section 10(a)(1)(B) permit
- California Department of Fish and Game
  - Approval of black legless lizard Search and Relocation Plan

#### SECTION 2 CONSISTENCY WITH ADOPTED PLANS

This section complies with CEQA Guidelines Section 15125(d), which requires an EIR to discuss inconsistencies between the proposed project and applicable general plans and regional plans.

#### 2.1 SAND CITY GENERAL PLAN

The Sand City 2002-2017 General Plan is a City Council development and redevelopment policy document that notifies residents and the general public of the City's intent to become a contemporary Monterey Peninsula city, deserving of its gateway location on the southern portion of the Monterey Bay. The goals, policies, and implementation programs identified in the General Plan are intended gradually to phase-out heavy industrial uses in town with a preference for becoming a more pedestrian and residentially-oriented community. These goals and policies are discussed in detail below.

#### 2.1.1 Land Use Element

Sand City was incorporated in May 1960 and since that time has served the Monterey Peninsula area as an active employment center. Heavy commercial and manufacturing industries have historically dominated the community's economy and land use patterns. More recently, destination commercial uses have located in the city. The community also contains scattered residential areas and undeveloped lands, particularly along the coast. For general planning purposes, the City has been divided into six geographical districts including the North of Tioga Coastal district within which the project site is located. The North of Tioga Coastal district is designated for various land uses including *Visitor-Serving Commercial, Visitor-Serving Residential*, and *Public Recreation*. The project is consistent with these general plan designation and related policies.

#### 2.1.1.1 Coastal Memorandum of Understanding (MOU)

In April 1996, the City of Sand City and the former Sand City Redevelopment Agency entered into a Memorandum of Understanding (MOU) with the California Department of Parks and Recreation (CPDR) and the Monterey Peninsula Regional Park District (MPRPD) regarding the community's coastal land uses. The MOU recognizes that the Sand City Coastline is an integral part of the Monterey Bay State Seashore and that it possesses important recreational, trail linkage, open space and natural resource values, and visitor-serving potential. The MOU is an advisory document that is intended to facilitate cooperation among the involved agencies to accomplish mutually beneficial objectives including:

- Preservation of ocean views from State Route 1;
- Restoration of sand dunes and other associated dune vegetation and habitat;
- Creation and preservation of a north/south habitat corridor for endangered and threatened species;
- Creation of a continuous north/south public pedestrian and bicycle trail linking Fort Ord and the Monterey Peninsula;
- Provision of appropriate open space and beach and dune access;
- Identification of an ongoing source of revenue to develop access facilities, restore dune lands and maintain and operate public lands; and
- Development of appropriate public and private land uses in Sand City's Coastline, including but not limited to visitor serving commercial and residential.

**Consistency:** The proposed project would block portions of designated view corridors across the site. The project would restore sand dunes and plant dune vegetation which would replace habitat and create new habitat for special status species. The project would also connect two segments of an existing bicycle and pedestrian trail along the Monterey Peninsula. The project provides visitor-serving commercial uses and would allow access to the beach and dunes on the site. The project, therefore, is partially inconsistent with the Coastal Memorandum of Understanding. To be fully consistent, the project would require redesign to avoid view blockage within designated view corridors on State Route 1. Mitigation measures discussed in *Section 3.2 Visual and Aesthetic Resources* would be required by the City Council as conditions of approval to bring the final project into conformity with these policies.

#### 2.1.1.2 Goals and Policies

<u>Goal 2.9:</u> Enhance the community's appearance and sense of identity in the greater Monterey Bay Region.

**Consistency:** The proposed coastal resort would redevelop a site previously used for sand mining operations which is currently used for construction storage. The proposed project would enhance the appearance of the site as viewed from surrounding roadways, including SR 1. The project, therefore, is consistent with this goal.

<u>Policy 2.9.3:</u> Encourage building designs that evoke a coastal resort or coastal industrial architectural theme and provide treatment that includes building design articulation and variation.

**Consistency:** The project proposes a craftsman style design for the development which will allow for variation and articulation of the building and is typical of coastal architecture. The project, therefore, is consistent with this policy.

<u>Policy 2.9.5:</u> Develop and install streetscape improvements with all new development, particularly along the following primary streets: California Avenue, Tioga Avenue, Sand Dunes Drive, Contra Costa Street, and Catalina Street.

**Consistency:** The project proposes native and ornamental species, coastal scrub species, and pioneer dune species along the Sand Dunes Drive extension and Tioga Avenue. The project, therefore, is consistent with this policy.

<u>Goal 2.11:</u> Consider and mitigate the impacts of new development and/or redevelopment activities on public facilities and services, whenever possible, prior to the approval of specific projects.

**Consistency:** The proposed project would not result in significant impacts on public facilities and services (refer to *Section 4 Availability of Public Services*). The project would not result in significant impacts to utilities and service systems (refer to *Section 3.11 Utilities and Service Systems*). The project, therefore, is consistent with this goal.

<u>Goal 2.12:</u> Support the efforts of the Sand City Redevelopment Agency to upgrade infrastructure, provide affordable housing opportunities, and remove blight in the Sand City Redevelopment Project Area.

**Consistency:** The project would redevelop a property currently used for construction storage and would provide public parking spaces on a property owned by the City of Sand City. The proposed project would support the efforts of the City and therefore is consistent with this goal.

#### 2.1.2 <u>Circulation and Public Facilities Element</u>

The Circulation and Public Facilities Element of the General Plan focuses on both transportation features and public facilities and services. This element plans for the circulation of people, goods, energy, water, sewage, storm drainage, and communications. The Circulation and Public Facilities Element identifies the extension of Sand Dunes Drive as part of coastal development on the project site and the extension of Playa Avenue to provide coastal access which is currently limited to Tioga Avenue.

#### 2.1.2.1 Goals and Policies

<u>Policy 3.1.1:</u> Maintain a minimum level of service of LOS D for all non-freeway streets within the City during peak hours, or as indicated within the Congestion Management Plan of the Transportation Agency of Monterey County (TAMC).

**Consistency:** The proposed project would result in significant LOS impacts at four intersections; however, mitigation measures are proposed to reduce these impacts to a less than significant level. The project, with the implementation of the identified mitigation measures, will be consistent with this policy.

<u>Policy 3.1.5:</u> Pursue the development of new vehicular and/or pedestrian linkage between the Old Town and South of Tioga Coastal districts, as well as pedestrian and aesthetic enhancements to existing coastal linkages at the Tioga Avenue overcrossing and Playa Avenue underpass.

**Consistency:** The proposed project will enhance coastal linkages through the extension of Sand Dunes Drive from Tioga Avenue along the project frontage and connect with the existing Playa Avenue underpass. The extension of Playa Avenue to the site and proposed bike trail connections will provide greater coastal access from both Tioga Avenue and Playa Avenue. The project, therefore, is consistent with this policy.

<u>Policy 3.2.1:</u> Coordinate land use planning with transportation planning to mitigate the traffic impacts of new development.

**Consistency:** The proposed project includes mitigation measures to reduce project traffic impacts to a less than significant level and, therefore, is consistent with this policy.

<u>Policy 3.2.2:</u> Incorporate aesthetic considerations and landscaping as part of facility design. Where major road improvements are constructed, landscaping should be included to reduce negative visual and environmental effects.

**Consistency:** The project proposes both native and ornamental landscaping along existing roadways and proposed roadway extensions fronting the site. The project, therefore, is consistent with this policy.

<u>Policy 3.2.5:</u> All streets, pedestrian paths and bike paths should be part of a fully-connected system of interesting routes to all city destinations. The design of these routes should encourage pedestrian and bicycle use and should be defined by landscaping and energy-efficient lighting.

**Consistency:** The proposed project includes connections to the existing coastal bike trail and sidewalks along the Tioga Avenue overcrossing. The project includes landscaping and lighting along the bike and pedestrian pathways through the site. The proposed project also introduces new public access on the westerly blufftop for pedestrians and bicycles. The project, therefore, is consistent with this policy.

<u>Policy 3.6.1:</u> Require that all new development provide adequate on-site parking facilities to accommodate projected parking demand.

**Consistency:** The project proposes 745 parking spaces. The proposed parking spaces would be adequate to comply with the City's parking standards. The project, therefore, is consistent with the intent of this policy.

<u>Policy 3.6.4:</u> Consider and include the incorporation of on-street parking improvements (i.e. curbs, pavement markings, signage, etc.) as appropriate within City and/or developer initiated street improvement projects.

**Consistency:** The project proposes 14 parking spaces on the south side of Tioga Avenue as part of the required improvements to Tioga Avenue for the project. The project, therefore, is consistent with this policy.

<u>Policy 3.7.1:</u> Facilitate the coast-side completion of the remaining segment of the coastal bicycle trail connecting Marina to the Monterey Peninsula in conjunction with project approvals in the North of Tioga Coastal district.

**Consistency:** The project proposes to extend the Class I coastal bike path southerly from its terminus at proposed Sand Dunes Drive at Playa Avenue (on the west side of SR 1) to connect with the existing bike path located south of Tioga Avenue. The project, therefore, is consistent with this policy.

<u>Policy 3.8.1:</u> Integrate pedestrian facilities in all road improvement and construction projects; where feasible.

**Consistency:** Pedestrian coastal access from Tioga Avenue would be provided by the bike path and through the project site with the extension of Playa Avenue to the proposed Sand Dunes Drive. The project, therefore, is consistent with this policy.

<u>Policy 3.10.2:</u> Require that the construction of roadway, water, sewer and storm drainage improvements be staged in areas where major new development is anticipated to minimize disruption to new road surfaces.

**Consistency:** The project would construct all necessary utility improvements to serve the proposed development (refer to *Section 3.11 Utilities and Service Systems*). The proposed project, therefore, is consistent with this policy.

<u>Policy 3.10.3</u>: Develop a program to monitor, repair and upgrade the City's water, storm drain and sewer lines. All improvements to the existing lines necessitated by new development shall have committed financing before the project may proceed.

**Consistency:** The proposed project will be required to finance any water, storm drain, and sewer line upgrades to serve the site (refer to *Section 3.11 Utilities and Service Systems*). The project, therefore, is consistent with this policy.

<u>Policy 3.11.1:</u> Require that new utilities or necessary extensions for new development and redevelopment projects be installed underground.

**Consistency:** The proposed project would be required to underground all utilities needed to serve the project site. The project, therefore, is consistent with this policy.

#### 2.1.3 <u>Conservation and Open Space Elements</u>

The Open Space Element is required to address a variety of specific types of open space including open space for the managed production of resources, and open space for outdoor recreation. The Conservation Element is intended to address the conservation, development and use of natural resources, including water, forest, soils, rivers, and mineral deposits. The Conservation and Open Space Element addresses a full range of important environmental issues that directly impact the community. Environmental resources are sensitive to changes created by land use and development decisions. Economic development is necessary for a community's long term well being, however at the same time, development must result in as minimal an impact on the natural environment as possible.

#### 2.1.3.1 Goals and Policies

<u>Policy 5.2.2:</u> The City requires new development to incorporate water conservation features in accordance with the Monterey Peninsula Water Management District (MPWMD) guidelines.

**Consistency:** The proposed project includes water conservation features in accordance with MPWMD guidelines (refer to *Section 3.11 Utilities and Service Systems*). The project will install showerheads, toilets, wash basins, hot water systems, and irrigation in accordance with MPWMD requirements for new construction. The project, therefore, is consistent with this policy.

<u>Policy 5.3.1:</u> The City shall not permit development within the 50-year erosion setback line, as established in the Moffatt & Nichol methodology.

**Consistency:** Several of the project buildings are located seaward of the 50-year erosion setback line, as established in the updated Moffatt & Nichol methodology. In addition, some ancillary features of the project are proposed seaward of the 50-year setback. Recreational amenities would be required to be moved and replaced prior to bluff retreat encroachment (refer to *Section 3.6 Geology, Soils, and Seismicity*). The project, as proposed, is not consistent with this

policy. The City Council may require mitigation as detailed in Section 3.6 of this EIR as a condition of approval for the project which would ensure the project's consistency with this policy.

<u>Goal 5.4:</u> Manage and conserve the City's biological resources, including the ecosystem of Monterey Bay.

Consistency:	The proposed project includes mitigation measures to reduce its impacts to
	biological resources on the project site to a less than significant level (refer to
	Section 3.7 Biological Resources).

- <u>Goal 5.5:</u> Maintain scenic views from view corridors and vista points identified in the LCP.
- **Consistency:** The proposed buildings will encroach into View Corridor B identified in the LCP (refer to *Section 3.2 Visual and Aesthetic Resources*). The project includes public vista points as identified in the LCP. The project will encroach into an identified view corridor across the site and therefore, is not fully consistent with this goal. The City Council may require mitigation as detailed in Section 3.2 of this EIR as a condition of approval for the project which would ensure the project's consistency with this goal.

<u>Policy 5.8.1</u>: The City shall support the Monterey Bay Unified Air Pollution Control District (MBUAPCD) in its development of improved ambient air quality monitoring capabilities and the establishment of appropriate standards and rules to address the air quality impacts of new development.

- **Consistency:** The proposed project would not result in regional or local air quality impacts beyond those disclosed and mitigated for in the *Air Quality Management Plan* (refer to *Section 3.8 Air Quality*). The project, therefore, is consistent with this policy.
- <u>Goal 5.10:</u> Reduce the amount of waste generated in the City that goes to the Marina landfill.
- **Consistency:** As of 2008, Sand City diverted approximately 66 percent of its waste from the Marina (Monterey Peninsula) landfill. The proposed project will be required to include recycling programs consistent with City requirements. The project, therefore, is consistent with this policy.
- <u>Goal 5.13</u>: Maintain and improve public access to the Sand City coastline.

**Consistency:** The proposed project will provide bike, pedestrian, and vehicle facilities which will improve public access to the coastline. The project, therefore, is consistent with this policy.

#### 2.1.4 <u>Public Safety and Noise Element</u>

The intent of a Safety Element is to document potential hazards that must be considered when planning the location, type, and density of development throughout the Planning Area. A major objective is to reduce potential loss of life, injuries, and property. The Noise Element is intended to

identify and appraise the noise problems in the community and protect citizens from exposure to excessive noise levels.

#### 2.1.4.1 *Goals and Policies*

<u>Goal 6.1:</u> Reduce the potential for injury, loss of life, and property damage resulting from seismic activity.

**Consistency:** The project would be constructed to conform to the current Uniform Building code. The project will also be located outside the 100-year and 500-year events for a distant source tsunami. The project, therefore, will avoid hazards related to seismic activity to the extent practicable and is consistent with this policy.

<u>Policy 6.2.1:</u> Avoid the development of permanent structures within the 100-year flood zone. In instances where development is necessary within this zone, require that the facility be designed so that the finished floor elevation of the structure is at least one foot above the established 100-year flood elevation or that any non-habitable structure be appropriately flood-proofed.

### **Consistency:** The majority of the project site, including the location of proposed buildings, is located outside the 100-year floodplain (refer to *Section 3.5 Hydrology and Water Quality*). The project would not develop permanent structures within the 100-year flood zone and, therefore, is consistent with this policy.

<u>Policy 6.4.1</u>: Require that all new development and redevelopment of older projects meet state and local standards for fire protection.

**Consistency:** The proposed project will meet all state and local standards for fire protection. The project, therefore, is consistent with this policy.

<u>Policy 6.5.3:</u> New development shall provide water main extensions, fire hydrants and automatic fire sprinkler systems in accordance with the requirements and policies of the Monterey Fire Department in effect at the time building permits are issued.<sup>4</sup>

**Consistency:** The proposed project will be required to extend water mains, as necessary, and provide fire hydrants and automatic fire sprinkler systems throughout the development. The project, therefore, is consistent with this policy.

<u>Policy 6.10.1:</u> Utilize Table 6-1 as a general guide when considering the feasibility of a new development with respect to existing and future transportation noise levels. Noise levels should be measured from the perimeter of the outdoor activity area of each specified use.

**Consistency:** The proposed project will mitigate the impact of ambient noise on interior noise levels and provide acoustically shielded common use areas on the project site (refer to *Section 3.9 Noise*). The project, therefore, is consistent with this policy.

<sup>&</sup>lt;sup>4</sup> The Monterey Fire Department is the City's contract fire department.

#### 2.1.5 <u>Local Coastal Program (LCP)</u>

In November 1972, California voters approved a ballot initiative known as Proposition 20, which called attention to management of California's vast coastal resources. As a result, the State of California Coastal Commission and six regional commissions were established to manage the coastal zone as a resource of statewide interest through permit control and preparation of a comprehensive Coastal Plan. The intent of the plan is "to preserve, protect, and where possible, restore the resources of the coastal zone for the enjoyment of the current and succeeding generations." The State Legislature passed the California Coastal Act of 1976 to implement recommendations found appropriate in the Coastal Plan. A key element in the Coastal Act of 1976 is that the bulk of the authority granted to the State and regional commissions by the Act was to be transferred to local governments through adoption and certification of "Local Coastal Programs." The Local Coastal Program (LCP) includes a local government's land use plans, zoning ordinance, zoning district maps, and other implementing actions which, when taken together, meet the requirements of and implement the provisions and policies of the Coastal Act. The policies of the Local Coastal Program are incorporated by reference throughout the Sand City General Plan 2002-2017 and discussed in applicable sections throughout this EIR. The LCP land use policies applicable to the project site are discussed in detail below.

#### 2.1.5.1 *LCP Goals and Policies*

#### **Public Access**

<u>Policy 2.3.1:</u> Require all future shorefront developments to provide public access in the following manner: a) where access is shown on Figure 10, dedication of a vertical and/or bluff top access easement which meets the criteria established in Policy 2.3.4; b) where no access is shown on Figure 10, dedication of an access easement where it is found to be consistent with the criteria of Policy 2.3.4; or c) where no access is shown on Figure 10, and access dedication cannot be achieved consistent with Policy 2.3.4, payment of in-lieu fees for development and maintenance.

<u>Policy 2.3.2:</u> Require dedication of lateral access easements for dry sand access along sandy beaches as part of all shorefront development.

<u>Policy 2.3.3:</u> Developed public access ways shall at the minimum provide trash receptacles, signs and trail improvements. Vista points shall be located and designed to take full advantage of views to and across the Bay, with provisions for vehicle turnouts where accessible from a public road, signs, and trash receptacles. Developed vista points should be accessible from a public road or access way.

**Consistency:** The proposed project includes two trails that provide access across the site on both the east side of the Sand Dunes Drive extension and on the west side of the project site along the bluff and reconstructed sand dunes. The project will be required to dedicate a lateral access easement for dry sand access on the site. The project includes three vista points in the general location identified in the LCP Land Use Plan as shown on Figure 10. The project includes a public parking area at the terminus of the Sand Dunes Drive extension with access to a vista point and the improved trails that cross the site. The project is consistent with these public access policies.

<u>Policy 2.3.4:</u> Future developments shall implement safe access ways and improvements as determined by the City. Site specific locations shall be developed as part of future development

proposals, and according to guidelines established by the City. The following criteria shall be used to determine the exact location of access ways.

a) Access ways should be located at intervals commensurate with the level of public use.

b) Access ways should be sited where the least number of improvements would be required to make it usable by the public, where support facilities exist or can be provided where public safety hazards are minimal, and where resource conflicts can be avoided or mitigated.

c) Vertical access ways to the shoreline should be located in areas where there is sufficient beach area, and should be distributed throughout an area to prevent crowding, parking congestion, and misuse of coastal resources.

- d) Access ways and trails should be designed and sited to:
  - 1) Minimize alteration of natural landforms, conform to existing contours, blend in with the visual character of the setting, and be consistent with the City's design standards;
  - 2) Prevent unwarranted hazards to land and public safety;
  - 3) Provide for privacy of adjoining residences and minimize conflicts with adjacent or nearby established uses, and be wide enough to permit placement of a trail and/or fence and landscape buffer;
  - 4) Prevent misuse of sensitive coastal resource areas; and
  - 5) Be consistent with military security needs.

e) Coastal access trails should not be located in areas of high erosion or fire hazard or in areas hazardous to public safety (including bluff top areas where bluff stability is a concern), unless the trail is designed and constructed so that it does not increase the hazard potential, or if it is required to correct abuse by existing access use.

# **Consistency:** The project proposes a coastal trail on the western side of the site along the bluffs and reconstructed sand dunes. The trail would provide access across the site and conform to the proposed reconstructed dune contours on the site. This trail is within the 50-year coastal recession setback line and may be required to be relocated as part of an adaptive management plan dealing with shoreline erosion. The project proposes another trail/access way located along the Sand Dunes Drive extension which meets this LCP policy.

<u>Policy 2.3.5:</u> Future access ways shall be guided away from any dune areas that may be proposed for stabilization or restoration. Where major access ways may be available through dunes to the coast, boardwalks or other appropriate pathways shall be used to protect the vegetation stabilizing the dunes. Other access routes through the dunes shall be restricted.

## **Consistency:** The project proposes a coastal trail on the western side of the site along the bluffs and reconstructed sand dunes as well as a second trail located along the Sand Dunes Drive extension. The City will require the project to provide connecting boardwalks to meet the intent of policy 2.3.5. Therefore, with this condition, the project is consistent with this policy.

<u>Policy 2.3.6:</u> Protect visual access at the general points shown on Figure 10 by requiring provision of public vista points as part of future developments in these areas. Site specific locations will be developed as part of future development proposals and according to the guidelines set forth in Policy 2.3.4.


**Consistency:** The proposed project includes three public vista points that will provide views of Monterey Bay in the general locations shown in Figure 10. The project, therefore, is consistent with this policy.

<u>Policy 2.3.10</u>: Ensure provision of adequate parking for designated pedestrian access ways. Require provision of public parking as part of developments at a rate of 10 percent above the project's total required parking. The means for providing public parking areas will be the responsibility of State and local government entities and private development proposals. The following will be pursued where feasible and consistent with the Plan:

c) The City shall require approved development plans to include a provision of public parking on-site, or provide the property off-site, but in a convenient location to the beach areas, or be assessed an in-lieu pro-rata fee that the City could utilize for public parking and maintenance purposes.

**Consistency:** The project proposes to construct a public parking lot with 43 spaces at the northern terminus of Sand Dunes Drive. In addition 49 public parking spaces are proposed along Sand Dunes Drive and 14 public parking spaces are proposed on the south side of Tioga Avenue. The project would provide ten percent above its required parking as public parking spaces and, therefore, is consistent with this policy.

<u>Policy 2.3.13:</u> Implement a bicycle path as part of a regional bike path. The portion of the bike path designated where no road exists shall be developed as part of future development proposals along this road and/or development of the road.

# **Consistency:** The project includes extension of the coastal bike path along the proposed Sand Dunes Drive extension. A second bike path would cross the western portion of the site. The project, therefore, is consistent with this policy.

#### **Recreation and Visitor Serving Facilities**

<u>Policy 3.3.1:</u> Visitor-serving and public recreational uses are given priority west of State Highway One, as designated on the LCP Land Use Map. Development of these uses shall be consistent with the protection of natural and visual resources.

**Consistency:** The proposed project is visitor-serving and provides approximately 7.8 acres of restored and stabilized dune habitat. Since the project is in conformance with the LCP's land use designation and provides for the protection of natural resources, it is consistent with this policy. However, some of the proposed buildings would block views and, therefore, the project would not be fully consistent with this policy unless conditioned by the City Council to implement MM VA-1.4. The specific impacts on visual resource policies are discussed in detail in *Section 3.2 Visual and Aesthetic Resources*.

<u>Policy 3.3.2:</u> Encourage development of visitor serving facilities that provide services that meet a range of visitor needs. Provision of visitor facilities and service open to the general public, such as but not limited to state park facilities, dedication of sandy beach, and development of viewing areas and sheltered areas, is expected as part of each shorefront development project. Lower-cost visitor serving facilities such as campgrounds are encouraged.

**Consistency:** The project proposes a range of visitor serving facilities including hotel rooms, banquet facilities, restaurants, conference facilities, health/wellness spa, trails providing beach access, public parking, vista points, and a lifeguard station. The proposed project, with the inclusion of these facilities, is consistent with this policy. In addition, the City's signing of the 1996 MOU ensures that there will be low-cost visitor serving facilities within the Sand City coastal zone as public park agencies will have the ability to acquire up to 70 percent of the coastal zone within Sand City, west of Highway 1 (State Route 1).

<u>Policy 3.3.3:</u> Permitted uses in areas designated as visitor-serving commercial include hotels, motels, accessory shops, food service establishments, service stations, recreation retail shops and services, campgrounds, recreational vehicle parks and other recreational facilities operated as a business and open to the general public for a fee. In addition to areas designated public recreation on the Land Use Plan Map, public recreation also means public uses within development projects such as picnic areas, wind shelters, promenades; other support facilities for public recreational uses; and controlled public access and/or educational programs in areas of dune restoration programs.

**Consistency:** The proposed project is consistent with the LCP's land use designation and the uses permitted under that designation.

<u>Policy 3.3.4:</u> Permitted timeshare residential units shall be restricted to purchase in 31-day maximum increments and to occupancy for 31-day maximum periods.

**Consistency:** The project proposes vacation ownership units that comply with LCP policy 6.4.1 which restricts owner stays to a limit of 29 consecutive days and 84 total days in any one year period. The project, therefore, is consistent with this policy.

<u>Policy 3.3.5:</u> Require proposed visitor serving and recreational developments to comply with development and design standards presented in Sections 5.3 and 6.4.

**Consistency:** The project complies with the development standards identified in Policy 6.4. The project would block portions of the designated view corridors identified in Policy 5.3.2. The project, therefore, is inconsistent with this policy unless conditioned by the City Council to implement MM VA-1.4.

<u>Policy 3.3.8:</u> Require all visitor-serving developments to provide adequate parking for the project users, commensurate with the proposed use. The developer will have to provide an adequate number of parking spaces to suit that development, including any public uses on-site. In addition, the developer will be required to provide additional public parking at a rate of 10 percent above the project's total required parking.

**Consistency:** The project will provide 10 percent above the project's total required parking for public use. The project would provide the required parking needed to comply with the City's standards and, therefore, is consistent with this policy.

<u>Policy 3.3.9:</u> Ensure provision of adequate public beach recreational areas for public use commensurate with future population growth and development, and compatible with existing

development. Require the dedication of all sandy beach areas seaward of the toe of the dune, bluff or shoreline protection device as a condition of future development.

**Consistency:** The proposed project will be required to dedicate the sandy beach area seaward of the reconstructed dunes on the site. The project, therefore, is consistent with this policy.

#### **Coastal Resource Management**

<u>Policy 4.3.1:</u> Permit construction and maintenance of all shoreline protection devices (including seawalls) in situations where they are necessary to protect existing structures, coastal-dependent uses, public beaches and recreational areas, and public works. Such structures must not reduce or restrict public access, adversely affect shoreline processes, or increase erosion on adjacent properties.

**Consistency:** The project does not propose any shoreline protective devices and may be subject to additional conditions of approval by the City Council to locate buildings so that such protection measures are not required based on the 50-year estimated erosion rate. The project, therefore, is consistent with this policy.

<u>Policy 4.3.4:</u> All developments shall be sited and designed to minimize risk from geologic, flood or fire hazards.

**Consistency:** The project would be designed to minimize risk from geologic, flood, and fire hazards as discussed in Sections 3.5, 3.6, and 4.1 of this EIR.

<u>Policy 4.3.7:</u> No development will be allowed in the tsunami run-up zone, unless adequately mitigated. The tsunami run-up zone and appropriate mitigations, if necessary, will be determined by the required site-specific geological investigation.

**Consistency:** The entire Sand City shoreline is located within a tsunami hazard area. The extent of damage to the project would depend on the size of the tsunami. Portions of the site below approximately 26 feet NGVD may experience tsunami inundation based on a distant-source tsunami. The project will be required to submit a design-level geotechnical investigation to the City Engineer for review and approval prior to the issuance of development permits on the site. The report will take into account design considerations to address the impact of a tsunami on the site. The proposed project, therefore, is consistent with this policy (refer to *Section 3.5 Hydrology and Water Quality*).

<u>Policy 4.3.15:</u> Designate general areas as sensitive habitats as shown on the Coastal Resources Map (Figure 11). Where development is proposed in these areas, require field surveys by qualified biologists or agencies in order to determine exact locations of environmentally sensitive habitat areas and to recommend mitigation measures to minimize habitat impacts. Standards for biological field surveys will be set forth by the City.

## **Consistency:** The project site does not contain an environmentally sensitive habitat area as identified in the LCP Land Use Plan. The project site does contain habitat and sensitive species which are discussed in Section 3.7. Mitigation and

avoidance measures are included in the project to reduce these impacts to a less than significant level. The proposed project, therefore, is consistent with this policy.

#### **Coastal Visual Resources**

<u>Policy 5.3.2:</u> Views of Sand City's coastal zone, Monterey Bay and Monterey Peninsula shall be protected through provision of view corridors, vista, points, development height limits, and dune restoration areas, as shown on Figure 12 (on page 77). Major view corridors are:

- c) Three southbound views over development on properties between Tioga Avenue and the former dump site.
- **Consistency:** The proposed project would result in a view blockage in one of the identified LCP view corridors (View Corridor B) as discussed in *Section 3.2 Visual and Aesthetic Resources*. The project, therefore, is inconsistent with this policy unless conditioned by the City Council to implement MM VA-1.4.

#### Land Use and Development

<u>Policy 6.4.1:</u> This policy establishes the land use designations in the coastal zone, including *Visitor-Serving Commercial* and identifies 745 rooms as the maximum allowed. As required by applicable policies of the LCP, permitted development intensities shall be limited to those which adequately address constraints including, but not limited to: public access and recreation needs (including adequate public access and recreation facilities inland of the 50-year erosion setback line); natural hazards, dune habitats and their appropriate buffers; and natural landforms and views to the Bay.

a) Visitor-Serving Commercial: This designation allows hotels, motels, vacation clubs/timeshares, public recreation areas, accessory shops (including gift shops, travel agencies, beauty shops, health spaces), food service establishments, service stations, recreation retail shops and services, campgrounds, recreational vehicle parks, and other recreational facilities operated as a business and open to the general public for a fee. Vacation clubs/timeshares are defined as accommodation facilities with guest or owner stays limited to not more than 29 consecutive days, and not more than a total of 84 days in each calendar year. The hotel/motel/vacation club/timeshare uses shall be consistent with hotel/motel density limits presented in Policy 6.4.4(e). All other visitor serving commercial uses shall be accessory and customarily incidental to hotel use and shall not exceed the maximum amount of square footage identified by Appendix F.

# **Consistency:** The project proposes 342 visitor-serving units which is well below the maximum number of units allowed by the LCP. The accessory uses proposed by the project are incidental to the proposed hotel use and do not exceed the maximum square footage identified in Appendix F of the LCP. The project, therefore, is consistent with this policy.



#### 2.2 STATE AND REGIONAL PLANS

#### 2.2.1 <u>California Coastal Act</u>

In 1972, California voters adopted Proposition 20 creating the California Coastal Act and Coastal Commission. The Coastal Act's basic goals for conservation and development in the coastal zone are to: 1) protect and enhance the natural resources of the coast; 2) protect and restore the built resources of the coast – the special communities and neighborhoods that have unique cultural, historic, and aesthetic qualities; 3) give priority to coastal-dependent development; 4) maximize access to the coast by the public; and 5) encourage orderly growth in areas with adequate public services. The Coastal Commission was given the mandate of implementing Coastal Act policies by preparing a comprehensive plan for the California coastline and reviewing locally-approved projects within the coastal zone, which includes a width of approximately 1,000 yards along the coastline. In 1976, the Coastal Act was revised with specific provision that coastal permit processing authority be transferred from the Coastal Commission to local government upon adoption of a Coastal Land Use and Implementation Plan.

The City of Sand City has developed and adopted a Local Coastal Program Land Use Plan (LCP) that is an integral part of the City's General Plan. Adoption of the General Plan coastal zone policies and maps, and the Local Coastal Program, along with the Implementing Regulations in the City's Zoning Ordinance approved by the California Coastal Commission give the City the necessary policy basis and regulations to continue the issuance of coastal permits under its jurisdiction. The extent of Coastal Commission review and authority over local projects is defined by three areas, which are described as follows:

- 1) The first area consists of lands *below the mean high-tide line and lands where the public trust may exist and within 100 feet of any wetland, estuary, or stream.* Within these areas, the Coastal Commission exercises final authority on all applications.
- 2) The second area includes those *properties generally within 300 feet of the beach's mean high-tide line or coastal bluff or to the first public road paralleling the sea.* Within those areas, the Coastal Commission reviews projects only if there is an appeal on the decision of the local jurisdiction.
- 3) The third area includes *coastal properties which are located between the coastal zone boundary and that area more than 300 feet from the mean high-tide line, bluff, or beach line.* Coastal permits are required for various types of projects within this large area. However, the local decision on coastal permits is final unless the project involves a major public works project or energy facilities, either of which may be appealed to the Coastal Commission.
- **Consistency:** The proposed buildings are located outside the mean high-tide line; however, the project is within 300 feet of the mean high-tide line and can be appealed to the California Coastal Commission. As described in Section 2.1.5 above, the proposed land use is consistent with the Local Coastal Program Land Use Plan for the site. The project's consistency with various aspects of the LCP are discussed in *Sections 2.1.5 Local Coastal Program, 3.1 Land Use* and *3.2 Visual and Aesthetic Resources*.

#### 2.2.2 <u>Transportation Agency for Monterey County – Congestion Management Plan</u>

The Congestion Management Program (CMP) for Monterey County has an overall goal to manage traffic congestion and improve air quality. The Transportation Agency of Monterey County monitors the implementation of the CMP which contains policies intended to facilitate the coordination of land use, transportation, and air quality planning and implementation.

The program establishes an acceptable level of service (LOS) for roads in the network covered by the CMP, which includes all state highways and principal arterial streets. The long-range goal of the CMP is to achieve LOS C on all routes in the network. This long range goal should be balanced by lead agencies who may take into account unacceptable environmental or cost consequences. The applicable LOS standard for analyzing the project's impacts is that there should be no degradation below LOS D for urban roads operating at LOS D or better. The minimum LOS that the CMP permits is LOS E. A deficiency plan must be prepared for all roads that do not meet the minimum LOS E standard.

**Consistency:** The proposed project includes mitigation to reduce its significant intersection LOS and freeway segment LOS impacts to a less than significant level (refer to *Section 3.4 Transportation*). The project, therefore, is consistent with this policy.

#### 2.2.3 <u>Air Quality Management Plan for Monterey Bay Region</u>

The 2008 Air Quality Management Plan (AQMP) addresses the California Clean Air Act requirements and establishes the basis for meeting the 1990 Federal Clean Air Act Amendments. The AQMP was prepared using population and employment forecasts developed by the Association of Monterey Bay Area Governments (AMBAG). The 2008 AQMP is the current regional strategy for improving air quality. The AQMP proposes the adoption of transportation, mobile source, and stationary source controls on a variety of pollutant sources to provide improvements in air quality. The consistency of the proposed project with this regional plan is primarily a question of the consistency with the population/employment assumptions utilized in developing the Plan.

**Consistency:** The number of hotel rooms proposed by the project is consistent with the inventory accommodated in the 2008 Air Quality Management Plan.

#### 2.2.4 <u>Central Coastal Basin Water Quality Control Plan</u>

The Regional Water Quality Control Board has developed and adopted a Water Quality Control Plan Basin Plan for the Central Coastal Basin. The Plan is a master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the Central Coast region.<sup>5</sup> The Regional Board first adopted a complete water quality control plan in 1975 and the last major revision was adopted in 1994.

The Plan provides a program of actions designed to preserve and enhance water quality and to protect beneficial uses. The implementation portion of the Basin Plan includes descriptions of specific actions to be taken by local public entities and industries to comply with the policies and objectives of the Plan. These include measures for urban runoff management and agricultural

<sup>&</sup>lt;sup>5</sup> The 11,274 square mile Central Coastal Region encompasses all of Santa Cruz, San Benito, Monterey, San Luis Obispo, and Santa Barbara Counties as well as the southern one-third of Santa Clara County, and small portions of San Mateo, Kern and Ventura Counties.

wastewater management. As of June 2002, the Plan also includes an amendment which requires the identification of Total Maximum Daily Loads (TMDLs) for each water-body within the jurisdiction of the RWQCB. A TMDL defines the specified maximum amount of a pollutant which can be discharged in to the water-body from all combined sources. These water-body specific targets are considered necessary by the EPA in order to attain water quality standards in an impaired watercourse. No TMDL has been established for Monterey Bay.

**Consistency:** The proposed project will conform to the waste discharge requirements of the Regional Water Quality Control Board. Storm water runoff from the developed portions of the site would be routed to an on-site percolation system and a combination of the post construction storm water BMPs will be used to reduce post construction impacts from storm water runoff to a less than significant level (refer to *Section 3.5 Hydrology and Water Quality*).

### SECTION 3 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

- 3.1 LAND USE
- 3.1.1 <u>Setting</u>

#### 3.1.1.1 Background

The City of Sand City is a relatively small city located on the Monterey Peninsula. The City occupies a total area of 3.16 square miles, of which 347 acres are on land and 1,675 acres are in Monterey Bay. The City is bounded by the former site of the Fort Ord Military Base on the north, the City of Seaside on the east and south, and Monterey Bay on the west. The City's coastal frontage includes approximately 1.5 miles of coastline.

#### 3.1.1.2 Existing Land Uses

The 26.46-acre project site is located within the municipal boundary of the City of Sand City. The site fronts Monterey Bay, along the west side of SR 1, north of Tioga Avenue and is intersected by Playa Avenue. The project site consists of three properties including, the Sterling/Calabrese property, the McDonald property, and the City property formerly owned by Granite Construction (Assessor Parcel Numbers 011-12-001, -002, -005, and 011-501-016). The project site was historically used for sand mining operations and a concrete batch plant that are no longer active. Most of the site is currently undeveloped except for an outdoor construction/contractor storage area on the Sterling/Calabrese site and a coastal bike trail.

#### 3.1.1.3 Surrounding Land Uses

The land uses surrounding the project site include an undeveloped coastal beach and dunes to the north, SR 1 to the east, coastal beach and dunes south of Tioga Avenue, and Monterey Bay to the west. An aerial photograph showing the site and surrounding land uses is provided on Figure 3 on page 24.

#### 3.1.1.4 Local Coastal Program and 1996 Memorandum of Understanding (MOU)

In November 1972, California voters approved a ballot initiative known as Proposition 20, which called attention to the management of California's vast coastal resources. As a result, the Coastal Commission and six regional commissions were established to manage the coastal zone as a resource of statewide interest through permit control and preparation of a comprehensive Coastal Plan. The intent of the plan is "to preserve, protect, and where possible, restore the resources of the coastal zone for the enjoyment of the current and succeeding generations." The State Legislature passed the California Coastal Act of 1976 to implement recommendations found appropriate in the Coastal Plan. A key element in the Coastal Act of 1976 is that the bulk of the authority granted to the State and regional commissions by the Act was to be transferred to local governments through adoption and certification of "Local Coastal Programs." The Local Coastal Program (LCP) includes a local government's land use plans, zoning ordinance, zoning district maps, and other implementing actions which, when taken together, meet the requirements of and implement the provisions and policies of the Coastal Act. Each LCP should reflect the coastal issues and concerns of the local jurisdiction and must be consistent with the statewide policies of the Coastal Act. Once adopted, the LCP becomes legally binding on local governments and provides a permanent program for coastal protection. The adoption of the LCP also transfers permit authority, except in limited cases, to the local government.

The Land Use Plan is the most important component of the LCP. The Land Use Plan designates the types, location, and intensity of land and water uses, and presents applicable resource protection and development policies to accomplish Coastal Act objectives.

In April 1996, the City of Sand City and the former Sand City Redevelopment Agency entered into a Memorandum of Understanding (MOU) with the California Department of Parks and Recreation (CPDR) and the Monterey Peninsula Regional Park District (MPRPD) regarding the community's coastal land uses. The MOU recognizes that the Sand City Coastline is an integral part of the Monterey Bay State Seashore and that it possesses important recreational, trail linkage, open space and natural resource values, and visitor-serving potential. The MOU is intended to facilitate cooperation among the involved agencies to accomplish mutually beneficial objectives including:

- Preservation of ocean views from State Route 1;
- Restoration of sand dunes and other associated dune vegetation and habitat;
- Creation and preservation of a north/south habitat corridor for endangered and threatened species;
- Creation of a continuous north/south public pedestrian and bicycle trail linking Fort Ord and the Monterey Peninsula;
- Provision of appropriate open space and beach and dune access;
- Identification of an ongoing source of revenue to develop access facilities, restore dune lands and maintain and operate public lands; and
- Development of appropriate public and private land uses in Sand City's Coastline, including but not limited to visitor serving commercial and residential.

The project site is designated in the Land Use Plan for *Visitor-Serving Commercial* uses. This designation allows hotels, motels, vacation clubs/timeshares, public recreation areas, accessory shops (including gift shops, travel agencies, beauty shops, and health spas), food service establishments, service stations, recreation retail shops and services, campgrounds, recreational vehicle parks, and other recreational facilities operated as a business and open to the general public for a fee. The Land Use Plan also states that hotel uses shall not exceed 45 feet in height measured from existing grade [Policy 6.4.5(b)].

The Land Use Plan also includes service and circulation requirements for new development. The conformance of the project to these requirements is discussed in *Section 3.4 Transportation* and *Section 3.11 Utilities and Service Systems*.

#### 3.1.2.1 Site Constraints

The project site is located in an area of vacant and primarily undeveloped coastal beaches and dunes located west of SR 1. Physical conditions on or adjacent to the project site that might affect its suitability for specific land uses include the following:

- Monterey Bay and the coastal dunes on and near the site
- The presence of loud noise sources such as automobiles and trucks on SR 1

The potential for noise sources to impact development on the site is discussed in *Section 3.9 Noise*. Issues related to coastal erosion are discussed in detail in *Section 3.6 Geology, Seismicity, and Soils*.

#### 3.1.2 Land Use Impacts

#### 3.1.2.1 Thresholds of Significance

For the purposes of this EIR, a land use impact is considered significant if the project would:

- Substantially or adversely change the type or intensity of existing or planned land use in the area;
- Be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height;
- Conflict with established residential, recreational, educational, religious, or scientific uses of an area; or
- 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, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

#### 3.1.2.2 Conformance with Local Plans and Policies

The combined density for the three properties included in the project site under the City's certified Local Coastal Program (LCP) would allow as many as 745 units, subject to environmental constraints. The Memorandum of Understanding (MOU) reached by the City of Sand City, the California Department of Parks and Recreation (CDPR), and the Monterey Peninsula Regional Park District (M.P.R.P.D.) in 1996 supports 300 to 450 mixed hotel and visitor-serving units on the Sterling and McDonald properties. The proposed project at 342 units is consistent with the identified number of units for the site in both the LCP and MOU.

As stated in the LCP, the allowed densities can be reduced based on the physical constraints and environmental resources. These physical constraints include the coastal conditions, site topography, availability of water, and the presence of sensitive species. The project has incorporated some mitigation measures into its design to address the physical constraints of the site. The existing resources on the site, design considerations, and mitigation for these site constraints are discussed in the subsequent individual subject areas of this EIR.

The proposed buildings would not exceed the 45 foot height limit above existing grade established in the LCP for hotel uses. Although some of the proposed buildings on the site will exceed 45 feet from finished grade to roof-top, the buildings would not exceed 45 feet from existing grade because excavation is proposed on the site to allow the buildings to step down the proposed slopes on the site. The project's adherence to LCP policies regarding views of the Monterey Bay and Peninsula and building massing are discussed in greater detail in *Section 3.2 Visual and Aesthetic Resources*.

# **Impact LU-1:** The proposed project implements the existing land use designations for the project site and is consistent with the established land use goals of Sand City for the project area. (Less Than Significant Impact)

#### 3.1.2.3 Land Use Conflicts

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site; or 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project. Both of these circumstances are aspects of land use compatibility. Potential incompatibility may arise from placing a particular development or land use at an inappropriate

location, or from some aspect of the project's design or scope. Depending on the nature of the impact and its severity, land use compatibility issues can range from minor irritation and nuisance to potentially significant effects on human health and safety. The discussion below distinguishes between potential impacts from the proposed project upon people and the physical environment, and potential impacts from the project's surroundings upon the project itself.

#### Land Use Compatibility

As described previously, the project is located between undeveloped coastal beach and sand dunes to the north and south. State Route 1 (SR 1) is located east of the site and Monterey Bay is located west of the site. The project area has historically been used for industrial operations including sand mining and a concrete batch plant. The Sterling/Calabrese property is currently used as an outdoor construction/contractor storage area and is considered a blighted property by the City. The former industrial operations in the vicinity of the site have ceased operations. The property adjacent to the northern property line is planned for Public Recreation. South of Tioga Avenue, High Density Residential uses are planned along Sand Dunes Drive, and Public Recreation uses are planned along the coastline to the City limits.

The proposed project is consistent with the planned land uses in the vicinity of the project site. The proposed public parking on the City property (formerly Granite Construction) would provide a buffer between the proposed buildings on the project site and the future public recreation uses north of the site. A public restroom is proposed on the northeast corner of the site adjacent to the realigned coastal bike path. This restroom could be used by both the public accessing the Sand City coastline from the project site and visitors using the planned public recreation land uses north of the site. The proposed hotel rooms are also consistent with the land use designation for the three properties involved.

The proposed uses are consistent with Sand City's Local Coastal Program in terms of density limits, and consistent with the objectives of the MOU in terms of use, intensity, and location. The project site is one of three sites along the Sand City shoreline sanctioned by the MOU, for the types of land uses proposed by the project. The site was designated for development after a planning process that included the involvement of the public and interested agencies taking into account the overall needs of Sand City and the region, and the site has been certified for these types of uses by the Coastal Commission.

Design guidelines are included in the LCP for the purpose of ensuring the compatibility of development with its natural setting. The project would adhere to the height limit restrictions of 45 feet measured from existing grade contained in the Land Use Plan [Policy 6.4.5(b)]. Other land use compatibility issues are discussed in the relevant sections of this EIR, including *Section 3.2 Visual and Aesthetic Resources, Section 3.6 Geology, Seismicity, Soils, Section 3.7 Biological Resources,* and *Section 3.9 Noise*.

**Impact LU-2:** The proposed project is consistent with the Land Use Plan designation for the project site, and would be compatible with existing and planned land uses adjacent to the site. (Less Than Significant Impact)

#### 3.1.2.4 Loss of Open Space

Development of the proposed project will convert approximately 18.5 acres of the project site from public- and privately-owned open space to a resort hotel. The project will change vacant land with a natural character (although disturbed) to a site with a developed, urban character. The visual impacts of this change from open space to a resort hotel development are discussed in detail in *Section 3.2 Visual and Aesthetic Resources*. However, the site is not designated open space and has been planned for development for many years. The project would also replace a blighted contractor storage area on the 7.9 acre Sterling Property.

The proposed project is consistent with the land uses designated for the site by the LCP's Land Use Plan and the MOU. In formulating its overall coastal zone land use plan, one of the City's primary goals was to encourage greater public use of the shoreline. A variety of land uses, therefore, have been designated in the areas of the City west of SR 1 including Visitor-Serving Commercial, Public Recreation, Residential High Density, Visitor-Serving Residential Medium Density, Residential Medium Density, and Public Facilities. Amenities proposed by the project include public restrooms, public parking, bike path connections, and a lifeguard station which will encourage the use of public recreation areas north and south of the project site. The MOU mentioned in Section 3.1.2.2 of this EIR has allowed the park agencies to purchase most of the area west of Highway 1 for public open space even though it is zoned for other uses.

**Impact LU-3:** Although the proposed project would result in development of existing open space, the site is not designated open space and has been planned for development for many years. Publicly-owned open space areas are located adjacent to the site, and the project proposes public amenities to provide greater access to these areas. (Less Than Significant Impact)

#### 3.1.3 <u>Conclusion</u>

- **Impact LU-1:** The proposed project implements the existing land use designations for the project site and is consistent with the land use goals of Sand City for the project area, and the certified LCP and MOU. (Less Than Significant Impact)
- **Impact LU-2:** Although the proposed development is different than the existing land uses adjacent to the site, it is consistent with the Land Use Plan designation for the project site, is compatible with existing and planned land uses adjacent to the site, and it would also eliminate the current blighted conditions on the Sterling property portion of the site. (Less Than Significant Impact)
- **Impact LU-3:** Although the proposed project would result in development of existing open space, the site is not designated open space and has been planned for development for many years. Publicly-owned open space areas are located adjacent to the site, and the project proposes public amenities to provide greater access to these areas. (Less Than Significant Impact)

#### 3.2 VISUAL AND AESTHETIC RESOURCES

The City of Sand City's Local Coastal Program's Land Use Plan (LCP) policies 5.3.1 through 5.3.13 provide standards and guidelines for new shoreline development that are intended to implement the City's goal of preserving and enhancing visual resources in the coastal zone. This section discusses visual and aesthetic aspects of the proposed project with respect to the LCP standards. In assessing the project's impacts, this section addresses both the impacts on scenic views and the compatibility of the project's design with its surroundings.

The analysis of the project's impacts on scenic views is based on a view corridor simulation. The project's aesthetic impacts are evaluated based on its compatibility with the natural setting according to policies set forth in the LCP.

#### 3.2.1 <u>Setting</u>

#### 3.2.1.1 Visual Character of Site

The project site is mostly undeveloped and consists of uneven sand dunes partly covered with nonnative iceplant. The Sterling/Calabrese site is currently used as an outdoor construction/contractor storage area. Stockpiles of sand, gravel and other construction materials are present on this portion of the site. Concrete erosion protection, approximately 40 feet in height, is present on the site along the beach zone. The site is bounded by coastal beach and sand dunes to the north, SR 1 to the east, Tioga Avenue to the south and Monterey Bay to the west. Photos 1 through 7 illustrate the visual character of the site.

#### 3.2.1.2 Views of Site

The site can be seen from SR 1, the coastal bike trail, boats on the Monterey Bay, along the shoreline, as well as across the Peninsula in and around the City of Monterey. The most prominent views of the site are from southbound SR 1. The natural characteristics of the site that can be viewed from various perspectives are the sand dunes, beach and surf zone, and the non-native ice plant. The site is also partially developed with the coastal bike trail which is currently located on the northeast portion of the site.<sup>6</sup> The site's western boundary has been altered by concrete erosion protection installed for the previous sand mining operations on the southern portion of the site.

The views from SR 1, for motorists traveling south, include the Monterey Bay, the Peninsula in the distance, and the site's sand dunes covered in ice plant in the foreground (refer to Photo 7). Views of the Sterling/Calabrese site are partially blocked by a cyclone fence with wooden slats (refer to Photo 5). The site is less visible for motorists traveling northbound due to the elevation of Sand Dunes Drive and the Tioga Avenue overcrossing.

<sup>&</sup>lt;sup>6</sup> Views from the bike trail are considered subordinate to formal LCP policies due to an amendment adopted in 1996.



Photo 1 - View of the project site looking west from the coastal bike trail.



Photo 2 - View of the project site looking north from the coastal bike trail.

PHOTOS 1 AND 2



Photo 3 - View of the southern portion of the project site. Concrete erosion protection is shown on the right side of the photo.



Photo 4 - View of the Sterling/Calabrese site from Tioga Avenue.

PHOTOS 3 AND 4



Photo 5 - View of the project site looking north from the Tioga Avenue overpass.



Photo 6 - View of construction storage area on the Sterling/Calabrese site from Tioga Avenue.

PHOTOS 5 AND 6



Photo 7 - View of the project site looking west from the eastern project boundary near SR 1.

#### PHOTO 7

#### 3.2.2 <u>Visual and Aesthetic Resources Impacts</u>

#### 3.2.2.1 Thresholds of Significance

For the purposes of this EIR, a visual and aesthetic resources impact is considered significant if the project would:

- Substantially conflict with the established Local Coastal Program visual resource or design policies;
- Remove or substantially alter an important scenic or aesthetic resource as required by the LCP;
- Substantially block significant existing views of scenic vistas or resources; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

#### 3.2.2.2 Local Coastal Program's Visual Resources Policies

The LCP designation for the site is *Visitor-Serving Commercial*. Development on the site due to its location in the coastal zone is subject to the limitations of the policies contained in the LCP. The LCP contains thirteen policies (5.3.1-5.3.13) that apply to new development, all of which are intended to implement the City's overarching visual resources goal as stated in Policy 5.3.1:

"Views of Sand City's coastal zone shall be enhanced and protected through regulation of siting, design, and landscaping of all new development in the coastal zone, adjacent to Highway One (on both the east and west) in order to minimize the loss of visual resources."

In the LCP, view corridors are established in various locations along the shoreline based upon existing views of the ocean and the Monterey Peninsula. Three designated view corridors from southbound SR 1 cross the project site (refer to Figure 12). The LCP also states that stationary views, such as vista points, are a valuable alternative to view corridors for the protection of visual resources.<sup>7</sup>

#### 3.2.2.3 Impacts to Views

#### **Specific LCP View Corridor Policies**

#### View Corridors

The LCP Policy 5.3.2 states that views of Sand City's coastal zone, Monterey Bay and the Monterey Peninsula shall be protected through view corridors, vista points, development height limits, and dune restoration areas as shown on Figure 12. According to the LCP, the site contains three view corridors from southbound SR 1, one vista point, as well as one dune preservation, stabilization, and restoration area.

In order to assess the project's visual impacts and its compatibility with the LCP, view corridor simulations were prepared for the project (refer to Figures 13-16). The policy states that the designated view corridors are three southbound views over development on properties between Tioga Avenue and the former dump site [LCP Policy 5.3.2(c)].

<sup>&</sup>lt;sup>7</sup>City of Sand City. <u>Local Coastal Program Land Use Plan.</u> 1982. Page 56.



LCP Policy 5.3.3(b) states that view corridors on the site are considered "views over development." According to the LCP, views over development:

"shall be provided by limiting the maximum height of development to protect views of the sweep of beach and dunes, Monterey Bay, and the Monterey Peninsula. Each development proposed in these corridors shall include an analysis prepared by a qualified professional that demonstrates compliance with this policy, and approved developments will be required to comply with the terms of such analysis. In measuring southbound views, viewpoints shall be assumed to be from the center point of the corridor at an elevation four (4) feet above freeway grade in the southbound traffic lane, to a point at the Coast Guard Station in Monterey. North of Tioga Avenue, approved development shall not intrude upon, or block an unobstructed view of more than one-third of the lineal distance across the Bay, measured as a straight line between the freeway viewpoint and the landward edge of the Coast Guard Breakwater."

For ease of description, the three view corridors on the site are identified in this discussion as View Corridor A, B, and C proceeding north to south on the project site (refer to Figure 13). The views shown on Figures 14 through 16 reflect the viewpoint from the center of the view corridor on southbound SR 1 from a vantage point four feet above the travel lane surface looking west toward the Coast Guard Station in Monterey. In accordance with the LCP Policy 5.3.3(b) for views over development, the development height limit within the view corridor represents one-third the lineal distance across the bay, measured as a straight line between each viewpoint and the landward edge of the Coast Guard Breakwater.

View Corridor A is approximately 150 feet wide and looks through the northern portion of the site (refer to Figures 13 and 14). As shown on Figure 14, View Corridor A would remain unobstructed with development of the proposed project. Buildings proposed on the site would be visible from southbound SR 1, however, they would not encroach into the view corridor identified in the LCP (refer to Figures 12-14).

View Corridor B is approximately 250 feet wide and looks through the center of the site. Buildings proposed on the site would obstruct View Corridor B. Portions of the Lobby and Conference center entry towers, portico, roof; and the Hotel 1 building roof and architectural elements would block approximately 50 percent of this view (refer to Figure 15). It should be noted that some portions of these buildings would be below the view corridor height limit and would provide additional lateral views of the bay.

View Corridor C is approximately 100 feet wide and looks through the southern portion of the site. View Corridor C is currently entirely blocked by an existing cyclone fence with slats. Views of Monterey Bay within the identified view corridor would not be further impacted by the proposed project (refer to Figure 16). Buildings would be visible above the fence in some areas outside of the specified LCP view corridor. The project would also discontinue use of the Sterling property as a construction and storage yard which the City considers a visual blight to the coastline and is currently visible from SR 1 outside of the specified view corridor.

# **Impact VA-1:** The proposed project would block portions of the designated view corridors on the site identified in the City's Local Coastal Program, which would be a significant visual impact. (Significant Impact without Mitigation)








# Project Design

The LCP includes additional design standards for new development in the City. The following LCP design standards would be applicable to the proposed project:

- Encourage mass and height variations within coastal zoning limits in order to provide view corridors and to generate, "lighter," "airier" buildings. Encourage building designs that avoid overly bulky buildings that could significantly block view corridors [LCP Policy 5.3.4(b)];
- Require colors compatible with the natural setting and the use of earth tones [LCP Policy 5.3.4(c)];
- Encourage dune building or berming around parking and roadway areas [LCP Policy 5.3.4(g)];
- Encourage layout of roads and paths to conform to natural and manmade contours [LCP Policy 5.3.4(i)];
- Encourage use of underground and/or under-building parking [LCP Policy 5.3.4(o)]; and
- Encourage the layout of the building and parking so that the structure serves as a screen between parking and water. If parking is exposed directly to water, encourage the use of natural or manmade buffers [LCP Policy 5.3.4(r)].

The project, as proposed, incorporates many of the design standards identified in the LCP. Although some building heights on the site (as proposed) would not adhere to the specific blockage criteria in the LCP, the mass and heights of the buildings do vary, consistent with the LCP design standards. In addition, the project includes reconstruction of the existing sand dune on the southeast portion of the site to provide a buffer between SR 1 and the proposed development. The proposed roadways on the site have also been designed to conform to the natural contours of the site.

The architectural character and siting of the proposed project are based on preserving the view corridors over and through the site as noted in the LCP, and to take advantage of the natural fall of the site topography towards the ocean. Buildings are for the most part proposed to be terraced and built into the natural slopes of the site and, where no slopes exist, the project includes creation of berms and dune formations to simulate natural contours of the coastal dunes in the vicinity.

Parking on the site is primarily located in covered or below grade spaces and in surface spaces along the proposed Sand Dunes Drive extension, Tioga Avenue, and in the proposed surface parking lot on the City property (formerly Granite Construction). With the exception of the proposed City property (formerly Granite Construction) parking lot, the proposed surface parking spaces would be mostly blocked from the water by the proposed buildings.

Based on the above discussion, the project would generally adhere to the intent of the design standards in the LCP. The proposed project is not anticipated to result in a significant visual or aesthetic impact based on inappropriate design. It should be noted that the LCP also requires a project to obtain a design permit following review by the City's Design Review Committee (DRC).

**Impact VA-2:** Based on the project's incorporation of design elements identified in the LCP, the project would not result in significant visual or aesthetic impacts related to design elements of the project. (Less Than Significant Impact)

# **On-Site Public Vista Point**

The existing designated public vista point on the western portion of the site (shown on Figure 12) would be improved by the project. The project proposes to re-contour the site and provide an

elevated dune in the general location of the existing vista, and therefore, the project would maintain and improve this vista point. For this reason, the project would not result in an impact to this resource. The project also proposes an additional vista point at the west end of the proposed parking lot on the City property formerly owned by Granite Construction (refer to Figure 4).

# Vista Point at Tioga Drive

An additional designated vista point is located at the terminus of Tioga Avenue (refer to Figure 12). The project proposes parking spaces along the south side of Tioga Avenue. A lifeguard station and public restrooms would be constructed on the northern side of the terminus of Tioga Avenue. These improvements are located north and south of the existing/designated vista point and would provide opportunities for additional access and views of the bay and Monterey Peninsula.

Impact VA-3:The proposed project would not impact the existing vista point on the site.<br/>The project proposes to provide amenities near the existing vista point located<br/>adjacent to the site at Tioga Avenue. (Beneficial Impact)

# **Light and Glare Impacts**

The project would introduce additional light in the area. There is currently no development on the site that requires nighttime lighting and no development is present on the north or south boundary of the site. The proposed buildings would have interior lighting, visible from the project exterior, and outdoor lighting associated with roadways, walkways, parking, landscaping, and signs. It is also anticipated that lighting would be provided on the bike paths through the site, in the amphitheater, pool/spa area, and in the City property (formerly Granite Construction) parking area. This outside lighting would incrementally increase the level of illumination in the immediate area, including SR 1. The City will require any outdoor lighting on the site to be directed in a way to avoid significant glare or light spillover onto adjacent land uses.

The proposed project would not be constructed with highly reflective materials. The proposed buildings would be concrete and wood structures using exterior wood and earth-toned stone siding. The project has been designed to reduce the massing of the buildings by stepping into the slopes on the site. Varied roof elements and terraces have also been used to articulate the building mass. The proposed articulation of the buildings and architectural materials used would minimize glare from the structures.

Impact VA-4:The proposed buildings and outdoor lighting for the proposed project would<br/>be designed, located, and directed in a manner to avoid light and glare<br/>impacts to surrounding land uses. (Less Than Significant Impact)

#### 3.2.3 Mitigation and Avoidance Measures for Visual and Aesthetic Resources Impacts

# 3.2.3.1 Avoidance Measures Required of the Project

The following avoidance measure will be conditioned by the City to ensure lighting on the site avoids light and glare impacts from the project:

# AM VA-4.1:A Lighting Plan and Management Program will be reviewed by the Design<br/>Review Committee (DRC) and approved by the Community Development<br/>Department (CDD) prior to the issuance of any building permits for the

project. The CDD shall confirm that the lighting is directed on-site and does not create glare.

#### 3.2.3.2 *Mitigation Measures Proposed by the Project*

The following measures are proposed by the applicant to reduce the visual impacts of the project:

MM VA-1.1:	The project includes a bike path along the ocean side of the project site to allow public access to views of the Monterey Peninsula and Monterey Bay.
MM VA-1.2:	The project also proposes extending View Corridor A in the City's LCP 100 feet further south to shift the center of the view corridor.
MM VA-1.3:	The project proposes to improve the existing vista point on the site and improve the vista point at the western terminus of Tioga Avenue.
MM VA-1.4:	The project will reduce building heights on the site within View Corridor B to comply with the City's LCP. The Hotel 1 building's roof will be reduced in height by at least four feet and the Hotel 1 architectural roof elements (refer to Figure 13) will be reduced in height by at least 2.5 feet and shall not exceed 78.5 feet NGVD <sup>8</sup> . The Lobby and Conference center entry towers will be reduced by at least eight feet and the entry towers and roofline shall not exceed 74.5 feet NGVD. The Lobby and Conference center portico shall also be reduced by at least one foot.

#### 3.2.4 <u>Conclusion</u>

Impact VA-1:	Implementation of the proposed mitigation measures would reduce significant
	view blockage in View Corridor B on the site. The reduction in building
	heights in the Hotel 1 building and Lobby and Conference center would
	ensure the project's compliance with the Sand City LCP. (Less Than
	Significant Impact with Mitigation)

- Impact VA-2:Based on the project's incorporation of design elements identified in the LCP<br/>and final review by the City's Design Review Committee (DRC), the project<br/>would not result in significant visual or aesthetic impacts related to design<br/>elements of the project. (Less Than Significant Impact)
- Impact VA-3:The proposed project would not impact the existing vista point on the site.<br/>The project proposes to provide amenities near the existing vista point located<br/>adjacent to the site at Tioga Avenue. (Beneficial Impact)

# **Impact VA-4:** The proposed buildings and outdoor lighting for the proposed project would be designed, located, and directed in a manner to avoid light and glare impacts to surrounding land uses. (Less Than Significant Impact)

<sup>&</sup>lt;sup>8</sup> National Geodetic Vertical Datum.

# 3.3 POPULATION AND HOUSING

# 3.3.1 <u>Setting</u>

According to the Association of Monterey Bay Area Governments (AMBAG) Monterey Bay Area 2008 Regional Forecast, the total population in Sand City in 2020 is forecast to be 1,498 residents. The City's 2002-2017 General Plan estimated a population of 1,295 residents and 587 residential units at buildout of the plan. The current forecast by AMBAG represents more population and housing growth in the City than previously forecasted or estimated in the existing General Plan.

AMBAG forecasts approximately 2,933 jobs within Sand City by 2020. The City provides substantially more employment opportunities than housing units. The current forecast represents a job to housing ratio of 4.37 jobs per housing unit. The General Plan currently estimates approximately 154 employees within the City for the project site's land use designation.

# 3.3.2 <u>Population and Housing Impacts</u>

# **3.3.2.1** Thresholds of Significance

For the purposes of this EIR, a population and housing impact is considered significant if the project would:

- 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); or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

The project proposes vacation and resort units, rather than permanent residences. Nevertheless, the proposed development would attract additional population to Sand City. The proposed project does not represent "growth" within the City which is not currently anticipated in the General Plan and LCP. Development of the project would create new business within the City and would involve the expansion of infrastructure including roads, water lines, and sanitary sewer lines. The project would not induce substantial population or employment growth exceeding planned growth in the City's General Plan. The direct impacts of this growth are discussed individually in the respective sections of this EIR.

The project site does not contain any existing residential development and, therefore, the project would not displace people or housing.

Impact PH-1:The proposed project would not result in significant population and housing<br/>impacts. (Less Than Significant Impact)

# 3.3.3 <u>Mitigation and Avoidance Measures for Population and Housing Impacts</u>

No mitigation measures have been identified or are required to reduce population and housing impacts to a less than significant level.

# 3.3.4 <u>Conclusion</u>

Impact PH-1:The proposed project would not result in significant population and housing<br/>impacts. (Less Than Significant Impact)

# 3.4 TRANSPORTATION

The following discussion is based on a Traffic Impact Analysis prepared by *Fehr & Peers Associates, Inc.* in April 2012. A copy of this report is included as Appendix A in this EIR.

# 3.4.1 <u>Setting</u>

# 3.4.1.1 Regional Access

Regional access to the project site is provided by State Route 1 and State Route 218 which are described below and shown on Figure 17.

<u>State Route 1 (SR 1)</u> is a four- to six-lane state freeway located east of the project site. State Route 1 extends northward through Santa Cruz and southward through Monterey and Carmel. North of Fremont Boulevard, State Route 1 includes three lanes in each direction. South of Fremont Boulevard, State Route 1 is two lanes in each direction. Access to the project site is provided via the State Route 1 interchanges at Fremont Boulevard and State Route 218.

<u>State Route 218 (SR 218)</u> is a four-lane state arterial connecting State Route 1 with State Route 68 through Del Rey Oaks. It is known as Canyon Del Rey Boulevard within the study area. State Route 218 connects with Sand Dunes Drive south of the project site.

# 3.4.1.2 Local Access

Local access to the site is provided via the roadways described below and shown in Figure 17.

<u>Del Monte Boulevard</u> is a four-lane north-south arterial extending from Fremont Avenue through the City of Seaside, connecting to the City of Monterey.

<u>Fremont Boulevard</u> is a four-lane north-south arterial through the City of Seaside, extending from State Route 1 to the City of Monterey.

<u>California Avenue</u> is a two-lane north-south collector that extends from Contra Costa Street to the Fremont Boulevard/State Route 1 interchange. Between Tioga Avenue and Playa Avenue, California Avenue passes through the Sand Dollar shopping center. This segment is not a public street. A future street connection between Tioga Avenue and Playa Avenue is planned within the existing Transportation Agency for Monterey County (TAMC) right-of-way.

<u>Tioga Avenue</u> is a two-lane east-west collector that runs from the beach to Del Monte Avenue, crossing over State Route 1.

<u>Playa Avenue</u> is a two-lane east-west collector that runs from a T-junction with Metz Road to the east beyond Fremont Boulevard.

<u>Sand Dunes Drive</u> is a two-lane north-south local street that extends from Tioga Avenue to the south past Humboldt Street. Sand Dunes Drive currently terminates at the south end of the project site.



# 3.4.1.3 Existing Transit Service

Monterey-Salinas Transit (MST) provides fixed-route bus service and shuttle service in Monterey County including Sand City. The MST Edgewater Transit Exchange is located approximately 0.25 miles from the project site at Playa Avenue and Metz Road. The Edgewater Transit Exchange is served by eight bus routes with operating hours to the transit exchange as described below.

<u>Route 2X</u> provides bus service between the Lodge at Pebble Beach and the Salinas Transit Center. During weekdays, Route 2X operates from 5:15 am to 8:15 am and from 4:40 pm to 6:50 pm with two to three trips in each direction. No service is provided on weekends.

<u>Route 8</u> provides bus service between Ryan Ranch and the Edgewater Transit Exchange. During weekdays, Route 8 operates between 6:25 am and 5:25 pm at 30 to 45 minute headways. No service is provided on weekends.

<u>Route 9</u> provides bus service between Monterey Transit Plaza and Edgewater Transit Exchange. During weekdays, Route 9 provides service between 5:45 am and 11:25 pm at 30 to 45-minute headways. During weekends, Route 9 provides service between 6:15 am and 7:15 pm with 60-minute headways.

<u>Route 10</u> provides service between the Monterey Transit Plaza and Edgewater Transit Exchange. During weekdays, Route 10 provides service between 6:40 am and 11:50 pm at 30 to 45-minute headways. During weekends, Route 10 provides service between 6:45 am and 8:45 pm at 60-minute headways.

<u>Route 11</u> provides service between the Edgewater Transit Exchange and Carmel. During weekdays service is provided from 6:10 am to 10:10 am and 3:10 pm to 7:10 pm at 60-minute headways. No service is provided on weekends.

<u>Route 16</u> provides service between the Marina Transit Center and Monterey. Weekdays, service is provided from 6:00 am to 11:35 pm at 60-minute headways. Weekend service is provided from 7:15 am to 11:40 pm at 60-minute headways.

<u>Route 20</u> provides bus service between Monterey Transit Plaza and Salinas Transit Center with a stop at the Edgewater Transit Exchange. Weekday and weekend service is provided between 6:00 am and 11:30 pm at 30-minute headways.

<u>Route 55</u> operates between Monterey Transit Plaza and San José Diridon Station. During weekdays, Route 55 operates from 5:10 am to 10:00 am and 3:20 pm to 7:40 pm with two to three trips in each direction. On weekends, Route 55 operates from 5:35 am to 11:00 am and from 3:25 pm to 7:45 pm with two trips in each direction.

# 3.4.1.4 Existing Pedestrian and Bicycle Facilities

Pedestrian facilities are comprised of sidewalks, multi-purpose bicycle/pedestrian paths, crosswalks, and pedestrian signals. Sidewalks and crosswalks are provided at all of the study intersections, with the exception of the two SR 218/SR 1 Ramps intersections. At these two intersections, the sidewalks are discontinuous, and there are no crosswalks. All of the studied signalized intersections provide pedestrian signals.

Bicycle facilities are comprised of bike paths (Class I), lanes (Class II), and routes (Class III). Bike paths are paved trails that are separated from roadways. Bike lanes are lanes on roadways designated for bicycle use by striping, pavement legends, and signs. Bike routes are roadways designated for bicycle use by signs only.

In the study area, a bike and pedestrian path extends from the intersection of Metz Road/Playa Avenue under SR 1 to the beach, where it continues north to meet with the Monterey Bay Coastal Trail near the Fremont Boulevard/SR 1/Monterey Road/Ord Avenue intersection. North of this intersection, the Coastal Trail continues to Castroville. The Coastal Trail is discontinuous between Playa Avenue and Tioga Avenue, but restarts at Tioga Avenue and parallels Sand Dunes Drive to the southern city border and beyond to Carmel.

Bike lanes are provided on California Avenue, Playa Avenue between California Avenue and Metz Road, Metz Road, and Tioga Avenue.

# 3.4.1.5 Existing Roadway Conditions

# Study Intersections and Roadway Segments

The operations of the study intersections were evaluated for weekday morning (AM) and evening (PM) peak hour traffic conditions. Peak traffic conditions generally occur on weekday mornings between 7:00 a.m. and 9:00 a.m. and evenings between 4:00 p.m. and 6:00 p.m. Intersection operations were evaluated for the one hour during this period with the highest measured traffic volumes. Peak-hour traffic counts were collected in December 2011 at all of the study intersections. The study intersections and roadway segments are listed below and shown on Figure 17.

# Intersections

- 1. Fremont Boulevard/SR 1/Monterey Road/Ord Avenue
- 2. California Avenue/Playa Avenue
- 3. Del Monte Boulevard/Playa Avenue
- 4. Fremont Boulevard/Playa Avenue
- 5. California Avenue/Tioga Avenue
- 6. Del Monte Boulevard/Tioga Avenue
- 7. Del Monte Boulevard/Broadway Avenue
- 8. SR 218/SR 1 Southbound Ramp
- 9. SR 218/SR 1 Northbound Ramp
- 10. Del Monte Boulevard/Canyon Del Rey Boulevard

# Roadway Segments

- State Route 1 Del Monte Avenue to State Route 218
- State Route 1 State Route 218 to Sand City / Ord Village (Fremont / California)
- State Route 1 Sand City / Ord Village to Ord Main Entrance
- Del Monte Boulevard Fremont Boulevard to Playa Avenue
- Del Monte Boulevard Playa Avenue to Tioga Avenue

#### Methodology for 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.

#### Signalized Intersections

The LOS methodology for signalized intersections described in Chapter 16 of the 2000 Highway Capacity Manual (HCM) published by the Transportation Research Board was applied in this analysis.<sup>9</sup> This methodology evaluates a signalized intersection's operations based on "average control delay."<sup>10</sup> The Synchro analysis software was used for all intersections in this analysis. Table 3.4-1 summarizes the relationship between delay and LOS for signalized intersections. Sand City's minimum acceptable level of service for signalized intersections is LOS D. The City of Seaside's minimum acceptable level of service for signalized intersections is LOS C.

	Table 3.4-1           Signalized Intersection Level of Service Definitions							
Level of Service	Description	Average Control Delay Per Vehicle (sec.)						
А	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less						
В	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0						
С	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						
Е	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.	Greater than 80.0						

#### Unsignalized Intersections

Unsignalized intersections (all-way stop controlled and side-street stop controlled) are evaluated using the Highway Capacity Manual – 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

<sup>&</sup>lt;sup>9</sup> It should be noted that the new 2010 HCM is currently available; however, it has not been widely adopted by jurisdictions for their traffic analyses since many LOS software programs have only recently been updated. The difference in analysis results for standard intersection evaluation would be negligible between the 2000 HCM and 2010 and unlikely to change the conclusions of this report.

<sup>&</sup>lt;sup>10</sup> Average Control Delay includes the time for initial deceleration delay, queue move-up time, stopped delay, and final acceleration.

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 3.4-2 summarizes the relationship between delay and LOS for unsignalized intersections.

The City of Sand City's acceptable LOS for unsignalized intersections is LOS D. The City of Seaside's minimum acceptable LOS for all-way stop controlled intersections is LOS C, and for two-way stop controlled intersections, the minimum acceptable LOS for the worst approach is LOS E.

Table 3.4-2           Unsignalized Intersection Level of Service Definitions							
Level of Service	Description	Average Control Delay Per Vehicle (sec.)					
А	Little or no delay.	10.0 or less					
В	Short traffic delays.	10.1 to 15.0					
С	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: 2000 Hig	hway Capacity Manual (Transportation Research Board, 2000).						

# **Existing Intersection Levels of Service**

The existing lane configurations and the peak-hour turning movement volumes were used to calculate the level of service for each of the 10 study intersections during the AM and PM peak hour. The results of the existing intersection analysis are summarized in Table 3.4-3. Unless otherwise noted in Table 3.4-3, the study intersections are under the City of Sand City's jurisdiction.

One study intersection operates at an unacceptable LOS E under existing conditions during the AM and PM peak hour. The Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue intersection operates at LOS E with an average delay of 71.4 and 64.7 seconds during the AM and PM peak hours, respectively.

Table 3.4-3           Existing and Background Intersection Levels of Service									
	Traffic	Pook	Exis	sting	Backg	Background			
Intersection	Control	Hour	Average Delay <sup>1</sup>	LOS <sup>2</sup>	Average Delay <sup>1</sup>	LOS <sup>2</sup>			
Fremont Blvd./SR 1/	Signal	AM	71.4	Е	105.0	F			
Monterey Rd./Ord Ave.*	Signal	PM	64.7	Е	132.2	F			
California Avenue/ Playa	All-Way	AM	8.0	А	8.0	А			
Avenue	Stop	PM	19.2	С	21.1	С			
Del Monte Blvd./Playa	Signal	AM	13.7	В	13.1	В			
Avenue**	Sigilar	PM	21.0	С	20.8	С			
Fremont Boulevard/	Signal	AM	9.0	А	9.3	А			
Playa Avenue**	Signal	PM	17.1	В	17.0	В			
California Avenue/Tioga	All-Way	AM	8.0	A	8.2	A			
Avenue	Stop	PM	24.1	C	23.6	В			

Table 3.4-3           Existing and Background Intersection Levels of Service									
	Troffic	Dool	Exis	sting	Background				
Intersection	Control	Hour	Average Delay <sup>1</sup>	LOS <sup>2</sup>	Average Delay <sup>1</sup>	LOS <sup>2</sup>			
Del Monte Blvd./	Signal	AM	12.4	В	13.6	В			
Tioga Avenue**	Signal	PM	21.4	С	21.9	С			
Del Monte Blvd./	Signal	AM	14.2	В	16.0	В			
Broadway Avenue**	Sigilai	PM	11.9	В	14.7	В			
State Route 218/ State	Signal	AM	30.4	С	33.5	С			
Route 1 SB ramps*	Signal	PM	13.5	В	15.5	В			
State Route 218/ State	Side-street	AM	28.7	D	31.6	D			
Route 1 NB ramps*	stop	PM	19.5	С	22.8	С			
Del Monte Blvd./	Signal	AM	30.0	С	31.7	С			
Canyon Del Rey Blvd.*	Sigliai	PM	35.3	D	42.3	D			

Notes:

<sup>1</sup>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 are shown.

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

\*Denotes Caltrans intersection.

\*\*Denotes City of Seaside intersection.

Sources: Fehr & Peers, January 2012.

#### Methodology for Roadway and Freeway Segment Levels of Service

Roadway segment evaluations are typically used to establish the number of travel lanes in each direction required to serve projected daily or peak-hour traffic volumes. For streets in developed areas with numerous cross streets, intersections govern the operation of the roadway system because the traffic control devices (i.e. traffic signals or stop signs) control vehicle movements, cause delay, and ultimately establish the vehicle capacity. Arterial roadway segment levels of service are derived by comparing the hourly volume to the threshold values (based on roadway type) shown in Table 3.4-4.

Table 3.4-4           Level of Service Threshold Volumes for Undivided Arterials <sup>1</sup>								
	Maximum Hourly Volume (both directions) <sup>2</sup>							
Roadway Type	LOS A	LOS B	LOS C	LOS D	LOS E			
4-Lane Undivided Arterial (with left- turn lanes)	1,600	1,900	2,200	2,400	2,700			
Notes:	roadway charac	teristics Actual t	hreshold volum	es for each lev	el of service			

<sup>1</sup>All volumes are approximate and assume ideal roadway characteristics. Actual threshold volumes for each level of service listed above may vary depending on a number of factors including roadway curvature and grade, intersection or interchange spacing, percentage of trucks and other heavy vehicles, lane widths, signal timing, on-street parking, amount of cross street traffic, pedestrians, driveway spacing, etc.

<sup>2</sup>Non-directional peak hour volumes are normally about 10 percent of the daily volume. Directional split is assumed 60/40. Source: *City of Seaside General Plan*, 2003.

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 (veh/mi/ln). Table 3.4-5 presents the range of densities for freeway mainline segment levels of service.

Table 3.4-5       Freeway Mainline LOS Criteria						
Level of Service	Description	Density <sup>1</sup>				
А	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11.0				
В	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	11.1 to 18				
С	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	18.1 to 26.0				
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	26.1 to 35.0				
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	35.1 to 45.0				
F	Represents a breakdown in flow.	**				
Note: <sup>1</sup> Density **Deman Source: Transpo	in passenger vehicles per mile per lane (veh/mi/ln). Id flow exceeds capacity. rtation Research Board, <i>Highway Capacity Manual</i> , 2000.					

The acceptable level of service for roadway and freeway segments 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. State facilities, such as mainline segments and ramp junctions of State Route 1 (SR 1) are under the jurisdiction of Caltrans. Caltrans' LOS standard for freeway segments is between LOS C and LOS D and maintenance of the existing measure where a State-operated facility is operating at less than LOS D (seconds of delay for intersections and density for freeway segments). Caltrans' *Transportation Concept Report for State Route 1* identifies LOS D as an acceptable operational standard for State Route 1 in 2025. The Transportation Agency for Monterey County (TAMC) is the Congestion Management Agency for Monterey County and identifies LOS D as the acceptable LOS in their planning documents (*Regional Transportation Plan* and the *Nexus Study for a Regional Development Impact Fee*) for their regional facilities, which includes SR 1. For the purpose of this EIR, LOS D was used as the minimum acceptable LOS for SR 1.

# Existing Roadway and Freeway Segment Levels of Service

Volumes on SR 1 south of the SR 218 interchange were collected by Caltrans in 2010. Freeway ramp intersection data collected in 2011 was used for the traffic analysis to determine the freeway segment volumes between the SR 218 interchange and the Fort Ord Main Entrance by balancing the on-ramp and off-ramp data. Existing roadway segment volumes during the morning and evening commute periods were collected on Del Monte Boulevard in December 2011.

The results of the segment analysis are presented in Table 3.4-6. The calculation sheets for the roadway segment analyses are included in Appendix A of this EIR. As shown in Table 3.4-6, the following segments of SR 1 operate at LOS E or below during either the AM or PM peak hour:

- Northbound SR 1 from Route 218 to Fremont (PM peak hour)
- Southbound SR 1 from Route 218 to Fremont (AM peak hour)
- Northbound SR 1 from Route 218 to Del Monte (PM peak hour)
- Southbound SR 1 from Route 218 to Del Monte (AM peak hour)

The segments of Del Monte Boulevard north and south of Playa Avenue operate at LOS A during both the AM and PM peak hours.

Table 3.4-6           Existing and Background Roadway and Freeway Segment Levels of Service									
	Facility		Exist	ing	Background				
Roadway Segment	Туре	Peak Hour	Volume	LOS	Volume	LOS			
SR 1 from Fremont Blvd to	6-lane	AM	2,288	В	2,797	В			
Ord Main Entrance (NB)	Freeway	PM	4,502	С	5,170	D			
SR 1 from Fremont Blvd. to	6-lane	AM	5,092	D	5,527	D			
Ord Main Entrance (SB)	Freeway	PM	2,878	В	3,609	С			
SR 1 from SR 218 to	4-lane	AM	1,953	В	2,477	С			
Fremont Blvd. (NB)	Freeway	PM	3,843	Е	4,519	Е			
SR 1 from SR 218 to	4-lane	AM	4,347	Е	4,797	Е			
Fremont Blvd. (SB)	Freeway	PM	2,457	С	3,187	D			
SR 1 from SR 218 to Del	4-lane	AM	1,981	В	2,500	С			
Monte Blvd. (NB)	Freeway	PM	3,898	Е	4,583	Е			
SR 1 South from SR 218 to	4-lane	AM	4,409	Е	4,862	Е			
Del Monte Blvd. (SB)	Freeway	PM	2,492	С	3,224	D			
Del Monte Blvd. from Playa	4-lane	AM	683	А	756	А			
Avenue to Fremont Blvd.	Arterial	PM	718	А	824	А			
Del Monte Blvd. from Tioga	4-lane	AM	1,050	А	1,123	А			
Avenue to Playa Avenue	Arterial	PM	1,189	A	1,295	А			
Sources: Caltrans 2010, Fehr & Peer	rs 2012.								

# 3.4.1.6 Background Roadway Conditions

Background conditions are comprised of existing traffic volumes from counts plus estimated traffic generated by approved developments in the area. Background roadway conditions are provided for informational purposes only and are not used to determine impact conclusions under CEQA (see Section 3.4.2.1).

# Background Traffic Volumes

Traffic volumes for background conditions were estimated by adding existing volumes to traffic generated by approved but not yet constructed projects in the vicinity of the site. A list of approved, but not yet constructed projects was obtained from the City of Sand City, the City of Seaside, City of Marina, City of Del Rey Oaks, and Monterey County. Table 3.4-7 summarizes the approved developments included under background conditions.

Table 3.4-7         Approved Developments							
Destant Name	Peak Hou	ır Trips					
Project Name	rroject Name City Description						
Design Center (Phase I)	Sand City	13,054 sf retail	30	106			
Monterey Bay Shores Ecoresort	Sand City	218 Hotel rooms, 138 Condominium units	117	155			
The Dunes on Monterey Bay (Phase I)	Marina	Mixed-Use Development	1,958	4,282			
Marina Heights	Marina	1,050 Residential Units	756	1,013			
Marina Station	Marina	Mixed-Use Development	2,276	2,605			
Cypress Knolls	Marina	606 Senior D.U., 50 Assisted Living D.U., 116 Multi-family D.U.	299	396			
Airport Business Park	Marina	175,000 S.F.	82	81			
CSUMB N. Campus Housing	Marina	429 D.U.	172	211			
Downtown Housing	Marina	532 Multi-family D.U.	1,150	1,982			
UC MBEST	Marina		1,155	1,813			
MPC Satellite Campus	Marina	400 students	84	84			
FORA Business Park	Marina	43,381 S.F.	46	45			
Marina High School	Marina	1,380 students	704	248			
Marina Joint Use Facility	Marina	500 participants	N/A	332			
K-8 School	Marina	850 students	451	128			
Marina Golf Course	Marina	110 Acres Golf Course/Recreation 350 Hotel rooms	258	278			
2 Upper Ragsdale	City of Monterey	66,173 S.F. Office/Research	93	93			
2969 Monterey Salinas Hwy.	City of Monterey	59,520 S.F. Office/Research	85	85			
3001 Monterey Salinas Hwy.	City of Monterey	25,932 S.F. Office/Research	42	43			
Corral de Tierra	Monterey County	99,970 S.F. Retail	95	235			
Rancho Canada	Monterey County	182 Single-family D.U., 64 Multi-family D.U., 35 condo D.U.	184	233			
September Ranch	Monterey County	95 Single-family D.U.	83	111			
West Broadway Specific Plan (Phase I & II)	City of Seaside	74,660 S.F. of Mixed-Use	379	489			
City Center	City of Seaside	42,000 sf Shopping center	43	102			
Seaside Resort	City of Seaside	<ul><li>340 Resort hotels</li><li>170 Timeshare units</li><li>150 Single-family homes</li></ul>	267	362			
Monterey Veterans Cemetery	City of Seaside	164 acres	28	138			
Total Trips			10,837	15,650			
Notes: D.U. = dwelling units, S.	F. = square feet						

Sources: City of Sand City, City of Marina, City of Monterey, Monterey County, City of Del Rey Oaks, and City of Seaside (January 2012).

#### Background Roadway Network

No study area roadway improvements were assumed to occur as a result of implementation of the background projects.

#### **Background Intersection Levels of Service**

Background intersection LOS results are summarized in Table 3.4-3. During the AM peak hour, the Fremont Boulevard/SR 1/Monterey Road/Ord Avenue intersection will worsen from LOS E to LOS F with the addition of traffic from approved projects. The projected average delay at this intersection will be 105.0 seconds per vehicle. All other study intersection will operate at LOS D or better during the AM peak hour.

During the PM peak hour, the Fremont Boulevard/SR 1/Monterey Road/Ord Avenue intersection will operate at LOS F with an average delay of 132.2 seconds. All other study intersections will continue to operate at LOS D or better during the PM peak hour.

#### **Background Roadway and Freeway Segment Levels of Service**

Trips from the approved, but not yet constructed projects were added to existing volumes to determine background roadway and freeway segment levels of service. The results of the roadway and freeway segment analysis are shown in Table 3.4-6. With the addition of approved project traffic, the same study roadway segments will operate at LOS E or worse during the AM or PM peak hour.

As shown in Table 3.4-6, the following segments of SR 1 operate at LOS E or below during either the AM or PM peak hour:

- Northbound SR 1 from SR 218 to Fremont (PM peak hour)
- Southbound SR 1 from SR 218 to Fremont (AM peak hour)
- Northbound SR 1 from SR 218 to Del Monte (PM peak hour)
- Southbound SR 1 from SR 218 to Del Monte (AM peak hour)

The segments of Del Monte Boulevard north and south of Playa Avenue operate at LOS A during both the AM and PM peak hours.

# 3.4.2 <u>Transportation Impacts</u>

#### 3.4.2.1 Thresholds of Significance

For the purposes of this EIR, a transportation impact is considered significant if the project would cause:

#### Sand City Impact Criteria

- Degradation below LOS D for any non-freeway streets and any signalized intersections in Sand City; or
- Degradation below LOS D for unsignalized intersections and the intersection conditions justify installation of a traffic signal; or

# Seaside Impact Criteria

- Degradation below LOS C for intersections operating at LOS C or better in Seaside; or
- An increase in the average delay of more than 2.0 seconds at intersections operating at LOS D; or
- An increase in the average delay of more than 1.0 second at intersections operating at LOS E or LOS F; or
- Degradation of an unsignalized intersection from LOS E or better for two-way stop control, or LOS C or better for all-way stop control, to an unacceptable level (LOS F for two-way stop control or LOS D for all-way stop control); or
- Congestion to be exacerbated at a two-way stop controlled intersection currently operating at LOS F or an all-way stop control intersection operating at LOS D, and the Manual on Uniform Traffic Control Devices (MUTCD) peak-hour signal warrant is met; or

# Freeway Impact Criteria

- Freeway segment operations to deteriorate from an acceptable level (LOS D) to an unacceptable level (LOS E or worse); or
- Freeway segment operations to deteriorate from the existing unacceptable LOS; or
- Unsignalized intersections to operate at unacceptable service levels (LOS E or worse) and the MUTCD peak-hour volume signal warrant is met.

# Other Transportation Impact Criteria

- Conflict with adopted plans or policies supporting alternative transportation; or
- Create an operational safety hazard; or
- Result in inadequate emergency access; or
- Result in inadequate parking capacity.

# **3.4.2.1** *Project Roadway Conditions*

The proposed project is divided into two phases. Phase I of the project would develop a 139-room condominium hotel, and Phase II would add 95 condominium hotel units and a 108-unit resort hotel. The hotel would include a 16,800-square foot conference and wellness center, a 14,100-square foot spa, and three restaurants totaling approximately 19,700 square feet. The impacts that would result from Phase I (139 units) and Phase II Project Buildout (342 units total) are analyzed separately.

# **Project Trip Estimates**

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 the first step, the amount of traffic entering and exiting the site was estimated on a daily and peak-hour basis. In the second step, the direction vehicles use to approach and depart the site was estimated. The trips were then assigned to specific street segments and intersection turning movements in the third step. The results of the process for this analysis are described in the following sections.

# Trip Generation

Trip generation was calculated using rates from the Institute of Transportation Engineers (ITE) *Trip Generation (8th 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 a number of similar uses.

The rates provided for residential condominiums/townhouses, low-rise apartments, and resort hotels were compared to determine which rate was most appropriate for the proposed condominium hotel. Refer to Appendix A for a detailed discussion of the trip generation methodology used for this project.

Trip generation estimates for the proposed project are presented in Table 3.4-8. Upon buildout of Phases I and II, the proposed project will generate approximately 3,669 daily trips, 194 morning peak hour trips (112 inbound, 82 outbound) and 279 evening peak hour trips (141 inbound and 138 outbound).

Table 3.4-8											
Project Trip Generation											
	Size	Tı	ip Rates	5			Nui	nber of '	Trips		
Land Use	(units or	Daily	AM	РМ	Daily	AN	A Peak	Hour	PM	Peak l	Hour
	<b>1,000 ft</b> <sup>2</sup> )	Dany	ANI	1 1/1	Dany	In	Out	Total	In	Out	Total
Phase I											
Condo Hotel	139	6.56	0.33	0.46	912	28	18	46	26	38	64
Phase II											
Condo	95	6 5 6	0.33	0.46	623	10	12	31	18	26	11
Hotel <sup>1</sup>	,,,	0.50	0.55	0.40	025	1)	12	51	10	20	++
Resort Hotel <sup>1</sup>	108	6.56	0.33	0.46	708	22	14	36	20	30	50
High-						4.0				• •	
Turnover $P_{astaurant^2}$	6.57	127.15	11.52	10.92	835	40	36	76	44	28	72
Quality											
Restaurant <sup>2</sup>	6.57	89.95	0.81	7.49	591	3	2	5	33	16	49
		Phase 1	I Subtot	al Trips	2,810	85	66	151	116	102	218
		Ne	ew Proje	ct Trips	3,669	112	82	194	141	138	279

Notes:

<sup>1</sup>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.

 $^{2}$  The proposed project includes three restaurants totaling 19,700 square feet. The hotel trip generation accounts for one of the restaurants. Trip generation for the other two restaurants is included above.

Sources: ITE Trip Generation, 8th Edition (Restaurants); SANDAG Traffic Generators (Hotel); Fehr & Peers, 2012.

#### Trip Distribution and Trip Assignment

Project trip distribution was based on the location of supporting land uses in the vicinity of the project site, and patterns used in previous traffic studies in the area. Most trips generated by the project are expected to use SR 1 to destinations north and south of the project site with the majority of these trips expected to go south to the attractions near Monterey. The remaining project trips will be spread along the local and regional surface street network. Trips generated by the proposed project were assigned to the roadway system based on the directions of approach and departure described above. The proposed trip distribution and assignment for the project is shown graphically in Appendix A.

# **Project Intersection Levels of Service**

Project-generated trips were added to existing traffic volumes to estimate volumes under project conditions. Intersection service levels were calculated for existing and project conditions (Phase I and Phase II). The results of the project LOS for Phases I and Project Buildout (Phases I and II) are summarized in Table 3.4-9.

The results of the intersection level of service show that measured against the City of Sand City, City of Seaside, and Caltrans LOS standards, one intersection would be significantly impacted by the proposed project during one or both peak hours.

Table 3.4-9											
Summary of Existing and Project Intersection Levels of Service											
Intersection	Traffic	Peak	Existi	ng	Proje Phase	ct e I	Project Buildout (Phase I and II)				
	Control	Hour	Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>			
Fremont Blvd./SR 1/	Signal	AM	71.4	Е	71.8	Ε	72.9	Ε			
Monterey Rd./Ord Ave.*	Signal	PM	64.7	Е	65.0	Ε	66.9	Е			
California Avenue/	All-Way	AM	8.0	Α	8.1	Α	8.6	А			
Playa Avenue	Stop	PM	19.2	С	19.6	С	25.3	D			
Del Monte Blvd./Playa	Signal	AM	13.7	В	13.7	В	13.7	В			
Avenue**	Signai	PM	21.0	С	21.0	С	19.0	В			
Fremont Boulevard/	Signal	AM	9.0	Α	9.1	Α	9.4	Α			
Playa Avenue**	Signai	PM	17.1	В	17.2	В	17.5	В			
California Avenue/	All-Way	AM	8.0	Α	8.0	Α	8.1	Α			
Tioga Avenue	Stop	PM	24.1	С	25.4	D	31.2	D			
Del Monte Blvd./	Signal	AM	12.4	В	13.4	В	13.7	В			
Tioga Avenue**	Signai	PM	21.4	С	21.9	С	22.0	С			
Del Monte Blvd./	Signal	AM	14.2	В	14.2	В	13.3	В			
Broadway Avenue**	Signai	PM	11.9	В	11.9	В	11.3	В			
State Route 218/ State	Signal	AM	30.4	С	31.9	С	34.5	С			
Route 1 SB ramps*	Signal	PM	13.5	В	14.2	В	15.9	В			
State Route 218/ State	Side-	AM	28.7	D	29.6	D	32.0	D			
Route 1 NB ramps*	street stop	PM	19.5	С	20.0	С	21.2	С			
Del Monte Blvd./	Signal	AM	30.0	C	30.0	С	30.3	С			
Canyon Del Rey Blvd.*	Signal	PM	35.3	D	35.6	D	36.6	D			

Notes:

<sup>1</sup>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 are shown.

<sup>2</sup>LOS calculations performed using the 2000 Highway Capacity Manual delay methodology for signalized and unsignalized intersections.

\*Denotes Caltrans intersection.

\*\*Denotes City of Seaside intersection.

**Bold** text denotes a significant impact.

Reported intersection delays are not considered accurate above 180 seconds of delay and therefore were not reported. It is also assumed that drivers would find alternate routes to access their destinations when delays exceed three minutes.

Source: Fehr & Peers, 2012.

Both phases of the project would result in significant traffic impacts at the Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue intersection during the AM and PM peak hours.

# **Impact TRANS-1:** Phase I and Project Buildout would result in significant LOS impacts at the Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue during both peak hours. (Significant Impact without Mitigation)

# Project Roadway Segment Levels of Service

The roadway segment analysis for Project Conditions is shown in Table 3.4-10. The same four freeway segments that operate unacceptably under existing conditions would continue to operate unacceptably under Phase I and Project Buildout.

Table 3.4-10								
Summary of Existing and Project Roadway Segment Levels of Service								
Intersection	Traffic	Peak	Existing		Project Phase I		Project Buildout (Phase I and II)	
	Control	Hour	Vol.	LOS	Vol.	LOS	Vol.	LOS
SR 1 from Fremont Blvd to	6-lane	AM	2,288	В	2,293	В	2,309	В
Ord Main Entrance (NB)	Freeway	PM	4,502	C	4,511	С	4,537	С
SR 1 from Fremont Blvd. to	6-lane	AM	5,092	D	5,099	D	5,120	D
Ord Main Entrance (SB)	Freeway	PM	2,878	В	2,885	В	2,913	В
SR 1 from SR 218 to	4-lane	AM	1,953	В	1,953	В	1,961	В
Fremont Blvd. (NB)	Freeway	PM	3,843	E	3,843	Ε	3,855	E
SR 1 from SR 218 to	4-lane	AM	4,347	E	4,347	Ε	4,353	Е
Fremont Blvd. (SB)	Freeway	PM	2,457	C	2,457	С	2,467	С
SR 1 from SR 218 to Del	4-lane	AM	1,981	В	1,993	В	2,026	В
Monte Blvd. (NB)	Freeway	PM	3,898	E	3,908	Ε	3,954	Е
SR 1 South from SR 218 to	4-lane	AM	4,409	E	4,416	Е	4,442	Е
Del Monte Blvd. (SB)	Freeway	PM	2,492	С	2,507	С	2,547	С
Del Monte Blvd. from Playa	4-lane	AM	683	Α	688	Α	703	Α
Avenue to Fremont Blvd.	Arterial	PM	718	Α	722	Α	733	Α
Del Monte Blvd. from Tioga	4-lane	AM	1,050	Α	1,051	Α	1,065	Α
Ave. to Playa Ave.	Arterial	PM	1,189	A	1,190	A	1,211	Α
Bold text denotes a significant impact. Source: Caltrans 2010, Fehr & Peers 2012.								

#### Phase I

The proposed project would result in significant traffic impacts at the following four freeway segments under Phase I Project Conditions:

- Northbound SR 1 from SR 218 to Fremont Boulevard (during the PM peak hour, the project would exacerbate LOS E operations)
- Southbound SR 1 from SR 218 to Fremont Boulevard (during the AM peak hour, the project would exacerbate LOS E operations)
- Northbound SR 1 from SR 218 to Del Monte Boulevard (during the PM peak hour, the project would exacerbate LOS E operations)
- Southbound SR 1 from SR 218 to Del Monte Boulevard (during the AM peak hour, the project would exacerbate LOS E operations)

#### Project Buildout (Phases I and II)

The addition of project traffic from Phase II would impact the same four freeway segments as under Phase I. All roadway segments would operate at the same LOS under Phase II Project Buildout Conditions as under Phase I Project Conditions.

Impact TRANS-2:	The proposed project would result in significant impacts to Northbound SR 1 from SR 218 to Fremont Boulevard during the PM peak hour. (Significant Impact without Mitigation)
Impact TRANS-3:	The proposed project would result in significant impacts to Southbound SR 1 from SR 218 to Fremont Boulevard during the AM peak hour. (Significant Impact without Mitigation)
Impact TRANS-4:	The proposed project would result in significant impacts to Northbound SR 1 from SR 218 to Del Monte Boulevard during the PM peak hour. (Significant Impact without Mitigation)
Impact TRANS-5:	The proposed project would result in significant impacts to Southbound SR 1 from SR 218 to Del Monte Boulevard during the AM peak hour. (Significant Impact without Mitigation)

#### **Project vs. Background Intersection Levels of Service Comparison**

An analysis of project conditions versus background levels of service is included in this EIR for informational purposes. Intersection service levels were calculated for background and project conditions (Phase I and Phase II). The results of the project LOS for Phases I and Project Buildout (Phases I and II) are summarized in Table 3.4-11.

Table 3.4-11								
Summary of Background and Project Intersection Levels of Service								
Intersection	Traffic Control	Peak Hour	Background		Project Phase I		Project Buildout (Phase I and II)	
			Delay <sup>1</sup>	LOS <sup>2</sup>	<b>Delay</b> <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>
Fremont Blvd./SR 1/	Signal	AM	105.0	F	105.4	F	>180.0	F
Monterey Rd./Ord Ave.*	Signal	PM	132.2	F	132.2	F	>180.0	F
California Avenue/	All-Way	AM	8.0	Α	8.1	Α	8.8	А
Playa Avenue	Stop	PM	21.1	С	21.5	С	34.8	D
Del Monte Blvd./Playa	Signal	AM	13.1	В	13.1	В	13.0	В
Avenue**		PM	20.8	С	21.7	С	23.2	С
Fremont Boulevard/	Signal	AM	9.3	Α	9.3	Α	9.2	А
Playa Avenue**		PM	17.0	В	17.0	В	18.3	В
California Avenue/	All-Way	AM	8.2	Α	8.2	Α	8.3	А
Tioga Avenue	Stop	PM	23.6	В	24.9	С	30.4	D
Del Monte Blvd./	Signal	AM	13.6	В	13.7	В	13.1	В
Tioga Avenue**	Signal	PM	21.9	С	22.9	С	24.8	С
Del Monte Blvd./	C'	AM	16.0	В	16.1	В	14.5	В
Broadway Avenue**	Signal	PM	14.7	В	15.5	В	15.8	В
State Route 218/ State	Signal	AM	33.5	С	35.2	D	47.2	D
Route 1 SB ramps*	Signal	PM	15.5	В	28.7	С	34.8	С

Table 3.4-11           Summary of Background and Project Intersection Levels of Service								
Intersection	Traffic	Peak Hour	Backgro	ound	Project Phase I		Project Buildout (Phase I and II)	
	Control		Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>
State Route 218/ State	Side-	AM	31.6	D	32.6	D	35.3	Е
Route 1 NB ramps*	street stop	PM	22.8	C	23.4	С	25.0	С
Del Monte Blvd./	Signal	AM	31.7	C	31.9	С	32.1	С
Canyon Del Rey Blvd.*	Sigilar	PM	42.3	D	42.7	D	42.9	D
Notes: <sup>1</sup> Whole intersection weighted av vehicle). For side-street stop co	verage total delay	/ for signal tions, delay	ized and all-way	y stop-contr vement are	rolled intersect shown.	ions (expre	essed in secon	ds per

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

\*Denotes Caltrans intersection.

\*\*Denotes City of Seaside intersection.

Reported intersection delays are not considered accurate above 180 seconds of delay and therefore were not reported. It is also assumed that drivers would find alternate routes to access their destinations when delays exceed three minutes. Source: Fehr & Peers, January 2012.

#### Project vs. Background Roadway and Freeway Segment Levels of Service Comparison

An analysis of project conditions versus background levels of service is included in this EIR for informational purposes. Roadway and freeway segment service levels were calculated for background and project conditions (Phase I and Phase II). The results of the project LOS for Phases I and Project Buildout (Phases I and II) are summarized in Table 3.4-12.

Table 3.4-12 Summary of Background and Project Roadway Segment Levels of Service								
Intersection	Traffic	Peak	Background		Project Phase I		Project Buildout (Phase I and II)	
	Control	Hour	Vol.	LOS	Vol.	LOS	Vol.	LOS
SR 1 from Fremont Blvd to	6-lane	AM	2,797	В	2,802	В	2,818	В
Ord Main Entrance (NB)	Freeway	PM	5,170	D	5,179	D	5,204	D
SR 1 from Fremont Blvd. to	6-lane	AM	5,527	D	5,534	D	5,555	D
Ord Main Entrance (SB)	Freeway	PM	3,609	С	3,616	С	3,645	С
SR 1 from SR 218 to	4-lane	AM	2,477	С	2,477	С	2,484	C
Fremont Blvd. (NB)	Freeway	PM	4,519	Е	4,519	E	4,531	Е
SR 1 from SR 218 to	4-lane	AM	4,797	Е	4,797	Е	4,804	E
Fremont Blvd. (SB)	Freeway	PM	3,187	D	3,187	D	3,197	D
SR 1 from SR 218 to Del	4-lane	AM	2,500	С	2,512	С	2,545	С
Monte Blvd. (NB)	Freeway	PM	4,583	Е	4,593	Е	4,639	E
SR 1 South from SR 218 to	4-lane	AM	4,862	Е	4,869	Е	4,895	Е
Del Monte Blvd. (SB)	Freeway	PM	3,224	D	3,239	D	3,279	D
Del Monte Blvd. from Playa	4-lane	AM	756	Α	761	Α	761	Α
Avenue to Fremont Blvd.	Arterial	PM	824	Α	828	Α	828	Α
Del Monte Blvd. from Tioga	4-lane	AM	1,123	Α	1,124	Α	1,124	Α
Ave. to Playa Ave.	Arterial	PM	1,295	Α	1,296	A	1,296	A
Bold text denotes a significant impact. Source: Caltrans 2010, Fehr & Peers, 2012								

# 3.4.2.2 Other Transportation Facilities

# **Bicycle, Pedestrian, and Transit Access**

The proposed project is not expected to increase biking or transit demand to a level where it could not be accommodated by existing or planned facilities.

Sidewalks are proposed to be provided throughout the project for pedestrian connectivity. As shown on the conceptual site plan (refer to Figure 4), there are sufficient sidewalks and crossings provided. There are no dead-end sidewalks, and where possible pathways are provided through the development to facilitate walkability of the project site. The proposed sidewalks and pathways would be designed to be compliant with the Americans with Disabilities Act (ADA) requirements. The provision of crosswalks on the south and west legs of the Tioga Avenue and Sand Dunes Drive intersection is recommended to provide connectivity to existing sidewalks on the south side of Tioga Avenue encourage walking and bicycling by resort guests and surrounding users.

**Impact TRANS-6:** The proposed project would provide adequate pedestrian and bicycle facilities for site access and site circulation and would not conflict with adopted plans or policies providing for alternative transportation modes. (**No Impact**)

# Parking

As proposed, the project would provide 697 parking spaces throughout the project site in surface lots, underground parking garages, and on Tioga Avenue. An additional 48 public parking spaces would be provided (43 spaces on the City property formerly owned by Granite Construction and five spaces on Tioga Avenue) that were not included in the project total due to their location seaward of the 50year coastal recession setback line (refer to Section 3.6 Geology, Soils, and Seismicity and Figure 18). One of these proposed parking spaces on Tioga Avenue not included in the project total due to the coastal recession setback line also conflicts with the City's existing brackish water wells and will be removed from the project plans prior to the issuance of a building permit for the project. An additional 117 resort parking spaces would be located seaward of the 50-year coastal recession setback line. 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 and one space per 50 square feet of restaurant floor area. 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 located in the coastal zone, the project must provide an additional ten percent of the project's total required parking for public parking, which may be located on-site or at another location that would benefit public access. Refer to Appendix A for details regarding the parking calculations for the site.

Table 3.4-13           Project Parking Requirements						
Use	Size	Spaces Required	Spaces Proposed			
Hotel & Condo Hotel	342 rooms	342				
$Spa^1$	14,100 square feet	24				
Restaurants <sup>2</sup>	13,133 square feet	263				
	Subtotal	629				
Additional Public Parking Required 63						
Total 692 697						
<sup>1</sup> Assumes that 50% of the spa patron <sup>2</sup> Assumes parking for 1/3 of the rest	ns will walk to the spa from other loca aurant space is accounted for in the h	ations on site. otel parking rate.				

Source: City of Sand City Municipal Code, Fehr & Peers, January 2012.

As shown in Table 3.4-13, the City's code requires that the project provide 692 spaces which means the site will have five (5) more parking spaces than required; however, 73 spaces according to the site plan are tandem spaces requiring multiple units to share a single tandem parking space, if the project were to receive a two-space credit for each tandem space. In order to ensure adequate public parking the project applicant should prepare a parking management plan that provides the following information:

- Proposed valet operations, including the location of spaces which will be reserved for valet use.
- Proposed operating plan for large events such as conferences or weddings. If such events are
  anticipated, it may be necessary to provide a shuttle from a remote parking lot to the project site
  to ensure that the public parking on Tioga Avenue, along Sand Dunes Drive, and the City
  property (formerly Granite Construction) remains available for general public use.
- Location of spaces reserved for specific uses, such as the spa, restaurants, or hotel guests.
- A revised circulation plan.
- Proposed additional spaces on the resort site that could be reserved to meet the public parking requirements of the project if planned public spaces are lost due to erosion.
- Proposed additional resort spaces to serve visitors in the event coastal recession reduces the availability of parking spaces.

Impact TRANS-7:The proposed project would have adequate parking capacity and would<br/>comply with Sand City parking standards. (Less Than Significant Impact)

# 3.4.3 <u>Mitigation and Avoidance Measures for Transportation Impacts</u>

# **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. The new program has been adopted and became effective in August 2008.

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 impacts on Monterey County roads and fund the fair share portion of the improvements based on land use type. The funding will be combined with other sources to fund county traffic mitigation improvements.

#### **Transportation Demand Management (TDM) Program**

The project proposes a number of TDM measures to reduce the number of vehicle trips and parking demand generated by the project. Some of the TDM measures include on-demand shuttle service for resort guests, incorporation of a public transit stop to facilitate employee and visitor use of local public transit, and provision of designated van pool parking spaces for employees that carpool to and from work. The identified trip generation for the project did not assume any vehicle trip reductions to account for the proposed TDM measures. The successful implementation of a TDM program will further help to reduce the project's intersection and freeway impacts.

# 3.4.3.1 Intersection LOS Mitigation Measures

The proposed project would result in transportation impacts at the Fremont Boulevard/State Route 1/ Monterey Road/Ord Avenue intersection under Existing Plus Phase I and Project Buildout Conditions.

#### **Fremont Boulevard**

Caltrans approved the State Route 1 (SR 1) Project Study Report (PSR) in 2002, which identified improvements for the intersection at the Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue intersection. Currently, these improvements are not fully funded, though the project is included in the Regional Development Impact Fee adopted by TAMC in August 2008. 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, and widening State Route 1 in the vicinity of the Fremont Boulevard interchange. The project volumes were modified to account for the changes in travel patterns from the PSR improvements. Intersection levels of service with the PSR improvements were calculated and are summarized in Table 3.4-14. The PSR improvements would mitigate the intersection impacts at the Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue intersection to less-than-significant levels.

Table 3.4-14           Mitigated Project Intersection Levels of Service						
Intersection	Improvement	Peak	Project (Phase I)		Project Buildout (Phase I & II)	
		nour	<b>Delay</b> <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>
Fremont Boulevard/State Route	Implement PSR/TAMC	AM	9.2	А	9.3	А
1/Monterey Road/Ord Avenue*	Regional Impact Fee	PM	9.8	А	9.9	Α
Notes:						

<sup>1</sup>Whole intersection weighted average total delay for signalized and all-way stop-controlled intersections (expressed in seconds per vehicle). Worst approach control delay for two-way stop-controlled intersections (expressed in seconds per vehicle).

<sup>2</sup>LOS calculations performed using the 2000 *Highway Capacity Manual* delay methodology for signalized and unsignalized intersections. \*Denotes Caltrans intersection **MM TRANS-1.1:** The proposed project will be required to pay the Regional Development Impact Fee as a fair share contribution to regional transportation improvements to mitigate the project's impact at the Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue intersection to a less than significant level.

#### 3.4.3.2 Roadway Segment Mitigation Measures

The proposed project would result in significant impacts at the following four roadway segments:

- Northbound State Route 1 from State Route 218 to Fremont Boulevard
- Southbound State Route 1 from State Route 218 to Fremont Boulevard
- Northbound State Route 1 from State Route 218 to Del Monte Boulevard
- Southbound State Route 1 from State Route 218 to Del Monte Boulevard

#### SR 1 from SR 218 to Fremont Boulevard

Implementation of the State Route 1 PSR improvements includes widening of State Route 1 to six lanes between Fremont Boulevard and State Route 218. Funding for this improvement is not currently in place though the project is included in the Regional Development Impact Fee program adopted by TAMC in August 2008. Widening the State Route 1 segment between Fremont Boulevard and State Route 218 will improve operation to LOS C under both Phase I and Project Buildout Conditions.

MM TRANS-2.1 &The proposed project will be required to pay the Regional DevelopmentTRANS-3.1:Impact Fee as a fair share contribution to regional transportationimprovements to mitigate the project's impact to this freeway segment to a<br/>less than significant level.

# SR 1 from SR 218 to Del Monte Boulevard

Capacity improvements along State Route 1 south of State Route 218 would be necessary to mitigate the impacts on the northbound segments between State Route 218 and Del Monte Boulevard. No improvements are currently identified for this segment of SR 1. Widening State Route 1 to six lanes would improve operations at these locations to LOS C or better under both Phase I and Project Buildout Conditions. No improvements are currently planned for this segment of SR 1, however, freeway segment impacts can be mitigated with contribution to the Regional Development Impact Fee adopted by TAMC.

MM TRANS-4.1 &The proposed project will be required to pay the Regional DevelopmentTRANS-5.1:Impact Fee as a fair share contribution to regional transportationimprovements to mitigate the project's impact to these freeway segments to a<br/>less than significant level.

#### 3.4.4 <u>Conclusion</u>

# Impact TRANS-1:Implementation of the proposed mitigation measures would reduce the project<br/>impacts to one intersection to a less than significant level. (Less Than<br/>Significant Impact with Mitigation)

Impact TRANS-2: Impact TRANS-3:	Implementation of the proposed mitigation measure would reduce the project's impact to the segment of State Route 1 between State Route 218 and Fremont Boulevard to a less than significant level. (Less Than Significant Impact with Mitigation)
Impact TRANS-4: Impact TRANS-5:	Implementation of the proposed mitigation measure would reduce the project's impact to the segment of State Route 1, south of State Route 218 to a less than significant level. (Less Than Significant Impact with Mitigation)
Impact TRANS-6:	The proposed project would provide adequate pedestrian facilities for site access and site circulation. ( <b>No Impact</b> )
Impact TRANS-7:	The proposed project would have adequate parking capacity and would comply with Sand City parking standards. (Less Than Significant Impact)

# 3.5 HYDROLOGY AND WATER QUALITY

The following discussion is based in part on a Coastal Recession and Wave Run-up Evaluation prepared for the project by *Haro Kasunich & Associates, Inc.* in July 2007 and updated in February 2012. A copy of these reports are included in Appendix B of this EIR. The following discussion is also based in part on a Preliminary Storm Drainage Report prepared by EDA Design Professionals in March 2009. A copy of this report is included in Appendix C of this EIR.

# 3.5.1 <u>Setting</u>

# 3.5.1.1 Ocean Wave Run-up and Coastal Flooding

The project site directly fronts on the Pacific Ocean and is exposed to ocean wave impact and resulting wave run-up. The ocean wave run-up has the potential to cause coastal flooding to varying and relative degrees along the Sand City coastline. Natural coastal erosion and resultant landward shoreline, bluff and dune edge recession will cause ocean wave run-up to come further inland over time. Rising sea level will cause wave run-up to reach higher elevations in the future than it does presently.

Concrete slurry, coastal armor, earth and rip-rap fill, and historical excavation and grading have substantially altered the coastal bluff character, morphology and position in the project area. These human influences have substantially altered the ocean wave run-up and the extent of coastal flooding. The landward topographic elevation that wave run-up flows up to, and the distance inland wave run-up extends, is a function of the slope, porosity, roughness and composition of the materials the waves are flowing across. The velocity of the waves, their erosive power, and the force they apply upon the ground surface, vegetation, buildings, and any other objects they encounter are a function of the configuration and nature of these objects. Due to the variability of the existing coastline in the project area, there is no uniform wave run-up elevation along the project site's coastline. In the area just north of Tioga Avenue, in the gently sloping area of back beach and sand dunes, debris and stranded driftwood, were observed that indicated recent wave run-up had occurred to at least an elevation of +18 national geodetic vertical datum.<sup>11</sup> Higher wave run-up has occurred where the steeply sloping concrete slurry coastal armor exists along the coastline.

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 platform and backshore sand dune to an elevation dependent on many factors. One possible wave run-up scenario would be long period waves on the order of 20 to 25 seconds. A more probable and more destructive wave run-up scenario at the project site would be similar to the 1982-83 El Niño event where for approximately six weeks, back to back winter storms impacted the local coastline. These storms caused increased bluff toe erosion and maximum wave run-up.

# 3.5.1.2 Stormwater Drainage

Within Sand City, runoff from rainfall events either drains to an existing storm drain system in the Old Town area, to interceptor tanks and percolation systems in the vicinity of Playa Avenue, or percolates into dune sands. There are no creeks, rivers, or other natural waterways within the boundaries of Sand City. The only other water bodies of concern are Roberts Lake/Laguna Grande and Monterey Bay. Storm water runoff from approximately half of the project site has an

<sup>&</sup>lt;sup>11</sup> An elevation of zero NGVD is very close to Mean Sea Level.

unobstructed path to Monterey Bay. The project site is currently estimated to discharge runoff of 17.2 cubic feet per second (cfs) to Monterey Bay. The remainder of the runoff is collected in several depressions in the dunes where it can percolate to groundwater.

# Water Quality

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.

Several storm drainage systems serve different portions of Sand City. The West End area (Old Town) drains to the 90-inch storm drain which discharges stormwater runoff to the surf zone of Monterey Bay adjacent to Bay Avenue. The Sand Dollar Center and the Edgewater Center both have percolation systems which have been in place since 1996. These storm drain systems drain to interceptor tanks which remove the petroleum products through the use of absorbent pillows. There are two 70,000 gallon interceptor tanks for the Sand Dollar Center and Tioga Avenue; two, 53,000 gallon interceptor tanks for California Avenue and Playa Avenue; and five, 5,000 gallon tanks in the Edgewater Center. The Sand Dollar Center and the California/Playa Avenue systems drain to a percolation system consisting of a 2,500 foot, 48-inch perforated pipe in Playa Avenue. Each of the interceptor tanks in the Edgewater Center have separate percolations systems.

The interceptor tanks are serviced twice yearly with the absorbent pillows replaced, debris removed, and the tanks measured to determine the amount of accumulated sediment. When the sediment becomes excessive, the tanks are pumped to remove the sediment.

# **Regulatory 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.

The State of California's Porter-Cologne Water Quality Control Act provides the basis for water quality regulation within California; the Act assigns primary responsibility for the protection and enhancement of water quality to the State Water Resources Control Board (SWRCB), and the nine regional water quality control boards. The SWRCB provides state-level coordination of the water quality control program by establishing state-wide policies and plans for the implementation of state and federal laws and regulations. Each Regional Water Quality Control Board (RWQCB) adopts and implements a water quality control plan ("Basin Plan") that recognizes the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems.

# 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 June 2011. 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 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," to protect water quality, and to satisfy the appropriate water quality requirements of the 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. Storm water 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 storm water runoff control programs be prepared and post-construction BMPs be implemented on development sites greater than one acre in size. The City of Sand City is responsible for review of all project plans and site inspections to ensure proposed development complies with the MRSWMP. Development projects must include measures during construction to prevent soil erosion and tracking onto adjacent streets and protect storm drain inlets from sediment laden runoff. Post-construction BMPs must include measures such as vegetated swales, detention/retention ponds, filtration systems, and mechanical treatment units.

# 3.5.1.3 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 Basin instead. In 2003, Cal-Am determined that the basin was in a state of overdraft, meaning more water was being pumped from the basin than was being replenished. The overdraft condition of the basin created concern that seawater intrusion from the Monterey Bay could contaminate the potable water supply.

The Superior Court in Monterey County has ruled that the potable water bearing layers of the Seaside Groundwater Basin are in overdraft (*California American Water v. City of Seaside*, Case Number M66343, 2006, amended 2007). 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. Preparation and implementation of a Seaside Basin Monitoring and Management Plan is required by the Court. The purpose of the 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 Plan include: monitoring of current overdraft conditions and the present threat of potential seawater intrusion into the Coastal Subarea of the Basin; development and import of supplemental water supplies for the purpose of eliminating Basin overdraft and the associated threat of seawater intrusion; and establishment of procedures that will be implemented to address seawater intrusion.<sup>12</sup> The Court's decision allowed 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 overdraft conditions.

<sup>&</sup>lt;sup>12</sup> Seaside Groundwater Basin Watermaster Board. *Seaside Basin Monitoring and Management Program*. May 17, 2006.

According to the Final Draft Basin Management Action Plan, the initial ruling identified the current Operating Yield as 5,600 acre feet per year (AFY) which exceeds the Natural Safe Yield of 3,000 AFY. Groundwater levels in the Seaside Groundwater Basin continued to decline from fall 2002 to fall 2007. The amended decision required the Operating Yield to be reduced to 5,180 AFY on January 1, 2009, to 5,040 AFY by October 1, 2009, and by ten percent triennially October 1<sup>st</sup> until the Operating Yield reaches the Natural Safe Yield.<sup>13</sup>

The City of Sand City approved construction of a reverse osmosis desalination facility in 2005. The facility was also approved by the California Coastal Commission in 2005, and approval extension was received in 2007. The Sand City Desalination Plant began operation in May 2010. The desalination facility supplies the City with 300 acre-feet of potable water annually from the Aromas Sands aquifer of the Seaside Groundwater Basin, which is consistent with Order 95-10. Sand City has a water entitlement from the Monterey Peninsula Water Management District (MPWMD) of 206 acre-feet per year.

# 3.5.2 <u>Hydrology and Water Quality Impacts</u>

# 3.5.2.1 Thresholds of Significance

For the purposes of this EIR, a hydrology and water quality impact is considered significant if the project would:

- Violate any water quality standards or waste discharge requirements;
- Substantially degrade or deplete groundwater resources or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration 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;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- 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;
- Provide substantial additional sources of polluted runoff or otherwise substantially degrade surface or groundwater quality;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- 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; or
- Expose people or structures to inundation by seiche, tsunami, or mudflow.

# 3.5.2.2 Ocean Wave Run-up and Coastal Flooding

It is difficult to precisely determine whether wave run-up would impact the project under present conditions, given the existing topography and the coastal protection on the project site. If so, wave run-up would likely impact Buildings C-1A and C-1B, since the natural grades between those building sites and the waterline of Monterey Bay are very low.

<sup>&</sup>lt;sup>13</sup> Hydrometrics, LLC. <u>Basin Management Action Plan Seaside Groundwater Basin, Monterey County California.</u> January 2009.

A wave run-up analysis was completed for the proposed project. As described in Section 1, the project proposes the removal of the existing concrete slurry and riprap protection. The removal of the existing coastal protection (concrete slurry, concrete rip rap, and debris) will cause accelerated coastal erosion which could affect wave run-up conditions. Some of this work could involve review by regulatory agencies including the U.S. Army Corps of Engineers, State Lands Commission and the Monterey Bay National Marine Sanctuary. The calculated results of the analysis indicate that in 40 to 50 years, wave run-up will flow across the project site and up to an elevation of approximately 32 feet National Geodetic Vertical Datum (NGVD). Wave run-up will flow under many of the proposed buildings closest to the ocean. This wave run-up will inundate the parking areas under these buildings and will exceed the elevation of the lowest habitable floors of the buildings identified as C-1a and C-1b (refer to Figure 4). The project includes floodproofing of the habitable floors in these buildings up to an elevation of 33 feet NGVD in order to avoid impacts from wave run-up. The building foundation elements will be subject to wave flooding impact forces as a result of run-up.

The wave run-up analysis suggests that some of the proposed buildings will be subject to wave runup during the 50-year design life of the project. The problem of wave run-up and coastal flooding is anticipated to get worse with time due to the fact that coastal erosion and recession will naturally result in the project buildings, elements, and facilities being closer and closer to the ocean over time. Wave run-up impacts may be insignificant for 10 to 20 years; however, wave run-up and coastal flooding will eventually impact the proposed buildings.

The areas of the project site below elevation 32 feet NGVD may be subject to wave impact and damaged by flooding. The damage may be temporary and may consist solely of temporary loss of use with subsequent cleanup, or could potentially be more severe and cause structural damage. Coastal flooding will occur under some of the seaward buildings and will impact other elements and facilities at the project including the public access trail, pool, and other features.

According to the General Plan, the entire Sand City shoreline is located within a tsunami hazard area. Projected distance-source tsunami elevations could reach 26 feet NGVD if coupled with a 100-year storm event.<sup>14</sup> No precise local-source tsunami run-up hazard has been determined for these events. Seiches in Monterey Bay would generally produce water levels lower than those projected for a distant-source tsunami.<sup>15</sup> The project design includes floodproofing of habitable floors up to an elevation of 33 feet NGVD.

Impact HYD-1:The proposed project will be subject to wave run-up and coastal flooding over<br/>the lifetime of the development. (Significant Impact without Mitigation)

# 3.5.2.3 Water Quality Impacts

# **Construction Phase**

Project grading and construction activities could affect the water quality of storm water runoff from the site. Soil erosion could be exacerbated by excavation and grading activities, increasing the potential for sediment runoff to enter the Bay. Pollutants such as oil, grease and heavy metals released during the operation of heavy construction equipment could be adhered to the sediments and/or carried directly by storm water into the Bay. The project will be required to comply with the NPDES General Construction Activity Storm Water Permit administered by the Regional Water

<sup>&</sup>lt;sup>14</sup> Geoconsultants, Inc. <u>Preliminary Geotechnical Study Proposed Monterey Dunes Beach Hotel and Condominiums</u>. August 24, 1987.

<sup>&</sup>lt;sup>15</sup> Ibid.

Quality Control Board. Prior to construction grading, the applicant shall file a Notice of Intent to comply with the General Permit and prepare a Storm Water Pollution Prevention Plan that identifies measures included in the project to minimize and control construction-related runoff.

# **Operational Phase**

Long-term water quality degradation could also occur after the project is constructed. The site is currently mostly unpaved. The proposed buildings, roadways, parking lots, and amenities would substantially increase the amount of impervious surfaces on the site and would cause an increase in storm water runoff from the site. Storm water runoff from the site could carry pollutants from the proposed parking lots, roads, maintenance areas, and landscaping. The proposed project is over one acre in size and therefore, is subject to the permitting requirements of the NPDES for post-construction storm water runoff.

Storm water runoff from the site will be collected by inlet structures and conveyed by pipes to two underground detention basins. Hydrocarbon separators are proposed for installation immediately upstream from the detention basins. The proposed drainage system will be sized to collect, convey, and dispose of runoff generated by a 100-year storm event. The proposed hydrocarbon separators will be sized for first-flush runoff flows. The design of all impermeable surfaces (rooftops, parking lots, etc.) will be required to address post-construction runoff water quality through the use of post-construction storm water control (or LID) practices including but not limited to measures that either detain and/or filter water to remove pollutants prior to discharge from the site, such as flow-through planters/tree boxes, bioretention swales, green roofs, and the like.

The implementation of BMPs will ensure the project complies with the Monterey Regional Storm Water Management Program. The project includes structural and treatment control BMPs which require the applicant to sign a statement accepting responsibility for their maintenance. The final Low Impact Development measures selected for the project shall be identified prior to the City's approval of the Tentative Map.

Impact HYD-2:Implementation of a SWPPP, the proposed BMPs, and LID measures will<br/>ensure the project complies with the requirements of the Monterey Regional<br/>Storm Water Management Program and will have a less than significant water<br/>quality impact. (Less Than Significant Impact)

# 3.5.2.4 Groundwater Impacts

New water service connections to the proposed development will be subject to the conservation rules of the Monterey Peninsula Water Management District. The project proposes to obtain water for domestic purposes, irrigation, and fire flow through the City of Sand City. The proposed project is anticipated to use approximately 64.4 acre-feet of water per year. The project's water demand would be supplied via the City's available desalination water at the time of construction of Phase I and/or Phase II. The proposed project would rely on the City's existing water entitlement from the City-operated desalination facility and, therefore, would not substantially deplete or degrade groundwater resources.

# Impact HYD-3:The proposed project would rely on water supplied by the City's existing<br/>water entitlements from the Sand City desalination facility and would not<br/>substantially deplete or degrade groundwater resources. (Less Than<br/>Significant Impact)
#### 3.5.3 <u>Mitigation and Avoidance Measures for Hydrology and Water Quality Impacts</u>

The following mitigation and avoidance measures will reduce the hydrology and water quality impacts of the project to a less than significant level:

**MM HYD-1.1:** Wave run-up and coastal flooding hazards can be mitigated by the structural design of the proposed buildings, elements and facilities. Breakaway walls, flow through design, appropriate foundation types, floodproofing measures, and necessary structural force field selection should be considered prior to final project design, in accordance with FEMA guidelines. A final, design-level geotechnical investigation for the project shall be completed for the applicant by a qualified geotechnical consultant and shall be reviewed and approved by the City Engineer.

#### 3.5.4 <u>Conclusion</u>

- Impact HYD-1:Implementation of the identified mitigation measures will reduce the wave<br/>run-up and coastal hazards on the project site to a less than significant level.<br/>(Less Than Significant Impact with Mitigation)
- Impact HYD-2:Implementation of a SWPPP, the proposed BMPs, and LID measures will<br/>ensure the project complies with the requirements of the Monterey Regional<br/>Storm Water Management Program and will have a less than significant water<br/>quality impact. (Less Than Significant Impact)
- Impact HYD-3:The proposed project would rely on water supplied by the City's existing<br/>water entitlements from the Sand City desalination facility and would not<br/>substantially deplete or degrade groundwater resources. (Less Than<br/>Significant Impact)

#### **3.6 GEOLOGY, SEISMICITY, AND SOILS**

The discussion below is based on a Geologic Report prepared by *Nielsen and Associates* in November 2006 and a Coastal Recession and Wave Run-up Evaluation prepared by *Haro, Kasunich and Associates, Inc.* in July 2007. An updated Coastal Recession Setback Evaluation was completed by *Haro, Kasunich and Associates, Inc.* in February 2012. Copies of these reports are included in Appendix B.

#### 3.6.1 <u>Setting</u>

The project site is a former sand quarry. At the southern end of the project site (Sterling property) is an existing storage yard for aggregate and various construction supplies. The Sterling property is hardscaped for truck and equipment access. In contrast, the remainder of the project site is covered with sand that is slowly revegetating with iceplant, from the past quarry activities.

The shoreline at the property is covered and composed of varying materials including concrete rubble, native sand, and a poured concrete mat. At the southern end of the project site, near the terminus of Tioga Avenue and fronting the storage yard portion of the property, the shoreline is crudely armored with blocks of broken concrete of various sizes. However, the approximately 20-foot high shore face is predominantly unarmored and native earth materials are exposed. In the central portion of the site, extending over a distance of approximately 850 feet, a mat of concrete armors an approximate 20 to 30 foot high shore face. The concrete mat has been formed over at least the past 34 years by the cleaning of excess concrete from concrete trucks. Aerial photographs from 1972 show the concrete mat in the general location where it is today. At the northern end of the site is a mass of fill composed of broken concrete blocks and poured scrap concrete. This area is the southern end of a small hill that rises to nearly 100 feet above sea level, with the peak located just north of the property.

#### 3.6.1.1 Site Geology

The site is located in an area dominated by relatively recent geologic earth materials. The local geologic map shows the property underlain by beach and dune sand of various age. The dune sands in the vicinity of the property are very young or flandrian age which is a term applied to dune sands formed since the end of the last ice age (approximately 15,000 years ago). However, most, if not all, of the native dune sand on the property has been removed by past quarrying activities. Based on an examination of oblique aerial photographs taken between 1972 and 2005, it appears that all of the near-surface earth materials on the property today would be considered "fill" in that they have either been moved by and are remnants of the quarry activities.

The map of Quaternary units also shows the presence of a marine terrace deposit exposed at the ground surface on the inland or east side of State Route 1. This terrace deposit is Sangamonian in age; Sangamon refers to the interglacial period from about 130,000 to 110,000 years ago. This terrace deposit (or most likely a soil layer capping the deposit) is exposed in the shore face at the southern end of the property. The dark, slightly cemented soil is distinct and can be traced continuously in the shore face for several hundred feet south of the site before it descends below beach level. The northern end of its exposure is just north of Tioga Avenue in the shore face below the entrance road to the storage yard on the project site. Along the entire length of this exposure, the terrace capping soil is continuous and is not offset, a fact that is important relative to the Seaside fault which has been mapped through this area. The Seaside fault is located south of the property and

would transect the exposed portion of this terrace deposit. The fact that the deposit is not offset is evidence that the fault has not moved in the last 100,000 years or more (see discussion below).

Subsurface information on the earth materials beneath the project site was obtained from a 1992 report for the Monterey Peninsula Water Management District (MPWMD) and cone penetrometer testing completed on-site for the project. Staal, Gardner and Dunne (1992) performed an investigation for the MPWMD as part of a feasibility study for a desalination plant. Two water test wells were drilled near the project site, including one located on the south side of Tioga Avenue near the coast line. Beach and dune sand were found to extend to approximately 38 feet below mean sea level (MSL). Below the dune sand layer, a 25 foot thick layer of silt and clay is located beneath the site, which extends several thousand feet to the north and south. Beneath the silt/clay layer at the property was a thick sequence of brownish gray clay and gray sand containing many grains and fragments of chert, which was interpreted to belong to the Plio-Pleistocene age Paso Robles Formation.

The cone penetrometer tests completed for the site verified the presence of beach and dune sands to a depth of at least ten feet below MSL, which is the maximum depth of the probe. One of the tests was conducted near the southwestern corner of the property to attempt to identify the terrace deposit which was visible in the shore face approximately five feet below ground surface at the project site. Data from this test was insufficient to determine the nature of the terrace deposit.

A majority of the project site is underlain by various forms of fill. The central portion of the site appears to be underlain by sands, silty sands and rare gravelly sands. Based on aerial photographs, the near-surface materials are most likely reworked sediments from quarry activity. At the north end of the property, a prominent hill rises to an elevation of nearly 100 feet MSL. On the southern flank of this hill, there are abundant concrete blocks scattered across the ground surface indicating that this area is underlain by fill. Aerial photographs bear evidence to the concrete-laden fill here. At the southern end of the project site, the area of the storage yard is also underlain by near-surface fill.

A pore pressure test was conducted in CPT-2 where the ground surface was at an approximate elevation of 36 feet MSL. Groundwater was located at approximately 35.4 feet below the ground surface or approximately at mean sea level.

#### 3.6.1.2 Seismicity

#### **Existing Faults**

The project site is located in a highly seismically-active region of California. A broad system of inter-related northwest-southeast trending strike-slip faults represents a segment of the boundary between the Pacific and North American crustal plates. For the past 15 million years, the pacific plate has been slipping northwestward with respect to the North American plate. The majority of movement has been taken up by the San Andreas fault, however, there are other faults within this broad system that have also experienced movement at one time or another.

The faults of significance to the project site include, but are not limited to, the Chupines fault and its associated faults – the Seaside and Ord Terrace faults, the San Andreas fault, the San Gregorio-Sur-Hosgri fault zone, and the Monterey Bay fault zone and its inland extensions, including the Tularcitos-Navy fault and the King City-Rinconada, Reliz fault. These faults are either active or considered potentially active.

The project site is located approximately 3,500 feet from the mapped traces of the Chupines fault zone, a potentially active (Type-B) fault with a Maximum Moment Magnitude Earthquake (MMME) of 7.1 by its association with the Monterey Bay fault zone. The King City-Rinconada-Reliz fault, also a Type-B fault with a MMME of 7.3, is about 3.2 miles from the site. The San Gregorio fault, also a Type-B fault with a MMME of 7.3 for the segment closest to the property, is eleven miles offshore. The exact limits and location of the Seaside Fault are not known, however, based on various tests, the Seaside fault is located at least 50 feet from the project site.

The Seaside fault is a buried fault that occurs beneath the City of Sand City on the coast of Monterey Bay. The fault lies north of the Chupines fault, and Rosenberg and Clark (1994) show it to be a splinter fault that joins the Chupines at depth. Similarly, they show the slightly farther north Ord Terrace fault to be a splinter fault off the Chupines fault. According to the most recent maps of Active Fault Near-Source Zones published by the California Divisions of Mines and Geology (1997), both the Seaside and Ord Terrace faults are not considered part of the potentially active Tularcitos-Monterey Bay fault zone. The most recent map of seismic hazard zones in Monterey County, which was based primarily on work by Rosenberg (2001), show the Seaside fault outside the zone of concern associated with the Chupines fault. Both the Chupines and Ord Terrace faults show offset of the sea floor, but the Seaside fault does not, therefore, if this model is correct these faults are connected at depth. Since the Ord Terrace fault offsets the sea floor, this strongly suggests relatively recent movement on the fault, and it is difficult to eliminate the Seaside fault as a potential seismic source. The Seaside and Ord Terrace faults do not conclusively show faulting during the Holocene age and therefore are not included on the Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist.<sup>16</sup> However, there is evidence that these faults are active and therefore should be taken into consideration for planning purposes.<sup>17</sup>

The existence of the Seaside fault was postulated from two historic occurrences, an offshore explosion circa 1902 of gas and asphaltic oil which brought up several tons of peat and hot water flowing from a deep well a short distance northeast of the property. Existence of a fault was supported by significant vertical offsets of the Monterey Formation bedrock which occurs many hundreds of feet beneath the site. Seismic profiles collected during the 1970s confirmed the presence of the Seaside fault. The fault extends at least seven miles offshore based on seismic profiles.

The location of the fault in the vicinity of the project site was revised in the early 1990's. Clark first mapped the fault roughly through the middle of the property passing just south of the Playa Avenue extension under crossing of State Route 1. The fault was remapped in 1994 based on a groundwater test well south of Tioga Avenue which proved that the fault was located south of this well. The remapping of the fault indicates that the fault is located greater than 50 feet south of the project site.

#### Seismic Hazards

Seismic hazards at the property consist chiefly of seismically-induced ground shaking and a potential for liquefaction. Surface ground rupture directly associated with movement along an existing fault would not be a potential hazard at the project site since no faults transect the property.

In the event of a large magnitude earthquake on any of the nearby active or potentially active faults, ground shaking at the site may range from moderate to severe. The characteristics of earthquake ground motions at any site are influenced by the magnitude of the earthquake, distance of the site

<sup>&</sup>lt;sup>16</sup> Clark, Joseph C., Dupre, William R., and Rosenberg, Lewis I. <u>Geologic Map of the Monterey and Seaside 7.5-</u> <u>Minute Quadrangles, Monterey Coutny, California: A Digital Database</u>. 1997.

<sup>&</sup>lt;sup>17</sup> Bill Bryant, California Geological Survey. Personal communication. April 4, 2008.

from the source of energy release, geologic characteristics of the rocks along the wave transmission path, and the local soil conditions of the site. Typically, intensity of ground motions is related to distance from the source of energy release.

The San Gregorio fault is the closest active fault to the property capable of generating a large magnitude earthquake. This active fault is located approximately eleven miles offshore, west of the property. The fault is recognized as one of the dominant faults in the coastal fault system along the Central Coast. This fault is believed to have generated the 1927-1928 earthquakes that occurred near Monterey and were estimated at greater than magnitude six. The San Gregorio fault is considered capable of generating a Moment Magnitude earthquake on the order of 7.3 with a recurrence interval of 400 years. An earthquake on this fault would cause severe ground shaking at the project site.

The Chupines fault is the closest fault to the property with a potential to generate a large magnitude earthquake, however, the activity level of this fault is much less than that of the San Gregorio fault. The currently estimated return period for earthquakes on the Monterey Bay fault zone is 1,700 to 2,800 years. The Chupines fault is located approximately 3,500 feet south of the property. The two faults associated with the Chupines, the Seaside and Ord Terrace faults, are much closer to the site, however, their activity and the likelihood they would generate a large magnitude earthquake is questionable.

#### Liquefaction

To assess the liquefaction potential of the project site, as well as the potential for dry settlement of the sands above the water table during sever seismic shaking, a quantitative liquefaction analysis was completed. The results of the liquefaction analysis indicate the project site is unlikely to experience liquefaction.

#### **3.6.1.3** *Coastal Erosion and Recession*

#### Water Erosion

The Sand City coastline has receded significantly landward since 1933. Substantial erosion and dune recession occurred during severe coastal storms in 1983, which lowered beach elevations throughout the Monterey Bay area and caused substantial damage to structures along the coastline. The damage was caused from high wave run-up and from coastal erosion. The coastal erosion lowered beach elevations allowing larger waves to break closer to the dune and bluffs. Increased wave energy reached the base of the coastal bluffs and dunes, causing erosion that removed the sediments which form the bluffs and dunes. Sediment removal at the base of the bluffs and dunes caused them to slump and slide seaward, resulting in recession of the bluff and dunes landward. These coastal processes occur to some degree each winter; however, they are much more severe during some winters than others. A combination of persistent ocean storms that lower beach elevations, followed by concurrent very high ocean swells during periods of high tides can cause substantial rapid bluff or dune recession. Because there is no exposed bedrock along the Sand City coastline, only cohesion-less dune sand and slightly cohesive soils, very rapid erosion is possible and does periodically occur.

Sand City is located on an eroding coastline, therefore, the geologic, geotechnical, and oceanographic environment at any selected location is gradually becoming more hazardous with time. Property owners have taken erosion control measures along large sections of the coastline to retard the rate of coastal bluff and dune recession. The measures taken have included placement of quarry stone riprap, broken concrete rip-rap, and poured concrete slurry. These measures have been effective in

retarding coastal bluff and dune recession in these immediate areas, but do not appear to have affected the rate of shoreline (Mean High Tide Line) recession yet.

The coastline in the entire project area north of Tioga Avenue has been modified by human activity. Concrete slurry, coastal armor, earth and rip-rap fill, and historical excavation and grading have substantially altered the coastal bluff character, morphology and position. These human influences make calculations of blufftop recession rates based on the measurement of historical blufftop positions suspect. In areas of the Monterey Bay coastline that have not been influenced by coastal armor, earth and rip-rap fill, and historical excavation and grading, which do not have erosion control, the average long-term annual rates of shoreline recession and bluff and dune recession are always equal, assuming the bluff is composed of homogenous earth materials. Because of the unreliability of the calculations of blufftop recession rates based on measurement of historical blufftop positions, a 1989 Moffat and Nichol Coastal Recession Study and the 2003 Coastal Recession Study prepared by Haro Kasunich & Associates (HKA) utilized comparative historical shoreline positions to evaluate recession rates in Sand City. The 2003 HKA study included measurements of the 1933 U.S. Coast and Geodetic Survey (USCGS) map shoreline position and the 2003 wetted bound shoreline position. The measurements resulted in the calculation of an average long-term annual rate of shoreline recession of approximately 3.1 feet per year.<sup>18</sup> These studies were requested by the City to determine a 50-year setback line for coastal erosion as required in the certified Local Coastal Program (LCP).<sup>19</sup>

Measurement of the 1933 and 2003 coastal bluff and dune positions were made, south of the project site, between Bay Avenue and Tioga Avenue at locations where grading, mining, and erosion control have not affected the bluff and dune recession rate, in order to calculate an average long-term annual rate of coastal bluff and dune recession. These calculations show that the shoreline and bluffs are receding landward along this section of coastline at an average long-term annual rate of approximately 2.4 feet per year, based on analysis of the position of the bottom of the dunes identified on the 1933 USCGS map and the 2003 aerial photographs.

Due to the extreme susceptibility of the soils on the project site to erosion, a single severe ocean storm season has the potential to result in 50 feet of bluff recession anywhere along this section of coastline, since the rip-rap was placed at the end of Tioga Avenue, and the concrete slurry was placed up-coast and down-coast from there.<sup>20</sup> The historical erosion and bluff recession has caused areas with erosion protection to be located further seaward now than when they were constructed. Because the erosion protection on the site has avoided recession that would have otherwise occurred, accelerated recession will occur if the coastal protection is removed, to reestablish an equilibrium position for the dune face and coastal bluff.

#### Wind Erosion

The site is naturally subject to wind erosion and a large sand dune field exists on the site. Wind processes that shape dunes are influenced by factors that speed up or slow down the wind, change wind direction, or determine whether sand is available to be moved by the wind.

<sup>&</sup>lt;sup>18</sup> Haro Kasunich & Associates, Inc. <u>Sand City Collection Coastal Recession and Wave Runup Evaluation</u>. July 25, 2007.

<sup>&</sup>lt;sup>19</sup> The *Ballona Wetlands Trust vs. City of Los Angeles* ruling found that an EIR is not required to analyze the impacts of the environment on a project; however, the coastal erosion analysis in this EIR was completed in order to comply with the Sand City LCP.

<sup>&</sup>lt;sup>20</sup> Ibid.

Sand movement on beaches and dunes depends on wind conditions near the surface. Wind velocities in excess of seven miles per hour transport sand. At the project site, onshore winds predominate, wind velocities in excess of seven miles per hour frequently occur, and large natural sand dunes exist as a result of wind erosion and deposition. Sand movement starts on the beach and on the eroded bluff or dune face where sand grains are picked up by the wind and put into motion. Deflation is the net removal of materials by the wind which causes the ground surface to become lower. Surfaces with loose particles are susceptible to deflation when they are exposed to strong winds. The sand particles are deposited when the wind velocity decreases. This can occur when the wind slows as the storm ends. It also can occur when vegetation decreases wind speed near the ground.

#### 3.6.2 <u>Geology, Seismicity and Soils Impacts</u>

#### **3.6.2.1** *Thresholds of Significance*

For the purposes of this EIR, a geology and soils impact is considered significant if the project would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated 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,
  - Strong seismic ground shaking,
  - Seismic-related ground failure, including liquefaction, and/or
  - Landslides.
- Result in substantial soil erosion or the loss of topsoil; or
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; or
- 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; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

#### 3.6.2.3 Seismicity

The Seaside fault would not impact the proposed development according to current Monterey County guidelines for building setbacks from faults. The Seaside fault, however, cannot be ruled out as a potential seismic source. Although there have never been any significant earthquakes associated with the fault and although the offshore portion of the fault does not appear to offset the modern sea floor, the fault is considered to be connected to the Chupines and Ord Terrace faults, both of whose offshore fault segments do offset the sea floor. The Chupines fault is considered a potential seismic hazard and a member fault of the Tularcitos-Monterey Bay fault zone, which is a Type B fault.

The Monterey Bay fault zone, which includes the Chupines, Seaside and Ord Terrace faults is recognized as potentially active. It is considered capable of generating a Moment Magnitude earthquake of 7.1 with recurrence intervals ranging from 1,700 to 2,800 years. Although the recurrence interval seems very long, there is no information concerning when the last large magnitude earthquake occurred on this fault zone. An earthquake on any of these faults could generate severe ground shaking at the property.

#### Seismically-Induced Dry Sand Settlement

In the event of seismically-induced settlement due to dynamic compaction of loose, dry sands above the design water table, dry settlement on the project site would range from 0.75 inches to 1.25 inches.

**Impact GEO-1:** The project proposes to design and construct the development in accordance with standard City of Sand City engineering requirements and based upon a design-level geotechnical report. The proposed project would not be exposed to seismic hazards that could not be reduced through the use of standard engineering design. (Less Than Significant Impact)

#### 3.6.2.3 Coastal Erosion and Recession

#### Water Erosion

The 2003 HKA Coastal Erosion Study prepared for the City of Sand City includes a methodology used to estimate future bluff and dune recession positions. For planning purposes, Sand City uses this methodology to identify a 50-year setback line for development along the Sand City coastline, consistent with the adopted LCP policies.

The amount of sea level rise assumed in the 2003 HKA Coastal Erosion Study is considered to be on the lower end of what is now expected. Coastal erosion analysis for a location further north of the project site along the Sand City shoreline indicates that seven to 58 feet of recession could occur during the next 50 years depending upon the actual future rates of sea level rise. The Coastal Erosion Study prepared by HKA in 2003 updated the previous Moffat & Nichol Engineers Final City of Sand City Shore Erosion Study (December 1989) and is more conservative than the study originally adopted by Sand City as part of the LCP. Average annual bluff edge recession rates have slowed significantly since 1984 because of the cessation of sand mining on the Sand City coastline. The State of California, through the California Ocean Protection Council, has adopted the sea level rise projections shown in Table 3.6-1 using the year 2000 as a baseline. Based on these projections, 19 to 22 inches (1.6 to 1.8 feet) of sea level rise should be planned for by 2062.

Table 3.6-1   Sea Level Rise Projections				
Year	Scenario	Average of Models	Range of Models	
2030		7 inches (0.6 feet)	5 to 8 inches	
2050		14 inches (1.2 feet)	10 to 17 inches	
2070	Low	23 inches	17 to 27 inches	
	Medium	24 inches (2.0 feet)	18 to 29 inches	
	High	27 inches	20 to 32 inches	
2100	Low	40 inches	31 to 50 inches	
	Medium	47 inches	37 to 60 inches	
	High	55 inches	43 to 69 inches	
Source: State of California Sea Level Rise Interim Guidance Document, October 2010.				

Based on the City's LCP methodology and using revised sea level rise projections, portions of the proposed project are within the area that will be eroded and undermined during the next 50 years. The coastal recession setback line in 2062 would be located landward of the Hotel 3 building and the majority of the Hotel 4b building. The Hotel 1, Hotel 2, and Restaurant building will extend approximately 42 feet or more seaward of the coastal recession setback line. Building C2 will extend a minimum of 15 feet seaward of the coastal recession setback line and Buildings C-1a and C-1b will be almost entirely seaward of the setback line. The remaining buildings on the site are entirely landward of the setback line. Project facilities located seaward of the 2062 setback line include the public access trail, public access parking, vistas, pool, spa, amphitheater, Tioga Avenue restroom facilities, and any utility lines located seaward of the setback line (refer to Figure 18). In addition, in future years coastal erosion and bluff recession could impact support for the foundation elements of the buildings.

**Impact GEO-2:** Coastal erosion and recession will significantly impact elements of the project located seaward of the 50-year coastal erosion setback line. (Significant Impact without Mitigation)

#### Wind Erosion

The project is located in an area that is susceptible to natural wind erosion of sandy soils. The impacts of deposition of windborne sand on the project will be significant unless adequately mitigated. The project site experiences ongoing coastal erosion and ocean wave impacts on the beach, bluff, and dune faces, which continuously creates barren ground surfaces that are subject to natural wind erosion. Windborne sand will be deposited against buildings and in depressions created by the grading proposed by the project. Due to the fact that the seaward buildings are proposed in areas where the grades will be lowered by excavation, the seaward faces of these buildings will be in depressions, as will the swimming pool, spa and amphitheater.

Deposition of windborne sand will increase with time due to coastal erosion and recession which will result in project buildings, elements, and other facilities being closer to the beach in the future.

**Impact GEO-3:** Wind erosion and sand deposition would likely result in project amenities being unusable over the life of the project. (**Significant Impact without Mitigation**)



#### 3.6.3 <u>Mitigation and Avoidance Measures for Geology, Seismicity and Soils Impacts</u>

#### 3.6.3.1 *Mitigation Measures Required of the Project*

The following mitigation and avoidance measures will be required by the City of Sand City to reduce the geology, seismicity, and soils impacts of the project to a less than significant level:

AM GEO-1.1:	A final, design-level geotechnical investigation for the project shall be completed for the applicant by a qualified geotechnical consultant and shall be reviewed and approved by the City Engineer. The geotechnical investigation shall specify all engineering practices to be used to reduce or avoid geologic hazards on the site. The applicant shall implement the specific engineering practices that are recommended in the geotechnical report prepared for the site during detailed project design and construction.
MM GEO-2.1:	Proposed structures situated within 20 feet landward of the 50-year erosion line shall be supported by pier and grade beam foundation systems. If a portion of any structure is to be placed on drilled or driven piers due to proximity to the 50-year erosion line, the entire structure should be supported by piers to minimize the potential for differential settlement within the building envelope (refer to Figure 18).
MM GEO-2.2:	Structures with perimeters situated more than 20 feet landward of the 50-year erosion line may be supported by either a pier and grade beam systems or shallow conventional spread footings bearing upon engineered fill soil mats. (A typical engineered fill soil mat consists of 24 to 36 inches of engineered fill compacted to at least 90 percent relative compaction.)
MM GEO-2.3:	Foundations for the buildings proposed on-site will be designed so they are embedded into the soils below a depth where lateral support is needed during the 50-year design life of the project.
MM GEO-2.4:	Coastal protection structures could be constructed during the design life of the project to protect non-sacrificial project elements and facilities.
MM GEO-3.1:	Organic materials such as straw mats, twigs, branches and other organic debris shall be used prior to the establishment of planted dune vegetation to reduce wind erosion and sand deposition.
MM GEO-3.2:	Sand fences shall be used to capture sand deposits caused by wind erosion. The fences should be placed to protect structures and other amenities from wind-blown sand. As the sand deposits grow, additional fences shall be used and the sand deposit shall be planted with vegetation to reduce further erosion.

#### 3.6.3.2 *Mitigation Measures Which Could be Required*

The following measure, not included in the project, could be required by the City Council and would reduce the above-identified significant project coastal erosion and recession impacts to a less than significant level:

**MM GEO-2.5:** The project should be partially redesigned so that structures, elements, and amenities of the development (i.e. pool, spa, etc.) are all located landward of the 50-year setback line.

A Design Alternative that includes removal of project structures, elements, and amenities from the 50-year coastal erosion and recession setback line is analyzed in *Section 8 Alternatives* of this EIR.

3.6.4 <u>Con</u>	<u>aclusion</u>
Impact GEO-1:	With implementation of standard engineering practices, the geologic seismic impacts to the project would be less than significant. (Less Than Significant Impact)
Impact GEO-2:	The proposed project would result in significant unmitigated impacts due to portions of the project being located within the 50-year coastal erosion setback line. ( <b>Significant Impact without Mitigation</b> )
Impact GEO-3:	With implementation of the identified mitigation measures, the impacts of windborne erosion on the project will be reduced to a less than significant level. (Less Than Significant Impact with Mitigation)

#### 3.7 BIOLOGICAL RESOURCES

The following discussion is based on a Biological Assessment and a Habitat Protection Plan prepared for the project by *Zander Associates* in February 2009. Copies of these reports are included as Appendix D of this EIR.

#### 3.7.1 <u>Setting</u>

Beginning in the 1990s, there has been a trend toward preservation and restoration of the remaining dune habitats and sensitive species they support. In this regard, the City of Sand City and its former Redevelopment Agency (RDA) entered into a Memorandum of Understanding (MOU) in 1996 with other parties including the California Department of Parks and Recreation and the Monterey Peninsula Regional Park District to limit development in the coastal areas of the city and to realize additional restoration opportunities from those development projects allowed. The proposed project is one of a few developments supported by the MOU and is intended to provide opportunities for dune preservation and restoration efforts in concert with visitor-serving development of the site.

The proposed project site contains dune forms that have been highly degraded but represent remnants of the once more extensive Monterey sand dune complex that extends from the Salinas River south to the Monterey Harbor. The project site includes a sand beach backed by a 30 to 36-foot high degraded costal bluff which fronts much of the 1,500 linear feet of ocean frontage, with the exception of two breaks in the bluff where the beach extends inland. The coastal bluff on the project site is highly degraded by concrete tailings that were poured over the top and side, creating a rough-hewn paved walkway along the top. The bluff is eroding from underneath the cement, resulting in unsupported cement slabs that are breaking off in large pieces and littering the slope. The dune system in Sand City has also been severely degraded by the spread of iceplant and through past industrial activities.

Despite the degraded condition of the site, western snowy plover nests have been documented on portions of the site in the past, with the last recorded siting being in 1998. In 2006, an occurrence of Monterey spineflower was identified on the project site. The site also contains habitat for Smith's blue butterfly, within a small area that has been revegetated with coast and seacliff buckwheat, as well as potential habitat for California burrowing owl (*Athene cunicularia*) and black legless lizard (*Anniella pulchra nigra*). The plant communities and wildlife habitat identified on the site are described below.

#### 3.7.1.1 Habitat Types

The discussion below is based in part on previous work done on the site and has been updated as a result of recent surveys completed by Zander Associates in 2006 and 2007. Within the 23.5 acres of the project site above the mean high tide elevation, the following three distinct habitat types have been identified: vegetated dune, bare sand, and disturbed/developed dune (refer to Figure 19).

#### Vegetated Dune

Vegetated dune is located throughout the project area and encompasses approximately 9.1 acres (refer to Figure 19). This habitat type is characterized by deep dune sands that are stabilized to various degrees by vegetation that ranges from extensive dense iceplant mats (*Carpobrotus edulis*) to scattered iceplant patches interspersed with pioneer dune plant species. Pioneer dune species observed include pink sand verbena (*Abronia umbellata*), beach bur (*Ambrosia chamissonis* var.

*bipinnatisecta*), beach evening primrose (*Camissonia cheiranthifolia*), sea rocket (*Cakile maritima*), beach morning glory (*Calystegia soldanella*), geranium sp. (*Geranium* sp.), beach salt bush (*Atriplex leucophylla*), Bermuda buttercup (*Oxalis pes-caprae*), silver beach lupine (*Lupinus chamissonis*), red-stemmed filaree (*Erodium cicutarium*), short-podded lotus (*Lotus humistratus*), and common iceplant (*Mesembryanthmum crystallinum*). The areas of dense iceplant generally exclude the establishment of all but a few herbaceous species.

A small area of approximately 37 square feet of the federally threatened Monterey spineflower (*Chorizanthe pungens* var. *pungens*) was located within an unofficial dirt trail adjacent to the existing developed coastal bike trail.

#### **Bare Sand**

The bare sand habitat, covering an area of approximately 7.1 acres, includes areas of non-vegetated unstabilized dunes, as well as the strip of beach strand between the ocean and the beach cliffs, within the tidal zone. Because of the highly unstable shifting sands, these areas are not conducive to the establishment of vegetation. In the beach strand area, there are sparsely scattered pockets of sea rocket, beach bur and a handful of other pioneer dune species.

There is a small area, approximately 0.5 acres, within the bare sand habitat where it appears sand stabilization activities have been attempted: several parallel construction fences have been installed and coastal dune species have been planted. The area is located adjacent to SR 1 on the east edge of the project site and about midway between the north and south project boundaries. The planted coastal dune species include coast buckwheat (*Eriogonum latifolium*) and seacliff buckwheat (*Eriogenum parvifolium*). Several herbaceous species such as sea rocket, pink abronia, beach evening primrose, California poppy (*Eschscholzia californica*), iceplant, ripgut brome (*Bromus diandrus*) and burclover (*Medicago polymorpha*) were also observed in this area, but probably were not planted. The fencing appears to be facilitating dune stabilization and establishment of the planted species. There are; however, some portions of the fencing that have become buried under shifting sands.

#### **Disturbed/Developed**

The disturbed/developed areas occur intermittently throughout the site and comprise approximately 6.8 acres. Developed areas include a paved bike trail constructed in 1999 that runs along the east edge of the project area from Playa Avenue north and a coastal viewing area constructed on top of the bluff at the north end of the project site. Monterey cypress trees (*Cupressus macrocarpa*) were planted in the coastal viewing area, benches were installed and wood chips have been spread over the soil surface.

There are other portions of the site where the natural dune soils have been severely disturbed by past and present land uses. These include an outdoor construction/contractor storage area in the southern portion of the site, as well as an area along the edge of the coastal bluff where concrete tailings were poured directly on top of the natural dune formation, creating a rough-hewn paved walkway. There are currently several points where the dune sands are eroding away from underneath the walkway, and large pieces of broken-off concrete slab are littering the dune slope. There are also several locations within the project area where the dune sands appear to have been removed by mining activities, resulting in a compacted substrate that supports only ruderal weed species.



#### 3.7.1.2 Wildlife

Wildlife likely to use the project site includes species adapted to sand dune and ruderal plant communities. Burrowing rodents such as the California ground squirrel (*Spermophilus beecheyi*), pocket gopher (*Thomomys umbrinus*), Norway rat (*Rattus norvegicus*) and the house mouse (*Mus musculus*) live in the dense ice plant patches. In more open areas, reptiles such as the western fence lizard (*Sceloporus occidentalis*) and northern alligator lizard (*Gerrhounotus coeruleus*) can be found. EIP Associates (1990) has reported several mammals as occurring in the area including the black tailed jackrabbit (*Lepus californicus*), deer mouse (*Peromyscus maniculatus*), and feral cat (*Felix domesticus*). Songbirds such as Brewer's blackbird (*Euphagus cyanocephalus*) and white crowned sparrow (*Zonotrichia leucophrys*) would also be expected. Killdeer chicks (*Charadrius vociferous*) were observed on two occasions by PRBO Conservation Science (PRBO) in a pocket between Tioga and Playa Avenues during snowy plover surveys in 2006. PRBO also observed American Crow (*Corvus brachyrhynchos*), a known predator of other bird's eggs and chicks. Burrowing owl has not been observed on the project site, but has been reported in the coastal dune scrub restoration area of the North of Playa Habitat Preserve on the east side of SR 1, and west of SR 1 near the southern boundary of the former Fort Ord and Sand City boundary.

Western snowy plover nests have historically been reported at the site, and Smith's blue butterfly was identified in the area of planted buckwheat during surveys in 2007 (refer to Figure 19). Black legless lizards (*Anniella pulchra nigra*) have been found to occur on adjacent lands to the south of the project and are likely to occur on the project site because the habitat characteristics are similar. These special status species are discussed in more detail in *Section 3.7.1.3*.

#### **3.7.1.3** Special Status Species

Special status species are defined as those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (Service); those species listed or proposed for listing as rare, threatened or endangered by the California Department of Fish and Game (CDFG); plants occurring on list 1A, 1B, or 2 or the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (2001); and animals designated as "Species of Special Concern" by CDFG.

Based on a review of the California Natural Diversity Database (CNDDB) records (CDFG 2006), the CNPS electronic inventory for the Seaside 7.5-minute quadrangle and the surrounding quadrangles (Marina and Monterey), a target list of special status species was created for evaluation of their potential to occur on the project site (refer to Appendix D). The project site was surveyed for Monterey spineflower in 2006 and 2007; directed surveys<sup>21</sup> for western snowy plover were completed in 2005, 2006, 2007, and 2008 by PRBO; and directed surveys were conducted for Smith's blue butterfly in 2007 by Dr. Richard Arnold. The potential for the existing habitat on the project site to support other special status species was also observed.

#### **Special Status Plants**

Forty-one special status plant species were evaluated for their potential to occur on the project site. Of these, only14 were determined to have potentially suitable habitat available on the project site; the rest occurred in habitats not present on the site or in the vicinity of the site. As a result of directed

<sup>&</sup>lt;sup>21</sup> Directed surveys follow accepted survey methods for the species being surveyed.

surveys conducted during the blooming periods of these species, only one special status plant species, Monterey spineflower, was observed on the site.

#### Monterey Spineflower (Chorizanthe pungens var. pungens)

Monterey spineflower is a small, prostrate annual of the buckwheat family which occurs scattered on sandy soils within coastal dune, coastal scrub grassland, maritime chaparral, and oak woodland communities along and adjacent to the coast of southern Santa Cruz and northern Monterey Counties as well as inland to the coastal plain of Salinas Valley. Upwards of 70 percent of the range of this plant has been documented at Fort Ord; the largest populations are being protected, managed and enhanced through implementation of the Installation-wide Habitat Management Plan for the former Fort Ord. Monterey spineflower is listed as threatened by the U.S. Fish and Wildlife Service (Service) and is considered a List 1B species by the California Native Plant Society (CNPS).

Monterey spineflower has a wide habitat range and tends to occur on bare sandy patches where there is not much vegetative cover. The species often colonizes recently disturbed sandy soils. Within grassland communities, the plant occurs along roadsides, in firebreaks, and other disturbed sites. In oak woodland, chaparral, and scrub communities, the plants occur in sandy openings between shrubs. In dense chaparral or scrub vegetation, Monterey spineflower typically is restricted to roadsides and firebreaks through these communities. The species is threatened by residential development, agricultural land conversion, recreational use, sand mining and dune stabilization due to the introduction of non-native species. In December 2006, the Service issued a proposed rule revising its previous critical habitat designation for Monterey spineflower (71 Federal Register 75189-75215). The revised designation does not include the coastal lands within the City of Sand City.

As a result of directed surveys completed for the project in 2006 and 2007, Monterey spineflower was found to occupy a total area of approximately 37 square feet on the site. The species was located in the middle of a sandy trail within sparsely vegetated degraded dune habitat that is disturbed by frequent pedestrian use (refer to Figure 19). While this species is known to occur on adjacent lands to the north, south and east, no other spineflower occurrences were found on the project site. Monterey spineflower, however, is a colonizer of disturbed sites and the size and location of a population can fluctuate from year.

#### **Special Status Wildlife**

Fourteen wildlife species were evaluated for their potential to use habitats present on the project site. For the majority of these species, suitable habitat is not present. Historically, western snowy plover have nested in the area, but the Sand City plover population has declined over the last decade and no nests have been observed in this area since 1998. Smith's blue butterflies (*Euphilotes enoptes smithi*) were identified on the project site during surveys conducted in the summer of 2007, within the area of the stabilized dune where coasts and seacliff buckwheat have been planted. Smith's blue butterflies have not historically been recorded on the project site, but have been recorded on property west of SR 1 in the northern portion of Sand City, and on the mitigation lands created for the Sand Dollar and Edgewater Shopping Centers just east of SR 1. Potential habitat for California burrowing owl (*Athene cunicularia*) and black legless lizard (*Anniella pulchra nigra*) is also present on the project site. The four species for which suitable habitat is present on the site are discussed in greater detail below.

#### Western Snowy Plover (Charadrius alexandrinus nivosus)

Western snowy plover is a federally threatened species and a CDFG Species of Special Concern. It is typically found along the beach above the high tide limit but is also known to use shores of salt ponds and alkali or brackish inland lakes. Protection of this species' nesting habitat is of greatest concern to CDFG. The snowy plover typically nests on flat, barren to sparsely vegetated sandy substrate, and nests are frequently located near objects such as grass clumps or pieces of driftwood. Breeding and nesting occurs mid-March through mid-September. Western snowy plovers are migratory birds and although they exhibit high nest area fidelity, they do not establish permanent nests that remain from year to year. Western snowy plovers are highly sensitive to human disturbance and may abandon their nests if disturbed.

The Monterey Bay population of western snowy plovers consists of both year-round residents and migratory (winter resident) birds. In-migration of winter residents can begin as early as July and a winter flock of 60-70 birds assembles and roosts annually on the beaches just south of the Sand City limits. Courting and pre-nesting behavior occurs at the end of the roosting season, typically in early February, followed by residents' establishment of nesting sites for the new year.

The PRBO staff and volunteers have been monitoring the plover populations that occur in Sand City and throughout the Monterey area since 1984. Within the project area, PRBO reported the repeated occurrence of snowy plover nests during annual surveys conducted from 1989 to 1998. These nests were found mostly within the interior dunes of the project site. However, there have been no reported occurrences of plover nests on the project site since 1998. In 2005 through 2008, PRBO surveyed for the presence or absence of western snowy plovers on sandy beaches and associated habitats within the City of Sand City. In 2005, one western snowy plover was observed in the City; in 2006, approximately 66 snowy plover individuals were sighted in the City; in 2007, one snowy plover was sighted in the City; and in 2008, four nests were located which are the first nests located in Sand City in eight years. One nest was located south of the project site between the Monterey Beach Hotel and Bay Street, on State Park property within an area set aside for plover nesting with symbolic fencing. The other three nests were located north of the project site, south of the Fort Ord boundary, on private property that receives substantially less pedestrian traffic than the Sand City beaches to the south. There was also a brood of one chick for which no nest was found, located near the three nests to the north. Of the four nests found in the egg stage, three hatched and one failed. Of the three broods that hatched, only one of the broods survived to fledging age, likely due to predation. None of the plover sightings or nests located since 2005 were observed within the boundaries of the project site.

Human activity is a key factor in the decline in western snowy plover coastal breeding sites and breeding populations. Activities including walking, jogging, running pets, horseback riding, off-road vehicle use, and beach raking cause unintentional disturbance and trampling of eggs and chicks. This is particularly emphasized for the western snowy plover because its breeding season (mid-March through mid-September) coincides with the season of greatest human use on beaches of the west coast (Memorial Day through Labor Day).

In the Service's revised designation of critical habitat for the plover in September of 2005, the critical habitat unit that included the Sand City beaches, a unit that extended from the City of Monterey to Moss Landing, was excluded due to the associated high economic costs to the City of Sand City of excluding this land from redevelopment. In June 2012, the Service again re-designated small portions of the Sand City shoreline as critical habitat for the Western Snowy plover and eliminated its previous approval of an economic exclusion.

#### Smith's Blue Butterfly (Euphilotes enoptes smithi)

Smith's blue butterfly is a federally endangered species. It is completely dependent upon coast and seacliff buckwheat during all life stages. During its one-year lifespan, mate location, copulation, oviposition and pupae emergence all occur on the flowerheads of the buckwheat species during peak flowering season, June through September. The dormant pupal form takes place during non-flowering periods. Previous surveys of the Sand City coastline completed by Thomas Reid Associates in 1987, LSA in 1988, and Richard Arnold in 1991 did not identify buckwheat plants on the project site, and therefore, the site was not considered potential habitat for Smith's blue butterfly. Since that time, dune stabilization activities have occurred in the project area, and coast and seacliff buckwheat plants were installed. The buckwheat plants appear to be well established in this area of the site. The buckwheat area was mapped and found to occupy 0.21 acres on the site and consist of 187 individual buckwheat plants (refer to Figure 19).

In June and July 2007, Dr. Richard Arnold completed surveys for Smith's blue butterfly within the planted buckwheat area and found the species to be present on the site. The identified population is thought to either be transient from a nearby population or an established population on the site. There are established populations of Smith's blue butterfly east of the project site, east of SR 1. These populations are located in the North of Playa Mitigation Area (Zander Associates 1997-2001), the Sand Dollar Habitat Preserve (Arnold 1992 and Dorrell in 1995), and the undeveloped portions of the East Dunes area (Arnold 1991). In 1987, an additional small population, thought to be transient, was also located north of the site, immediately south of the former Fort Ord boundary (Arnold 1987). More recently, this same area was found to have a vigorous population, perhaps due to restoration efforts within the Fort Ord Dunes State Park. The planted buckwheat may serve as a habitat link that allows for the dispersal of Smith's blue butterfly population from the north and east and possibly from the south.

#### Burrowing Owl (Athene cunicularia)

Burrowing owl is considered a Species of Special Concern by the CDFG. This species is a ground nester in open, dry, annual or perennial grasslands, or deserts and scrublands with low-growing vegetation. They utilize abandoned ground squirrel burrows for nesting and refuge and therefore ground squirrel activity is an important component of the habitat. Burrowing owls have been observed in the North of Playa Mitigation Area at the Edgewater Shopping Center, west of SR 1 within the city limits, and in back dune habitats within the City of Sand City.

No burrowing owls or signs of burrowing owl activity (e.g. large mounds with bones, pellets and whitewash in front of the burrows) were observed during surveys on the site; however, an abundance of ground squirrel activity was noted on the site. While burrowing owls do not currently inhabit the project site, there is potential that the species could move onto the site at any given time given the availability of suitable nesting habitat.

#### Black Legless Lizard (Anniella pulchra nigra)

Black legless lizard is a CDFG Species of Special Concern. This species lives in a number of habitats in dunes and sand areas from immediately above the high tide limit, the crest of sand dunes, and the edge of the hind dunes to inland sandy areas associated with oak woodlands, grasslands, maritime chaparral and other habitats. The lizards are fossorial animals that burrow in sand and leaf litter beneath plants growing in these habitats and feed on insects and other invertebrates. Some plant cover is required to support insects that, in turn, serve as food for the black legless lizards.

Black legless lizards are most abundant in dune habitats where native vegetation is present. Although legless lizards have also been found along the edges of ice plant mats within dune ecosystems, ice plant mats are not considered suitable habitat for black legless lizards. The dense root structure of African ice plant and lack of leaf litter and duff produced by the plant appear to provide poor burrowing conditions for legless lizards.

No legless lizards were found on the site during comprehensive, city-wide surveys for the species completed in 1987. The habitat quality for black legless lizard in the project area is considered poor because of the extent of bare sand, compacted soils and predominance of ice plant where vegetation occurs. Black legless lizards, however, have been found in abundance on adjacent lands to the south of the project site within similarly poor habitat and, therefore, are considered very likely to occur on the project site.

#### Migratory Birds

The Migratory Bird Treaty Act (16 USC 703), prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, and their eggs and nests. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." Section 3503.5 of the California Fish and Game Code also protects the nests and eggs of birds-of-prey and essentially overlaps with the Migratory Bird Treaty Act. No bird nests were observed on the project site during the surveys completed in 2006 and as there are few trees or shrubs, there is very little suitable nesting habitat present for raptors or song birds. However, there is potential nesting habitat for shore birds, such as killdeer and western snowy plover, as well as for the coastal ground nester, coast horned lark (*Eremophila alpestris*).

#### 3.7.1.4 Sand City Tree Ordinance

Trees that have a diameter of 10 inches or greater at breast height are considered a "significant" tree and are protected under City ordinance. A permit issued by the Community Development Department is required to cut, trim or remove more than one-third of the foliage of a significant tree.

There are currently five Monterey Cypress trees on the site, all of which are located on the north side of Tioga Avenue, west of SR 1. Two of the trees are located directly north of the Tioga Avenue and Sand Dunes Drive intersection and are approximately six and eight inches in diameter. None of the existing trees on the site are significant under the City's ordinance.

#### 3.7.2 <u>Biological Resources Impacts</u>

#### 3.7.2.1 Thresholds of Significance

For the purposes of this EIR, a biological resources impact is considered significant if the project would:

- 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
- Result in any direct or indirect disturbance of habitats designated as an ESHA, as defined in the Sand City Local Coastal Plan, which results in disruption of protected resources and habitat values; or

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations; or
- 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; or
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- Impede the use of native wildlife nursery sites or directly harm nesting species protected under the provisions of the Migratory Bird Treaty Act; or
- Conflict with any local ordinances protecting biological resources, such as a tree preservation ordinance.

#### 3.7.2.2 *Modification of Vegetation Types*

The project will result in the removal of most of the existing vegetation on the site and alteration of much of the existing topography above the 15-foot elevation contour. Approximately 19.8 acres will be disturbed for project construction, and 11.7 of those acres will be permanently removed for development of project facilities. The remaining 8.1 acres to be modified by the project will only be temporarily disturbed. Table 3.7-1 summarizes the extent of the area to be affected by project construction for each vegetation type.

Table 3.7-1Extent of Vegetation Types to be Affected				
Vegetation Type	Total in Project Area (acres)	Estimated Area to be Affected		
Vegetated Dune	9.1	8.8		
Bare Sand	7.1	3.7		
Stabilized Dune	0.5	0.5		
Disturbed/Developed	6.8	6.8		
Ocean	3	0		
Total	26.5	19.8		

There are no habitats on-site that are rare or especially valuable that would be affected and, therefore, the loss of habitat, absent the presence of special status species, would not be significant. The impact of the disturbance of the identified vegetation types on special status species is discussed in detail in *Section 3.7.2.3*, below.

#### 3.7.2.3 Impacts to Special Status Species

The habitat types that occur on the project site are typical of the west side of SR 1 in Sand City. Approximately one-third of the site is already developed or otherwise disturbed. Given the history of sand mining and industrial use, the natural dune features have become degraded, consisting of barren shifting sands or sands stabilized by extensive ice plant mats. The shortage of stabilized dune habitat makes the site inhospitable for many native plant and animal species. However, Monterey spineflower plants were observed on the site, there is potential for Smith's blue butterfly to occupy the newly planted buckwheat, and the western snowy plover has historically nested in the area.

#### **Monterey Spineflower**

Approximately 37 square feet occupied by Monterey spineflower would be removed for construction of the project. Since Monterey spineflower is an aggressive colonizer, it can be reestablished in areas that are proposed for restoration for the project. From a regional perspective, the temporary loss of habitat for the identified Monterey spineflower occurrence on the property would not affect the survival of the species, particularly considering: the large areas of Monterey spineflower habitat that are permanently protected on former Fort Ord lands to the north, areas protected to the east within the North of Playa Mitigation Area and the Sand Dollar Habitat Preserve, and the areas protected to the south on the State Park property. Although the removal of these plants would not affect the survival of the species, the loss of the individual plants of this threatened species is a significant impact (refer to Appendix D for additional detail regarding Monterey spineflower and permitting).

Impact BIO-1:The project would result in the loss of several Monterey spineflower plants.<br/>Although the removal of these plants would not affect the survival of the<br/>species, the loss of the individual plants of this threatened species is a<br/>significant impact. (Significant Impact without Mitigation)

#### Western Snowy Plover

As described in the setting section above, Western snowy plovers have historically been found on the site and in the vicinity; however, prior to 2008 no western snowy plovers had established nests in the vicinity of the project area since 1998. Of four nests observed in Sand City in 2008, one was located approximately 0.42 miles south of the project site and the other three were located approximately 0.3 to 0.45 miles north of the site. The increased human activity, dog use and other disturbances on the Sand City beaches have significantly decreased the availability of habitat for nesting plovers. There is also potential for direct take of plovers if a nest were to be established on or nearby the property and construction activities resulted in loss of birds and or abandonment of an active nest. Degradation of nesting habitat would result in a significant impact and there is a potential for direct take of snowy plovers if a nest were to be established on or near the property and construction activities resulted in loss of birds and or abandonment of an active nest. Through access controls, monitoring, and implementation of protection measures, these effects can be reduced, and nesting habitat for western snowy plover could be improved over existing conditions with construction of the project.

Impact BIO-2:The project could result in the removal of habitat for western snowy plover<br/>and, therefore, would have a significant impact on the species. (Significant<br/>Impact without Mitigation)

#### Smith's Blue Butterfly

The project will result in the removal of 187 coast and seacliff buckwheat plants, within a 0.21 acre area of the site, which were found to support the federally endangered Smith's blue butterfly. Removal of occupied Smith's blue butterfly habitat is a potentially significant project impact and may require independent "take" authorization from the Service in the form of a Section 10(a)(1)(B) permit and the preparation of an HCP. The butterflies identified on the project site are most likely individuals that have dispersed from other populations from the north or east. Removal of the occupied buckwheat plants could result in both the removal of individual Smith's blue butterflies and in the disruption of a dispersal corridor for the species.

### Impact BIO-3:The removal of seacliff and coast buckwheat plants as a result of the project<br/>would result in significant impacts to Smith's blue butterflies and their<br/>dispersal. (Significant Impact without Mitigation)

#### **Burrowing Owls**

Burrowing owls are not currently nesting on the project site, however, there is a high amount of ground squirrel activity, and owls have been sighted north and east of the project site. While no burrowing owls were seen on the site, owls occur in the area and suitable habitat exists on the site. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered a "taking" by the CDFG. Furthermore, the destruction of occupied burrowing owl burrows is also considered a taking. Any loss of burrowing owls or fertile eggs, any activities resulting in nest abandonment, or the destruction of occupied burrows would constitute a significant impact. Construction activities such as tree removal, site grading, etc., which disturb a nesting burrowing owl on-site or immediately adjacent to the site or destroy occupied burrows would constitute a significant impact. The project is not expected to result in a significant reduction of construction, then there is potential for the project to directly impact a nesting bird or cause nest abandonment. No signs of burrowing owls or their nests were identified on the site, and therefore, the project would not result in a significant loss of burrowing owl habitat.

**Impact BIO-4:** The proposed project will not result in impacts to burrowing owl habitat or active burrowing owl nests on the site. (Less Than Significant Impact)

#### **Black Legless Lizards**

The project will result in the removal of 19.8 acres of habitat that could potentially be occupied by black legless lizard. Of this area, 10.5 acres is extremely marginal habitat for the lizard, including areas of unvegetated dune and severely disturbed or developed areas. If the species is located on the site, there is potential to directly affect the lizard during construction activities.

Impact BIO-5:The project will remove potential habitat for the black legless lizard and<br/>could result in the loss of individual black legless lizards. (Significant<br/>Impact without Mitigation)

#### **Migratory Birds**

Migratory birds, including some shorebirds, could be impacted if there are active nests on or near the project area during construction. Removal of active nests would conflict with the Migratory Bird Treaty Act and section 3503.5 of the California Fish and Game Code. In practice, abiding by the Migratory Bird Treaty Act and California Fish and Game Code usually means avoiding construction in the vicinity of active nests until such time as the young have fledged and the nest is abandoned. No bird nests were observed on the project site during surveys completed in April and June 2006.

Impact BIO-6:The proposed project would not result in impacts to nesting migratory birds<br/>on the site. (Less Than Significant Impact)

#### 3.7.2.4 *Mature Trees*

The proposed extension of Sand Dunes Drive would result in the removal of approximately two trees from the project site. Based on the Sand City Tree Ordinance these trees are not significant trees.

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Impact BIO-7: The proposed project would not result in any impact to City-designated significant trees. (Less Than Significant Impact)
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#### 3.7.3 <u>Mitigation and Avoidance Measures for Biological Resources Impacts</u>

#### **3.7.3.1** Special-Status Species

The project proposes to implement the mitigation measures below to reduce the impacts of the project on special-status species to a less than significant level.

#### **Monterey Spineflower**

**MM BIO-1.1:** The project shall implement the following measures proposed as part of the Habitat Protection Plan for the site:

- Revegetation and enhancement of coastal dune scrub habitat.
- Collection and propagation of seed from Monterey spineflower plants in the development area.
- Salvage of Monterey spineflower soil seedbank from the project site.
- Re-establishment of approximately 185 square feet of Monterey spineflower within the proposed foredunes on the site; a 5:1 mitigation ratio for the 37 square feet that will be lost within the building envelope.
- Pre-construction surveys for Monterey spineflower will be completed to confirm the area of impact and the required size of the mitigation area prior to the issuance of grading permits on the site.

#### Western Snowy Plover

### **MM BIO-2.1:** The project shall implement the following pre-construction measures proposed as part of the Habitat Protection Plan for the site:

- Pre-construction surveys for active breeding/nesting on the project site to avoid disturbance of individual western snowy plovers.
- Establishment of an on-site biological monitor to monitor western snowy plover activity during construction activities and to direct construction activities appropriately through consultation with the construction superintendent.
- Lighting restrictions for project facilities within and adjacent to western snowy plover habitat.

### **MM BIO-2.2:** The project shall implement the following post-construction measures proposed as part of the Habitat Protection Plan for the site:

• Designation of a biological steward specifically to conduct ongoing monitoring of western snowy plover activity during the breeding season

(March through September) to identify presence/absence and locations of western snowy plover nests. Public access to beach areas will be regulated based on this monitoring.

- Restrict beach access during breeding/nesting season, as determined necessary by the biological steward. Access would be restricted through the installation of fencing and signs as well as patrol by the biological steward.
- Prohibit off-leash dogs and campfires on beaches to minimize disturbance of western snowy plover nests and populations. Fines and other penalties may be imposed on violators. This prohibition will remain in effect even if monitoring indicates that no plovers are using the coastal strand area.
- Prohibit use of motorized equipment to rake beaches or to remove trash or other debris from the beach. All maintenance activities in the coastal strand area should be completed by manual means.
- Develop education program to inform the public about the sensitivity of western snowy plover.
- Provide interpretive signs to describe the life history and sensitivity of western snowy plovers to the public.
- MM BIO-1.2,The project shall meet the monitoring and reporting requirements, and<br/>implement the adaptive management strategy identified in the Habitat<br/>Protection Plan prepared for the site.

#### Smith's Blue Butterfly

- **MM BIO-3.1:** The buckwheat host plant for Smith's blue butterfly shall be included in the plant palette for the dune areas to be reconstructed as part of the project. The planted dunes will re-establish habitat and create a movement corridor for this species on the west side of SR 1. To minimize direct impacts to the butterfly, removal of the buckwheat host plants shall occur between October and May, which is outside the species' typical flight season of June to September.
- **MM BIO-3.2:** Due to the removal of buckwheat plants from the site, a Section 10(a)(1)(B) permit from the U.S. Fish and Wildlife Service will be required for the project. The permit will require replacement of approximately 0.21 acres of buckwheat plants that will be lost due to construction grading. Approval from the U.S. Fish and Wildlife Service shall be obtained prior to project construction.

#### **Burrowing Owls**

While individual burrowing owls were not found on-site, because owls could move onto the site prior to construction, the project includes the following measures to avoid impacts to individual burrowing owls.

AM BIO-4.1: Directed surveys shall be conducted within 30 days of initiation of construction to determine presence/absence of burrowing owl nests. If construction activities are initiated during the period of August through November, these surveys may not be necessary. If pre-construction surveys identify an active burrowing owl nest, an appropriate buffer shall be

established around the nest in accordance with CDFG requirements/protocols, and construction activities shall not be allowed within that buffer area until the young have fledged or are otherwise able to move out of harms way. The nest shall be monitored by a qualified biologist and when it is determined to no longer be active, construction activities can resume within the buffer area.

- AM BIO-4.2: If preconstruction surveys determine that burrowing owls occupy the site, and avoiding development of occupied areas is not feasible, then the owls may be evicted outside of the breeding season, with the authorization of the California Department of Fish and Game (CDFG). The CDFG typically only allows eviction of owls outside of the breeding season (only during the non-breeding season [August-November]) by a qualified ornithologist, and generally requires habitat compensation on off-site mitigation lands.
- **AM BIO-4.3:** A final report of burrowing owls, including any protection measures, shall be submitted to the Director of Community Development prior to the start of grading.

#### **Black Legless Lizards**

**MM BIO-5.1:** Per CDFG recommendations, impacts to black legless lizards shall be minimized through a search and relocation effort for the species within the disturbance envelope prior to construction. The search and relocation effort shall be completed as a three-pass salvage effort immediately preceding the start of construction by a qualified biologist who holds a Scientific Collecting Permit issued by CDFG. The effort shall be completed in accordance with a black legless lizard Search and Relocation Plan specific to the project that is submitted to and approved by CDFG. Pursuant to CDFG guidelines, the plan will, at a minimum: 1) specify a relocation area for the lizards that will be preserved and has habitat characteristics suitable to support the species; 2) describe the protocol for conducting the three-pass search of the project area; 3) describe the protocol for recording essential data on each captured lizard, including information such as body length, color, sand temperature, capture location coordinates and release site coordinates; and 4) identify proper handling and search procedures.

#### **Migratory Birds**

While individual migratory birds were not found on-site, because migratory birds could locate on the site prior to construction, the project includes the following measures to avoid impacts to individual migratory birds.

AM BIO-6.1: Directed surveys for ground nesters, including coast horned lark and killdeer, shall be conducted within 30 days of initiation of construction to determine presence/absence of active nests. The typical nesting period for coast horned lark is January 15 to August 1. The typical nesting period for killdeer is March through September. If construction activities are initiated outside of these typical breeding seasons, then preconstruction surveys for active nests would not be necessary. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to

cause abandonment, then those activities shall be avoided until the young have fledged as determined through monitoring of the nest. Once the young have fledged, construction activities can resume in the vicinity.

#### 3.7.4 <u>Conclusion</u>

Impact BIO-1:	Implementation of the identified mitigation measures would reduce the impacts of the project on the Monterey spineflower to a less than significant level. (Less Than Significant Impact with Mitigation)
Impact BIO-2:	Implementation of the identified mitigation and avoidance measures would further avoid the less than significant impacts of the project on the Western snowy plover. (Less Than Significant Impact)
Impact BIO-3:	Implementation of the identified mitigation measures will reduce project impacts to Smith's blue butterfly to a less than significant level. (Less Than Significant Impact with Mitigation)
Impact BIO-4:	The proposed project will not result in impacts to burrowing owl habitat on the site. Incorporation of the identified avoidance measures would ensure that the project does not impact individual burrowing owls. (Less Than Significant Impact)
Impact BIO-5:	Implementation of the identified mitigation measures will reduce project impacts to black legless lizard to a less than significant level. (Less Than Significant Impact with Mitigation)
Impact BIO-6:	The proposed project would not result in impacts to nesting migratory birds on the site. Incorporation of the identified avoidance measures would ensure that the project does not impact individual migratory birds. (Less Than Significant Impact)
Impact BIO-7:	The proposed project would not result in any impact to City-designated significant trees. (Less Than Significant Impact)

#### 3.8 AIR QUALITY

The discussion below is based upon an Air Quality Impact Analysis prepared for the project by *Don Ballanti, Certified Consulting Meteorologist* in February 2012. A copy of this report is included as Appendix E of this EIR.

#### 3.8.1 Introduction and Regulatory Framework

Air pollution typically refers to air that contains chemicals in concentrations that are high enough to cause adverse effects to humans, other animals, vegetation, or materials. Air pollutants include those from natural sources (e.g., forest fires, volcanic eruptions, windstorms, etc.) and human sources (e.g., factories, transportation, power plants, etc.).

In recognition of the adverse effects of degraded air quality, Congress and the California Legislature enacted the Federal and California Clean Air Acts, respectively. As a result of these laws, 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, the California standards are more stringent than the federal standards. Table 3.8-1 lists these pollutants, their sources and effects, and the related standards.

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. 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 for the Monterey Bay Region is the current regional air quality plan. The goal of the Plan is to improve air quality through tighter industry controls, cleaner cars and trucks, cleaner fuels, and increased commute alternatives.

#### 3.8.2 <u>Setting</u>

The project is located within the North Central Coast Air Basin (NCCAB), which is comprised of Santa Cruz, San Benito and Monterey Counties. A semi-permanent area of high pressure in the eastern Pacific is the controlling factor in the climate of the air basin. In late spring and summer, the high pressure system is dominant and causes persistent west and northwesterly winds over the entire California Coast. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. Warmer air aloft creates elevated inversions that restrict dilution of pollutants vertically, and mountains forming the valleys restrict dilution horizontally.

In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The air flow is occasionally reversed in a weak offshore movement, and the relatively stagnant conditions allow pollutants to accumulate over a period of days. It is during this season that the north or east winds develop that transport pollutants from either the San Francisco Bay Area or the Central Valley into the NCCAB.

During winter and early spring the Pacific High migrates southward and has less influence on the air basin. Wind direction is more variable, but northwest winds still dominate. The general absence of deep, persistent inversions and occasional storm passages usually result in good air quality for the basin as a whole.

Table 3.8-1 Major Criteria Air Pollutants and Standards						
	Pollutant					
	Ozone	Carbon Monoxide	Nitrogen Dioxide	Sulfur Dioxide	PM <sub>10</sub>	PM <sub>2.5</sub>
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: .075ppm	1-hr: 35ppm 8-hr: 9ppm	1-hr: n/a AA: .053ppm	1-hr: n/a 24-hr:.075 ppm	24-hr: 150 μg/m <sup>3</sup> AA: n/a	24-hr: 35 μg/m <sup>3</sup> AA: 15 μg/m <sup>3</sup>
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 <sup>3</sup> AA: 20 μg/m <sup>3</sup>	24-hr: n/a AA: 12 μg/m <sup>3</sup>
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	А	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 $\mu$ G/m <sup>3</sup> = 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 <b>Source:</b> California Air Resources Board, Ambient Air Ouality Standards, February 2012.						

Under the Federal Clean Air Act, the NCCAB was designated a maintenance area for the federal 1hour ozone standard (now revoked), meaning that it was a non-attainment area but has achieved attainment status and has a maintenance plan approved under the Clean Air Act. The NCCAB was redesignated from a moderate non-attainment area to a maintenance area in 1997 after meeting the federal 1-hour standard in 1990. A federal maintenance plan for the 1-hour standard was approved in 1994. The NCCAB is currently designated as attainment or unclassified for the federal standards.

Under the California Clean Air Act (CCAA), the basin is a moderate non-attainment area for the state 1-hour ozone standard. The air basin is also designated non-attainment for the state  $PM_{10}$  standard.

#### 3.8.2.1 Ambient Air Quality

The Monterey Bay Unified Air Pollution Control District (MBUAPCD) operates a network of monitoring sites throughout the District. The closest to the project site is located in Salinas, approximately 12 miles northeast of Sand City. This site monitors ozone, PM<sub>10</sub>, PM<sub>2.5</sub>, carbon monoxide and nitrogen dioxide.

During the three year period 2008-2010 the federal/state ambient air quality standards for these pollutants were all met, with the exception of two exceedances of the state  $PM_{10}$  24-hour standard in 2008.

#### **3.8.2.2** *Toxic Air Contaminants*

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least forty different toxic air contaminants. The most important, in terms of health risk, are diesel particulate, benzene, formaldehyde, 1,3-butadiene and acetaldehyde.

Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Health effects of TACs include cancer, birth defects, neurological damage and death.

#### 3.8.2.3 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 land uses include residences, schools playgrounds, child care centers, retirement homes, convalescent homes, hospitals and medical clinics.

The project site is bounded on the north and south by open space. The Pacific Ocean bounds the site on the west and State Route 1 bounds the site on the east. The area east of State Route 1 is occupied by a shopping center. The closest sensitive receptors are residences located on the south side of Tioga Avenue east of State Route 1.

#### 3.8.3 <u>Air Quality Impacts</u>

#### **3.8.3.1** *Thresholds of Significance*

For the purposes of this EIR, an air quality impact is considered significant if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan; or
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation; or
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

Based on the Monterey Unified Air Pollution Control District's *CEQA Air Quality Guidelines*, the following thresholds were used to determine if the project's air pollutant emissions are significant.

#### **Operational Emissions**

For operational direct and indirect emissions, the project would have a significant impact if volatile organic compounds (VOC) or nitrogen oxides ( $NO_x$ ) emissions exceed 137 pounds per day;  $PM_{10}$  emissions exceed 82 pounds per day; carbon monoxide (CO) emissions exceed 550 pounds/day; or sulfur oxides ( $SO_x$ ) emissions exceed 150 pounds/day.

Direct emissions refer to pollutants on-site from equipment or stationary engines. These types of sources typically are found at industrial or manufacturing facilities. The MBUAPCD *CEQA Air Quality Guidelines* provide that exceeding the thresholds for  $PM_{10}$ , CO or SO<sub>x</sub>, is not a significant impact if district approved air quality modeling indicates that the source would not result in a violation of the corresponding state and federal ambient air quality standards.

Indirect emissions are those related to vehicle traffic attracted or generated by a project. Indirect sources such as the proposed project emissions are compared to the thresholds for VOC and  $NO_x$ .

District guidelines additionally identify several traffic-related thresholds related to the potential for high carbon monoxide concentrations:

- LOS at intersection/road segment degrades from D or better to E or F, or
- V/C ratio at intersection/road segment at LOS E or F increases by 0.05 or more or delay at intersection at LOS E or F increases by 10 seconds or more, or
- Reserve capacity at unsignalized intersections at LOS E or F decreases by 50 or more, or
- The project would generate substantial heavy truck traffic or generate substantial traffic along urban street canyons or near a major stationary source of carbon monoxide.

If any of these traffic thresholds are exceeded, carbon monoxide modeling should be undertaken to determine if indirect source emissions would cause an exceedance of state or national standards. If modeling demonstrates that the project would not cause or substantially contribute to an exceedance of CO standards, the project would not have a significant impact.

#### **Construction Emissions**

According to the MBUAPCD, exhaust emissions from construction equipment and vehicles emit precursors of ozone (VOC and  $NO_x$ ) as well as  $PM_{10}$  but emissions from these sources are assumed to be accommodated in the emission inventories of the state and federally required air plans and would not have a significant impact on the attainment and maintenance of the ozone standards.

The recommended threshold of significance for construction dust is  $PM_{10}$  emissions of 82 pounds per day or greater.

#### Toxic Air Contaminants

Construction emissions of diesel particulate matter (DPM) were evaluated based on the MBUAPCD Rule 1000 threshold of a cancer risk greater than one incident per 100,000 population (10 in one million). Non-cancer health risks would be considered significant if the Hazard Index would exceed 1.0.

#### 3.8.3.2 Regional Air Quality Impacts

Vehicle trips to and from the project site would result in new air pollutant emissions within the air basin. The long term operational emissions for the project were calculated using the URBEMIS 2007 emissions program. These include vehicle emissions associated with the project and area source emissions.

The project regional emissions are shown in Table 3.8-2 for non-attainment pollutants (ozone precursors and  $PM_{10}$ ). The results show that project operational emissions would not exceed the

Table 3.8-2Project Regional Emission in Pounds Per Day				
	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO <sub>x</sub> )	$PM_{10}$	
Area Sources	18.6	2.8	0.02	
Vehicle Emissions	20.5	30.3	46.6	
Total	39.1	33.1	46.6	
Significance Threshold	137.0	137.0	82.0	

MBUAPCD thresholds of significance and, therefore, project regional air quality impacts would be less than significant.

# Impact AQ-1:Emissions of ROG, NOx, and PM10 from the proposed project would not<br/>exceed the identified thresholds of significance; therefore, the proposed<br/>project would not result in a significant impact to regional air quality. (Less<br/>Than Significant Impact)

#### 3.8.3.3 Local Air Quality Impacts

The most significant local air pollutant is carbon monoxide. The primary source of carbon monoxide is automobile traffic. The highest concentrations of carbon monoxide are normally found near roads and highways. The project traffic would add to carbon monoxide concentrations near streets and intersections providing access to the site.

The traffic impact analysis prepared for the project examined project impacts on the operation of 10 intersections. Project traffic would not cause any intersection or road segment to degrade from LOS D to LOS E or F. All roadway segments currently at LOS E or F would have volume to capacity (V/C) increases less than 0.05. While the signalized intersection at Fremont Boulevard/State Route 1/Monterey Road currently operates at LOS E in the AM and PM peak hours, the increase in delay was calculated as 1.5 seconds in the AM peak hour and 2.2 seconds in the PM peak hour which does not meet the MBUAPCD threshold for modeling (10 second project increase for LOS E/F intersections). Additionally, the project would not generate heavy truck traffic or generate substantial traffic along urban street canyons or near any major stationary source of carbon monoxide. The project traffic impact analysis demonstrates that project traffic would not exceed any of the MBUAPCD thresholds for CO modeling and the project, therefore, would not result in a significant increase in local carbon monoxide concentrations.

# Impact AQ-2:Project traffic growth would not cause any new violations of the 8-hour<br/>standards for carbon monoxide, nor contribute substantially to an existing or<br/>projected violation; project impacts on local carbon monoxide concentrations<br/>are therefore less than significant. (Less Than Significant Impact)

#### **3.8.3.4** *Construction Dust Emissions*

The major construction air quality impacts would be due to dust generated by equipment and vehicles. Fugitive dust is emitted by construction activity and as a result of wind erosion over exposed earth surfaces. Dust emissions would vary from day to day, depending on the level and type of activity, moisture content of the soil and the weather. The URBEMIS 2007 program was applied to the project to estimate construction dust emissions over the anticipated 2.2 year construction period. Maximum dust emissions would occur during clearing and grading of the site. The

maximum predicted emission of  $PM_{10}$  is 474 pounds per day. These emissions would exceed the MBUAPCD significance criterion of 82 pounds per day, indicating that construction dust emissions would be significant.

**Impact AQ-3:** Construction activities, such as, clearing, excavation, and grading operations, construction vehicle traffic, and wind blowing over exposed earth would generate fugitive particulate matter emissions that would temporarily affect local air quality. (Significant Impact without Mitigation)

#### 3.8.3.5 Construction Toxic Air Contaminant Emissions

In 1998, after a 10-year scientific assessment process, the California Air Resources Board identified particulate matter from diesel-fueled engines as a toxic air contaminant. Construction of the project would place diesel-powered equipment and vehicles on the project site in proximity to residential properties southeast of the site. Following MBUAPCD guidance, construction emissions of diesel exhaust were evaluated for health risk. Diesel particulate emissions were estimated through the entire 2.2-year construction period by the URBEMIS 2007 program. Modeling parameters were based on MBUAPCD guidance. Following the recommendations of the Monterey Bay Unified APCD's diesel health risk assessment guidelines, a worst-case annual average concentration of diesel particulate matter (DPM) was estimated.

The SCREEN-3 model was used to calculate the excess cancer risk associated with exposure to diesel exhaust at the nearest residence. Calculated risk using the very conservative SCREEN-3 model results was 2.64 in one million, which is below the MBUAPCD threshold of significance of 10 in one million. For this reason, according to the established MPUAPCD thresholds, diesel particulate matter impacts are less than significant.

# Impact AQ-4:The construction of the proposed project would not expose sensitive receptors<br/>to substantial diesel emissions, and therefore, construction toxic air<br/>contaminant emissions would be less than significant. (Less Than<br/>Significant Impact)

#### 3.8.4 <u>Mitigation and Avoidance Measures for Air Quality Impacts</u>

The following mitigation and avoidance measures will be required by the City of Sand City to reduce the air quality impacts of the project to a less than significant level:

- **MM AQ-3.1:** Construction contractors shall implement a dust abatement program. The following construction practices shall be included in the dust abatement program and reflected as notes on the project plans prior to issuance of grading or building permits:
  - Water shall be used to control dust generation during loading materials onto trucks.
  - All trucks hauling demolition debris from the site shall be covered.
  - All exposed soil surfaces shall be watered at least three times daily. Frequency should be based on the type of operation, soil, and wind exposure.
  - All trucks hauling dirt, sand or loose materials, shall be covered or maintain at least two (2) feet of freeboard.
| MM AQ-3.2:              | <ul> <li>Inactive storage piles shall be covered.</li> <li>Streets shall be swept if visible soil material is carried out from the construction site.</li> <li>A publicly visible sign shall be posted 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).</li> <li>The above mitigations are calculated by the URBEMIS 2007 program to reduce maximum PM<sub>10</sub> construction emissions to 108.5 pounds per day, still above the MBUAPCD significance criterion of 82 pounds per day.</li> <li>In order to ensure construction emissions are reduced below MBUAPCD's significance criterion, construction contracts and conditions of approval on building permits and grading permits shall specify that grading operations be</li> </ul> |  |  |  |
|-------------------------|--|--|--|--|
|                         | restricted such that the area actively disturbed at any one time is less than five acres which would reduce dust emissions below 82 pounds per day.  |  |  |  |
|                         | with implementation of this measure in conjunction with MM AQ-3.1, the construction dust impacts of the project will be reduced to a less than significant level.  |  |  |  |
| 3.8.5 <u>Conclusion</u> |  |  |  |  |
| Impact AQ-1:            | Emissions of ROG, NOx, and $PM_{10}$ from the proposed project would not exceed the identified thresholds of significance; therefore, the proposed project would not result in a significant impact to regional air quality. (Less Than Significant Impact)  |  |  |  |
| Impact AQ-2:            | Project traffic growth would not cause any new violations of the 8-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation; project impacts on local carbon monoxide concentrations are therefore less than significant. (Less Than Significant Impact)   |  |  |  |
| Impact AQ-3:            | Implementation of the identified mitigation measures would reduce construction emissions of $PM_{10}$ to a less than significant level. (Less Than Significant Impact with Mitigation)   |  |  |  |
| Impact AQ-4:            | The construction of the proposed project would not expose sensitive receptors to substantial diesel emissions, and therefore, construction toxic air contaminant emissions would be less than significant. (Less Than Significant Impact)  |  |  |  |

# 3.9 NOISE

The discussion below is based on an Environmental Noise Assessment prepared for the project by *Illingworth & Rodkin, Inc.* in February 2012. A copy of this report is included as Appendix F of this EIR.

# 3.9.1 Introduction and Regulatory Framework

# 3.9.1.1 Background Information

Noise is measured in "decibels" (dB) which is a numerical expression of sound levels on a logarithmic scale. A noise level that is ten dB higher than another noise level has ten times as much sound energy and is perceived as being twice as loud. Sounds less than five dB are just barely audible and then only in absence of other sounds. Intense sounds of 140 dB are so loud that they are painful and can cause damage with only a brief exposure. These extremes are not commonplace in our normal working and living environments. An "A-weighted decibel" (dBA) filters out some of the low and high pitches which are not as audible to the human ear. Thus, noise impact analyses commonly use the dBA.

Since excessive noise levels can adversely affect human activities (such as conversation, sleeping and human health) federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods such as  $L_{eq}$ , DNL, or CNEL.<sup>22</sup> Using one of these descriptors is a way for a location's overall noise exposure to be measured, realizing of course that there are specific moments when noise levels are higher (e.g., when a leaf blower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows or in the middle of the night).

# 3.9.1.2 Applicable Noise Standards and Policies

# Sand City General Plan

The Noise Element of the Sand City General Plan establishes noise policies for new development. Residential 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 outdoor use areas meet the 60 dBA DNL exterior standard and that interior noise levels are maintained at or below 45 dBA DNL.

# 2010 California Building Code

The State of California establishes exterior sound transmission control standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings as set forth in the 2010 California Building Code (Chapter 12, Section 1207.11). Interior noise levels attributable to exterior environmental noise sources shall not exceed 45 dBA DNL/CNEL in any habitable room. When exterior noise levels (the higher of existing or future) where residential

 $<sup>^{22}</sup>$  L<sub>eq</sub> stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time such as the noisiest hour. **DNL** stands for Day-Night Level and is a 24-hour average of noise levels, with 10-dB penalties applied to noise occurring between 10 PM and 7 AM. **CNEL** stands for Community Noise Equivalent Level; it is similar to the DNL except that there is an additional five-dB penalty applied to noise which occurs between 7 PM and 10 PM. As a general rule of thumb where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L<sub>eq</sub>.

structures are to be located exceed 60 dBA DNL/CNEL 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.

# 3.9.2 <u>Setting</u>

The project site is located west of SR 1 and north of the intersection of Tioga Avenue and Sand Dunes Drive. The site is bordered to the north and south by undeveloped lands, by SR 1 to the east, and Monterey Bay to the west. A commercial shopping center is located opposite the site east of SR 1. The nearest noise-sensitive residential land uses are located over 900 feet southeast of the project site.

A noise monitoring survey was completed on May 15 to 16, 2007, to quantify the existing noise environment at the site. The noise monitoring survey included one 24-hour measurement (LT-1) and two short-term measurements (ST-1 and ST-2), completed in ten-minute intervals concurrent with the long-term measurement.

Noise measurement site LT-1 was located approximately 187 feet from the center of SR 1. Noise levels measured at this site resulted primarily from traffic on SR 1 and local traffic along Tioga Avenue and Sand Dunes Drive. Typical hourly average daytime noise levels ranged from 67 to 70 dBA  $L_{eq}$  and nighttime noise levels typically ranged from 57 to 65 dBA  $L_{eq}$  (refer to Figure 20). The calculated day-night average noise level at this location was 70 dBA DNL.

Measurement ST-1 was made at a distance of approximately 111 feet from the edge of southbound SR 1 in the center of the site near the coastal bike path. ST-1 was completed approximately five feet above the ground and approximately 13 feet below the grade of SR 1. ST-2 was made at a distance of approximately 223 feet from the edge of southbound SR 1, also in the central portion of the project site. The main source of noise in both these locations was traffic along SR 1 and noise generated from waves crashing on the shore. The results of these measurements are shown in Table 3.9-1.

Table 3.9-1           Summary of Short-Term Noise Measurements						
Location	L <sub>eq</sub>	L <sub>10</sub>	L <sub>50</sub>	L <sub>90</sub>	DNL	<b>Noise Source</b>
ST-1: 111 ft. to edge of SR 1	61	63	61	58	63	SR 1 Traffic
ST-2: 223 ft. to edge of SR 1	57	59	57	55	60	SR 1 Traffic

Generally, a 26 percent increase in traffic volumes would be required for traffic noise levels to increase by one (1) dBA DNL, and a 100 percent increase in traffic volumes would be required for traffic noise levels to increase by three (3) dBA DNL. Based on a review of existing traffic volumes on adjacent roadways, the calculated noise levels on the site from the 2007 survey are representative of existing conditions in 2012.



NOISE MEASUREMENT LOCATIONS

FIGURE 20

# 3.9.3 <u>Noise Impacts</u>

# **3.9.3.1** *Thresholds of Significance*

For the purposes of this EIR, a noise impact is considered significant if the project would:

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels; or
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- 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, expose people residing or working in the project area to excessive noise levels; or
- For a project located within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

# **CEQA Guidelines**

CEQA does not define what project-generated noise level increases are significant. Typically, project-generated noise level increases of three dBA DNL or greater are considered significant where exterior noise levels would exceed the normally acceptable noise level standard (60 dBA DNL). Where noise levels would remain at or below the normally acceptable noise level standard with the project, noise level increases of five dBA DNL or greater would be considered significant.

# 3.9.3.2 Ambient Noise Levels

# **Exterior Noise Levels**

Future noise levels at the project site will continue to result primarily from vehicular traffic along SR 1. Traffic noise levels were calculated to increase by approximately one dBA DNL assuming buildout of the General Plan. Exterior noise levels would range from approximately 65 dBA DNL at partially shielded first-floor units to 72 dBA DNL at hotel units with a direct line-of-sight to the roadway. Exterior noise levels at second-row and third-row hotel units would be approximately five to ten dBA DNL lower assuming shielding from the proposed buildings and increased distance from SR 1. Nearest Monterey Bay, the surf also contributes to exterior noise levels.

The project proposes shared common use areas (pool and deck areas) west of the lobby and hotel (refer to Figure 4). Exterior noise levels are calculated to be less than 60 dBA DNL at these shared common use areas due to the shielding provided by the proposed hotel buildings. Estimated future exterior noise levels on the project site comply with the City of Sand City's exterior noise and land use compatibility guidelines.

# Impact NOI-1:The proposed project would not expose persons to noise levels in excess of<br/>the City's adopted General Plan standards for outdoor activity areas. (Less<br/>Than Significant Impact)

# **Interior Noise Levels**

Exterior noise levels at the easternmost facades of the proposed hotel units nearest SR 1 would be as high as 72 dBA DNL. Interior noise levels are approximately 15 decibels lower than exterior noise levels assuming standard construction methods and the windows partially open for ventilation. Standard construction with the windows open, therefore, would yield interior noise levels of approximately 57 dBA DNL. Interior average noise levels would be expected to be approximately 20 to 25 dBA lower than exterior noise levels assuming the windows are closed to control noise, however, the proposed units must be provided a satisfactory form of forced air mechanical ventilation, as determined by the City, that adequately ventilates the interior space. With the windows closed and use of forced air mechanical ventilation, interior noise levels in the affected units would be approximately 47 to 52 dBA DNL. Second and third-row units that are partially shielded by topography or proposed buildings would be exposed to exterior noise levels ranging from approximately 60 dBA DNL to 70 dBA DNL. The interior noise levels in these units would range from 45 to 55 dBA DNL, assuming standard construction methods with the windows open. Therefore, with only standard construction, the interior noise levels would exceed the City's adopted General Plan and California Building Code standards and would be significant.

Impact NOI-2:Interior noise levels would exceed the City's adopted General Plan and<br/>California Building Code standards for hotel units using standard construction<br/>methods. (Significant Impact without Mitigation)

# 3.9.3.3 Project-Generated Traffic Noise

Project-generated traffic noise level increases were calculated by comparing project traffic volumes to existing traffic volumes. Based on this comparison, traffic noise levels are anticipated to increase by up to one dBA as a result of the project along roadways serving the project site. The proposed project, therefore, would not result in a noticeable increase in noise at noise-sensitive residential receptors adjacent to roadways serving the project site.<sup>23</sup>

Impact NOI-3:The increase in traffic volumes along roadways serving the site would not<br/>result in a substantial increase in noise at nearby sensitive receptors. (Less<br/>Than Significant Impact)

# 3.9.3.4 *Construction Noise*

Future construction on the project site would generate noise and would temporarily increase noise levels in the immediate vicinity of the site. Maximum noise levels generated by construction equipment at a distance of 50 feet range from 70 dBA to 95 dBA. The nearest noise-sensitive land uses are located over 900 feet from the site. These residences are located east of SR 1 and are currently exposed to high levels of traffic noise.

Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing, and duration of noise-generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction activities at the site would not normally generate noise levels in excess of traffic noise levels resulting from SR 1 at the nearest sensitive receptors. Construction activities would only occur during normal daytime hours, and therefore, it is unlikely that construction noise would be audible at the nearest receptors above

 $<sup>^{23}</sup>$  A minimum noise level increase of three decibels (3 dBA) or more would generally be required in a high noise environment to be perceptible to the human ear.

ambient traffic noise levels. The project would not generate noise levels that exceed 60 dBA  $L_{eq}$  and the ambient noise environment by at least five dBA  $L_{eq}$ .

Impact NOI-4:Construction noise would not result in significant noise impacts at the nearest<br/>noise sensitive land uses. (Less Than Significant Impact)

#### 3.9.4 <u>Mitigation and Avoidance Measures for Noise Impacts</u>

The following mitigation measures shall be included in the project to reduce the noise impacts of the project to a less-than-significant level:

- MM NOI-2.1: Design-level acoustical analyses will be required by the state building code to confirm that interior noise levels would be reduced to 45 dBA DNL or lower. The specific determination of what treatments will be necessary for each building 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 building permits.
   MM NOI-2.2: Building sound insulation requirements will need to include the provision of forced-air mechanical ventilation for units proposed in noise environments exceeding 60 dBA DNL, so that windows could be kept closed at the occupant's discretion to control noise.
- **MM NOI-2.3:** Special building techniques (e.g., sound-rated windows and building façade treatments) may be required to maintain interior noise levels. Depending upon the final building plans, units nearest SR 1 may require sound rated windows and doors (STC 30-33) to assure that the 45 dBA DNL indoor standard is met. Incorporation of windows and doors rated STC 30-33 or higher will reduce interior noise levels and assure that the City and state noise standards are met.

# 3.9.5 <u>Conclusion</u>

- Impact NOI-1:The proposed project would not expose persons to noise levels in excess of<br/>the City's adopted General Plan standards for outdoor activity areas. (Less<br/>Than Significant Impact)
- Impact NOI-2:Implementation of the identified mitigation measures would reduce interior<br/>noise levels to a less than significant level. (Less Than Significant Impact<br/>with Mitigation)
- Impact NOI-3:The increase in traffic volumes along roadways serving the site would not<br/>result in a substantial increase in noise at nearby sensitive receptors. (Less<br/>Than Significant Impact)
- **Impact NOI-4:** Construction noise would not result in significant noise impacts at the nearest noise sensitive land uses. (Less Than Significant Impact)

# 3.10 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based on a Phase I Environmental Site Assessment Update prepared by *The Twining Laboratories, Inc.* in March 2007 and a Phase II Environmental Site Assessment prepared by *CapRock Geology, Inc.* in December 2007 for the City property (formerly Granite Construction). A Phase I Environmental Site Assessment was also prepared for the McDonald and Sterling Properties by *LandAmerica Assessment Corporation* in August 2007. Copies of these reports are included in Appendix G of this EIR.

# 3.10.1 <u>Setting</u>

# 3.10.1.1 *Project Site Properties*

# **McDonald and Sterling Properties**

The McDonald and Sterling properties consist of three parcels which are currently undeveloped coastal lands. The surrounding properties consist of park land and undeveloped dunes, SR 1, and the Monterey Bay. The McDonald and Sterling properties were used for Sand Mining operations as early as the 1950s. A review of a government agency database report for these properties found that the site is listed as a "small quantity generator" of between 100 kilograms (kg) and 1,000 kg of hazardous waste per month. Based on the review of historical records and a government agency database report, there are no known on-site environmental conditions impacting these two properties.

# **City Property**

The City property (formerly Granite Construction) is composed of a bluff, approximately 60-70 feet above the beach line and is currently primarily undeveloped land. Several benches and a picnic table are present on the property with the coastal bike trail dividing the site into eastern and western portions. The remainder of the property is composed of sand dunes. The City property (formerly Granite Construction) was historically used as a fill material and construction debris dumping area and storage yard by the Granite Construction Company. A Phase II Environmental Site Assessment was completed for the City property (formerly Granite Construction) by *Dames & Moore* in 1996. This investigation found elevated concentrations of petroleum hydrocarbons primarily in the central portion of the property. The concentrations of petroleum hydrocarbons were identified to possibly require remediation; however, no remediation of these soils has taken place. This property also contains two monitoring wells used by the Monterey Peninsula Water Management District for the purpose of early detection of sea water intrusions into the regional aquifers.

Based on recommendations contained in the Phase I Environmental Site Assessment Update prepared for this property, seventeen soil samples were collected at the site and analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline, diesel, and motor oil as well as volatile organic compounds (VOCs) and oxygenates. None of the samples were found to contain VOCs, oxygenates, or gasoline. TPH as oil was found in three samples above the Monterey County Health Department (MCHD) action level of greater than 100 mg/kg, which are established to protect health and safety. TPH as diesel was also found above 100 mg/kg in one sample. These elevated levels of hydrocarbons were the only chemicals of concern found on the site.

# 3.10.1.2 *Nearby Properties*

Three leaking underground storage tank (LUST) sites were located within one-half mile of these properties, in addition, the former Fort Ord military base appeared on several EPA databases, however none of the LUST sites or the former Ford Ord base are anticipated to impact the site based on their distance from the site, elevation in relation to the site, or regulatory status. Based on the review of historical records and a government agency database report, there are no known off-site environmental conditions impacting the project site.

# 3.10.2 <u>Hazardous Materials Impacts</u>

# 3.10.2.1 Thresholds of Significance

For the purposes of this EIR, a hazard and hazardous materials impact is considered significant if the project would:

- Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials; or
- 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; or
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school; or
- 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; or
- 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; or
- 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; or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- 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.

# 3.10.2.2 *McDonald and Sterling Properties*

Based on a review of historical records and a government agency database report there are no known on-site or off-site environmental conditions impacting these two properties. The project does not propose any on-site use of hazardous materials other than the usage of small amounts of herbicides and/or pesticides for landscaping and pest control. The storage and use of these substances would not result in a significant hazardous materials impact.

# Impact HM-1:The proposed project would not be impacted by hazardous materials or soil or<br/>groundwater contamination on the McDonald and Sterling properties. (Less<br/>Than Significant Impact)

# 3.10.2.3 City Property (formerly Granite Construction)

In general the elevated concentrations of petroleum hydrocarbons found by *Dames & Moore* were significantly higher than the concentrations found on this property in September 2007. Deeper soils and groundwater were also tested and no TPH impact was identified. Motor oil and diesel hydrocarbon chains are less volatile and denser than lighter hydrocarbons which make them relatively immobile. Based on the soil and groundwater testing completed on the site in September 2007, the level of hydrocarbon contamination on the site has decreased significantly from TPH as diesel concentrations of 9,300 mg/kg in 1995 to 420 mg/kg in 2007 and TPH as motor oil concentrations of 4,500 mg/kg to 982 mg/kg in 2007. Based on the results of the September 2007 soil sampling on the property, the concentrations of TPH as diesel and TPH as motor oil continue to exceed the Monterey County Health Department (MCHD) action level of greater than 100 mg/kg, which are established to protect health and safety and, therefore, would require remediation as part of the redevelopment of the site.

A soil remediation project was completed by the County in 2009, prior to the City acquiring ownership of the property and a closure letter was received from the state Department of Toxic Substances Control (DTSC).

Impact HM-2:The City property (formerly Granite Construction) previously contained TPH<br/>concentrations exceeding minimum regulatory thresholds established by the<br/>Monterey County Health Department that were remediated to the satisfaction<br/>of the California DTSC in 2009. No other hazardous materials contamination<br/>is known to affect this property. (Less Than Significant Impact)

# 3.10.2.4 Other Hazards

#### **Airport Hazards**

The Monterey Peninsula Airport is located approximately 1.5 miles southeast of Sand City. Sand City is not within any of the airport's clear zones or extended clear zones, which are defined as safety zones of concern based on runway approaches.

**Impact HM-3:** The project would not result in an airport safety hazard for workers or guests of the proposed development. (**No Impact**)

# 3.10.3 Mitigation and Avoidance Measures for Hazardous Materials Impacts

No mitigation measures have been identified or are required to reduce hazardous materials impacts to a less than significant level.

- 3.10.4 <u>Conclusion</u>
- Impact HM-1:The proposed project would not be impacted due to soil or groundwater<br/>contamination on the McDonald and Sterling properties. (Less Than<br/>Significant Impact)
- Impact HM-2:The City property (formerly Granite Construction) previously contained TPH<br/>concentrations exceeding minimum regulatory thresholds established by the<br/>Monterey County Health Department that were remediated to the satisfaction

of the California DTSC in 2009. No other hazardous materials contamination is known to affect this property. (Less Than Significant Impact)

**Impact HM-3:** The project would not result in an airport safety hazard for workers or guests of the proposed project. (**No Impact**)

# 3.11 UTILITIES AND SERVICE SYSTEMS

# 3.11.1 <u>Setting</u>

# 3.11.1.1 Water Supply

Sand City, along with all of the other cities located on the Monterey Peninsula is a member of the Monterey Peninsula Water Management District (MPWMD). The MPWMD is responsible for issuing water service permits for development located within the District's boundaries. Domestic water service is provided by the California American Water Company (Cal-Am) which operates and maintains water lines within the District. Regionally, the primary source of water supply for Cal-Am customers is from wells along the lower Carmel River. Pumped groundwater from the Seaside aquifer and water stored in the San Clemente and Los Padres reservoirs in the upper Carmel River area make up the balance of water supply for the Monterey Peninsula. In 1995, the California Water Resources Control Board determined that Cal-Am was exceeding its legal water rights to Carmel River. This determination has created a shortage of water on the Monterey Peninsula and limits the availability of water for new development.

By 2001, Sand City had allocated all of the presently available water supply to specific development parcels. The City approved construction of a reverse osmosis desalination facility in 2005. The facility was also approved by the California Coastal Commission in 2005, and approval extension was received in 2007. The Sand City Desalination Plant began operation in May 2010. The desalination facility supplies the City with 300 acre-feet of potable water from a shallow brackish water aquifer located near Monterey Bay. Sand City has a water entitlement from the Monterey Peninsula Water Management District (MPWMD) of 206 acre-feet per year. Two brackish water extraction wells to be used by the desalination facility are located on Tioga Avenue. A third well further westerly on the south side of Tioga Avenue is not currently in use and should eventually be abandoned per County standards.

There is an existing eight-inch water line present in Tioga Avenue east of State Route 1 and a 12-inch water line in Playa Avenue east of SR 1.

# 3.11.1.2 Sanitary Sewer and 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<sup>24</sup> (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.

<sup>&</sup>lt;sup>24</sup> Monterey Regional Water Pollution Control Agency. <u>MRWPCA Service Area</u>. 3 March 2009. <u>http://www.mrwpca.org/about/svc\_area.php</u>

# 3.11.1.3 Storm Drainage

Storm drain lines are present in a limited area of the City. Storm drain lines are located in the Old Town district and along sections of Tioga Avenue east of SR 1. The nearest storm drain lines to the site are located adjacent to the intersection of Metz Road and Playa Avenue. The installation of storm drainage lines and/or on-site percolation facilities is required concurrent with new development. Percolation systems currently exist in the vicinity of Playa Avenue and stormwater also percolates into dune sands or runs off into Monterey Bay.

# 3.11.1.4 Solid Waste

Sand City is located within the jurisdiction of the Monterey Regional Waste Management District (MRWMD). Solid waste collection is provided by Waste Management, Inc. Solid waste collected in Sand City is disposed of at the Monterey Peninsula Landfill which serves western Monterey County. The MRWMD estimates the Monterey Peninsula Landfill has adequate capacity for projected development on the Monterey Peninsula through 2107. The City curbside recycling program began in 1991, and by 2008 the City was diverting 66 percent of its waste.<sup>25</sup> The City also has residential curbside collection for green waste and household hazardous waste and commercial collection of recyclables.

# 3.11.1.5 Electricity and Natural Gas

Gas and electric distribution services are provided to Sand City by the Pacific Gas and Electric Company (PG&E). The primary issue related to electric utility facilities within Sand City is the presence of overhead utility lines. In order to ensure no new overhead lines are installed, the Underground Ordinance requires that all proposed new construction in the City include provisions for underground construction of the utilities.

Four-inch gas lines and electric power lines are located in Playa Avenue and Metz Road east of SR 1 and electric power lines are also located on Tioga Avenue west of SR 1.

# 3.11.2 <u>Utilities and Service Systems Impacts</u>

# 3.11.2.1 Thresholds of Significance

For the purposes of this EIR, a water supply and utilities and service systems impact is considered significant if the project would:

- Require or result in the construction of a new storm water or wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Need new or expanded entitlements for water supplies;
- Be served by a landfill with insufficient permitted capacity;
- Generate waste before or after project completion in a quantity sufficient to negatively affect the City's compliance with State law; or
- Not comply with federal, state, and local statutes and regulations related to solid waste.

<sup>&</sup>lt;sup>25</sup> Steve Matarazzo. E-mail communication. August 10, 2009.

# 3.11.2.2 Water Supply

The project proposes to obtain water for domestic purposes, irrigation, and fire flow through the City of Sand City. The estimated water demand for the completed resort project is approximately 64.4 acre-feet per year. Water use on the site would be approximately 59.29 acre-feet per year for interior, domestic use and 5.11 acre-feet per year for exterior landscape use. Water would be supplied to the site via the City's available resources at the time of construction of Phase I and/or Phase II. Water lines will be extended to the site from Tioga Avenue and Playa Avenue as part of project construction. Due to fire flow requirements, it is likely that the Tioga Avenue and Playa Avenue water mains will be connected to function as a "looped" system subject to the approval of Cal-Am. Each of the branch lines will require crossing the Caltrans right-of-way for SR 1 at both Playa and Tioga Avenues to serve the project. Water line extensions to the site will occur within the existing street right-of-way.

Impact UTIL-1:Based on the water rights secured for the site and use of the City's available<br/>supply, the proposed project would have adequate water supplies to serve the<br/>development. (Less Than Significant Impact)

# 3.11.2.3 Sanitary Sewer

Wastewater from the project would be collected on-site in a private lift station and a private force main will be installed in the Sand Dunes Drive extension and right-of-way to Bay Avenue. The private force main will be connected to the Seaside County Sanitation District system at Bay Avenue for transfer to the wastewater treatment plant. The project would increase sewage generation from the site by approximately 52,939<sup>26</sup> gallons per day. The sewage created by the project is not considered a substantial increase in sewage generation due to the existing capacity of the treatment plant and the fact that the project type has been planned as part of the City's Land Use Plan for the site for many years. The extension of the sanitary sewer line would be located within the proposed alignment and within the existing right-of-way of Sand Dunes Drive, and therefore, construction and extension of this line is not anticipated to result in significant environmental effects.

Proposed public restrooms would be located at the terminus of the Sand Dunes Drive extension and on the north side of the terminus of Tioga Avenue. Both locations are located proximate to proposed public parking. The proposed location of the public restrooms on Tioga Avenue would conflict with the desalination extraction wells and, therefore, shall be conditioned by the City to be relocated to the north side of the Tioga Avenue cul-de-sac. As described above, wastewater from the public restrooms would be collected in a private lift station connected to the proposed private force main in Sand Dunes Drive.

The project will require modifications to an existing 36-inch sewer force main that traverses the site and may be exposed due to site grading near the proposed Sand Dunes Drive and Playa Avenue intersection. The project would modify the elevation of the sewer in its existing easement and provide a minimum of three feet of cover when the pipe is under a paved or stabilized surface and four feet of cover when the pipe is located outside of paved areas of the project. Engineered construction drawings will be reviewed and approved by the MRWPCA and City of Sand City prior to issuance of building permits for the project. The review and approval of the proposed modifications to the sewer force main will ensure that the proposed modifications to the sewer main

<sup>&</sup>lt;sup>26</sup> Based on interior water use of 59.29 acre feet per year and approximately 325,900 gallons per acre-foot.

are consistent with the requirements of the MRWPCA and City of Sand City and would not result in a significant impact to wastewater facilities.

**Impact UTIL-2:** The proposed project would not result in the need for additional wastewater treatment facilities; however, the proposed public restrooms on Tioga Avenue would conflict with water supply facilities. (Significant Impact without Mitigation)

# 3.11.2.4 Storm Drainage

The project site is primarily unpaved and all stormwater runoff from the site presently percolates into the dune sand or runs off to Monterey Bay. The proposed buildings, roadways, parking lots, and amenities would substantially increase the amount of impervious surfaces on the site and would cause an increase in storm water runoff from the site. Storm water runoff from the site could carry pollutants from the proposed parking lots, roads, maintenance areas, and landscaping.

Storm water runoff from the site will be collected by inlet structures and conveyed by pipes to two underground detention basins. Hydrocarbon separators are proposed for installation immediately upstream from the detention basins. The proposed drainage system will be sized to collect, convey, and dispose of runoff generated by a 100-year storm event. The proposed hydrocarbon separators will be sized for first flush runoff flows. The design of all impermeable surfaces (rooftops, parking lots, etc.) will be required to address post-construction runoff water quality through the use of post-construction storm water control (or LID) practices including but not limited to measures that either detain and/or filter water to remove pollutants prior to discharge from the site, such as flow-through planters/tree boxes, bioretention swales, green roofs, and the like. The final storm water conveyance and treatment systems included in the project will ensure compliance with the Monterey Regional Storm Water Management Program. The final Low Impact Development measures selected for the project shall be identified prior to the City's approval of the Tentative Map. The applicant will be required to sign a statement accepting responsibility for the maintenance of the proposed storm water drainage facilities.

**Impact UTIL-3:** The proposed project would install pipes to convey storm water runoff to onsite percolation facilities. The installation and maintenance of the proposed storm water facilities as part of the project would not result in significant environmental effects. (Less Than Significant Impact)

# 3.11.2.5 Solid Waste

The proposed project would generate approximately 331 tons of solid waste per year.<sup>27</sup> The Monterey Peninsula Landfill 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.<sup>28</sup> The proposed 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.

<sup>&</sup>lt;sup>27</sup> Based on solid waste generation rates of two pounds per room per day for hotel uses and 0.0108 tons per square foot per year for restaurant uses. Source: California Integrated Waste Management Board. <u>Estimated Solid Waste Generation Rates for Service Establishments</u>. Accessed: March 8, 2012.

Available at: <u>http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/Service.htm</u>

<sup>&</sup>lt;sup>28</sup> Monterey Regional Waste Management District. *About Us.* Accessed: March 12, 2012. Available at: <u>http://www.mrwmd.org/about-us.htm</u>

Impact UTIL-4:The proposed project would not substantially increase solid waste generation<br/>in the City or require additional landfill capacity. (Less Than Significant<br/>Impact)

# 3.11.2.6 Electricity and Natural Gas

Consistent with the Public Works Master Plan all electricity and natural gas lines serving the project site will be constructed underground in a joint utility trench. The proposed project is not anticipated to require significant upgrades in the existing electricity and natural gas infrastructure serving the City.

# Impact UTIL-5:The proposed project would not require the installation of new infrastructure<br/>that would result in substantial physical impacts to the environment. (Less<br/>Than Significant Impact)

#### 3.11.3 Mitigation and Avoidance Measures for Utilities and Services Impacts

The following mitigation and avoidance measure will be required by the City of Sand City to reduce the utilities and service system impacts of the project to a less than significant level:

**MM UTIL-2.1:** As a condition of project approval, the proposed restrooms on Tioga Avenue shall be located on the north side of Tioga Avenue near the proposed lifeguard station. The location of these restroom facilities will reduce the impact to existing water supply facilities to a less than significant level.

#### 3.11.4 <u>Conclusion</u>

- Impact UTIL-1:Based on the water rights secured for the site and use of the City's available<br/>supply, the proposed project would have adequate water supplies to serve the<br/>development. (Less Than Significant Impact)
- Impact UTIL-2:Implementation of the identified mitigation measure, movement of the<br/>proposed restroom facilities to the north side of Tioga Avenue, would reduce<br/>conflicts between these facilities and existing water supply facilities to a less<br/>than significant level. (Less Than Significant Impact with Mitigation)
- **Impact UTIL-3:** The proposed project would install pipes to convey storm water runoff to onsite percolation facilities. The installation and maintenance of the proposed storm water facilities as part of the project would not result in significant environmental effects. (Less Than Significant Impact)
- Impact UTIL-4:The proposed project would not substantially increase solid waste generation<br/>in the City or require additional landfill capacity. (Less Than Significant<br/>Impact)
- Impact UTIL-5:The proposed project would not require the installation of new infrastructure<br/>that would result in substantial physical impacts to the environment. (Less<br/>Than Significant Impact)

# 3.12 CULTURAL RESOURCES

# 3.12.1 <u>Setting</u>

# 3.12.1.1 Archaeological Resources

#### Sand City

A preliminary archaeological survey prepared for the Sand City General Plan identified one potential area of archaeological sensitivity located in the southwestern coastal portion of the City on land owned by the California Department of Parks and Recreation. A recorded archaeological resource is located in the southwestern coastal area of the City. Buried resources may be found in other locations throughout the City; however, these resources are likely to be small and may consist of temporary occupation areas in the dunes, resource gathering or processing areas, and relatively isolated burial sites.

# Monterey

The City of Monterey's General Plan designates the northwestern boundary of its jurisdiction, in the vicinity of Roberts Lake/Laguna Del Rey, as archaeologically sensitive.

# 3.12.1.2 *Historic Resources*

Sand City does not contain any significant historic resources. The City was incorporated in 1960 and has historically been a primarily industrial community. The existing industrial buildings and industrial activities that have taken place in the City are not considered historically significant. None of the buildings or structures in the City are considered eligible for the California Register of Historic Resources. There are no existing structures on the project site.

# 3.12.2 <u>Cultural Resources Impacts</u>

# 3.12.2.1 Thresholds of Significance

For the purposes of this EIR, a cultural resources impact is considered significant if the project would:

- Cause a substantial adverse change in the significance of a historic resource as defined in \$15064.5 of the CEQA Guidelines;
- Cause damage to an important archaeological resource as defined in §15064.5 of the CEQA Guidelines;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

# 3.12.2.2 Archaeological Resources

The only known archaeological resources in Sand City are located near the southern boundary of the City limits. The project site is located in an area of low archaeological sensitivity. Development on the project site would not impact any known archaeological resources or disturb human remains.

**Impact CULT-1:** The project site is not located in an area of archaeological significance; therefore the project is not anticipated to result in an impact to archaeological resources. (**No Impact**)

# 3.12.2.3 *Historic Resources*

There are no identified historic resources located in the City of Sand City. The project site consists of a former sand mining operation and concrete batch plant. No known historic resources are located on the project site. For these reasons, the project would not result in any impact to known historic resources.

Impact CULT-2: The project would not result in any impact to known historic resources. (No Impact)

#### 3.12.3 Avoidance Measures for Cultural Resources Impacts

While there are no known archaeological resources present, and no resources are anticipated to be present at the site, there remains the potential for resources to be encountered during grading and construction. Therefore, the project would include the following avoidance measures to ensure that construction activities do not significantly impact archaeological resources.

- AM CULT-1.1: In the event that human remains are found, all project-related construction shall cease within a 50-foot radius of the find in order to proceed with the testing and mitigation measures required. Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California:
  - In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Monterey County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.
  - A final report shall be submitted to the Director of Community Development. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found, a summary of the resources analysis methodology and conclusion, and a description of the disposition/curation of the resources. The report shall verify completion of the mitigation program to the satisfaction of the Director of Director of Community Development Department.

# 3.12.4 <u>Conclusion</u>

Impact CULT-1:	The project would not result in any impact to known archaeological
	resources. (No Impact)

**Impact CULT-2:** The project would not result in any impact to known historic resources. (**No Impact**)

# 3.13 ENERGY

This section was prepared pursuant to CEQA Guidelines Section 15126.4(a)(1)(C) and Appendix F (Energy Conservation of the Guidelines), which require that EIRs include a discussion of the potential energy impacts of proposed projects with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.

# 3.13.1 <u>Introduction</u>

Energy consumption is analyzed in an EIR because of the environmental impacts associated with its production and usage. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emissions of pollutants during both the production and consumption phases.

Energy usage is typically quantified using the British Thermal Unit (BTU). As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWh) of electricity are 123,000 BTUs, 1,000 BTUs, and 3,400 BTUs, respectively.

Energy conservation is embodied in many federal, state and local statutes and policies. At the federal level, energy standards apply to numerous products (e.g., the EnergyStar program) and transportation (e.g., fuel efficiency standards). At the state level, Title 24 of the California Administrative Code sets forth energy standards for buildings, rebates/tax credits are provided for installation of renewable energy systems, and the *Flex Your Power* program promotes conservation in multiple areas. At the local level, the City's General Plan includes policies whose objectives include reduction in energy usage. Specifically, Policy 5.9.2 states that the City will promote energy conservation and the use of renewable energy resources, and Policy 5.9.3 states that the City will encourage site and building design which incorporate energy conservation measures and take advantage of passive heating opportunities.

# 3.13.2 <u>Setting</u>

Total energy usage in California was 8,006 trillion BTUs in the year 2009 (the most recent year for which this specific data was available), which equates to an average of 217 million BTUs per capita.<sup>29</sup> Of California's total energy usage in 2009, the breakdown by sector was 19 percent residential, 20 percent commercial, 22 percent industrial, and 39 percent transportation.<sup>30</sup> This energy was supplied in the form of petroleum (50%), natural gas (34%), renewables (10%), nuclear electric power (5%), and coal (1%).<sup>31</sup>

# 3.13.2.1 Electricity and Natural Gas

Electricity and natural gas are provided to Sand City by Pacific Gas & Electric Company (PG&E) and Duke Energy. The State of California currently requires that energy-saving measures be applied

 <sup>&</sup>lt;sup>29</sup> United States Energy Information Administration. *State Energy Profile: California*. February 16, 2012.
 Available at: <u>http://tonto.eia.doe.gov/state/state energy profiles.cfm?sid=CA#related reports</u>
 <sup>30</sup> United States Energy Information Administration. *Table C1. Energy Consumption Overview: Estimates by*

<sup>&</sup>lt;sup>30</sup> United States Energy Information Administration. *Table C1. Energy Consumption Overview: Estimates by Energy Source and End-Use Sector*, 2009. March 8, 2012. Available at: http://www.eia.gov/state/seds/hf.jsp?incfile=sep\_sum/html/sum\_btu\_1.html

<sup>&</sup>lt;sup>31</sup> United States Energy Information Administration. *Table C3. Primary Energy Consumption Estimates, 2009.* March 9, 2012. Available at: <u>http://www.eia.gov/state/seds/hf.jsp?incfile=sep\_sum/html/sum\_btu\_totcb.html</u>

to new dwellings through the Uniform Building Code. Sand City currently requires all buildings to conform to the energy conservation requirements of California Administrative Code Title 24.

# Electricity

Electricity consumption in California was approximately 272,300 gigawatt hours (GWh)<sup>32</sup> in 2010.<sup>33</sup> Statewide annual demand is expected to grow, on average, 1.31 percent annually, to reach approximately 318,400 GWh in 2022.<sup>34</sup>

PG&E estimates that electricity consumption for its service areas throughout the state will grow at a rate of approximately 1.3 percent per year from 2011-2022, with peak demand projected to grow at a rate of approximately 1.2 percent per year.<sup>35</sup>

Electricity usage in California for differing land uses varies substantially by the type of uses in a building, the type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. PG&E estimates annual electricity usage per multi-family residence is approximately 4,434 kWh/residence. The average annual usage of electricity for restaurant space is approximately 36 kWh/square foot.

According to the California Energy Commission's 2009 Integrated Energy Policy Report, population growth in California is expected to occur at a higher rate in the hotter, drier inland areas as more people move there, which will not only increase the peak demand, but also change the pattern of energy use.<sup>36</sup> For example, inland areas during the summer months will require more air conditioning than coastal areas which will increase peak demand more than overall demand. Energy efficiency and demand response programs, therefore, will become even more important.

# Natural Gas

In 2010, Californians consumed approximately 12,700 million therms of natural gas, excluding fuel used for electricity generation.<sup>37</sup> In 2006, natural gas was used to produce electricity (44 percent), in industrial uses (23 percent), in commercial uses (10 percent), in residential uses (22 percent), and for transportation (less than one percent).<sup>38</sup>

Natural gas usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all gas-consuming devices within a building. That said, the average annual usage of natural gas is roughly 225 therms per residence. The average annual usage of natural gas is approximately 2.12 therms/square foot of restaurant space.

As California strives to reduces its greenhouse gas emissions, natural gas sources and use will depend on new technologies (e.g., hybrid vehicles, solar heating) and methods of supply (e.g.,

 $<sup>^{32}</sup>$ One gigawatt = one thousand megawatts = one million kilowatts = one billion watts.

<sup>&</sup>lt;sup>33</sup> California Energy Commission. <u>2011 Integrated Energy Policy Report</u>. February 2012. Page 100.

<sup>&</sup>lt;sup>34</sup> California Energy Commission. <u>Preliminary California Energy Demand Forecast 2012-2022</u>. August 2011. Page 2.

<sup>&</sup>lt;sup>35</sup> California Energy Commission. <u>Preliminary California Energy Demand Forecast 2012-2022</u>. August 2011. Page 42.

<sup>&</sup>lt;sup>36</sup> California Energy Commission. <u>2009 Integrated Energy Policy Report</u> Page 214.

<sup>&</sup>lt;sup>37</sup> California Energy Commission. <u>2011 Integrated Energy Policy Report</u>. Page 100.

<sup>&</sup>lt;sup>38</sup> California Energy Commission. 2007 Integrated Energy Policy Report. Figure 6-1, Pages 167-168.

liquefied natural gas shipped by tanker, biogas). These developments will depend on and influence natural gas supplies, and contribute to the uncertainty in past and future projections.<sup>39</sup>

#### 3.13.2.2 **Gasoline for Motor Vehicles**

In 2010, Californians consumed roughly 21.5 billion gallons of gasoline, diesel, and jet fuel.<sup>40</sup> This represents a seven percent decrease in consumption since 2006. The primary factors contributing to this decrease are: 1) higher fuel costs, 2) low economic growth, and 3) continued high unemployment.<sup>41</sup> Approximately 38 percent of crude oil used in California is produced in-state, the remaining 62 percent comes from Alaska (14 percent) and foreign sources (48 percent).<sup>42</sup> All imported crude supplies and products arrive to California by ship through marine terminals.<sup>43</sup>

The average fuel economy for the fleet of light-duty vehicles (autos, pickups, vans, and SUVs) steadily increased from about 12.6 miles-per-gallon (mpg) in the mid-1970s to approximately 20.7 mpg in 1985 as a result of federal standards which had not substantially changed in 22 years.<sup>44</sup> In December 2007, the Energy Independence and Security Act of 2007 was signed which mandates a national fuel economy standard of 35 miles per gallon by 2020.45

Although no new refineries have been constructed in California since 1969, supply has kept pace with demand through a combination of refinery upgrades/modernizations and out-of-state imports. Imports of foreign crude oil will increase as in-state and Alaskan supplies diminish. Since California refineries are already operating close to their full capacity, daily imports of refined gasoline and diesel are expected to double over the next 20 years. Unless out-of-state facilities expand, the gasoline and diesel markets will become increasingly volatile, with the likelihood of shortages and more prolonged periods of high prices.<sup>46</sup>

#### 3.13.3 **Energy Impacts**

#### Thresholds of Significance 3.13.3.1

For the purposes of this EIR, an energy impact is considered significant if the project would:

- Use fuel or energy in a wasteful manner; or
- Result in a substantial increase in demand upon energy resources in relation to projected supplies.

#### 3.13.3.2 **Energy Efficiency and Use**

The proposed vacation condominium and hotel development would be constructed to meet the requirements of Title 24 of the California Administrative Code, as it pertains to energy efficiency. Development of the proposed project will consume energy during both the construction and

<sup>&</sup>lt;sup>39</sup> California Energy Commission. <u>2007 Integrated Energy Policy Report</u>. Pages 167-171.

<sup>&</sup>lt;sup>40</sup> California Energy Commission. <u>2011 Integrated Energy Policy Report</u>. Page 2.

<sup>&</sup>lt;sup>41</sup> California Energy Commission. <u>2011 Integrated Energy Policy Report.</u> Page 137-138.

<sup>&</sup>lt;sup>42</sup> California Energy Commission. "Energy Almanac: California's Major Sources of Energy." April 7, 2011

Accessed: March 11, 2012. Available at: <u>http://www.energyalmanac.ca.gov/overview/energy\_sources.html</u>. <sup>43</sup> California Energy Commission 2007. <u>2007 Integrated Energy Policy Report</u> (CEC-100-2007-008CMF). Page 27. <sup>44</sup> California Energy Commission. <u>2007 Integrated Energy Policy Report</u>. Page 200.

<sup>&</sup>lt;sup>45</sup> United States Energy Information Administration. Energy Independence and Security Act of 2007: Summary of Provisions. May 26, 2008. http://www.eia.doe.gov/oiaf/aeo/otheranalysis/aeo 2008analysispapers/eisa.html <sup>46</sup> California Energy Commission. 2007 Integrated Energy Policy Report. Page 190.

operational phases of the project. The construction phase will require energy for the manufacture and transportation of building materials, preparation of the site (e.g., grading), and the actual construction of the buildings. The operational phase will consume energy for multiple purposes including – but not limited to – building heating and cooling, lighting, appliances, and electronics. Operational energy will also be consumed during each vehicle trip associated with the proposed uses.

The proposed resort is estimated to use approximately 1,748 Mwh of electricity and 90,690 therms of natural gas annually.<sup>47</sup> The average daily vehicle miles traveled to and from the proposed resort is estimated at 26,784 miles. Assuming an average fuel economy of 20.7 miles per gallon, approximately 1,293 gallons of gasoline would be consumed daily as a result of automobile travel to and from the proposed resort.<sup>48</sup>

The project would result in increased energy usage in the City of Sand City. The project; however, would not result in a substantial increase in energy used in the Monterey Bay region or the State of California as a whole, nor would it use energy in a wasteful manner. For these reasons and based on the thresholds identified above the project would not result in significant energy impacts under CEQA.

# Impact ENERGY-1: The proposed project would not result in a substantial energy demand increase or use energy in a wasteful manner. (Less Than Significant Impact)

# 3.13.4 <u>Avoidance Measures</u>

#### 3.13.4.1 Measures to Reduce Energy Consumption by Design

The City may, as a condition of approval, require implementation of the following measures to reduce the project's energy use to the extent feasible:

AM ENERGY-1.1:	Development on the site would incorporate principles of passive solar design as a condition of coastal development permit approval. Passive solar design is the technology of heating, cooling, and lighting a building naturally with sunlight rather than with mechanical systems because the building itself is the system. Basic design principles include large south-facing windows with proper overhangs, as well as tile, brick, or other thermal mass material used flooring or walls to store the sun's heat during the day and release it back in the building at night or when the temperature drops. Passive solar also takes advantage of energy efficient materials, improved insulation, airtight construction, natural landscaping, and proper building orientation to take advantage of the sun, shade, and wind.
	the building at night or when the temperature drops. Passive solar also tak advantage of energy efficient materials, improved insulation, airtight construction, natural landscaping, and proper building orientation to take advantage of the sun, shade, and wind.

AM ENERGY-1.2: The U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Rating System is designed for rating new and existing commercial, institutional, and high-rise residential buildings. It evaluates environmental performance from a "whole building" perspective over a building's life cycle, providing a definitive standard for what constitutes a

 <sup>&</sup>lt;sup>47</sup> Project electricity use and natural gas use was estimated by the Bay Area Air Quality Management District's greenhouse gas emission model (BGM), which was used to estimate the project's greenhouse gas emissions.
 <sup>48</sup> Based on an average vehicle trip length of 7.3 miles and approximately 3,669 average daily trips (refer to *Section*)

<sup>&</sup>lt;sup>48</sup> Based on an average vehicle trip length of 7.3 miles and approximately 3,669 average daily trips (refer to *Section 3.4 Transportation*).

green building. A building is scored in six different green building categories: sustainability, water efficiency, energy and atmosphere, materials and resources, indoor environmental air quality, and innovation and design process. Based on the building's score, the building may be awarded a LEED Certified, LEED Silver, LEED Gold, or LEED Platinum status.

The proposed buildings could incorporate elements of the LEED Project Checklist into the design and construction to the satisfaction of the Community Development Director. The following are examples of LEED measures that could be incorporated into the project:

- The project could use recycled materials to reduce the use of raw materials and divert materials from landfills. Construction material used shall be at least five to ten percent salvaged or refurbished materials, specifically, a minimum of 25-50 percent of building materials shall contain at least 20 percent post consumer recycled content material, or a minimum of 40 percent post industrial recycled content material.
- The project could use local and regional materials in order to reduce natural resources necessary for transporting materials over long distances. Of the building material used, 20-50 percent shall be manufactured within 500 miles of the building site.
- The project could use rapidly renewable materials in order to reduce the depletion of virgin materials and reduce use of petroleum-based materials. Specifically, five percent of total building materials shall be made from rapidly renewable building materials.
- For components of the project where buildings would be made from wood, such as flooring and framing, the project could use a minimum of 50 percent wood-based materials certified in accordance with the Forest Stewardship Council Guidelines.
- **AM ENERGY-1.3:** The project could implement, to the satisfaction of the Community Development Director, the following measures:
  - Install motion detectors or dimmers to control lighting;
  - Install efficient security and parking lot lighting (e.g., high pressure sodium fixtures);
  - Install reflective window film or awnings on all south and west facing windows; and
  - Install Energy Management System to control HVAC system its operating hours, set points, scheduling of chillers, etc.

# 3.13.4.2 Measures to Reduce Energy Consumption During Construction

The City may, as a condition of approval, require implementation of the following measures to reduce the project's energy use to the extent feasible:

- **AM ENERGY-1.4:** The project shall have a waste management plan for recycling of construction and demolition materials in place and operating at the beginning of the project.
- **AM ENERGY-1.5:** The project shall recycle or salvage a minimum of 50 percent (by weight) of construction and land clearing waste.

#### 3.13.5 <u>Conclusion</u>

**Impact ENERGY-1:** The project would not result in a substantial increase in energy demand or use energy in a wasteful manner. (Less Than Significant Impact)

# 3.14 GREENHOUSE GAS EMISSIONS

The following discussion is based in part on modeling completed to determine the project's construction and operational greenhouse gas emissions. The modeling results are included in Appendix E of this EIR.

# 3.14.1 Existing Setting

# 3.14.1.1 Background Information and Regulatory Framework

Global climate change refers to changes in weather including its temperature, precipitation, and wind patterns. Global temperatures are affected by naturally occurring and anthropogenic-generated (generated by mankind) atmospheric gases, such as carbon dioxide, methane, and nitrous oxide.<sup>49</sup> These gases allow sunlight into the Earth's atmosphere, but prevent heat from radiating back out into outer space and escaping the Earth's atmosphere, thus altering the Earth's energy balance. This phenomenon is known as the "greenhouse" effect.

Naturally occurring greenhouse gases include water vapor<sup>50</sup>, carbon dioxide, methane, nitrous oxide, and ozone. Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but are for the most part solely a product of industrial activities. Emissions of greenhouse gases are typically expressed in a common metric (i.e., carbon dioxide equivalent), so that their impacts can be directly compared, as some gases are more potent (have a higher global warming potential) than others.

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; however, in California a multi-agency "Climate Action Team," has identified a range of strategies and the Air Resources Board, under AB 32, has approved the <u>Climate Change Scoping Plan</u>. 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. The CARB and other state agencies are currently working on regulations and other initiatives to implement the <u>Climate Change Scoping Plan</u>. By 2050, the state plans to reduce emissions to 80 percent below 1990 levels.

Other state and local greenhouse gas regulations include:

- SB 1078 and 107 which requires retail sellers of electricity to provide at least 20 percent of their supply from renewable sources by 2010.
- Executive Order S-14-08 which expands the state's Renewable Energy Standard to 33 percent renewable power by 2020.

<sup>&</sup>lt;sup>49</sup> IPCC. <u>2007: Summary for Policymakers.</u> In: Climate Change 2007: The Physical Science Bases. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available at: <u>http://ipcc.ch/.</u>

<sup>&</sup>lt;sup>50</sup> Concentrations of water are highly variable in the atmosphere over time, with water occurring as vapor, cloud droplets and ice crystals. Changes in its concentration are also considered to be a result of climate feedbacks rather than a direct result of industrialization or other human activities. For this reason, water vapor is not discussed further as a greenhouse gas.

- SB 375 which aligns regional transportation planning efforts, regional greenhouse gas reduction targets, and land use and housing allocation.
- Executive Order S-1-07 which establishes a goal to reduce the carbon intensity of transportation fuels sold in California by a minimum of 10 percent by 2020.

# 3.14.1.2 *Existing Conditions*

Under existing conditions, greenhouse gas emissions from human activities at the project site are limited to mobile source emissions associated with equipment use and travel to and from the outdoor construction/contractor storage area on the Sterling/Calabrese portion of the site.

# 3.14.2 <u>Greenhouse Gas Emission Impacts</u>

# 3.14.2.1 Thresholds of Significance

For the purposes of this EIR, a greenhouse gas emission impact is considered significant if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The Monterey Bay Unified Air Pollution Control District (MBUAPCD) does not have adopted significance thresholds for greenhouse gas emissions in the current (2008) CEQA Air Quality Guidelines. The MBUAPCD is currently considering various significance thresholds for greenhouse gas emissions.<sup>51</sup> In the absence of local air district significance thresholds, air districts with adopted CEQA thresholds that address the significance of greenhouse gas (GHG) emissions were reviewed to identify an appropriate project-level significance threshold. Both the Bay Area Air Quality Management District (BAAQMD) and the San Luis Obispo County Air Pollution Control District have identified bright line thresholds for GHG emissions of 1,100 MTCO<sub>2</sub>e<sup>52</sup> and 1,150 MTCO<sub>2</sub>e, respectively, based on a gap analysis for land-use driven sectors of emissions. These thresholds address the gap between the AB 32 emissions reduction requirements for 2020 and the reductions that could be achieved by the Climate Change Scoping Plan. The identified bright line threshold for each of these air districts reflects the historic patterns of development within these areas and the development projected to occur by 2020. Given the very different nature of development in each of these air districts and yet the similarity in their bright line thresholds for development, a future bright line threshold to address development in the North Coast Central Air Basin is anticipated to be set within the range identified for the adjacent air districts. For the purposes of this EIR, and in order to

<sup>&</sup>lt;sup>51</sup> Association of Monterey Bay Area Governments (AMBAG). <u>CEQA GHG Thresholds of Significance</u> <u>Presentation.</u> November 2011.

http://www.ambag.org/pdf/How%20it%20fits%20together/CEQA%20GHG%20Thresholds%20of%20Significance %20(11-14-11).pdf

<sup>&</sup>lt;sup>52</sup> In December 2010, the California Building Industry Association (BIA) filed a lawsuit in Alameda County Superior Court challenging toxic air contaminants and PM2.5 thresholds adopted by BAAQMD in its CEQA Air Quality Guidelines (California Building Industry Association v. Bay Area Air Quality Management District, Alameda County Superior Court Case No. RG10548693). On March 5, 2012, the Superior Court issued a Statement of Decision requiring BAAQMD to set aside their 2010 adoption of their thresholds until and unless CEQA review is completed. The Superior Court did not make any findings regarding the substance or evidence supporting the thresholds. In order to comply with this decision, BAAQMD released revised CEQA Guidelines in May 2012 removing all adopted numeric thresholds from the document pending CEQA review.

be conservative, the bright line threshold of  $1,100 \text{ MTCO}_2e$  is used to determine the significance of GHG emissions.<sup>53</sup>

# 3.14.2.2 Greenhouse Gas Emissions from the Project

Given the overwhelming scope of global climate change, it is not anticipated that a single development project would have an individually discernible effect on global climate change. It is more appropriate to conclude that the greenhouse gas emissions generated by the proposed project would combine with emissions across the state, nation, and globe to cumulatively contribute to global climate change.

Greenhouse gas emissions from the proposed project would include emissions from constructing and operating the resort. The greenhouse gas emissions from the project include:

- Construction emissions from equipment and vehicles used for grading and construction;
- Mobile emissions (e.g., emissions from combustion of fossil fuels for vehicle trips to and from the project site);
- Emissions from the generation of electricity to operate the resort;
- Emissions from the decomposition of organic materials in solid waste generated by the resort;
- Emissions from the manufacture and transport of building materials; and
- Emissions produced from conveying water to the project site.

The URBEMIS2007 and BGM models were used to estimate the project's direct and indirect greenhouse gas emissions from construction, transportation, area sources, electricity, natural gas, water and wastewater, and solid waste.

The BGM program was developed by the Bay Area Air Quality Management District but is flexible enough to be applied to areas outside the BAAQMD. Transportation and area source emissions used by BGM are taken from URBEMIS 2007, which was run using Monterey County inputs. Solid waste disposal and water/wastewater emissions are calculated using statewide protocols that are applicable in Monterey County and based on PG&E emission rates, which are applicable in both the Bay Area and Monterey County. Electrical usage and natural gas consumption are two sources of GHG emissions that are partially determined by Climate Zone and thus vary from region to region. It is possible to change electrical and natural gas usage rates in BGM, however, this is not necessary since a portion of the BAAQMD shares the same Climate Zone with Monterey County. By specifying Climate Zone 4, BGM utilized electrical/natural gas parameters appropriate for Monterey County.

# **Construction Impacts (Short-Term Emissions)**

Project construction would involve emissions associated with equipment and vehicles used to construct the project as well as emissions associated with manufacturing materials used to construct the project. The URBEMIS2007 model can be used to estimate the emissions associated with construction equipment and vehicle activity. There are, however, no reliable methods to estimate construction-related emissions associated with the manufacturing of project materials.

<sup>&</sup>lt;sup>53</sup> The determination of whether a project may have a significant effect on the environment is made by the lead agency, in this case the City of Sand City, based upon substantial evidence (CEQA Guidelines Section 15064(b)). The City of Sand City considers the thresholds previously adopted by adjoining air districts and being considered by the MBUAPCD to be based on the best information available for the North Central Coast Air Basin.

Construction phase emissions would include site grading, trenching, paving, building construction, and application of architectural coatings. This activity was assumed to extend approximately three calendar years. Construction of the proposed project would produce approximately 2,432 metric tons of CO<sub>2</sub> equivalent emissions.

#### **Operational Impacts**

The primary sources of greenhouse gas emissions for the proposed projects are anticipated to be combustion of fossil fuels for vehicle trips to and from the site, from grid-delivered electricity for lighting, appliances, water service and building cooling, and from building heating with natural gas.

Operational emissions were estimated using the BGM model. Greenhouse gas emissions resulting from the project are summarized in Table 3.14-1 below.

Table 3.14-1Carbon Dioxide Equivalent Emissions from the Project					
Annual Emissions (metric tons per year)					
3,946.10					
2.36					
725.64					
555.71					
81.06					
57.60					
125.15					
5,493.62					

Notes: \*Area source emissions include natural gas combustion for heating and cooking, fireplace use, and landscape equipment.

The project would exceed the threshold of significance of 1,100 metric tons per year of greenhouse gas emissions. The project's transportation emissions account for over 71 percent of the project's total greenhouse gas emissions. The project's transportation greenhouse gas emissions alone would exceed the threshold of significance.

#### Other Emissions Sources

Additional unknown quantities of greenhouse gases would be emitted as part of the proposed project from the manufacture and transport of building materials and other project related activities. There currently are no readily available methods of quantifying additional greenhouse gases from the manufacturing and transportation of buildings materials. For this reason, it can be assumed that the project's total greenhouse gas emissions are more than identified in Table 3.14-1.

Over time, it is assumed that the greenhouse gases emissions due to the project will decrease as AB 32 will require GHG emission reductions in all sectors.

#### Strategies to Reduce Greenhouse Gas Emissions

Given the project's generation of greenhouse gases (primarily from electricity use, vehicles, and construction), efforts to reduce the project's greenhouse gas emissions should focus on reducing electricity demand and reducing vehicle trips and miles. The project will include the following design features and measures:

- The project will implement a Transportation Demand Management (TDM) program to reduce the number of vehicle trips resulting from the project.
- The City may, as a condition of project approval, require the project to implement energy conservation measures including LEED certification, use of recycled materials, and Energy Management Systems (refer to *Section 3.13 Energy*).
- **Impact GHG-1:** The project would result in a net increase in carbon dioxide emissions annually. The project proposes a TDM program to reduce the number of vehicle trips and associated greenhouse gas emissions resulting from the project. Based on the estimated emissions from construction and operation of the proposed development, the project would result in substantial new greenhouse gas emissions and contribute to cumulative global climate change impacts. (**Significant Impact without Mitigation**)

# 3.14.2.3 Impacts to the Proposed Project from Global Climate Change

As stated above, climate change effects expected in California over the next century could include reduced water supply, increased electricity demand (particularly in the summer months), and impacts from sea level rise.

# **Utility Service**

Impacts to the project from global climate change could include reduced water availability due to droughts. At this time, neither the State Department of Water Resources nor the Monterey Peninsula Water Management District has established the effects of global climate change on water supplies in California or locally.<sup>54</sup>

Energy use on the project site could rise during hot summer months because energy demand for building cooling could increase. In the event regional demand exceeded supply, this could result in temporary interruptions in power supply. For the proposed project, this would be primarily an economic rather than an environmental impact and is not discussed further.

Impact GHG-2:Utilities required by the proposed project would not be directly impacted by<br/>the effects of global climate change. (Less Than Significant Impact)

# Sea Level Rise

The project site is located adjacent to Monterey Bay. The California Ocean Protection Council has adopted sea level rise projections for mean sea level along the California coast that range from 1.0 to 1.4 meters (3.3 to 4.6 feet) by the year 2100.

The Coastal Recession and Wave Run-up Evaluation prepared for the project assumed 1.8 feet of sea level rise and followed the City's methodology to establish a 50-year coastal recession setback line. Based on the sea level rise projections for the California coast, discussed above, the buildings on the project site would be subject to flooding from sea level rise by 2100.

<sup>&</sup>lt;sup>54</sup> Santa Clarita Oaks Conservancy, et al v City of Santa Clarita, et al., Los Angeles Superior Court Case No. BS084677, August 15, 2007.

**Impact GHG-3:** The proposed project would experience flooding due to expected sea level rise by the year 2100. (Significant Impact without Mitigation)

# 3.14.3 <u>Mitigation and Avoidance Measures</u>

The following project specific mitigation measures will be required by the City to lessen identified significant global climate change impacts:

- **MM GHG-1.1:** The City will require, as conditions of project approval, the implementation of the majority of the following measures to reduce energy use and greenhouse gas emissions:
  - Incorporation of passive solar design principles
  - LEED certification
  - Installation of efficient lighting and lighting control systems
  - Installation of energy efficient heating and cooling systems, appliances and equipment, and control systems
  - Use of solar heating, automatic covers, and efficient pumps and motors for pools and spas
  - Installation of solar, wind, and geothermal power systems and solar hot water heaters
  - Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls
  - Implementation of a waste management plan requiring recycling of construction and land clearing materials
- **MM GHG-1.2:** The applicant shall prepare and implement a Greenhouse Gas Emissions Reduction Plan (GHG Plan) to offset the project-related incremental increase of greenhouse gas emissions exceeding 1,100 metric tons of carbon dioxide equivalents per year. Refinement of the project's estimated GHG emissions would be completed as part of the GHG Reduction Plan in order to reflect the most current and accurate data available regarding the project's estimated emissions (including emission rates). Offsets may include, but are not limited to, the following (in order of preference):
  - 1. Incorporation of on-site measures to offset project emissions, for example through development of a renewable energy generation facility or additional energy efficiency measures.
  - 2. Implementation of projects that would result in real, permanent, verifiable, enforceable, and additional reduction in greenhouse gas emissions.
  - 3. Purchase of carbon credits. Carbon offset credits must be verified and registered with the Climate Registry, the Climate Action Reserve, or other source that is approved by the California Air Resources Board as being consistent with the policies and guidelines of the California Global Warming Solution Act of 2006 (AB 32). Based on current California offset credit costs (October 2012), approximately \$57,650 annually would be required for full-funding of this mitigation measure. Either a dedicated developer-funded annuity will be required or a percentage of revenue

proposed by the development will need to be dedicated to pay for this mitigation measure on an annual basis.

- **AM GHG-1.1:** A TDM program is proposed to reduce the number of vehicle trips and resulting GHG emissions from the project.
- **MM GHG-3.1:** The applicant will develop an adaptive management plan to remove and/or relocate portions of the project that may be impacted by sea level rise. The project will be monitored until the year 2100 (over a 90 year period) to determine if sea level rise would impact the project in the final 40 years of that term.

#### 3.14.4 <u>Conclusion</u>

- **Impact GHG-1:** The proposed project, with the implementation of the identified mitigation measures (MM GHG–1.1 and GHG-1.2) to reduce annual greenhouse gas emissions below 1,100 MTCO<sub>2</sub>e, would not result in significant greenhouse gas emission impacts. (Less Than Significant Impact with Mitigation)
- Impact GHG-2: Utilities required by the proposed project would not be directly impacted by the effects of global climate change. (Less Than Significant Cumulative Impact)
- **Impact GHG-3:** The proposed project, with the implementation of the identified mitigation measure (MM GHG-3.1), would reduce impacts to the project from increased coastal flooding due to expected sea level rise by the year 2100 to a less than significant level. (Less Than Significant Impact with Mitigation)

# SECTION 4 AVAILABILITY OF PUBLIC SERVICES

Unlike utility services, public facility services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery agency can be a city, county, service or other special district. Usually, new development will create an incremental increase in the demand for these services; the amount of the demand will vary widely, depending on both the nature of the development (residential vs. industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. family housing).

The impact of a particular project on public facilities services is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.) That is a fiscal impact, however, not an environmental one.

CEQA does not require an analysis of fiscal impacts unless the increased demand triggers the need for a new facility (such as a new school or fire station), since the new facility will have a physical impact on the environment.

#### 4.1 FIRE PROTECTION

#### 4.1.1 <u>Setting</u>

Fire protection is provided for the project site by the City of Monterey Fire Department. Fire Station No. 3, located in Monterey at 401 Dela Vina Avenue, would provide first response to an emergency at the site. The station is staffed with three full-time personnel and one engine. Additional help would be provided by other stations in the event the capacity of Station No. 3 is exceeded. The current response time from Station No. 3 is five to seven minutes, which is considered acceptable by Sand City.<sup>55</sup>

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 the 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.

#### 4.1.2 <u>Impact Analysis</u>

The General Plan requires extensions of water mains and the installation of fire hydrants and automatic fire sprinkler systems, as appropriate, in conjunction with new development in accordance with the requirements and policies of the Monterey Fire Department in effect at the time building permits are issued. The project proposes to extend water lines to the site from Tioga Avenue and Playa Avenue (refer to *Section 3.11*). The proposed water lines would be required to provide adequate flow for fire protection at the site. The proposed buildings on the site would be sprinklered to aid in fire suppression in the event of an emergency at the site. Fire hydrants would be provided throughout the site in accordance with City standards.

<sup>&</sup>lt;sup>55</sup> City of Sand City. <u>General Plan 2002-2017.</u> February 2002. Page 6-19.

Impact PS-1:The project will incorporate fire protection measures and is served by a<br/>department with adequate facilities to serve the project. (Less Than<br/>Significant Impact)

#### 4.1.3 <u>Conclusion</u>

Impact PS-1:The proposed project would be built to current local and state standards for<br/>fire protection and would not result in the need for construction of new fire<br/>service facilities. (Less Than Significant Impact)

# 4.2 POLICE PROTECTION

#### 4.2.1 <u>Setting</u>

The Sand City Police Department provides police services within the City limits, with backup services provided by the City of Seaside and Monterey Police Department. The Sand City Police Department currently employs a police chief, two sergeants, and six patrol officers. Response times are three to five minutes for emergency calls and five minutes for other calls. The existing response times for all calls is considered adequate for a small community.<sup>56</sup>

#### 4.2.2 Impact Analysis

The proposed project would result in additional visitors in Sand City. The project would create greater connectivity between the project site and the nearby shopping centers. The project design will be reviewed by the Sand City Police Department to ensure that building and site designs consider utilization of crime prevention features and design techniques. The project site would result in an incremental increase in calls for the Sand City Police Department, however, it is not anticipated to result in the need for additional police facilities in Sand City.

Impact PS-2:The project is located within the service boundary of the Sand City Police<br/>Department. No additional facilities would be required to serve the project<br/>site. (Less Than Significant Impact)

#### 4.2.3 <u>Conclusion</u>

Impact PS-2:The site is located within the existing service boundary of the Sand City<br/>Police Department and would not result in the need for construction of<br/>additional police facilities. (Less Than Significant Impact)

# 4.3 PARKS AND RECREATION

#### 4.3.1 <u>Setting</u>

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,

<sup>&</sup>lt;sup>56</sup> City of Sand City. <u>General Plan 2002-2017.</u> February 2002. Page 6-20.
Sand City has adequate recreational space. In April 1996, Sand City, along with the Department of Parks and Recreation, Monterey Peninsula Regional Park District (MPRPD), and Sand City's former 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 while permitting the continued acquisition of land on the coast for a proposed state park.

#### 4.3.2 <u>Impact Analysis</u>

The project proposes construction of vacation condominium units and a boutique-style hotel. Visitors staying in the vacation condominiums and hotel would be in the City for a limited amount of time and therefore are not anticipated to increase demand for City parks. Visitors would likely use the beach for their recreational activities, and therefore, no additional parkland would be necessary.

The project proposes an extension and relocation of the existing bike path on the site. The existing bike path crosses the northeastern portion of the site and crosses under Highway 1 at the alignment of Playa Avenue. The project would extend the bike path on the east side of the Sand Dunes Drive extension south through the site to connect with the existing bike path on the south side of Tioga Avenue (refer to Figure 4). An additional extension of the bike path would be located on the coastal side of the proposed development and along the north side of Tioga Drive to connect with the existing bike path. The project would also construct a lifeguard station and public restrooms which would provide additional visitor facilities to enhance coastal access to the public.

Impact PS-3:The project will provide additional recreational facilities for the public and<br/>will not require construction of additional parkland. (Beneficial Impact)

#### 4.3.3 <u>Conclusion</u>

Impact PS-3:The project would provide additional recreational facilities in the City for<br/>local residents and visitors. The project would not increase the demand for<br/>parkland. (Beneficial Impact)

#### 5.1 INTRODUCTION

Cumulative impacts, as defined by CEQA, consist of two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. Cumulative impacts may result from individually minor, but collectively significant projects taking place over a period of time. Section 15130 of the CEQA Guidelines states that an EIR should discuss cumulative impacts, "when the project's incremental effect is cumulatively considerable, as defined in section 15065(a)(3)." The discussion does not need to be as detailed as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision makers to better understand the potential impacts which might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project.

The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence. To accomplish these two objectives, the analysis should include either a list of past, present, and probable future projects or a summary of projections from an adopted general plan or similar document. The effects of past projects are generally reflected in the existing conditions described in the specific sections of this document.

As a point of clarification, cumulative traffic impacts evaluate the proposed project combined with other pending, not approved, development. The traffic from recently approved projects is reflected in the Background Conditions described in *Section 3.4 Transportation* of this EIR. Because recently approved projects (such as the Monterey Bay Shores Ecoresort) are captured in the background conditions, they are also accounted for in this cumulative analysis.

The discussions below address two aspects of cumulative impacts:

- 1) Would the effects of all of the pending development listed result in a cumulatively significant impact on the resources in question?
- 2) If that cumulative impact is likely to be significant, would the contributions to that impact from the project which is the subject of this EIR, make a cumulatively considerable contribution to those cumulative impacts?

As noted in *Section 7, Significant Unavoidable Impacts* of this EIR, the proposed project would result in significant unmitigated geology and soils impacts; however, this impact is specific to the site and design of the proposed project. The project, therefore, would not contribute to a greater cumulative geologic and soils impact in the region. The project, as proposed, would result in significant unmitigated impacts to visual resources, and therefore, the project could contribute to a cumulative visual resource impact. The project's contribution to the cumulative greenhouse gas emissions impact is discussed in *Section 3.14 Greenhouse Gas Emissions*.

Although not identified as significant unavoidable project impacts, the project would also generate traffic, increase vehicle emissions, contribute to an increase in traffic noise, increase water use and sewage generation, and increase energy use. Therefore, it is also possible that the proposed project could contribute to cumulative impacts in these areas, if a cumulative impact exists. In addition, as described in Section 5.3.2 below, the project's contribution to cumulative traffic impacts would result in the need for signalization of an intersection in the project area. The project's contribution to this traffic impact may result in additional impacts to cultural resources and biological resources due to

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the location of the intersection requiring signalization. The projects included in the cumulative analysis may have other significant impacts to land use, hydrology and water quality, and hazardous materials contamination, but the specific project development evaluated in this EIR would not increase or result in cumulatively considerable significant impacts on those particular resources or would mitigate its impacts to those resources. Those areas of impact are, therefore, not discussed further in this section.

#### 5.2 CUMULATIVE PROJECTS

The project proposes development of a 342 room coastal resort on the site. The CEQA Guidelines recommend that the cumulative analysis rely on either a list of pending projects, or the projections contained in an adopted General Plan. In order to complete this Cumulative Impact analysis, a list of past, present, and probable future projects was prepared to analyze the effects of these projects in conjunction with the proposed project addressed in this EIR. The cumulative projects are summarized in Table 5.2-1, below.

Table 5.2-1							
List of Cumulative Projects							
Project	City	Size/Land Use					
Main Gate	Seaside	559,500 sq. ft. retail center					
		250 room hotel					
West Broadway (Phase III)	Seaside	41,160 S.F. Mixed-Use					
		Development					
South of Tioga Residential	Sand City	261 Condo/Townhouse D.U.					
East Dune Specific Plan	Sand City	Mixed-Use Development					
West End District	Sand City	Mixed-Use Development					
The Dunes on Monterey	Marina	Mixed Use Project					
Bay (Phase II & III)							
CSUMB Students (2010-	Marina	6,389 students					
2025)							
Ferrini Ranch Subdivision	Monterey County	212 Single-family D.U.					
Monterey Downs Horse	Monterey County	961 Single-family D.U.					
Park							
East Garrison	Monterey County	Mixed-Use Development					
Notes: S.F. = Square Feet, D.U. = Dw	elling Unit						
Sources: City of Marina, City of Sand	City, City of Seaside, City of Del	Rey Oaks, Monterey County, City of Monterey					

#### 5.3 ANALYSIS OF CUMULATIVE IMPACTS

Unless otherwise stated, the thresholds of significance used throughout the analyses of cumulative impacts are the same listed as those listed in Section 3, Environmental Setting, Impacts, and Mitigation of this EIR.

#### 5.3.1 <u>Cumulative Visual and Aesthetic Resource Impacts</u>

Both the proposed project and the Monterey Bay Shores Resort, also located in Sand City, would be developed on sites adjacent to the Monterey Bay. The Sand City LCP establishes view corridors on The Collection and Monterey Bay Shores sites. These projects, as proposed, would both contribute to the blockage of views of the Monterey Bay which is a locally important scenic resource.

**Impact CUMUL-1:** The proposed project would result in a cumulatively considerable contribution to scenic resource impacts from resort development along the Sand City coast. (Significant Unmitigated Cumulative Impact)

#### 5.3.1.1 *Mitigation for Cumulative Visual and Aesthetic Resource Impacts*

The following measure, proposed by the project, would reduce the project's contribution to significant cumulative visual and aesthetic resource impacts to a less than significant level:

**MM CUMUL-1.1:** The project will reduce building heights on the site within View Corridor B to comply with the City's LCP. The Hotel 1 building's roof will be reduced in height by at least four feet and the Hotel 1 architectural roof elements (refer to Figure 13) will be reduced in height by at least 2.5 feet and shall not exceed 78.5 feet NGVD<sup>57</sup>. The Lobby and Conference center entry towers will be reduced by at least eight feet and the entry towers and roofline shall not exceed 74.5 feet NGVD. The Lobby and Conference center portico shall also be reduced by at least one foot.

#### 5.3.1.2 Conclusions Regarding Cumulative Visual and Aesthetic Resource Impacts

**Impact CUMUL-1:** The project, with the implementation of MM CUMUL-1.1, would reduce its contribution to cumulative scenic resource impacts from resort development along the Sand City coast to a less than significant level. (Less Than Significant Cumulative Impact)

#### 5.3.2 <u>Cumulative Transportation Impacts</u>

#### 5.3.2.1 Introduction

The levels of service under cumulative conditions with and without the project buildout are discussed below. The cumulative No Project Conditions include background traffic volumes plus traffic generated by pending development near the study area. Cumulative Project Conditions include cumulative No Project Conditions plus traffic generated by the proposed project. Under Cumulative Project Conditions only full project buildout (342 units) was analyzed.

#### **Cumulative Trip Generation**

The ten pending cumulative projects and estimated trips are summarized in Table 5.3-1. The trips for each cumulative project were estimated and assigned to the roadway network based on the relative locations of complementary land uses as well as existing and estimated future travel patterns.

<sup>&</sup>lt;sup>57</sup> National Geodetic Vertical Datum.

Table 5.3-1   Cumulative Project Trip Generation								
Project AM Peak Hour PM Peak Hour								
Main Gate	716	1,931						
West Broadway (Phase III)	350	362						
South of Tioga Residential	111	132						
East Dune Specific Plan	188	476						
West End District	1,193	1,807						
The Dunes on Monterey Bay (Phase II & III)	1,958	4,282						
CSUMB Students (2010-2025)	529	529						
Ferrini Ranch Subdivision	158	207						
Monterey Downs Horse Park	865	1,130						
East Garrison	1,290	1,379						
Total trips 7,358 12,235								
Source: City of Marina, City of Sand City, City of S	easide, City of Monterey, and Monter	ey County (January 2012).						

#### **Cumulative Roadway Improvements**

The City of Sand City commissioned a Project Study Report (PSR) to construct a new diamond interchange at Monterey Road/State Route 1 just north of the existing Fremont Boulevard interchange. Caltrans approved the PSR in 2002; however, the improvement is currently not fully funded and it is not known when this improvement will be constructed. There are no other funded improvements at any the study intersections or roadway segments. Due to the lack of full funding of the improvements in the area, the cumulative analysis assumes the same intersection and roadway configurations as under existing conditions (refer to *Section 3.4.1*).

#### 5.3.2.2 *Cumulative Intersection Levels of Service*

The results of the cumulative intersections levels of service are summarized in Table 5.3-2 below.

Table 5.3-2   Summary of Cumulative Intersection Levels of Service								
Intersection	Traffic	Peak	Cumulative No Project		Cumulative Project (Phase I and II)			
	Control	nour	<b>Delay</b> <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
Fremont Blvd./SR 1/Monterey	Cioreal	AM	>180.0	F	>180.0	F		
Road/Ord Avenue*	Signal	PM	>180.0	F	>180.0	F		
California Avenue/	All-Way	AM	8.3	А	8.9	А		
Playa Avenue	Stop	PM	28.2	D	40.5	Ε		
Del Monte Blvd./	Signal	AM	12.9	В	15.9	В		
Playa Avenue**	Signai	PM	20.2	С	20.6	В		
Fremont Boulevard/	Signal	AM	8.6	А	9.6	А		
Playa Avenue**	Signai	PM	21.8	С	23.1	С		
California Avenue/	All-Way	AM	8.9	А	9.1	А		
Tioga Avenue	Stop	PM	45.1	Ε	56.9	F		
Del Monte Blvd./	Signal	AM	15.9	В	15.2	В		
Tioga Avenue**	Siglial	PM	43.5	D	48.3	D		
Del Monte Blvd./	Signal	AM	16.3	В	16.9	В		
Broadway Avenue**	Signai	PM	18.1	В	18.2	В		

Table 5.3-2   Summary of Cumulative Intersection Levels of Service								
Intersection	Traffic Control	Peak Hour	Cumulative No Project		Cumulative Project (Phase I and II)			
			Delay <sup>1</sup>	LOS <sup>2</sup>	<b>Delay</b> <sup>1</sup>	LOS <sup>2</sup>		
State Route 218/ State	Signal	AM	40.6	D	49.1	D		
Route 1 SB ramps*	Signai	PM	25.5	С	31.8	С		
State Route 218/ State	Side-street	AM	45.2	Ε	128.7	F		
Route 1 NB ramps*	stop	PM	36.7	Ε	113.2	F		
Del Monte Blvd./Canyon	Signal	AM	35.2	D	38.2	D		
Del Rey Blvd.*	Signal	PM	49.6	D	51.7	D		

Notes:

<sup>1</sup>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 are shown.

<sup>2</sup>LOS calculations performed using the 2000 *Highway Capacity Manual* delay methodology for signalized and unsignalized intersections. \*Denotes Caltrans intersection.

\*\*Denotes City of Seaside intersection.

Bold text denotes a significant impact.

Source: Fehr & Peers, January 2012.

The results of the cumulative project conditions analysis show the project will contribute to significant cumulative traffic impacts at the following four intersections:

- Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue (the project exacerbates unacceptable LOS F intersection operations during the AM and PM peak hours.)
- California Avenue/Playa Avenue (during the PM peak hour, the project contributes to unacceptable LOS E operations and the peak hour signal warrant is met.)
- California Avenue/Tioga Avenue (during the PM peak hour, the project contributes to unacceptable LOS F operations and the peak-hour signal warrant is met.)
- State Route 218/State Route 1 Northbound Ramp (the project contributes to unacceptable LOS F during the AM and PM peak hours. The peak-hour signal warrant is met for both peak hours.)

**Impact CUMUL-2:** The proposed project will contribute to cumulative impacts at four intersections. (Significant Cumulative Impact without Mitigation)

#### **Cumulative Roadway Segment Levels of Service**

The results of the cumulative roadway segment analysis are shown in Table 5.3-3, below.

Table 5.3-3   Summary of Cumulative Roadway Segment Levels of Service							
Intersection	Traffic Control	Peak Hour	ak Cumulative No Project Cumulative Proj   (Phase I and I				
			Volume	LOS	Volume	LOS	
SR 1 from Fremont Blvd to	6-lane	AM	3,112	В	3,133	В	
Ord Main Entrance (NB)	Freeway	PM	5,784	D	5,818	D	
SR 1 from Fremont Blvd. to	6-lane	AM	5,813	Ε	5,841	Ε	
Ord Main Entrance (SB)	Freeway	PM	4,200	С	4,236	С	
SR 1 from SR 218 to	4-lane	AM	2,759	С	2,766	С	
Fremont Blvd. (NB)	Freeway	PM	4,666	Ε	4,678	Ε	
SR 1 from SR 218 to	4-lane	AM	5,053	Ε	5,060	Ε	
Fremont Blvd. (SB)	Freeway	PM	3,339	D	3,349	D	

Table 5.3-3   Summary of Cumulative Roadway Segment Levels of Service							
Intersection	Traffic	Peak Hour	Cumulative	e No Project	Cumulative Project (Phase I and II)		
	Control		Volume	LOS	Volume	LOS	
SR 1 from SR 218 to Del	4-lane	AM	2,833	С	2,878	С	
Monte Blvd. (NB)	Freeway	PM	5,225	F	5,281	F	
SR 1 South from SR 218 to	4-lane	AM	5,185	Ε	5,218	F	
Del Monte Blvd. (SB)	Freeway	PM	3,890	Ε	3,945	Ε	
Del Monte Blvd. from Playa	4-lane	AM	761	А	918	А	
Avenue to Fremont Blvd.	Arterial	PM	828	А	1,069	А	
Del Monte Blvd. from Tioga	4-lane	AM	1,124	А	1,293	А	
Ave. to Playa Ave.	Arterial	PM	1,296	А	1,565	А	
<b>Bold</b> text denotes a significant impact. Source: Caltrans 2010, Fehr & Peers, 20	12.						

The results of the cumulative project conditions analysis show the project will contribute to significant cumulative traffic impacts at the following five Caltrans roadway segments:

- Southbound State Route 1 from Fremont Boulevard to Ord Main Entrance (during the AM peak hour, the project exacerbates unacceptable LOS E operations)
- Northbound State Route 1 from State Route 218 to Fremont Boulevard (during the PM peak hour, the project exacerbates unacceptable LOS E operations)
- Southbound State Route 1 from State Route 218 to Fremont Boulevard (during the AM peak hour, the project exacerbates unacceptable LOS E operations)
- Northbound State Route 1 from State Route 218 to Del Monte Boulevard (during the PM peak hour, the project exacerbates LOS F operations)
- Southbound State Route 1 from State Route 218 to Del Monte Boulevard (during the AM and PM peak hours, the project exacerbates LOS F and E operations, respectively)

**Impact CUMUL-3:** The proposed project will contribute to cumulative impacts on five roadway segments. (**Significant Cumulative Impact without Mitigation**)

#### 5.3.2.3 Mitigation for Cumulative Transportation Impacts

#### **Cumulative Intersection LOS Mitigation**

The proposed project would contribute considerably to cumulative transportation impacts at the following four intersections:

- Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue
- California Avenue/Playa Avenue
- California Avenue/Tioga Avenue
- State Route 218/State Route 1 Northbound Ramp

Table 5.3-4 summarizes the intersection delay and LOS for the mitigation under cumulative project conditions.

Table 5.3-4   Mitigated Cumulative Intersection Levels of Service							
Intersection	Improvement	Peak	Cumulative Project				
		Hour	Delay <sup>1</sup>	LOS <sup>2</sup>			
Fremont Boulevard/State Route 1/	Implement PSR/TAMC	AM	23.4	В			
Monterey Road/Ord Avenue	Regional Impact Fee	PM	30.5	В			
California Avanua/Plava Avanua	Signaliza Intersection	AM	7.1	А			
Camonna Avenue/Playa Avenue	Signalize intersection	PM	19.2	В			
	Signaliza Intersection	AM	9.1	A			
California Avanua/Tiaga Avanua	Signalize Intersection	PM	8.9	A			
California Avenue/ Hoga Avenue	Additional Westbound	AM	13.4	В			
	Right-Turn Lane	PM	12.5	В			
State Route 218/State Route 1		AM	8.3	В			
Northbound Ramp*	Signalize Intersection	PM	8.2	В			

Notes:

<sup>1</sup>Whole intersection weighted average total delay for signalized and all-way stop-controlled intersections (expressed in seconds per vehicle). Worst approach control delay for two-way stop-controlled intersections (expressed in seconds per vehicle).

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

\*Denotes Caltrans intersection

Source: Fehr & Peers, January 2012.

#### Fremont Boulevard

As noted in *Section 3.4.3.1*, Caltrans approved the Highway 1 (SR 1) Project Study Report (PSR) in 2002, which identified improvements for the intersection at the Fremont Boulevard/State Route 1/Monterey Road/Ord Avenue intersection. Currently, this project is not fully funded, though the project is included in the Regional Development Impact Fee adopted by TAMC in August 2008. The PSR improvements would mitigate intersections impacts at the Fremont Boulevard/State Route 1/ Monterey Road/Ord Avenue intersection to a less-than-significant-level.

**MM CUMUL-2.1:** The proposed project will be required to pay the Regional Development Impact Fee as a fair share contribution to regional transportation improvements which will mitigate the project's contribution to these cumulative intersection LOS impacts to a less than significant level.

#### California Avenue/Playa Avenue

The intersection of California Avenue/Playa Avenue would operate unacceptably under cumulative project conditions and would meet the minimum volume threshold for the peak-hour signal warrant during the PM peak hour under Phase II of the project. With implementation of Phase I the intersection would operate at an acceptable LOS under cumulative conditions. Mitigation of the project impacts to less-than-significant levels requires the signalization of this four-way stop intersection.

### **MM CUMUL-2.2:** The proposed project shall signalize the intersection of California Avenue and Playa Avenue.

#### California Avenue/Tioga Avenue

The intersection of California Avenue/Tioga Avenue operates unacceptably under cumulative project conditions and would meet the peak-hour volume signal warrant during the PM peak hour. Signalization of this intersection would mitigate the impact to a less-than-significant level and cause the intersection to operate at LOS A. Alternatively, the addition of an exclusive right-turn lane on the westbound approach (for a total of one left-turn lane, one through-lane and one right-turn lane) would mitigate operations to an acceptable LOS B.

**MM CUMUL-2.3:** The proposed project shall implement improvements to the California Avenue and Tioga Avenue intersection to improve the level of service to acceptable levels.

#### SR 218/SR 1 Northbound Ramp

As shown in Table 5.3-4, signalization of the northbound ramp intersection of State Route 218/State Route 1 and adding an eastbound left-turn lane is required to mitigate the project's impact. Under cumulative project conditions, the northbound ramp is projected to operate at LOS B with this mitigation. Therefore, the signalization of the northbound ramp intersection would mitigate the impacts to less-than-significant levels.

**MM CUMUL-2.4:** The proposed project will signalize the SR 218/SR 1 northbound ramp intersection.

#### **Cumulative Roadway Segment Mitigation Measures**

The proposed project would result in significant contributions to cumulative impacts on the following five roadway segments:

- Southbound State Route 1 from Fremont Boulevard to Ord Main Entrance
- Northbound State Route 1 from State Route 218 to Fremont Boulevard
- Southbound State Route 1 from State Route 218 to Fremont Boulevard
- Northbound State Route 1 from State Route 218 to Del Monte Boulevard
- Southbound State Route 1 from State Route 218 to Del Monte Boulevard

#### SR 1 from SR 218 to Ord Main Entrance

Implementation of the State Route 1 PSR improvements includes widening of State Route 1 to six lanes between the Ord Main Entrance and State Route 218. Funding for this improvement is not currently in place, though the widening of SR 1 between Fremont Boulevard and State Route 218 is included in the Regional Development Impact Fee program that was adopted by TAMC in August 2008. Widening the State Route 1 on the segment between Fremont Boulevard and State Route 218 will improve operation to LOS D in both the northbound and southbound direction under cumulative project conditions.

Although no improvements are currently proposed for the segment of SR 1 from Fremont Boulevard to the Fort Ord Main Entrance as part of the Regional Development Impact Fee, TAMC is the responsible agency for the implementation of regional roadway improvements required to provide acceptable operations in the region. Since this freeway segment would operate at a level of service that exceeds Caltrans standards under cumulative conditions, TAMC should include the widening of

this segment of SR 1 on their project list and pursue these improvements as part of the regional traffic impact fee. The continued implementation of the impact fee and construction of roadway improvements, as funding allows, will then reduce the cumulative impact of new and pending developments on the regional roadway system.

**MM CUMUL-3.1:** The proposed project will be required to pay the Regional Development Impact Fee as a fair share contribution to the State Route 1 PSR improvements which will mitigate the project's contribution to the cumulative impact to SR 1 from SR 218 to the Fort Ord Main Entrance to a less than significant level.

#### SR 1 from SR 218 to Del Monte Boulevard

Capacity improvements along State Route 1 south of State Route 218 would be necessary to improve operations on the two roadway segments between State Route 218 and Del Monte Boulevard. No improvements are currently identified for this segment of SR 1. Widening State Route 1 to six lanes would improve operations at these locations to LOS C or better under cumulative project conditions.

Although no improvements are currently proposed for the segments of SR 1 from SR 218 to Del Monte Boulevard, TAMC is the responsible agency for the implementation of regional roadway improvements required to provide acceptable operations in the region. Since these freeway segments are already operating at a level of service that exceed Caltrans standards, TAMC should include the widening of these segments of SR 1 on their project list and pursue these improvements as part of the regional traffic impact fee. The continued implementation of the impact fee and construction of roadway improvements, as funding allows, will then reduce the cumulative impact of new and pending developments on the regional roadway system.

- **MM CUMUL-3.2:** Although no improvements are currently identified for the two segments of SR 1 from SR 218 to Del Monte Boulevard, freeway impacts can be mitigated with contribution to the Regional Development Impact Fee adopted by TAMC.
- 5.3.2.4 Conclusions Regarding Cumulative Transportation Impacts
- **Impact CUMUL-2:** Implementation of the proposed mitigation measures would reduce the project's contribution to cumulative impacts to four intersections to a less than significant level. (Less Than Significant Cumulative Impact with Mitigation)
- Impact CUMUL-3.1: Implementation of the proposed mitigation measure would reduce the project's impact to State Route 1 between State Route 218 and the Fort Ord Main Entrance to a less than significant level. (Less Than Significant Cumulative Impact with Mitigation)
- **Impact CUMUL-3.2:** Implementation of the proposed mitigation measure would reduce the project's contribution to cumulative regional transportation impacts, including the segment of SR1 from SR 218 to Del Monte Boulevard, to a less than significant level. (Less Than Significant Cumulative Impact with Mitigation)

#### 5.3.3 <u>Cumulative Biological Resources Impacts</u>

The project requires installation of a traffic signal at the SR 218/SR 1 northbound ramp intersection. Although the exact location of the signal poles has not been determined, the probable locations for such poles include paved sidewalks/bike trails and landscaping. The existing landscaping consists of iceplant which is prevalent along SR 1 in this area. No natural habitat or special status plant species are known to be present in the probable location of the required signal poles.

- Impact CUMUL-4: The proposed cumulative projects would not result in significant cumulative impacts to biological resources. (Less Than Significant Cumulative Impact)
- 5.3.3.1 Conclusions Regarding Cumulative Biological Resource Impacts
- Impact CUMUL-4: The proposed cumulative projects would not result in significant cumulative impacts to biological resources. (Less Than Significant Cumulative Impact)

#### 5.3.4 <u>Cumulative Air Quality Impacts</u>

#### 5.3.4.1 Cumulative Regional Air Quality Impacts

A cumulative regional air quality impact would occur if the project resulted 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). Based on emissions modeling, the project would not exceed the MBUAPCD's significance thresholds for ozone precursors (refer to *Section 3.8 Air Quality*).

**Impact CUMUL-5:** The proposed cumulative projects would not result in significant cumulative regional air quality impacts. (Less Than Significant Cumulative Impact)

#### 5.3.4.2 Consistency with Air Quality Management Plan

A project would conflict with or obstruct implementation of the regional air quality management plan (AQMP) if it would be inconsistent with the growth assumptions, in terms of population, employment or regional growth in Vehicle Miles Traveled. The MBUAPCD has determined that the project is consistent with the AQMP.<sup>58</sup>

Impact CUMUL-6:The proposed project would not conflict with or obstruct implementation of<br/>the regional AQMP and would, therefore, not result in a considerable<br/>contribution to cumulative regional air quality impacts. (Less Than<br/>Significant Cumulative Impact)

#### 5.3.4.3 Conclusions Regarding Cumulative Air Quality Impacts

## **Impact CUMUL-5:** The proposed cumulative projects would not result in significant cumulative regional air quality impacts. (Less Than Significant Cumulative Impact)

<sup>&</sup>lt;sup>58</sup> Amy Clymo, Supervising Air Quality Planner, Monterey Bay Unified Air Pollution Control District. <u>Consistency</u> <u>Determination for the Collection at Monterey Bay Resort Project, Sand City</u>. March 21, 2012.

# **Impact CUMUL-6:** The proposed project would not conflict with or obstruct implementation of the regional AQMP and would, therefore, not result in a considerable contribution to cumulative regional air quality impacts. (Less Than Significant Cumulative Impact)

#### 5.3.5 <u>Cumulative Noise Impacts</u>

The project would result in a significant cumulative traffic noise impact if existing sensitive receptors would be exposed to cumulative traffic noise level increases greater than three (3) dBA DNL above existing traffic noise levels and if the project would make a "cumulatively considerable" contribution to the overall traffic noise level increase. A "cumulatively considerable" contribution would be defined as an increase of 1 dBA DNL or more attributable solely to the proposed project.

Cumulative traffic noise level increases were calculated by comparing cumulative plus project traffic volumes to existing traffic volumes. Cumulative noise levels are anticipated to increase substantially (i.e., 3 to 5 dBA DNL) along roadways serving the project site due to planned growth in the project area and region. The project's contribution to cumulative noise level increases would be less than one dBA DNL. This noise level increase would not be perceptible or cumulatively considerable, and therefore, the impact is less than significant.

**Impact CUMUL-7:** The proposed project would not substantially contribute to cumulative noise levels anticipated with buildout of the project area. (Less Than Significant Cumulative Impact)

#### 5.3.5.1 Conclusions Regarding Cumulative Noise Impacts

**Impact CUMUL-7:** The proposed project would not substantially contribute to cumulative noise levels anticipated with buildout of the project area. (Less Than Significant Cumulative Impact)

#### 5.3.6 <u>Cumulative Utilities and Service Systems Impacts</u>

#### 5.3.6.1 *Water Use*

The proposed project would use existing water resources allocated to development parcels in Sand City and water from the City's desalination plant. The project, therefore, would not significantly contribute to cumulative water use exceeding the City's available supplies.

## **Impact CUMUL-8:** The proposed project would not significantly contribute to a cumulatively considerable demand for new water entitlements. (Less Than Significant Cumulative Impact)

#### 5.3.6.2 Sewage Generation

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 Street 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.

Although construction of the cumulative projects would increase wastewater flows, they would not exceed the planned or permitted capacity of the regional wastewater treatment plant. Limitations on water supply, and associated wastewater generation, are anticipated to continue even with implementation of the cumulative projects. The proposed project and other cumulative projects, therefore, are not expected to result in the need for expanded wastewater treatment facilities.

**Impact CUMUL-9:** The proposed project would not result in a cumulatively considerable impact due to the need for expanded wastewater treatment facilities. (Less Than Significant Cumulative Impact)

#### 5.3.6.3 Conclusions Regarding Cumulative Utilities and Service Systems Impacts

- Impact CUMUL-8: The proposed project would not contribute to a cumulatively considerable demand for new water entitlements. (Less Than Significant Cumulative Impact)
- **Impact CUMUL-9:** The proposed project would not result in a cumulatively considerable need for expanded wastewater treatment facilities. (Less Than Significant Cumulative Impact)

#### 5.3.7 <u>Cumulative Cultural Resources Impacts</u>

#### 5.3.7.1 *Cumulative Cultural Resources Impacts*

The project requires installation of a traffic signal at the SR 218/SR 1 northbound ramp intersection. Although the exact location of the signal poles has not been determined, the probable locations for such poles include paved sidewalks/bike trails and landscaping. According to the City of Monterey's Archaeological Sensitivity Map, this intersection is located in an area with the potential for archaeological resources. Installation of traffic signal poles would require disturbance of native soils which may contain archaeological resources.

**Impact CUMUL-10:** The proposed project may result in impacts to buried archaeological resources during construction of a traffic signal to mitigate cumulative traffic impacts. (Significant Cumulative Impact)

#### 5.3.7.2 *Mitigation for Cumulative Cultural Resources Impacts*

The following measure, proposed by the project, would reduce the project's contribution to significant cumulative cultural resources impacts to a less than significant level:

**MM CUMUL-10.1:** In the event of the discovery of prehistoric or historic archaeological deposits, work shall be halted within 50 feet of the discovery and a qualified professional archaeologist shall examine the find and make appropriate recommendations regarding the significance of the find and the appropriate mitigation. The recommendation shall be implemented and could include collection, recordation, and analysis of any significant cultural materials.

- **MM CUMUL–10.2:** In the event that human remains and/or cultural materials are found, all project-related construction shall cease within a 50-foot radius of the find in order to proceed with the testing and mitigation measures required. Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California:
  - In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Monterey County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials in a nearby location not subject to further subsurface disturbance.
  - A final report summarizing the discovery of cultural materials shall be submitted to the Director of Community Development prior to issuance of occupancy permits for the project. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found, a summary of the resources analysis methodology and conclusion, and a description of the disposition/curation of the resources. The report shall verify completion of the mitigation program to the satisfaction of the Director of Community Development.

#### 5.3.7.3 Conclusions Regarding Cumulative Cultural Resources Impacts

**Impact CUMUL-10:** Implementation of the proposed mitigation measures would reduce the project's contribution to cumulative cultural resources impacts due to intersection signalization to a less than significant level. (Less Than Significant Cumulative Impact with Mitigation)

#### 5.3.8 <u>Cumulative Energy Impacts</u>

Buildout of the cumulative projects listed in Table 5.2-1 would result in increased energy use. The projects would not, however, substantially increase energy use in the city, region, or state relative to supplies. The cumulative projects would be built to comply with Title 24 standards and the local building code, and therefore, would not use energy in a wasteful manner.

**Impact CUMUL-11:** The proposed project would not contribute to a cumulatively considerable increase in energy use. (Less Than Significant Cumulative Impact)

#### 5.3.6.1 Conclusions Regarding Cumulative Energy Impacts

**Impact CUMUL-11:** The proposed project would not contribute to a cumulatively considerable increase in energy use. (Less Than Significant Cumulative Impact)

#### 6.1 INTRODUCTION

The CEQA Guidelines require that an EIR discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in a surrounding area [CEQA Guidelines Section 15126.2(d)]. Projects which could remove obstacles to population growth (such as a major public services expansion) must also be considered in this discussion.

#### 6.2 PLANNED AND PROJECTED GROWTH

The proposed project would construct visitor-serving commercial uses, a 342 unit coastal resort, which is an allowed use in the City's General Plan and certified Local Coastal Program. According to the *Association of Monterey Bay Area Governments (AMBAG) Monterey Bay Area 2008 Regional Forecast*, the total population in Sand City in 2020 is forecast to be 1,498 residents. The City's 2002-2017 General Plan estimated a population of 1,295 residents at buildout of the plan. The current forecast by AMBAG represents more population and housing growth in the City than previously forecast or estimated in the City's existing General Plan.

AMBAG forecasts approximately 2,933 jobs within Sand City by 2020. The City provides substantially more employment opportunities than housing units. The General Plan currently estimates approximately 154 employees within the City for the project site's land use designation. The proposed project would result in job and economic growth in Sand City but would not construct any additional housing. Based on AMBAG's assumptions of Monterey County jobs per housing unit of 1.3 in the year 2020, and assuming the project creates 154 jobs, the project would result in the need for 118 residential units. Although this number of residential units may not be accommodated within Sand City, it would not represent substantial growth for the region.

#### 6.3 IMPACTS OF GROWTH

Since the project site is currently undeveloped, development of the proposed project on the site, in conformance with the existing land use designation will be "growth." The project would allow for visitor-service commercial development on a site that currently is not developed with those uses. This growth on the site, however, would not be "induced" by the proposed project - it <u>is</u> the proposed project.

The project would require the extension of utilities to the project site but would not create any additional capacity than necessary to serve the site. The proposed project may create additional pressure for additional housing units in Sand City or in the Monterey Peninsula region. This growth would not represent additional growth beyond what has already been assumed for the region, given that the site has been envisioned for the type of land use proposed by the project.

The growth induced indirectly by the proposed project would contribute to a number of environmental impacts, including traffic congestion and air pollution emissions affecting air quality. The vehicle usage associated with any indirect residential growth caused by the project is not anticipated to result in any significant contribution to regional air quality emissions. The increase in air pollutant emissions due to growth in the region have been assumed as part of the *2008 Air Quality Management Plan*. Growth in Sand City resulting in urban development west of SR 1 could also result in impacts to coastal dune and coastal dune scrub habitats and associated special status species, including Monterey spineflower, Smith's blue butterfly, snowy plover, and burrowing owl.

Development in the coastal zone could also result in significant geologic and water quality impacts and impacts to visual resources.

Mechanisms for avoiding or reducing impacts associated with new development in Sand City are included in the Sand City General Plan. New development in areas of the City planned for residential growth would be subject to separate project-specific environmental review. Implementation of policies in the General Plan may substantially limit the amount of development that could occur in the environmentally sensitive areas of the City.

#### 6.4 CONCLUSION

As discussed above, because the project proposes development which is consistent with the existing General Plan designation and the LCP, the proposed project: (1) will not induce growth in an area where urbanization is not already planned, (2) will not create a precedent for growth outside the existing urban envelope, and (3) will not create a significant demand for new infrastructure in an area where urban infrastructure does not already exist.

The project could result in indirect growth in the City because it would create a new source of employment. Any growth that would result from the project is growth that has already been planned for Sand City. The conformance of future development projects to the policies in the General Plan and Local Coastal Program would avoid or reduce significant impacts on the environment associated with new growth in the City to a less than significant level.

#### SECTION 7 SIGNIFICANT UNAVOIDABLE IMPACTS

If the proposed project is approved, it would result in the following significant unavoidable impacts:

#### Geology and Soils (Coastal Erosion and Recession)

The proposed project would result in significant unavoidable impacts due to portions of the proposed development being located within the 50-year coastal erosion setback line. These facilities include portions of the westernmost buildings on the site, the public access trail, public access parking, vistas, spa, amphitheater stage, Tioga Avenue restroom facilities, and any utility lines located seaward of the setback line (refer to Figure 18).

A project that conforms with the 50-year erosion line would, however, avoid geology and soils impacts and is discussed in *Section 8 Alternatives*.

All other impacts of the project would be mitigated to a less than significant level through the implementation of the mitigation measures identified in this EIR.

#### SECTION 8 ALTERNATIVES

CEQA requires that an EIR identify alternatives to a project as it is proposed. The CEQA Guidelines specify that the EIR should identify alternatives which "will feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project." The purpose of this section is to determine whether there are alternatives of design, scope or location which could substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of the project objectives," or are more expensive. [§15126.6]

In order to comply with the purposes of CEQA, it is important to identify alternatives that could reduce the significant impacts which are anticipated to occur if the project is implemented, but meet as many of the project's objectives as possible. The Guidelines emphasize a common sense approach; the alternatives should be reasonable, should "foster informed decision making and public participation," and the EIR should focus on alternatives that avoid or substantially lessen the significant impacts.

The significant unavoidable impacts identified in this EIR as resulting from the proposed project include the following:

• Geology and Soils (Coastal Erosion and Recession)

Alternatives may also be considered if they would further reduce impacts that are already less than significant because the project is proposing mitigation. Impacts that would be significant, but for which the project includes mitigation to reduce them to less than significant levels include visual and aesthetic resources, transportation, hydrology and water quality, geology and soils, biological resources, construction dust, and noise.

CEQA encourages consideration of an alternative site when significant effects of the project might be avoided or substantially lessened. Only locations that would avoid or substantially lessen any of the significant effects of the project and meet most of the project objectives need be considered for inclusion in the EIR.

#### **Objectives of the Project**

While CEQA does not require that alternatives must be capable of meeting all the project objectives, their ability to meet most of the objectives is relevant to their consideration. The following represent the project applicant's stated objectives for the proposed project:

- Develop a destination resort consisting of conference and culinary meeting space;
- Create a room count (300) that meets the operator's criteria for conferencing centers and accommodations for attendees;
- Physically accommodate buildings within a stepped design that blends into the dunes, and respects the ocean front pedestrian orientation;
- Establish public access through the site via the Granite parking lot and bluff trail networks, to tie into the existing coastal bike trail and Tioga blufftop overlook and beach access;
- Create sand dunes restoration and stabilization zones that build upon habitat management and enhancement, respect wave and tidal influences, and permit sand movement maintenance practices that harmonize with the flora and fauna of the site and surroundings;
- Include restaurants, spa, recreation, administration and support facilities and services for the destination resort; and

• Create a mix of uses and a development pattern that respects the environmental constraints of the site and area, supports the public access and visitor-serving policies of the City and is feasible for the developer.

The following are the City's stated objectives for the project site:

- Provide needed property tax, sales tax, and transient occupancy tax (TOT) to the City.
- Conformance of the project to the goals, vision, policies of the Local Coastal Program (LCP) including the LCP land use designation.
- Development of a distinctive, high quality visitor-serving coastal resort consistent with General Plan goals and objectives.
- Encourage development of visitor serving facilities that provide services that meet a range of visitor needs.
- Provide visitor facilities and services open to the general public, such as dedication of sandy beach, viewing areas, and sheltered areas as a part of shorefront development projects.
- Provide adequate parking for the development as well as any public uses proposed on the site.
- Ensure provision of adequate public beach recreational areas for public use including the dedication of all sandy beach areas seaward of the toe of the dune or bluff.
- Provide an additional revenue source in the form of transient occupancy tax (TOT) for general municipal purposes.

#### Feasibility of Alternatives

CEQA, the CEQA Guidelines, and the case law on the subject have found that feasibility can be based on a wide range of factors and influences. The Guidelines advise that such factors can include (but are not necessarily limited to) the suitability of an alternate site, economic viability, availability of infrastructure, consistency with a general plan or with other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent can "reasonably acquire, control, or otherwise have access to the alternative site [§15126.6(f)(1)]."

#### Selection of Alternatives

In addition to the "No Project" alternative, the Guidelines advise that the range of alternatives discussed in the EIR should be based on the "rule of reason" and should be limited to those that "would avoid or substantially lessen any of the significant effects of the project [§15126.6(f)]." The alternatives discussion in this section of the EIR will analyze the *No Project Alternative*, *Design Alternative*, *Location Alternative*, and *Conforming Use Alternative*.

#### 8.1 NO PROJECT ALTERNATIVE

The CEQA Guidelines specifically require consideration of a No Project Alternative. The No Project Alternative should address both "the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services."

The project site is mostly undeveloped except for an outdoor construction/contractor storage area on the Sterling/Calabrese site and a paved coastal bike trail. Under the No Project Alternative, the project site would remain undeveloped in the near-term. This alternative would avoid all of the proposed project's significant impacts. However, it would also result in the continuation of a negative visual condition along State Route 1 due to the operation of the outdoor construction/

contractor storage area on the site. It should be noted, however, that the project site is designated in the City's General Plan and Local Coastal Program for visitor-serving commercial uses. Therefore, it is possible that other future development proposals for this site, consistent with this designation, might come forward in the future. Development of a project on the site consistent with the visitor-serving commercial use designation would likely result in and be subject to similar impacts as the proposed project (refer to *Section 8.4 Conforming Use Alternative*).

The No Project Alternative would not meet any of the City's or applicant's objectives for the site. Overall the No Project Alternative (assuming the existing uses continue operating on the site) would be environmentally superior to the project because it would avoid all of the project's environmental impacts.

#### 8.2 DESIGN ALTERNATIVE

The goal of a Design Alternative would be to modify the design of the proposed resort in order to reduce or avoid the project impacts. The applicant for the project has developed a site plan that could accommodate 340 visitor units when designed to reduce or avoid some of the significant impacts of the proposed project. A summary of the potential development assumed under the Design Alternative is provided in Table 8.2-1 below. The modifications to the project assumed under the Design Alternative are conceptually shown on Figure 21.

Table 8.2-1 Design Alternative Summary								
	McDonald Property Property Property Calabrese Property Property							
Area (Acres)	16.25	7.90	2.31	26.46				
Total Visitor Units	235	105	0	340				
Conference Center	16,800 sq. ft.	0	0	16,800 sq. ft.				
Restaurant Space	12,000 sq. ft.	0	0	12,000 sq. ft.				
Spa Facilities	5,000 sq. ft.	0	0	5,000 sq. ft.				
Resort Parking Required	488 spaces	145 spaces	0	633 spaces				
Resort Parking Provided	419 spaces	210 spaces	0	629 spaces				
Public Parking Required	49 spaces	15 spaces	0	64 spaces				
Public Parking Provided	59 spaces*	17 spaces*	44 spaces**	76*** spaces				
* Surface parking spaces were assu	med to provide for publ	ic parking Forty-four	public spaces are propos	ed along Sand Dunes Drive				

\* Surface parking spaces were assumed to provide for public parking. Forty-four public spaces are proposed along Sand Dunes Drive. \*\*Parking proposed on the City property (Granite Construction) would be available for public use at all times, but not counted towards the resort or public parking requirements. (Source: Dave Watson, King Ventures, E-mail communication, September 25, 2012.) \*\*\*Includes surface parking spaces on the McDonald and Sterling/Calabrese properties and parking spaces on Sand Dunes Drive.

One of the project's significant impacts is blockage of a designated view corridor of the Monterey Bay from southbound SR 1, due to the height of the proposed buildings. The Design Alternative could accommodate a similar number of units (340 total units) while maintaining views through the project site (review to Figure 22).

The Design Alternative would also eliminate project buildings and recreational amenities encroaching into the coastal erosion setback line. The Design Alternative would construct buildings with similar uses as the proposed project in the same general area but landward of the coastal erosion setback line. The Design Alternative reduces the square footage of the restaurant and spa facilities by 7,700 square feet and 9,100 square feet, respectively. The proposed public access trail on the west side of the site, public access parking on City-owned property, vistas, Tioga Avenue restroom

facilities and utility lines would continue to be located seaward of the setback line with the Design Alternative. The Design Alternative includes a 10-foot pathway located beneath the balconies of units adjacent to the coastal recession setback line that would continue to provide public access on the seaward side of the development through 2062. With the exception of the public access trail, these public amenities would require an adaptive management plan for relocation due to expected coastal erosion and sea level rise. The Design Alternative does not include a pool and spa or amphitheater seaward of the coastal erosion setback line. With the Design Alternative, it could also be feasible to amend the grading plan for the Sterling property to reduce the elevation across the seaward side of the property to 18 feet. This potential grading modification would create a uniform, straight setback line in this area and allow for construction of a pool at 18 feet in elevation instead of 30 feet in elevation as currently shown on Figure 21.

#### **Comparison of Environmental Impacts**

The Design Alternative would reduce the visual and aesthetic resource impacts of the project to a less than significant level since all buildings on the site would be below the height limits in the designated view corridors identified in the City's LCP (refer to Figure 22). The Design Alternative proposes a similar number of units as the project and, therefore, would result in the same intersection and roadway segment LOS impacts. The Design Alternative proposes to remove all resort buildings out of the coastal recession setback area of the site.

The Design Alternative maintains the roadway alignment of the proposed project and, therefore, would have the same impacts to Smith's blue butterfly as the proposed project. All other biological impacts of the project would remain the same with construction of the Design Alternative. All other impacts of the project would be similar under this Alternative since they are generally related to the construction of any visitor-serving commercial use on the project site.

#### **Relationship to Project Objectives**

The Design Alternative would meet the City's objectives including conforming to the policies of the Local Coastal Program. The Design Alternative does not substantially alter the unit count on the site and would meet the applicant's minimum room requirements for a conference center that accommodates attendees with a minimum of 300 rooms.

#### Conclusion

The Design Alternative would reduce the visual and aesthetic resource impacts and the coastal erosion impacts of the project to a less than significant level. This alternative would not reduce the transportation impacts of the project and, therefore, the intersection LOS impacts and roadway segment impacts of the project would still require mitigation. The Design Alternative would generally meet the City's and applicant's objectives for the project and would reduce some of the environmental impacts of the project related to visual and aesthetic resources and geology and soils.

#### 8.3 LOCATION ALTERNATIVE

The CEQA Guidelines require that an EIR identify an alternative location that "would avoid or substantially lessen any of the significant effects of the project" [§15126.6 (f) (2) (A)]. As discussed previously in this section, the overall objective of the project is to develop a resort of at least 300 units with culinary and conference meeting space which respects the environmental constraints of the site and area, and supports the public access and visitor-serving policies of the City.





The City includes an area of 347 acres, all of which was previously included in the Redevelopment Plan adopted by the City in 1987. The 1996 Memorandum of Understanding between the City and the California Department of Parks and Recreation (CPDR) and the Monterey Peninsula Regional Park District (MPRPD) regarding the community's coastal land uses eliminated much of the Sand City coastline from consideration as an alternative location for a coastal resort. Inland sites would also not provide the environment for a "coastal resort" and in addition, these sites are limited due to the infill, small lot nature of the east side of Sand City (i.e. east of SR 1). The Monterey Bay Shores site is the only coastal site in the City that would support the redevelopment objectives of the City and be of suitable area to accommodate the project. Alternative locations outside the City of Sand City would not support the City's objectives of providing additional tax revenue for general municipal purposes and, therefore, were not considered further.

The proposed project could be developed on the Monterey Bay Shores site, which is approximately 39.04 acres in size and could accommodate the proposed development. This site is located north of the former landfill site and west of SR 1, along the Monterey Bay. This site also consists of sandy dunes and was also formerly used for sand mining. This site is designated for and would allow for a visitor-serving commercial land use. The proposed 342 room coastal resort could be accommodated by this Location Alternative although another coastal resort project is proposed there.

#### **Comparison of Impacts**

The Monterey Bay Shores Location Alternative would be subject to the same geology and soils conditions as the proposed project site. This site would also be subject to coastal recession and wave run-up; however, because the Location Alternative site is larger, the proposed project design could be located on this site outside of the 50-year coastal erosion setback line. This alternative site would also result in similar impacts to biological resources due to the historical presence of Monterey spineflower and western snowy plover on the Monterey Bay Shores site. The proposed project could also likely be designed to avoid buckwheat plants on this alternative site. The Location Alternative would also have similar visual and aesthetic resource impacts as the proposed project. Given that access to this alternative site would be from the same roadway facilities as for the proposed project site, development of the resort project on this site would likely result in similar intersection and roadway segment LOS impacts as the project. Public amenities such as restroom facilities could be located to avoid interference with existing utilities.

#### **Relationship to Project Objectives**

The proposed project could potentially be developed on the Location Alternative site and could be designed to meet the objectives of the City and applicant for the project.

#### Conclusion

Development of the project on the Location Alternative site would likely result in similar impacts as the proposed project. The majority of the project's impacts are related to the sensitivity of the coastal environment, and therefore, location of the project on another coastal site is likely to result in similar impacts. The Monterey Bay Shores Resort was approved on the Location Alternative site in 1998, and the property owner is currently seeking necessary permits to develop a modified project on the site. It is, therefore, not known whether the applicant (King Ventures) could acquire or obtain control over this property. Given the City-approved development on the Location Alternative site, it is likely that the project could feasibly be developed on this alternative site; however, the project applicant may not be able to acquire the site given the active development proposal being pursued by the property owner.

#### 8.4 CONFORMING USE ALTERNATIVE

The LCP and General Plan designations for the site allow for a variety of visitor-serving commercial uses. Development of the site with an alternate use serving coastal visitors that conforms to the land use designation for the site could include the following:

- Park and/or Open Space use Development of parkland on the project site would provide additional recreational facilities in the City and would be consistent with the land use designation for the site.
- Commercial retail and service uses Development of a visitor-serving commercial use on the site such as retail shops or a service station would be consistent with the land use designation for the site.

#### **Comparison of Impacts**

Development of park and recreational uses on the site would be subject to similar geology and soils conditions as the proposed project. Proposed amenities associated with a recreational use could be located outside of the 50-year coastal erosion setback line. Proposed amenities may be subject to coastal flooding but would have a less impact given the lack of habitable structures on the site. Similar impacts to biological resources would occur due to construction of the project; however, additional acreage could be proposed for mitigation given the less intensive use of the site and ability to locate development further inland and reduce grading. The visual and aesthetic impacts of development on the site would be reduced given the lack of large buildings associated with a park and recreational use. The traffic impacts of the project would also be reduced with a park use because the site would not draw a similar number of vehicle trips. Construction on the site would result in similar dust impacts due to the need for removal of existing paving and coastal armoring on the site. Noise impacts on the site may result in greater impacts to the park alternative due to the lack of acoustical shielding from buildings. Public amenities such as restroom facilities could be located to avoid interference with existing utilities. Greenhouse gas emissions from the project would be less due to the lack of substantial development on the site. A park use would also be subject to sea level rise and coastal flooding over the lifetime of these facilities.

Development of a variety of commercial retail and service uses on the site is assumed to require a similar footprint as the proposed resort use. Buildings of various sizes with a mix of visitor-serving retail business uses could be developed on the site and would require improvements and amenities such as roadways, sidewalks, parking, landscaping etc. Coastal recession and wave run-up impacts would be similar to the proposed project. Impacts related to biological resources, visual and aesthetic resources, and construction dust resulting from any development of buildings on the site would be similar to the proposed project. Traffic impacts would be similar due to the large amount of traffic generation from commercial retail development. Noise impacts would be reduced due to the lack of sensitive populations inhabiting the site. Public amenities such as restroom facilities could be located to avoid interference with existing utilities. Greenhouse gas emissions impacts would be similar to the project given the amount of traffic and energy use resulting from commercial development of the site. Given the similar footprint of the commercial development, impacts from sea level rise and coastal flooding over the lifetime of this development would be similar to the proposed project.

#### **Relationship to Project Objectives**

Development of the site exclusively with a recreational/open space use would provide limited revenue to the City for municipal purposes and would not meet any of the applicant's objectives for a destination resort and conference use. A park and open space use on the site could meet the objectives for a coastal bike trail and public access. A park and open space use may also allow for the restoration and stabilization of sand dunes on the site. Development of a public park and open space use on the site would likely require the allocation of public funds for restoration of the site and construction of improvements. Given the currently limited financial resources of the City, this alternative may not be financially feasible. The use of the project site for an exclusive park and recreational use is not considered further since it would not meet most of the project objectives and, based on the 1996 MOU with the park agencies, up to 75 percent of the coastal area west of Highway 1 will be dedicated to park and open space uses in any case.

Development of the site with visitor-serving retail and service uses would provide some revenue to the City for municipal purposes but would not provide transient occupancy tax revenues. Commercial retail development on the site would provide limited linkage and coastal access for the public. A commercial retail use of the site would not meet most of the applicant's objectives for providing a resort and conference center with accommodations for conference attendees.

#### Conclusion

The Conforming Use Alternative involving development of a park/recreation use on the site may reduce the impacts of the project but would not meet most of the objectives of the project.

The Conforming Use Alternative involving development of visitor-serving commercial retail uses on the site would likely result in similar impacts as the proposed project. The majority of the project's impacts are related to the sensitivity of the coastal environment, and therefore, construction of any substantial development providing economic benefit to the City in the form of tax revenue would result in similar impacts. The Conforming Use Alternative (commercial retail development) would meet some of the City's objectives for the project but would not substantially reduce the environmental impacts of the project and would not meet the applicant's objectives for a 300 room conference center.

#### 8.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. Based on the above discussions, the environmentally superior alternative is the No Project Alternative, because all of the project's significant environmental impacts would be avoided if no new construction occurred under this Alternative. CEQA Guidelines Section 15126.6(e)(2), however, states that "if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." A comparison of the impacts resulting from the project and the project alternatives is provided in Table 8.5-1 on the following page.

Table 8.5-1   Comparison of Alternatives							
Significant Impact	Proposed	No Project	Design	Location	Conforming Use Alternative		
	Project	Alternative	Alternative	Alternative	Park	Retail	
Visual & Aesthetics	SM	LTS	LTS	SM	LTS	SM	
Transportation	SM	LTS	SM	SM	LTS	SM	
Hydrology (Flooding)	SM	LTS	SM	LTS	LTS	SM	
Geology & Soils							
- Water Erosion	SU	LTS	LTS	LTS	LTS	SM	
- Wind Erosion	SM	LTS	SM	LTS	LTS	LTS	
Biological Resources							
- Monterey spineflower	SM	LTS	SM	SM	SM	SM	
- Western snowy plover	SM	LTS	SM	SM	SM	SM	
- Smith's blue butterfly	SM	LTS	SM	LTS	LTS	LTS	
- Black legless lizard	SM	LTS	SM	LTS	SM	SM	
Air Quality	SM	LTS	SM	SM	SM	SM	
Noise	SM	L TS	SM	SM	SU	SM	
Indisc Indisc	SM		SM		ITS		
Greenhouse Gas	5101	L15	5111	LIS			
Emissions							
- Emissions	SM	LTS	SM	LTS	LTS	SM	
- Sea Level Rise	SM	LTS	SM	LTS	LTS	SM	
Key: LTS – Less Thar SM – Significant SU – Significant	- Sea Level Rise SM LTS SM LTS LTS SM Key: LTS – Less Than Significant Impact SM – Significant Impact Reduced to LTS with Mitigation SU – Significant Unoveidable or Unwritigated Impact						

While the Location Alternative and the Conforming Use Alternative would reduce or avoid some of the project's impacts, these alternatives are not considered to be feasible or meet the project objectives. Therefore, the Design Alternative would be the environmentally superior alternative because it would reduce the significant and unavoidable coastal erosion impacts of the project. The Design Alternative would also reduce the visual and aesthetic LCP view corridor impacts of the project to a less than significant level. This alternative would meet the main objectives of the applicant and the City.

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