CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877
WEB: WWW.COASTAL.CA.GOV

Th13c

Appeal Filed:	12/30/2013
49th Day:	Waived
Staff:	Mike Watson - SC
Staff Report:	4/3/2015
Hearing Date:	4/16/2015

STAFF REPORT: DE NOVO HEARING

Appeal Number:	A-3-SNC-14-0001
Applicant:	King Ventures
Appellants:	Commissioners Kinsey and Shallenberger; Sierra Club
Local Decision:	Coastal development permit (CDP) approved by the Sand City City Council on December 17, 2013 (CDP Number 13-06).
Project Location:	The 26.46-acre area north of Tioga Avenue and seaward of Highway One in the City of Sand City, consisting of an area with an active materials recovery operations (known as the Sterling site, APN 011-012-005) and undeveloped dune areas (known as the McDonald and Granite sites (APNs 011-012-001 & 002, and APN 011-501-016 respectively) immediately adjacent to the shoreline and the Monterey Bay.
Project Description:	Construct a 340-room resort complex including a 235-room standard operating hotel, a 105-room condominium hotel, two restaurants, a conference center, onsite parking, a wellness spa, on and offsite road improvements (including to Sand Dunes Drive and Tioga Avenue), public restrooms, a lifeguard station, public access and parking, and related development.
Staff Recommendation:	Denial

SUMMARY OF STAFF RECOMMENDATION

The Applicant proposes to develop a 340-unit visitor serving resort and related facilities that includes 235 hotel rooms, 105 condominium hotel rooms a conference center, spa, two restaurants, and on- and offsite road, parking, and public access improvements. The project is located in a dune area seaward of Highway One in the City of Sand City, Monterey County. The site extends north from Tioga Avenue over roughly 26.5 acres, about eight of which are currently used for construction materials handling and storage nearest Tioga Avenue (The "Sterling Parcel," owned by the Applicant). The remainder of the site, which constitutes undeveloped dune area, is owned by the City of Sand City (MacDonald and Granite Parcels). The project would be developed in a series of three-to-five-story building clusters atop an underground garage and a deep caisson foundation, and would result in some 572,127 square feet of facilities covering roughly 11.5 acres of the site.

Development has occurred on the subject property, including an 800-foot long shell of hardened slurry stretching from the MacDonald parcel to the Granite parcel and the placement of debris on the Sterling parcel, without the benefit of a coastal development permit. The Applicant does not seek authorization to retain the above described development in this permit application. Denial of this application pursuant to the staff recommendation will result in this potential violation remaining on the subject property. The Commission's enforcement division has opened a violation case, and is pursuing resolution of the alleged violation as a separate matter.

As currently proposed, the project is inconsistent with Sand City Local Coastal Program (LCP) and Coastal Act policies related to hazard avoidance, protection of public views, natural resource protection, public recreational access, and public services (i.e., traffic and water supply). In general, the project raises LCP and Coastal Act conformance questions primarily about the City's approval of a large resort complex on the sand dunes above a rapidly eroding shoreline, within the public viewshed from Highway One, and on land supporting state and federally listed species, including land designated as critical habitat for animal species.

As detailed in the findings below, in addition to questions regarding the availability of a potable water supply west of Highway One, the proposed resort does not adequately address coastal hazards, visual, landform, and other natural resource constraints, or traffic and circulation concerns. Even assuming the project secures a water supply, the project site is significantly constrained. The findings describe each of the constraints and project inconsistencies. To address the LCP constraints, significant changes are needed, including that the project must be re-sited and redesigned at a significantly smaller scale with respect to density, height and coverage, to minimize its impacts on public views and natural dune resource values, and to be set back farther to appropriately respond to coastal hazards at the site. In particular, given the significant coastal hazards the project must be set back farther and include specific enforceable mechanisms to assure that these hazards are minimized. Staff attempted to work with the Applicant on a redesigned project that could begin to address these LCP and Coastal Act requirements, but the Applicant indicated that it was not interested in working with staff on a redesigned project, and that it was not interested in pursuing anything other than the proposed project. Given that the proposed project is significantly out of compliance and cannot be found consistent with the LCP and the Coastal Act, staff recommends denial. The extent and fundamental nature of changes to

the project necessary to address the requirements of the LCP and Coastal Act simply make it infeasible for the Commission to approve the project with conditions.

With respect to hazards, the LCP requires that development be sited and designed to avoid hazards, and requires that it be sited to ensure stability and safety over its lifetime without a reliance on shoreline protective devices. It is clear that the site is subject to significant coastal hazards, including shoreline erosion/retreat and wave run-up/flooding. The southern Monterey Bay area consists of highly erodible dune sands and presents some of the highest shoreline erosion rates in the state. The Applicant has not demonstrated that the project is sited and designed to keep it out of harm's way as required by the LCP. In addition, the proposed project includes a foundation that would constitute a shoreline protective device under such erosion/retreat scenarios, which is inconsistent with the LCP. Additionally, the Applicant's erosion/retreat and sea level rise estimates are based on more optimistic estimates than much of the evidence supports, exacerbating all of these issues.

Regarding the protection of public views, the project is located within significant public viewsheds, critically including the Highway One viewshed of the site and beyond to the Monterey Bay and the Monterey peninsula. The LCP requires that development be sited and designed to protect significant public views, and prohibits impairment of certain specifically identified ocean views associated with this site. The project does not conform to the LCP's public viewshed protection policies because the project exceeds LCP height limits, encroaches upon and obstructs blue water views within LCP-identified view corridors, and significantly degrades public views not completely obstructed by the development.

In terms of dune resources, although a portion of the site is currently used for construction purposes (just north of Tioga Avenue), the site is entirely located in dunes that are a part of the larger southern Monterey Bay dune system that extends some 20 miles from Monterey Harbor to the Pajaro River. Portions of the project site support state and federally listed plants and animals, notably Monterey spineflower, Smith's blue butterfly, and Western snowy plover. The project would disturb essentially all dune areas above the 15-foot contour, and would permanently displace some 11.5 acres of dune, or roughly 60% of the undeveloped and mostly publicly owned dune area associated with the property above the beach. These impacts would significantly degrade dune resources, including listed species' habitats. In fact, the U.S. Fish and Wildlife Service (USFWS) has concluded that the City-approved project will render the project site unsuitable for use by snowy plovers in an area designated as critical habitat for the species, and that surrounding dune areas will also be adversely affected.

The LCP also requires that new development be approved only where water and sewer services are available and adequate, and where adequate circulation and parking are provided. The project seeks to use water from the City's desalination plant, but it is not clear whether water from this plant can be used for development on the site, because the desalination plant was sized only for the purpose of providing water for City build-out *inland* of Highway One, and the Commission's CDP for the desalination plant does not allow for water lines to be extended to the dunes west of the highway. The Commission's CDP for the desalination plant would have to be amended to allow water service and allocation seaward of the Highway before such water could be used to serve this project. Absent such a CDP amendment, including confirmation that there is actually available water to serve it, the project lacks a water supply. For sewer, there appears to be

adequate capacity at the regional wastewater treatment plant to serve the project. For traffic circulation, the project would bring significant new traffic to an already significantly congested transportation grid, particularly with respect to Highway One and the Fremont Boulevard – Monterey Road intersection. An unknown series of traffic improvements to Highway One would be required, which raises questions and issues because Highway One runs through dunes in this area and such projects themselves could raise their own set of LCP and Coastal Act conformance problems.

Regarding public access, the LCP and the Coastal Act require development to include public recreational access to and along the shoreline, including improvements to maximize public recreational access opportunities and facilitate public recreational use such as parking and vista point areas. Although the project includes a suite of access amenities, including improved California Coastal Trail (CCT) connections and public parking, these elements share some of the same hazard issues as the resort development itself. In addition, the CCT improvements have been sited and designed in a way that limits their utility, including by reducing views from the CCT and siting it with little separation from the road and proposed resort development.

Finally, the LCP establishes that LCP-identified development densities are maximums, and requires that development be limited to that which adequately addresses resource constraints, including with regard to coastal hazards, public views, natural resources, public service capacities, and public access and recreation. Although designed at a density that is less than the theoretical maximum for the site per the underlying zoning,[1] the City-approved project appears to be overly dense given the significant resource constraints present at the site. It is clear that a project of this density and intensity cannot be found consistent with LCP and Coastal Act policies in light of these constraints.

In short, the project involves a very large resort complex on sand dunes supporting state and federally listed species (and a critical habitat area for snowy plover) above a rapidly eroding shoreline within a significant public viewshed and in an area with significant public service constraints. As currently designed, the proposed project is inconsistent with LCP policies regarding coastal hazards, public viewsheds, natural resources, public services (i.e., traffic and circulation and water supply), and development densities, and is also inconsistent with LCP and Coastal Act public recreational access policies. For these reasons, staff recommends that the Commission deny a coastal development permit for the development as currently sited and designed. The motion and resolution to implement this recommendation are found on page 6 below.

[1] The theoretical maximum is a rote arithmetic calculation that takes the gross acreage and multiplies it by the maximum allowed density per acre. Such a maximum does not take into account actual site constraints, and thus the LCP explicitly states that it is only a potential maximum, and that it may need to be reduced to meet site constraints, such as the constraints present in this case that significantly limit potentially developable area.

TABLE OF CONTENTS

I. MOTION AND RESOLUTION 6
A. CDP DETERMINATION 6
II. FINDINGS AND DECLARATIONS 6
A. PROJECT LOCATION 6
B. PRIOR PROJECT BACKGROUND 7
C. CITY OF SAND CITY APPROVAL 8
D. PROJECT DESCRIPTION 8
E. COASTAL DEVELOPMENT PERMIT DETERMINATION 9
1. HAZARDS 9
2. PUBLIC SERVICES 30
3. VISUAL AND SCENIC RESOURCE PROTECTION 35
4. NATURAL RESOURCES 52
5. PUBLIC ACCESS AND RECREATION 77
6. TRAFFIC AND CIRCULATION 88
7. VIOLATION 99
8. TAKINGS ANALYSIS 99
F. CDP DETERMINATION CONCLUSION 102
G. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) 102

APPENDICES

Appendix A – Substantive File Documents

EXHIBITS

Exhibit 1: Regional Location Maps
Exhibit 2: Aerial Photos of Project Site
Exhibit 3: Project Plans
Exhibit 4: Applicant's View Simulations and View Sections (from Highway One)
Exhibit 5: Applicable Coastal Act Policies and LCP Policies, Standards and Figures
Exhibit 6: Special Condition 2(b) from CDP A-3-SNC-05-010
Exhibit 7: Views of Site from Highway One
Exhibit 8: Natural Resources Map
Exhibit 9: Approximate Current Location of Dune Landform
Exhibit 10: U.S. Fish & Wildlife Service Correspondence
Exhibit 11: Map and Description of Applicant's Proposed Dune Management Areas
Exhibit 12: Applicant's Identified Erosion Setbacks (50-75-100 years)
Exhibit 13: Definitions of Level of Service (LOS)
Exhibit 14: Caltrans January 10, 2013 Comment Letter on DEIR
Exhibit 15: TAMC 2014 Expenditure Plan
Exhibit 16: Commission's Senior Ecologist's March 25, 2015 Memorandum
Exhibit 17: Commission Geologist's April 2, 2015 Geotechnical Review Memorandum
Exhibit 18: Commission Engineer's March 3, 2015 Memorandum

I. MOTION AND RESOLUTION

A. CDP DETERMINATION

Staff recommends that the Commission, after public hearing, **deny** a CDP for the proposed development. To implement this recommendation, staff recommends a **NO** vote on the following motion. Failure of this motion will result in denial of the CDP and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present

Motion: *I move that the Commission approve Coastal Development Permit Number A-3-SNC-14-0001 pursuant to the staff recommendation, and I recommend a no vote.*

Resolution to Deny CDP: *The Commission hereby denies Coastal Development Permit Number A-3-SNC-14-0001 and adopts the findings set forth below on the grounds that the development would not be in conformity with the Sand City Local Coastal Program policies and the Coastal Act's public access and recreation policies.*

II. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

A. PROJECT LOCATION

The proposed project is located in the sand dunes along the shoreline in the southern Monterey Bay area near the bottom of the Monterey Bay crescent where it meets the Monterey peninsula area (and the Cities of Monterey, Pacific Grove, etc.). The dunes at the site are part of the larger southern Monterey Bay Dunes complex extending roughly along the shoreline from Monterey Harbor to the Pajaro River, a distance of approximately 20 miles that is made up primarily of undeveloped dune, much of it in public ownership and/or managed as conservation land.

The 26.46 acre project site extends along approximately 1,600 linear feet of the Sand City shoreline in the dunes between Highway One (and the Monterey Bay Sanctuary Scenic Trail) and the Monterey Bay, and between Monterey Peninsula Regional Park District dune parkland (upcoast) and Tioga Avenue (downcoast). Part of the southern, or downcoast, portion of the site, about 7.9 acres (or just less than a third of the overall site), is currently being used as a construction and materials storage yard/staging location. This actively used portion of the overall project site is located immediately adjacent to Tioga Avenue, is owned by the Applicant, and is known and referred to as the Sterling site (APN 011-012-005). The remainder of the overall project site, about 18.56 acres (or about 70% of the overall site) is made up of undeveloped dunes, which are known and referred to as the McDonald and Granite sites (APNs 011-012-001 & 002, and APN 011-501-016 respectively). These sites are 16.25 and 2.31 acres, respectively, and are owned by the City of Sand City.

The project site is located seaward of Highway One, between the Fremont Boulevard interchange to the north and the State Route 218 interchange to the south. Access to the site from the

Fremont Boulevard off-ramp requires turning onto Playa Avenue, then onto Del Monte Boulevard, and then onto Tioga Avenue. Tioga Avenue extends westward over the highway to the sand dune area and into the project site. Access to the project site from State Route 218 requires a turn onto Sand Dunes Drive (which is the primary beach and dune frontage road west of Highway One), and then a turn onto Tioga Avenue. The Tioga Avenue overpass connects the inland portion of the City to the largely undeveloped western dune area. Public parking exists along Tioga Avenue, and an informal bluff-top trail leads south to unimproved access to the beach below. North of Tioga Avenue, Playa Avenue terminates on the eastern, inland side of Highway One into a public recreational trail that extends under Highway One to connect with the Monterey Bay Sanctuary Scenic Trail, which heads north through the dunes to Fort Ord Dunes State Park and beyond.

Much of the project site had historically been used for sand mining, although such activities ceased some three decades ago, and there are still some remnant materials (e.g., the shell of hardened slurry and some rubble) along the shore as evidence of these long ago activities. As indicated, the 7.9-acre Sterling portion of the site immediately north of Tioga Avenue continues to be used for materials recovery and related operations, and is highly degraded as a result. The 18.56-acre McDonald and Granite portions of site have also been disturbed by previous sand mining activities, but they are now recovering. In addition, a tall dune feature remains adjacent to the Highway One right-of-way that straddles the Sterling and McDonald property line. Again, evidence of dune recovery is present throughout these sites as the dunes exhibit signs of dune regeneration and stabilization, including via wind-driven dune re-establishment and re-colonization of a variety of native and non-native plant species.

See **Exhibit 1** for project location maps and **Exhibit 2** for site photos.

B. PRIOR PROJECT BACKGROUND

Proposed development of this site has a long history with the Commission, beginning with the Commission's denial of a CDP for a 229-unit City-approved project on the site in 1986, a decision that was upheld by the Superior Court on March 16, 1987.[2] The City subsequently approved a smaller 136-unit project in 1989, which was also appealed to the Commission. However, the City's approval was nullified before the Commission acted on the appeal, due to a lawsuit challenging the City approval's compliance with the California Environmental Quality Act (CEQA). After complying with the Court Order, the City approved a similar project in November 1990, which again was appealed to the Commission. After the Commission approved the project with Special Conditions in April 1991, the Superior Court of Monterey County issued a ruling, finding deficiencies with the environmental documents and noticing. The City responded to this ruling with an updated environmental document in July 1993, and then re-approved the project.

Subsequently, on June 9, 1994, the Commission heard the appeal of what was known then as the Sterling Center hotel resort project approved by the City in 1993.[3] The Commission approved

[2] *Sand City vs. California Coastal Commission*, Case No. M 16952.

[3] A-3-SNC-94-008 was essentially the same project reviewed by the Commission in 1991, and included a 136-unit hotel/resort with a 135-seat restaurant and bar; an on-site desalination and water treatment facility; 4,000 square feet of conference and

the project with special conditions that required, among other things, an increase in setback distances; reductions in the height of the proposed structures and in the length of the proposed roadway extension; grading and dune stabilization and restoration plans; and, a sand replenishment program.[4] The Commission's conditions of approval also required the Applicant to eliminate a City-approved desalination plant from the final project plans, and to provide evidence that an alternative water source was available to serve the project. The project was never fully initiated, and the Applicant ultimately requested an extension of the CDP's expiration date. In September 1999, the Commission found that there were changed circumstances and voted to deny the extension of the CDP's expiration date. The changed circumstances were the federal listing of the Western snowy plover as a threatened species, reductions in the availability of water, and increased growth in the project vicinity with corresponding impacts on roadway capacity, among other reasons. The Applicant did not pursue a new hearing on the CDP, and ultimately CDP A-3-SNC-94-008 is null and void,

C. CITY OF SAND CITY APPROVAL

On December 17, 2013, the Sand City City Council conditionally approved a CDP (CDP 13-06; Site Plan 13-03; and a PUD) for the Collection at Monterey Bay resort development (Collection Resort). Notice of the City's action on the CDP was received in the Coastal Commission's Central Coast District Office on December 23, 2013. The Coastal Commission's ten-working day appeal period for this action began on December 24, 2013 and concluded at 5 p.m. on January 8, 2014. Two valid appeals (by the Sierra Club and by Commissioners Kinsey and Shallenberger) of the City's CDP decision were received during the appeal period, and on December 12, 2014, the Commission found that the City's approval raised substantial LCP conformance issues and took jurisdiction over the CDP application. Thus, the CDP application is now before the Commission for consideration and action.

D. PROJECT DESCRIPTION

The proposed project is a 340-room resort on the 26.46-acre site described above. Phase One of the project would take place on the downcoast 7.9-acre Sterling portion of the site closest to Tioga Avenue, and would consist of a 105-room vacation club condominium hotel. Phase Two of the project would take place on the 16.25-acre McDonald portion of the site immediately upcoast and adjacent to the Sterling site, and would consists of a 235-room standard operating hotel, two restaurants, and conference center. As part of Phase Two a public parking lot and trailhead for a lateral dunes pedestrian path would be constructed on the 2.31-acre Granite site. The proposed overall development design includes a series of building clusters located over an underground parking garage. In general, the buildings would be three to five stories in height. The lowest finished floor elevation would be 18 feet above sea level (the parking garage) and the highest elevation would be about 85 feet above sea level (certain hotel elements).

---

retail space; a 234-space subterranean garage; an extension of Sand Dunes Drive; public access improvements; and, dune restoration.

[4] CDP A-3-SNC-94-008.

As part of the project, the terminus of Tioga Avenue is proposed to be restructured into a cul-de-sac with public parking, restrooms, and a lifeguard station. Beach access stairs would also be provided at the Tioga Avenue cul-de-sac. Sand Dunes Drive would be extended from Tioga Avenue north to a new terminus at the Granite property with the proposed public parking lot that would extend out into the dunes and toward the bluff edge. The Sand Dunes Drive roadway extension would serve as the primary vehicular accessway for the resort and is designed at 24 feet in width, with a 12-foot-wide multi-purpose path located along the roadway extension's westerly edge. The project includes related improvements such as extending an eight-inch water line to the project site from water lines located in Tioga Avenue on the east side of Highway One, installation of a sewer force main in the Sand Dunes Drive right-of-way, construction of an on-site wastewater pump station, and grading over 19.8 acres of the 26.5 acre site. The project also includes removal of remnant materials associated with prior sand mining activities, most notably the shell of hardened slurry located along an 800-foot-long portion of the shoreline fronting the site.

See **Exhibit 2** for site area photos and **Exhibit 3** for project plans.

E. COASTAL DEVELOPMENT PERMIT DETERMINATION

The standard of review for this CDP determination is the City of Sand City certified LCP and, because the proposed project is located between the first public road and the sea, the public access and recreation policies of the Coastal Act.

1. Hazards

Applicable Policies

The LCP requires that new development address coastal hazards. In particular, the LCP requires that new development be sited and designed to minimize risk from geologic and flood hazards, including that it be set back sufficiently so as to provide for at least 50 years of stability and structural integrity, and to never need shoreline armoring. Applicable LCP policies and standards include:

> ***LUP Policy 4.2.1*** *… Average annual erosion rates for Sand City in general, as estimated by previous researchers, range between 1.5 and 5 feet per year. Typically, it has been found that permanent coastal erosion takes place along the cliffs and bluffs as a result of major storms. There may be no erosion for many years, and then significant erosion will result. In additions, erosion rates will vary at different points along the coast due to differences in wave refraction, type of geography, and location. Thus, an average uniform erosion rate cannot be applied to Sand City's coastline.*
>
> ***LUP Policy 4.3.1.*** *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. In the area south of Tioga Avenue, permit repair and expansion of a shoreline protective device only to protect Vista del Mar Street, an existing structure and major shoreline access route. Permit the construction and maintenance of new shoreline*

protective devices between existing shoreline protective devices north of Tioga Avenue where the geologic report has determined the technical feasibility of such construction. Permit construction of shoreline protective structures on the old landfill site if the geologic report demonstrates the necessity of such construction and if the development includes removal of all former landfill debris and garbage in order to improve geologic stability and public health and safety. Such structures must not reduce or restrict public access, adversely affect shoreline processes, or increase erosion on adjacent properties.

LUP Policy 4.3.4. *All developments shall be sited and designed to minimize risk from geologic, flood or fire hazards.*

LUP Policy 4.3.5. *Require preparation of geologic and soils reports for all new developments located in the coastal zone. The report should address existing and potential impacts, including ground shaking from earthquakes, direct fault offset, liquefaction, landslides, slope stability, coastal bluff and beach erosion, and storm wave and tsunami inundation. The report shall identify appropriate hazard setbacks or identify the need for shoreline protective devices to secure long-term protection of Sand City's shoreline, and shall recommend mitigation measures to minimize identified impacts. The reports shall be prepared by qualified individuals in accordance with guidelines of the California Division of Mines and Geology, the California Coastal Commission, and the City of Sand City. Geologic reports shall include the following:*

a) setback measurements that are determined from the most inland extent of wave erosion, i.e., blufftop or dune or beach scarp; if no such feature is identifiable, determine setback from the point of maximum expected design storm wave runup;

b) setbacks based on at least a 50-year economic life for the project;

c) the California Division of Mines and Geology criteria for reports, as well as the following: 1) description of site topography; 2) test soil borings and evaluation of suitability of the land for the proposed use; 3) evaluation of historic, current and foreseeable cliff and beach erosion, utilizing available data; 4) discussion of impacts of construction activity on stability of site and adjacent area; 5) analysis of ground and surface water conditions, including any hydrologic changes caused by the development; 6) indication of potential erodibility of site and recommended mitigation measures; 7) potential effects of seismic impacts resulting from a maximum credible earthquake and recommended building design factors and mitigation measures; 8) evaluation of off-site impacts; and 9) alternatives (including non-structural) to the project.

LUP Policy 4.3.6. *Encourage the clustering of developments away from potentially hazardous areas and condition project permits based upon recommendations presented in the geologic report.*

LUP Policy 4.3.7. *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.*

LUP Policy 4.3.8. *Deny a proposed development if it is found that natural hazards*

cannot be mitigated as recommended in the geologic report, and approve proposed developments only if the project's density reflects consideration of the degree of the on-site hazard, as determined by available geotechnical data.

LUP Policy 4.3.9. *Implement building setbacks from active or potentially active fault traces of at least 50 feet for all structures. Greater setbacks may be required where it is warranted by site-specific geologic conditions and as determined by the geologic report.*

LUP Policy 4.3.10. *Require all new developments to be designed to withstand expected ground shaking during a major earthquake.*

LUP Policy 4.3.11. *Require the developer of a parcel in an area of known geologic hazards to record a deed restriction with the County Recorder indicating the hazards on the parcel and the level of geotechnical investigations that have been conducted.*

LUP Policy 4.3.12. *Require drainage plans for developments proposed on coastal bluffs that would result in significant runoff which could adversely affect unstable coastal bluffs or slopes.*

LUP Policy 6.4.1*. [LCP development densities] represent a maximum. 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….*

IP Section 2.2, Natural Hazards. *…all development will be sited to minimize risks from geologic, flood, or fire hazards ….*

A preliminary geologic report also shall be prepared by a registered geologist and should address existing and potential impacts for ground shaking from earthquakes, direct fault offset, liquefaction, landslides, slope stability, coastal bluff and beach erosion, and storm wave and tsunami inundation. …The report shall also determine a site specific tsunami run-up zone. …The report shall also provide recommended mitigation measures for identified hazards, including at the minimum, the following: …c) Recommended building setbacks for identified hazards based on at least a fifty year economic life for the project. Setback measurements shall be determined from the most inland extent of erosion; that is, bluff top or dune or beach scarp. If no such feature is identifiable, the setback shall be determined from the point of maximum expected design storm wave run-up. …f) Recommend mitigations, if any, for development within an identified tsunami or design storm wave run-up zone. …

IP Section 2.2, Protective Shoreline Structures. *…Setbacks shall be great enough to protect the economic life of the proposed development (at least 50 years). …*

As discussed below, the most significant hazard constraint for the site in question is the LCP requirement that a project be set back sufficiently from the "most inland extent of erosion" to minimize risk and protect the development for its economic lifetime (i.e., set back from the bluff top or dune/beach scarp, or where those features are not identifiable, from the maximum expected storm wave run-up location). All such setbacks must account for the economic life of

the project. The LCP requires that a geologic report be prepared that addresses existing and potential hazard impacts, and recommends mitigation measures to minimize identified impacts. The LCP further requires that a project be denied if the identified hazards cannot be mitigated. Further, shoreline protection devices can be permitted only in very limited situations not applicable here. Thus, the project is not allowed to include shoreline protection components, and must be designed to avoid the need for shoreline protection in the future.

Project Economic Lifetime

As stated above, Sand City LCP Policy 4.3.5 and IP Section 2.2 require that new development be set back from shoreline hazards a sufficient distance to assure safety for its economic life, and in all cases for at least 50 years. The LCP, however, does not define the term "economic life," leading to some ambiguity. The Applicant has not identified a specific economic life for the proposed development. For the purposes of establishing a setback for the project, the Applicant has developed a setback that is based on the Applicant's assessment of erosion rates for the next 50 years, but has not submitted any evidence that this is the predicted or defined economic life for this particular project. The Commission is aware of numerous hotel development projects along the California coast with economic lives of significantly longer than 50 years. For example, the Hotel de Coronado in San Diego County (c.1888), the Georgian Hotel in Santa Monica (c.1933), the Montecito Inn in Santa Barbara (c. 1928), the Lodge at Pebble Beach (c. 1919), La Playa Carmel in Carmel-by-the-Sea (c. 1905), Monterey Hotel in the City of Monterey (c. 1904), and the Dream Inn in Santa Cruz (c.1963). Though not quite 50 years old, the Monterey Beach Hotel located approximately one-half mile downcoast of the proposed Collection Resort development site was constructed in 1969, is 46 years old, and continues to operate today, with no sign that it will have reached the end of its economic life within the next four years. Nevertheless, even assuming that the project's economic life is only 50 years and that the Applicant would be willing to agree to conditions that it has no reasonable expectation in the continuance of its development for more than 50 years, the proposed project is not set back adequately to meet LCP requirements even under 50-year projections, as discussed below.

Hazards Affecting the Site

A. Sea Level Rise

LCP policy 4.3.5 requires that the geologic report for the site must analyze historic, current and foreseeable erosion, based on best available data. Thus, coastal hazards at the project site must be assessed with available data related to the potential changes due to sea level rise. This allows the Commission to consider whether the project is sited and designed to minimize risk from geologic or flood hazards and to ensure that it is located away from potentially hazardous areas. Sea level, along with tectonic uplift and subsidence, is one of the strongest drivers for long-term shoreline change along the California coast, and it needs to be considered in the analysis of bluff retreat, inundation/flooding, and wave impacts. Rising sea levels will cause landward migration of beaches and bluffs due to the combined effects of inundation and higher water levels during wave and storm events. This will increase the amount of time that bluffs and dunes are impacted by waves at high tide, causing greater erosion of the dunes inland of the beach (National Research Council (NRC, 2012). Wave impacts and coastal flooding more generally can be some of the more damaging consequences of coastal storms, resulting in damage or destruction of structures, and high amounts of erosion. The increase in the extent and elevation of flood waters will also increase wave impacts and move the wave impacts farther inland.

There is strong evidence that the historic trend of a gradual rise in sea level of seven inches to eight inches per century has changed and that future sea level will rise more quickly than it has in the past few centuries. Satellite observations of global sea level have shown sea level changes since 1993 to be almost twice as large as the changes observed by tide gauge records over the past century. Recent observations from the polar regions show rapid loss of some large ice sheets and increases in the discharge of glacial melt. Projections of future sea level rise will continue to be updated as new evidence and scientific analysis is brought to bear. Many believe that projected sea level rise will continue to increase, particularly given the potential melting of glacial and Greenland ice. As stated in the 2009 California Climate Adaptation Strategy:

> *Over the 20th century, sea level has risen by about seven inches along the California coast. Replacing previous projections of relatively modest increases of sea-level rise for the 21st century, the 2009 Scenarios Project built on scientific findings that became available in the last two years to produce estimates of up to 55 inches (1.4 meters) of sea-level rise under the A2 emissions scenario by the end of this century (Figure 7). This projection accounts for the global growth of dams and reservoirs and how they can affect surface runoff into the oceans, but it does not account for the possibility of substantial ice melting from Greenland or the West Antarctic Ice Sheet, which would drive sea levels along the California coast even higher. Projections of sea level rise under the B1 scenario are still several times the rate of historical sea-level rise, and would barely differ under a stringent "policy scenario" in which global emissions would be drastically reduced. This suggests that while mitigation will be important to minimize many climatic and ecological impacts, adaptation is the only way to deal with the impacts of sea-level rise during the 21st century. In short, even on a lower emissions trajectory and without the addition of meltwater from the major continental ice sheets, sea levels in the 21st century can be expected to be much higher than sea levels in the 20th century.*[5]

The 2013 Intergovernmental Panel on Climate Change's (IPCC) "Summary for Policy Makers" notes on page 25 that "Global mean sea level will continue to rise during the 21st century. …. Under all of the "Representative Concentration Pathway" (RCP) scenarios for future greenhouse gas production, the rate of sea level rise will very likely exceed that observed during 1971 to 2010 due to increased ocean warming and increased loss of mass from glaciers and ice sheets." Due to the potential for sea level rise to result in greater flooding, inundation and erosion, coastal managers need to consider sea level rise in proposed project planning and design, and they should apply the best available information on future sea level to decisions that will affect the coast for most of the 21st century.

Extensive research has been focused recently on climate change modeling, and the Commission has followed this research for information on predicted sea level change. While much of the sea level rise science has examined global concerns, such as the IPCC, several recent reports about sea level rise have focused on the California coast, and these reports may be more relevant to proposed projects in California. In 2011, the Ocean Protection Council adopted a resolution on sea-level rise[6] that directed state agencies to incorporate consideration of the risks posed by sea level rise into all decisions, and the resolution provided science-based recommendations and sea-

[5] See http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF, p. 18.

[6] Resolution of the California Ocean Protection Council on Sea-Level Rise, Adopted on March 11, 2011; see http://www.opc.ca.gov/webmaster/ftp/pdf/docs/OPC_SeaLevelRise_Resolution_Adopted031111.pdf.

level rise projections that could be used by state agencies. These projections were based upon global sea level rise estimates[7] that have been reviewed for their use for California. These projections were recommended for use in planning for the San Francisco Bay Delta by the Blue Ribbon Task Force for the Bay-Delta plan (DeltaVision), and these projections provided the foundation for the 2011 California Climate Action Team's Climate Change Scenarios for estimating the likely changes range for sea level rise by 2100.[8]

In 2012 the NRC issued "Sea Level Rise for the Coasts of California, Oregon and Washington: Past, Present and Future,"[9] (NRC Report) prepared in partial response to then Governor Schwarzenegger's Executive Order S-13-08 that directed state agencies to plan for sea level rise and coastal impacts. One of the main purposes of the NRC Report is to inform and assist state agencies as they develop approaches for incorporating sea level rise into planning decisions with the most recent and best available science. The NRC Report used a year 2000 baseline and produced sea level rise projections for 2030, 2050 and 2100, taking into account geological differences north and south of Cape Mendocino attributed to vertical land movement.[10] Table 1 provides the range of projections from the Ocean Protection Council's (OPC) Guidance and the 2012 NRC Report, both based upon 2000 as the base year. Both reports show that sea level rise is very likely to be much higher than it is at present, and both show a large range in future projections. The Coastal Commission's Draft Sea Level Rise Policy Guidance document recommends using the NRC Report as the current best available science for sea level rise. Other state agencies have also adopted the sea level rise projections and recommendations of the NRC Report, including the OPC, which adopted the NRC Report's sea level rise projections in March 2013. Based on the NRC Report projections, the estimated range of sea level rise for 2065 and 2090 (appropriate for a 50-year or 75-year project life respectively) can be interpolated between the projections for 2050 and 2100 to be from 7 inches to 35 inches (0.19 m to 0.88 m) for 2065 and from 14 inches to 56 inches (0.36 m to 1.4m) for 2090.

Table 1. Range of Sea-Level Rise Projections for California from OPC & NRC (2000 base year)

TIME PERIOD	OCEAN PROTECTION COUNCIL 2011	NRC 2012
2000 – 2030	13 – 21 cm (5 – 8 inches)	4 – 30 cm (2 – 12 inches)
2000 – 2050	26 – 43 cm (10 – 17 inches)	12 – 61 cm (5 – 24 inches)
2000 - 2070	43 – 81 cm (17 – 50 inches)	Not Provided
2000 – 2100	78 – 176 cm (31 – 69 inches)	42 – 167 cm (17 – 66 inches)

[7] Based upon the sea level rise estimates presented in Martin Vermeer's and Stefan Rahmstorf's "Global sea level linked to global temperature," *Proceedings of the National Academy of Sciences*, published online December 7, 2009; doi: 10.1073/pnas.0907765106.

[8] Cayan et al. 2009. Climate Change Scenarios and Sea Level Estimates for the California 2008 Climate Change Scenarios Assessment; CEC-500-2009-014, 62 pages.

[9] National Research Council 2012, Sea Level Rise for the Coasts of California, Oregon and Washington: Past, Present and Future; ISBN 978-0-309-25594-3, 250 pages.

[10] North of Cape Mendocino, geologic forces are causing much of the land to uplift, resulting in a lower rise in sea level, relative to the land, than has been observed farther south.

The observed trend for global sea level has been a long-term, persistent rise, and the 17-66 inches of rise projection is useful in encompassing the probable rise that could occur by 2100. This amount of sea level rise does not represent the extreme rise that might occur if the rate of glacial melting accelerates more quickly and continues over several decades.[11] It also does not represent the extreme low rise in sea level that might occur if current trends for global temperature flatten or reverse.

The OPC 2013 Sea Level Rise Guidance document recommends that decision makers consider timeframes, adaptive strategies, and risk tolerance when selecting estimates of sea level rise.

> *The consequences of failing to adequately address sea level rise for a particular project will depend on both adaptive capacity and the potential impacts of sea level rise to public health and safety, public investments, and the environment.*
>
> *Adaptive capacity is the ability of a system to respond to climate change, to moderate potential damages, to take advantage of opportunities, and to cope with the consequences. In most situations, adaptive capacity must be front-loaded, or built into the initial project; it cannot be assumed that adaptive capacity can be developed when needed unless it has been planned for in advance. A project that has high adaptive capacity and/or low potential impacts will experience fewer consequences. For example, an unpaved trail built within a rolling easement with space to retreat has high adaptive capacity (because the trail and easement can be relocated as sea level rises) and therefore will experience fewer harmful consequences from SLR. In contrast, a new wastewater treatment facility located on a shoreline with no space to relocate inland has low adaptive capacity and high potential impacts from flooding (related to public health and safety, public investments, and the environment). The negative consequences for such a project of failing to consider a large amount of SLR would therefore be high.*
>
> *The amount of risk involved in a decision depends on both the consequences and the likelihood of realized impacts that may result from SLR. These realized impacts, in turn, depend on the extent to which the project design integrates an accurate projection of SLR. However, current SLR projections provide a range of potential SLR values and lack precision. Therefore, agencies must consider and balance the relative risks associated with under- and/or over-estimating SLR in making decisions.*
>
> *Figure 2 in Appendix C illustrates this relationship for a project in which underestimating SLR in the project design will result in harmful realized impacts such as flooding. In this case, harmful impacts are more likely to occur if the project design is based upon a low projection of SLR and less likely if higher estimates of SLR are used. In situations with high consequences (high impacts and/or low adaptive capacity), using a low SLR value therefore involves a higher degree of risk.*

In terms of establishing coastal erosion setbacks, simple extrapolation from historic trends is not sufficient in an era of accelerating sea level rise, and any analysis of projected future erosion must take into account potential sea level rise. Since erosion and coastal flooding hazards tend to

[11] For a discussion of projected sea level rise greater than that projected by Rahmstorf, see, for example, Pfeffer et al. 2008. "Kinematic Constraints on Glacier Contributions to 21st-Century Sea-Level Rise". Science Vol. 321. no. 5894, pp. 1340 – 1343, DOI: 10.1126/science.1159099.

increase in severity with an increase in sea level, it is prudent planning to examine the consequences from the higher projections for future sea level rise.

In the case of the proposed project, the Applicant failed to provide an adequate analysis of the effects of sea level rise. The Applicant provided an analysis that took into account only the migration of the beach that will result from sea level rise, without considering increases in the bluff retreat rate. Also, the Applicant's analysis only examined the consequences of 1.8 feet of sea level rise over a 50-year period. A rise of 1.8 feet by 2065 is at the low range of the NRC projections (adopted by the OPC and recommended as the best available science currently by the Commission's Draft Sea Level Rise Guidance), There was no analysis of the consequences of the upper range of possible future sea level rise (2.9-feet of sea level rise by 2065). It is expected that higher sea level will result in increased erosion; however, the Applicant's analysis did not attempt to analyze how these different possible rates of sea level rise would affect the rate of coastal erosion. Also, under these more conservative scenarios (i.e., higher sea level estimates), wave run-up and overtopping could increase at the project site earlier than estimated by the Applicant and could occur more frequently. See **Exhibit 18** for the Commission Engineer's memorandum[12] regarding sea level rise and the proposed project.

The purpose of the Applicant's sea level rise analysis was to determine whether its identified sea level trends would result in impacts to the proposed development at the LCP's minimum 50-year analytic framework, or if facilities at risk would change significantly with a change in the assumptions for rising sea level. The rate used in the Applicant's analysis is at the lower end of the current sea level rise projections typically used to assess the dangers of developing along the shoreline. As discussed in the following sections, the development, as proposed, will likely be at risk from erosion, wave impacts, overtopping and flooding, even with the low range of future sea level rise projections. The development, as proposed, would not minimize risks from hazards or be appropriately sited if these identified deficiencies in the Applicant's assumptions about sea level rise were addressed. In addition, the Applicant evaluated erosion for a 50-year time frame. In past cases in Sand City for a similar scale of development, the Commission looked to a longer analytic timeframe under the LCP given the high potential for impacts and the commitment to development engendered.[13] Over 75 years, the project is located in the area that is expected to be lost to erosion even using the Applicant's more favorable sea level rise projections. Accordingly, the Commission finds that the project is inconsistent with the LCP's shoreline hazard policies including: Policy 4.3.4, which requires development to be sited and designed to minimize risk from hazards; Policy 4.3.5 regarding the preparation of geologic reports and establishment of appropriate hazard setbacks for development based on *at least* a 50-year economic life without reliance on shoreline protective devices; Policy 4.3.6, which encourages clustering of development away from hazardous areas, and Policy 4.3.8, which instructs that development be denied if shoreline hazards cannot be adequately mitigated and that development only be approved if the proposed density reflects consideration of the degree on on-site hazards as determined by available geotechnical data.

---

[12] The wave up-rush analysis in the 25 July 2007 HKA report used 1.5 feet of sea level rise over 50 years in the up-rush calculation and that is the estimate used by the Commission's Staff Engineer in **Exhibit 18**. However, it is the Commission's Staff Geologist's understanding that the "Bluff Crest Recession Line" developed from a cross-section through the middle of the property used a figure of 1.8 feet of sea level rise over 50 years to arrive at the amount of translation of the beach profile would occur. That 1.8 feet estimate is used in this finding.

[13] CDP A-3-SNC-98-114 approved in 2014 for the SNG Ecoresort to be located just upcoast.

B. Slope Stability

The Commission's staff geologist, Dr. Mark Johnsson, has reviewed the project materials, visited the site, and has written a memo describing geologic hazards at the site (see **Exhibit 17**). As discussed in his memo, in establishing LCP-required development setbacks, it is necessary to ensure stability throughout the life of the development in order to minimize the risk from geologic hazards. Because coastal bluffs are generally unstable, development must be set back a sufficient distance to ensure stability throughout its lifetime. Generally, this is done through applying a quantitative slope stability analysis to the shoreline erosion/retreat analysis. Barring significant geologic differences between the landforms present today and those expected to be present at the end of the life of the project, the amount of setback necessary to assure stability today can be added to the expected amount of shoreline erosion/retreat to arrive at a total setback that will ensure stability at the end of the development's lifetime.

Regarding slope stability at the project site, the Applicant used a methodology to arrive at a setback line that inherently assumes that the bluff will eventually reach and maintain a 2:1 slope, and sets the proposed development behind that line. The Commission concurs that setting back development behind a projected 2:1 slope measured from the expected bluff toe that is based on expected retreat over the project's lifetime likely offers a more conservative setback than is to be obtained by setting it behind a line indicating a factor of safety against sliding of 1.5, obtained by slope stability analysis. Accordingly, the Commission finds that the Applicant's approach to assuring the safety of the development from slope instability is a suitable surrogate for a setback reached through an actual slope stability analysis.

However, the question of slope stability is just one aspect of determining site stability and the appropriate setback for new development. As indicated above, the economic life of the project and appropriate sea level rise parameters are key elements in the overall site stability equation. And as shown in the following sections, there are problems with the Applicant's analysis of projected erosion that raise questions regarding the siting of the proposed development, notwithstanding the adequacy of the Applicant's assumption/methodology for addressing the slope stability question alone. The 2:1 slope concept works to address the slope stability issue only so far as it is based on the appropriate expected amount of erosion/retreat over time.

C. Shoreline Erosion/Retreat

Erosion/Retreat Trends

The United States Geological Survey (USGS) in its document "National Assessment of Shoreline Change, Part 4: Historic Coastal Cliff Retreat along the California Coast" by Cheryl Hapke and David Reid (Open File Report 2007-1133), highlighted the southern Monterey area for its high erosion rates. The USGS report documented116 meters (381 feet) of retreat at the former Fort Ord military base (now Fort Ord Dunes State Park) over the 65 years between 1933 and 1998, based on a comparison of historic and current cliff edge positions. The historic cliff edge was estimated from 1933 aerial photographs, and the current cliff edge was estimated from a 1998 LIDAR survey. The USGS analysis shows an average annual long-term retreat rate of about 1.8 meters (5.9 feet) per year at that locality. Closer to Sand City, and on the subject site, Griggs et al. reported an erosion rate of 74 inches (6.2 ft) per year just north of the end of Tioga Avenue.

Thornton et al., in their classic 2006 paper linking sand mining to coastal erosion (see discussion below) avoided the site itself, presumably because most of it includes anomalous "armoring" type features (i.e., the unpermitted debris and rubble and the hardened slurry). However, one of their transects, approximately 400 meters north of the subject site, showed an erosion rate of 6.4 ± 0.7 ft/yr for the period 1940-1984. The closest transects for which they provided erosion rates spanning the entire interval 1940-2004 are located 1300 meters south of the site, and 1200 meters north of the site. They yielded long term historic erosion rates of 2.3 ft/yr and 5.1 ft/yr, respectively. Taken together, these numbers yield an average erosion rate of 3.7 ft/yr, which is still significantly lower than the average calculated by Thornton et al. at the transect closest to this site. For illustrative purposes, see page 13 of **Exhibit 19**, which depicts the 50-, 75- and 100-year retreat lines along the cross section provided by the Applicant's geotechnical consultants, based on these historical average erosion rates.

In general, bluff erosion and retreat is episodic and correlated with events when storms and high tides coincide. As the Commission's Geologist Dr. Mark Johnsson reported in a March 18, 2014 memo to the Commission regarding proposed development approximately one-quarter mile north of the subject site:

> *It is well established that this site, like much of the Monterey Bay bluffed shoreline, experiences episodic bluff retreat in response to large storm events, particularly those correlating with El Niño events. Much less erosion occurs between these episodic events. Erosion and coastal bluff retreat associated with the 1982-1983 and 1997-1998 El Niño events are particularly well documented throughout Monterey Bay (see, for example, Griggs and Brown, 1998; Dingler and Reiss, 2002; Griggs et al. 2005).*
>
> *Most studies of coastal erosion in southern Monterey Bay have focused on long-term bluff retreat, smoothing out episodic events in an attempt to define averages over long time scales. There have been many anecdotal accounts of episodic erosion events, such as the 50 feet quoted in a report by Haro, Kasunich and Associates (2003), but documentation has been lacking. Where events are well documented, they have tended to be relatively far from the subjects site. For example, Dingler and Reiss (2002) measured (by survey) 70 feet of bluff retreat between 1982 and 1998 (a 15 year period) [at Pajaro Dunes, approximately 18 miles north of the subject site]***. Of that, 25 feet occurred between February and April of 1983 and over 30 feet occurred during the 1997-19987 El Niño winter, with only 15 feet occurring during the remaining 14 years (as quoted in Phillip Williams and Associates, 2008). Thornton et al. (2006) measured coastal erosion by the volume of sand eroded, and found that during the 1997-1998 El Niño 2.4 million cubic yards of dunes were eroded, a seven-fold increase over the average annual volume.*
>
> *The best documentation of the amount of bluff retreat that might be expected during a severe El Niño event was reported in Quan et al. (2013). These authors, using ship-borne LIDAR, did surveys pre- and post- El Niño for the 1997-1998 event. They documented several erosion "hot spots" one to two miles north of the site of up to 15 m (49 feet) of bluff recession. Through repeated LIDAR surveys at other time intervals, they found that these "hot spots" tended to migrate with subsequent erosion events. Even though the amount of bluff retreat they measured at Sand City was only on the order of 7 m (23 feet)*

during the 1997-1998 El Niño, a principal conclusion to be drawn from their research is that the location of erosion hot spots moves throughout the area; erosion hot spots are not fixed in one or two locations and, there are no constraints that would prevent a future erosion hot spots from developing at the bluff fronting the proposed development. Indeed, the areas where the hotspots occurred during the 1997-1998 El Niño have generally the same geologic and wave characteristics as the proposed development site.

Erosion in the Sand City area cannot be completely analyzed without consideration of historic and ongoing sand mining. The time period of cliff retreat for the USGS analysis includes the time period when drag lines and dredge pond mining were occurring in the Marina (upcoast) and Sand City areas. The Coastal Regional Sediment Management Plan (CRSMP) for Southern Monterey Bay, prepared by Philip Williams and Associates, provided information on sand mining in the area.[14] In general, there was about 111,000 cubic yards per year of sand mining at Sand City up until 1990, and about 83,000 cubic yards per year from Marina. Most of these operations ceased in the late 1980s and early 1990s, leaving the sand dredge pond in Marina as the only currently active mining effort in the southern Monterey Bay. If sand mining were to decrease or stop, allowing that sand to stay in the system, erosion rates may decrease.

Thus, the identified historic retreat rates of 5.9 feet per year could be somewhat lower in the future, after cessation of the remaining sand mining activities in the area, if all other factors affecting shoreline erosion remained the same. However, the CRSMP also found that the volumes mined from the Marina dredge pond likely have increased over time to current rates of approximately 200,000 cubic yards per year, which is about the same as the total volume mined up until 1990, thereby reducing or possibly eliminating the shoreline retreat benefits from closing out the other drag line operations in Sand City and Marina. The CRSMP also documents increased erosion rates since 1984 in Marina, and south of the Salinas River, and finds that this may be related to the increased mining volumes in Marina.[15]

The effects from the possible increased volume of sand extracted at Marina may take several years to propagate downcoast to Sand City, and the recent trends in shoreline change for the 1984 to 2004 period for Sand City that show a lower (2.8 feet per year, from Thornton et al. 2006) rate of bluff erosion, may represent an abnormal lull in bluff retreat. Even this possibly anomalous low erosion rate is about 17% higher than the rate that has been used by the Applicant. Given the various factors in play, such as long-term erosion trends, decreasing and increasing mining at different locations, the episodic nature of erosion correlated to mean sea levels and storm events, there is considerable uncertainty concerning the relationship between sand mining and erosion rates.

City Efforts

In 1990, the City of Sand City adopted a resolution (SC-21) accepting a 1989 shoreline erosion study performed by Moffatt and Nichol and directing City staff to consider the findings and projections of the report when reviewing applications for development west of Highway One. This resolution was never incorporated into the City's LCP. In earlier project proposals for

[14] Coastal Regional Sediment Management Plan for Southern Monterey Bay, Philip Williams and Associates, November 3, 2008, p.33.

[15] Id, p. 87.

development west of Highway One, this 1989 report was helpful in projecting the location of the mean high tide line under low-, medium-, and high-risk scenarios. However, it is bluff erosion, not the location of the mean high tide line per se that most directly threatens development in this area. Although the level of wave run-up and flooding must be considered, where high bluffs occur it is more likely that bluff retreat and slope stability will determine when development is threatened.

Accordingly, in 2003 the City hired Haro, Kasunich and Associates, Inc (HKA) to prepare a "Coastal Recession Evaluation" which, by estimating typical equilibrium beach and dune profiles, developed an estimate of future bluff edge positions. This was not based solely on analysis of historical bluff retreat, but also accounted for sea level rise and slope flattening through time. HKA's methodology was essentially as follows:

- Multiply the historic long-term bluff retreat rate calculated from examination of aerial photographs (2.4 feet per year) by 50 years to establish the amount of shoreline retreat expected in 50 years (120 feet).
- Add to this the amount of shoreline retreat expected due to 0.6 feet (7 inches) of sea level rise.[16] Using the Bruun Rule (see below) and an estimated 0.6 feet of sea level rise over the next 50 years, together with assumptions about the closure depth of the shore profile, HKA calculated an additional seven feet of shoreline retreat due to sea level rise.
- Assume an equilibrium condition in which beach width remains constant as the shoreline moves landward. The equilibrium beach, based on measurements taken in 2003, was assumed to have a slope of 7:1 and a width of 105 feet. The landward end of the beach, measured from the estimated 2053 mean high tide position, is taken to be the 2053 toe-of-bluff.
- Assume bluff slope stability could be established by a 2:1 slope of the bluff face, an assumed worst-case for slope flattening through time. Where this 2:1 slope intersects current topography is assumed to be the position of the 2053 top of slope and is a taken to be a development setback line.

Using this methodology, HKA established a 2053 bluff crest recession line for all of Sand City.

Applicant's Bluff Recession Estimates for the Collection Resort Project
The Applicant's engineers (HKA) applied the same methodology it used in its report for the City when it estimated a 2062 bluff recession line across the project area, with a slight modification in the sea level rise projection (1.8 feet of sea level rise by 2062, which is not only on the low end of projected sea level rise but also does not account for the changing erosion rate due to sea level rise, as discussed below). This calculation, done on a single cross section through the middle of the project site, yielded 205 feet of recession of the mean high tide line relative to 2003. Applying a 100-foot beach at a slope of 7 horizontal:1 vertical, and a layback of the bluff to a 2 horizontal:1 vertical slope, a "bluff crest recession line" was found to be approximately 330 feet landward of the current mean high tide line (see **Exhibit 12**).

[16] Current sea level rise guidance from the 2012 NRC Report provides a range of estimates of 7 inches to 35 inches of sea level rise by 2065, and the 7 inches used here is at the lowest end of the range. The Applicant's current analysis omits a discussion of the full range of such estimates.

The submitted analysis and exhibit depicting the Applicant's 2062 erosion line is deficient for several reasons. First, the Applicant's planning consultant Dave Watson established a "2062 erosion line" across the entire property, extrapolating the location of this line based on the single measurement made by HKA and following the mean high tide line along the site. Not only is there no engineering basis for using this methodology to establish a setback along an entire site using a single data point, but this line did not account for future bluff crest recession and therefore the "2062 erosion line" is sited 305 feet landward of the current mean high tide line (see cross-section "2062" of **Exhibit 12**)[17].

Second, the Commission notes that the erosion rate of 2.4 feet/year that was used is less than half the 5.9 feet/year erosion rate calculated by the USGS from historic trends and is in fact lower than either Griggs et al. (2005) found for this site or Thornton et al. (2006) found for its immediate vicinity. Thus, the Applicant's analysis likely underestimated historic erosion rates.

Third, the Applicant's analysis did not include how the project would be impacted under higher sea level rise estimates, such as those projected in the 2012 NRC report (i.e., up to 2.9 feet of sea level rise by 2065). Staff Geologist Dr. Mark Johnsson in conversation with Mark Foxx of HKA on February 2, 2015, learned that HKA has provided the Applicant with new estimates of the mean high tide line recession under high, middle, and low sea level rise scenarios based on the 2012 NRC report and the Brunn Rule. Those estimates were provided to staff verbally, though the Applicant has not provided staff with an updated recession exhibit. Even so, and even using the lower end erosion rates and sea level rise estimates, the proposed development is inconsistent with even the LCP's minimum 50-year setback requirement, e.g. the foundations are actually depicted as being undermined in **Exhibit 12**. When more conservative erosion rate and sea level rise estimates are applied, the project is even more inconsistent with this minimum LCP requirement. And when even longer time periods are applied, the project is even further inconsistent. The bottom line is that the proposed project has not been sited to be located far enough back to account for coastal erosion hazards as required by the LCP, even using the information provided thus far. Without an adequate analysis of the recession effects of the range of anticipated sea level rise scenarios, the Commission is also not in a position at this time to identify more precisely the area within which development might be able to be found consistent with LCP hazards policies.

Fourth, the analysis provided to the Commission did not consider the effects of higher sea level rise on bluff retreat rates themselves. Instead, the analysis was based on a mid-range value of sea level rise (1.8 feet of sea level rise), and only considered sea level rise's effect on translation of

[17] Staff requested that the Applicant provide an expanded analysis of shoreline hazards at the site by assuming a project economic life of 75-years and 100-years and by using a more realistic annual erosion rate and more conservative sea level rise model assumptions. The Applicant submitted an expanded analysis but also indicated that it was "not willing to compromise further on a reduction in the size or footprint of the project due to possible coastal erosion." Staff also learned that the 75-year and 100-year analyses were prepared by the Applicant's land use consultant and not by its consulting engineer, Haro Kasunich & Associates, Inc (HKA). Staff spoke directly with the Applicant's consulting engineer (Mark Foxx of HKA) who indicated that HKA had employed expanded sea level rise and 75-year and 100-year time horizons, but that the Applicant had not granted permission to release this information. Thus, the only information the Applicant has provided is the one transect from HKA, on which the Applicant has extrapolated a setback line that HKA indicates it did not draft and does not stand by as their work.

the beach profile. As noted in the findings above, higher rates of sea level rise would result in a larger amount of erosion than is currently projected. Using only the Brunn Rule methodology to approximate the effects of sea level rise significantly underestimates those effects. The Brunn Rule does not take into account the effect that higher sea level has on the bluff retreat *rate*. As waves impact the toe of the bluff more frequently under higher sea level rise scenarios, the bluff will experience erosion for more of each tidal cycle than under lower sea level rise scenarios. To more accurately model the effects of higher sea levels on coastal recession, a variable bluff retreat rate should also be applied. Again, the project is currently inconsistent with the LCP on these points, and without an adequate analysis of such effects, the Commission is also not in a position at this time to identify more precisely the area within which development might be able to be found consistent with LCP hazards policies.

Fifth, the presence of the hardened concrete slurry currently impedes natural shoreline processes at this site. This unpermitted debris is proposed to be removed as part of this project. When this debris is removed, it is certain that bluff recession at the site will resume. The removal of armoring at Stillwell Hall, located upcoast from the project site, has clearly demonstrated that once armoring is removed, the poorly lithified sand bluff is likely to retreat quickly until it forms a continuous line with the adjacent bluffs. The Applicant's erosion analysis has not considered or attempted to estimate the consequences of this rapid bluff adjustment in development of the safe setback distance. Given that an analysis that correctly omits unpermitted development and other unnatural debris would only lead to higher rates of retreat and the need for larger setbacks, the project is even more inconsistent with the LCP on these points.

Sixth, the proposed project includes lowering the grade of the foredunes and dune bluff areas on this site. Lower dunes on the seaward edge of the project would be expected to exacerbate the effects of shoreline erosion and sea level rise. The Applicant did not analyze this effect, and this failure also leaves the Applicant's analysis incomplete and inadequate. Again, were this proposed flattening of the foredunes and dune bluff areas appropriately taken into account, the retreat rates and required setbacks again would be even greater.

While there are inherent uncertainties in predicting future erosion rates for this site, even in the most optimistic of retreat scenarios at this location (i.e., the Applicant's estimated erosion rate of 2.4 feet annually), once more realistic sea level rise estimates are used and their effect on the rate of erosion considered, the site presents significant hazard constraints that would affect the proposed project over a project life of even the LCP's bare minimum for analysis of 50 years.

Overall, the development setback line proposed by the Applicant does not adequately address the hazards from shoreline erosion because the setback: i) is based on a lower erosion rate than what is required based on available data (i.e., the Applicant uses an erosion rate of only 2.4 feet/year, but the USGS historical erosion rate in this area is 5.9 feet/year, and the only known historical rate for this particular site is 6.2 feet per year); ii) does not adequately reflect the effects of sea level rise in either the location of the development setback or in the expected increase in the bluff retreat rate; iii) does not take into consideration the impeded recession rate for the sections of bluff that are now blocked by unpermitted riprap and remnant debris that would be removed as part of the proposed project; iv) was calculated only using the Bruun Rule, which does not take into account the effects of sea level rise on the bluff retreat rate; and v) the effect of lowering the foredunes and dune bluff was not included in the Applicant's analysis. Even the Applicant's

graphic cross section (**Exhibit 12**) depicts the foundations of the proposed development as being undermined within the 50-year timespan. If the foundations were deepened to allow coastal erosion to proceed around them, they would constitute a shoreline protective device, which is prohibited by the LCP and the Coastal Act.

Due to all of these factors, the Applicant's proposed setback used to establish the seaward line of development appears to be inconsistent with the LCP, and is not based on a reliable analysis. This is because the LCP requires that setbacks be based on foreseeable erosion using the most current erosion and sea level rise data. When one takes into account the effects of anticipated sea level rise, more realistic erosion rate estimates on the project site, the effects of removing the unpermitted hardened concrete slurry and remnant debris on the site and lowering the foredunes, the proposed project is located within areas that should not be developed, and that could very likely be subject to wave attack due to erosion/retreat over even the minimum 50 years evaluated by the Applicant.

In order to account for these types of deficiencies and the uncertainties inherent in the effects of future sea level rise, the preferred option would be for the Applicant to provide an analysis that accounts for all of the variables listed above. Failing that, it is the opinion of staff that in order to meet LCP requirements, the next best alternative would be a setback based on one of the higher historical erosion rates recorded in the area to estimate future erosion at this site. The 5.9 ft/yr value reported by USGS is on the higher end of historic values for the region, although it is not as high as that recorded on this site, and adopting it as a proxy for the rate expected over the life of the development due to higher sea levels is appropriate and consistent with the recommendations in the Commission's draft Sea Level Rise Guidance Document.

Therefore, the Commission finds that the Applicant has not demonstrated that the project as proposed is consistent with the LCP, which requires that new development be clustered away from potentially hazardous areas and that new development minimize risks from coastal hazards. Using the recommended 5.9 feet per year setback, very little of the site would be developable (see page 13 of **Exhibit 17**). Nevertheless, as described in Section 8 below, it appears that the Commission could approve development on a portion of this site in order to avoid a taking of private property without just compensation, and it is possible that development consistent with the LCP could be sited and designed on a portion of the site. Such an approval would, however, require an adequate and updated hazards analysis and a significantly redesigned project, and it would be difficult for the Commission to accomplish such a redesign through conditions alone, whether in a "takings" approval or otherwise, including because the Applicant would need to develop an updated hazards analysis to appropriately inform such a redesign project. Thus, although development is allowed on this site, the Commission denies the project as currently proposed.

D. Wave Run-Up/Flooding

LUP Policy 4.3.4 and IP Section 2.2 require that all development be sited and designed to minimize risk from geologic, flood or fire hazard. These LCP provisions do not limit the source or sources of the flooding risk that must be minimized. Oftentimes for projects adjacent to the coast, it is the flooding from waves and wave run-up that is the most critical flood concern. Flooding from surface runoff and sheet flow can be significant, but in most situations it can be addressed with proper site design and drainage. Flooding by wave run-up, however, is a different

phenomenon, and is less easily addressed through site design. Such flooding is explicitly identified as a core hazard avoidance criterion by the LCP, including requiring setbacks to be based on the maximum expected storm wave run-up (LUP Policy 4.3.5 and IP Section 2.2).

In general, the evaluation of wave run-up combines both changes to the beach or dunes with the changes in water conditions to determine the predicted amount of wave run-up. Since concern for wave run-up and flooding can occur any time during the project life, the analysis of wave run-up is based on long-term erosion of the beach and dune and seasonal recession of the beach. The wave conditions are assumed to be from a storm comparable to the 100-year event (meaning a storm that has a 1% annual chance of occurrence, a large but not improbable event) during a high water-level condition. Because storms can last for several hours, it is highly likely that part of a storm event will coincide with high tide. And, as with erosion, the storm event could occur anytime or several times during the project life, so the analysis and estimate of potential wave run-up should increase based on the amount of sea level rise that could occur over the project life. Thus, the beach conditions for determining flooding from a 100-year storm event include both long-term erosion and seasonal erosion and the water conditions include high tide and sea level rise over time.

There have been two studies of wave run-up for the Sand City shoreline, including one study prepared for the Sterling Environmental Center (a project proposed previously for this site) and the Applicant's consultant (HKA) provided a 2007 analysis of the Collection Resort site. The results of these studies are summarized below:

- Sterling Environmental Center wave run-up analysis by Dr. Thompson predicts +27-foot NGVD average run-up, +30 to +31-foot NGVD for 20% inundation and +32 to +34-foot NGVD maximum run-up. Wave analysis was prepared for the 50-year storm event, and based on 65 years of historic observations. Since this analysis was based on historic observations, the analysis would include tide conditions, but would not include effects of future sea level rise. The analysis was only for a 50-year storm event and, while the observations indicate the elevation of the dunes that could be subject to flooding, they do not indicate the inland locations that would be subject to flooding after the dunes have been altered by seasonal or long-term erosion (and/or by project design, as proposed for this project with foredune grading and lowering). Thus, the analysis only considers flooding that would take place over time in the absence of sea level rise, for the 50-year storm event and if the existing dunes were not altered as part of the project or due to erosion.

- Haro, Kasunich and Associates, July 2007 Sand City Collection Resort Coastal Recession and Wave Run-up Evaluation. The analysis is based upon a still water level of 8.0 feet NGVD (4.1 feet NGVD extreme high tide, 0.4 feet of storm surge, 1.5 feet short term water increase, 1.5 feet of sea level rise over 50 years, and 0.5 feet for a safety margin), an eroded beach and a 16-second, depth-limited wave. Under those conditions HKA calculated a run-up elevation of +32.2 feet NGVD for the Collection Resort site.

Normally an analysis for wave run-up examines both the changes to beach and dune conditions and the changes to the water levels. For this project, the analyses of the changes to the beach conditions were included in the analysis of bluff retreat and have been separated from the run-up analysis. The wave run-up analyses that were prepared for this project thus evaluated only the expected run-up elevation on the existing dune slope without taking into account how this

analysis would change as the existing bluffs retreat and/or they are modified via grading and the removal of the unpermitted hardened concrete slurry and debris located along a portion of the shoreline at the site. The analyses determined that wave run-up could reach up to approximately +32.2 feet NGVD for the 50-year storm event. The +32.2 elevation included high tide conditions, elevated water conditions due to atmospheric forcing and 18 inches (1.5-feet) of sea level rise. The assumed 1.5 feet of sea level rise over 50 years is in the mid-range of the NRC's Sea Level Rise projections for the areas south of Cape Mendocino. For the year 2065 (50 years from an assumed project commencement during 2015), the NRC projection range is from 0.6 feet to 2.9 feet. If sea level rise is higher than the 1.5 feet used in the analysis all other conditions being equal, then the run-up would be higher than +32.2 feet NGVD. Also, if 1.5 feet of sea level rise occurs closer to 2050 than 2065, the conditions under which storm run-up could reach +32.2 feet NGVD would occur earlier, and could be present for many years of the project's life.

The consequences of high run-up and dune overtopping from wave run-up could be significant. As noted in HKA's July 2007 evaluation, "During the project's design life, it is likely that as wave run-up naturally penetrates further inland and reaches higher elevations, that areas where buildings are now proposed will eventually become FEMA "A" zones or may even become "V" zones.[18]…Eventually, wave run-up and coastal flooding will have severe and significant impacts." Also from the HKA 2007 evaluation, wave run-up of +32.2-feet NGVD "will flow under many of the proposed buildings and will exceed the elevation of the lowest habitable floors of a few of the proposed buildings. The building foundation elements will be subject to wave flooding impact forces as a result."

Given the uncertainty of estimates of future sea level rise, the Commission has typically recommended that planning efforts examine the possible consequences of flooding from a range of sea level rise amounts to understand the possible impacts that can occur in the future. With the knowledge of the possible impacts, the project design can model the appropriate amount of sea level rise that is likely to occur, and identify the possible adaption strategies that could be implemented (along with their impacts) in the event that the actual future sea level is higher than used in the design phase.

As noted, the HKA analysis examined the consequences of 1.5 feet of sea level rise by 2065. The Commission's staff engineer reviewed the HKA analysis and provided a memorandum in response (see **Exhibit 18**). As noted in that memorandum, there was no analysis of the consequences of 2.0 feet of sea level rise, or of 2.9 feet of sea level rise, which is the upper range of the sea level rise projections developed by the 2012 NRC committee. A higher water level could increase run-up beyond the anticipated maximum of +32.2 feet NGVD. There are a few options for adaptation for a higher sea level rise than the one used for design purposes. HKA has recommended flood-proofing all garage parking areas and habitable buildings to an elevation of +33-feet NGVD. However, this is only adequate for small increases in wave run-up elevation. Larger increases in wave run-up elevation would require some type of shoreline armoring. While LUP Policy 4.3.1 contemplates situations in which shoreline protective devices might be allowed in the City, this policy only allows such structures to protect existing development and not when accompanying new development, and only if they do not reduce or restrict public access or

[18] The FEMA "A" and "V" zones are FEMA designations for flood zones. The "A" zone is the area with a 1% annual probability of flooding, and the "V" zone is an area where the flooding can be accompanied by high velocity water at a depth of three feet or more.

adversely affect shoreline processes. Even if shoreline armoring were allowed with the project, which it is not, given the beach fronting the site that is available for public access and the dynamic shore environment at the site, shoreline protection here would be expected to adversely affect both public access and shoreline processes. Thus, the proposed development must be sited to minimize risks from hazards without relying on shoreline protection, and development must be clustered away from potentially hazardous areas. The proposed development must be set back adequately to ensure safety over its lifetime without reliance on shoreline protection that would adversely affect natural shoreline processes.

Because shoreline protection at this site is not allowed as part of a new construction project and would be expected to adversely affect public access and shoreline processes, the project must be designed to not include or require such components. As proposed, it is unclear the extent to which shoreline protection components will be included in the initial design of the structure because comprehensive foundation design plans have not been completed. However, the July 2007 HKA Coastal Recession and Wave Run-Up Evaluation recommends that the development be supported by a system of deep piers and a grade beam foundation, and the site plans and cross section provided to date appear to show such features (**Exhibit 3** and **Exhibit 12**). The HKA Wave Run-Up Evaluation indicates that structures beyond the 50-year erosion line may be supported by either a pier and grade beam foundation system or shallow conventional spread footings on engineered fill soil mats. As such, the pier and grade beam foundation requirement is linked directly to the potential hazards of shoreline erosion and wave run-up and the inadequacy of the identified 50-year development setback to address these hazards. The deep pier and grade beam foundation system, if approved, would function as shoreline protection as soon as it protects the buildings from shoreline erosion that results from a combination of wave run-up, bluff recession, and sea level rise. If dense enough, the system of deep piers could act as a barrier to natural shoreline processes and interrupt longshore sand transport. Further, if allowed to persist beyond the time when the piers become exposed along an eroded shoreline, the proposed foundation system would adversely affect public access and coastal views. LCP Policy 4.3.1 doesn't allow shoreline armoring with new construction, and requires that shoreline protection structures not impact public access, nor adversely affect shoreline processes or increase erosion on adjacent properties. LCP Policy 4.3.4 requires that new development be sited to minimize risk from hazards. For the reasons stated above, the proposed deep pier and grade beam foundation system would be inconsistent with LCP policies 4.3.1 and 4.3.4.

The Applicant has indicated a willingness to waive its rights to shoreline armoring in the future and intends to pursue an adaptive retreat strategy that includes the removal of any portions of the development that become “threatened” when future erosion reaches the resort improvements. However, the Applicant has not provided any details that describe the retreat strategy, including undertaking the necessary analysis to determine the construction and removal methods, the impacts on adjacent natural resources, costs associated with removal, triggers for removal or relocation episodes, bonding to assure relocation or removal at the appropriate juncture, and related contingency measures. Although it is appropriate to plan for retreat on a site as vulnerable to coastal hazards as this site is, the LCP still requires new development to be sited and designed to minimize risks from hazards and to cluster development away from hazards. Development must thus be initially designed to meet these LCP policies and then to plan for retreat, if necessary, instead of relying on installation of shoreline protection that would adversely affect public access and shoreline processes.

The analysis by HKA of flooding sensitivity to sea level rise shows that it is only a matter of time until the proposed development will be flooded. Given the flaws in the analysis described above (low estimate for sea level rise, no analysis of lower foredunes or removal of unpermitted hardened concrete slurry and debris on the site), it does not support a conclusion that the proposed buildings will be safe for 50 years, much less any period of time beyond the 50-year time period analyzed in the report. And, while the wave run-up analysis identified the expected inundation elevation at fifty years, it does not provide information on the safe inland building envelope location that derives from such an analysis. The current +32.2-foot NGVD contour will retreat significantly over time, and the safe inundation condition needs to be considered in conjunction with the removal of the hardened slurry and debris along the shoreline proposed by the Applicant, the safe bluff setback area that takes into account beach erosion and long-term bluff retreat, and the effect of the proposed grading of the foredunes.

Based on analysis of current and future flood risks, the proposed project has not been designed or sited to minimize risk of flood hazard, and thus it cannot be found consistent with LUP Policy 4.3.4 and IP Section 2.2. In addition, the proposed project cannot be found consistent with the LCP policies 4.3.6 and 4.3.8 because it cannot be assured that development has been clustered out of potentially hazardous areas or that all natural hazards have been mitigated with respect to wave run-up/flooding. Thus, the Commission finds that the Applicant has not demonstrated that the project as currently proposed is consistent with the LCP's wave run-up and flooding policies.

E. Seismicity and Liquefaction

The site is located in a seismically active area and there is a high probability that the site will be subject to strong ground motion during the economic life of the development. There are no active faults on the site, but several faults, including the San Andreas, San Gregorio, Tularcitos, King City, and Chupines Faults, are located within 25 miles of the site. The Seaside fault, likely a splay of the Chupines fault, has been previously mapped through the property. However, as explained in the 2006 Nelson and Associates report:

> *The location of the fault in the vicinity of the property was revised in the early 1990's. Clark (1974) first mapped the fault roughly through the middle of the property passing just south of the Playa Avenue extension under crossing of Highway One. Rosenberg and Clark (1994), however, were able to refine the probable location of the fault using more recent data. In the early 1990's, two groundwater test wells were drilled for the Monterey Peninsula Water Management District by Staal, Gardner and Dunne as part of a feasibility study for a desalination plant. Lew Rosenberg was their geologist, a person extremely familiar with the geology of the Monterey Bay Area. The wells were located south of the property, one just south of Tioga Avenue near the coast and the other at the water treatment plant about 1500 feet to the south. The data from the northern of these two wells proved that the fault had to be located south of that well which was their reasoning for remapping the fault on their 1994 maps.*

In a letter report dated February 10, 1998, HKA estimates an average maximum horizontal peak acceleration for the soils making up the site to range from 0.1 to 1.0 times the force of gravity. The Applicant has not submitted seismic design criteria, but it does not appear that there are any extraordinary design considerations that would significantly affect the project's ability to meet fault setback criteria as required by LUP Policy 4.3.9, and to withstand expected ground shaking during a major earthquake as required by LUP Policies 4.3.5 and 4.3.10.

Although the 25 July 2007 HKA report concludes that the site has a low potential for liquefaction, the Commission's staff geologist, Dr. Mark Johnsson, is of the opinion that given the limited number of Cone Penetrometer Testing (CPT) borings and relatively low peak ground seismic acceleration of 0.54 g, the possibility of liquefaction-induced settlement cannot be ruled out. Deep foundations may be necessary to address liquefaction hazards (**Exhibit 17**). To the extent such deep foundations did not act as shoreline protective devices, they could likely be allowed consistent with the LCP. However, given the proposed project elements in this regard *do* act as shoreline protective devices as discussed above, it is not clear that they could be found LCP consistent.

F. Tsunami

LCP Policy 4.3.7 prohibits development in a tsunami run-up zone unless it includes adequate mitigation of the tsunami threat. A February 3, 2009 HKA letter report applicable to the site notes on page 6 that a 1984 report by Dr. Warren Thompson has indicated that "the 100-year tsunami run-up elevation for the shoreline of Sand City is 6 feet NGVD and the predicted 500 year tsunami run-up elevation for the shoreline of Sand City is 11.7 feet NGVD." However, as discussed below, it does not appear that this 30-year-old assertion remains current and up to date, nor can it be used as a baseline from which to measure consistency with the LCP's tsunami requirements. In fact, tsunami awareness and information on triggering mechanisms has increased greatly over the past 30 years, stimulated in part by the Indian Ocean tsunami, the tsunami generated by the Tohoku earthquake off Japan and, for California coastal areas in particular, by the increased understanding of the Cascadia subduction zone and its potential for generating tsunami waves that could be comparable to those experienced in Sumatra in 2004 and Japan in 2011. In addition, the potential for submarine landslides to generate tsunamis has gained or regained recognition following a large landslide-triggered tsunami in Papua New Guinea in 1998. The awareness of a large tsunamigenic source off the California coast, the improved understanding of landslide-generated tsunamis, and the experiences, eyewitness accounts, and post-disaster surveys from the Indian Ocean, have all contributed to an interest by the State of California in having a more up-to-date evaluation of tsunami risks along the coast.

The Monterey County Operational Area Tsunami Incident Response Plan (Response Plan), last revised in June 2008, recognizes that tsunamis pose a regional risk. For Sand City, the Response Plan identified the main areas at risk as beaches, noting, "In the event of a tsunami warning, the beach will need to be evacuated, to include swimmers and surfers, and entrance to the beach will be prohibited. Also, the Monterey Regional Water Pollution Control Agency (MWRPCA) pumping plant on Bay Street may also need to be evacuated and its emergency operations plan implemented." The area east of Fremont Avenue has been identified as a location sufficiently inland of the tsunami risk area to be safe for evacuation. More recently, the County of Monterey has released Draft Tsunami Inundation Maps that include the proposed project site, and these maps show that the proposed project site is at risk from tsunami inundation. These risks have not been addressed in the Applicant's submitted materials.

The tsunami risk may be exacerbated by the proposed grading and dune contouring that is part of the proposed project. The Tsunami Inundation Maps are based upon the current site topography. The proposed project would lower some of the foredunes, thus increasing the possible zone of tsunami inundation. The best mitigation steps for tsunami risk are to increase the setback distance and building elevations. The proposed re-grading of the fronting dunes would reduce the

primary tsunami protection for this property and could potentially result in an expansion of the tsunami inundation zone into the back dune area.

The Tsunami Inundation Maps also do not consider any future shoreline changes due to erosion or changes in sea level due to sea level rise. Shoreline erosion may move the inundation zone even farther inland, exposing new areas to risk from tsunami inundation. A rise in sea level will increase the inundation elevation and also expand the potential future inundation zone. Over the life of the project, there will be shoreline erosion and some rise of sea level, therefore exacerbating tsunami risk.

The LCP prohibits development within the tsunami run-up zone unless adequately mitigated, where mitigations are to be determined within the context of the required site-specific geologic investigation. The risks from tsunami hazard were not evaluated in the Geologic and Wave Run-up reports prepared for the site in contradiction to the requirements of the LCP, and the evidence that is available in the record demonstrates that the tsunami risks are not mitigated by the proposed project. Thus, the Commission finds that the Applicant has not demonstrated that the project as currently proposed is consistent with LCP Policy 4.3.7.

Hazards Conclusion

The site is subject to significant coastal hazards, including but not limited to, shoreline erosion/retreat, wave run-up/flooding, and tsunamis, all of which are exacerbated by anticipated sea level rise. The Applicant contends that these hazards have been sufficiently addressed, and that the proposed project has been sited and designed to avoid them under the requirements of the LCP. However, analysis of available data shows that the hazards at the site have not been adequately addressed by the Applicant, most significantly because the Applicant's base assumptions regarding potential erosion and sea level rise do not reflect recent evidence and data suggesting higher levels of sea level rise and erosion than estimated by the Applicant. Nor does the Applicant provide sufficient analysis to support its conclusions about the appropriate setback, or analyze the effects of the proposed project itself on the appropriate setback.

When the project's risks from hazards are evaluated using the more realistic, higher estimates of bluff retreat or when taking into account potential sea level rise, the project is expected to be threatened by hazards within the minimum economic life of 50 years, much less more realistic 75- or 100-year estimates for the project's economic life. The Applicant's consultant has further misapplied the methodology identified by HKA for establishing future shoreline and bluff crest recession and has extrapolated a line of development based on a single data point provided by the Applicant's engineer. This is not a scientifically valid method for establishing a proposed line of development. The project's foundation and lower levels also are designed to function as a shoreline protective device, inconsistent with the LCP. The proposed project, therefore, has not adequately mitigated or addressed hazards risks as required by the LCP. In fact, one needs only to look at the immediate downcoast shoreline development at Ocean Harbor House condominiums and the Best Western Beach Resort Hotel to see the coastal resource impacts associated with underestimating the risks of developing too close to the ocean. The siting for those projects is now only maintained by virtue of significant shoreline armoring, resulting in development out onto the beach and toward the Bay (causing loss of beach, a reduction in public access, including loss of space for lateral access, as well as adverse effects on shoreline processes).

In short, the proposed project has not minimized the potential risks from hazards at this location, nor has it been adequately sited and designed to address the hazards discussed in this section, and thus it cannot be found consistent with the LCP's hazard policies and standards. The Applicant has not proposed adequate mitigation or re-design of the project to alleviate these LCP inconsistencies with respect to the identified hazards. Such hazards are a fundamental coastal resource constraint that significantly directs what may or may not be approvable at the subject site, and the project must be re-sited and potentially significantly re-designed to more adequately address potential hazards. Commission staff attempted to work with the Applicant on a redesign that could begin to address these LCP requirements, but the Applicant indicated that it was not interested in working with staff on a redesigned project, and that it was not interested in pursuing anything other than the proposed project. Given that the proposed project is significantly out of compliance and cannot be found consistent with the LCP on these points, the Commission is left with no choice but to deny the project. Thus, conditions are not available, or appropriate, to adequately resolve the significant LCP inconsistencies raised by this project in its current form. The Commission finds the project, as currently proposed, inconsistent with the LCP's hazards policies and therefore denies the CDP on that basis.

2. Public Services

Applicable Policies
The LCP identifies public services as a constraint to new development due to limited availability of water and wastewater treatment capacity. Applicable LCP policies and IP standards include:

> ***LUP Policy 4.3.27.*** *Require future developments which utilize private wells for water supply to complete adequate water analyses in order to prevent impacts on Cal-Am wells in the Seaside Aquifer. These analyses will be subject to the review and approval of the Monterey Peninsula Water Management District. In support of MPWMD's review and permit authority, the City should incorporate these requirements into City development review.*
>
> ***LUP Policy 6.4.10.*** *New development shall be approved only where water and sewer services are available and adequate….*
>
> ***LUP Policy 6.4.11.*** *Prior to the approval of any new development within the coastal zone of the City of Sand City, adequate sewage treatment facility capacity shall be demonstrated consistent with the provisions and requirements of the California Regional Water Quality Control Board.…*
>
> ***LUP Policy 6.4.12.*** *Within the Coastal Zone, permit only new development whose demand for water use is consistent with available water supply and the water allocation presented in Appendix F [MPWMD assignment to Sand City of a relative share of total Cal-Am water usage – see below].*
>
> ***LUP Policy 6.4.13.*** *Require all new developments to utilize water conservation fixtures (such as flow restrictions, low-flow toilets, et cetera).*
>
> ***LUP Policy 6.4.14.*** *Require water reclamation or recycling within large industrial uses and*

encourage water reuse for landscaping wherever possible and economically feasible.

LUP Policy 6.4.16. *Require that landscaping in new developments and public open space areas maximize use of low water requirement/drought resistant species.*

LUP Policy 6.4.17. *If dune management programs are implemented on State owned properties or other Areas within the City, investigate the feasibility of using reclaimed water for irrigation.*

IP Coastal Zone Overlay District, Permit Conditions, Sections (c)(8) and (c)(10). *In considering a coastal development permit application, the City Council shall give due regard to the Local Coastal Program in order to approve a development, and the Council shall make findings that approval of the permit is consistent with the Local Coastal Program, including but not limited to: …(8) Demonstrated availability and adequacy of water and sewer services. …(10) Compliance with City water allocation.*

IP Section 3.2, Coastal Zone Overlay District, Permit Conditions, (c). *In considering a coastal development permit application, the City Council shall give due regard to the Local Coastal Program in order to approve a development, and the Council shall make findings that approval of the permit is consistent with the Local Coastal Program, including but not limited to: …(8) Demonstrated availability and adequacy of water and sewer services. …(10) Compliance with City water allocation;…*

IP Section 4.2 (Sand City Water Allocation Resolution). *… In order to protect water resources, and ensure the availability of water for coastal land uses, the maximum water usage allowable in the coastal zone for new developments shall be limited to the water allocations established in the Local Coastal Land Use Plan. …The water allocations established in the Local Coastal Program may be revised according to any changes in water allotments granted to Sand City by the District. A change in the water allocations established in the Local Coastal Land Use Plan will require a Local Coastal Program amendment.*

The LCP recognizes that water is a finite commodity in great demand in Sand City and the surrounding area. The LCP thus only allows approval of new development where it has been clearly demonstrated that adequate water supply is available to serve the development, and that such water is consistent with the Monterey Peninsula Water Management District's (MPWMD's) allocation to Sand City. Likewise, the same availability and adequacy criteria apply to the need for wastewater services as well. The LCP includes these limitations to ensure that new development does not exacerbate water and wastewater capacity problems within the City.

Wastewater Services

Wastewater from the site would be directed to the Monterey Regional Water Pollution Control Agency's (MRWPCA's) wastewater treatment plant in Marina via delivery lines maintained by the Seaside County Sanitation District (SCSD). MRWPCA's Marina plant currently processes approximately 21 million gallons per day (MGD) and has a permitted capacity of 25 MGD.[19]

[19] The plant has a maximum operating capacity of 30 MGD, but the Regional Water Quality Control Board (RWQCB) permit limits this facility to a maximum of 25 MGD.

Thus, the Marina plant has an additional capacity of up to 4 MGD over existing use. The project would generate up to 59.35 acre feet per year (afy) of wastewater, which is equivalent to 52,939 gallons per day, well within the additional capacity of the Marina plant.

The next question is whether the SCSD has adequate capacity in its transport lines to serve the project. The Applicant proposes a private lift station and private force main that will connect directly to the MRWPCA pump main at Bay Avenue. According to SCSD staff, there is adequate capacity in the trunk sewer between the Bay Avenue pump station and the MRWPCA treatment facility in Marina to handle the additional volume of wastewater that will originate from the proposed development. SCSD staff also indicated that a will serve letter has been issued to the Applicant. As such, and for the reasons discussed above, the proposed project is consistent with the LCP with respect to wastewater services.

Water Supply Context

The adequacy and availability of water to serve the development is a key public services question with respect to the proposed development. In general, the water supply in Monterey County is extremely limited. There are significant restrictions, including court adjudicated and State Water Resource Control Board (SWRCB) orders limiting available water supplies. New and existing water extractions to serve development raise a series of significant and complicated issues.

The primary water supply for communities on the greater Monterey peninsula is managed by the MPWMD and is provided by California American Water (Cal-Am), which is a privately-owned water purveyor. Cal-Am extracts the water it sells from both the Carmel River and the Seaside groundwater basin aquifer, which underlies much of the Monterey Peninsula area, including Sand City. MPWMD allocates Cal-Am's water supplies among various cities and Monterey County, which in turn decide how to distribute their respective allocations to users within their jurisdictions. There are currently significant regulatory constraints on Cal-Am's extractions from both the Carmel River and the Seaside aquifer, and there is the potential for significant reductions in the current extractions from both sources.

In 2005, the Commission approved a coastal development permit (CDP A-3-SNC-05-010) for a 300-acre-feet-per-year reverse osmosis desalination plant to supply potable water to Sand City's residents and commercial/industrial establishments on the inland side of Highway One. The desalination plant and two 425,000 gallon storage tanks are located east of Highway One, mostly within the Coastal Zone, on the 3300 block of Shasta Avenue. The plant is supplied with brackish water from extraction wells located 60 feet below the existing grade of the dune, near the bluff edge, within City-owned street rights-of-way (Bay and Tioga Avenues). A process of reverse osmosis removes salt and impurities to produce drinking water.

The Sand City desalination plant began operation in May 2010. The City contracts with Cal-Am to operate, maintain, and distribute water from the desalination plant. As noted, the plant supplies the City with 300 acre-feet of potable water per year, although Sand City's water needs are currently only about 146 acre feet per year (afy). The plant was sized to address water needs of build-out in Sand City inland of Highway One, estimated at 300 afy. Because build-out would happen over time, and thus all of the 300 afy would not be used in that way initially, and to help address the serious environmental degradation issues associated with Cal-Am's withdrawals associated with the Carmel River and the Seaside basin, the CDP was structured so that the water

produced could be used to serve other existing Cal-Am customers and that amount of water could be "backed out" from Cal-Am water source withdrawals to the benefit of those resources. Thus, the remaining 154 afy being produced above Sand City's current needs inland of the Highway are currently being used by Cal-Am as required by the Commission's CDP in such a way as to reduce its withdrawal of water out of the Carmel River. This benefit to Carmel River and Seaside Basin resources was an important component of the Commission's approval of the desalination plant, albeit it was always understood that over time this benefit would be reduced as Sand City built out east of the Highway.

For the proposed project, the Applicant estimates that the proposed development will use 64.4 acre-feet of water annually, which represents roughly 40% of the City's remaining 154 acre-foot entitlement. That is, the City is entitled to the full 300 acre feet produced by its desalination plant every year, and it is currently using 146 acre feet, so it has the right to use the remaining 154 acre feet within the City. Currently, however, there are no water distribution lines west of Highway One, and thus the proposed project includes the extension of water lines from existing water mains east of the Highway at Tioga Avenue and Playa Avenue to west of the Highway to form a "looped" system to meet fire flow requirements. Finally, given that the desalination plant was sized for build-out east of the Highway, and there are currently no other options available for water supply, the effect of reprogramming the 64.4 afy to the proposed project would have the effect of eliminating that amount of supply for development east of the Highway in Sand City. Given the lack of supply options currently, the City would simply be foregoing any such inland development as there would not be any available water supply to meet the City's build-out projections.

Analysis

In its approval of the City's desalination facility, the Commission's findings make it clear that the sizing of the desalination plant (i.e., 300 acre-feet per year) is based on the City's General Plan building projections for likely development located *east* of Highway One. The General Plan identified the numbers of potential residential dwellings and per dwelling occupancy rates, along with the amount of square footage available within commercially and industrially zoned parcels. Water use factors obtained from the MPWMD were applied to each category of development and the total amount was adjusted to account for water conservation measures. Table 1 of the Final EIR (reproduced on page 30 of the Commission's adopted staff report for the desalination plant) shows the projected water use for all development east of the Highway. The report's findings acknowledge that full build-out may not be realized due to a variety factors, including unrealized maximum building intensities, resource constraints and additional conservation measures. Nevertheless, sizing of the City's desalination facility was derived solely from the data produced in the Final EIR regarding potential development east of Highway One.

Regarding growth inducement and concerns that the facility could serve other areas or facilitate other service where development is or may be problematic, the Commission found that the desalination project did not need to be revised as there are more direct ways to address any problematic development in the coastal zone. In the discussion regarding the potential for development in the coastal dunes west of the Highway (pages 33 and 34 of the desalination plant staff report), the findings state: "Development of the sand dunes has not occurred in part due to the unavailability of water, though equally important impediments stem from the natural resource constraints of the site." The Commission found that past actions to approve

development within the dunes did not contain the necessary measures to adequately protect sensitive habitat, or address other coastal related resource issues such as public access, shoreline hazards, and coastal views as required by the LCP. The report concluded that while the desalination project may remove this one constraint to development, it is not inconsistent with LCP provisions to prevent inappropriate growth-inducement for the following reasons:

- the proposed project [i.e. the desalination project] does not include any water distribution lines west of Highway One;
- the proposed project does not charge landowners west of Highway One prior to them receiving service;
- the proposed project is sized so that potentially all of the water produced could be used elsewhere;
- the proposed project is for the purpose of serving development east of the Highway only;
- any development west of Highway One will need to be evaluated for consistency with all other LCP policies prior to being permitted.

Thus, in order to make the requisite findings for approval of the desalination plant, the Commission approved the permit subject to a condition that any extension of water lines west of Highway One would require a permit amendment (See **Exhibit 6** for Special Condition 2b, CDP A-3-SNC-05-010). The proposed Collection Resort project requires that water distribution lines be extended west of Highway One and includes as part of the proposed project the construction of such distribution lines. However, to date, the City has not submitted an application for an amendment to the base desalination permit, as required by Special Condition 2b. Thus, before water distribution lines may be constructed west of Highway One, the Sand City desalination permit must be amended to allow such construction.

Additionally, the project EIR for the Collection Resort does not adequately evaluate the potential adverse environmental effects associated with extending the water service lines west of Highway One. The City suggests that the proposed project may create additional pressure for housing in Sand City and/or in the Monterey Peninsula region, but dismisses the growth as not representing growth beyond what has already been assumed for the region. The project EIR that was developed for the City's desalination facility in 2004, however, estimated far fewer residents in Sand City than the Collection Resort EIR, calling into question this conclusion. Based on an average 2.5 persons per dwelling unit in the East Dunes planning area and two persons per dwelling unit in the Mixed Use planning area, the City in the 2004 desalination EIR derived an estimate for an overall residential build-out population of 1,029 residents. The Collection Resort project 2012 EIR indicates that projected residential population at full build-out for the City will be 1,498 persons or roughly 45% greater than what was evaluated in the desalination project's 2004 EIR.[20] Using the same residential use rates given in the final EIR for the desalination facility, the projected additional 469 residents will consume on average an additional 20,542 gallons of water per day or roughly another 23 acre-feet per year. The additional 23 acre-feet was

[20] According to the Association of Monterey Bay Area Government's (AMBAG) *Monterey Bay Area 2008 Regional Forecast*, the total population in Sand City in 2020 is forecast to be 1,498 residents. That is a significant increase over the 2004 Desalination Facility project level EIR which estimated a total build-out population of 1,029 residents.

not planned for in the sizing of the City's desalination facility. The City may therefore not have sufficient capacity to serve the Collection Resort project and anticipated growth in the City with the remaining capacity from its desalination plant.

Further, neither the Applicant nor the City provided an evaluation of the potential impacts associated with redirecting 64 acre-feet (roughly 40%) of the City's remaining water credits to the Collection Resort and how that would impact the ability of the City to provide adequate services for the projected growth in residential, commercial and/or industrial development *east* of the Highway. Based on the 2012 Collection Resort EIR, total projected *residential* water use at full build-out east of Highway One is nearly 74 acre-feet. Adding the two together, the projected residential demand and the Collection Resort estimated 64.4 acre-feet results in 138.4 acre-feet of water reserved for these two uses. The remaining water available to the City is just 154 acre-feet, so the proposed project together with projected residential build-out alone would leave only 15.6 acre feet for remaining commercial and/or industrial development planned east of the highway. The City has estimated that it needs 261 acre-feet per year to serve the City's currently undeveloped commercial and industrially zoned properties east of Highway One, so the City would be approximately 190 acre-feet short of its requirements. The City has not indicated how this will be addressed (i.e., the City has not identified additional sources of water or eliminated potential development east of Highway One). Thus, before water distribution pipelines are constructed west of Highway One, the potential environmental impacts of such expansion must be fully assessed. To date, that assessment has not taken place.

Public Service Extension Conclusion

The sizing of the City's water supply desalination plant was based solely on likely projected development *east* of Highway One. Given the potential for coastal resource impacts, the conditions of approval for the desalination plant (CDP A-3-SNC-05-010) require an amendment to that permit before any water lines may be extended beyond their current configuration east of Highway One, and that has not been done. Although the City's desalination facility currently produces enough water to be able to serve the proposed development, additional analysis of the project is needed to determine if dedicating approximately 40% of the remaining capacity of that facility to this one project is consistent with the LCP requirement that there be adequate water for it, especially given that this remaining capacity was originally planned to be used east of Highway One, not west. The effect of potential water withdrawals on constrained resources (i.e., the Carmel River and Seaside groundwater basin) associated with these developments must also be clearly identified. The impacts of these water allocation issues have not been fully analyzed and/or addressed within the context of the proposed project or project EIR and the desalination permit has not yet been amended to allow expansion of water service west of Highway One. Until this analysis is completed and CDP A-3-SNC-05-010 is amended, the Commission cannot approve construction of water distribution facilities west of Highway One.

3. Visual and Scenic Resource Protection

A. Applicable Policies

The LCP protects visual resources and coastal views of Sand City, including those to and along the shoreline and from significant public viewing locations (e.g., from along Highway One.). The LCP also requires that new development be sited and designed to enhance and protect views,

including certain specific views; that the loss of visual resources be minimized; and also encourages new development to be compatible with its natural surroundings. Applicable LCP policies and standards include:

LUP Policy 2.3.6. *Protect visual access at the general points shown on Figure 4 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.*

LUP Policy 3.3.1. *Visitor-serving and public recreational uses are given priority west of State Highway One, as designated on the Land Use Plan Map in Section 6.0. Development of these uses shall be consistent with the protection of natural and visual resources.*

LUP Section 5.2.2 Coastal Visual Resources, Future Design Considerations. *View enhancement is an important aspect of Sand City's LCP. … [LCP design standards have] been guided by the following concerns: 1. the protection and enhancement of visual access, views and scenic areas; 2. the assurance of visual and functional compatibility of new development with site characteristics and the existing City; 3. the assurance of visual and functional compatibility among new developments within the shoreline area; 4. the protection and/or utilization of significant landforms; and 5. improvement and upgrading of the image of the City as a whole.*

LUP 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.*

LUP Policy 5.3.2 *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 9. Major designated view corridors are: c) three southbound views over development on properties between Tioga Avenue and the former dump site; …*

LUP Policy 5.3.3. *View corridors are defined as follows:**…***

b) "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 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. ...

LUP Policy 5.3.4.a. *Encourage project design that is compatible to its natural surroundings and that enhances the overall City image. All buildings should be designed and scaled to the community character as established by new development.*

LUP Policy 5.3.4.b. *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*

LUP Policy 5.3.4.f. *Encourage the use of existing natural and manmade dunes as earth berms for visual and noise barriers, as well as buffers between land uses. Landforms are more efficient for visual and noise reduction than planting screens.*

LUP Policy 5.3.4.k*. Discourage multiple drives. Encourage the use of single drives for ingress and egress. Encourage shared use of a single drives by several parking areas within a site. Where possible, encourage shared use of entry drives by adjacent property owners.*

LUP Policy 5.3.6. *Encourage restoration or enhancement, where feasible, of visually degraded areas. …*

LUP Policy 5.3.7. *Require new developments to provide vista points along the shoreline and bluff top in conjunction with provision of public vertical and lateral access ways. Encourage provision of minor vista points, such as pedestrian plazas in new projects.*

LUP Policy 5.3.8. *In addition to view corridors designated on Figure 9, encourage new developments to incorporate view corridors from Highway One to the ocean, within project design, consistent with City standards for view corridors. Such standards for view corridors should include varied roof or building profile lines, and visual corridors through, between and/or over buildings to the bay.*

LUP Policy 5.3.9. *New development should to the extent feasible, soften the visual appearance of major buildings and parking areas from view of Highway One*

LUP Policy 5.3.10 *Utilize existing or manmade dunes within project design to enhance visual resources.*

LUP Policy 5.3.11. *In new developments require dune stabilization measures where feasible and where they would stabilize an unconsolidated dune, and/or reduce views of the development from Highway One.*

LUP Policy 5.3.13. *Plan and implement, provided adequate funding is available, a regional bike link west of Highway One, in the general vicinity of the existing and planned Sand Dunes right-of-way. This bike trail connection will provide additional public views of the dune environment and Monterey Bay. However, due to funding considerations, and recognized development potential along the bike path alignment, these views shall not have the same status as those along Highway One. Bike path views shall be considered an additional benefit of the bike path project, but it is recognized that these views will be subject to future view encroachment that may result from public or private development.*

LUP Policy 6.4.1. *… Land Uses. Establish the following land use designations in the coastal zone, as defined below and shown on the Land Use Plan Map in Figure 11…*

The described densities, both above and below, represent a maximum. 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: … dune habitats and their appropriate buffers; and natural landforms and views to the Bay.

LUP Policy 6.4.4: *Densities. Allow the following densities per land use type. …*

c) Visitor Serving Hotels: 0-75 rooms per acre. The number of hotel units shall be limited as follows: … LUP Area (B): 375 rooms.

Density credit shall be allowed based on policies 6.4.2 and 6.4.8 of this plan.

d) Visitor Serving Motels: 0-37 rooms per acre. The number of motel rooms to be limited as follows: LUP Area (a): 229 rooms; LUP Area (b): 141 rooms.

LUP Policy 6.4.5. *In the Sand City Coastal Zone, permit a height limit of 36 feet as measured from existing grade with the following exceptions:…*

b) Hotel uses shall not exceed 45 feet. … All other on or above-ground private and public recreational structures, public-serving commercial uses and public amenity improvements shall not exceed 15 feet or one story in height from finished grade;

c) All development within 100 feet of the freeway right of way (considered as the main thoroughfare right of way, excluding on/off ramps) shall be designed so as to minimize significant adverse visual impacts, limited to 25 feet in height except as permitted by (b) above, and landscaped. Unattractive elements shall be screened; and

d) Views over development (see Figure 9) shall be preserved by limiting heights as necessary to assure compliance with Policy 5.3.3.…

LUP Figure 9: Visual Resources (see Exhibit 5).

IP Section 2.2, Visual Resources. *Protection of visual resources will be accomplished through provision of view corridors, vista points, development height limits, and dune restoration areas as identified in the Local Coastal Land Use Plan. …[Decision makers shall approve a CDP] only if it is found that the development is sited, designed, and landscaped in a manner that provides view corridors from Highway One to the ocean and considers protection and/or enhancement of coastal visual resources. …*

IP Section 3.2, CZ-VSC Coastal Zone Visitor Serving Commercial, Height Regulations: *No building shall exceed thirty-six (36) feet as measured from the existing grade except hotel uses shall be permitted variation in height to forty-five (45) feet. All development within one hundred (100) feet of the freeway right-of-way (considered as the main thoroughfare right-of-way, excluding on/off ramps) shall be designed so as to minimize significant adverse visual impacts and shall be limited to 25 feet in height. Views over development, as specified*

in the Local Coastal Land Use Plan, shall be preserved by limiting heights as necessary to assure compliance with policies contained in the Local Coastal Land Use Plan.

IP Section 3.2, CZ-VSC Coastal Zone Visitor Serving Commercial, Minimum Requirements:

(a) Density: For visitor-serving hotels, allow up to 75 rooms per acre. …[maximum rooms allowed in Area CZ-VSC-B is 375 rooms] … For visitor-serving motels, allow up to 37 rooms per acre. …[maximum rooms allowed in Area CZ-VSC-a is 229 rooms; CZ-VSC-b is 141 rooms] …

IP Section 3.2, Habitat Restoration Overlay District: *Purpose: To provide areas suitable for dune restoration, relocation, and/or stabilization as part of future developments as designated in the Local Coastal Land Use Plan. Permitted Uses: a) Restoration or enhancement of native dune plant habitats or establishment of new habitat for rare and endangered species; b) Grading and other activities necessary to implement a habitat restoration activity; and c) native plant relocation as established in the Local Coastal Land Use Plan. Only the above permitted uses are allowed; no other permitted uses of the underlying district are allowed within this overlay.*

B. Policy Summary

The LCP's visual resource policies state a clear intent to maximize, protect, and enhance the significant public visual resources of Sand City, including those specifically related to the project site. Perhaps most important in this respect are the views seen by Highway One motorists of the site itself and across the site to the Monterey Bay and Monterey peninsula. Other important public views include those from a closer perspective than Highway One (i.e., from the Monterey Bay Sanctuary Scenic Trail (Scenic Trail) that runs between Highway One and the site, from Tioga Avenue, and from the Monterey Peninsula Regional Park property upcoast). In addition, the site is prominent in public views from the sandy beach area located seaward of the project site. Finally, a more distant, but still important public view, is the view of the site as seen from across the Bay from various points along the Monterey peninsula, including from the highly visited Cannery Row area. As seen from the City of Monterey, the vista of the site is seen as a relatively undeveloped continuous dune foreground panorama.

The LCP policies protect the visual resources of Sand City in general terms and also provide specific, more detailed, protections for identified "major designated view corridors." The background section of the LUP visual resources section states:[21]

Sand City's coastal zone is separated by Highway One, which forms a distinguishing boundary between the City's visual resources. The area west of Highway One is characterized by shifting sands, non-native ice plant, beaches, coastal bluffs and views of Monterey Bay. The area east of Highway One is characterized as primarily industrial due to the existing land uses outside of the coastal zone.

[21] LUP Section 5.2.1 ("Coastal Visual Resources, Existing Visual Resources").

Sand City's viewshed consists of coastal views and views of the Monterey Peninsula from Highway One, Sand Dunes Drive, Tioga and Bay Avenues, and existing developed portions of Sand City and Seaside (the area east of Highway One). In addition, views of Monterey Bay and portions of Sand City can be seen from areas on the Monterey Peninsula. Generally, Sand City's coastal zone is highly visible from Highway One.

Views of Monterey Bay and Monterey Peninsula can been seen while traveling along Highway One. These views are broken and obstructed by dunes and, to a lesser extent, by existing uses. However, at several Points in Sand City along Highway One, view corridors do exist.

These corridors were evaluated according to significance of views and relationship to existing dunes. As a result, view corridors and vista points requiring protection have been designated in general locations as shown on Figure 9. In some cases, where the elevation of Highway One is much greater than properties to the west of it, view corridors are established over development, so the line of sight from Highway One is not obstructed. Other corridors are generally established to be free of structures except for parking, public facilities or public recreation.

The evaluation of view corridors concluded that visual corridors could be established in various locations throughout the City, based on open views to the ocean and the Peninsula. However, many areas could not be established as view corridors due to location of existing industrial development and potential future developments. The visual analysis also concluded that stationary views, such as at vista points, are a valuable alternative to view corridors for the protection of visual resources.

This introductory text identifies the important views described above, including views of Monterey Bay and the Monterey peninsula as seen from Highway One and the Scenic Trail, etc., and views back toward the project site from the Monterey peninsula. It also introduces the concept of specifically identified significant view corridors as seen from Highway One, which are further described in LUP Policy 5.3.2 and Figure 9 (**Exhibit 5**) of the LUP. These views are intended to be protected through the provision of view corridors, vista points, development height limits and dune restoration areas. There are four primary areas on the project site that are identified as requiring this heightened level of view protection. The first is a "key coastal overview" represented by a large arrow overlooking the northern portion of the project site (see Figure 9 in **Exhibit 5**). The second is three "view corridors over development," which are generally represented as large triangular view cones within the southbound Highway One view. Development heights are limited within these view cones to protect views of the sweep of beach and dunes, Monterey Bay, and the Monterey peninsula. A third element of view protection are two "vista points" located near the bluff edge, one at the Tioga Avenue street end and another at the mid-point of the McDonald site as shown in Figure 9 in **Exhibit 5**. Finally, the fourth area of view protection is a "dune preservation, stabilization and restoration area" located along the eastern edge of the development site adjacent to the Highway One right-of-way and straddling the Sterling – McDonald property line.

In addition to the specific view corridors identified in LUP Figure 9, the LCP provides more general protection for other visual resources in the City's coastal zone. For example, Policy 5.3.1

requires enhancement and protection of views in the City's coastal zone, in order to minimize the loss of visual resources. Policy 3.3.1 requires development west of Highway One to be consistent with the protection of visual resources, and Policy 5.3.8 encourages additional view corridors from Highway One to the ocean as part of new development.

Overall the LCP provides a broad vision for visual resource protection. The LUP's visual resource text indicates that "view enhancement is an important aspect of Sand City's LCP,"[22] and the LUP identifies the following five guiding principles for the LCP's visual resource policies:[23]

1. *the protection and enhancement of visual access, views and scenic areas;*

2. *the assurance of visual and functional compatibility of new development with site characteristics and the existing City;*

3. *the assurance of visual and functional compatibility among new developments within the shoreline area;*

4. *the protection and/or utilization of significant landforms; and*

5. *improvement and upgrading of the image of the City as a whole.*

The LCP places a fundamental emphasis on view protection and enhancement. The concept of "view enhancement" and "protection and enhancement of visual access, views and scenic areas" clearly denotes a broad and fundamentally protective LCP visual resource policy context.

As described in these background principles, and in Policies 5.3.2, 5.3.4 and 5.3.10, the LCP also encourages the use of dunes to enhance the visual resources of the City. Existing dunes must be protected (see Policies 3.3.1, 5.3.2, 5.3.4.f and 5.3.10) and used to screen new development, while created dune landforms may also be used for a similar purpose, as long as the development of such dune landforms is otherwise compatible with LCP policies. The intent of the LCP is to protect existing dunes, and to seamlessly integrate approvable development within them. As the Commission found when certifying the LUP:

> *… this revised policy [5.3.2] designates dune restoration/preservation areas recognizing that these areas also will be visual amenities as they will reflect the dune landforms through which the Highway was constructed and will also reduce the visual impact of new structures between the Highway and the sea.*[24]

Policy 5.3.10 thus requires that the dunes be considered as a means of enhancing the City's visual resources.

The LCP also designates three southbound views over the site as view corridors from Highway One that are explicitly required to be maintained "over development" (per LUP Policy 5.3.3).

---

[22] LUP Section 5.2.2 ("Coastal Visual Resources, Future Design Considerations").

[23] Id (Section 5.2.2).

[24] CCC, LUP Findings, September 7, 1982.

Significant portions of the proposed development site are designated in LUP Figure 9 (**Exhibit 5**) as requiring these view corridors over development. The LCP allows development to be visible in this location as long as views over the development are protected.

The LCP includes very specific requirements for development on the site. Beginning with the view corridors identified in Figure 9 (**Exhibit 5**), development within these view cones must adhere to specific view protection performance criteria including that development not intrude upon, or block, an unobstructed view of more than one-third of the lineal distance across the Bay as seen by southbound motorists on Highway One. Within the Visitor-Serving Commercial (VSC) district, the LCP limits hotel/motel/timeshare densities to a maximum of 37 rooms per acre (229 maximum) on the roughly 8-acre Sterling site, 75 rooms per acre (375 maximum) on the 16.25 acre McDonald site, and 37 rooms per acre (141 maximum) on the 2.3 acre Granite site. Development heights for the site are limited to a maximum of 45 feet above existing grade for hotel uses, and are limited to a maximum of 36 feet above existing grade for all other uses and development (and limited to a maximum of 25 feet within 100 feet of Highway One). As indicated in LUP Policy 6.4.1, such maximums are not entitlements, but rather upper thresholds that can be considered but that must be understood in relation to site constraints that affect development (including explicitly in terms of protecting natural landforms and views to the Bay) and that limit allowable densities and scale otherwise. Development of the uses identified requires a planned unit development (PUD) approval, and that approval requires the project to be consistent with CEQA, including appropriate environmental review.

In sum, the LCP's visual resource policies, as they apply to this site, require that approvable development be sited and designed to ensure that dune features and public views are protected, including views from Highway One, although some of these views can be over development. These policies include specific maximum densities and intensities of use, and they prescribe specific maximum height limits with development still being consistent with identified view corridors and other LCP visual resource protection policies.

C. Visual Resources Setting

The project is located along a particularly scenic section of shoreline connected to and visually indistinguishable from up and downcoast dune landforms. The site includes the previously described remnant dune feature that is identified on Figure 9 (**Exhibit 5**) of the LUP as a dune preservation, stabilization, and restoration area. The primary public view in relation to the site is the view from Highway One. This is the way that most people view the site and the Monterey Bay/Monterey peninsula beyond the site. The view from the Highway changes depending on one's location, and ranges from a clear view of the Bay and the Monterey peninsula to a more broken view due to the dune topography itself (see Highway One view photos in **Exhibit 7**), and ultimately a view of the construction and materials yard on the Sterling property.

The McDonald site, being both lower in elevation and having greater vertical separation from the Highway, provides greater through views, when seen from northbound and southbound Highway One. In general, the site is extremely visible from Highway One, and views of the site and across it are significant. The 18.56-acre McDonald and Granite portion of site has been disturbed by previous sand mining activities. However, this larger portion of the project site exhibits signs of dune regeneration and stabilization, including via wind-driven dune re-establishment and re-colonization of a variety of native and non-native plant species. Much of the project site had

historically been used for sand mining, and there are hardened slurry and rubble along the shore as evidence of these industrial activities. Further south, the 7.9-acre Sterling property immediately north of Tioga Avenue continues to be used for materials recovery and related operations, and is degraded. The shoreline fronting Tioga Avenue is eroding and there is evidence of unpermitted hardened slurry and other debris at the toe of the slope (see also violation finding). The mapped dune feature topography blocks much of the southbound view of the Sterling site, though it does become prominent in the view for a moment before the Tioga Avenue overpass. See **Exhibit 2** for aerial photos of the project site and **Exhibit 7** for Highway One views of the site.

The Scenic Trail and bike path that runs north of Playa Avenue between Highway One and the site provides similar vistas for pedestrians and cyclists as those seen by motorists on Highway One. However, because the Scenic Trail is at a slightly lower elevation than Highway One, the views of the dunes (including the project site) and the ocean from this location are especially expansive. While fewer people view the project site from the Scenic Trail compared with from Highway One, the Scenic Trail is a major public recreational feature that is highly used, and views from the Scenic Trail in this location are significant and spectacular.

A different vista of and across the site is provided upcoast, from the Monterey Peninsula Regional Park District's Eolian Dune Preserve (Preserve). The Preserve opened for public use in 1997. The Preserve consists of sand dunes with limited access amenities, and although it is not heavily used, it is a public use area where users look over the subject site. The Preserve also provides visual dune continuity and open space for users of the adjacent Scenic Trail segment, the beach, Highway One motorists, and from vantages seen from the Monterey peninsula across the Bay. The project site shares a common boundary with the Preserve, and the site is prominent in views from the Preserve and from the portion of the Scenic Trail that is adjacent to the Preserve. This is especially true for southbound users of this portion of the Scenic Trail. From this view, the project site is extremely prominent in the immediate foreground.

The primarily undeveloped stretch of sand between Monterey and the Pajaro River, a stretch of approximately 20 miles, includes the project site. The site is thus seen on the inland dune slope by walkers making use of the sandy beach, and is prominent in this pedestrian view. The site is currently indistinguishable in this respect from the adjacent Preserve uses, as the dunes are similar up and downcoast.

Finally, the project site is highly visible in views from the Monterey peninsula across the Bay, including vistas from the Scenic Trail as it winds through the cities of Monterey and Pacific Grove, from Cannery Row, and from the Monterey Bay Aquarium. While there are some existing developments (e.g., Embassy Suites Hotel, Best Western Beach Resort hotel, Ocean Harbor House condominiums) that are prominently visible from these vantage points, all of these developments are located well downcoast of the site. Upcoast of these developments, the site is seen as part of the existing unbroken and undeveloped strand of coastal dune bluffs that extend roughly from Tioga Avenue and north through the Fort Ord dunes.[25]

[25] The Commission has authorized the development of a large resort complex just downcoast of Fort Ord and just upcoast of the project site, but that development is not yet under construction.

D. Landform Alteration Is Excessive

The project site totals 26.46 acres. The project proposes to grade almost the entire site, including grading, excavation, and re-contouring of approximately 75% of the dune area above the 15-foot contour, totaling approximately 19.8 acres. More than 11.5 acres will be permanently removed and/or covered for development of the project. The project would result in the removal of all existing vegetation and much of the existing topography within this 11.5-acre area. For example, the protected dune feature at the eastern edge of the site, which is identified in LUP Figures 7 and 9 (**Exhibit 5**) as a "dune preservation, stabilization and restoration area," would be re-contoured and reshaped to conform it to the proposed alignment of the Sand Dunes Drive extension. This would essentially eliminate this LCP- protected dune feature as it currently exists.

Substantial grading, re-contouring and ultimately reduction in the size and extent of the LUP-identified protected dune feature along the eastern edge of the site are inconsistent with the visual protection policies of the LCP. As described above, this dune feature is specifically identified as a dune preservation, stabilization and restoration area in LUP Figures 7 and 9 and as a Habitat Restoration feature in IP Figure 4. Policy 4.3.20 states that grading of this feature is only allowed for purposes of dune habitat restoration and that these dune features must be kept in open space. Policy 4.3.19 requires preparation of a maintenance program for all dune stabilization and /or restoration areas shown on Figure 7 that includes permanent preservation and maintenance of the restored habitat. Rather than preserving and/or restoring this dune, the proposed project and associated grading would completely redefine this feature. The project plans do identify an area designated for dune stabilization and restoration; however the proposed restoration area understates the full extent of this feature based on the current topographical survey of the site and its depiction in the figures in the LCP (see **Exhibit 9**). Not only is this inconsistent with LUP visual protection policies, such as 5.3.1 and 5.3.2, which require the protection and restoration of this area, it is also inconsistent with LUP Figures 7 and 9, and IP Figure 4. Further, as discussed below, this dune feature is also protected by the LCP natural resource protection policies (e.g., LUP Policies 4.3.19 and 4.3.20 and IP Section 3.2: Habitat Restoration Overlay District).

With respect to the proposed grading of the existing protected dune feature, the proposed project cannot be found consistent with LUP Policies 3.3.1, 4.3.19, 4.3.20, 5.3.1, 5.3.2, 5.3.3, and 5.3.10, LUP Section 5.2.2, and IP Sections 2.2 and 3.2. Thus, the Commission finds the proposed project inconsistent with the applicable LCP and visual resource provisions related to protection of specific dune features.

E. Public View Impacts - Buildings and Other Development Not Approvable

With respect to the buildings and related development, as described above, the proposed buildings and development would be plainly visible from multiple public views.

Views from Highway One

Exhibit 7 shows views of the site when travelling northbound and southbound on Highway One. The proposed new Sand Dunes Drive road extension and public parking areas would be located in the foreground of the view between Highway One and the proposed development, and thus largely would not be shielded from view by dune landforms. The one exception is the area seaward of the LUP-identified dune feature, and this feature has been significantly understated in

the project plans (**Exhibit 9**). The proposed road extension and related development would slope gradually in a downcoast to an upcoast direction from an elevation of about 70 feet nearest Tioga Avenue (an existing road and the location of the proposed Sand Dunes Drive extension), down to an elevation of about 50 feet near the midpoint of the site, and then up again to an elevation of about 80 feet as the road terminates in a cul-de-sac and public access parking lot out on the bluff above the beach (see site plan in **Exhibit 3**). This road will be prominent in both northbound and southbound views, and will significantly alter the existing character of the view from one of a dune viewshed to one of a frontage road extending more than a quarter mile in length and out into the dunes. Fourteen public parking spaces are proposed along the re-developed Tioga Avenue cul-de-sac. Another 44 public parking spaces are proposed along the Sand Dunes Drive extension. At the terminus of this road extension, a vehicle turnaround and a 44-space public parking lot would be provided. Vehicles parked in this area would be prominent in the Highway One public viewshed and would degrade the dune viewshed. Although such development need not be invisible from Highway One (e.g., LUP Policy 6.4.5(b) contemplates that there will be development within 100 feet of the Highway One right-of-way, and Policy 5.3.9 only requires that views of parking areas be "softened" to the extent feasible), to be consistent with the LCP the development must at least be minimized and screened to lessen its impact on the City's visual resources.

Finally, views from northbound Highway One are also significant and important. LUP Policy 5.3.1 requires all new development to be sited and designed to protect and enhance views of Sand City's coastal zone and to minimize the loss of visual resources. LUP Policy 6.4.5(b) further limits development within 100-feet of the highway right-of-way to 25-feet in height in order to minimize adverse visual impacts. As discussed above, the proposed project will introduce development adjacent to the Highway One right-of-way that exceeds the 25-foot development height limit and within the larger development site beyond the 100-foot Highway buffer. These development features will obstruct and degrade these important coastal views and further result in the loss visual resources inconsistent with the LCP.

View Corridors

As explained above, the LCP contains specific policies aimed at protecting and enhancing its visual resources, including via provision of view corridors, vista points, development height limits, and dune restoration areas. LUP policy 5.3.2 requires that views of Sand City's coastal zone, Monterey Bay, and the Monterey peninsula be protected, in part by protecting the mapped view corridors shown on Figure 9 (**Exhibit 5**). Figure 9 shows the project site with three mapped view corridors over it. Within these view corridors "views over development" are provided by limiting the maximum height of development to protect views of the beach and dunes, Monterey Bay, and the Monterey peninsula. That is, in addition to the general development standards that require view protection and prescribe maximum development heights within the visitor-serving commercial zone district and adjacent to Highway One, LCP Figure 9 also outlines a very specific, if not unique, standard for measuring visual impacts.

The Applicant has attempted to take advantage of site topography and changes to it where possible to construct the buildings into the sand dunes and to reduce visual impacts. This is, however, in and of itself inconsistent with the LCP. As described above, the Applicant proposes to grade out the dunes in order to put the buildings within the created space, including reducing the height of the foredunes so that the buildings will not be underground but instead will have a

view out towards the ocean. The idea that the LCP's dune and view protection standards are intended to allow for sites to be completely re-contoured in this way cannot be reconciled with the LCP, including the LCP's guiding principle that requires protection of significant landforms, such as the dune landform in this case. The LCP envisions that new development may result in minor landform changes to accommodate the development, but not to the extent proposed here. The Applicant proposes dune excavation to allow for buildings that extend up to four stories and about 40 feet in height (from bottom floors to tops of roofs), and this is accommodated only by dune excavation. If the development were instead developed atop the landform, as is the more typical construction method for development, then there may well be subsurface development below that could meet LCP tests, including because it would not be visible, but when the subsurface development is actually not subsurface development, as is the case here where the space within which the buildings would be placed is largely being created from areas that are currently solid dunes, such a methodology is not consistent with the LCP.[26] In addition, such a methodology puts buildings into areas where dunes had been, increasing visual impacts substantially from seaward locations (i.e. from the beach below and from the Monterey Peninsula - see also findings that follow).

In addition, even if it were appropriate to dig out the site to allow buildings to be placed where solid dunes currently exist, this alone is insufficient to accommodate the proposed number of units and development intensity onto the constrained site consistent with LCP visual resource policies that protect views from Highway One. For example, buildings M1, M8, S5 and S6 (shown in **Exhibit 3**) are within protected view corridors, but are too tall to allow views over the development consistent with the LCP, as demonstrated in the finding below.

LUP Policy 5.3.3.b prohibits development that would intrude upon, or block, an unobstructed view of more than one-third of the lineal distance across the Bay as measured between the Highway One right-of-way and the landward edge of the Coast Guard Breakwater in Monterey The Applicant provided an analysis of the project's visual impacts from each of the three view corridors shown in Figure 9, but used a different test for establishing compliance with the "one-third lineal distance" requirement than that specified in the LCP. The Applicant's analysis involves an estimate of the amount of visible development within a vertical space between the Highway One elevation and finished floor elevation for building elements as viewed above the bluff edge. The Applicant contends that if less than one-third of the "view" within that vertical space would be blocked by the proposed development, then public views would be preserved consistent with the LUP's "views over development" policy (see **Exhibit 4** for the Applicant's visual analysis). A review of the Applicant's visual analysis showed that in two of the three instances, less than one-third of the "view" within that vertical space would be blocked by the proposed development.

The Applicant suggests that the analysis is sufficient to establish that no more than one-third of the lineal distance between Highway One and the Coast Guard Station will be blocked by the proposed development, consistent with LUP Policy 5.3.3(b)'s "one-third lineal distance" requirement. Using the methodology specified in the LUP, however, this statement does not

[26] Note: Applying the Applicant's methodology to a project atop a level 50-foot tall bluff-top with a 20-foot maximum building height limit is analogous to allowing an applicant in the bluff-top case to excavate the top 20 feet of bluff (extending back from the bluff-top edge) and to construct a 40-foot tall building in the void created to "meet" the height limit and address visual issues.

appear to be true. First, the LUP standard is a precise measurement between two points: one-third the distance between Highway One and the Coast Guard Station in Monterey. The analysis provided by the Applicant does not measure the distance across the Bay. Second, the visual analysis provided by the Applicant measures the amount of view blockage in the vertical space above the bluff edge. While this can provide some additional context regarding view blockage, it does not assure that a view of two-thirds of the distance across the Bay will be preserved as required by the LUP. The horizontal visual perspective changes the farther out into the distance away one is looking. Thus, even though it may be possible that no more than one-third of the vertical view is obstructed at the bluff edge, this does not ensure that no more than one-third of the overall view, including the more distant views (e.g., of the Monterey Bay or the Monterey Peninsula) are obstructed. The fact is that the one-third view disruption at the bluff edge will result in greater than a one-third visual disruption of these more distant LCP-protected views. Thirdly, as noted above, only two of the three view sections evaluated passed the "one-third lineal distance" test even using the Applicant's methodology. The third and final view section, View C, exhibited greater than one-third view blockage within the vertical view space even as measured by the Applicant at the bluff edge. In addition, view corridors are identified by the LCP to be "designated in general locations" on Figure 9 (LUP Section 5.2.1), and the actual view on the ground is even broader than as mapped on the figure, and thus impacts in this regard to protected views are only exacerbated. Thus, the Applicant's visual analysis does not demonstrate compliance with LUP Section 5.3.3.b, and overall the project is inconsistent with this LUP section.

Building Heights

The proposed development also fails to comply with LCP height limits for development adjacent to Highway One. LUP Policy 6.4.5.c and Implementation Plan Section 3.2 limit development within 100 feet of the Highway One right-of-way to minimize adverse visual impacts. This is achieved by limiting building heights to no more than 25 feet in this protected area. This standard applies to development all along the entire Highway One frontage including areas outside of the LUP-identified view corridors. However, several buildings shown on the project plans (i.e., buildings S-4, M-6, M-7 and M-8) are designed at three and four stories in height (i.e., 30 to 40 feet in height), exceeding the 25-foot height limit (see **Exhibit 3**).[27]

Key Coastal Overview

LUP Policies 5.2.2 and 5.3.2 require the protection and enhancement of visual access, views, and scenic areas, including via the provision of view corridors, vista points, dune restoration areas and other measures as identified in Figure 9 of the LUP. In particular, Figure 9 identifies the southbound Highway One view where the Fremont Street on-ramp merges onto the highway and the roadway bends slightly to the south as a "Key Coastal Overview." This is the point where southbound motorists obtain the first full view of the Sand City shoreline, with Monterey Bay, and the Monterey Peninsula in the distance. The entire shoreline from Sand City all the way to Point Pinos in Pacific Grove is visible in this view. This is probably the finest coastal and

[27] The LCP development standards are explicit in that general building heights are measured from existing grade. The same is not true for development height limits along the Highway One right-of-way. IP Policy 3.2 states that "All development within 100 feet of the highway right-of-way … shall be designed to minimize significant adverse visual impacts and shall be limited to 25 feet in height.

shoreline view attainable from southbound Highway One in the Sand City area, and it is thus called out in LUP Figure 9 as one of the three "Key Coastal Views" in the entire City.

The proposed development would introduce large-scale urban development within this view, including buildings, roads, vehicles, and parking lots. Although the LCP allows views over development in much of the project site, and a number of these developments would be situated below the grade of the highway, reducing their impact, some of the proposed development would block views, inconsistent with the LCP. More significantly, however, the Sand Dunes Drive extension, which includes a roadway turnabout and a public parking lot extending out onto the bluff-top, is proposed at the northern end of the development site, which is only slightly below the grade of Highway One. The proposed 44-space public parking area would be located directly within the identified "Key Coastal Overview," overlooking the shoreline. Currently, this portion of the project site is unimproved and contains only modest public access amenities (i.e., picnic tables, benches, etc.). The proposed Sand Dunes Drive road extension, turnabout area, parking spaces and associated vehicles would be highly visible in this "Key Coastal Overview" and would represent a significant adverse impact on visual access, public views, and the scenic character of the dune/shoreline landscape. Although the LCP requires any proposed development on this site to include public access, including public parking, these parking areas must be designed to soften their visual impact in the viewshed. One way to do that is to choose an appropriate site for such amenities that will reduce their visual impact. In this case, there are more suitable locations to site these features including areas where the vehicles could be better screened from public views. For example, areas along the proposed Sand Dunes Drive extension, which would be located below the existing grade of Highway One. For these reasons, the proposed project is inconsistent with LUP policies 5.2.2 and 5.3.2 and Figure 9 regarding the protection of this "Key Coastal Overview."

Monterey Bay Sanctuary Scenic Trail

In terms of impacts on views from the Monterey Bay Sanctuary Scenic Trail (Scenic Trail), such impacts will be similar to those from Highway One, but to a greater degree. This is because the elevation of the Scenic Trail is lower than Highway One and, when traversing on the Scenic Trail directly along the frontage of the project site, the proposed development will mostly block shoreline and dune views as seen from the Scenic Trail. The proposed project would in essence redefine the existing views from the Scenic Trail segment north of Playa Avenue from the current undeveloped dune landscape to a substantially more urban landscape due to the buildings and parking areas that would be constructed in foreground, with the Sand Dunes Drive extension flanking the project site's eastern edge. South of Playa Avenue, the project proposes to extend/relocate the Scenic Trail to a new location west of Highway One (i.e. the Scenic Trail would be sandwiched between the Sand Dune Drive extension and the proposed resort buildings), and the same would apply to this new portion of the Scenic Trail.

LUP Policy 5.3.13 contemplates the relocation of the Scenic Trail within the vicinity of the planned Sand Dunes Drive extension right-of-way as a means to provide additional public views of the dune environment and Monterey Bay, while recognizing that some of these views may ultimately be interrupted by future development. However, the proposed siting and design of the resort development would substantially degrade the views and experience of the existing Scenic Trail segment located north of Playa Avenue. Over two-thirds of existing views of the shoreline in this area would be obstructed and/or completely blocked. The proposed new trail segment

south of Playa Avenue, which would provide a link in the California Coastal Trail (CCT), further falls short of statewide objectives for completing the Scenic Trail and the CCT.[28] Such objectives include siting and design considerations to locate the trail as far as possible from vehicles, roads, and urban development, and as close as possible to the sights, sounds, and scent of the ocean. One hundred percent of the views from the Scenic Trail segment located south of Playa Avenue would be blocked by the proposed development. Thus, although the LCP recognizes that there will be some development between the Scenic Trail and the ocean, the proposed project blocks all of the ocean view from the portion of the Scenic Trail located south of Playa Avenue, and blocks two-thirds of the ocean view from the portion of the Scenic Trail located north of Playa Avenue. This is not consistent with Policy 5.3.13, which recognizes that there will be some view encroachment but nevertheless states that the bike trail connection will provide views of the dune environment and Monterey Bay. In order for the project to be consistent with the LCP, it must strike a better balance between view encroachments from the development and protection of views of the dune environment and Monterey Bay.

Additionally, both of the trail segments (i.e., north and south of Playa Avenue) are proposed and designed to have minimal or no separation from the proposed Sand Dune Drive extension. The Scenic Trail at this location currently meanders through the dune landscape but would be "hemmed-in" between the roadway extension east of the path and the resort development west or seaward of the path. Thus, the proposed development would for this additional reason significantly degrade the views from this important CCT recreational trail. Accordingly, the proposed project cannot be found consistent with the LUP's scenic viewshed policies, including LUP Policies 5.3.1 and 5.3.2, nor can the project be found consistent with LUP Policy 5.3.13.

Ingress and Egress

To protect visual resources, LUP Policy 5.3.4.k encourages the use of single drives for ingress and egress, and discourages multiple drives. The proposed development does not minimize or consolidate ingress and egress points to the new development as recommended by LUP Policy 5.3.4.k. There are at least three entry points along the proposed Sand Dunes Drive extension. Each point of entry introduces additional development, disturbance of the dunes, and visual clutter into the viewshed. In addition to degrading the visual experience, the unnecessary entry points may create user conflicts between Scenic Trail users and vehicles entering or exiting the resort where there previously were none. Thus, the proposed project is inconsistent with LUP Policy 5.3.4.k.

Eolian Dunes Preserve

LUP Policy 5.3.1 provides general protection for views of the Sand City coastal zone. It requires that they be protected and enhanced through regulation of siting, design and landscaping of new development. This policy protects visual resources from vantages other than Highway One. With respect to views of the project site from the adjacent Eolian Dunes Preserve, the proposed road and buildings would be located prominently in the foreground of the southbound view of and across the site from the Preserve's existing blufftop access trails. The project will appear as a very large cluster of buildings fronted by a parking lot in this view. Should additional trails and amenities be developed in this area, these too would be impacted in the same manner. This

[28] See "Completing the California Coastal" prepared by the California Coastal Conservancy in cooperation with the California Coastal Commission and the California Department of State Parks, 2003.

protected Preserve, and its value as a recreational area encompassing the dunes, would thus be significantly adversely affected. The development would be in stark contrast to the existing open space dune aesthetic, despite the proposed native landscaping. The reality is that there would be a series of multi-storied buildings and significant related development directly in the middle of this view, detracting from the Preserve's recreational experience and reducing its public recreational utility otherwise. Although the LCP does allow development on the proposed site, it must be sited, designed and landscaped to protect visual resources, and as currently designed it does not meet this requirement.

Views from the Beach

Similarly, LUP Policy 5.3.1 protects views from the beach area located adjacent to and just upcoast and downcoast from the proposed project site, which would be significantly impacted by the proposed development. In place of a rolling dune landform, the foredune would be backed by a series of large building clusters extending up to elevations of approximately 80 feet in places. Currently, the view from the beach fronting the McDonald and Granite sites is a mix of natural and man-made features, including a modest 30 foot high bluff, dunes extending away from the ocean in the background, and remnant tailings and debris from past activities at the site. The tailings and the remnant rock and debris at the toe of the bluffs are proposed for removal as part of the project. The new view would be of a much lower dune feature with a large scale resort behind it (see elevations in **Exhibit 3**).

The view from the beach fronting the Sterling site is one of a modest bluff face with unpermitted concrete, rock, asphalt and rubble along the toe (see photos in **Exhibit 2**). Further in the background, the view of the Sterling site is highly degraded given its use as a construction and materials storage and staging location. Nevertheless, the site is mainly used for stockpiling sand and rock. There are no structures. The new view from the beach would be of a multi-story resort complex. The proposed development would introduce development at urban densities where there currently is none, eliminating from the background any evidence of the back-dune and forever altering the views from the beach. Again, while these sites are designated for visitor-serving uses, and the LCP allows development on them, such uses must still be sited and designed to blend in with the environment and protect visual resources. As currently proposed, the development is of such a scale and intensity that it is inconsistent with LUP Policy 5.3.1.

All of these beach view impacts are exacerbated by the proposed massive grading program associated with the site and particularly associated with excavating and grading down the height of the foredunes and dune bluff areas. Instead of a bluff edge that varies up to as high as 50 feet above the beach, these bluffs would be taken down to a uniform 30 feet above mean sea level (so that proposed resort development would have better views), leading to even worse beach view impacts than if the landform were not excessively graded and instead was left largely intact. Again, the proposed project is inconsistent with the LCP in this respect, including with LUP Policy 5.3.1, and also the guiding LCP visual resource principles.

Views from Across Monterey Bay

LCP Policy 5.3.1 also protects views of the site as seen from across Monterey Bay. The view from across the Bay on the Monterey Peninsula would be impacted in a manner similar to the lateral beach access viewshed, albeit at greater distance and varying degrees, depending on the view angle. The proposed buildings would be highly visible from a number of vantage points in

the City of Monterey, including Cannery Row. The existing impacts of shoreline development located in this viewshed and downcoast of the site provide a good reference point and barometer for assessing view impacts. Similar in terms of location in this view are the Best Western Beach Resort hotel and the Ocean Harbor House condominiums located downcoast of the project site. These facilities are both located directly on the shoreline, and although somewhat integrated into the surrounding built environment from this vantage, they appear overly large and massive in relation to the immediate shoreline view. As indicated before, the project site is located within the currently undeveloped dune shoreline extending upcoast through Fort Ord Dunes State Park and beyond, and thus the degree to which the proposed project can "integrate" with this existing environment is limited. Although the proposed development would integrate to a certain degree into the viewshed with respect to development located outside of the coastal zone and above the site in this view, it would serve to connect that urban development visually to the shoreline, and it would remove the swath of dune in this view that currently helps soften the visual impact of this existing built environment.[29] In its place, it would introduce the large buildings previously described. From across the Bay, there would be little that could be done to disguise the development, and the buildings would appear as a very large complex in the dunes. Such a large complex would significantly alter the view from across the Bay. The project must instead be sited and designed to better protect Sand City's visual resources.

F. Scenic and Visual Resource Conclusion

The project site is part of a significant public viewshed dominated by a relatively undeveloped dune and beach environment. The Applicant proposes to completely alter the dune landform to accommodate the proposed development, rather than designing the development to integrate into the existing environment. In addition, the proposed roads, structures, and related development themselves also block significant public views, and significantly impair these and other views otherwise, transforming the existing open space dune aesthetic and character into a substantially built urban environment. Although the proposed project attempts to take advantage of existing topography to screen the development, and visitor-serving development is allowed in this location, the current project is proposed on such a size and scale that it cannot be found consistent with the LCP's visual resource protection policies.

Specifically, with respect to all the specific views discussed above (as distinct from but related to view impacts caused by the proposed grading also discussed above), the proposed project has not been designed or sited to protect visual resources, including existing view corridors. Although the LCP's visual resource policies contemplate development on this site, the currently proposed project does not adequately preserve views protected under the LCP or soften the visual impacts of this development, as required by the LCP. In its current configuration the project cannot therefore be found consistent with LUP Policies 3.3.1, 5.3.1, 5.3.2, 5.3.3, 5.3.4a, 5.3.4.k, 5.3.6, 5.3.9, 5.3.10, 5.3.13, and 6.4.5, LUP Section 5.2.2, and IP Sections 2.2 and 3.2. In addition, the proposed roads, buildings, and related development would block public views and otherwise intrude upon the public viewshed to such a significant degree that conditions are neither available nor appropriate to adequately resolve the policy inconsistencies related to these proposed developments at this time. A significantly redesigned project could address these LCP

[29] The same is true for the resort development in the dunes approved by the Commission in 2014 upcoast of this site and downcoast of Fort Ord Dunes State Park.

deficiencies, and Commission staff is willing to work with the Applicant on re-designing the project to meet LCP visual resource protection requirements.

In short, the proposed project would result in significant adverse public view impacts. The project has not minimized the loss of visual resources, assured visual compatibility with the site or surrounding area, protected existing view corridors, or, in general, sited and designed the proposed development in such a way as to protect the significant and important public viewsheds associated with the site. As a result, the proposed project cannot be found consistent with the LCP's visual resource policies.

The Commission therefore finds the proposed project inconsistent with the LCP's visual resource policies and denies the CDP on this basis.

4. Natural Resources

A. Applicable Policies

ESHA

The certified Sand City LCP states that there are no Environmentally Sensitive Habitat Areas (ESHA) west of Highway One – an area that includes the project site. Because of this, the LCP's ESHA policies do not apply to the proposed project, so the Commission must apply only those other LCP policies and ordinances that specifically address the protection of dune landforms and natural resource areas that do not constitute ESHA under the City's LCP. This includes requirements to implement dune stabilization, restoration, and a habitat protection plan for a specific dune landform mapped on the project site. The LCP also requires that any development be consistent with the protection of natural resources on the site.

Protection of Natural Dune Resources and Landforms

The LCP contains various development standards to ensure the permanent preservation and maintenance of certain identified sand dune areas, including a significant sand dune landform on the project site. LUP Policy 4.3.20 requires that the dune landform on the project site be kept in open space as an area suitable for dune habitat restoration; grading is prohibited in this area except in conjunction with habitat restoration:

> ***LUP Policy 4.3.20*** *Designate areas especially suitable for dune habitat restoration on the Coastal Resources Map (Figure 7). These include: …*
>
> *e) three areas west of the freeway north of Bay Avenue designated for stabilization/restoration as part of future development.*
>
> *Require these areas to be maintained in open space, and prohibit grading except in conjunction with an approved habitat restoration activity,…. Permit these areas to be used for restoration or enhancement of native dune plant habitats, establishment of new habitat for rare or endangered species, and in conjunction with approved development for off-site habitat mitigation.*

Figure 7 (see **Exhibit 5**), referenced in LUP Policy 4.3.20, shows the mapped dune landform on

the project site. Figure 7 indicates that this area is designated for "dune stabilization/restoration" within future developments. As discussed in the visual resource finding, this dune area is also identified on Visual Resources Figure 9 as a "dune preservation, stabilization and restoration area" (see **Exhibit 5**). LUP Policies 4.3.19 and 4.3.18a specify the policy standards that must be applied to the mapped dune feature on the project site:

LUP Policy 4.3.19 *Require implementation of dune stabilization and/or restoration Programs as a part of new developments west of Highway One, in areas shown on Figure 7. Requirements for these programs shall include:*

a) a professional survey and habitat protection plan including relevant items set forth in Policy 4.3.18a;

b) identification of any grading proposed for recontouring and/or dune stabilization;

c) maximum use of native plant materials, including rare and endangered species;

d) a maintenance program which includes:

1) initiation of restoration activities prior to occupancy of new developments;

2) completion of restoration activities within a five-year period, during which the owner, developer, homeowners association, an assessment district or other appropriate management agency accepts responsibility for the restoration activity;

3) permanent preservation and maintenance of the restored habitat by integration with a development's general landscape program, dedication to a public agency, or other method; and

4) effective restrictions for prohibiting vehicular access and managing pedestrian access to and through such areas.

…

h) Native landscape planting and dune stabilization techniques, as recommended in the certified Environmental Impact Report for the regional bike path link (State Clearinghouse Number 93053047). It is recognized that these added native landscape and dune stabilization areas related to the bike path project may be disturbed by future development. However, they shall be protected within the terms of the required easements for regional bike path construction. Any loss of such native plant landscaping on these dune areas shall be offset with the preservation or restoration (revegetation with native plants) of an equivalent dune area not presently restored or preserved, in accordance with the policies of this Local Coastal Program.

LUP Policy 4.3.18.a *Prior to any development or specific plan approval which affects habitat areas identified on Figure 7, a qualified professional botanist shall prepare a plant survey and plan for the affected area that includes:*

1) *Description of type and location of existing native and other species;*

2) *Protection goals consistent with Policy 4.3.20;*

3) *In habitat preservation areas: methods for controlling public access and eliminating invasive non-native species (ice plant);*

4) *In habitat enhancement and consolidation areas: irrigation, fertilization and long-term maintenance requirements, and methods of establishing new native plants (e.g., seeding, transplanting) and eliminating ice plant;*

5) *Mitigation measures for adverse impacts, such as loss of transplants to shock; and*

6) *A schedule setting forth time requirements for plant establishment, dune stabilization, access controls, etc.;*

LUP Figure 7: Coastal Resources (see Exhibit 5)

These LUP requirements are implemented through various provisions of the certified Implementation Plan (IP). First, the IP calls for the "protection and preservation . . . of dune stabilization/restoration areas required as a part of new development" (IP, p. 19 – see **Exhibit 5**). The underlying implementation mechanism for this requirement is the "Habitat Restoration Overlay District" that corresponds to the mapped large dune landform on the project site (see IP Figure 4 in **Exhibit 5**). The requirements of this overlay district are as follows:

Purpose.

To provide areas suitable for dune restoration, relocation, and/or stabilization as part of future developments as designated in the Local Coastal Land Use Plan.

Permitted uses.

(a) Restoration or enhancement of native dune plant habitats or establishment of new habitat for rare and endangered species;

(b) Grading and other activities necessary to implement a habitat restoration activity;

(c) Native plant relocation as established in the Local Coastal Land Use Plan.

Only the above permitted uses are allowed; no other permitted uses of the underlying district are allowed within this overlay.

Minimum requirements.

(a) A biological field survey and habitat protection plan is required to be prepared according to standards established in the Local Coastal Land Use Plan. If the plan includes habitat relocation or off-site restoration activities, it shall be forwarded to the Department of Fish and Game for review and approval. Plans involving rare or endangered species should also be forwarded to the U.S. Fish and Wildlife Service for

consultation.

(b) Permanent protection shall be ensured for areas designated as habitat preserves as determined by the required field survey and habitat management plan through easements or dedications to public agencies to be reviewed and approved by the City Attorney and/or the Executive Director of the Coastal Commission pursuant to CZ "Review of legal documents" provisions.

Significantly, the permitted uses in this overlay district are strictly limited to restoration or enhancement of dune habitat, establishment of new habitat for rare and endangered species, grading and other activities necessary to implement habitat restoration, and native plant relocation.

This overlay district also requires that a biological field survey and habitat protection plan be prepared for the area to implement LUP Policy 4.3.19. In addition, it requires the permanent protection of the area through easements or dedications, consistent with the LUP policy 4.3.20 open space requirement. And to implement LUP policies 4.3.19 and 4.3.18a, the IP includes various specific requirements for the area and the required survey and habitat protection plan:

For dune stabilization and/or restoration programs as a part of new developments, the following requirements shall apply:

a) A biological field survey and habitat protection plan including relevant items set forth above;

b) Identification of any grading proposed for recontouring and/or dune stabilization;

c) Maximum use of native plant materials, including rare and endangered species;

d) A maintenance program which includes:

1) initiation of restoration activities prior to occupancy of new developments;

2) completion of restoration activities within a five year period, during, which the owner, developer, homeowners association, an assessment district or other appropriate management agency accepts responsibility for the restoration activity;

3) permanent preservation and maintenance of the restored habitat by integration with a development's general landscape maintenance program, dedication to a public agency, or other method.

4) effective restrictions for prohibiting vehicular access and managing pedestrian access to and through such areas.

Appendix C lists some native plants appropriate for landscaping in general, which was prepared by the Monterey peninsula Water Management District, and should be used as general landscaping guidelines. (IP, p. 20)

The IP biological survey and habitat protection plan items referenced in subsection (a) are:

The plant survey and habitat protection plan shall consist of the following components:

a) description of type and location of existing native and other species;

b) protection goals consistent with Policy 4.3.21 of the Land Use Plan;

c) in habitat preservation areas: methods of controlling public access and eliminating invasive non-native species (iceplant);

d) in habitat enhancement and consolidation areas: irrigation, fertilization, and long term maintenance requirements, and methods of establishing new native plants (e.g., seeding, transplanting) and eliminating iceplant;

e) mitigation measures for adverse impacts, such as loss of transplants to shock;

f) schedule setting forth time requirements for plant establishment, dune stabilization, access controls, etc.;

g) All habitat protection plans shall include the maximum feasible planting or protection of dune buckwheat (Eriogonum parvifolium and E. latifolium) as a food source for the endangered Smith's blue butterfly (Shijimiaeoides enoptes smithi);

h) An implementation and management component which provides for:

1) fencing, signing, or other appropriate access control measures to be installed as a condition of development (or as a condition of permits for restoration activities if no other development is proposed);

2) responsibility by the developer for habitat installation, maintenance and preservation for at least five years. Permanent maintenance shall also be provided for, with reliance on public and/ or private funding sources and ownership. Options include:

a. contribution of funds by developments requiring habitat preservation/ enhancement/relocation measures;

b. dedication of restored habitats to a public agency or private conservation organization with habitat management capabilities. (IP p. 19)

Finally, the IP also specifies requirements for habitat protection plans that may involve habitat relocation or off-site restoration:

For habitat relocation or off-site restoration, a field survey and habitat protection plan must be prepared. The protection plan must be reviewed by the California Department of Fish and Game, and must demonstrate:

a) The long term suitability of the restored habitat for these species, including but not limited to wind protection, soil condition, and acre-for-acre replacement of habitat;

b) the management methods needed for installation, nurturing, and permanent protection of the restored habitat including but not limited to the method of establishment (seed, hydro-mulch, transplant), and access restrictions;

c) the requirements for successful establishment of each species in another location, after which removal of the original plants may be possible. (IP p. 20)

Protection of Other Natural Resources

In addition to the specific requirements for the dune landform on the project site, the LCP also requires that new visitor-serving development be consistent with the protection of natural resources. LCP Policy 3.3.1 provides:

Visitor-serving and public recreational uses are given priority west of State Highway One, as designated in the Land Use Plan Map in Section 6.0. Development of these uses shall be consistent with the protection of natural and visual resources.

Similarly, in discussing appropriate development densities for the site, LCP Policy 6.4.1 states in part:

The described [LCP development] densities, both above and below, represent a maximum. 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.

Thus, at a minimum, the proposed development density must adequately address any natural resource constraints on the site, such as the significant identified dune landform called out for restoration, and assure appropriate buffering to protect such natural resources.

Finally, the LUP also contains three specific policies to assure more general protection of the dune environments in Sand City:

LUP Policy 4.3.21*. Enhance coastal plant communities by requiring new developments to utilize appropriate native coastal plants in landscaping plans that are compatible with existing native species. Prohibit the use of invasive plants in landscaping schemes.*

LUP Policy 4.3.22*. All off-road vehicles shall be prohibited on the dunes, except those necessary for emergency and to support coastal dependent uses and shall be limited to existing paths and stockpiles in order to protect dune vegetation.*

LUP Policy 4.3.23*. Where major access routes are available or desirable through sand dunes to the coast, boardwalks or other appropriate pathways constructed of permeable materials should be provided to protect the vegetation stabilizing the dunes.*

B. Natural Resources Description

Background on the Monterey Bay Dunes System
The Applicant's site is located in the Monterey Bay Dunes Complex (also known as the Seaside dune system). Geologists (Cooper et al) describe the dune system as having three main components, each layered upon one another with the oldest layers on the bottom: youngest are the Recent dunes, such as those found around Moss Landing and which are still in the process of building. The most ancient are the pre-Flandrian dunes, mostly located inland from Highway One outside the coastal zone.

The highest and most dramatic component of the system is the strand of Flandrian-era dunes, named for an Ice Age event known as the Flandrian Transgression. These high dunes run as a narrow but continuous formation along the shoreline of Monterey Bay, beginning at the Pajaro River and extending approximately 20 miles to Monterey Harbor. The dune system traverses a variety of governmental jurisdictions: Monterey County, the City of Marina, California State Parks, City of Sand City, Monterey Peninsula Regional Park District, City of Seaside, the City of Monterey and the U.S. Naval Postgraduate School. The coastal zone boundary through this region primarily follows Highway One which, for the most part, is the first public road paralleling the sea. In Sand City the coastal zone includes all areas seaward of Highway One and extends 200 feet inland of the east side of the state highway right-of-way.[30] The remnant pre-Flandrian dunes inland of Highway One in the cities of Seaside and Sand City have suffered severe impacts and are mostly already developed. While the high Flandrian dunes are also impacted, at present several largely undeveloped, albeit degraded, sections remain along the shoreline (including the project site).

The coastal dunes at the project site are an extremely limited natural resource of statewide significance. Oceanfront dunes provide unique habitat values. Throughout its history, the Commission has placed high priority on the protection and preservation of dune systems. On the Central coast, this includes the Nipomo Dunes, Asilomar Dunes, and the Del Monte Dunes (also located within the Monterey Bay Dunes complex). At 40 square miles, the Monterey Bay dune complex is one of the largest remaining coastal dune fields in all of California. However, less than half of the dune field has survived urbanization, conversion to military or agricultural uses, sand mining, and shoreline erosion. According to the U.S. Fish and Wildlife Service's (USFWS's) Technical Review Draft for the Smith's Blue Butterfly Recovery Plan:

More than 50 percent of the Seaside [Monterey Bay] dune system has been destroyed or altered significantly by sand mining, urbanization, military activities, construction, and the introduction of two aggressive exotic plants, European marram grass (Ammophila arenaria), and iceplant (Mesembryanthemum spp.). Even considering this, these dunes are the largest and best preserved of any of the central California dune systems except for the Oso Flaco Dunes near San Luis Obispo. The dune system at San Francisco has

[30] The coastal zone boundary in Sand City also includes the former Southern Pacific Railroad right-of-way and 100 feet on the west side of that right-of-way.

been almost totally destroyed (Powell, 1981).

The significance of the natural resource values of the Monterey Bay Dunes complex, particularly the Flandrian component along the shoreline, is well recognized, as is the potential to restore and enhance these values in degraded areas (see more detail below). This is summarized in the Sand City LCP:

> *One of the most distinctive coastal landforms in the Monterey Bay region is that of the Monterey Sand Dune complex, which extends from the Salinas River south to Canyon del Rey. The State and previous Coastal Commission decisions have identified the Monterey Sand Dune complex as one of the largest dune complexes on the west coast, and therefore, as a whole, it is characterized as a unique resource.* (LCP Section 4.2.4)

More generally, the active coastal dune community is considered threatened, having a moderately limited distribution throughout its range, with a limited distribution in California.[31]

Several major dune restoration programs are underway in the vicinity of Sand City. A significant restoration effort has taken place immediately north of the proposed project site, on a former dump site that was acquired and remediated by the Monterey Peninsula Regional Park District (i.e., the adjacent Eolian Dunes Preserve area). Further, less than one mile north of the project site, State Parks intends to protect and restore 700 acres of dune habitat on the former Fort Ord property located seaward of Highway One. Other notable restoration areas within the dune system include State Park's restoration efforts at Monterey, Seaside, Marina, and Moss Landing State Beaches, and the Navy's restoration of 44 acres of dunes at the Naval Post Graduate School in the City of Monterey.

One of the more critical functions of the dune system is its role as habitat for a very unique flora and fauna. These are species that are specially adapted to the conditions and opportunities found in the dunes. Dune plants, in particular, play a special role by both stabilizing the dunes from the effects of wind erosion, and hosting rare fauna. However, as the natural dune system has been reduced and fragmented, the risk of extinction has increased for several species. Thus, each new impact within the dunes system has and will continue to contribute to the cumulative decline of these species.

Specifically, several native plants known to occur in the dunes are either already listed, or are on the candidate list for the federal register of endangered and threatened species. These include the Seaside bird's beak (*Cordulanthus rigidus littoralis*), sand gilia (*Gilia tenuiflora arenaria*), Sandmat manzanita (*Arctostaphylus pumila*), Eastwood's ericameria (*Ericameria fasciculata*), coast wallflower (*Erysimum ammophilum*), Menzies' wallflower (*Erysimum menziesii*) and Monterey ceanothus (*Ceanothus rigidus*). The Seaside bird's beak is protected under the California Plant Protection Act of 1977. All seven species are recognized as rare by the California Native Plant Society. The sand gilia is both state-listed and federal-listed. Another sand-stabilizing plant species, the Monterey spineflower (*Chorizanthe pungens var.pungens*), is also found in the Monterey Bay dunes, and has been listed in the Federal Register as a threatened species (USFWS notice of February 14, 1994).

[31] Sawyer, J. O., and T. Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society. Sacramento, California

The USFWS has also listed the Western snowy plover as a threatened species. These birds forage along the shoreline and nest in the foredunes of the Flandrian system. The plovers are known to nest in various areas of the dunes, and have been the focus of significant conservation efforts by the State Department of Parks and Recreation (see below for more detail). Another species of concern existing within the dune system is the Smith's blue butterfly (*Euphilotes enoptes smithi*), a federally protected animal species listed as endangered by the USFWS. Coast buckwheat (*Eriogonum parvifolium* and *E. latifolium*) are the host plants for the Smith's blue butterfly, and occur in clusters that support localized populations of the butterfly. The black legless lizard (*Anniella pulchra nigra*), another native species of the Monterey Bay dunes, has previously been a candidate for federal listing as endangered, and is considered a Species of Concern by the California Department of Fish and Wildlife (CDFW) because of its limited distribution.

The distribution of these dune plants and animals can appear sparse, but over time the entire available dune surface is important to their survival. This is because the Flandrian component of the dunes complex is a dynamic system. The dunes present a rather harsh and difficult growing environment, where the wind keeps shifting the shape of the ground, rainfall rapidly percolates out of reach, and lacking a distinct topsoil horizon, nutrients are quickly exhausted. Thus, a plant like Monterey spineflower may, over a year or two, use up the available moisture and nutrients at a particular site, and by means of wind-blown seed "move" to a neighboring area. In this simplified model, the original site remains a bare sand surface until life's necessities again accumulate at the original site, thereby allowing recolonization and repetition of the cycle. Therefore, the overall growing area ("habitat") needed over the long run is vastly larger than the area occupied by the plants at any one "snapshot" in time.

Natural Dune Resources On and Adjacent to the Project Site
As discussed above, the project site is located within a significant and sensitive ecological system (i.e., the Flandrian component of the Monterey Bay Dunes complex). However, the LCP concludes that no sites seaward of Highway One are ESHA, including this site. This conclusion derives in part from the fact that the project site was substantially degraded by historic sand mining at the time of LCP certification. As summarized in LCP section 4.2.4:

> *Sand City's Coastal Zone has two distinct dune areas: the area west of State Highway One and the area east of State Highway One. An ecological survey performed in Sand City found that, generally, all dune areas have been highly degraded and are in a disturbed state, especially in the area west of State Highway One. As such, the City's dunes are probably the most degraded within the regional Monterey dune complex.*
>
> *The remaining dune areas also comprise a large portion of the City's vacant land. As such, they are left to compete with other land uses and resource demands such as recreation, potential residential/urban development, habitat areas, potential storm protection, and visual resources.*
>
> *The dunes west of State Highway One are in a severely disturbed state. Due to human uses over time, the original dune landform in this area is generally absent. The majority of the dunes are active, characterized by shifting sand. Little plant life has established itself on these dunes, and where there is vegetation, it is dominated by non-native invasive vegetation. The area provides no natural habitats, although some native species*

> *are found. The dunes have other valuable qualities, however, including visual qualities and the potential for wind and, erosion protection when stabilized with vegetation.*
>
> …
>
> *Future development west of Highway One (where no environmentally sensitive habitats exist) should consider dune management programs as part of the development. Future dune management programs can take the form of stabilization and/or restoration. Dune restoration means that the dunes are restored to their native plant condition. This is a long-range, laborious process which generally cannot be applied on a large scale, and requires rigid control of human access in order to be effective. It appears that dune stabilization is a more practical process than dune restoration; however, it involves utilization of exotic species. While stabilization provides an immediate solution to the problems of active sand dunes, it often leads to long-range elimination of native plant communities. …*

Although the LCP recognizes no ESHA west of Highway One, there are important dune landform and natural habitat resources on the project site that must be protected under other LCP policies. First, the project site contains one of the more significant dune landforms of the Monterey Bay Dunes complex, which is specifically mapped by LCP Figure 7 (**Exhibit 5**). As detailed below, specific dune stabilization, restoration, and protection requirements apply to this mapped dune area. Second, the LCP does protect natural resources west of Highway One, and biological evaluations have documented that the project site contains significant natural dune resources, such as Monterey spineflower and habitat for the Smith's Blue butterfly and the western snowy plover. Thus, these natural resources must be protected under the LCP. Finally, the site lies immediately adjacent to the Monterey Peninsula Regional Park District's Eolian Dunes Preserve, which contains significant dune habitat resources as well.

Identified Dune Landforms on the Project Site
The project site contains a significant dune landform that is mapped in LCP Figures 7 and 9 (**Exhibit 5**). Although this dune feature has undoubtedly been altered over time by historic sand mining, it has become an important feature of the historic dune landforms along this stretch of coast. U.S. Geological Survey maps show that there were significant dunes along this stretch coast in the early 1900s, including at the project site.

When the LCP was certified, the Commission recognized the significance of this dune feature on the project site, along with four other dune recognized dune features within the dunes overall in the City. As described above, the purpose of mapping the dune features was to protect them for both habitat restoration purposes and visual/landform protection. In protecting these "substantial dune areas" the Commission found:

> *[d]une stabilization and restoration areas offer a high level of public benefit through landform protection, habitat enhancement, and visual amenities*. (LUP Findings, 11/19/82, p. 8)

A review of current aerial photographs indicates the large dune form on the project site is essentially in the same location as was generally mapped in the LCP in the early 1980s, though

the precise contours have undoubtedly changed due to changing environmental conditions over time, and also because sand mining on the site ceased in 1986. With respect to vegetation, recent surveys conducted by the Applicant indicate that the dune feature is comprised of substantial un-vegetated sand areas, pioneer dune vegetation[32] and iceplant, and an area of stabilized dunes containing seacliff and coast buckwheat plants (see **Exhibit 8**).

Other Natural Dune Resources on the Project Site
At 26.46 acres, the project site is one of the largest on the Sand City shoreline. As summarized above, the dune system on the site has been substantially degraded by sand mining and, in the case of the 7.9-acre Sterling property, by continued light construction and staging operations. Nonetheless, biological evaluations conducted in 2006 and 2007 documented significant natural dune resource values on the project site, including evidence of self-restoration taking place on the site, leading to a more natural dune environment. Despite its past history of sand mining, this large site has few existing roads or paths, no buildings or other structures, and the majority of the site is comprised of a sandy surface, which provides the potential for various natural dune habitat resources to reestablish themselves over time.[33] These sandy surfaces provide habitat that may be recolonized by the dune dwellers that are found in the Flandrian-era dunes.

The EIR and the Habitat Protection Plan (HPP) prepared for this site by the Applicant document various dune plant and animal species on the site, including some recognized sensitive species. Figure 4 of the HPP prepared by Zander Associates (August 2007 and revised in February 2009) identifies the then current location and densities of plant species occupying the site. This vegetation mapping from 2006 and 2007 characterizes the approximate 23.5 acres above mean high tide as including 7.1 acres of bare sand (including beach area), 9.1 acres of pioneer dune vegetation and iceplant, 6.8 acres of developed/disturbed area, and 0.5 acres of stabilized and restored dunes (see **Exhibit 11**). Within the area of pioneer dune vegetation and iceplant, surveys documented several small occurrences of Monterey spineflower. Similarly, a small area containing coast and seacliff buckwheat plants was observed within the stabilized dune area. The Applicant's HPP further documents the history and presence of two sensitive animal species, along with the spineflower (detailed below). The HPP summarizes:

> *Black legless lizard has not been observed on the site but has been observed in the dune forms directly south and east of the site and is considered highly likely to occur. 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.*

This general observation about the presence of sensitive natural resources on the site is also supported by the USFWS's 2013 correspondence on the site:

> *The proposed project area consists of 0.21 acres of occupied Smith's blue butterfly habitat and this habitat may serve as a link that allows dispersal of Smith's blue butterfly populations from the north, east, and south. …The project is proposed for construction*

[32] Pioneer species are early colonizers of unoccupied habitats and often are well-adapted to harsh conditions. They generally stabilize the substrate and may alter its physical and chemical characteristics. In time, these early colonizers may be excluded by better competitors for space.

[33] As noted, the Sterling site is currently used for construction staging/storage and exhibits the characteristics of these operations. In addition, the Monterey Bay Sanctuary Scenic Trail traverses the northern portion of the project site.

> *within Western snowy plover nesting habitat. Nests of this species were observed within the project area from 1989 to 1998. …The project area includes 37 square feet of occupied Monterey spineflower habitat, all of which would be removed … (*see **Exhibit 8***)*

The EIR and HPP also describe the various natural habitat resources of the site that have not been specifically listed as sensitive by the state or federal government. This includes the presence of beach and coastal strand species, such as sea rocket, pink sand verbena, and beach bur; habitat for feeding and nesting of marine and shore birds, and resting/preening areas for gulls on the beach; and suitable nesting habitat for burrowing owls (EIR pp. 129 and 134 – 135).

Snowy Plover

One of the most important natural resource values provided by the site is the documented and potential nesting area it provides for the federally threatened Western snowy plover. The project site is located within the "critical habitat area" for this species as designated by the USFWS, and has provided habitat for the species over the years. Historic use of the project site by snowy plover was documented in the August 2007 HPP prepared for the Applicant by Zander Associates as follows:

> *The PRBO* [Point Reyes Bird Observatory] *staff and volunteers have been monitoring the plover population in Sand City and Monterey area since 1984. Within the project area, PRBO reported repeated occurrences of Western snowy plover nests during annual surveys conducted from 1989 to 1998, primarily within the interior dunes of the site (Figure 4).*

As shown in Figure 4 of the HPP, over the course of the ten-year period (1989 through 1998), 13 snowy plover nests were recorded on the Collection Resort project site. These nests appear to have been dispersed throughout the interior of the McDonald site (see **Exhibit 8**). Information on hatch or fledge rates was not provided in the HPP, but the importance of the project site to nesting snowy plovers and the continuance of this threatened species is evident.

According to the Applicant's biologist, snowy plover nesting activity in Sand City was recorded until 2000 and then no nests were recorded again until 2008. With respect to Sand City, 2008 field surveys documented a return of nesting snowy plovers:

> *One was located approximately 0.42 miles 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 by approximately 0.3, 0.39, and 0.45 miles, 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 fledgling age… (HPP p.8)*

Smith's Blue Butterfly

The project site also currently provides habitat for Smith's blue butterfly, listed by the federal government as endangered. The habitat is located along the highway right-of-way in the

southeastern portion of the site. The current butterfly habitat is directly related to the existence of approximately 187 coast buckwheat plants in this area, which is the host plant for this butterfly species. Previous surveys conducted in 1987, 1988, and in 1991 did not identify buckwheat plants on lands within the project area. Since that time, however, dune stabilization efforts have occurred in the project area and the site was planted with native dune species including seacliff and coast buckwheat plants. Zander Associates reports on page 9 of the HPP:

> *During our 2006 site visit, the buckwheat plants appeared to be well established and were in full flower. In June of 2007, the buckwheat area was mapped with a research grade Trimble GPS unit and was found to occupy 0.21 acres and consists of 187 individual buckwheat plants.*

The HPP referenced a 2007 survey, conducted by Dr. Richard Arnold, for the presence of Smith's blue butterfly within the dune stabilized area, which found that the species was present on the site. Dr. Arnold further observed that there are known established populations north and east of the project site that could contribute to an increase in the population on the project site. Finally, he indicates that the Smith's blue butterfly habitat on the project site may serve as a habitat link that allows for the dispersal of Smith's blue butterfly populations from the north and east, and possibly from the south.

Monterey Spineflower

The Monterey spineflower, listed by the federal government as threatened, was first identified on the project site during site surveys conducted in 2006 by the Applicant's biologist (Zander Associates):

> *As a result of our directed surveys in 2006 and 2007, Monterey spineflower was found to occupy a total area of about 37 square feet. The species was located in the middle of a sandy trail within sparsely vegetated degraded dune habitat that is disturbed by frequent pedestrian use (see Figure 4). While this species is known to occur on adjacent lands to the north, south, and east, no other spineflower occurrences were found in the project area. However, Monterey spineflower is a colonizer of disturbed sites and the size and location of a population can fluctuate from year to year.*

This ongoing use of the site by the Monterey spineflower provides an illustration of the self-restoration of the site that is taking place.

Natural Resource Values of Degraded Dune Areas

A significant portion (7.1 acres) of the site, including the beach area, is bare sand. Besides providing nesting habitat for the Western snowy plover, bare sand areas are potentially restorable dune habitat areas that contribute to the long-term survival of the rare plant and animal species unique to the Monterey Dune ecosystem. Similarly, the approximately 9.1 acres of the site that is currently dominated by non-native iceplant and pioneer dune vegetation remains a dune resource, albeit degraded, and also represents restorable dune habitat. Removal of the iceplant, which can occur naturally (via heavy frost or disease) or by human intervention, would enhance the native dune resources currently provided by the site, and assist in the recovery of this resource throughout the dune system. Recovery and expansion of native dune habitats on the project site is facilitated by the absence of European beach grass, a non-native invasive species

that has degraded native habitats elsewhere in the Monterey Bay Dunes complex and which is difficult to eradicate.

Adjacent Park Property
The Collection Resort project site shares its boundary to the north with the Monterey Peninsula Regional Park District's (MPRPd) Eolian Dunes Preserve. The 26-acre Preserve includes roughly 1,500 linear feet of shoreline frontage along Monterey Bay and is bordered by private property to the north, Highway One to the east and Monterey Bay to the west. The Preserve is also located in the Monterey Bay Dunes complex and is comprised entirely of coastal sand dunes of the Flandrian variety.

Despite the degradation of natural habitat values that occurred due to previous municipal dump uses at the Preserve, the Preserve has recovered and contains significant habitat areas for sensitive plant and animal species. The MPRPD website indicates that after site remediation in 1996, the entire 26-acre parcel was restored with native coastal dune habitat and improved with the construction of an extension of the Monterey Bay Sanctuary Scenic Trail. The site restoration plan prepared for the Preserve included a plant palette comprised of native plant species such as beach sagewort, mock heather, yellow sand verbena, coast buckwheat, and seacliff buckwheat, the last two being host plants for the federally protected Smith's blue butterfly.

C. Proposed Natural Resources Protection Measures
The Applicant has proposed various measures to protect natural resources on the site and comply with the LCP, including preparing a Habitat Protection Plan. The HPP proposes four management areas for the site: the beach and strand; foredune and plateau; State Route One habitat corridor; and developed areas. As presented in the HPP, measures to protect resources in these areas include: avoidance of certain natural resource areas, including some potential habitat areas for the Western snowy plover and all the currently identified Smith's blue butterfly habitat; dune creation and stabilization; control of exotic species; re-vegetation and habitat enhancement; salvage of plants prior to disturbance of the site and transplantation to restoration areas; pre-construction surveys in developed areas; habitat protection during construction, including use of a biological monitor; post-construction management measures; and permanent protection of restored habitat areas. Overall, the project includes a dune restoration program designed to restore and protect dune habitats on 7.8 acres of the site. A more detailed discussion of these proposed measures is provided below.

D. Consistency Analysis

Protection and Restoration of Designated Dune Landforms
As detailed previously, the project site contains a mapped dune landform that is located within an LCP "Habitat Overlay Protection District," which requires that this dune landform be protected and restored pursuant to the LCP. **Exhibit 9** reproduces LCP Figure 7, referenced in LUP Policy 4.3.20, and shows the mapped dune landform on the project site. Figure 7 indicates that this area is designated for "dune stabilization/restoration" within future developments. As discussed in the visual resource finding, this dune area is also identified on the Visual Resources Figure 9 as a "dune preservation, stabilization and restoration area". This mapped dune is also protected by the IP's corresponding habitat restoration overlay district (**Exhibit 5**). Significantly, the permitted uses in this overlay district are strictly limited to restoration or enhancement of dune habitat, establishment of new habitat for rare and endangered species, grading and other activities

necessary to implement habitat restoration, and native plant relocation.

The intent of the mapped dune feature shown in Figure 7 and described in the previously cited LCP policies is to protect and restore this dune feature consistent with various habitat protection goals. Although the precise edges of this dune feature, as well as its general morphology, have undoubtedly changed somewhat since LCP certification, recent topographic mapping shows that the dune landform is generally in the same location as when it was originally mapped in the LCP. Regardless of its precise location, though, the current development proposal is not consistent with the relevant LCP requirements regarding this dune landform. The Applicant has proposed various measures to restore and protect portions of the dune form. However, the proposed development also encroaches into the area of the dune landform, which specifically is not allowed by LUP Policies 4.3.18a, 4.3.19, and 4.3.20 or in the IP's Habitat Overlay Protection District.

Construction of these facilities will require grading of the protected dune, but the LCP clearly prohibits grading of this area except for habitat restoration purposes. In addition, the LCP requires that this area be kept in open space and does not allow the construction of structures within it. As proposed, the project will result in a permanent net loss of more than 50% of the dune restoration area identified in the LCP. However, the LUP policies mandate that this area be reserved for restoration and enhancement of native dune habitats, which would create new habitat for rare or endangered species. Rather than restoring and stabilizing this dune area and preserving it as open space, however, the project would result in the permanent loss of approximately 50% of it, inconsistent with the LCP. Therefore, the project is inconsistent with LUP policy 4.3.20 and the IP's habitat restoration overlay district.

To the extent that restoration-related grading of the duneform is proposed, it is not clear how the proposed grading results in natural dune restoration. The HPP generally describes the proposed grading as follows:

> *Management Area 3 comprises the portion of the project area between SR-1 and the Sand Dunes Drive extension. It is a thin strip, no more than 80 feet in width at its widest point, that will be re-contoured as part of the project for construction of the road and trail along the eastern property boundary. (HPP, page 17)*

No specific detail was provided by the Applicant regarding the basis for the proposed re-contouring of the mapped dune landform. However, the proposed construction clearly entails significant grading of the dune landform that will substantially change its height and shape. As proposed, the overall height of the dune crest would be lowered and the unique wind-formed contours of the dune feature would be re-contoured into an engineered semi-circular shape (see **Exhibit 3**). As mentioned above, the LCP specifically states that grading of the dune landform's features may only take place for restoration purposes. It is not clear how the proposed grading will result in restoration and protection of the significant dune landform, as it appears that the grading is instead designed to facilitate the proposed location and structural design of the development on the site. The Applicant provides no detailed scientific dune restoration basis to explain the proposed grading in the required restoration area. To meet the intent of the LCP's required restoration of this dune feature, the HPP should more fully evaluate the site and the dune feature with respect to environmental conditions such as wind and dune morphology in

order to establish an appropriate restoration grading plan. Although some grading of the dune feature may be appropriate, the basis of such grading should be to reestablish a more natural dune morphology and habitat regime, and the conditions necessary for maintaining, or providing for, a more natural dune morphology and habitat over time, not to allow over 50% of it to be turned over to resort and related development.

Related to this point, a restoration plan for the mapped dune should also address how adjacent development and other conditions might affect the dune restoration. For example, it may be appropriate to have a buffer or development setback from the restored dune, both to provide better protection of habitat functions, and to minimize interference with wind dynamics and sand movement that work to maintain a more natural dune area over time. As proposed, the project may adversely affect the dune stabilization and habitat restoration area by introducing significant amounts of noise, light, pets, and human activity, unnaturally attracting wildlife that is tolerant of or benefited by urban conditions (i.e., corvids, skunks, non-native ants, etc.), and which may have negative impacts on native communities. It is not clear from the proposed HPP how these potential impacts will be addressed.

In conclusion, as proposed, the project is inconsistent with the requirements of LCP Policy 4.3.20 to protect and restore the mapped dune feature on the site. Although the project does propose to restore a portion of the dune feature, a number of project components are proposed in the area of the dune landform, inconsistent with the LCP. To be approved, a project must keep the entire mapped dune feature in open space, and a dune restoration plan must be developed that addresses both dune morphology and habitat values over time. The plan should evaluate any necessary re-contouring/restoration of dune morphology in order to maintain a more natural dune landform. No grading should occur within the area except for that necessary to support the goals and objectives of the dune restoration plan. The LCP requires permanent maintenance of these areas, so appropriate buffers should also be evaluated to see if they are required as part of the restoration plan to ensure long-term protection and maintenance of these areas. Given the other significant inconsistencies of the project with the LCP, and because the Commission is not in a position to propose the substantial redesign of the project that would be necessary to accomplish these LCP requirements, the project must be denied at this time. Any future project will need to better address this major site constraint.

Protection of Other Natural Resources

As described above, the project site contains a variety of natural dune resources that are provided some measure of protection pursuant to the LCP, including LUP Policy 3.3.1. This policy requires that development of visitor-serving and public recreational uses west of Highway One must be consistent with the protection of natural resources. The Applicant's HPP demonstrates that the site supports various dune plant and animal species, including several sensitive species. As reported in the EIR, project related development will modify nearly the entire 26.45 acre site:

> *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.* (EIR, page 136)

The table below from the EIR summarizes the impacts on the identified major vegetation types on site:

EIR Table 3.7-1: Extent of Vegetation Types to be Affected

Vegetation Type	Total Project Area (Acres)	Estimated Area to be Affected (Acres)
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	0.0
Total	**26.5**	**19.8**

*Includes roughly 3.4-acres of bare sand below the 15-foot contour (i.e., beach).

As summarized in the table, and as indicated by the proposed grading and construction plan for the site, the project will initially impact almost the entire site, including removing most of the native vegetation. The proposed project includes several hundred thousand cubic yards of grading, including a significant portion of the dune restoration area discussed above. As the table indicates, roughly 98% of the site (20.1 acres) that is located above the 15-foot contour (i.e., above the beach) is proposed to be removed or directly affected by grading and construction activities. This includes a significant amount of grading seaward of the proposed development, and the removal of all vegetation on site. As a consequence, all of the foredune vegetation used by nesting shorebirds, including "historic nesting habitat" for the western snowy plover, will be removed. The entire seed bank for native coastal dune plants, including rare and endangered plant species, will be displaced. The areas where Monterey spineflower have recently been seen will be completely removed, as will the roughly 187 individual dune buckwheat plants observed in the stabilized dune area along the eastern boundary and adjacent to the Highway One right-of-way.

Proposed methods of minimizing and mitigating these impacts are included in the Applicant's HPP and the Final EIR. In summary, the graded and re-contoured dune topography outside of the proposed development envelope would be replanted with native dune plant species. Approximately 7.8 acres of the 20.1 acres of the project site above the beach would be re-vegetated/restored as dune habitat, including a portion of the dune stabilization/restoration area on the eastern boundary of the site. Approximately 3.4 acres seaward of the restored area would be placed in a public access easement area; and approximately one acre of landscaping would be installed within the 11.7-acre footprint of the resort development. Other notable proposed project mitigation measures include re-establishment of buckwheat plants within the dune stabilization area and elsewhere, and provision of 192 square feet of Monterey spineflower habitat, also through re-vegetation measures.

The specific provisions of the Applicant's HPP are intended to minimize the impacts of project construction on existing dune habitats and sensitive species, and to facilitate the enhancement of

native dune habitat values on the 7.8 acres of the site outside of the development footprint. A particular emphasis is placed on establishment of habitat that will benefit the rare plants and animals of the Monterey Bay Dunes complex.

The certified LCP requires that development west of Highway One be consistent with the "protection of natural resources" (LUP Policy 3.3.1). The LCP does not define "natural resources" or otherwise provide guidance on what would constitute protection. However, the LCP recognizes that such resources are found west of Highway One, and the Commission finds that there is more than substantial evidence of the presence of such resources on the site, as documented by the number and variety of native and sensitive species or their habitats that were found on site in various environmental surveys performed on the site since LCP certification. This includes the evidence presented in the EIR and the HPP that were prepared by the Applicant.

With respect to the evaluation of the protection of these resources, the Commission recognizes that the typical ESHA protection requirements of Coastal Act 30240 that are embodied in the Sand City LCP (such as the requirement that only "resource-dependent" development be allowed within ESHA and the requirement of no significant disruption) do not apply to the site because the natural resources of the site do not, as a matter of law, constitute ESHA. However, the Commission does find guidance on how to analyze what would constitute adequate "protection" in the requirements of the California Environmental Quality Act (CEQA). Pursuant to Section 13115 of the Coastal Commission's Regulations (CCR), the Commission must consider the de novo portion of an appeal in accordance with the procedures in CCR Sections 13057-13096. CCR Section 13096 requires the Commission to find that the application is consistent with CEQA. In addition, the proposed development requires a planned unit development (PUD) approval, and that approval also requires the project to be consistent with CEQA, including appropriate environmental review (IP Section 3.2). The Commission finds, therefore, that it is reasonable to analyze the natural resource protection issue consistent with the manner in which biological and other natural resources are analyzed under CEQA.

Section 21002 of CEQA (Cal. Public Resources Code §21002) prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse effect which the activity may have on the environment. The definition of "feasible" for purposes of CEQA is the same as the Coastal Act definition:

> *"Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.*

As discussed in other findings of this report, development of the project site must address significant resource planning constraints, including the presence of a mandatory dune restoration area, significant geological hazards, and protection of important public views. Together, these constraints require a considerably reduced project footprint, both in surface coverage and physical volume. If such a revised project were pursued, it would also necessarily reduce the direct impacts to natural resources, including impacts to Monterey spineflower habitat and Western snowy plover habitat. However, even if the Commission considers only the natural

resource constraints of the site, including the protected dune landform, there appear to be feasible alternatives to develop the project site at a reduced scale in order to better avoid and mitigate impacts to the site's natural resources.

Grading of the Site is Excessive
The EIR documents significant direct impacts to natural resources through grading of 85% of the site above the mean high tide, or 19.8 acres.[34] The EIR suggests that the disturbance of roughly 20 acres of the site's wildlife habitat during construction is less than significant because it is temporary and reversible; however, the EIR also concludes that the potential displacement or harm to shore birds and animal species during construction, including western snowy plover, black legless lizards, and Smith's blue butterfly, is potentially significant if unmitigated. The Commission disagrees that grading and disturbance of 85% of the entire site above the mean high tide for potentially multiple years is insignificant and that natural resources will be protected, as required by the LCP, if such massive amounts of grading take place.

More specifically, the current proposal *unnecessarily* alters nearly the entire site through extensive grading. For example, it appears unnecessary to grade and excavate the dune along the eastern boundary of the site, particularly given that this is a protected dune landform identified in the LCP. Similarly, the project proposes substantial grading of the foredune across the property to allow resort development proposed at lower elevations to look out toward the ocean (as opposed to being completely located underground). However, there is no basis for allowing the dune to be removed for such a purpose. Although no sensitive vegetation is currently documented in this area, there are other natural resource values to the foredunes, the alteration of which should be avoided if feasible unless there is a restoration purpose for the grading. In particular, this area is the most likely location for snowy plover activity, including nesting. However, there is no discussion in the HPP about grading or "microtopographic contouring" to attract snowy plovers to the site. In addition, as discussed in other findings, the proposed grading of the foredunes will also exacerbate the visual impacts of the proposed development, and increase shoreline hazard risks.

More generally, given the historical Western snowy plover nesting locations and current vegetation mapping of the site, which show these sensitive areas located mostly on the McDonald site, it would appear feasible to limit grading in these areas. However, the Applicant has not demonstrated that it is necessary to grade virtually the entire McDonald property in order to develop a visitor-serving project. Thus, there are feasible alternatives that would further protect Monterey spineflower in situ and snowy plover nesting sites, either through direct avoidance or through significantly reduced impacts.

Impacts to the Monterey spineflower
Construction of the proposed project would result in the direct removal of identified Monterey spineflower, which is listed as threatened by the USFWS. This includes a few patches (37 square feet) of low- and medium-density plants growing in the northeast corner of the McDonald property. The EIR and HPP both concluded that this impact is significant if unmitigated, and recommend reestablishing approximately 192 square feet (5:1 replacement) of Monterey

[34] Disturbance of the sand dunes above the 15-foot contour (i.e., above the beach) is on the order of 98% of that portion of the project site.

spineflower on the project site. Neither the HPP nor the EIR identified the impacts associated with grading and removing dune areas that would also remove seed stock for spineflower not expressed above ground, and thus these impacts have not even been identified, and the impact to spineflower is, if anything, greater than the direct impact that has been identified.

The project is inconsistent with Policy 3.3.1 because, as discussed above, it appears feasible to develop a project that can avoid impacting the Monterey spineflower to the same degree as currently proposed. Moreover, even if the removal of this flower (and its seed stock where not expressed yet above ground) were consistent with the LCP's requirement to protect natural resources, and the proposed amount of mitigation for the loss of existing threatened habitat considered satisfactory, the proposed dune restoration may not enhance habitat values as anticipated. Commission staff biologist, Dr. John Dixon, reviewed both the EIR and HPP mitigation measures and concluded that they were insufficient to reduce the impacts to Monterey spineflower to a less than significant level (see **Exhibit 16** for Dr. Dixon's memo). He concluded that the proposed artificially recreated dunes located seaward of the development would not be stable, even if planted with native species. Measures, such as installation of snow fences, that are proposed to reduce the scouring effects of wind-driven sand will only serve to elevate the dunes in some places but will not promote dune plant recolonization or prevent wind-driven sand from encroaching on the project components.

Dr. Dixon further noted that the site of the proposed mitigation was not likely to result in long-term mitigation given the portending effects of shoreline erosion and bluff retreat:

> *Within 50 years all the dune habitat seaward of the project and significant portions of the project itself will be removed by coastal erosion and shoreline retreat ("coastal recession"). Given the transient, that is to say ephemeral, nature of the "restored habitat" and remaining plover habitat, no significant mitigation is proposed.*

Restoration success is tenuous, particularly when transplantation is used. More generally, protecting rare plants and their associated habitat (i.e., dunes and their associated seed stock) in situ, if feasible, is a superior way to better assure protection of the plant, as opposed to the uncertain success of transplanting or seeding. Thus, the proposed mitigation is not sufficient to reduce the impacts to Monterey spineflower to less than a significant level. Given all the above, the proposed project will not adequately protect the Monterey spineflower, which is a natural resource that must be protected under the LCP.

Impacts to the Snowy Plover

The EIR and HPP assess the potentially significant impacts to natural snowy plover resources caused by the proposed direct removal of historic western snowy plover nesting and related habitat, construction disturbance of nesting habitat, loss of plover nests due to increased human activity, and increased disturbance and predation of plovers due to the increased human presence. Project impacts on the federally threatened Western snowy plover were described in the EIR as follows:

> *Human activity is a key factor in the ongoing decline in Western snowy plover coastal breeding sites and breeding populations. Activities such as 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 western snowy plover because its breeding season (mid-March to mid-September) coincides with the season of greatest human use on beaches of the west coast (Memorial Day through Labor Day). As long as this heightened level of disturbance continues in a around the project site, the success of plover nests initiated along the Sand City coastline will be compromised. (HPP p. 9)

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 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. 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. (EIR p. 137)

To reduce project impacts on the Western snowy plover, the HPP requires: pre-construction surveys to ensure that breeding/nesting snowy plovers are not disturbed by construction activities; an onsite qualified biologist to monitor western snowy plover activity and construction activities; a pre-construction conference with equipment operators and field supervisors; an adaptive management and access plan; prohibition on use of mechanical equipment and beach raking; lighting restrictions; a public educational program and interpretive signing; and designation of a specific snowy plover management area.

Although recent nesting activity on the project site is less than was documented in the 1990s, Sand City in general, and the project site in particular, still provide suitable snowy plover nesting habitat and other habitat values. The plover nesting findings reported in the EIR and the Applicant's HPP prepared by Zander Associates imply that plover nesting has declined sufficiently that without the project and corresponding mitigation, the species will not return to the southern Monterey Bay. The Commission disagrees with this conclusion and points out that the dataset does not reflect more recent years (i.e., 2008 – present) that documented a return of nesting snowy plovers just upcoast and downcoast of the project site, and does not reflect overall snowy plover nesting trends in the Monterey Bay area during this same timeframe.[35]

Trends in nesting attempts in Sand City from the late 1990's to early 2000's coincided with plover nesting declines in Fort Ord and elsewhere along the Monterey Bay. Beginning in 2005, however, snowy plover nesting along the former Fort Ord property north of the project site was observed with higher frequency. In its January 2007 Fort Ord Dunes State Park Management Plan, data provided by PRBO indicated that after several years of significant population declines,

[35] Regarding survey methods and timing, the City of Sand City did not renew its contract with Zander Associates and the Point Reyes Bird Observatory (PRBO) in 2009 to survey shorefront properties in Sand City. Nevertheless, the site was surveyed by PRBO biologists as part of its overall Monterey Bay-wide study, though the hours of effort and survey methods were modified from previous years. In the past, surveys were performed on foot. In 2009, though the site was visited as often as in years past (i.e., weekly), the duration of those visits was shorter and surveys of the site made from a vehicle.

including zero nests and zero fledges between the years of 2000 and 2004, surveys for nesting plovers in 2005 documented 12 nests and 11 fledges and, in 2006, 21 nests with 29 fledged chicks. The number of nests and chicks fledged in 2006 represents the greatest number of nests recorded since monitoring commenced in 1988. Data for 2007 was not obtained; however in 2008 there were 14 nests with 12 fledged chicks. The 2009 nesting season exceeded the 2006 season in terms of the total number of nests (23 in 2009 versus 21 in 2006). The 2009 hatch rate along Fort Ord State Park beaches was also very successful with 18 of the 23 identified nests resulting in hatches (i.e., 78% hatch rate). From these 18 nests, an estimated 44 plover chicks were hatched, of which there were 17 fledged (i.e., became capable of flight).

From 2000 through 2007, although there was no nesting activity in Sand City, Western snowy plover were continuing to use Sand City beaches for foraging and rearing activities. In 2005, 2006, 2007, and 2008, Zander Associates contracted with PRBO to document the presence or absence of Western snowy plovers on sandy beaches and associated habitats within the City of Sand City. One Western snowy plover was sighted over the course of the survey in 2005, approximately six snowy plover individuals were sighted in 2006, one snowy plover was again sighted in 2007, and then four nests were located in 2008, the first plover nests seen in eight years within Sand City.

In 2009, a male bird that nested in Sand City in 2008, was observed north of the project site on at least seven different occasions between the months of March and May 2009, including one day in March 2009 when he was observed with three nest scrapes (i.e., depressions in the sand made prior to egg laying). Though no nests were observed on the subject property, it is likely that the male snowy plover had a nest in the vicinity at that time that went undetected. Additionally, there was one brood from a nest located in the south Fort Ord State Park boundary that was observed using Sand City beaches. This brood was the progeny of a female that nested in Sand City in 2008. In 2010 there were two nests observed just south of Bay Street, roughly one-third of a mile south of the project site; only one nest was successful (i.e., produced hatchlings). In 2011, there were no nests found in Sand City. Two nests were observed in Sand City during the 2012 season, both on the former Lonestar site roughly three-tenths of a mile north of the Collection Resort project site. Another pair of nests was observed in 2013, one of which was located on the Preserve immediately adjacent to and north of the project site. Plover nest counts for the 2014 season have not yet been tabulated but PRBO staff informed Commission staff of the presence of one plover nest in April 2014, again on the former Lonestar property north of the Collection Resort project site.

In its January 15, 2013 letter to the City of Sand City (**Exhibit 10**), the USFWS concluded that the site provides known occupied habitat for the species:

> *The project is proposed for construction within western snowy plover nesting habitat. Nest of this species were observed within the project area from 1989 through 1998. The DEIR indicates no nests were observed in the project area during surveys from 2005 through 2008, but nests and chicks were observed both north and south of the project area within Sand City in 2008. The DEIR does not appear to present any data regarding survey efforts for the periods from 1999 through 2004, or 2009 to the present, and it should not be assumed that the project area was thoroughly surveyed in those years.*

The USFWS comment letter (**Exhibit 10**) raises significant concerns with respect to proposed measures to protect the snowy plover. The letter identifies a number of deficiencies with the HPP and calls into question whether take of listed species can truly be avoided and therefore recommends that if "take" can only be minimized, as is suggested by the HPP measures, then the Applicant should pursue an incidental take permit in consultation with USFWS. An HCP is a required component of any application for an incidental take permit. To date, the Applicant has not pursued an application for an HCP and an incidental take permit with USFWS. Given the discussion above, it is reasonably foreseeable that such an HCP and permit could lead to significant changes to the project. Preferably such a process would be underway if not complete but, as of today, potential project changes associated with an HCP and the way such changes might alter the project are unknown, complicating coastal permit review.

Regardless, the Western snowy plover habitat protection and restoration objectives included in the project do not ensure the effective protection of the Western snowy plover natural habitats within and adjacent to the project. First, most of the proposed pre- and post-construction management strategies have not been developed much beyond the conceptual ideas identified in the Applicant's submitted Habitat Protection Plan (i.e., pre-construction surveys for active breeding/nesting on the project site; a biologist steward to oversee Western snowy plover activity; access and use restrictions; prohibition on use of mechanical equipment and beach raking; lighting restrictions; public educational program and interpretive signing; designation of specific management area, etc.). While there may be some short-term benefit resulting from the proposed minimization efforts (e.g., reducing likelihood of direct "take" during construction), the HPP does not substitute for a Habitat Conservation Plan and its contents would not be adequate for an approval of a USFWS incidental take permit. The HPP prescribes measures to take after snowy plover nests have been found rather than requiring that plover habitat be protected or enhanced to allow for/promote nesting. Further, the proposed access and use restrictions are focused on protection of snowy plovers found along the beach fronting the development, when all documented nesting has occurred in the back dune portion of the site.

Second, the project will displace and significantly alter documented nesting locations. While snowy plovers do not establish permanent nests that remain from year to year, they do exhibit high nest site fidelity. All documented locations of nesting on the project site have occurred in back dunes away from the beach (see **Exhibit 8**). As noted above, 19.8 acres or roughly 85% of the terrestrial habitat above the mean high tide would be disturbed and 50% of the site permanently converted to developed areas.[36] After grading and removal of the remnant tailings and debris from the project site, an artificial 30-foot bluff would be created along the shoreline frontage of the site, and this area would be re-vegetated. The project site has historically been used by nesting snowy plovers due to proximity to adjacent nesting sites north and south of the site (e.g., Fort Ord Dune State Park and south of Bay Avenue), and site topography which provides a significant back-beach area for nesting and brooding plovers. Snowy plovers return to nest in specific locations because they have particular nesting needs. Though the project proposes minimization measures to protect plovers, it is expected that the direct removal of historical nesting habitat, ongoing construction activity over multiple years, and the increase in noise, glare, proximity to structures, and human activity, will preclude use of the site by nesting Western snowy plovers. Under that scenario, no nests would be found and the proposed

[36] The project plans indicate that three acres are located below the mean high tide line.

protections implemented via the biological steward would not be triggered.

Third, the project will eliminate critical habitat designated by the USFWS for Western snowy plover. As indicated in the paragraph above, the project will displace the entire terrestrial habitat above the beach and re-shape and re-contour the bluff edge, essentially eliminating the constituent elements that constitute critical habitat for the species. The EIR does not analyze the effects of the project on critical habitat, but the USFWS has opined that the project area would be rendered unsuitable for the species and that surrounding areas would also be adversely affected.

Additionally, the Applicant's HPP proposes the creation of a Beach Strand management area located seaward of the 15-foot contour and extending to the mean high tide line. This area would be managed specifically to improve conditions for Western snowy plover. Though this area falls within the boundaries of the USFWS critical habitat designation for the species, as indicated above, plovers return to nest in specific locations because they have particular nesting needs. For this stretch of shoreline, these needs have been met on the upper reaches of the bluff and not down on the beach where there is a greater human presence.

Lastly, impacts associated with an increase in human use of Western snowy plover habitat areas on and adjacent to the site are proposed to be controlled by the presence of a biological monitor, signage, and use restrictions. The ability of these measures to effectively manage plover habitat consistent with the significant increase in human use of the area is questionable. Signage and the types of use restrictions proposed (e.g., restrictions on pets, beach fires, vehicles, etc.) may provide some small measure of awareness regarding the plight of plovers in the vicinity but it will not prevent resort patrons from going to the beach and certainly will not attract plovers to the beach fronting the development. The proposed project in essence will transform what is a relatively lightly used shoreline into an urban beach with thousands of beach users annually. It further is unclear how the presence of a biological steward will mitigate for the impact of the development itself, particularly given its scale and intensity. Even with the steward, the light, noise, large physical structures, and increased human presence will remain.

In addition, the Collection Resort project site shares its boundary to the north with the Monterey Peninsula Regional Park District's Eolian Dunes Preserve, a 26-acre natural dune area that is also located in the Monterey Bay Dunes complex and is comprised entirely of restored native coastal sand dunes. The year 2013 marked the first time a snowy plover nest was observed on the beach fronting the Preserve. The EIR failed to fully acknowledge the recent nesting success at the Preserve (and elsewhere in Sand City), instead asserting that nesting activity had been discontinued. As such, there is very little discussion of the potential project's impacts to adjacent snowy plover habitat and nesting snowy plovers in the Preserve. The entire Sand City shoreline and beaches are designated by USFWS as critical habitat for the snowy plover. As previously discussed, the proposed project is likely to introduce a much greater level of urbanization and human use and disturbance into the area that may adversely affect nesting plovers, both directly and cumulatively.

Impacts to Smith's Blue Butterfly

As discussed, the proposed project includes grading over approximately 85% of the project site above the mean high tide line, including the sand dunes containing seacliff buckwheat plants growing along the eastern property boundary adjacent to the Highway One right-of-way. The

HPP found that the project will result in the removal of 187 coast and seacliff buckwheat plants, within a 0.21 acre area, which provide habitat for the federally protected Smith's blue butterfly. The HPP notes that removal of the occupied buckwheat plants could result in the direct "take" of Smith's blue butterfly and could also disrupt a dispersal corridor for the species. The project proposes to restore about one acre of coastal dune habitat suitable for use by Smith's blue butterfly. The restoration of this habitat is primarily associated with the proposed dune stabilization and restoration required by the LCP. Following grading and construction of the project, 400 seacliff buckwheat plants and 400 coast buckwheat plants would be planted.

While restoration efforts in other areas of the Monterey Dunes have demonstrated that the re-vegetation of dunes with buckwheat can be accomplished, it remains unclear whether this proposal will provide productive habitat for the Smith's blue butterfly. Of primary concern is the grading and disturbance of the existing dune feature and the associated impacts to the existing butterfly population resulting from altering the existing topography, which currently provides the right combination of sun exposure and shelter from the predominant northwest winds that are favored by this species. The HPP assumes that the Smith's blue butterflies on site have dispersed into the project area from populations to the north or east but provides no support for this assumption. Without additional information regarding nearby populations, the assertion that any new habitat established within the project area will be colonized by the Smith's blue butterfly is unsubstantiated. Additionally, the Smith's blue butterfly overwinters as pupae on and under the host plants. Thus, the butterfly may remain on the host plants outside of the flight season. Construction avoidance during the flight season may protect adult butterflies, but would not necessarily protect the resident population within the project area.

E. Conclusion

There are numerous outstanding issues that preclude a finding that the project as currently proposed conforms to LCP standards protecting the LCP-identified dune feature and natural resources. The project is inconsistent with the LCP's prohibition on grading the protected dune feature for other than restoration purposes and requirements to restore and protect the dune landform mapped on the site. The project will result in a permanent net loss of more than 50% of the dune restoration area identified on Figure 4 of the Zoning Map, and Figure 7: Coastal Resource Map (**Exhibit 5**). The LUP requires that this area be preserved as open space, that it be restored and stabilized, and that any grading of the area be solely in conjunction with an approved restoration activity. The project does not meet any of these criteria. The project also fails to sufficiently avoid and minimize direct impacts to dune vegetation and habitats, and will have significant impacts to documented Smith's blue butterfly, Western snowy plover, and Monterey spineflower habitat. The Applicant has not demonstrated why the proposed volume of grading is necessary or if the project could be re-designed to avoid or minimize grading in areas where natural resources are found. There appear to be feasible alternatives, albeit of a reduced scale, that would be consistent with the LCP requirements to protect natural resources while still providing a viable visitor-serving project.[37] Related to this point, the Commission refers to its 1997 approval of the Marina Dunes Resort (now the Sanctuary Beach Resort), in the City of Marina dunes system located upcoast from the project site. That approved project provided for 5.5 acres of development on an approximately 18 acre site, or about 30% of the site, instead of

[37] In fact, a prior applicant received a CDP for a project on this site that included fewer than half of the currently proposed hotel rooms and less development overall.

the 50% proposed here. Finally, the proposed Habitat Protection Plan is lacking in detail to fully assess the proposed mitigation and whether it is adequate to avoid significant impacts to natural resources.

In short, the proposed project would result in significant and feasibly avoidable adverse natural resource impacts. As a result, the proposed project cannot be found consistent with the LCP's natural resource policies, as cited in this finding above, and thus cannot be found consistent with the LCP in this respect. The scale and scope of the natural resource impacts and issues are so substantial that conditions are not available or appropriate to adequately resolve the LCP inconsistencies at this time, although a re-designed project that avoided grading the protected dune feature and minimized impacts to other natural resources could be found consistent with the LCP.

The Commission finds the proposed project inconsistent with the LCP's natural resource policies and denies the CDP for the currently proposed project for this reason.

5. Public Access and Recreation

A. Applicable Policies

LCP Policies

The LCP provides detailed direction with respect to protecting and providing for public recreational access. Applicable LCP LUP and IP policies include:

> ***LUP Policy 2.3.1.*** *Require all future shorefront developments to provide public access in the following manner: a) where access is shown on Figure 4, dedication of a vertical and/or blufftop access casement which meets the criteria established in Policy 2.3.4; b) where no access is shown on Figure 4, 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 4, and access dedication cannot be achieved consistent with Policy 2.3.4, payment of in-lieu fees for development and maintenance of other accessways.*
>
> ***LUP Policy 2.3.2.*** *Require dedication of lateral access easements for dry sand access along sandy beaches as part of all shorefront development.*
>
> ***LUP Policy 2.3.3.*** *Developed public accessways 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 accessway.*
>
> ***LUP Policy 2.3.4.*** *Work with landowners and public agencies to develop and manage vertical and lateral accessways in the general locations shown on Figure 4. Future developments shall implement safe accessways 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 accessways. a) Accessways should be located at*

intervals commensurate with the level of public use. b) Accessways 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 accessways 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) Accessways and trails should be designed and sited to: 1) minimize alterations 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 a 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 blufftop 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.

LUP Policy 2.3.8. *New improved accessways shall not be made available for public use until public or private agencies responsible for managing the accessway have addressed the following management concerns: a) identification of the types of uses to be allowed; b) the need for any seasonal restrictions; c) the type of improvements needed, such as signs, gates, trash receptacles, boardwalks, restrooms; d) the proposed location, type and amount of parking facilities; and e) identification of the number of users that can be supported.*

LUP Policy 2.3.9. *Require new development to dedicate and improve accessways, which shall be opened to the public when such accessways are accepted by a public or private agency. …*

LUP Policy 2.3.10. *Ensure provision of adequate parking for designated pedestrian accessways. Require provision of public parking as part of developments at a rate of 10 percent above the project's total required parking. The means of providing public parking areas will be the responsibility of State and local governmental entities and private development proposals. The following will be pursued where feasible and consistent with the Plan: a) utilization of State of California Parks Department Properties to provide public parking and other public services and amenities, which provide quick and easy access to beach areas; b) abandonment, when appropriate, of some City paper streets, which then could be utilized for public parking strips, or traded for adjacent properties to form a more logically shaped parking lot; c) the City shall require approved development plans to include a provision for 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. Parking areas should be located in geologically stable areas where they would not contribute to excessive erosion or slope failure. Parking areas shall be screened from public viewpoints through landscaping, berming or other appropriate*

measure consistent with the Design Standards required in Section 5.3 of this Plan.

LUP Policy 3.3.1. *Visitor-serving and public recreational uses are given priority west of State Highway One, as designated on the Land Use Plan Map in Section 6.0. Development of these uses shall be consistent with the protection of natural and visual resources.*

LUP Policy 3.3.2 *Encourage development of visitor serving facilities that provide services which meet a range of visitor needs. Provision of visitor facilities and services 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.*

LUP Policy 3.3.3. *Permitted uses in areas designated as visitor-serving commercial include hotels, motels, accessory shops (including gift shops, travel agencies, beauty shops, et cetera), food service establishments, service stations, recreation retail shops and services (i.e., bike rentals), campgrounds, recreational vehicle parks and other recreational facilities operated as a business and open to the general public for a fee. Permitted uses in areas designated as public recreation include public parks, picnic areas, parking areas, sandy beaches and accessways which are publicly owned or over which access easements are to be required as a condition of development. 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 or other indoor public recreational area uses where outdoor recreation may not be favorable; other support facilities for public recreational uses; and controlled public access and/or educational programs in areas of dune restoration programs.*

LUP Policy 3.3.8. *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, consistent with Policy 2.3.10.*

LUP Policy 3.3.9. *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.*

LUP Policy 4.3.6.b. *Encourage the clustering of developments away from potentially hazardous areas and condition project permits based upon recommendations presented in the geologic report. An active recreation beach zone and public amenity zone shall be established between the mean high water line and the building envelope (refer ahead to Figures 12 and 13). Uses allowed in the active beach and public amenity zones are described in Policy 6.4.1 of this plan.*

LUP Policy 5.3.13. *Plan and implement, provided adequate funding is available, a regional bike link west of Highway One, in the general vicinity of the existing and planned Sand Dunes right-of-way. This bike trail connections will provide additional public views of the dune environment and Monterey Bay. However, due to funding considerations, and recognized development potential along the bike path alignment, these views shall not have the same status as those along Highway One. Bike path views shall be considered an additional benefit of the bike path project, but it is recognized that these views will be subject to future view encroachment that may result from public or private development.*

LUP Policy 6.4.1. *… The described densities, both above and below, represent a maximum. As required by applicable policies of the LCP, permitted development intensities shall be limited to those which 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); …*

LUP Policy 6.4.1.g. *Allow public parks, picnic areas, parking areas, public vista points, sandy beaches and accessways which are publicly owned or over which access easements are to be required as a condition of development. In addition to areas designated public recreation in Figure 11, public recreation also means public uses within development projects such as picnic areas, wind shelters, promenades or other indoor public recreational areas; other support facilities for public recreational uses; and controlled public access and/or educational programs in areas of dune restoration programs.*

LUP Policy 6.4.3d. *(Circulation Designations, Public Access – Pedestrian/Bike Path) Plan and develop, provided that adequate funding is available, a public pedestrian/bike path along the existing and proposed Sand Dunes Drive right-of-way to connect to the regional bike path system in Fort Ord and Seaside/Monterey.*

IP Section 3.2, CZ-PR, Coastal Zone Public Recreation District. *Purpose. To provide areas for public use and enjoyment of the coast, and to enhance the recreational opportunities along Sand City's shoreline. Permitted uses, subject to Coastal Development Permit approval. (a) Public parks, picnic areas, parking areas, and sandy beaches; (b) Accessways which are publicly owned or over which access easements are to be required as a condition of development; (c) other support facilities for public recreational uses; (d) controlled public access and/or educational programs in areas of dune restoration programs. (e) all permitted and proposed uses shall be incorporated into a general parks plan or public works plan as part of an application for a coastal development permit.*

IP Section 3.2, Coastal Zone Overlay District, Access requirements. *(a) Offers to dedicate or grant public access easements shall be made in accordance with the provisions of the Local Coastal Land Use Plan. … (b) Access easements shall be provided in accordance with provisions of the Local Coastal Land Use Plan and the following: (1) Vertical beach accessway easements shall be a minimum width of ten (10) feet and shall extend from the nearest public roadway to the sandy beach frontage. … (2) Lateral beach accessway shall be provided by an easement with a minimum of 25 feet dry sandy beach or the entire sandy beach if the width of the beach is less than 25 feet. (3)*

Blufftop access easements shall run along the edge of the bluff, and be of a width adequate to provide safe access. ….

LUP Figure 4: Public Access Provisions (see Exhibit 5).

Coastal Act Policies

As described earlier, because the proposed project is located seaward of the first through public road and the sea, the Coastal Act's public access and recreation policies also apply to any proposed development at this location. Applicable Coastal Act access and recreation policies include:

Section 30210. *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30211. *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30212(a). *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. …*

Section 30212.5. *Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

Section 30213. *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. …*

Section 30214. *(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following: (1) Topographic and geologic site characteristics. (2) The capacity of the site to sustain use and at what level of intensity. (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses. (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.*

(b) It is the intent of the Legislature that the public access policies of this article be

carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

(c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

Section 30220. *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

Section 30221. *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Section 30222. *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

Section 30223. *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Section 30240(b). *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Section 30253. *New development shall do all of the following: …(e) where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.*

The LCP and Coastal Act public recreational access policies that apply to this site protect existing access, and require that development provide for new access, including requiring dedications for lateral and vertical accessways and related improvements, where such new access use is a LCP priority west of Highway One. Under IP Section 3.2 (Access Requirements), minimum dedication areas are 10 feet for vertical accessways from the public road to the shoreline, 25 feet for lateral accessways along the sandy shoreline beach, and an adequate width to provide safe access along bluff-tops. Such access improvements and areas must be identified and sited and designed in such a way as to meet the LCP's hazards provisions (including the requirement to be located inland of hazard areas) and visual provisions as well. Vista points must be provided, as must public access parking at a rate of 10% above the development's basic parking requirements otherwise. LUP Policy 5.3.13 contemplates a regional bike link west of

Highway One from Playa Avenue to Tioga Avenue – the last undeveloped segment in an otherwise continuous Class I bike/pedestrian trail component of the CCT stretching from Castroville to Pacific Grove. Finally, Figure 4 of the LUP (see **Exhibit 5**) depicts the generalized locations for planned public access provisions in Sand City, including on and over the site of the proposed project.

In short, read together, the applicable policies require development projects to include public recreational access to and along the shoreline, including improvements to facilitate public recreational use, and including parking and vista point areas. Like the development itself, such public recreational access improvements must be sited and designed to be out of harm's way such that they continue to provide the intended access utility over time, and to avoid public viewshed impacts otherwise. As applied to this case, these requirements mean that in addition to providing dedicated access along the sandy shoreline beach, the proposed project must include dedicated public access improvements. These improvements must be dedicated to public access in perpetuity, must be maintained over time, and include access trails that connect from Sand Dunes Drive to the shoreline beach, trails that connect Sand Dunes Drive to the regional bike path, vista point areas that provide views to and across the Monterey Bay, and parking commensurate with the intensity and density of the proposed project use. All such public access areas and related development/amenities must be sited and designed to blend seamlessly into the public viewshed and to adequately respond to coastal hazards, including through appropriate setbacks.

The LCP also encourages the provision of lower-cost visitor-serving facilities, such as campgrounds (LUP Policy 3.3.2). Similarly, the Coastal Act public access policies also require the protection, encouragement, and where feasible, the provision of lower cost visitor and recreational facilities (Section 30213). The Commission has interpreted this Coastal Act policy to either require that development of new overnight accommodations include lower cost units, or if the provision of such units within the proposed development is not feasible, that the Applicant provide an in-lieu fee or in some other way contribute towards the protection of lower cost accommodations in the region.

B. Existing Public Recreational Access Setting

The shoreline beach area at the project site is part of a relatively unbroken stretch of sandy beach extending roughly 20 miles from the Pajaro River to the Monterey Harbor that is used by the general public as a primary lateral accessway for this stretch of coast, including bridging the gap between Monterey State Beach and Seaside State Beach downcoast and the beaches of the Fort Ord Dunes State Park unit upcoast. Similarly, the Monterey Bay Sanctuary Scenic Trail (Scenic Trail), a dedicated shoreline access path for pedestrians and bicyclists and a component of the CCT, is a paved lateral access path, 12-feet in width that parallels the beach at this location. At this location, the path meanders from connecting segments upcoast across the site to Playa Avenue seaward of Highway One. At Playa Avenue the Scenic Trail detours inland under the Highway where it becomes a Class II (shared) bike lane through the parking area behind the City's commercially zoned shopping center. The bike lane continues south along the parking lot until it jogs westward once again at Tioga Avenue and reconnects with the dedicated shoreline trail at Sand Dunes Drive. In other words, there is a well-known "gap" of sorts fronting the downcoast portion of the project site on the west side of the Highway. This recreational trail is very popular, and is heavily used by pedestrians and cyclists throughout the region. Together, the

recreational trail and the beach are major components for the California Coastal Trail.

On the site's upcoast boundary is the MPRPD property. Although opened for public use, the use patterns and amenities have not been completely developed. One of the reasons for this is the ongoing efforts to restore the dunes that were once used as a municipal landfill. However, as noted above, a segment of the Scenic Trail was constructed across the Preserve in the late 1990's and provides lateral access across the site as well as spectacular views of the Monterey peninsula.

In terms of beach access, the public has used the Playa Avenue underpass for shoreline access historically, as evidenced by the well-established sand paths in the dunes leading down to the beach and shoreline. Similarly, at Tioga Avenue, the public has used the road right-of-way for parking and beach access. Despite such ongoing use, there has not been any sort of formal public access study or evaluation specific to the site (such as a prescriptive rights study), and public access rights associated with the property, to the extent any have accrued and exist, have not been formally evaluated or established.

C. Proposed Access Improvements and Dedications

The proposed project includes substantial access improvements, including reconfiguring the Tioga Avenue street end into a cul-de-sac with public parking, restrooms, an overlook, and a lifeguard station. Sand Dunes Drive would be extended north from Tioga Avenue to a new terminus on the Granite property. The roadway extension would connect with Playa Avenue at its midpoint and culminate in a 44-space public parking lot out on the bluff. Vertical access stairs are proposed at the Tioga Avenue cul-de-sac and lateral access is proposed along the beach and inland locations. A 12-foot wide multi-purpose path is proposed along the Sand Dunes Drive roadway extension's edge. A second pedestrian only path connecting the public parking lot south to the Tioga Avenue street end is proposed on the bluff seaward of the proposed development. Both the vertical and lateral access areas would be secured through dedication of public access easements. Two vista points, one midway on the McDonald site and another near the Tioga Avenue street end, including related development (i.e., benches, signage, etc.), are also proposed. Finally, the Applicant proposes to remove the existing hardened slurry and other debris currently located along a portion of the shoreline at this location.

D. Consistency Analysis

Public Access Easement Areas

The proposed access includes areas of the site to be set aside for both vertical and lateral public access and for public parking. The LCP requires the provision of public access amenities for use by the general public, and the proposed dedications are generally consistent with the LCP requirement that both a lateral and a vertical accessway be dedicated on this property (LUP Policies 2.3.1, and 2.3.2). However, not all LCP and Coastal Act requirements are adequately addressed by the project as currently proposed, although such compliance could be achieved through imposition of conditions if the project were otherwise approvable.

First, the LCP requires that the lateral beach accessway be provided by an easement with a minimum width of 25 feet of dry sandy beach or the entire sandy beach if the width of the beach is less than 25 feet. The suggested dedication below the 20-foot contour would probably accomplish this requirement, but a condition would need to be imposed to ensure that the

ultimate access dedication is specifically written to assure that the requirement of the LCP to provide adequate sandy beach access of a minimum of 25 feet or the entire sandy beach is met.

Second, although the general location of the lateral accessway is currently sufficient to provide lateral public access, subject to the qualification above, the Coastal Act and LCP require that such access be located where it will not be subject to high erosion rates or other hazards to public safety (LUP Policy 2.3.4(1)(e), Coastal Act Section 30210). The Applicant has indicated a willingness to forgo future shoreline armoring and proposes to move various resort development improvements, presumably even the necessary access improvements, inland as erosion threatens them. However, it is not clear that the Applicant has proposed that the dedicated access areas themselves will move inland as necessary to continue to provide the requisite access over time. Further, many of the proposed access amenities, including most of the improvements at the Tioga Avenue street end and the bluff-top lateral path, would be located seaward of even the Applicant's estimated 50-year hazard setback line, which, as described in the coastal hazards findings earlier are not adequately representative of even 50 years of erosion at this location. As discussed in the hazards finding, the proposed erosion setback is not adequate, and there would be considerable uncertainty as to whether there would remain adequate space for required public access over time given potential sea level rise and bluff erosion. If the project were to be approved, it would need to be conditioned to ensure continual public lateral access, in all aspects, despite the effects of erosion and sea level rise. The project could be approved with a condition that required the accessways and access improvements to be ambulatory (i.e., moving inland over time in response to erosion).

Third, the Applicant proposes to manage these access easements to limit public access to them and to potentially close the accessways in order to protect sensitive natural resources, such as the snowy plover. Both the Coastal Act and the LCP acknowledge that public access must be maximized, but consistent with the protection of natural resources. (Coastal Act Section 30214(a)(3), LUP Policy 2.3.4(1)(4)). If the Commission were to approve a CDP for this project, it would need to be conditioned to require Executive Director approval of a final access management plan to ensure that the limitations on public access were the minimum necessary to protect natural resources.

Public Parking

Parking to serve public access and recreation will be located in the north end of the site, on the bluff overlooking the beach and shoreline. The LCP requires that the project provide public parking at a rate of 10% more than the total required parking for the site. According to the Applicant's materials, the project must provide 633 parking spaces for the development. Thus, the development must provide at least 64 additional public parking spaces for public access. The Applicant's proposal to provide 44 public parking spaces in the north portion of the development and another 44 parking spaces along the Sand Dunes Drive extension provides more than the required 64 spaces. However, LUP Policy 2.3.4 requires access to be developed consistent with certain guidelines, including that they blend in with the visual character of the setting. (LUP Policy 2.3.4(d)(1)). As discussed in the Visual Resource finding above, the proposed public parking lot would be sited in a "Key Coastal Overview," the most exposed and visually sensitive location on the entire development site. Currently, this portion of the project site is unimproved and contains only modest public access amenities (i.e., picnic tables, benches, etc.). The proposed 44-space parking lot and associated vehicles would be highly visible in this "Key

Coastal Overview" and would not blend in with the visual character of the setting consistent with LUP Policy 2.3.4. Were the project to be approved, it would need to be conditioned to minimize the visual impacts of the proposed parking lot. For example, an alternative location might be less visually intrusive and yet still provide for access, or the proposed parking lot could be better screened from public viewpoints.

In addition, this parking area may not always be available for public use. The Applicant has indicated that seasonal restrictions may be contemplated to protect special status species during critical period of their life cycles. Thus, for any approval of this project, the Applicant must provide additional details regarding when the parking lot would be open, what criteria it would use before determining when closure to protect species would be appropriate, etc., and the Commission would need to evaluate such additional information. In addition, the Applicant has not provided information on the measures that would be taken to ensure that the public parking spaces being provided would not be used by employees, residents, or visitors to the resort as opposed to being available for general public access visitors, and these measures would need to be clearly detailed. Again, if the Commission were to approve a CDP for this project, it would need to be conditioned to require Executive Director approval of a final access management plan to ensure that the limitations on public access were the minimum necessary to protect natural re address such issues.

Monterey Bay Sanctuary Scenic Trail/California Coastal Trail
While the project includes public access and recreation improvements, some of these improvements are inconsistent with LCP and Coastal Act policies that require the provision of maximum public access. For example, the existing Monterey Bay Sanctuary Scenic Trail component of the California Coastal Trail is a 12-foot wide, Class I dedicated bike/pedestrian trail/multiuse path that is located north and south of the project site. The approved project would extend Sand Dunes Drive and the Scenic Trail in this area.

However, the approved new CCT trail segment would have little separation from the extended portion of Sand Dunes Drive (i.e., the path would be sandwiched between Sand Dunes Drive and the project development). The proposed project would also in essence redefine the existing access experience for the Scenic Trail segment that currently exists north of Playa Avenue from a CCT that overlooks the current undeveloped dune landscape to one that is blocked by and otherwise overlooks a substantially more urban landscape due to the buildings and parking areas that would be constructed in the foreground, with the Sand Dunes Drive extension flanking the project site's eastern edge. South of Playa Avenue, the new CCT/Scenic Trail segment would similarly be sandwiched between the Sand Dune Drive extension and the proposed resort buildings. Over two-thirds of existing views of the shoreline in this area would be obstructed and/or completely blocked. The proposed new trail segment south of Playa Avenue, which would provide a key link in the CCT, further falls short of statewide objectives for completing the Scenic Trail and the CCT. Such objectives include siting and design considerations to locate the trail as far as possible from vehicles, roads, and urban development, and as close as possible to the sights, sounds, and scent of the ocean.[38] One hundred percent of the shoreline and ocean view from the Scenic Trail segment located south of Playa Avenue would be blocked by the proposed development. Accordingly, alternative locations for the trail must be analyzed for

[38] Id ("Completing the California Coastal" 2003).

feasibility and other methods for ensuring that it complies with Coastal Act and LCP requirements must be explored. If the project were to be approved, it would need to be conditioned to ensure that the proposed path is consistent with the LCP and Coastal Act.

Low Cost Visitor Serving

Where development has occurred along the coastline, the Commission has given priority to new hotel developments because they are visitor-serving facilities. These hotels, however, are frequently exclusive because of their high room rates, particularly in recent years. Often, the Commission has secured public amenities when approving these hotels (e.g., public accessways, public parking, and open space dedications) to address the Coastal Act priorities for public access and visitor support facilities. The Commission has also required mitigation for the use of land that would have been available for lower cost and visitor serving facilities.[39] The expectation of the Commission, based upon Coastal Act requirements and applied in several recent decisions, is that developers of sites suitable for overnight accommodations will provide facilities which serve the public with a range of incomes. If the development does not provide for a range of affordability on-site, the Commission has required off-site mitigation, such as payment of an in-lieu mitigation fee, to fund construction of lower cost overnight accommodations including youth hostels and campgrounds.

The Applicant has indicated that the proposed boutique hotel and resort amenities would not be in the price range considered affordable for the Monterey Bay area. Were the project otherwise approvable, the project would need to be conditioned to ensure that it included lower cost accommodations on-site or that it provide mitigation for the lack of such on-site accommodations.

E. Public Access Conclusion

The proposed project includes numerous public access amenities, as required by the Coastal Act and LCP. Specifically, the Applicant has proposed dedication of both lateral and vertical public accessways, and the project provides sufficient numbers of parking spaces to meet LCP requirements, although their proposed siting and design may not be consistent with the LCP. These public accessways will need to be managed to ensure that public access is maximized, while still protecting the natural resources on the site. The Applicant's proposal is deficient in certain details, and does not include sufficient information for the Commission to determine the adequacy of the proposed access, signage and management plan for actual implementation. However, if the application were approved, it could be conditioned to require submission of such final plan for Executive Director review and approval, subject to various performance standards to address the LCP and Coastal Act requirements. In addition, the proposed plan does not provide adequate assurances that the dedicated lateral accessway and other access amenities would be moved inland to address public safety concerns as the shoreline moves inland due to erosion and sea level rise. Finally, the Applicant is not proposing on-site lower cost overnight accommodations, a plan to provide such accommodations in the vicinity of the project, or an in-lieu fee to facilitate the provision of lower cost accommodations in the area. While this failure to

[39] Including CDPs 5-04-291, 5-88-062, 5-83-560, 5-89-240, 5-89-91, 5-84-866, 5-81-554, 5-94-172, 5-06-328, A-253-80, A-69-76, A-6-IMB-07-131, 3-07-002, and 3-07-003. Also, LCP amendment SBV-MAJ-2-08 and CDP amendment 5-98-156-A17.

address lower cost accommodations means that the proposed project is inconsistent with Coastal Act Section 30213 and LUP Policy 3.3.2, the Commission could address this issue through the addition of a special condition. In sum, as proposed, the project is not entirely consistent with the LCP and Coastal Act public access and recreation policies. These deficiencies could likely be addressed through the imposition of conditions, but since the project is not otherwise approvable, no conditions have been recommended in this report.

6. Traffic and Circulation

A. Applicable Policies

LCP Policies
The LCP requires adequate circulation and parking as part of new development projects. Development within the CZ-VSC zone district also requires a planned unit development permit,[40] approval of which requires that such development not create traffic congestion. Applicable LCP policies and IP standards include:

> ***LUP Policy 6.4.10.*** *New development shall be approved only where …adequate circulation and parking has been provided for.*
>
> ***LUP Policy 6.4.23.a.*** *Development within the coastal zone shall insure public safety by providing for adequate ingress or egress for emergency vehicles.*
>
> ***LUP Policy 6.4.24.*** *Require future development in the Coastal Zone area to provide safe adequate streets, parking and loading.*
>
> ***IP Section 3.2 (Planned Unit Development Permit, Findings Required).*** *… Any development that is needed as part of the development scheme at the proposed location will not create traffic congestion, has adequate off- and on-site parking,…*

Coastal Act Policies
As described above, because the proposed project is located seaward of the first through public road and the sea, the Coastal Act's public access and recreation policies also apply to any proposed development at this location. Coastal Act access policies that are applicable for traffic and circulation analysis include:

> ***Section 30210.*** *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*
>
> ***Section 30211.*** *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

[40] Per IP Section 3.2 – see page 18 of **Exhibit 5**.

Section 30212.5. *Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

Section 30214. *(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following: (1) Topographic and geologic site characteristics. (2) The capacity of the site to sustain use and at what level of intensity. (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses. (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.*

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

(c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

Section 30252. *The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.*

Section 30253. *New development shall do all of the following: …(e) where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.*

B. Traffic and Circulation Patterns

The Sand City coastal zone is bisected by Highway One,[41] which is the primary shoreline access route through this part of the coast. The project site is located seaward of Highway One, between the Fremont Boulevard interchange to the north and the State Route 218 interchange to the south. The Fremont Boulevard off-ramp delivers vehicles to the area inland and east of Highway One, which is where most development in Sand City is located, including major commercial development. This off-ramp also provides access to other roads that provide circulation through Sand City proper (including Fremont Boulevard itself, California Avenue, Ord Avenue, Monterey Road, and Del Monte Boulevard).[42] Accessing the site from the Fremont Boulevard off-ramp requires one to turn onto Playa Avenue, then onto Del Monte Boulevard, and finally onto Tioga Avenue, which extends over the highway to the sand dune area west of the highway and into the project site. Accessing the project site from State Route 218 requires a turn onto Sand Dunes Drive, which is a primary beach and dune frontage road located west of Highway One, and then a turn onto Tioga Avenue. See **Exhibit 1** for a location map applicable to the site and the immediate surrounding area.

C. Traffic Analysis from 2012 EIR

The project's Draft Environmental Impact Report (DEIR) describes the existing site conditions (e.g., existing traffic volumes and Level of Service[43] (LOS) capacities for road segments and intersections, existing bicycle and pedestrian accessways, and public transportation routes and their service frequencies), and the potential impacts to the local and regional transportation system as a result of the proposed project. The DEIR also describes the mitigation measures necessary to reduce the project's identified impacts to less than significant levels. The DEIR also describes the assumptions being made about transportation impacts, including by analyzing peak weekday morning (7:00AM to 9:00AM) and evening (4:00PM to 6:00PM) traffic volumes in 2011 at ten road intersections and eight roadway segments.

According to the information presented in the DEIR, some of the most heavily impacted roadways under the conditions that existed at the time of the DEIR's preparation in November 2012 include:

- The intersections of Fremont Boulevard/Highway One/Monterey Road/Ord Avenue, which operate at an LOS of E during both morning and evening peak traffic hours.

- Highway One between the State Route 218 interchange and the Fremont Boulevard interchange, which operates at an LOS E in the southbound direction during the morning peak traffic hours, and at an LOS E in the northbound direction during the evening peak traffic hours.

- Highway One between the State Route 218 interchange and the Del Monte Boulevard interchange, which operates at an LOS E in the southbound direction during morning peak

[41] The traffic and circulation section of the FEIR describes the freeway in the vicinity of the project site as "State Route One;" but the term "Highway One," is used in the remainder of this report, so that is the terminology used here, despite the language in the FEIR.

[42] The Fremont Boulevard off-ramp also provides access to the City of Seaside's surface streets and roads.

[43] "Level of Service" is a quantitative measure of an intersection's or a roadway's operations, ranging from LOS A (free-flow conditions) to LOS F (over-saturated conditions; a breakdown in flow). See **Exhibit 13** for the EIR's definitions of Level of Service.

traffic hours, and at an LOS E in the northbound direction during the evening peak traffic hours.

The tables provided in the DEIR further illustrate that, independent of the proposed project, the existing adverse traffic conditions at the following intersections are expected to worsen as other already approved developments are constructed:

- Fremont Boulevard/Highway One/Monterey Road/Ord Avenue. The project will exacerbate unacceptable LOS F intersection operations during both the morning and evening peak traffic hours with the addition of traffic from other approved projects.

- California Avenue/Playa Avenue. The project degrades existing LOS D operations to unacceptable LOS E operations during PM peak periods, and the peak hour signal warrant is met.[44]

- California Avenue/Tioga Avenue. The project degrades existing LOS E operations to unacceptable LOS F operations during PM peak hours, and the peak hour signal warrant is met.

- State Route 218/Highway One Northbound Ramp. The project degrades existing LOS E operations to unacceptable LOS F during both the AM and PM peak hours. The peak hour signal warrant is met for both peak hours.

With the addition of traffic from other approved projects, the following roadway segments will operate at LOS E or worse during the AM or PM peak traffic hours:

- Highway One between the State Route 218 interchange and the Fremont Boulevard interchange in the southbound direction (AM peak hours).

- Highway One between the State Route 218 interchange and the Fremont Boulevard interchange in the northbound direction (PM peak hours).

- Highway One between the State Route 218 interchange to Del Monte Boulevard in the southbound direction (AM peak hours).

- Highway One between the State Route 218 interchange to Del Monte Boulevard in the northbound direction (PM peak hours).

According to the DEIR, the proposed project (340 units) would generate an additional 3,669 trips per day on average. This would contribute 194 additional trips (112 inbound and 82 outbound) during the peak AM traffic hours, and 279 trips (141 inbound and 138 outbound) during the peak PM traffic hours. However, according to the DEIR, the only intersection that would be adversely affected by this increase is at Fremont Boulevard/Highway One/Monterey Road/Ord Avenue, which would exacerbate LOS E operations during both AM and PM peak hours. However, in

[44] A "warrant" is a set of criteria that can be used to define the relative need for, and appropriateness of, a particular traffic control device (e.g., a STOP or YIELD sign, traffic signal, etc.).

comments regarding the DEIR, the California Department of Transportation (Caltrans) stated that the State Route 218 and Sand Dunes Drive intersection, which would be the primary intersection serving the project, was not included in the transportation analysis (see Caltrans' letter in **Exhibit 14**). Thus, the DEIR's analysis of traffic impacts on intersections was deficient because it did not examine the primary intersection that would serve the approximately 3,700 additional daily trips associated with the proposed project.

According to the DEIR, the proposed project would also result in significant traffic impacts at the following four freeway segments:

- Northbound Highway One from State Route 218 to Fremont Boulevard (during PM peak hours the project would exacerbate LOS E operations).
- Southbound Highway One from State Route 218 to Fremont Boulevard (during AM peak hours the project would exacerbate LOS E operations).
- Northbound Highway One from State Route 218 to Del Monte Boulevard (during PM peak hours the project would exacerbate LOS E operations).
- Southbound Highway One from State Route 218 to Del Monte Boulevard (during AM peak hours the project would exacerbate LOS E operations).

The DEIR did not consider the increase in traffic generated by the project, in and of itself, to be a significant impact, especially in light of the traffic mitigation measures proposed by the Applicant.[45] These mitigation measures include:

- The project shall signalize the intersection of California Avenue and Playa Avenue to improve the level of service to acceptable levels.
- The project shall signalize the California Avenue and Tioga Avenue intersection to improve the level of service to acceptable levels.
- The project will signalize the State Route 218/Highway One northbound ramp intersection.
- Payment to the Transportation Agency for Monterey County (TAMC) of a Regional Development Impact fee as a fair-share contribution to regional transportation improvements to mitigate the project's impact at the Fremont Boulevard/Highway One/Monterey Road/Ord Avenue intersection.
- Payment to TAMC of a Regional Development Impact fee as a fair-share contribution to regional transportation improvements to mitigate project impacts to the segment of Highway One between the State Route 218 interchange and the Fremont Boulevard interchange.

[45] As part of the project, the Applicant proposes to implement a Transportation Demand Management (TDM) program, targeted to reduce employee trips. The proposed program includes on-demand shuttles for guests, van pool parking for employees who carpool to work, and a new bus stop (likely to be located on Sand Dunes Drive adjacent to the project site). The methodology used in the DEIR to estimate trips generated by the proposed development did not assume any vehicle trip reductions due to the proposed TDM measures. The DEIR, however, assumes that successful implementation of the TDM program will help to reduce the project's intersection and freeway impacts.

- Payment to TAMC of a Regional Development Impact fee as a fair-share contribution to regional transportation improvements to mitigate impacts to the segment of Highway One between the State Route 218 interchange and Del Monte Boulevard.

The DEIR concluded that implementation of the above mitigations would reduce project impacts to a less than significant level.

D. Traffic Analysis Modifications in the First Amendment to the DEIR

Comments received on the DEIR with respect to traffic and circulation were generally focused on the efficacy of the proposed impact fee approach to mitigate for project specific impacts. More specifically, commenters noted that the identified improvements to Highway One, for which the Applicant would contribute a fair-share contribution, were not fully funded and that therefore the completion date for such improvements was uncertain, and thus the project's freeway impacts should be identified as significant and unavoidable. In response to such comments, the City determined that the "Draft EIR originally included an overly conservative estimate and conclusion regarding the significance of the project's freeway impact" and thus the project's traffic impacts upon the above-mentioned Highway One segments were reevaluated using different impact thresholds in the First Amendment to the DEIR:

> *The EIR freeway impact threshold has been modified to clarify that an impact was not considered significant unless the freeway was operating at level of service (LOS) E or F and the project trips were more than one percent of the freeway's capacity. The original analysis assumed that if one trip was added to a freeway section operating at LOS E or F, it was considered a significant impact. With the modifications of the threshold, the project would have no significant freeway impacts under Phase I development. There would be an impact under the project buildout phase development at the northbound [Highway] 1 segment between Del Monte Boulevard and State Route 218.* (First Addendum to the DEIR p. 7)

As noted in the DEIR, the acceptable level of service for roadway and freeway segments varies by jurisdiction and agency in the project area. State facilities, such as mainline segments and highway on- and off-ramps fall under the jurisdiction of the California Department of Transportation (Caltrans). However, Caltrans' level of service standard for freeway segments is on the cusp of LOS C and LOS D, and includes maintenance of the existing LOS where a freeway segment is operating at less than LOS D. Based on these criteria, the DEIR (before the revisions in the First Addendum to the DEIR mentioned above) found that the estimated project-related trip generation would result in significant impacts to four freeway segments along Highway One during AM and PM peak periods. Using the revised traffic analysis in the First Addendum to the DEIR, which employed modified thresholds, the project would result in significant impacts to only one of the four freeway segments previously identified (i.e., northbound Highway One between Del Monte Boulevard and the State Route 218 interchange). The remaining three project-related freeway impacts shown above were stricken from the final EIR along with their corresponding mitigations because those freeway segments were not operating at LOS E or F and the project was not projected to contribute more than one percent of the freeway's capacity.

In addition, the revised traffic analysis in the First Addendum to the DEIR introduced a new build-out scenario that avoids a freeway impact or the need for a Transportation Demand Management program.

> *The project will be required to only develop 50 percent of two of the restaurant uses under the project buildout conditions or restrict occupancy to 50 percent of the capacity for two of the proposed restaurants in order to avoid the significant freeway segment impact to [Highway] 1 between State Route 218 and Del Monte Boulevard. The restriction on the restaurant size and/or capacity would remain in place until the [Highway] 1 improvements identified in the Transportation Agency for Monterey County (TAMC) Regional Development Impact Fee to improve regional circulation in the project area are constructed. Implementation of these restrictions would reduce the project's impact to this freeway segment to a less than significant level.* (First Amendment to the DEIR p. 87)

Alternatively, the First Amendment to the DEIR includes a mitigation measure that allows the option (not a requirement) of an enhanced TDM program to include an annual trip generation monitoring program to ascertain the precise number of PM peak period trips generated by the development. If the monitoring shows that the project is generating less than the estimated 112 PM peak hour trips, it would allow the project to develop more than 50 percent of the restaurant uses. If the monitoring shows that the project is generating more than the estimated 112 PM peak hour trips, the Applicant would be required to enhance the proposed TDM program.

Lastly, the First Addendum to the DEIR included additional revisions to the identified mitigation for the Fremont Boulevard/Highway One/Monterey Road/Ord Avenue intersection. Originally, the required mitigation included an impact fee payment to TAMC to reduce project-related impacts to this intersection to a less than significant level. However, instead of payment of an impact fee, the mitigation has been revised to require the addition of a westbound right turn lane at this intersection, which would improve intersection operation over existing conditions. The project Applicant would be directly responsible for the cost of this improvement.

E. Project Transportation Analysis

Adverse Impacts to Highway Segments

The proposed project is estimated to add 3,669 daily trips to the traffic mix, including 473 trips during the peak traffic times.[46] These trips would increase traffic on Highway One, including during peak use periods, and would likewise increase traffic along local streets and intersections in the area, including the Fremont Street/Highway One/Monterey Road/Ord Avenue intersection, an intersection that is already physically very complicated and challenging to navigate. The FEIR concludes that mitigation measures would bring project traffic impacts to less than significant levels, including payment for direct improvements to the identified roadway intersection, reductions in project development (i.e., restriction on restaurant size or capacity) until certain improvements to Highway One are constructed, a possible expansion of the Applicant's proposed TDM program to include implementation of an annual trip generation monitoring program, and payment to TAMC's regional development impact fee for cumulative traffic impacts to Highway One.

[46] DEIR at page 100.

The LCP requires that there be adequate circulation and that the project not contribute to traffic congestion. As described above, the existing circulation system is inadequate. The identified freeway segments are currently operating below the level of service considered acceptable for those facilities. The proposed project will add vehicles and traffic to Highway One and local roads and intersections, which are already congested. Based on the modified criteria used in the revised traffic analysis, the FEIR underestimates the full effect of project-driven trip generation and its associated impact on an already substantially impacted circulation system. Traffic impacts on freeway segments that would otherwise fall into the unacceptable category under the criteria developed by the Caltrans would not rise to a level of significant impact based on the criteria used in the FEIR, and thus in the case of three freeway segments, would not necessitate any mitigation. The FEIR states that it is relying upon "typical standard thresholds" used in the region, as opposed to the criteria developed and used by Caltrans, which is the agency responsible for management and daily operation of highway facilities, but the FEIR does not explicitly reveal how these "typical standard thresholds" were developed or cite to other projects that used these standards.

The TDM mitigation measure designed to address freeway congestion and described in the FEIR is unenforceable and greatly exaggerates its benefits to the impacted circulation system. This measure requires the Applicant to only develop 50 percent of each of the two proposed restaurants *or* restrict occupancy of each of these restaurants to 50 percent of their capacity in order to avoid the significant freeway segment impacts. It is not clear how this measure will be implemented and who will be responsible for ensuring compliance with it. The mitigation measure does not appear to limit the project to one restaurant but instead requires either two smaller restaurants or that each restaurant operate at 50% capacity. In all likelihood, both restaurant uses would be constructed complete with all necessary kitchen facilities and dining room infrastructure for full capacity, and there is no mechanism in the mitigation measure to ensure that only 50% of the capacity is actually used. Under this scenario, project-related trip generation and corresponding freeway traffic impacts would be likely realized and unmitigated because enforcement of this condition would be difficult.

The restriction on the restaurant size and/or capacity would remain in place until the Highway One improvements identified in the TAMC Regional Development Impact Fee program to improve regional circulation in the project area are constructed. Even if the issues related to implementation and monitoring of the mitigation measure could be addressed, it would be many years before the highway improvements come to fruition. The freeway improvement projects envisioned in the Sand City/Seaside area have not been funded and have not received discretionary permits; thus construction of such improvements would not take place until many years into the future. These projects run through dune areas, and these resources present additional challenges to an expanded Highway One in this area. Again, under this scenario the proposed mitigation does not appear practical or appropriate for the project-related trip generation and corresponding freeway traffic impacts that would occur, and it is not clear when, or if, any mitigation to offset project impacts would actually occur.

As an alternative to the limit on restaurant development, FEIR mitigation measure TRANS 2.2 allows the project Applicant the option of expanding the TDM program to include trip generation monitoring to determine the amount of PM peak period trips actually generated by the development. If monitoring shows that the project is generating less than the threshold peak hour

trips, it would allow the project to develop more than 50 percent of the restaurant uses. If monitoring shows that the project is generating more than the threshold peak hour trips, the Applicant would be required to enhance the TDM program. This is problematic for a number of reasons. First, the project will be built to full capacity, and project-related impacts that are generated immediately upon the resort's opening will not be mitigated at all. Mitigation is instead required before a project commences operations and the adverse impacts are generated. Second, the terms of the program require monitoring of trip generation during the mid-week over a four week period in August for a total of six monitoring events. If the resort does not open until after August, it could be almost an entire year before any trip generation data are compiled, yet project-related traffic impacts will be occurring from the time the resort opens. Third, the optional TDM program (FEIR MM TRANS 2.2) does not include any legal mechanisms to ensure that the program will be implemented and complied with. And fourth, if trip generation exceeds the threshold criteria, the FEIR does not define or describe what the required enhancements to the TDM program would be, thus mitigation is undefined and deferred, so it is not possible to evaluate if future undefined traffic enhancements would adequately offset project-related traffic impacts. The expanded TDM program is purely voluntary and the FEIR did not evaluate the potential vehicle trip reductions associated with a voluntary program. Thus, though the expanded TDM program may reduce some of the project-related trip generation, it is not possible to analyze the voluntary TDM program for consistency with LUP Policies 6.4.10 and 6.4.24, and IP Section 3.2.

Adverse Impacts to Intersections

Other than the identified voluntary TDM program, the FEIR recommends that the project be conditioned to require the Applicant to pay the City of Seaside for the construction of a dedicated westbound left-turn lane from Monterey Road to southbound Fremont Boulevard. The left-turn lane is expected to improve intersection operations as compared to existing conditions, though even with this turn lane the intersection will continue to operate at an unacceptable LOS F. The EIR also requires additional mitigation for impacts to the California Avenue/Playa Avenue and California Avenue/Tioga Avenue intersections which would operate at unacceptable levels under cumulative project conditions (i.e., LOS E and F respectively) and would meet the minimum traffic volume criteria for the peak-hour signal warrant. Signalization of these intersections, as required by the FEIR, would reduce cumulative traffic impacts and improve intersection operations to acceptable levels (LOS B and A respectively). Alternatively the addition of an exclusive right-turn lane on the westbound approach to the California Avenue/Tioga Avenue intersection would also reduce operations to an acceptable LOS B.

In its comments on the project, Caltrans noted that the DEIR omits the analysis of the State Route 218 and Sand Dunes Drive intersection (see **Exhibit 14**). The City noted in response that this is a side-street, stop-controlled intersection serving one hotel and beach access with very low traffic volumes. It also noted that review of the existing traffic volumes at the adjacent State Route 218 – Southbound Highway One intersection roughly 110 feet east of the State Route 218 and Sand Dunes Drive intersection confirm traffic volumes are well below the traffic warrant for the intersection which operates at LOS B. However, given that the State Route 218/Sand Dunes Drive intersection will serve as the primary access to the project site, it will no longer serve only one hotel and beach access, so the FEIR should have analyzed the project's impacts to this intersection.

Highway One Widening Proposals

The primary circulation improvements described in the FEIR that are to be implemented under the fee program to address traffic congestion, including cumulative traffic impacts, involve widening Highway One south of the Fremont Boulevard interchange, and modifying the Fremont Boulevard on- and off-ramp intersection. The FEIR indicates that Caltrans has completed a study report for such improvements; however, Caltrans does not have funds appropriated for the project and has not applied for the necessary coastal permit for such improvements. Thus, the future construction of such improvements, if approved, is many, many years away. Caltrans' comment letter on the DEIR (**Exhibit 14**) noted that a report on widening Highway One in the area of the project site "is no longer valid due to age, and that any widening project would require a new planning document to determine the scope of the project, impacts, and alternatives." Caltrans planning for such changes to Highway One has been known to be measured in decades, not years. Also, while TAMC indicates that the cost of widening Highway One in the area of the proposed project has a total estimated program cost of $56.4 million, only $2.7 million would be funded through TAMC's Regional Development Impact Fee program, to which this project would contribute (see **Exhibit 15**).[47] The source of the remaining funds has not been identified.

Although intersection improvements east of the highway could likely be accomplished in this already developed area to help ease traffic without undue resource impacts, it is not clear that the Highway One widening mentioned above could be so completed. In fact, the existing Highway One cuts through historic dune areas, and is adjacent to existing dune resources, and widening would likely impact these resources. Likewise, it does not appear that such resource impacts could be found consistent with applicable LCP and Coastal Act[48] policies that require protection of these dune resources. TAMC states that one of the alternatives that would be considered for the Highway One widening project includes converting the median to a single lane of traffic which would reduce the amount of right-of-way necessary to do the widening, and thus the widening project could be accomplished with adequate mitigation to address the loss of such historic dunes or sensitive habitat. By this statement, TAMC acknowledges that all alternatives to widening Highway One in this area will impact sensitive habitats, which may not be consistent with LCP or Coastal Act requirements, even with mitigation.

Further, although a fee program has been implemented recently by the Joint Powers Authority for the Monterey County Regional Development Impact Fee Agency to address Highway One congestion, and such a program could be used as mitigation, it is unclear whether a mitigation measure related to this program would be adequate in this case. The revenues raised by the fee program are not expected to be sufficient to pay for the highway improvements identified without new local funding sources. The TAMC Regional Development Impact Fee Program Strategic Expenditure Plan (updated August 2014) states that there are 17 regionally-significant

[47] TAMC identifies that its Regional Development Impact Fee went into effect as mitigation for cumulative impacts to the regional transportation system. Caltrans contributed in the development of the fee program, and has certified that it is an adequate mechanism for mitigating cumulative transportation impacts. It is not a program designed to address direct impacts, In other words, direct impacts and overall cumulative impacts are both required to be addressed, and the fee program can only satisfy the latter.

[48] The City of Monterey, located just downcoast of Sand City, does not have a certified LCP, and thus the standard of review for State Route One development in the City of Monterey is the Coastal Act. In addition, it is possible that a Caltrans project of such size and scope could be subject to either the Commission's federal consistency review authorities and/or a consolidated CDP review process, in which cases the Coastal Act again would be the standard of review

projects located throughout Monterey County identified for the impact fee program (which includes the above-mentioned widening in the vicinity of the project site). The Highway One Sand City/Seaside widening proposal was among the transportation projects listed for funding under Monterey County's Measure Z sales tax increase that failed on the November 2008 ballot. In addition, it has been the Commission's experience that the time it takes to bring such major Highway One projects to fruition can be considerable, and thus it could be many years before any traffic relief associated with such improvements is realized, and certainly long after the impacts from the proposed project would occur, if the project were approved. In this case, there is no estimate of when the widening of Highway One may be pursued. The Highway One widening project is not included in Caltrans' current list of projects under environmental review, and there is no information regarding sources for the balance of funding, which is currently unavailable. Without an identified means of funding, such a widening project could be on hold indefinitely.

Given the natural resource concerns associated with Highway One widening, the fact that the funding for such widening does not exist at this time, and that the mechanism for raising the funds was defeated at the ballot box, there is no reasonable expectation that payment into the TAMC Regional Development Impact fee program will mitigate the project's traffic impacts on Highway One in the foreseeable future.

F. Traffic Conclusion

The LCP requires that there be adequate circulation and that projects not contribute to traffic congestion. The project would generate significant traffic that would further tax an overburdened traffic circulation system that is currently recognized as inadequate. Signalization of some of the area's congested intersections will improve traffic operations under cumulative conditions (e.g., California Avenue/Playa Avenue and California Avenue/Tioga Avenue) but only marginally so for others (e.g., Fremont Boulevard/SR1/Monterey Road/Ord Avenue), which would continue to operate at unacceptable levels (LOS F), although signalization could ensure that this project does not exacerbate existing conditions. The potential mitigation proposed to address the project's cumulative impacts on Highway One (i.e., payment of a Regional Development Impact fee) is not meaningful mitigation because of the relatively small amount of the fee, the lack of substantial other funding for Highway One widening, and the lack of completion of the necessary permitting process for widening, including coastal development permits. Thus, the proposed Highway One mitigation raises significant LCP and Coastal Act issues and is inconsistent with LUP Policy 6.4.10, which requires that new development be approved only where adequate circulation has been provided.

In addition, Coastal Act Section 30252 requires that, among other things, the amount and location of new development should maintain and enhance public access to the coast, facilitate the provision or extension of transit service, and provide non-automobile circulation within the development. The proposed project includes development of a TDM program that includes on-demand shuttles, employee vanpool parking, and a new public transit stop. However few details are provided regarding the particulars of the TDM program, and how it will be implemented. Further, the FEIR's voluntary expanded TDM program defers mitigation, doesn't include legal mechanisms to ensure implementation, and is insufficient to evaluate whether the program would be successful in reducing vehicle trips. The proposed project would add to coastal traffic

congestion, without adequately mitigating those impacts. Thus the project as proposed and in its current density is inconsistent with this Coastal Act Section 30252.

In sum, the project as proposed and at its current density is not consistent with the LCP's traffic and circulation policies, and is inconsistent with the Coastal Act's access-related transportation policies. Traffic capacity and circulation is a fundamental constraint that significantly directs what may or may not be approvable at the subject site. A reduced scale project, however, would have significantly fewer impacts on traffic and circulation and special conditions could be imposed to ensure appropriate mitigation for the impacts of such a smaller-scale project. Such a project is not currently before the Commission, however, and the Commission finds that as currently proposed the project is inconsistent with the LCP's traffic and circulation policies and the Coastal Act's access policies as they relate to traffic and circulation.

7. Violation

On March 4, 2015, Commission staff (during a site visit) observed evidence that concrete, rock, and debris has been placed at the foot of Tioga Avenue and immediately seaward of the Sterling site. It appears that the shoreline is eroding in this location and there is evidence of the failing Tioga Avenue street end and the driveway at the base of the bluff. However, the concrete, rock, and debris do not have the same characteristics of the asphalt roadway and/or driveway in this location and there is no other development within the vicinity which could have contributed to the debris field. The subject concrete, rock, and debris appears to have been recently placed as it does not appear to be weathered as would be expected of material along the shoreline in place for any length of time. In addition, as noted above, development of an 800-foot long shell of hardened slurry stretching from the MacDonald parcel to the Granite parcel has at least partially taken place without the benefit of a coastal development permit. Commission staff has been unable to find any evidence that a CDP was issued for any of the above-mentioned development in this location.

Thus, the existence of material at the base of Tioga Avenue and the Sterling property and the hardened slurry along the MacDonald parcel are potentially violations of the Coastal Act. Although the placement of rock and debris and the presence of hardened slurry have taken place on the property without the benefit of a CDP, consideration of this application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act and policies of the certified LCP. Commission review and action on the application does not constitute a waiver of any legal action with regard to the alleged violation nor does it constitute an implied statement of the Commission's position regarding the legality of any development undertaken on the subject site without a CDP. Denial of this application pursuant to the staff recommendation will result in potential violations remaining on the subject property. The Commission's enforcement division will address said alleged violations as a separate matter.

8. Takings Analysis

As discussed above, the proposed project is fundamentally inconsistent with the certified LCP with respect to hazards, visual resources, and natural resources, and it appears that even reduced-

scale alternatives on the overall project site that attempted to address such inconsistencies through conditions of approval would lead to similar, albeit lessened, coastal resource impacts that likewise could not be found entirely LCP consistent. In other words, the appropriate LCP coastal resource protection outcome is denial of the CDP for the proposed project, which is the Commission's decision, as described above. When the Commission denies a project, however, a question may arise as to whether the denial results in an unconstitutional "taking" of the applicant's property without payment of just compensation. Coastal Act Section 30010 addresses takings and states as follows:

> *The Legislature hereby finds and declares that this division is not intended, and shall not be construed as authorizing the commission, port governing body, or local government acting pursuant to this division to exercise their power to grant or deny a permit in a manner which will take or damage private property for public use, without the payment of just compensation therefore. This section is not intended to increase or decrease the rights of any owner of property under the Constitution of the State of California or the United States.*

Consequently, although the Commission is not a court and may not ultimately adjudicate whether its action constitutes a taking, the Commission must assess whether its action might constitute a taking so that the Commission may take steps to avoid it. If the Commission concludes that its action does not constitute a taking, then it may deny the project while still complying with Section 30010. If the Commission concludes that its action might constitute a taking, then Section 30010 requires the Commission to approve some level of development, even if the development is otherwise inconsistent with LCP or Coastal Act policies.[49] In this situation, the Commission finds that some level of development could likely be allowed on the site. The Applicant's proposed project is inconsistent with the LCP, however, and the Commission therefore denies the project as proposed and suggests that the Applicant work with staff on an alternative project that may be more consistent with LCP requirements.

General Takings Principles

The Fifth Amendment of the United States Constitution provides that private property shall not "be taken for public use, without just compensation."[50] Article 1, section 19 of the California Constitution provides that "[p]rivate property may be taken or damaged for public use only when just compensation…has first been paid to, or into court for, the owner."

The idea that the Fifth Amendment proscribes more than the direct appropriation of property is usually traced to *Pennsylvania Coal Co. v. Mahon* ((1922) 260 U.S. 393). Since *Pennsylvania Coal*, most of the takings cases in land use law have fallen into two categories (see *Yee v. City of Escondido* (1992) 503 U.S. 519, 522-523). First, there are the cases in which government authorizes a physical occupation of property (see, e.g., *Loretto v. Teleprompter Manhattan CATV*

[49] For example, in CDP A-3-SCO-00-033 (Hinman), the Commission in 2000 approved residential development on a site that was entirely ESHA even though it was not resource dependent development and thus was inconsistent with the LCP (which was the standard of review in that case).

[50] The Fifth Amendment was made applicable to the States by the Fourteenth Amendment (see *Chicago, B. & Q. R. Co. v. Chicago* (1897) 166 U.S. 226).

Corp. (1982) 458 U.S. 419). Second, there are the cases in which government merely regulates the use of property (*Yee, supra*, 503 U.S. at pp. 522-523). A taking is less likely to be found when the interference with property is an application of a regulatory program rather than a physical appropriation (e.g., *Keystone Bituminous Coal Ass'n. v. DeBenedictis* (1987) 480 U.S. 470, 488-489, fn. 18). The Commission's actions here would be evaluated under the standards for a regulatory taking.

In recent takings cases, the United States Supreme Court (Court) has identified two circumstances in which a regulatory taking might occur. The first is the "categorical" formulation identified in *Lucas v. South Carolina Coastal Council* (1992 505 U.S. 1003, 1014). In *Lucas*, the Court found that regulation that denied all economically viable use of property was a taking without a "case specific" inquiry into the public interest involved (*Id*.). The *Lucas* court emphasized, however, that this category is extremely narrow, applicable only "in the extraordinary circumstance when no productive or economically beneficial use of land is permitted" or the "relatively rare situations where the government has deprived a landowner of all economically beneficial uses" or rendered it "valueless" (Id. at pp. 1016-1017 [emphasis in original]) (see *Riverside Bayview Homes, supra*, 474 U.S. at p. 126 [regulatory takings occur only under "extreme circumstances"]).[51]

The second circumstance in which a regulatory taking might occur is under the three-part, ad hoc test identified in *Penn Central Transportation Co*. (*Penn Central*) *v. New York* (1978) 438 U.S. 104, 124. This test generally requires an examination into the sufficiency of the applicant's property interest, its economic impact, and its interference with reasonable, investment-backed expectations (*Id*. at p. 134; *Ruckelshaus v. Monsanto Co*. (1984) 467 U.S. 986, 1005). In *Palazzolo v. Rhode Island* (2001) 533 U.S. 606, the Court again acknowledged that the *Lucas* categorical test and the three-part *Penn Central* test were the two basic situations in which a regulatory taking might be found to occur (see *id*. [rejecting *Lucas* categorical test where property retained value following regulation but remanding for further consideration under *Penn Central*]).

Final Government Determination

Before a landowner may seek to establish a taking under either the *Lucas* or *Penn Central* formulations, however, the landowner must demonstrate that the taking claim is "ripe" for review. This means that the takings claimant must show that government has made a "final and authoritative" decision about the use of the property (*e.g., Williamson County Regional Planning Com. v. Hamilton Bank* (1985) 473 U.S. 172; *MacDonald, Sommer & Frates v. County of Yolo* (1986) 477 U.S. 340, 348). Premature adjudication of a takings claim is highly disfavored, and the Supreme Court's cases "uniformly reflect an insistence on knowing the nature and extent of permitted development before adjudicating the constitutionality of the regulations that purport to limit it" (Id. at p. 351). Except in the rare instance where reapplication would be futile, the courts

[51] Even where the challenged regulatory act falls into this category, government may avoid a taking if the restriction inheres in the title of the property itself; that is, background principles of state property and nuisance law would have allowed government to achieve the results sought by the regulation (*Lucas, supra*, 505 U.S. at pp. 1028-1036).

generally require that an applicant resubmit at least one application for a modified project before it will find that the taking claim is ripe for review (e.g., *McDonald, supra*).

In this case, although the Commission denies the project proposed by the Applicant, the LCP does provide for visitor-serving development on the proposed project site. Thus, even with the constraints identified in the staff report, the Commission believes that some alternative project could be constructed on the site that is more consistent with the LCP than the proposed project. An alternative project clustered on the eastern portion of the site would have fewer resource impacts compared to other portions of the proposed project site. The Commission advises the Applicant to work with Commission staff to develop an alternative proposal that responds to the LCP and Coastal Act inconsistencies identified in this report and provides for a reduced scale development. In these circumstances, the Commission has not made a final and authoritative decision about the use of the subject property, as it is clear that some development could be allowed on the property to avoid a taking of private property without just compensation, although such revised project would be at a reduced scale. This decision does not preclude the Applicant from applying for some other development or use of the site, such as a more minor development that still proposes a visitor-serving use but more carefully addresses the site's constraints.

Conclusion
The Commission finds that the project, as proposed, is inconsistent with the LCP and must therefore be denied. The Commission also finds, however, that an alternative project could be approved on the site. The Commission recommends that the Applicant work with Commission staff to design a different project that is more consistent with the policies and standards of the LCP and the Coastal Act. Thus, this denial is not a final adjudication by the Commission of the potential for development on the project site, as it does not preclude the Applicant from applying for some other development or use of the site, such as a more minor development that proposes a visitor-serving use and more carefully addresses the applicable Coastal Act and LCP policies.

F. CDP DETERMINATION CONCLUSION

The Commission hereby denies CDP A-3-SNC-14-0001 for the proposed development of a 340-unit hotel and condo-hotel resort facility because the project is not consistent with certified Sand City LCP policies and standards that require hazard avoidance, protection of public views, natural resource protection, public recreational access, and provision of adequate public services (i.e., traffic and water supply).

G. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Public Resources Code (CEQA) Section 21080(b)(5) and Sections 15270(a) and 15042 (CEQA Guidelines) of Title 14 of the California Code of Regulations (14 CCR) state in applicable part:

> ***CEQA Guidelines (14 CCR) Section 15042.*** *Authority to Disapprove Projects. [Relevant Portion.] A public agency may disapprove a project if necessary in order to avoid one or more significant effects on the environment that would occur if the project were approved as*

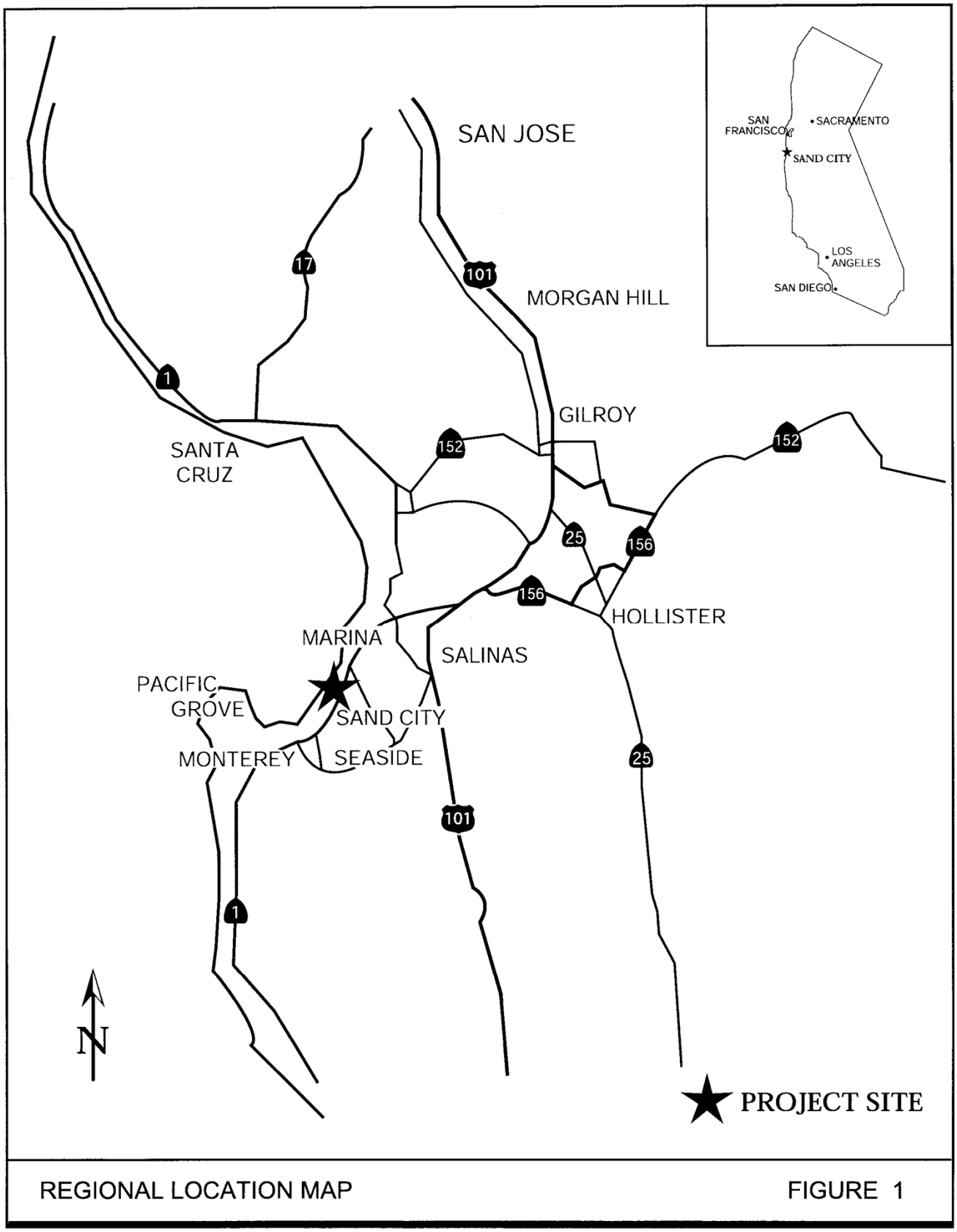
proposed.

Public Resources Code (CEQA) Section 21080(b)(5). *Division Application and Nonapplication. …(b) This division does not apply to any of the following activities: …(5) Projects which a public agency rejects or disapproves.*

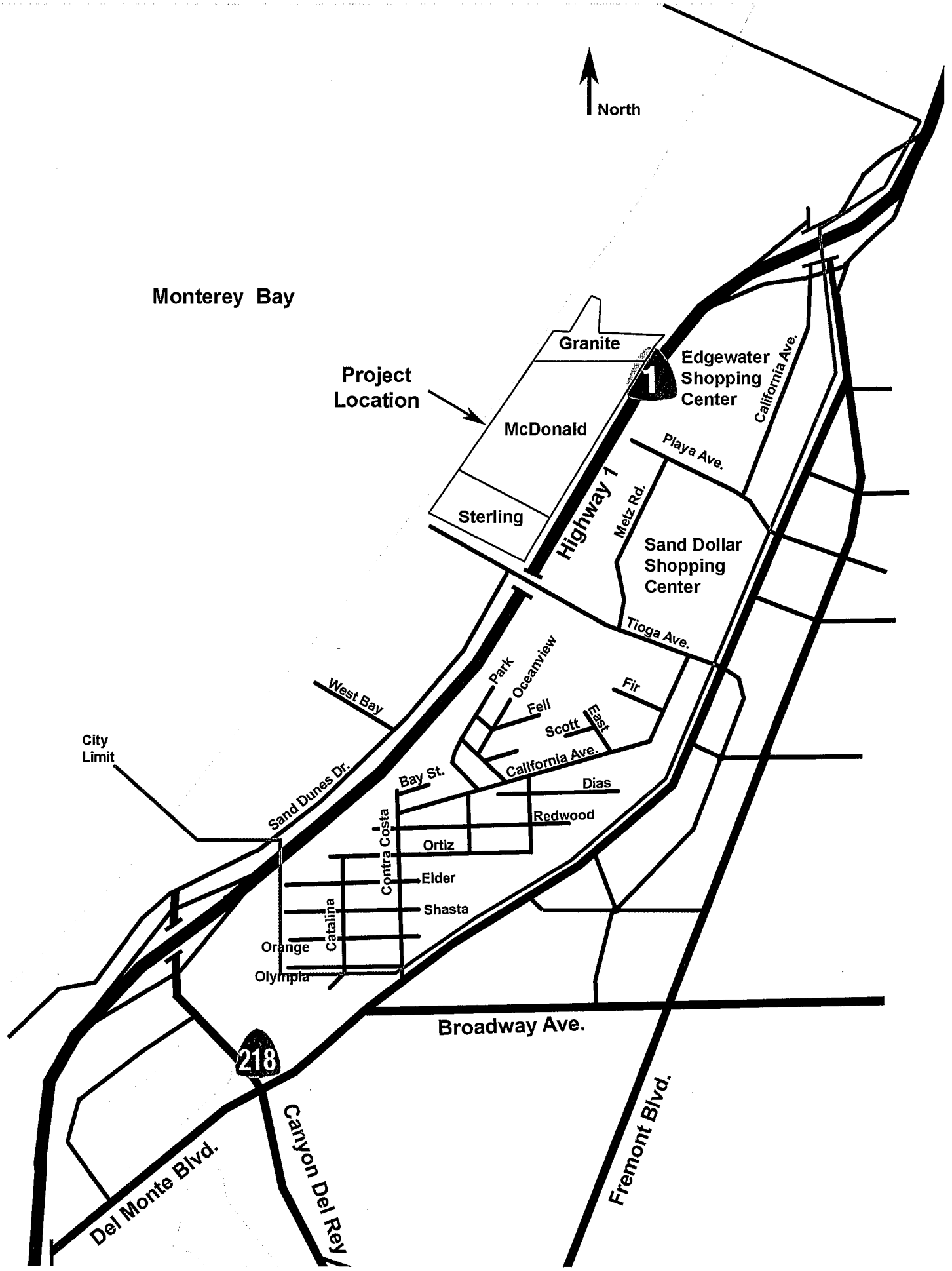
CEQA Guidelines (14 CCR) Section 15270(a). *Projects Which are Disapproved. (a) CEQA does not apply to projects which a public agency rejects or disapproves.*

Section 13096 (14 CCR) requires that a specific finding be made in conjunction with CDP applications about the consistency of the application with any applicable requirements of CEQA. This report has discussed the relevant coastal resource issues with the proposed project. All public comments received to date have been addressed in the findings above. All above findings are incorporated herein in their entirety by reference. As detailed in the findings above, the proposed project would have significant adverse effects on the environment as that term is understood in a CEQA context.

Pursuant to CEQA Guidelines (14 CCR) Section 15042 "a public agency may disapprove a project if necessary in order to avoid one or more significant effects on the environment that would occur if the project were approved as proposed." Section 21080(b)(5) of the CEQA, as implemented by Section 15270 of the CEQA Guidelines, provides that CEQA does not apply to projects which a public agency rejects or disapproves. The Commission finds that denial, for the reasons stated in these findings, is necessary to avoid the significant effects on coastal resources that would occur if the project was approved as proposed. Accordingly, the Commission's denial of the project represents an action to which CEQA, and all requirements contained therein that might otherwise apply to regulatory actions by the Commission, do not apply.



REGIONAL LOCATION MAP FIGURE 1



Vicinity Map

Source: California Coastal Records Project, Slide 201314344

Source: California Coastal Records Project, Slide 201314343

Source: California Coastal Records Project, Slide 201314341

Source: California Coastal Records Project, Slide 201314340

Exhibit 2: Site Aerial Photos
A-3-SNC-14-0001 Collection Resort at Monterey Bay
Page 4 of 4

Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 1 of 34

SAND CITY - SHEET INDEX

Title
COVER SHEET, INDEX & STATISTICS
COLORED CONCEPT SITE PLAN
BUILDING REFERENCE SITE PLAN
AERIAL PHOTO SITE PLAN
UNIT FLOOR PLANS
PARKING LEVEL
HOTEL CONFERENCE & SPA
HOTEL VACATION CLUB LEVEL
HOTEL LOBBY RESTAURANT
HOTEL VACATION CLUB LEVEL
HOTEL LEVEL
VIEW CORRIDOR SECTIONS A, B & C
VIEW CORRIDOR SECTIONS D & E
SECTION F - PARKING LOT PILINGS
SECTION F - PILINGS CONST. & DUNES
SECTION - HOTEL LOBBY BLDG M-4, M-6, M-7
LOBBY COLORED ELEVATION
SECTION - LOBBY, PORTE COCHRE
PARTIAL OCEANFRONT BUILDING ELEV.
FULL OCEANFRONT BUILDING ELEV.
OCEANFRONT RENDERING, RESTAURANT
SECTION BLDG M-1 PORTE COCHRE
BEACH FRONT ELEVATIONS - HOTEL
SAND DUNES DRIVE ELEVATIONS - HOTEL
NORTH END ELEVATIONS - HOTEL
INTERIOR CENTER COURT ELEVS. - HOTEL
INTERIOR END ELEVS - HOTEL
OCEAN FRONT COLORED ELEVATION
NORTH END COLORED ELEVATION
TIOGA AVENUE COLORED ELEVATION
TIOGA AVE. BUILDING ELEVATION
EXTERIOR COLORS & MATERIALS - PHOTOS
LIGHT FIXTURE DETAILS
GRADING & DRAINAGE PLAN

the Collection at Monterey Bay

SAND CITY RESORT, Monterey Bay, California

Area Seaward of Mean Tide ('03)			Bluftop Setback Area - 2082 "Recession Line"			"Net" Building Envelope Area - Landward of Bluff Setback Area			Site Totals		
in acres	in sq ft	% of site	in acres	in sq ft	% of site	in acres	in sq ft	% of site	in acres	in sq ft	% of site
0.46 ac	20,038 sf	1.7%	3.69 ac	160,736 sf	13.9%	3.75 ac	163,350 sf	14.2%	7.90 ac	344,124 sf	30%
0.97 ac	40,075 sf	3.5%	9.32 ac	405,979 sf	35.2%	6.01 ac	261,796 sf	22.7%	16.25 ac	707,850 sf	61%
0 ac	0 sf	0.0%	0 ac	0 sf	0.0%	2.31 ac	100,624 sf	8.7%	2.31 ac	100,624 sf	9%
1.38 ac	60,113 sf	**5%**	**13.01 ac**	566,715 sf	**48%**	**12.07 ac**	525,770 sf	**46%**	**26.46 ac**	1,152,598sf	**100%**

Sterling Site			McDonald Site			Granite Site			Site Totals		
in acres	in sq ft	% of site	in acres	in sq ft	% of site	in acres	in sq ft	% of site	in acres	in sq ft	% of site
1.03 ac	44,524 sf	3.87%	1.60 ac	69,784 sf	6.05%				2.62	114,308 sf	10%
0.33 ac	14,580 sf	1.27%	0.81 ac	35,400 sf	3.07%	0.39 ac	17,160 sf	1.50%	1.54	67,140 sf	6%
0.37 ac	16,300 sf	1.42%	0.91 ac	39,350 sf	3.41%				1.28	55,650 sf	5%
2.02 ac	87,946 sf	7.64%	2.69 ac	117,262 sf	10.17%	1.92 ac	83,464 sf	7.20%	6.63	288,672 sf	25%
3.75 ac	163,350 sf	**14.20%**	**6.01 ac**	261,796 sf	**22.70%**	**2.31 ac**	100,624 sf	**8.70%**	**12.07 ac**	525,770 sf	**46%**

Sterling Site	
in units	in sq ft
25 units	17,950 sf
80 units	78,160 sf
--	0
--	0
--	0
--	0
105 units	96,110 sf

McDonald Site	
in units	in sq ft
175 units	117,075 sf
60 units	58,620 sf
--	109,072 sf
--	11,950 sf
--	5,000 sf
--	16,800 sf
235 units	318,517 sf

Site Totals	
in units	in sq ft
200 units	135,025 sf
140 units	136,780 sf
--	109,072 sf
--	11,950 sf
--	5,000 sf
--	16,800 sf
340 units	414,627 sf

Project Statistics

Site Area	Gross Acreage
Sterling Site	7.90 ac
McDonald Site	16.25 ac
City (Granite) Site	2.31 ac
	26.46 ac

Breakdown of "Net" Building Envelope

Building Footprints	
Paving and Parking	
Pathways and Patios	
Landscaping and Habitat	
	12.07 ac

Resort Land Uses and Density

Hotel and Timeshare-Vacation Club Units 1 bdrm	
Hotel and Timeshare-Vacation Club Units 2 bdrm	
Lobby and Administrative Offices	
Restaurant and Lounge	
Spa	
Conferencing Area	

Parking Spaces - Provided & Required	Sterling Site Provided	McDonald Site Provided	Total Parking Provided	Total Parking Required
Garage Parking On-site	191	419	610	Hotel = 410 spaces
Surface Parking On-site	36	15	51	Road-Retail-Conf = 223 spaces
On-site Parking subtotals	**227 spaces**	**434 spaces**	**661 spaces**	**633 spaces**
On-site Public Parking - Sand Dunes Drive	--	44	44	64
Off-site Public Parking - Tioga Avenue	14	--	14	0
Off-site Public Parking - Granite Site	--	44	44	0
Public Parking subtotals	**14 spaces**	**44 spaces**	**102 spaces**	**64 spaces**
Total Parking Provided	**241 spaces**	**242 spaces**	**763 spaces**	**697 spaces**

RECEIVED
JAN 17 2014
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

design team
architectural associates, inc.
40373 saudia creek drive fallbrook, ca. 92028

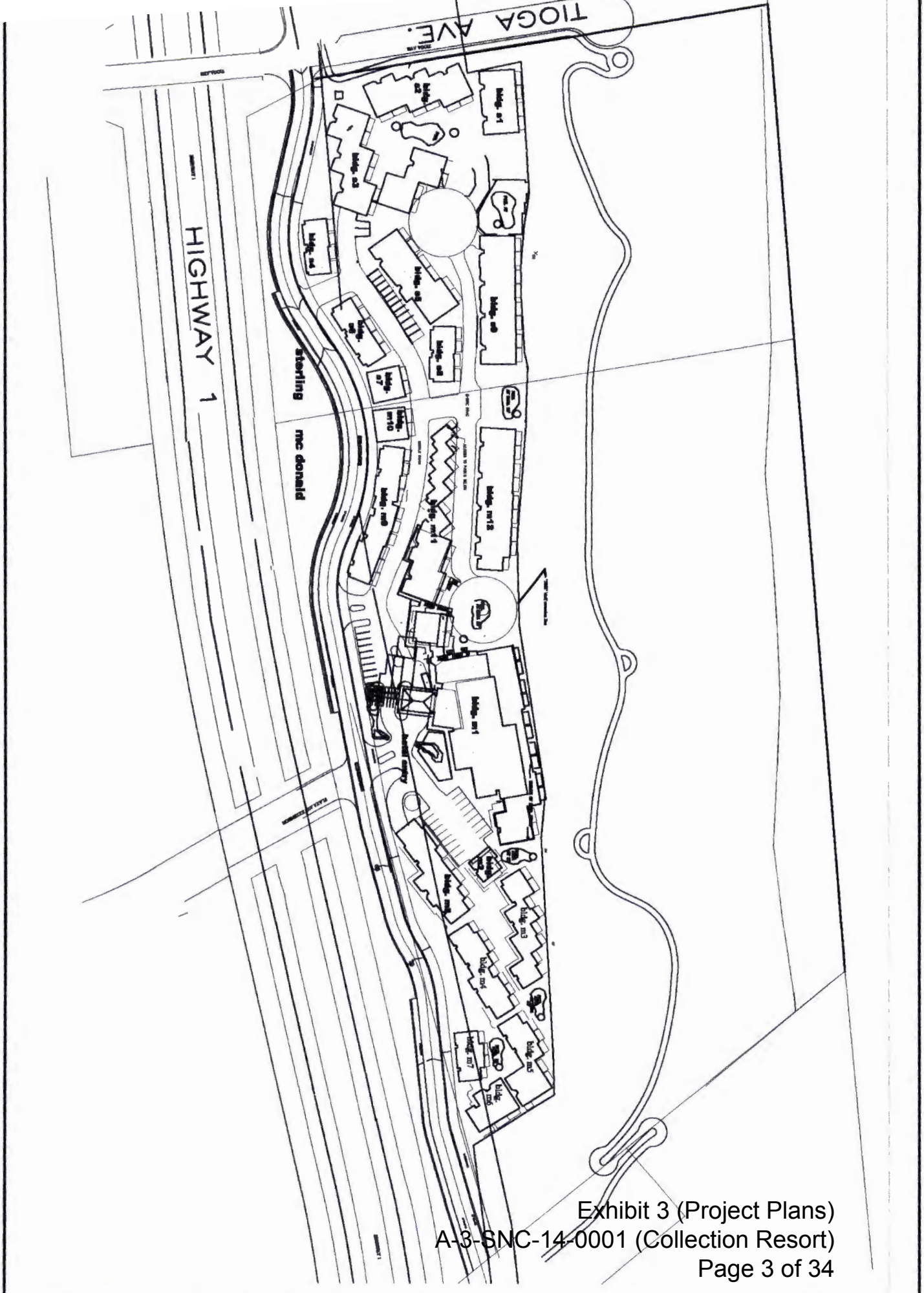
the Collection at Monterey Bay
Sand City, CA

Cover Sheet - Index - Stats

1
SHEET

Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 2 of 34

SHEET 2		Colored Site Plan	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sendia creek drive fallbrook, ca. 92028



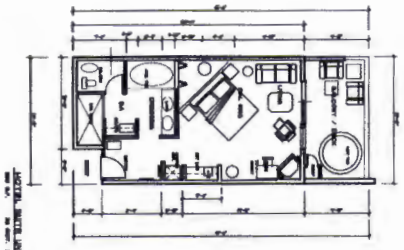
SHEET 2A

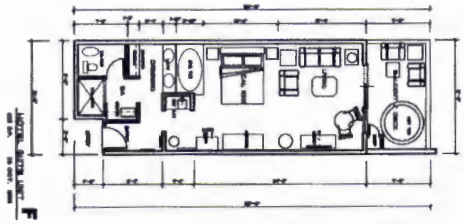
Reference Site Plan

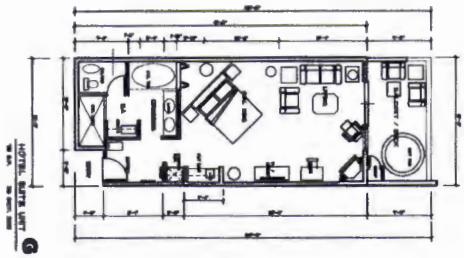
the Collection at Moterey Bay
Sand City, CA

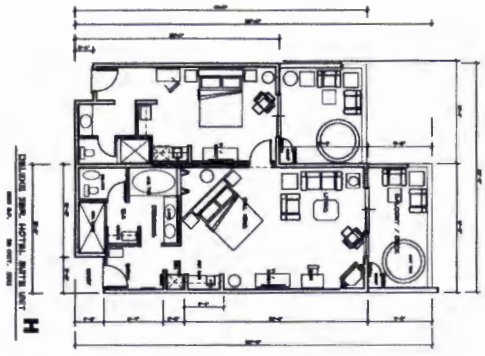
design haus
architectural associates, inc.

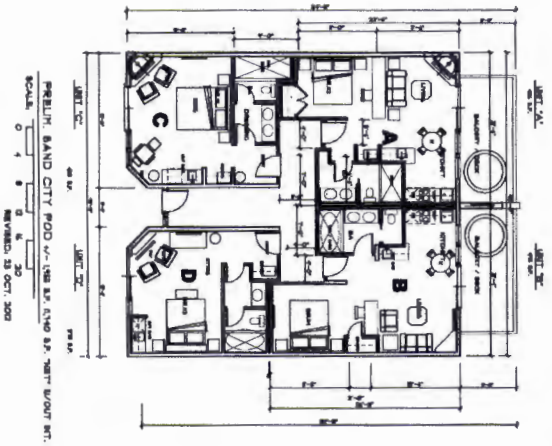
2B SHEET		Aerial Photo Site Plan	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028











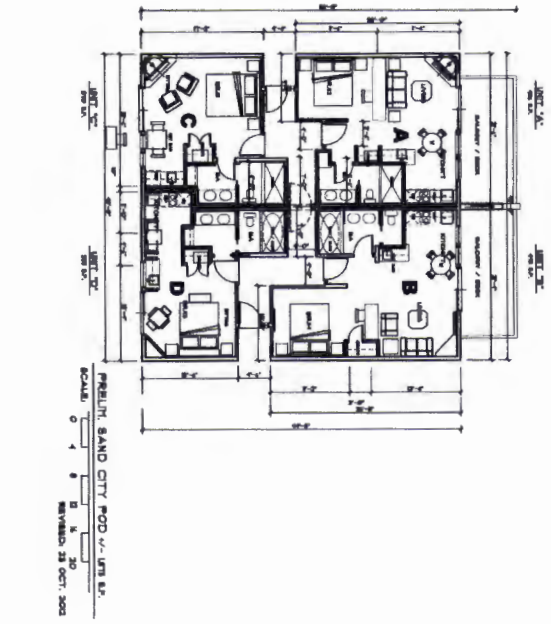
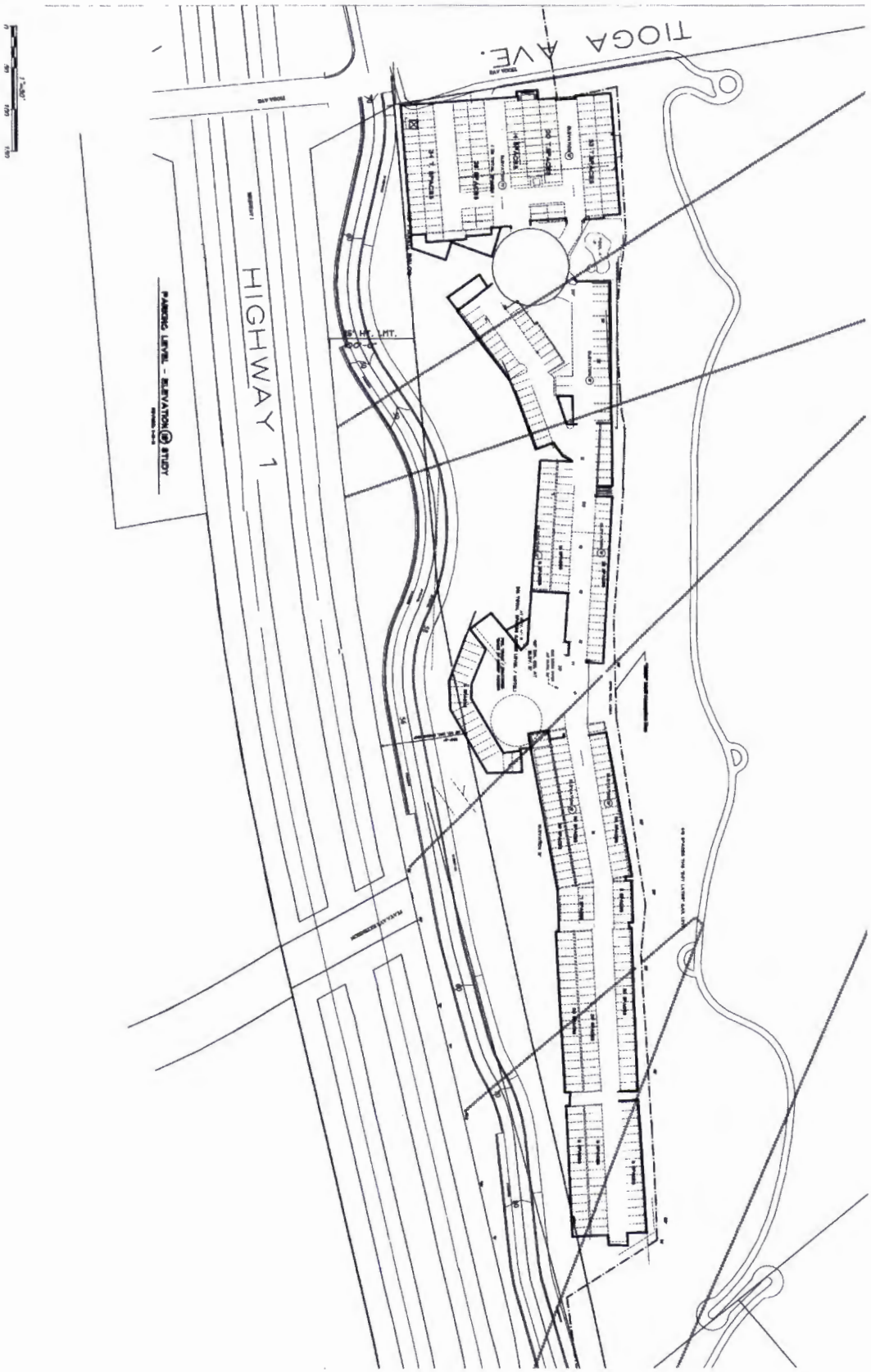


Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 5 of 34

SHEET 3		Unit Floor Plans	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 saudia creek drive fallbrook, ca. 92028



SHEET 4		Parking Level Plan	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028

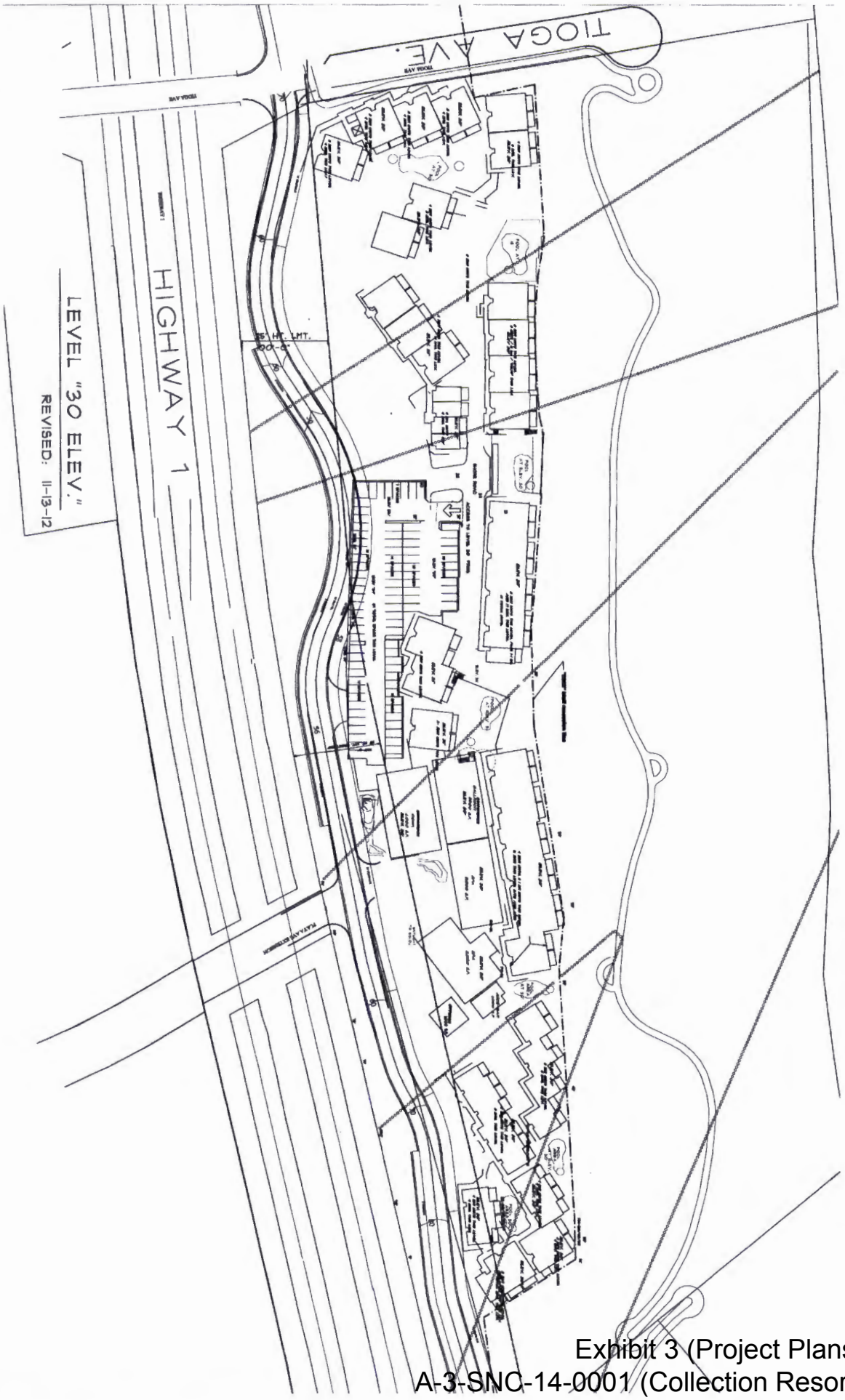
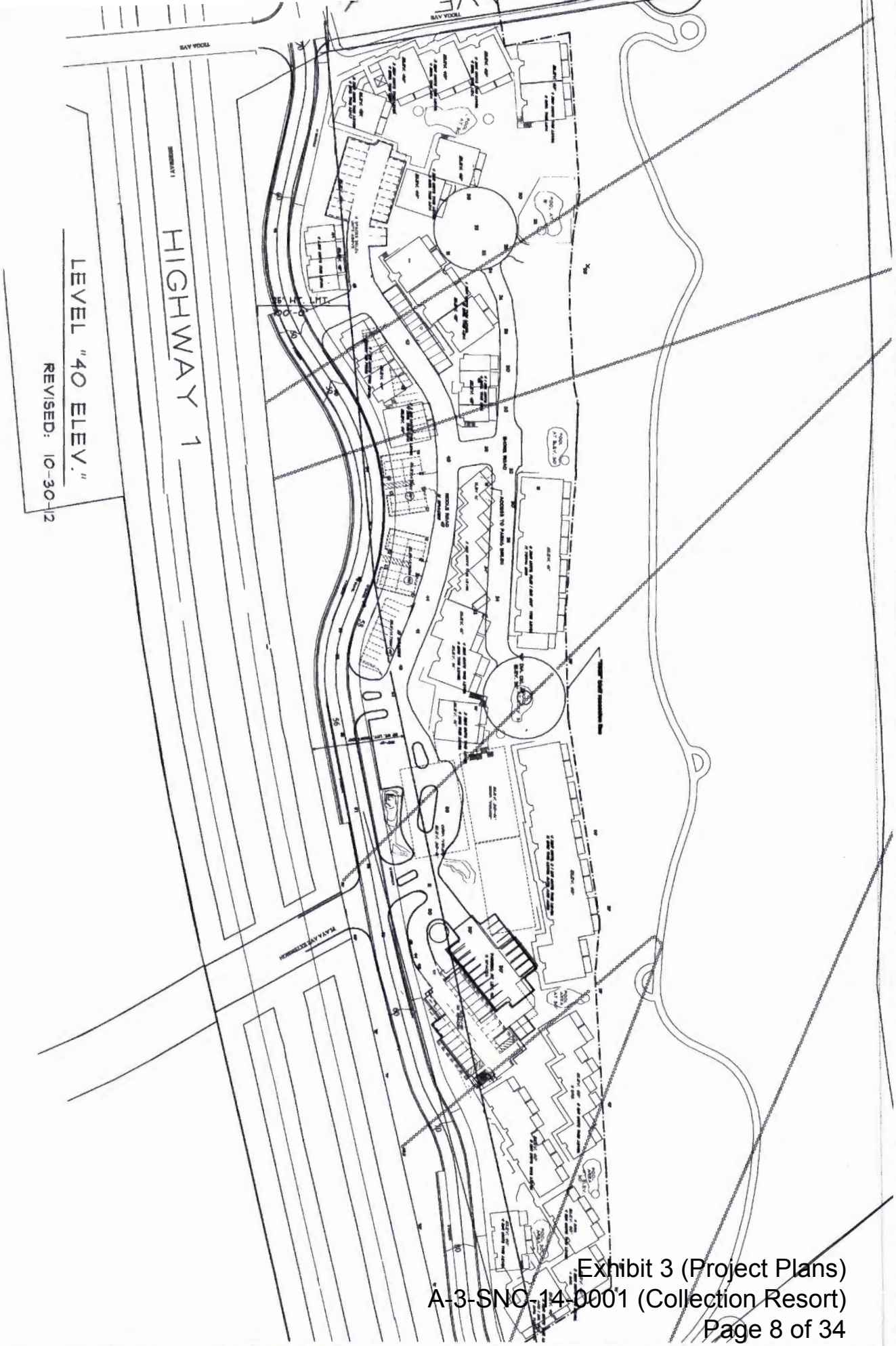


Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 7 of 34

SHEET 5		Hotel Conference & Spa Level Plan	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 saddle creek drive fallbrook, ca. 92028



SHEET 9		Hotel Vacation Club Level	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sundia creek drive fallbrook, ca. 92028

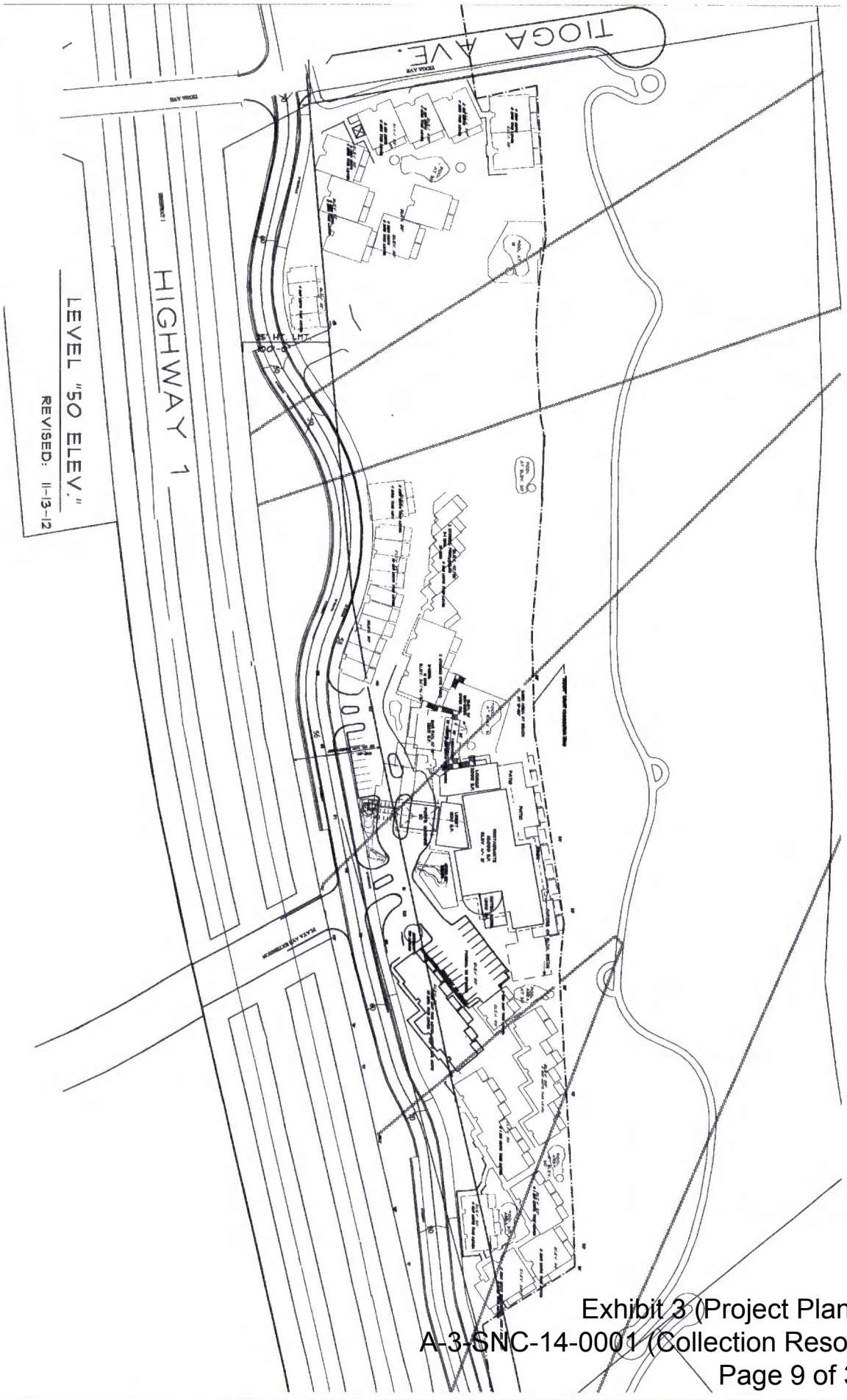


Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 9 of 34

SHEET 7

Hotel Lobby Restaurant & Vacation Club Level

the Collection at Moterey Bay
Sand City, CA

design haus
architectural associates, inc.
40373 sandia creek drive fallbrook, ca. 92028

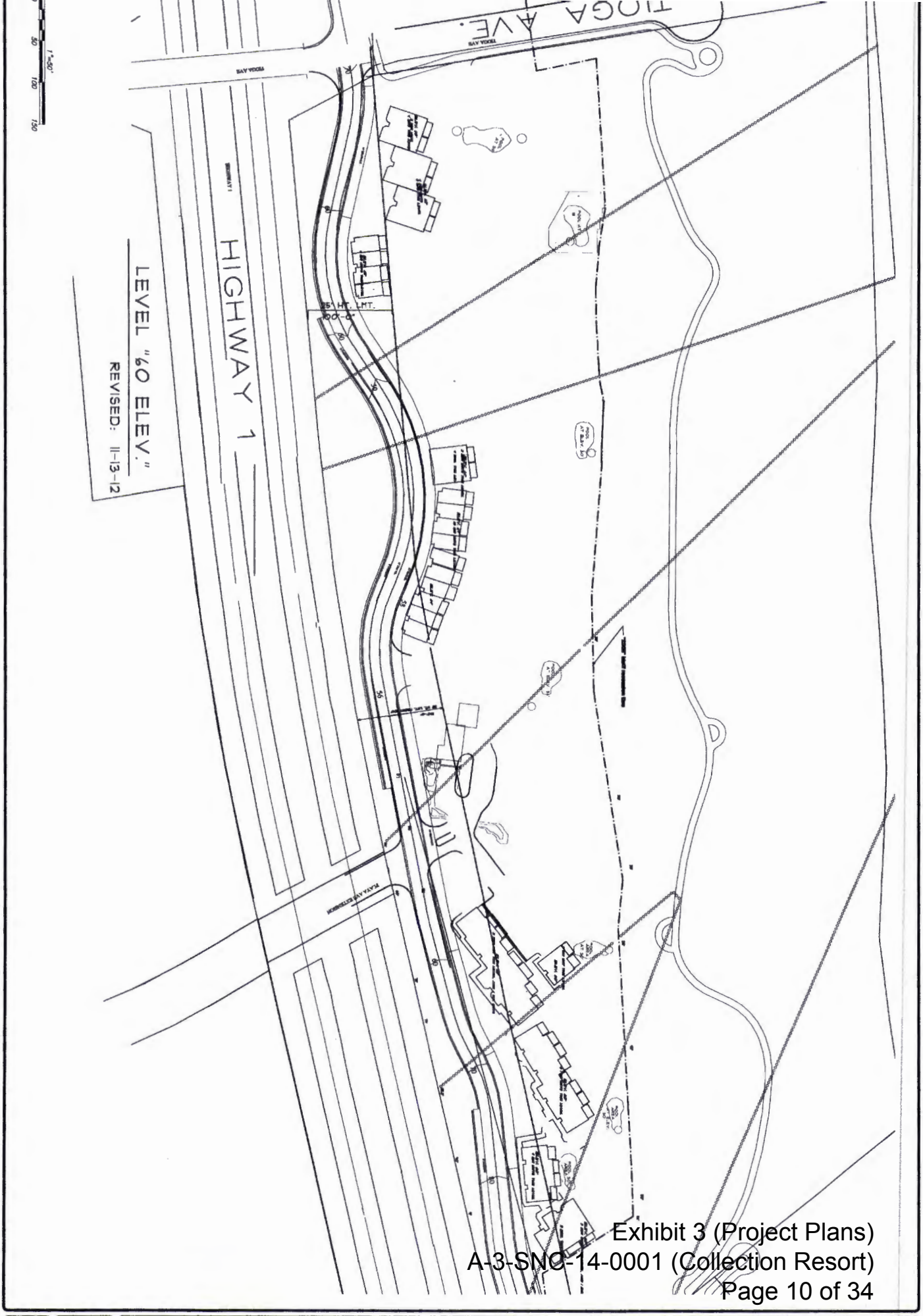


Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 10 of 34

SHEET 8		Hotel - Vacation Club Level	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028

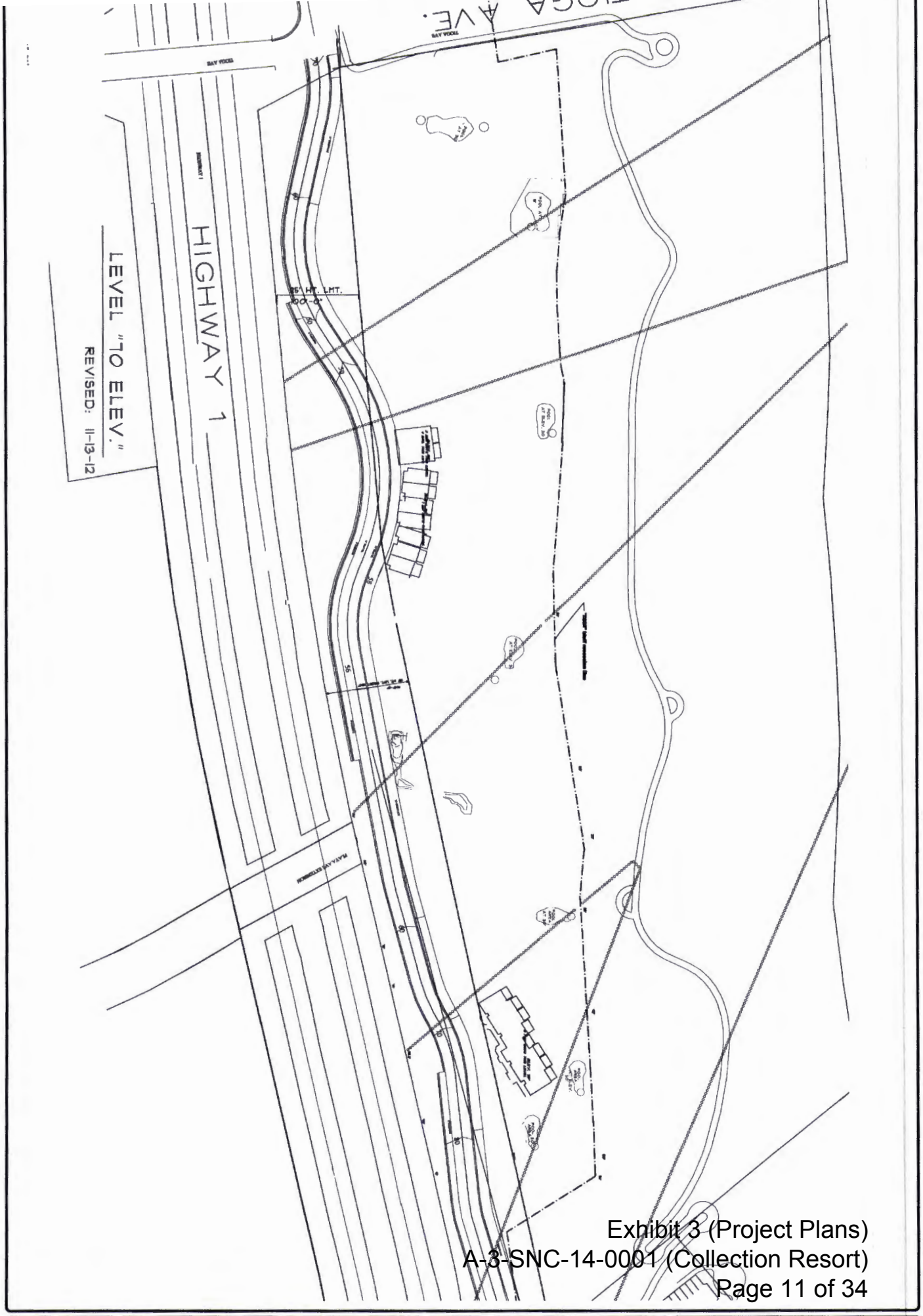


Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 11 of 34

SHEET 9		Hotel Level	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028

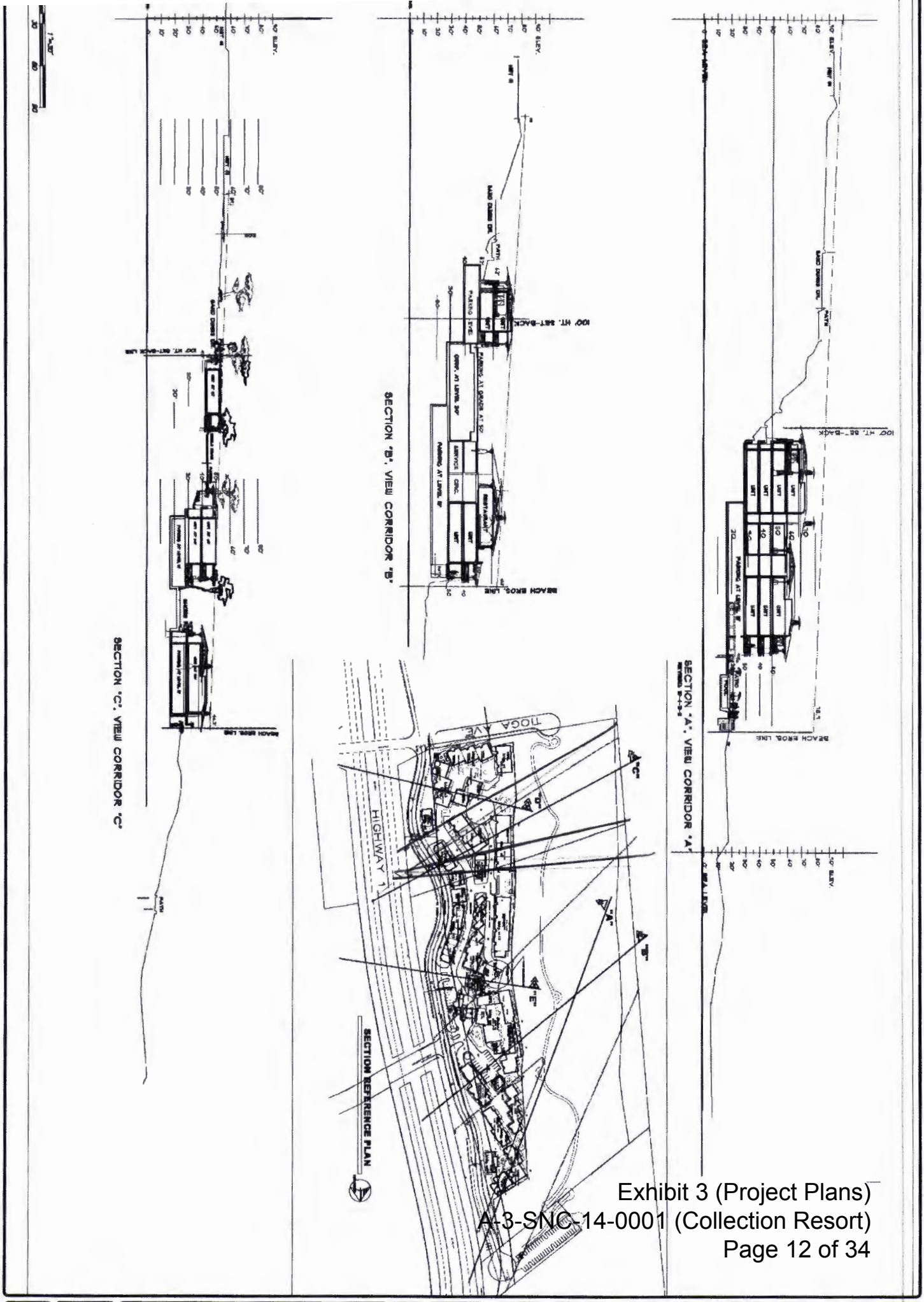


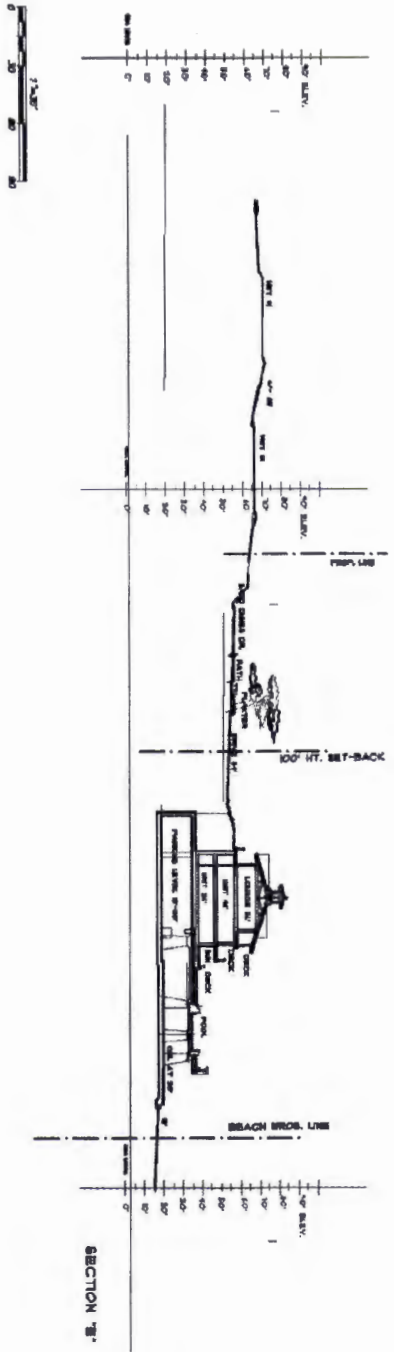
Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 12 of 34

10

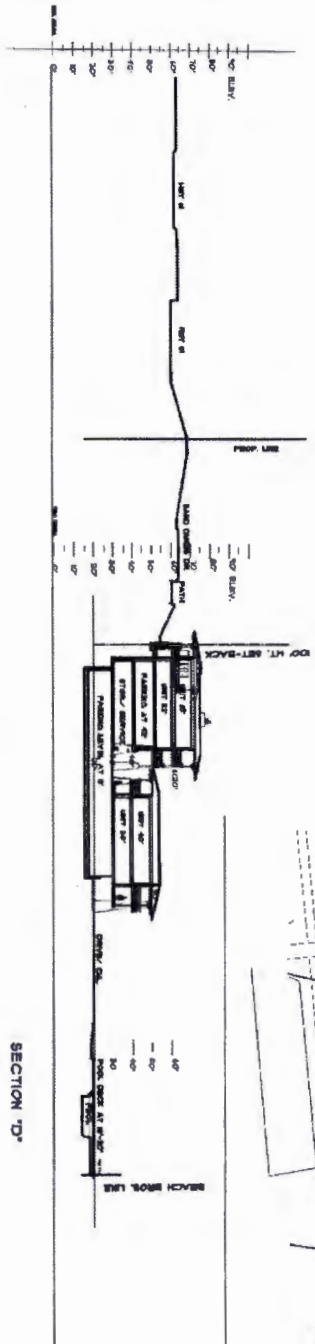
View Corridor Sections A, B & C

the Collection at Moterey Bay

design haus
architectural associates, inc.
40373 sandia creek drive fallbrook, ca. 92028



SECTION "E"



SECTION "D"

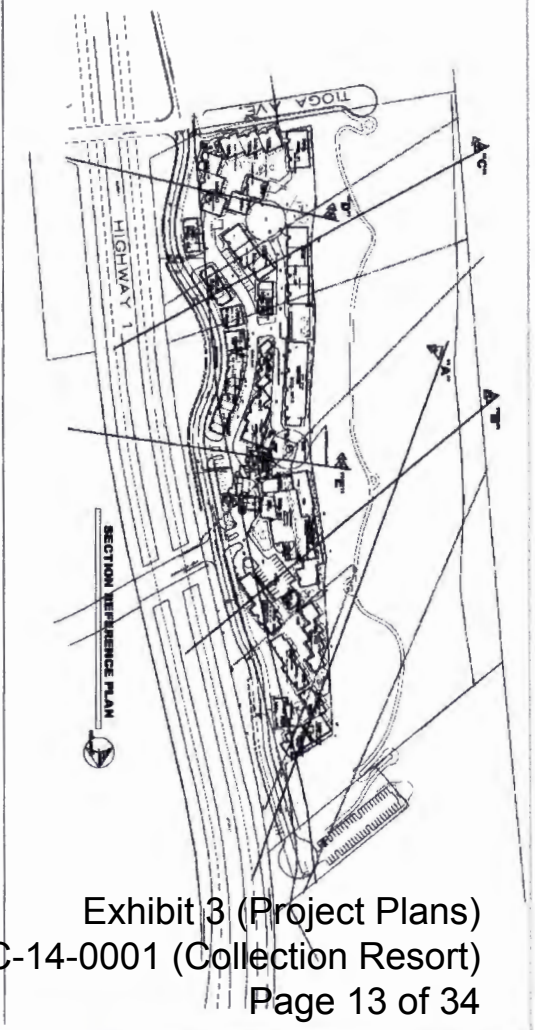
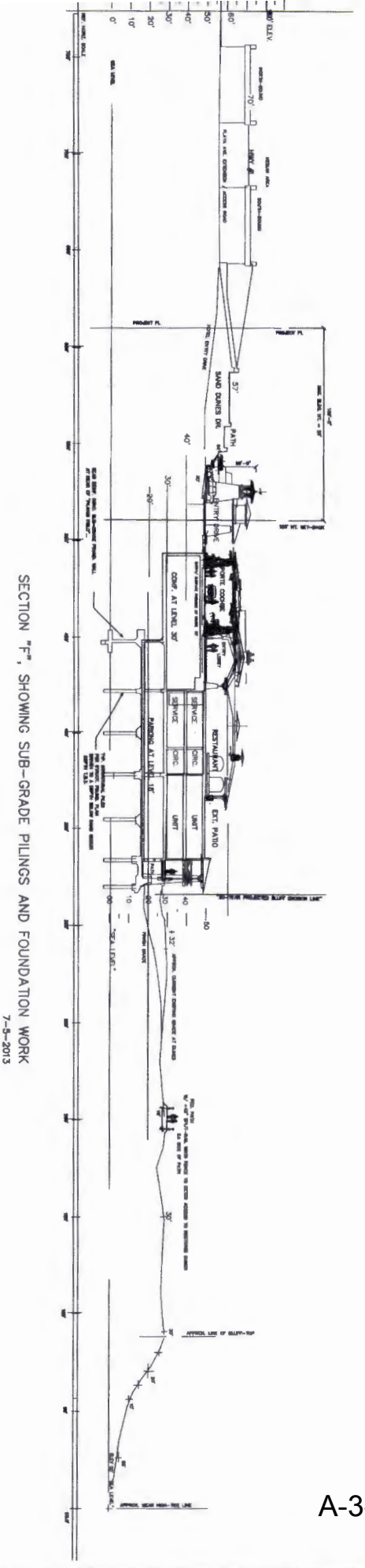


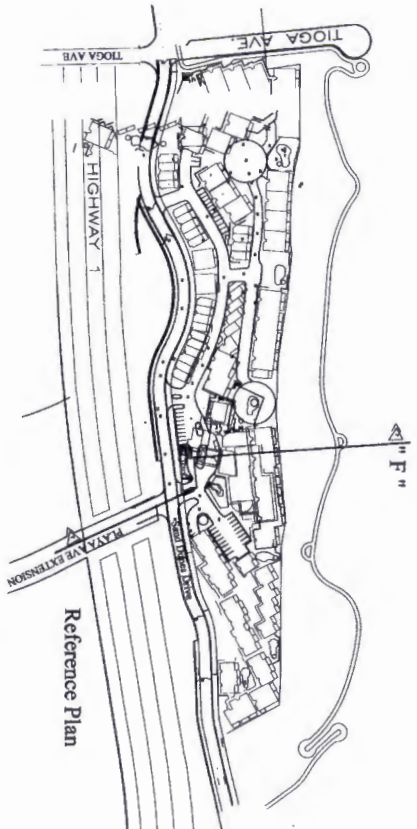
Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 13 of 34

SHEET 11		View Corridor Sections D & E	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028



SECTION "F", SHOWING SUB-GRADE PILINGS AND FOUNDATION WORK

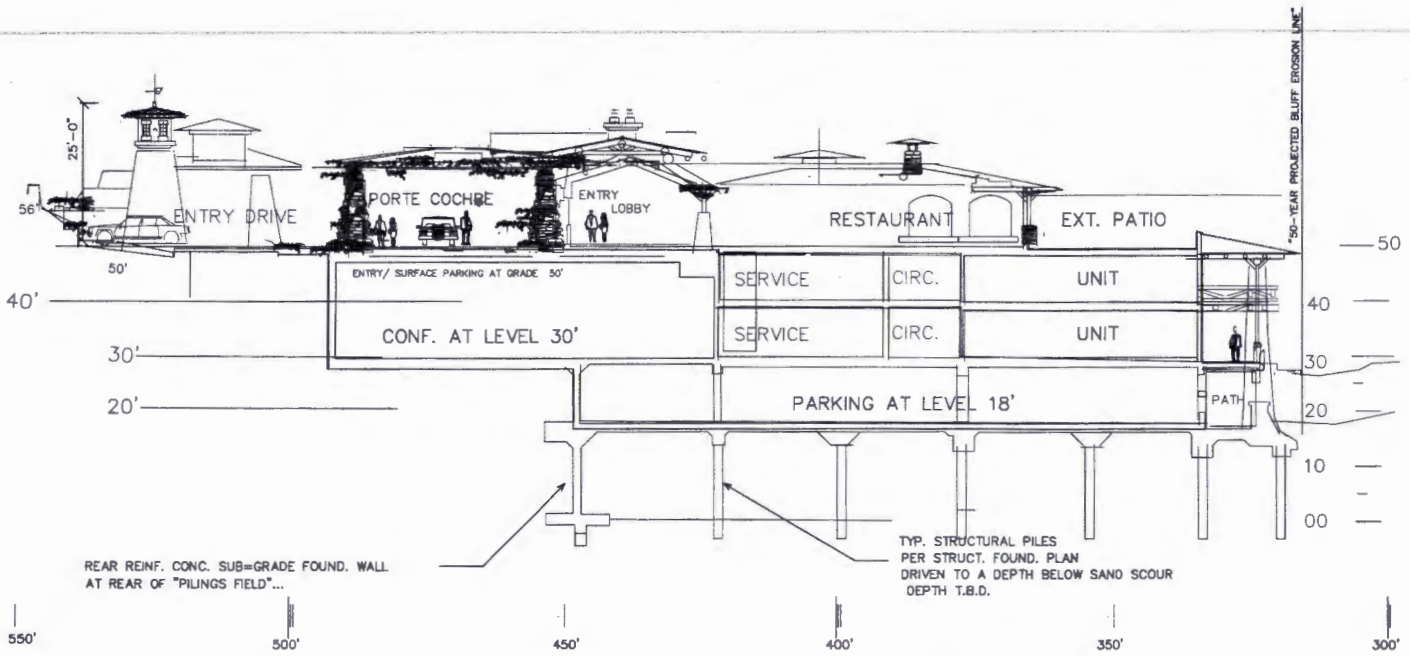
7-5-2013



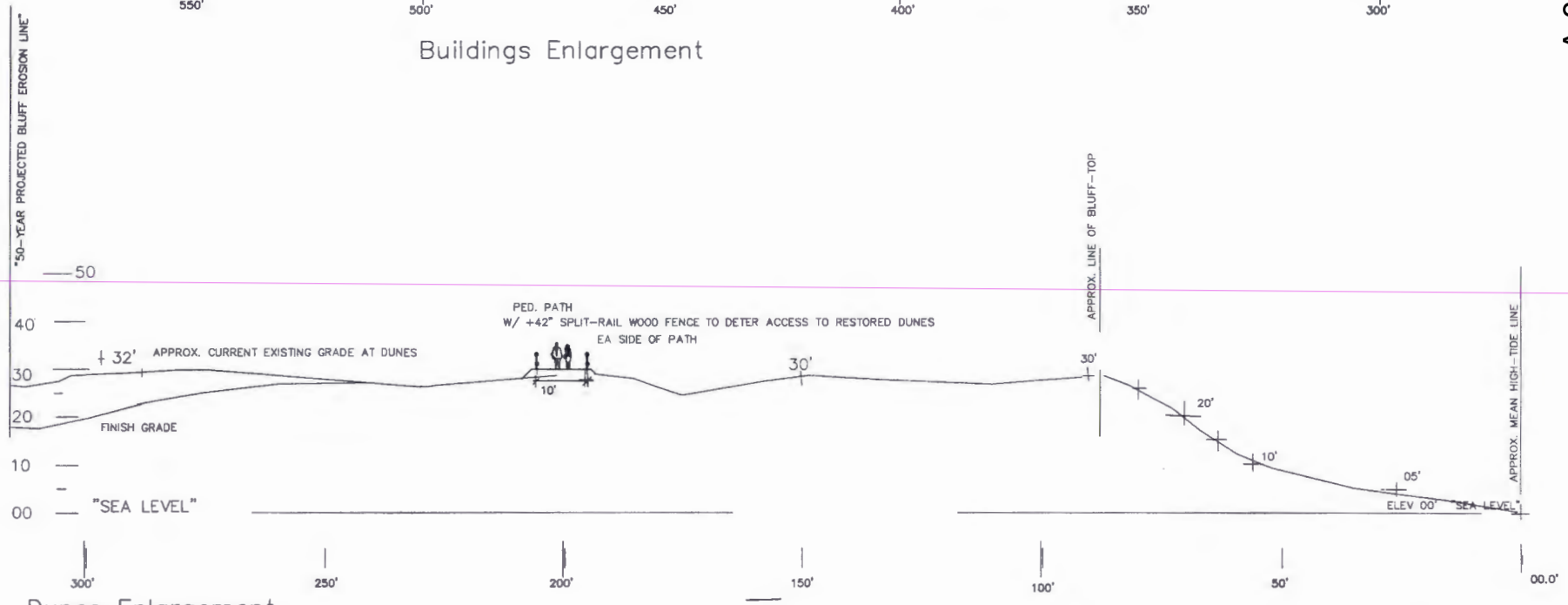
SECTION "F"

Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 14 of 34

SHEET 11A		Section F - Parking Lot Pilings	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028



Buildings Enlargement



Dunes Enlargement

Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 15 of 34

design haus
architectural associates, inc.
40373 sandia creek drive fallbrook, ca. 92028

the Collection at Moterey Bay
Sand City, CA

Section F - Pilings Construction & Dune Profile

11B
SHEET

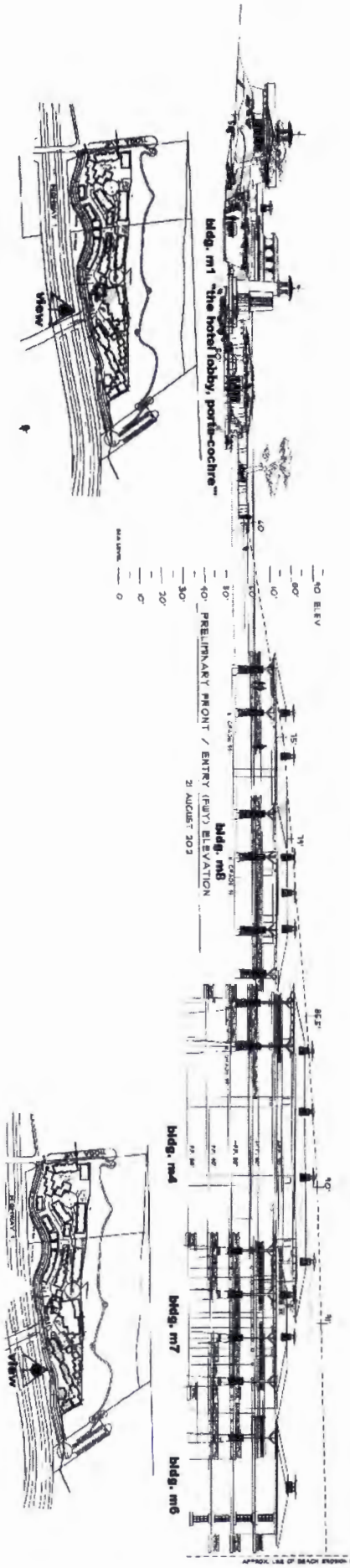


Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 16 of 34

SHEET 12		Section Hotel Lobby Bldgs. M-4, M-6, M-7	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028

SHEET 13

Lobby Colored Elevation

the Collection at Moterey Bay
Sand City, CA

design haus
architectural associates, inc.
40373 saudia creek drive fallbrook, ca. 92028

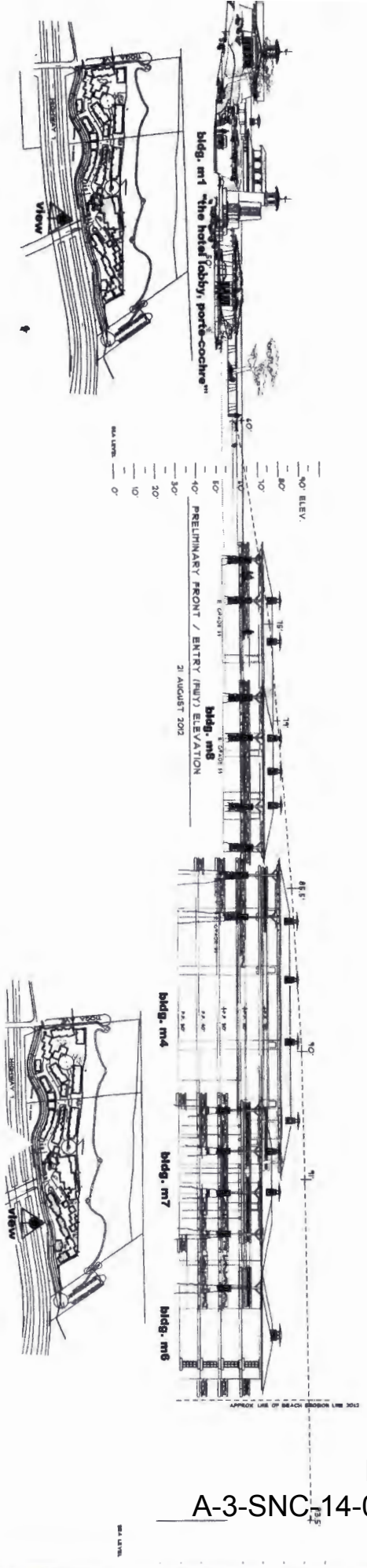


Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 18 of 34

SHEET 14		Section Porte Cochre, Building M	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028

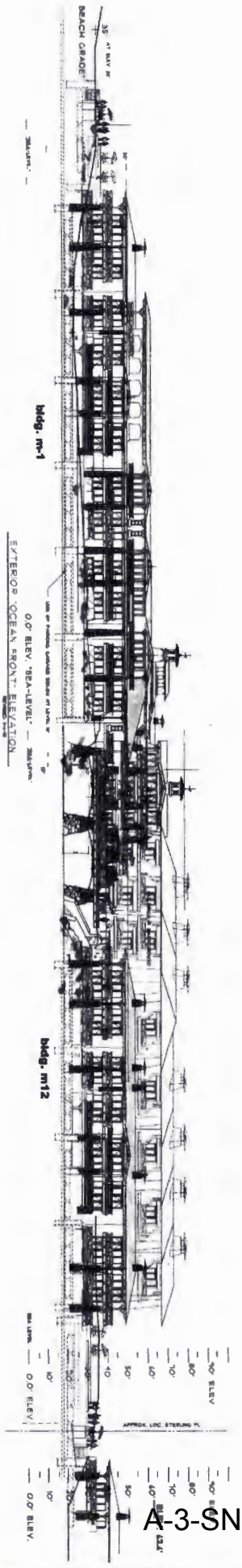


Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 19 of 34

SHEET 15		Partial Oceannfront Bldg Elevation	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028

Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 20 of 34

SHEET 16		Full Oceanfront Colored Elevation	the Collection at Moterey Bay Sand City, CA	design base architectural associates, inc. 40373 murrieta creek drive fallbrook, ca. 92028

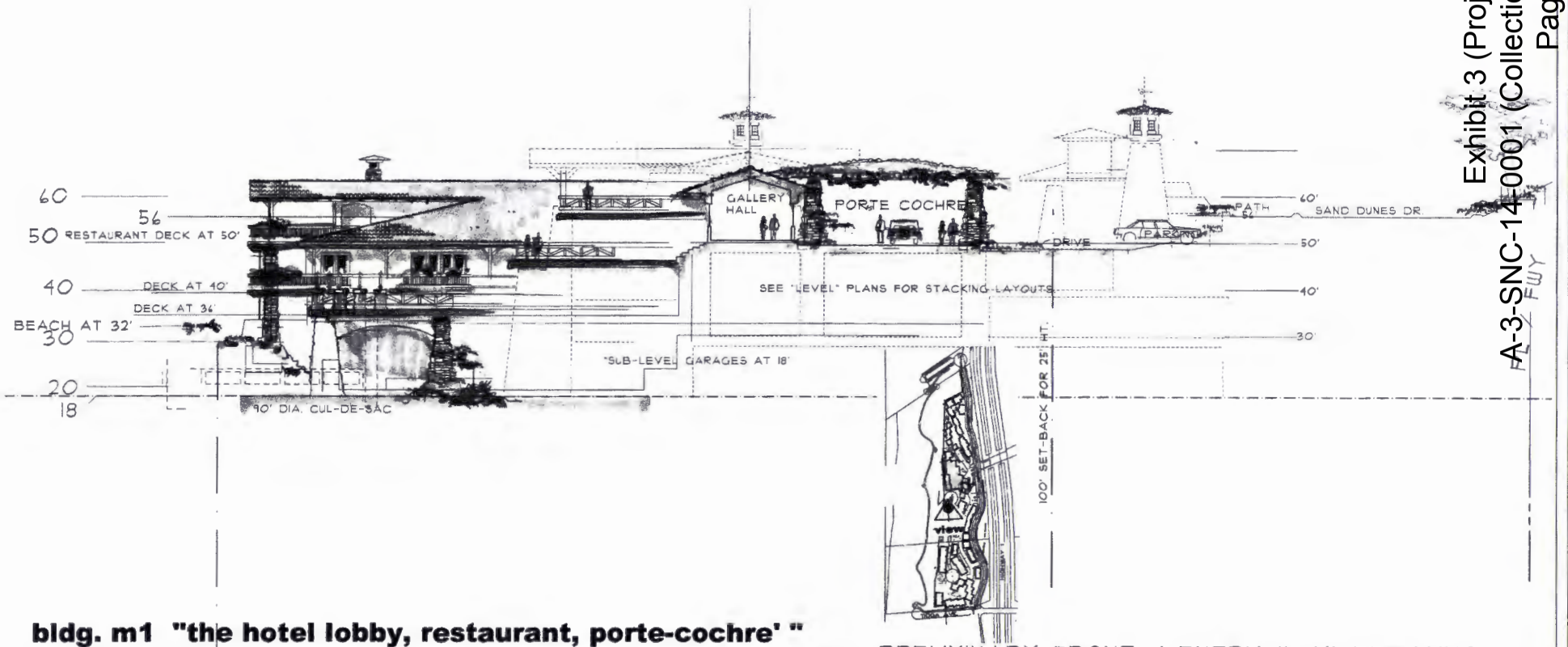
Oceanfront Rendering - Restaurant View from Beach

SHEET 17

Oceanfront Rendering at Restaurant

the Collection at Moterey Bay
Sand City, CA

design haus
architectural associates, inc.
40373 sandia creek drive fallbrook, ca. 92028



bldg. m1 "the hotel lobby, restaurant, porte-cochre' "

"COMPOSITE" SOUTH END ELEVATION

PRELIMINARY FRONT / ENTRY (FWY) ELEVATION

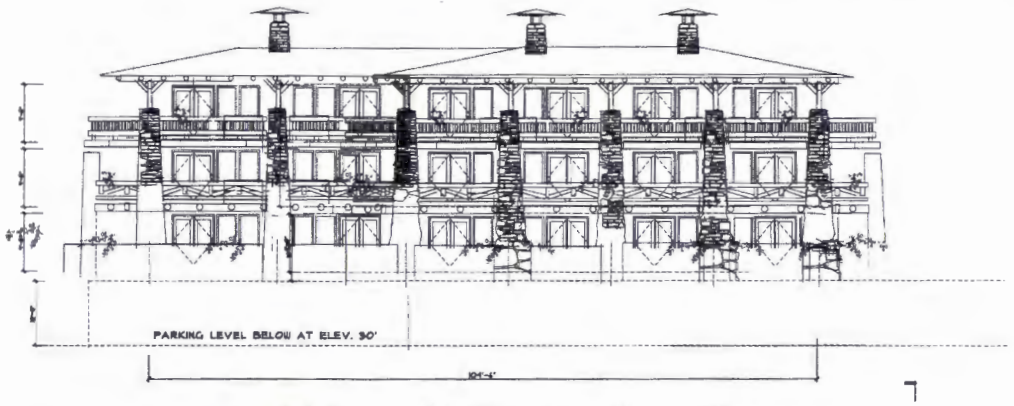
13 NOVEMBER 2012

design base architectural associates, inc. 40373 austin creek drive fallbrook, ca. 92028

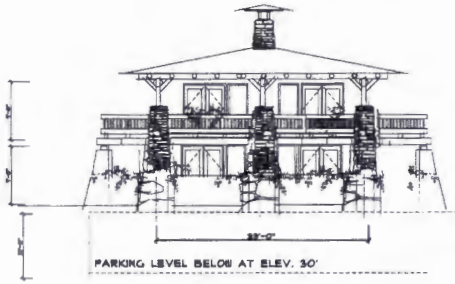
the Collection at Moterey Bay
Sand City, CA

Hotel Lobby - Porte Cochre Section

18
SHEET

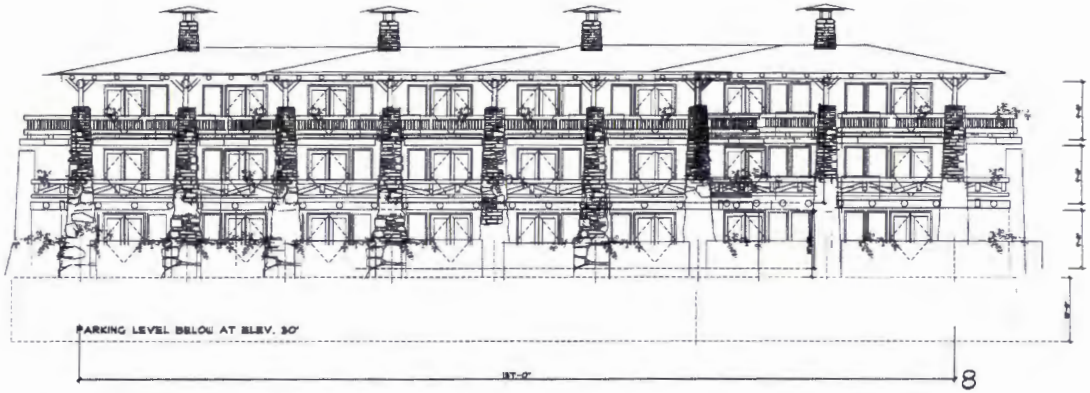


bldg. m5 "beach front" elev.

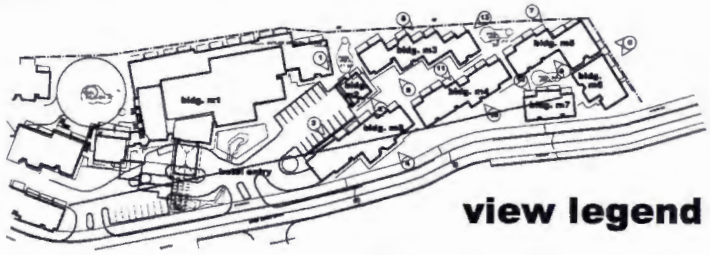


bldg. m2 "west" elev.

SCALE:



bldg. m3 "beach front" elev.



view legend

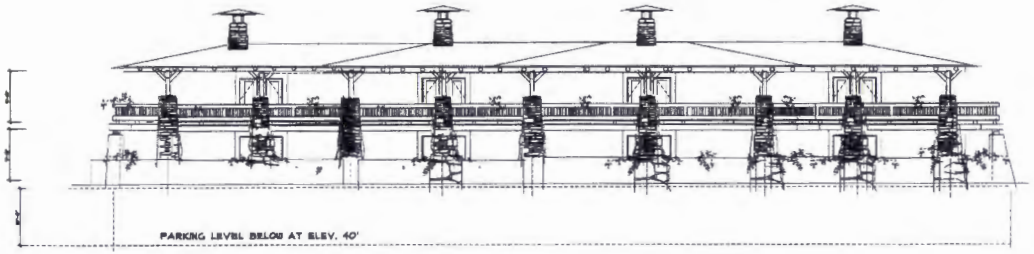
Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 23 of 34

design haus
architectural associates, inc.
40373 amelia creek drive fallbrook, ca. 92028

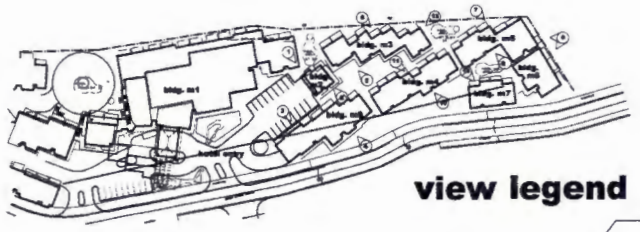
the Collection at Moterey Bay
Sand City, CA

Beach Front Elevations - Hotel

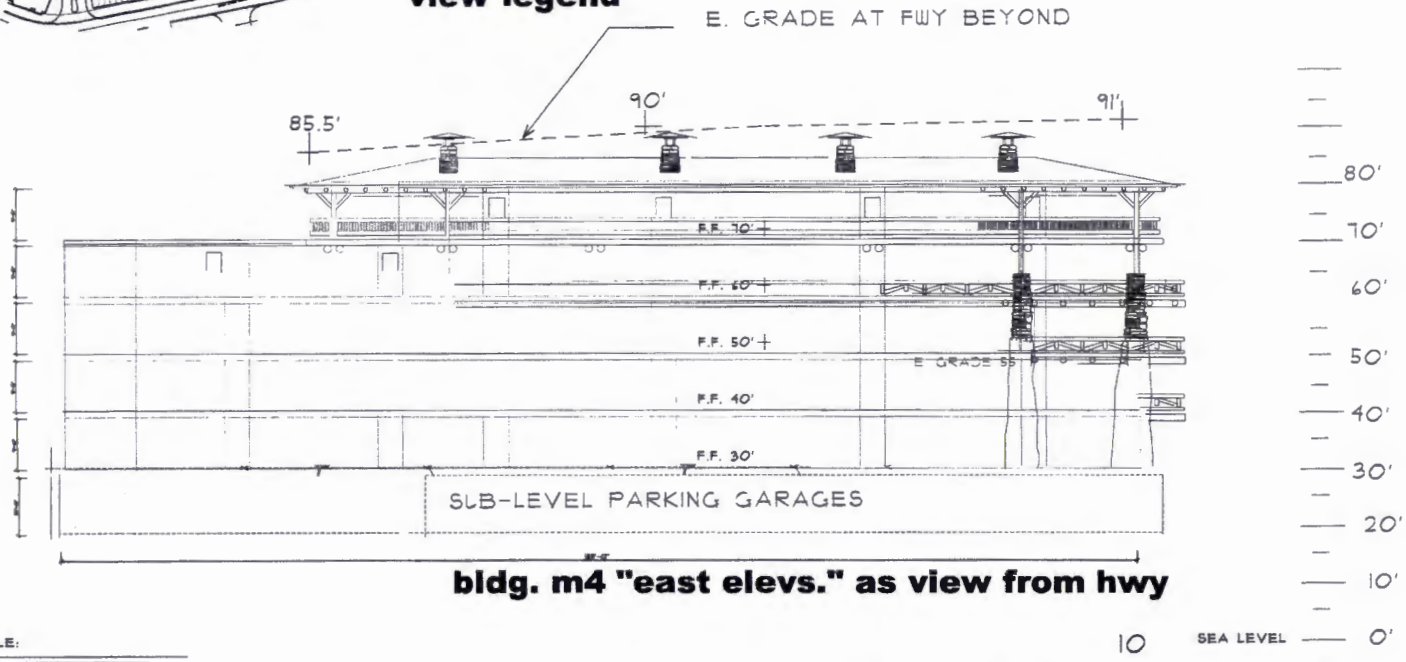
18A
SHEET



bldg. m8 "sand dunes drive" elev.



view legend



bldg. m4 "east elevs." as view from hwy

SCALE:

10

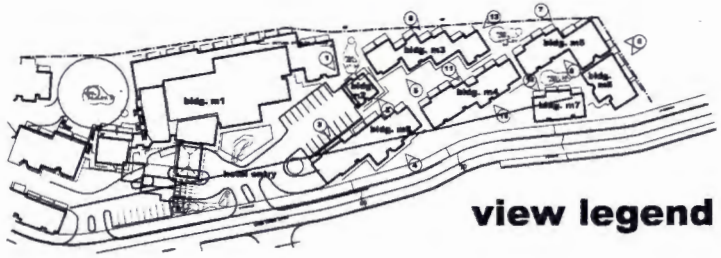
SAND DUNES DRIVE ELEVATIONS

design haus architectural associates, inc. 40373 amelia creek drive fallbrook, ca. 92028

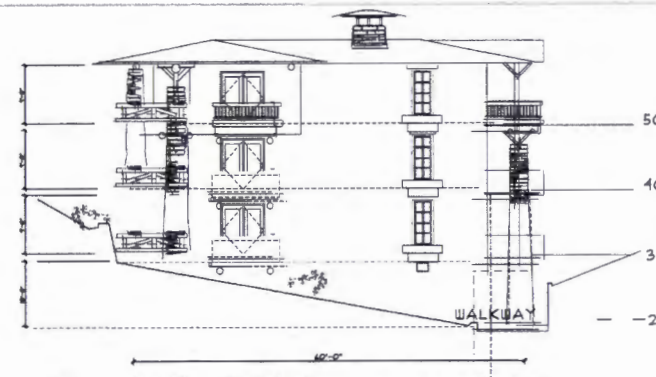
the Collection at Moterey Bay
Sand City, CA

San Dunes Drive Elevations - Hotel

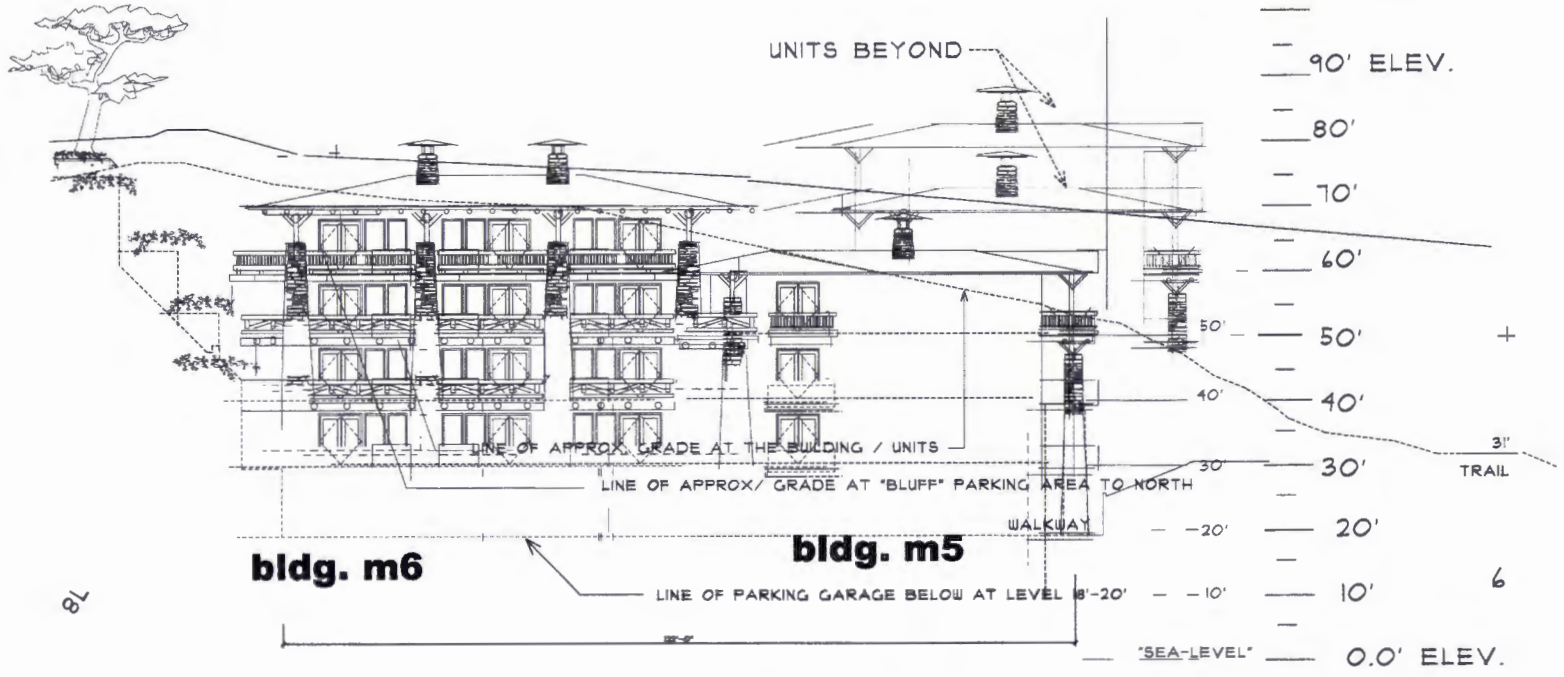
18B
SHEET



view legend



typ. "2br" bldg. end elev.



EXTERIOR "NORTH END" ELEVATION / from the "PARKING AREA"

0.0' ELEV. "SEA-LEVEL"

REVISED: 3-16-2013

SCALE:

HOTEL NORTH END ELEVATIONS

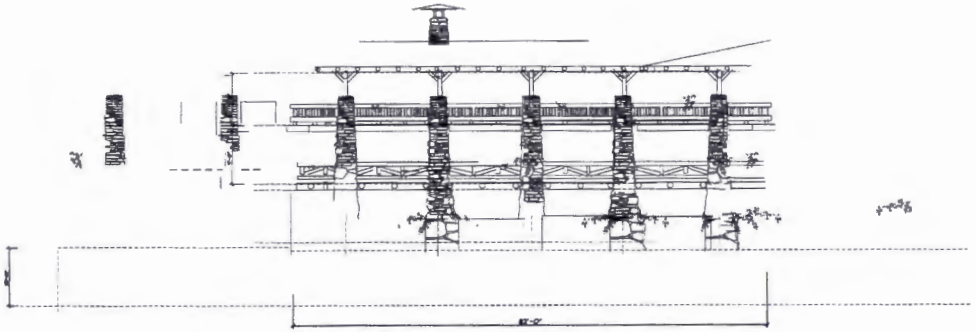
Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 25 of 34

design haus architectural associates, inc. 49373 saddle creek drive fallbrook, ca. 92028

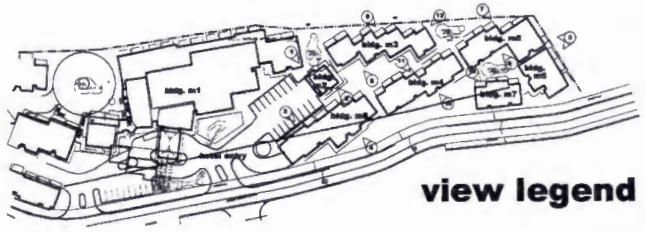
the Collection at Monterey Bay
Sand City, CA

North End Elevations - Hotel

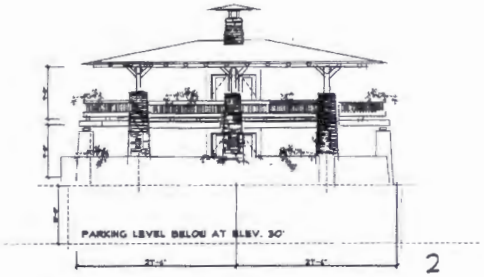
18C
SHEET



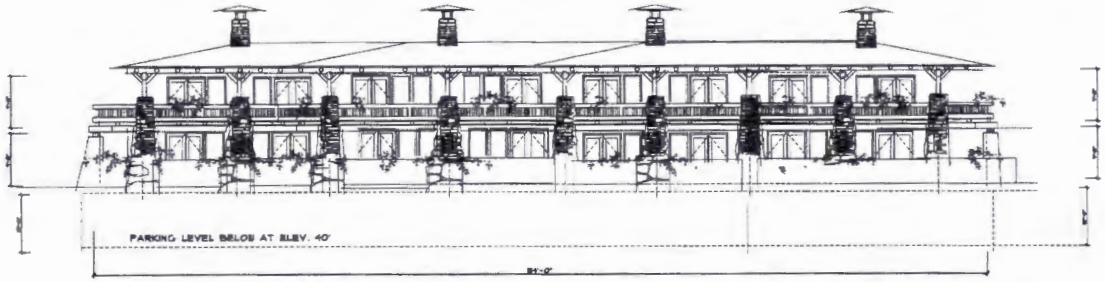
bldg. m3 "center court" elev.



view legend



bldg. m2 "entry court/ east" elev.



bldg. m8 "parking court" elev.

SCALE:

10-16-2013

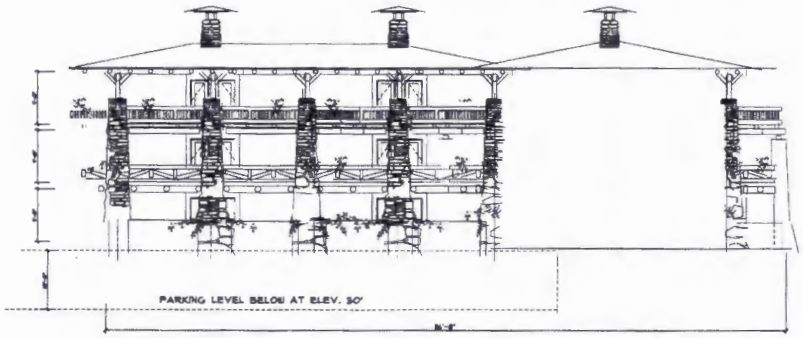
HOTEL "INTERIOR CENTER COURT" ELEVATIONS

design haus
architecture associates, inc.
40373 sandia creek drive fallbrook, ca. 92028

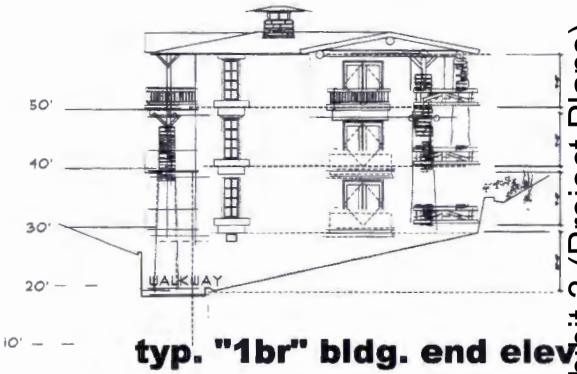
the Collection at Moterey Bay
Seand City, CA

Interior Center Court Elevations - Hotel

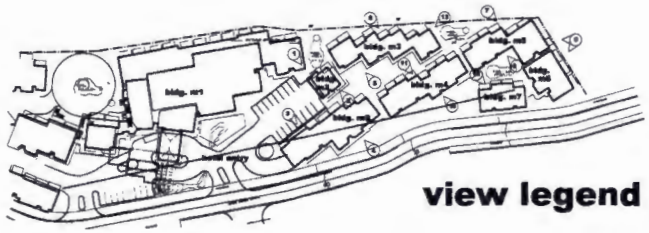
18D
SHEET



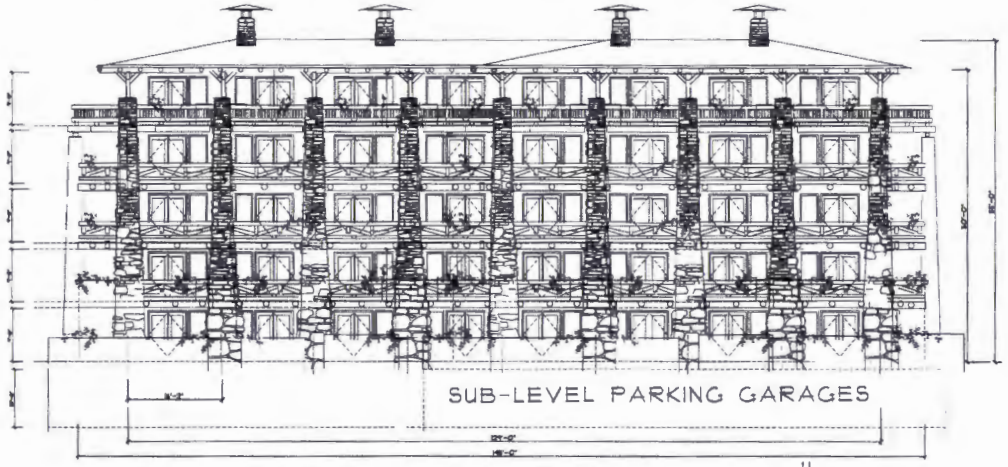
bldg. m5 "center court" elev.



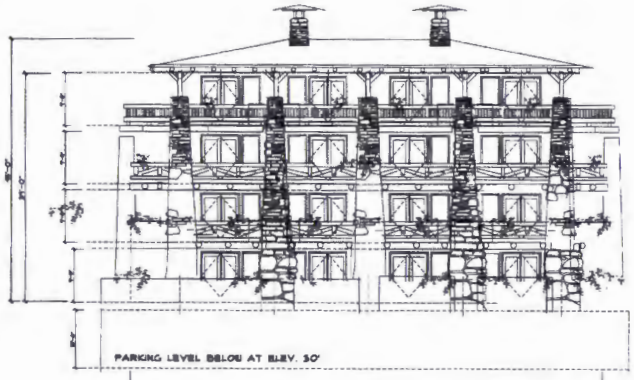
typ. "1br" bldg. end elev.



view legend



bldg. m4 "center court" elev.



bldg. m7 "center court" elev.

SCALE: 1/8" = 1'-0"

HOTEL "INTERIOR - END" ELEVATIONS

design haus architectural associates, inc. 40373 amelia creek drive fallbrook, ca. 92028

the Collection at Moterey Bay
Sand City, CA

Interior end Elevations - Hotel

18E
SHEET

EXTERIOR "OCEAN FRONT" ELEVATION / the "STERLING"

REVISED: 8-17-12

SHEET 19		Ocean Front Colored Elevation	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028

Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 29 of 34

Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 30 of 34

SHEET 21		Tioga Ave. Colored Elevation	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sundia creek drive fallbrook, ca. 92028

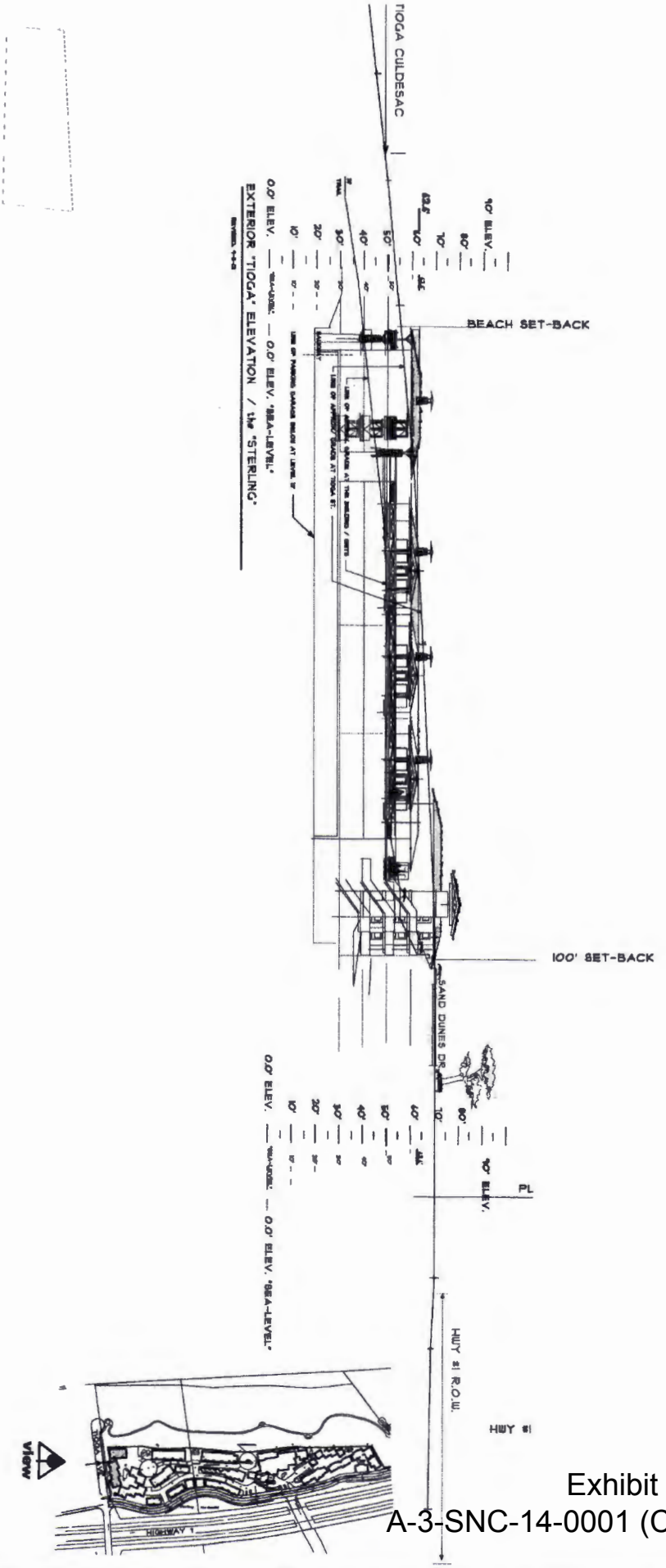


Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 31 of 34

SHEET 22		Tioga Ave. Building Elevation	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 saucito creek drive fallbrook, ca. 92028

Sand City Resort, Monterey Bay, California

EXTERIOR COLORS/ MATERIALS

The "design theme" for the project is to be "Old California" set "into the side of the hill" and exhibit a blend of "natural" plateau, stone, wood and earth colors that will allow to project to blend into the existing ocean bluff terrain made up of a varied palette of colors and natural materials.

ROOF: Clay tile in an early "California Blend" of warm Saltillo colors.

STUCCO: A matted selection of La Habra Stucco golds and light tans, and earthy tone soft greens.

STONE FACING: A selection by "Eldorado Stone" to emulate a natural "Carmel Stone" appearance.

- "Mountain Ledge" Cliffstone, "Lantana" Cliffstone, "China" Mountain Ledge
- A section of natural stone for column forms, selected walls, planters and low wall areas

DOORS & WINDOWS: A variety of wood, steel, and vinyl doors and windows in "stained natural wood," patina bronze metal, browns and white selected with care to withstand the harsh ocean exposure and still feel like early California.

STAINED TIMBERS, BEAMS, POSTS & FASCIAS, TRIM, EXTERIOR SIDING & SHINGLES: "BEHR" paint selections, or an "SEMI" solid body stain:

- Indicated in "natural" browns, light browns, and tans with accents and wrought iron railings, etc. in dark greens, bland black and burgundy "patinas."
- Two selections: "Adobe Brown" and "Chamois" for "beams, trim, fascias, eaves, trim and siding panels."

WALKS & COURTYARD AREAS: "Pavers" in natural Saltillo Tiles, or "stone finish" "stamp-crete concrete, some patio or walls may be in natural "GC" treatments.

DRIVES & SURFACE PARKING AREAS: "Red Brick Paving" with various patterns and textures with landscaping.

BALCONIES & DECK RAILINGS: A combination of:

- "Natural Wood" with stainless steel frames and cables;
- Powder coated galvanized metal railing painted in dark patina bronze shaded to black; and
- Tempered glass panels where required by Coastal for view interaction and screen views.

OP21505TB

Harwich 10" Outdoor Post Light Textured Black

OW21501TB

Harwich 10" Outdoor Wall Light Textured Black

PROGRESS LIGHTING

Progress Lighting
701 Millennium Blvd.
Greenville, South Carolina
29607

www.progresslighting.com

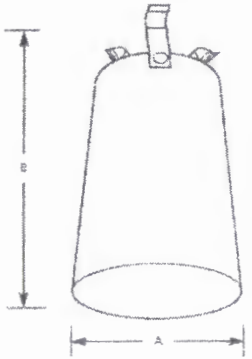
Nightsaver **Outdoor**

Lamp Shield

Type

	-19	-31	-33	-44
P8709	☐	☐	☐	☐

Catalog No.	Finish: Roman Bronze	Brushed Nickel	Cobble-stone	Oxford Silver	Dimensions(Inches): A	B
P8709	-19	-31	-33	-44	2-7/8	3-3/8



Specifications:

General

- Shield to convert most wall & chain hung lanterns to a sky friendly fixture
- When installed no light is emitted above 45 degrees
- For A19 lamps mounted in a downward position (base up)
- Available to match most lantern finishes.

Mounting

- A high heat gasket is affixed to the top of the shield which slides over the base of the lamp
- Lamp and shield are installed as a unit

Other

- Patent Pending

Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 33 of 34

design team
architectural associates, inc.
40873 sandia creek drive fallbrook, ca 92028

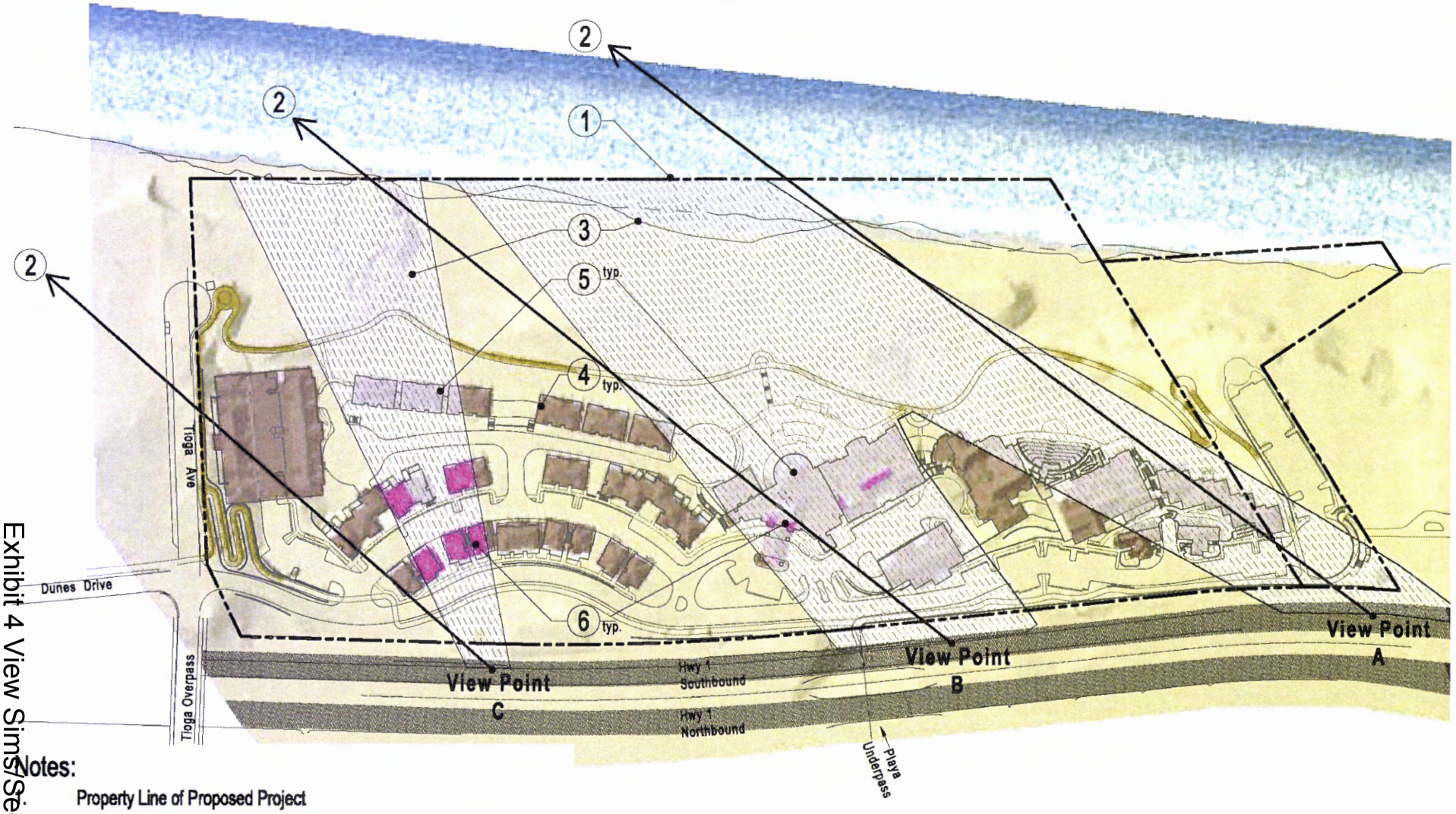
the Collection at Moterey Bay
Sand City, CA

Light Fixture Details

23A
SHEET

Exhibit 3 (Project Plans)
A-3-SNC-14-0001 (Collection Resort)
Page 34 of 34

SHEET 24		Preliminary Grading and Drainage Plan	the Collection at Moterey Bay Sand City, CA	design haus architectural associates, inc. 40373 sandia creek drive fallbrook, ca. 92028



Notes:

1. Property Line of Proposed Project
2. View angle looking toward the Coast Guard Station in Monterey as specified in the L.C.P.
3. Extent of L.C.P. required "views over development" corridor shown shaded with in dashed lines.
4. Proposed structure outside of view corridor.
5. Proposed structure in view corridor below height limitation shown shaded.
6. Height encroachment of proposed structure in view corridor, not shaded.

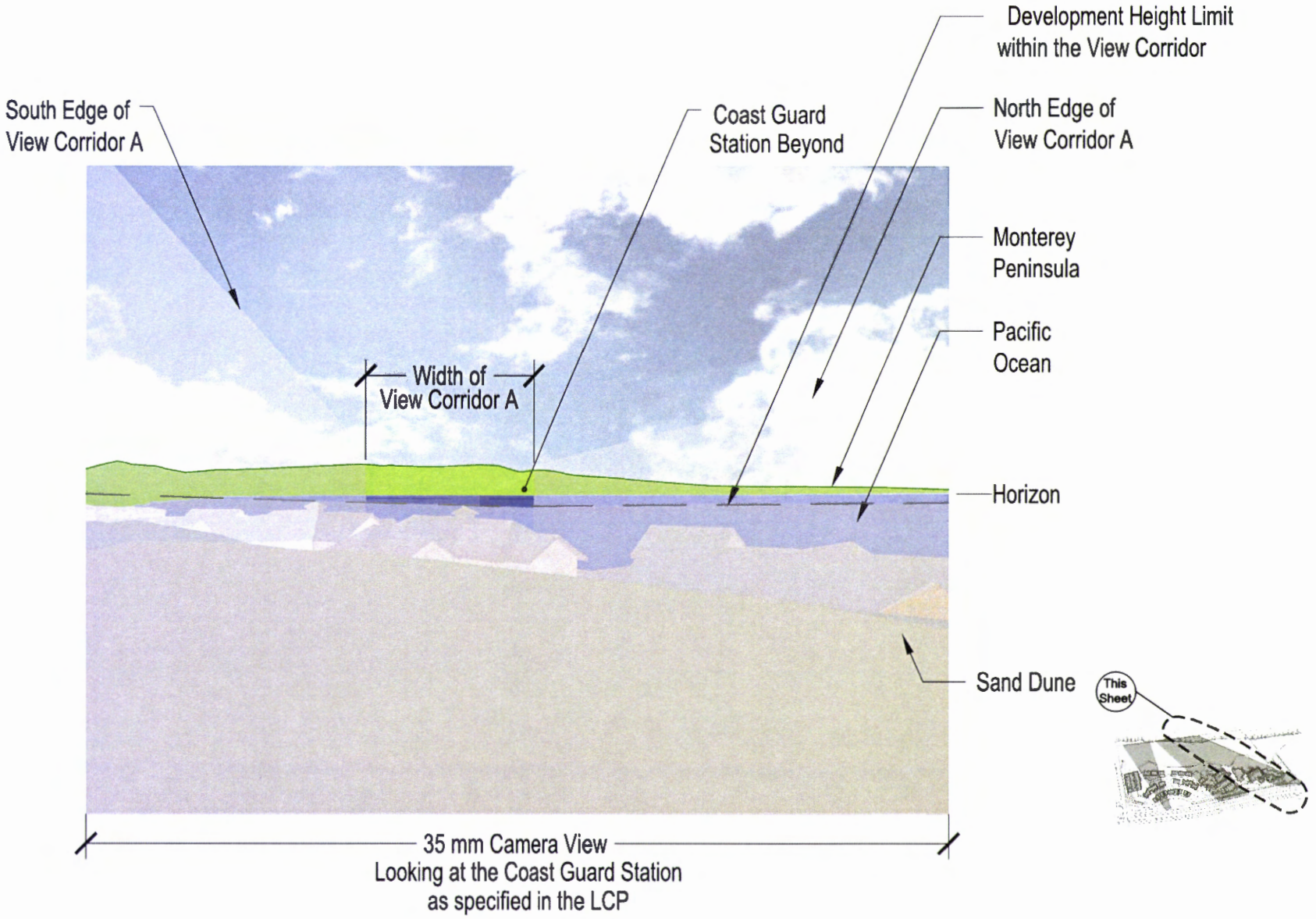
VISUAL STUDY KEY

FIGURE 13

Exhibit 4 View Sims/Sections (from Hwy 1)

A-3-SNC-14-0001 Collection Resort at Monterey Bay

1 of 5

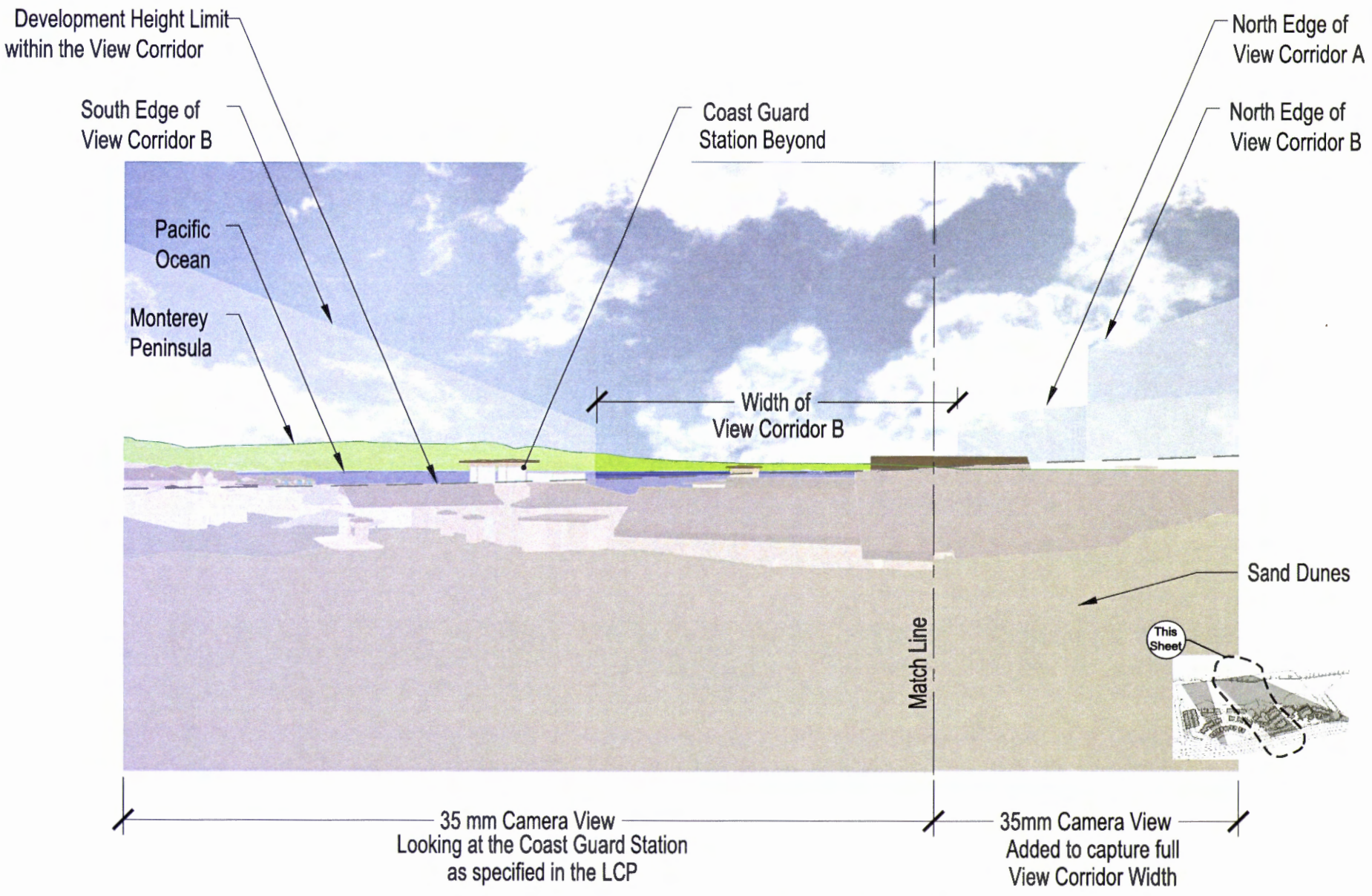


Note: View is from the outside lane of southbound SR 1 at four (4) feet (driver's view) above the travel lane surface.

VIEW CORRIDOR A

FIGURE 14

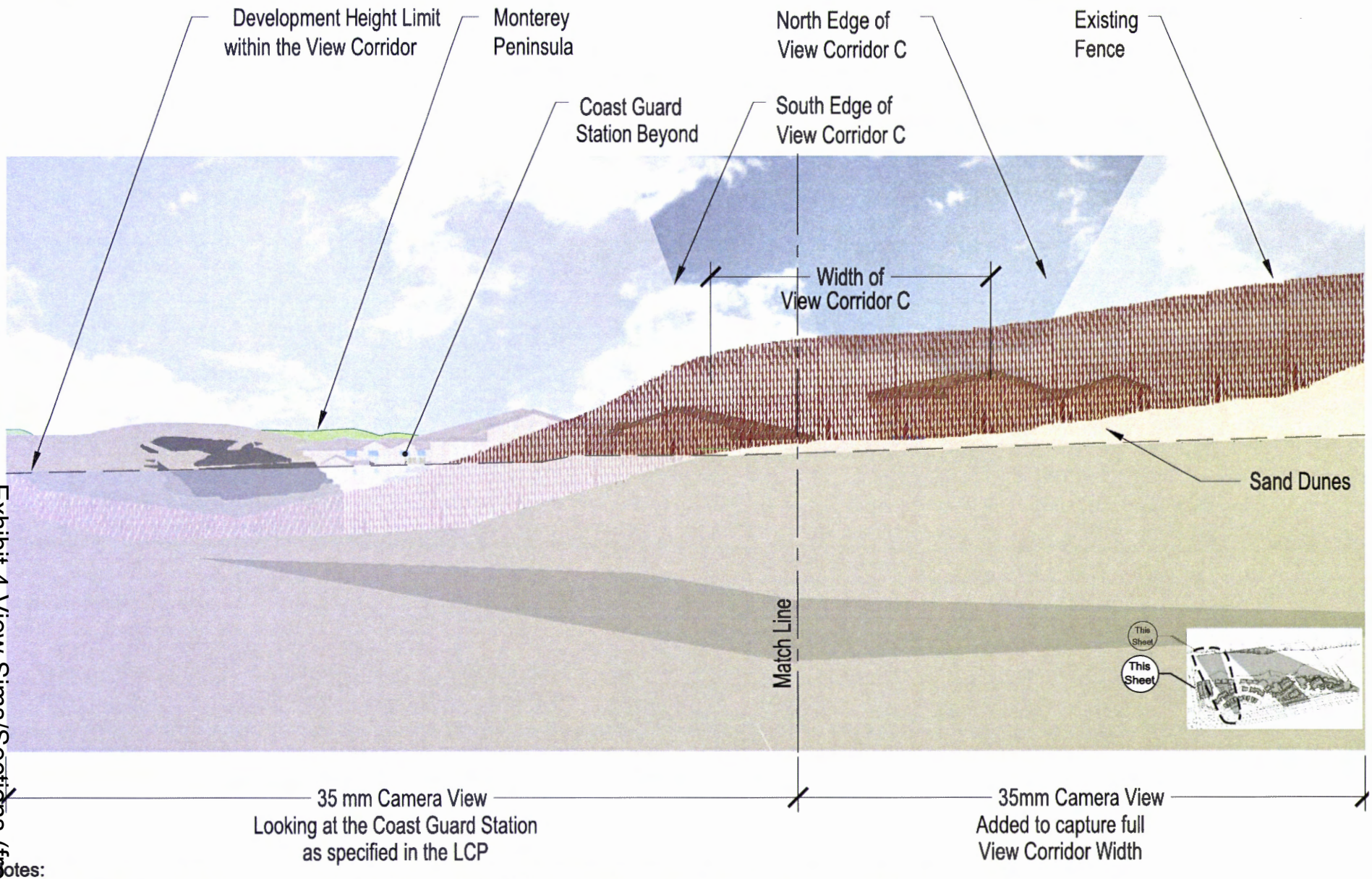
Exhibit 4 View Sims/Sections (from Hwy 1)
A-3-SNC-14-0001 Collection Resort at Monterey Bay
80
2 of 5



Note: View is from the outside lane of southbound SR 1 at four (4) feet (driver's view) above the travel lane surface.

VIEW CORRIDOR B

FIGURE 15



Notes:

1. View is from the outside lane of southbound SR 1 at four (4) feet (driver's view) above the travel lane surface.
2. Proposed building exceed the development height limit within the view corridor; however, no significant impact would occur given the existing view blockage from the chain link fence on the site (refer to section 3.2.2.3).

VIEW CORRIDOR C

FIGURE 16

Exhibit 4 View Sims/Sections (from Hwy 1)

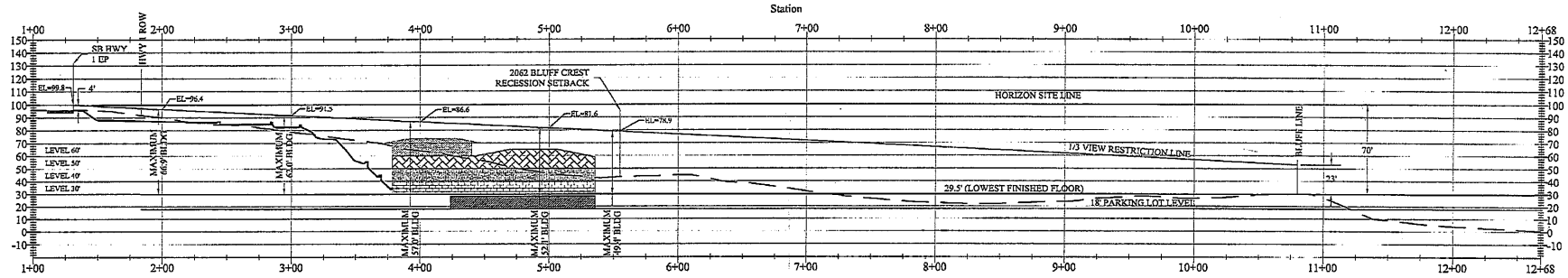
A-3-SNC-14-0001 Collection Resort at Monterey Bay

82

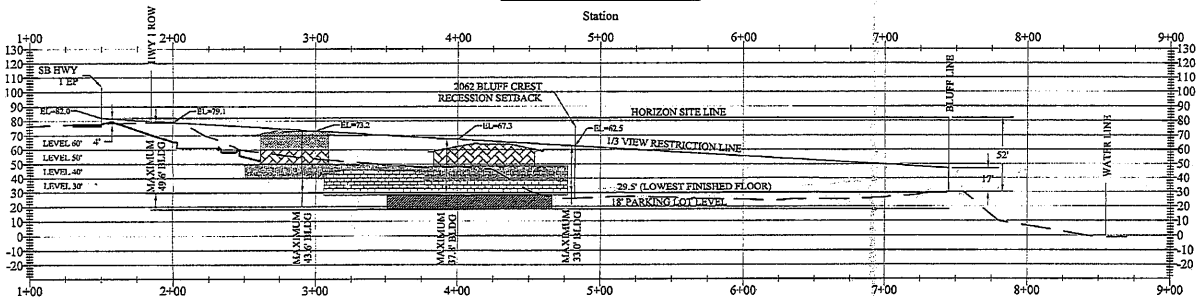
4 of 5

Exhibit 4 View Sims/Sections (from Hwy 1)
A-3-SNC-14-0001 Collection Resort at Monterey Bay
5 of 5

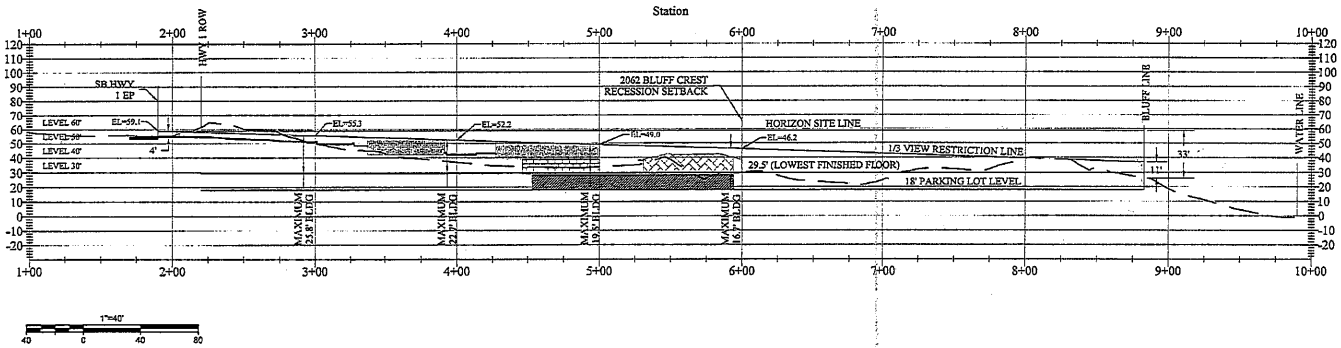
VIEW A SECTION 1

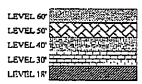


VIEW B SECTION 1



VIEW C SECTION 1





SAND CITY VIEW SECTIONS
SAND CITY, CA

2
SHEET

Applicable Coastal Act Policies
Applicable LCP Policies, Standards, and Figures

LCP Hazards Policies and Standards

LUP Policy 4.2.1 *… Average annual erosion rates for Sand City in general, as estimated by previous researchers, range between 1.5 and 5 feet per year. Typically, it has been found that permanent coastal erosion takes place along the cliffs and bluffs as a result of major storms. There may be no erosion for many years, and then significant erosion will result. In additions, erosion rates will vary at different points along the coast due to differences in wave refraction, type of geography, and location. Thus, an average uniform erosion rate cannot be applied to Sand City's coastline.*

LUP Policy 4.3.1. *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.*

LUP Policy 4.3.4. *All developments shall be sited and designed to minimize risk from geologic, flood or fire hazards.*

LUP Policy 4.3.5. *Require preparation of geologic and soils reports for all new developments located in the coastal zone. The report should address existing and potential impacts, including ground shaking from earthquakes, direct fault offset, liquefaction, landslides, slope stability, coastal bluff and beach erosion, and storm wave and tsunami inundation. The report shall identify appropriate hazard setbacks or identify the need for shoreline protective devices to secure long-term protection of Sand City's shoreline, and shall recommend mitigation measures to minimize identified impacts. The reports shall be prepared by qualified individuals in accordance with guidelines of the California Division of Mines and Geology, the California Coastal Commission, and the City of Sand City. Geologic reports shall include the following:*

a) setback measurements that are determined from the most inland extent of wave erosion, i.e., blufftop or dune or beach scarp; if no such feature is identifiable, determine setback from the point of maximum expected design storm wave runup;

b) setbacks based on at least a 50-year economic life for the project;

c) the California Division of Mines and Geology criteria for reports, as well as the following: 1) description of site topography; 2) test soil borings and evaluation of suitability of the land for the proposed use; 3) evaluation of historic, current and foreseeable cliff and beach erosion, utilizing available data; 4) discussion of impacts of

construction activity on stability of site and adjacent area; 5) analysis of ground and surface water conditions, including any hydrologic changes caused by the development; 6) indication of potential erodibility of site and recommended mitigation measures; 7) potential effects of seismic impacts resulting from a maximum credible earthquake and recommended building design factors and mitigation measures; 8) evaluation of off-site impacts; and 9) alternatives (including non-structural) to the project.

LUP Policy 4.3.6. *Encourage the clustering of developments away from potentially hazardous areas and condition project permits based upon recommendations presented in the geologic report.*

LUP Policy 4.3.7. *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.*

LUP Policy 4.3.8. *Deny a proposed development if it is found that natural hazards cannot be mitigated as recommended in the geologic report, and approve proposed developments only if the project's density reflects consideration of the degree of the on-site hazard, as determined by available geotechnical data.*

LUP Policy 4.3.9. *Implement building setbacks from active or potentially active fault traces of at least 50 feet for all structures. Greater setbacks may be required where it is warranted by site-specific geologic conditions and as determined by the geologic report.*

LUP Policy 4.3.10. *Require all new developments to be designed to withstand expected ground shaking during a major earthquake.*

LUP Policy 4.3.11. *Require the developer of a parcel in an area of known geologic hazards to record a deed restriction with the County Recorder indicating the hazards on the parcel and the level of geotechnical investigations that have been conducted.*

LUP Policy 4.3.12. *Require drainage plans for developments proposed on coastal bluffs that would result in significant runoff which could adversely affect unstable coastal bluffs or slopes.*

LUP Policy 6.4.1. *[LCP development densities] represent a maximum. 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….*

IP Section 2.2, Natural Hazards. *….all development will be sited to minimize risks from geologic, flood, or fire hazards ….*

A preliminary geologic report also shall be prepared by a registered geologist and should address existing and potential impacts for ground shaking from earthquakes, direct fault offset, liquefaction, landslides, slope stability, coastal bluff and beach erosion, and storm wave and tsunami inundation. …The report shall also determine a site specific tsunami run-up zone. …The report shall also provide recommended mitigation measures for identified hazards, including at the minimum, the following: …c) Recommended building setbacks for identified hazards based on at least a fifty year economic life for the project. Setback measurements shall be determined from the most inland extent of erosion; that is, bluff top or dune or beach scarp. If no such feature is identifiable, the setback shall be determined from the point of maximum expected design storm wave run-up. …f) Recommend mitigations, if any, for development within an identified tsunami or design storm wave run-up zone. …

IP Section 2.2, Protective Shoreline Structures. *….Setbacks shall be great enough to protect the economic life of the proposed development (at least 50 years). …*

LCP Public Services Policies and Standards

LUP Policy 4.3.27. *Require future developments which utilize private wells for water supply to complete adequate water analyses in order to prevent impacts on Cal-Am wells in the Seaside Aquifer. These analyses will be subject to the review and approval of the Monterey Peninsula Water Management District. In support of MPWMD's review and permit authority, the City should incorporate these requirements into City development review.*

LUP Policy 6.4.10. *New development shall be approved only where water and sewer services are available and adequate….*

LUP Policy 6.4.11. *Prior to the approval of any new development within the coastal zone of the City of Sand City, adequate sewage treatment facility capacity shall be demonstrated consistent with the provisions and requirements of the California Regional Water Quality Control Board.…*

LUP Policy 6.4.12. *Within the Coastal Zone, permit only new development whose demand for water use is consistent with available water supply and the water allocation presented in Appendix F [MPWMD assignment to Sand City of a relative share of total Cal-Am water usage – see below].*

LUP Policy 6.4.13. *Require all new developments to utilize water conservation fixtures (such as flow restrictions, low-flow toilets, et cetera).*

LUP Policy 6.4.14. *Require water reclamation or recycling within large industrial uses and encourage water reuse for landscaping wherever possible and economically feasible.*

LUP Policy 6.4.16. *Require that landscaping in new developments and public open space areas maximize use of low water requirement/drought resistant species.*

LUP Policy 6.4.17. *If dune management programs are implemented on State owned properties or other Areas within the City, investigate the feasibility of using reclaimed water for irrigation.*

IP Coastal Zone Overlay District, Permit Conditions, Sections (c)(8) and (c)(10). *In considering a coastal development permit application, the City Council shall give due regard to the Local Coastal Program in order to approve a development, and the Council shall make findings that approval of the permit is consistent with the Local Coastal Program, including but not limited to: …(8) Demonstrated availability and adequacy of water and sewer services. …(10) Compliance with City water allocation.*

IP Section 3.2, Coastal Zone Overlay District, Permit Conditions, (c). *In considering a coastal development permit application, the City Council shall give due regard to the Local Coastal Program in order to approve a development, and the Council shall make findings that approval of the permit is consistent with the Local Coastal Program, including but not limited to: …(8) Demonstrated availability and adequacy of water and sewer services. …(10) Compliance with City water allocation;…*

IP Section 4.2 (Sand City Water Allocation Resolution). *… In order to protect water resources, and ensure the availability of water for coastal land uses, the maximum water usage allowable in the coastal zone for new developments shall be limited to the water allocations established in the Local Coastal Land Use Plan. …The water allocations established in the Local Coastal Program may be revised according to any changes in water allotments granted to Sand City by the District. A change in the water allocations established in the Local Coastal Land Use Plan will require a Local Coastal Program amendment.*

LCP Visual and Scenic Resource Protection Policies and Standards

LUP Policy 2.3.6. *Protect visual access at the general points shown on Figure 4 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.*

LUP Policy 3.3.1. *Visitor-serving and public recreational uses are given priority west of State Highway One, as designated on the Land Use Plan Map in Section 6.0. Development of these uses shall be consistent with the protection of natural and visual resources.*

LUP Section 5.2.2 Coastal Visual Resources, Future Design Considerations. *View enhancement is an important aspect of Sand City's LCP. … [LCP design standards have] been guided by the following concerns: 1. the protection and enhancement of visual access, views and scenic areas; 2. the assurance of visual and functional compatibility of new development with site characteristics and the existing City; 3. the assurance of visual and functional compatibility among new developments within the shoreline area; 4. the protection and/or utilization of significant landforms; and 5. improvement and upgrading of the image of the City as a whole.*

LUP 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.*

LUP Policy 5.3.2 *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 9. Major designated view corridors are: a) southbound view across the northern city boundary consistent with the public recreation designation; …f) southbound views beyond and above the existing dune line (which may be "rounded off") shall be preserved.*

LUP Policy 5.3.3. *View corridors are defined as follows:*

a) "views across" shall be protected by retaining the view corridor free of new structures. These corridors will continue to provide broad unobstructed views of the sand dunes, shoreline, Monterey Bay, and the Monterey peninsula (southbound) or Santa Cruz Mountains (northbound); …

"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. … In measuring southbound views, viewpoints shall be assumed to be from the center point of the corridor at an elevation four 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...

LUP Policy 5.3.4.a. *Encourage project design that is compatible to its natural surroundings and that enhances the overall City image. All buildings should be designed and scaled to the community character as established by new development.*

LUP Policy 5.3.4.b. *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.*

LUP Policy 5.3.4.f. *Encourage the use of existing natural and manmade dunes as earth berms for visual and noise barriers, as well as buffers between land uses. Landforms are more efficient for visual and noise reduction than planting screens.*

LUP Policy 5.3.4.k. *Discourage multiple drives. Encourage the use of single drives for ingress and egress. Encourage shared use of a single drives by several parking areas within a site. Where possible, encourage shared use of entry drives by adjacent property owners.*

LUP Policy 5.3.6. *Encourage restoration or enhancement, where feasible, of visually degraded areas. …*

LUP Policy 5.3.7. *Require new developments to provide vista points along the shoreline and bluff top in conjunction with provision of public vertical and lateral access ways. Encourage provision of minor vista points, such as pedestrian plazas in new projects.*

LUP Policy 5.3.8. *In addition to view corridors designated on Figure 9, encourage new developments to incorporate view corridors from Highway One to the ocean, within project design, consistent with City standards for view corridors. Such standards for view corridors should include varied roof or building profile lines, and visual corridors through, between and/or over buildings to the bay.*

LUP Policy 5.3.9. *New development should to the extent feasible, soften the visual appearance of major buildings and parking areas from view of Highway One*

LUP Policy 5.3.10 *Utilize existing or manmade dunes within project design to enhance visual resources.*

LUP Policy 5.3.11. *In new developments require dune stabilization measures where feasible and where they would stabilize an unconsolidated dune, and/or reduce views of the development from Highway One.*

LUP Policy 5.3.13. *Plan and implement, provided adequate funding is available, a regional bike link west of Highway One, in the general vicinity of the existing and planned Sand Dunes right-of-way. This bike trail connection will provide additional public views of the dune environment and Monterey Bay. However, due to funding considerations, and recognized development potential along the bike path alignment, these views shall not have the same status as those along Highway One. Bike path views shall be considered an additional benefit of the bike path project, but it is recognized that these views will be subject to future view encroachment that may result from public or private development.*

LUP Policy 6.4.1. *… Land Uses. Establish the following land use designations in the coastal zone, as defined below and shown on the Land Use Plan Map in Figure 11…*

The described densities, both above and below, represent a maximum. 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: … dune habitats and their appropriate buffers; and natural landforms and views to the Bay.

LUP Policy 6.4.4 Densities. *Allow the following densities per land use type.* ***Visitor Serving Hotels:*** *0-75 rooms per acre. …LUP Area (B): Maximum Rooms Allowed: 375 rooms.* ***Visitor Serving Motels:*** *0-37 rooms per acre. LUP Area (a): Maximum Rooms Allowed: 229 rooms; LUP Area (b): Maximum Rooms Allowed: 141 rooms.*

LUP Policy 6.4.5. *In the Sand City Coastal Zone, permit a height limit of 36 feet as measured from existing grade with the following exceptions:…*

b) hotel uses shall not exceed 45 feet. Hotel uses shall not exceed 45 feet. … All other on or above-ground private and public recreational structures, public-serving commercial uses and public amenity improvements shall not exceed 15 feet or one story in height from finished grade;

c) All development within 100 feet of the freeway right of way (considered as the main thoroughfare right of way, excluding on/off ramps) shall be designed so as to minimize significant adverse visual impacts, limited to 25 feet in height except as permitted by (b) above, and landscaped. Unattractive elements shall be screened; and

d) views over development (see Figure 9) shall he preserved by limiting heights as necessary to assure compliance with Policy 5.3.3.…

IP Section 2.2, Visual Resources. *Protection of visual resources will be accomplished through provision of view corridors, vista points, development height limits, and dune restoration areas as identified in the Local Coastal Land Use Plan. …[Decision makers shall approve a CDP] only if it is found that the development is sited, designed, and landscaped in a manner that provides view corridors from Highway One to the ocean and considers protection and/or enhancement of coastal visual resources. …*

IP Section 3.2, CZ-VSC Coastal Zone Visitor Serving Commercial, Permitted Uses, Subsection (a). *Hotels, motels, vacation clubs/timeshares, public recreation areas, and accessory shops (such as gift shops, travel agencies, beauty shops, etc.) and any other visitor serving use as determined by the City Council to serve the purpose of this district. Vacation clubs/timeshares are defined as accommodations facilities with guest of owner stays limited to not more than 29 consecutive days, and not more than a total of 84 days in each calendar year. For projects involving the develop of vacation clubs/timeshares, the property owner shall be required to*

record a deed restriction, prior to the issuance of a coastal development permit, indicating the length of stay limitations and that the project is a visitor-serving use available to the general public through a rental pool program when not in use by vacation clubs/timeshares owners or members. …

IP Section 3.2, CZ-VSC Coastal Zone Visitor Serving Commercial, Height Regulations: *No building shall exceed thirty-six (36) feet as measured from the existing grade except hotel uses shall be permitted variation in height to forty-five (45) feet. … Views over development, as specified in the Local Coastal Land Use Plan, shall be preserved by limiting heights as necessary to assure compliance with policies contained in the Local Coastal Land Use Plan.*

IP Section 3.2, CZ-VSC Coastal Zone Visitor Serving Commercial, Minimum Requirements:

(a) Density: For visitor-serving hotels, allow up to 75 rooms per acre. …[maximum rooms allowed in Area CZ-VSC-B is 375 rooms] … For visitor-serving motels, allow up to 37 rooms per acre. …[maximum rooms allowed in Area CZ-VSC-a is 229 rooms; CZ-VSC-b is 141 rooms] …

LCP Natural Resource Policies and Standards

LUP Policy 4.3.18.a *Prior to any development or specific plan approval which affects habitat areas identified on Figure 7, a qualified professional botanist shall prepare a plant survey and plan for the affected area that includes:*

1) Description of type and location of existing native and other species;

2) Protection goals consistent with Policy 4.3.20;

3) In habitat preservation areas: methods for controlling public access and eliminating invasive non-native species (ice plant);

4) In habitat enhancement and consolidation areas: irrigation, fertilization and long-term maintenance requirements, and methods of establishing new native plants (e.g., seeding, transplanting) and eliminating ice plant;

5) Mitigation measures for adverse impacts, such as loss of transplants to shock; and

6) A schedule setting forth time requirements for plant establishment, dune stabilization, access controls, etc.;

LUP Policy 4.3.19 *Require implementation of dune stabilization and/or restoration Programs as a part of new developments west of Highway One, in areas shown on Figure 7. Requirements for these programs shall include:*

a) a professional survey and habitat protection plan including relevant items set forth in Policy 4.3.18a;

b) identification of any grading proposed for recontouring and/or dune stabilization;

c) maximum use of native plant materials, including rare and endangered species;

d) a maintenance program which includes:

1) initiation of restoration activities prior to occupancy of new developments;

2) completion of restoration activities within a five-year period, during which the owner, developer, homeowners association, an assessment district or other appropriate management agency accepts responsibility for the restoration activity;

3) permanent preservation and maintenance of the restored habitat by integration with a development's general landscape program, dedication to a public agency, or other method; and

4) effective restrictions for prohibiting vehicular access and managing pedestrian access to and through such areas.

…

h) Native landscape planting and dune stabilization techniques, as recommended in the certified Environmental Impact Report for the regional bike path link (State Clearinghouse Number 93053047). It is recognized that these added native landscape and dune stabilization areas related to the bike path project may be disturbed by future development. However, they shall be protected within the terms of the required easements for regional bike path construction. Any loss of such native plant landscaping on these dune areas shall be offset with the preservation or restoration (revegetation with native plants) of an equivalent dune area not presently restored or preserved, in accordance with the policies of this Local Coastal Program.

LUP Policy 4.3.20 *Designate areas especially suitable for dune habitat restoration on the Coastal Resources Map (Figure 7). These include: …*

e) three areas west of the freeway north of Bay Avenue designated for stabilization/restoration as part of future development.

Require these areas to be maintained in open space, and prohibit grading except in conjunction with an approved habitat restoration activity, ... Permit these areas to be used for restoration or enhancement of native dune plant habitats, establishment of new habitat for rare or endangered species, and in conjunction with approved development for off-site habitat mitigation.

IP Figure 4: Habitat Overlay District

Purpose.

To provide areas suitable for dune restoration, relocation, and/or stabilization as part of future developments as designated in the Local Coastal Land Use Plan.

Permitted uses.

(a) Restoration or enhancement of native dune plant habitats or establishment of new habitat for rare and endangered species;

(b) Grading and other activities necessary to implement a habitat restoration activity;

(c) Native plant relocation as established in the Local Coastal Land Use Plan.

Only the above permitted uses are allowed; no other permitted uses of the underlying district are allowed within this overlay.

Minimum requirements.

(a) A biological field survey and habitat protection plan is required to be prepared according to standards established in the Local Coastal Land Use Plan. If the plan includes habitat relocation or off-site restoration activities, it shall he forwarded to the Department of Fish and Game for review and approval. Plans involving rare or endangered species should also be forwarded to the U.S. Fish and Wildlife Service for consultation.

(b) Permanent protection shall be ensured for areas designated as habitat preserves as determined by the required field survey and habitat management plan through easements or dedications to public agencies to be reviewed and approved by the City Attorney and/or the Executive Director of the Coastal Commission pursuant to CZ "Review of legal documents" provisions.

Required Survey and Habitat Protection Plan (IP, Page 20)

For dune stabilization and/or restoration programs as a part of new developments, the following requirements shall apply:

a) A biological field survey and habitat protection plan including relevant items set forth above;

b) Identification of any grading proposed for recontouring and/or dune stabilization;

c) Maximum use of native plant materials, including rare and endangered species;

d) A maintenance program which includes:

1) initiation of restoration activities prior to occupancy of new developments;

2) completion of restoration activities within a five year period, during, which the owner, developer, homeowners association, an assessment district or other appropriate management agency accepts responsibility for the restoration activity;

3) permanent preservation and maintenance of the restored habitat by integration with a development's general landscape maintenance program, dedication to a public agency, or other method.

4) effective restrictions for prohibiting vehicular access and managing pedestrian access to and through such areas.

Appendix C lists some native plants appropriate for landscaping in general, which was prepared by the Monterey peninsula Water Management District, and should be used as general landscaping guidelines. (IP, p. 20)

The IP biological survey and habitat protection plan items referenced in subsection (a) are:

The plant survey and habitat protection plan shall consist of the following components:

a) description of type and location of existing native and other species;

b) protection goals consistent with Policy 4.3.21 of the Land Use Plan;

c) in habitat preservation areas: methods of controlling public access and eliminating invasive non-native species (iceplant);

d) in habitat enhancement and consolidation areas: irrigation, fertilization, and long term maintenance requirements, and methods of establishing new native plants (e.g., seeding, transplanting) and eliminating iceplant;

e) mitigation measures for adverse impacts, such as loss of transplants to shock;

f) schedule setting forth time requirements for plant establishment, dune stabilization, access controls, etc.;

g) All habitat protection plans shall include the maximum feasible planting or protection of dune buckwheat (Eriogonum parvifolium and E. latifolium) as a food source for the endangered Smith's blue butterfly (Shijimiaeoides enoptes smithi);

h) An implementation and management component which provides for:

1) *fencing, signing, or other appropriate access control measures to be installed as a condition of development (or as a condition of permits for restoration activities if no other development is proposed);*

2) *responsibility by the developer for habitat installation, maintenance and preservation for at least five years. Permanent maintenance shall also be provided for, with reliance on public and/ or private funding sources and ownership. Options include:*

a. *contribution of funds by developments requiring habitat preservation/ enhancement/relocation measures;*

b. *dedication of restored habitats to a public agency or private conservation organization with habitat management capabilities.*

Finally, the IP also specifies requirements for habitat protection plans that may involve habitat relocation or off-site restoration:

For habitat relocation or off-site restoration, a field survey and habitat protection plan must be prepared. The protection plan must be reviewed by the California Department of Fish and Game, and must demonstrate:

a) *The long term suitability of the restored habitat for these species, including but not limited to wind protection, soil condition, and acre-for-acre replacement of habitat;*

b) *the management methods needed for installation, nurturing, and permanent protection of the restored habitat including but not limited to the method of establishment (seed, hydro-mulch, transplant), and access restrictions;*

c) *the requirements for successful establishment of each species in another location, after which removal of the original plants may be possible.*

LUP Policy 3.3.1: *Visitor-serving and public recreational uses are given priority west of State Highway One, as designated in the Land Use Plan Map in Section 6.0. Development of these uses shall be consistent with the protection of natural and visual resources.*

LUP Policy 6.4.1: … *The described [LCP development] densities, both above and below, represent a maximum. 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….*

LUP Policy 4.3.21: *Enhance coastal plant communities by requiring new developments to utilize appropriate native coastal plants in landscaping plans that are compatible with existing native species. Prohibit the use of invasive plants in landscaping schemes.*

LUP Policy 4.3.22: *All off-road vehicles shall be prohibited on the dunes, except those necessary for emergency and to support coastal dependent uses and shall be limited to existing paths and stockpiles in order to protect dune vegetation.*

LUP Policy 4.3.23: *Where major access routes are available or desirable through sand dunes to the coast, boardwalks or other appropriate pathways constructed of permeable materials should be provided to protect the vegetation stabilizing the dunes.*

LCP Public Access and Recreation Policies and Standards

LUP Policy 2.3.1. *Require all future shorefront developments to provide public access in the following manner: a) where access is shown on Figure 4, dedication of a vertical and/or blufftop access casement which meets the criteria established in Policy 2.3.4; b) where no access is shown on Figure 4, 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 4, and access dedication cannot be achieved consistent with Policy 2.3.4, payment of in-lieu fees for development and maintenance of other accessways.*

LUP Policy 2.3.2. *Require dedication of lateral access easements for dry sand access along sandy beaches as part of all shorefront development.*

LUP Policy 2.3.3. *Developed public accessways 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 accessway.*

LUP Policy 2.3.4. *Work with landowners and public agencies to develop and manage vertical and lateral accessways in the general locations shown on Figure 4. Future developments shall implement safe accessways 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 accessways. a) Accessways should be located at intervals commensurate with the level of public use. b) Accessways 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 accessways 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) Accessways and trails should be designed and sited to: 1) minimize alterations 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 a 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 blufftop 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.

LUP Policy 2.3.8. *New improved accessways shall not be made available for public use until public or private agencies responsible for managing the accessway have addressed the following management concerns: a) identification of the types of uses to be allowed; b) the need for any seasonal restrictions; c) the type of improvements needed, such as signs, gates, trash receptacles, boardwalks, restrooms; d) the proposed location, type and amount of parking facilities; and e) identification of the number of users that can be supported.*

LUP Policy 2.3.9. *Require new development to dedicate and improve accessways, which shall be opened to the public when such accessways are accepted by a public or private agency. …*

LUP Policy 2.3.10. *Ensure provision of adequate parking for designated pedestrian accessways. Require provision of public parking as part of developments at a rate of 10 percent above the project's total required parking. The means of providing public parking areas will be the responsibility of State and local governmental entities and private development proposals. The following will be pursued where feasible and consistent with the Plan: a) utilization of State of California Parks Department Properties to provide public parking and other public services and amenities, which provide quick and easy access to beach areas; b) abandonment, when appropriate, of some City paper streets, which then could be utilized for public parking strips, or traded for adjacent properties to form a more logically shaped parking lot; c) the City shall require approved development plans to include a provision for 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. Parking areas should be located in geologically stable areas where they would not contribute to excessive erosion or slope failure. Parking areas shall be screened from public viewpoints through landscaping, berming or other appropriate measure consistent with the Design Standards required in Section 5.3 of this Plan.*

LUP Policy 3.3.1. *Visitor-serving and public recreational uses are given priority west of State Highway One, as designated on the Land Use Plan Map in Section 6.0. Development of these uses shall be consistent with the protection of natural and visual resources.*

LUP Policy 3.3.2 *Encourage development of visitor serving facilities that provide services which meet a range of visitor needs. Provision of visitor facilities and services 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.*

LUP Policy 3.3.3. *Permitted uses in areas designated as visitor-serving commercial include hotels, motels, accessory shops (including gift shops, travel agencies, beauty shops, et cetera), food service establishments, service stations, recreation retail shops and services (i.e., bike rentals), campgrounds, recreational vehicle parks and other recreational facilities operated as a business and open to the general public for a fee. Permitted uses in areas designated as public recreation include public parks, picnic areas, parking areas, sandy beaches and accessways which are publicly owned or over which access easements are to be required as a condition of development. 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 or other indoor public recreational area uses where outdoor recreation may not be favorable; other support facilities for public recreational uses; and controlled public access and/or educational programs in areas of dune restoration programs.*

LUP Policy 3.3.8. *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, consistent with Policy 2.3.10.*

LUP Policy 3.3.9. *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.*

LUP Policy 4.3.6.b. *Encourage the clustering of developments away from potentially hazardous areas and condition project permits based upon recommendations presented in the geologic report. An active recreation beach zone and public amenity zone shall be established between the mean high water line and the building envelope (refer ahead to Figures 12 and 13). Uses allowed in the active beach and public amenity zones are described in Policy 6.4.1 of this plan.*

LUP Policy 6.4.1. *… The described densities, both above and below, represent a maximum. As required by applicable policies of the LCP, permitted development intensities shall be limited to those which 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); …

LUP Policy 6.4.1.g. *Allow public parks, picnic areas, parking areas, public vista points, sandy beaches and accessways which are publicly owned or over which access easements are to be required as a condition of development. In addition to areas designated public recreation in Figure 11, public recreation also means public uses within development projects such as picnic areas, wind shelters, promenades or other indoor public recreational areas; other support facilities for public recreational uses; and controlled public access and/or educational programs in areas of dune restoration programs.*

LUP Policy 6.4.3d. *(Circulation Designations, Public Access – Pedestrian/Bike Path) Plan and develop, provided that adequate funding is available, a public pedestrian/bike path along the existing and proposed Sand Dunes Drive right-of-way to connect to the regional bike path system in Fort Ord and Seaside/Monterey.*

IP Section 3.2, CZ-PR, Coastal Zone Public Recreation District. *Purpose. To provide areas for public use and enjoyment of the coast, and to enhance the recreational opportunities along Sand City's shoreline. Permitted uses, subject to Coastal Development Permit approval. (a) Public parks, picnic areas, parking areas, and sandy beaches; (b) Accessways which are publicly owned or over which access easements are to be required as a condition of development; (c) other support facilities for public recreational uses; (d) controlled public access and/or educational programs in areas of dune restoration programs. (e) all permitted and proposed uses shall be incorporated into a general parks plan or public works plan as part of an application for a coastal development permit.*

IP Section 3.2, Coastal Zone Overlay District, Access requirements. *(a) Offers to dedicate or grant public access easements shall be made in accordance with the provisions of the Local Coastal Land Use Plan. … (b) Access easements shall be provided in accordance with provisions of the Local Coastal Land Use Plan and the following: (1) Vertical beach accessway easements shall be a minimum width of ten (10) feet and shall extend from the nearest public roadway to the sandy beach frontage. … (2) Lateral beach accessway shall be provided by an easement with a minimum of 25 feet dry sandy beach or the entire sandy beach if the width of the beach is less than 25 feet. (3) Blufftop access easements shall run along the edge of the bluff, and be of a width adequate to provide safe access. ….*

Coastal Act Public Access and Recreation Policies

Section 30210. *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30211. *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30212(a). *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. …*

Section 30212.5. *Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

Section 30213. *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. …*

Section 30214. *(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following: (1) Topographic and geologic site characteristics. (2) The capacity of the site to sustain use and at what level of intensity. (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses. (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.*

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

(c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

Section 30220. *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

Section 30221. *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Section 30222. *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

Section 30223. *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Section 30240(b). *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Section 30253. *New development shall do all of the following: …(e) where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.*

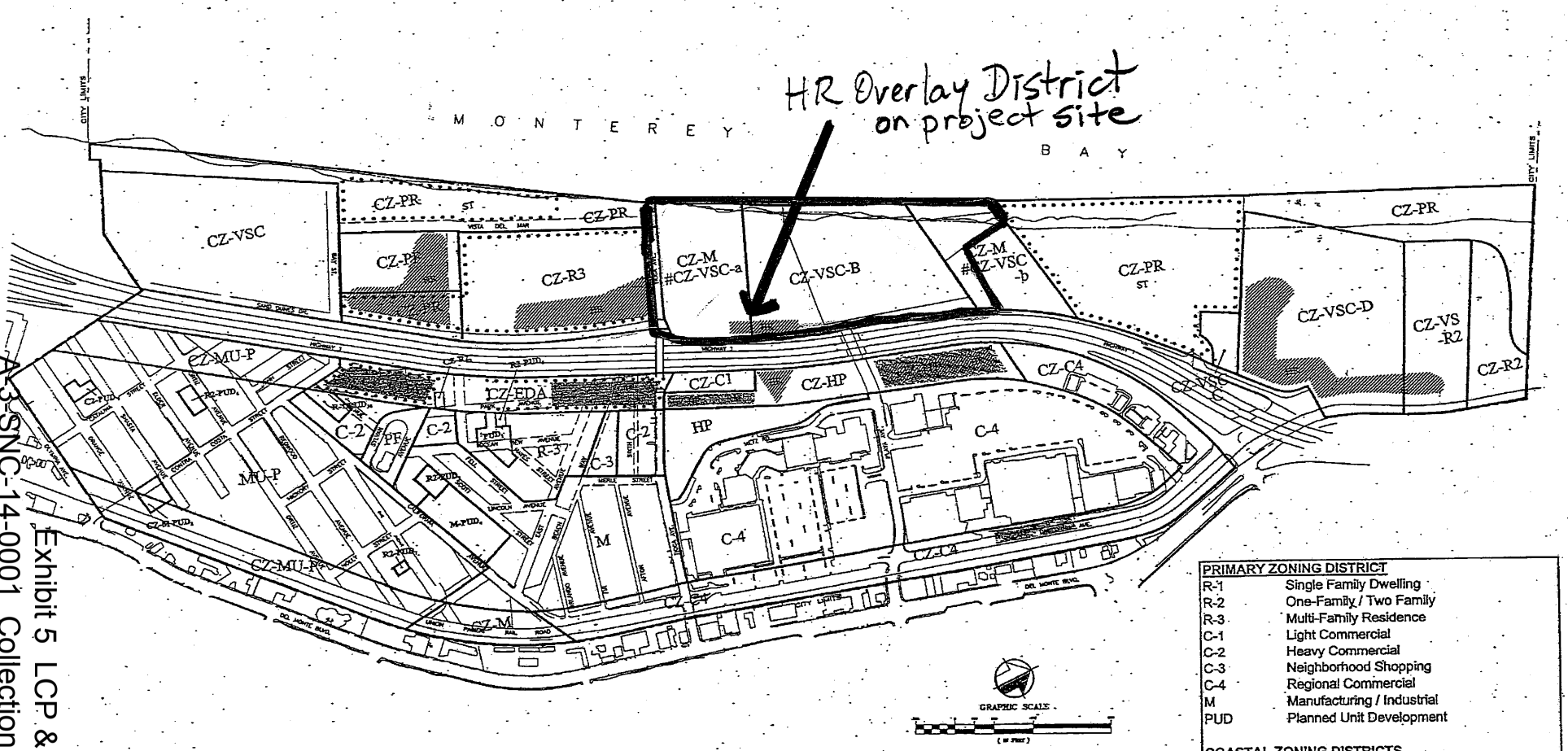
LCP Traffic and Circulation Policies and Standards

LUP Policy 6.4.10. *New development shall be approved only where …adequate circulation and parking has been provided for.*

LUP Policy 6.4.23.a. *Development within the coastal zone shall insure public safety by providing for adequate ingress or egress for emergency vehicles.*

LUP Policy 6.4.24. *Require future development in the Coastal Zone area to provide safe adequate streets, parking and loading.*

IP Section 3.2 (Planned Unit Development Permit, Findings Required). *… Any development that is needed as part of the development scheme at the proposed location will not create traffic congestion, has adequate off- and on-site parking,…*



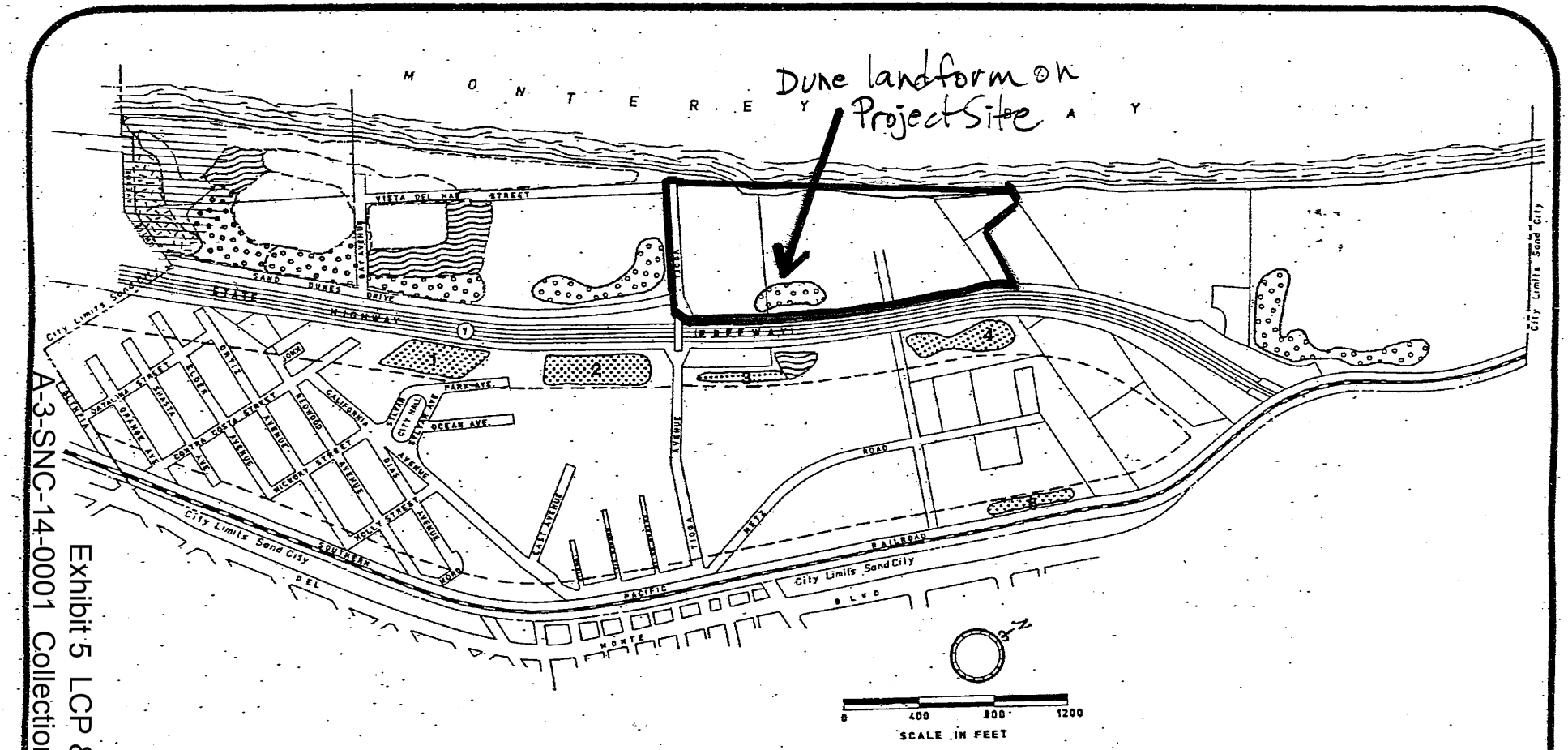
PRIMARY ZONING DISTRICT	
R-1	Single Family Dwelling
R-2	One-Family / Two Family
R-3	Multi-Family Residence
C-1	Light Commercial
C-2	Heavy Commercial
C-3	Neighborhood Shopping
C-4	Regional Commercial
M	Manufacturing / Industrial
PUD	Planned Unit Development

COASTAL ZONING DISTRICTS	
CZ-R2	Coastal Residential / Medium Density
CZ-R3	Coastal Residential / High Density
CZ-MU-P	Coastal Planned Mixed-Use
CZ-VS-R2	Visitor Serving Residential/ Medium Density
CZ-EDA	Coastal East Dunes Area
CZ-C1	Coastal Light Commercial
CZ-C4	Coastal Regional Commercial
CZ-VSC	Coastal Visitor Serving Commercial
#CZ-VSC	Duel Designation (Secondary/Future Use)
CZ-M	Coastal Manufacturing / Industrial
CZ-PF	Coastal Public Facility
CZ-PR	Coastal Public Recreation
CZ-HP	Coastal Habitat Preserve
a,b,B,C,D	See Density Standards

OVERLAY ZONING DISTRICTS	
ST	Special Treatment Area
RM	Resource Management (Generalized Locations)
HR	Habitat Restoration (Generalized Locations)

SAND CITY LCP IMPLEMENTATION PLAN
ZONING MAP

FIGURE 4



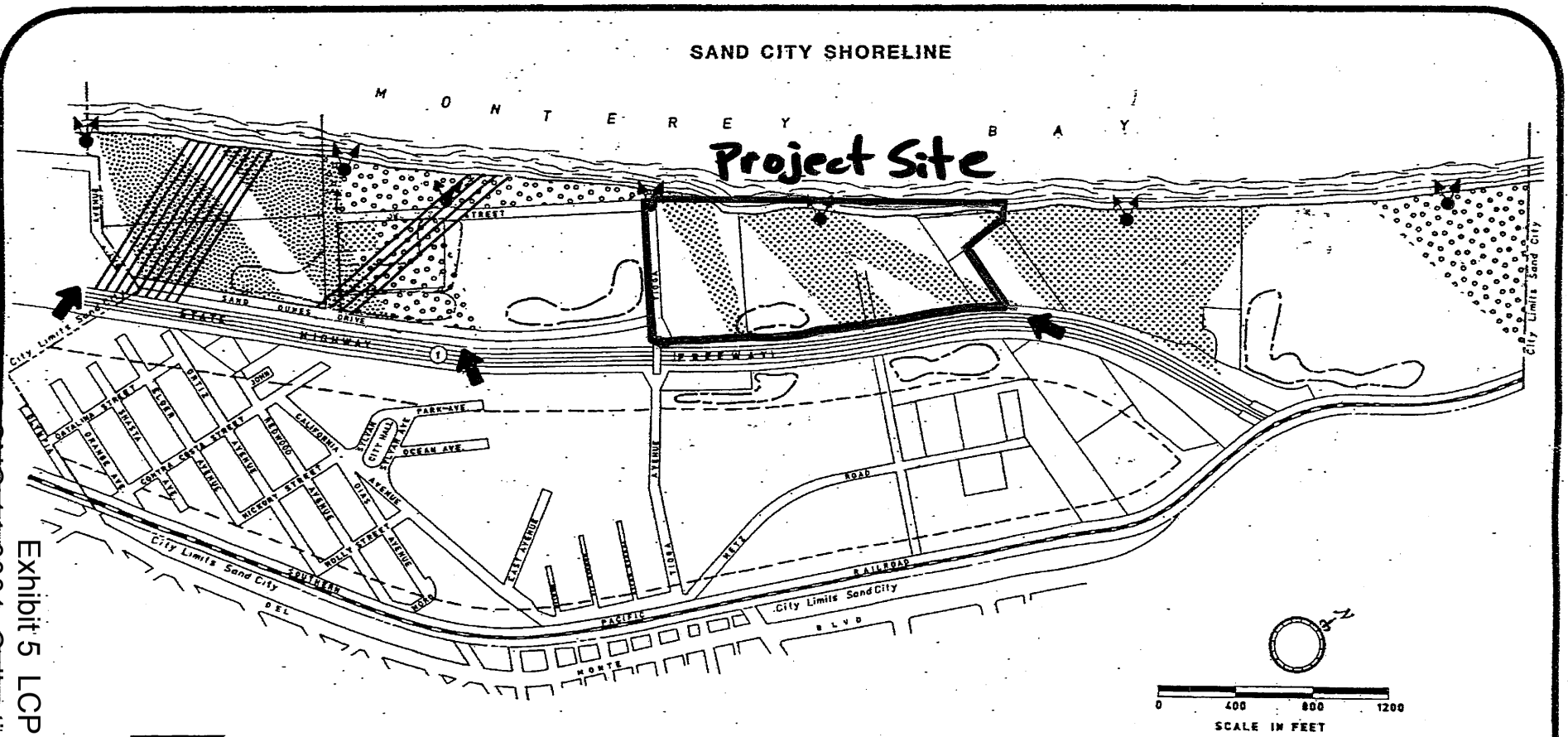
Legend :

- SENSITIVE HABITAT AREAS (Generalized Locations)
- HABITAT RESTORATION AREAS
- DUNE STABILIZATION/RESTORATION AREAS (Within Future Development) Note: For more detail and additional land uses allowed south of Bay Avenue, refer to Figure 12
- BUTTERFLY HABITAT RESTORATION ZONE
- AREA OF HIGH ARCHAELOLOGICAL SENSITIVITY

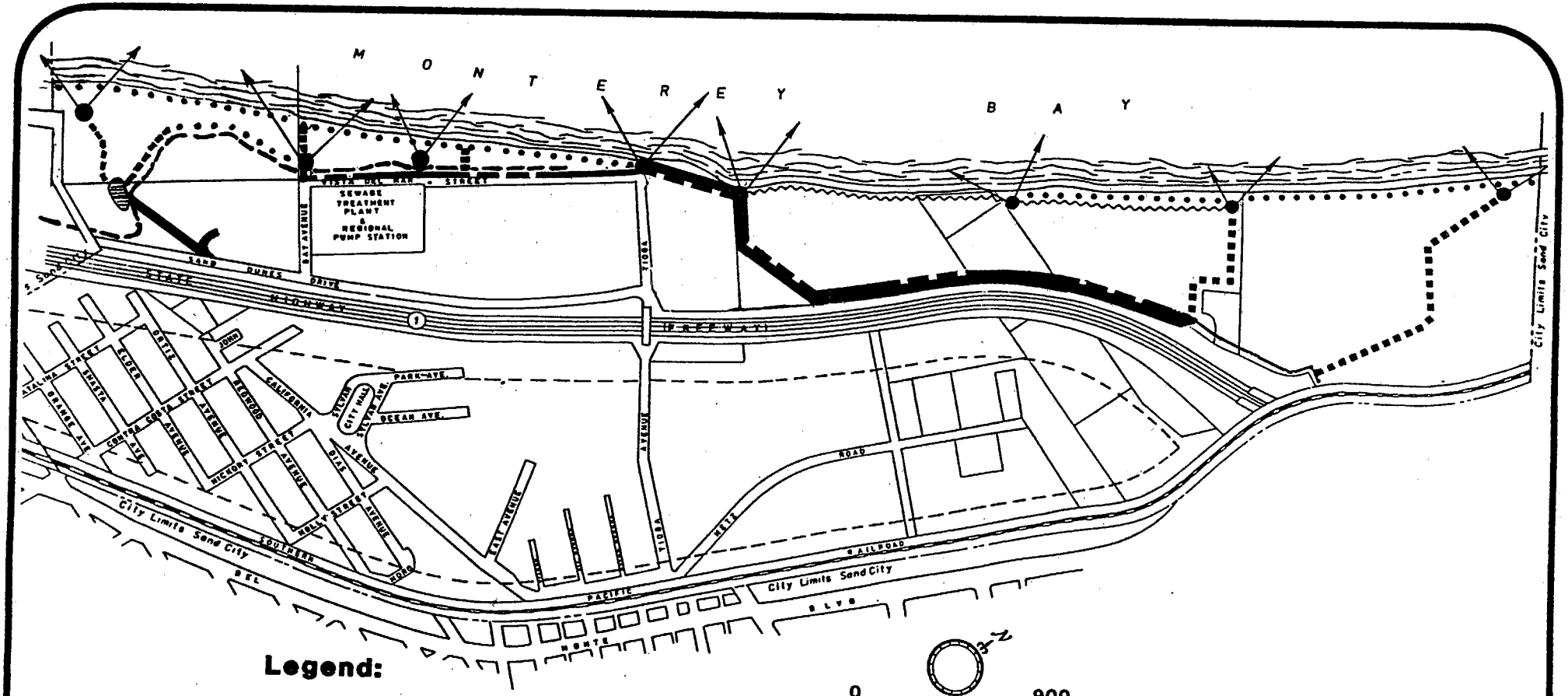
SAND CITY LCP LAND USE PLAN

COASTAL RESOURCES

Figure 7



Generalized Views from Hwy. 1 and Vistas



Legend:

- BLUFFTOP ACCESS
- FLOATING VERTICLE ACCESS (GENERALIZED LOCATIONS)
- LATERAL ACCESS (SANDY BEACH)
- PROPOSED BICYCLE PATH (GENERALIZED LOCATION)
- VISTA POINTS
- FLOATING PLAN LINE (GENERALIZED LOCATIONS)

0 900

SCALE IN FEET

Note: For more detail south of Bay Avenue, refer to Figure 12

SAND CITY LCP LAND USE PLAN

PUBLIC ACCESS PROVISIONS

Figure 1

Special Condition 2(b) of CDP A-3-SNC-05-010

Final Plans.

…

b. The Permittee shall undertake development in accordance with the approved plans and any changes shall be reported to the Executive Director. No changes within the coastal zone shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is necessary. Changes to the project requiring review for amendment would include but not be limited to changes in the method of financing the project (see Special Condition #6), changes in ownership (see Special Condition #8), physical, operational, or delivery capacity increases (i.e., beyond 300 AF/y), relocation of the wells (see Special Condition #5), *or extension of water supply distribution pipelines (not individual connections from existing or approved lines) in the coastal zone beyond those shown on the final plans.* [emphasis added]

Exhibit 7
A-3-SNC-14-0001 Collection Resort at Monterey Bay
1 of 8


Cabrillo Hwy
Exit Street View
© 2015 Google
© 2015 Google
Report a problem
Google earth
36°37'17.58" N 121°50'48.79" W elev 111 ft eye alt 108 ft


Cabrillo Hwy
Exit Street View
© 2015 Google
© 2015 Google
Report a problem
Google earth
36°37'13.84" N 121°50'49.61" W elev 77 ft eye alt 89 ft

Cabrillo Hwy

Exit Street View

Exhibit 7
A-3-SNC-14-0001 Collection Resort at Monterey Bay
4 of 8


Cabrillo Hwy
Exit Street View
© 2015 Google
© 2015 Google
Report a problem
Google earth
36°37'07.59" N 121°50'57.16" W elev 72 ft eye alt 66 ft

Exhibit 7
A-3-SNC-14-0001 Collection Resort at Monterey Bay
6 of 8

Cabrillo Hwy

Exit Street View

N

Exhibit 7
A-3-SNC-14-0001 Collection Resort at Monterey Bay
7 of 8

Cabrillo Hwy

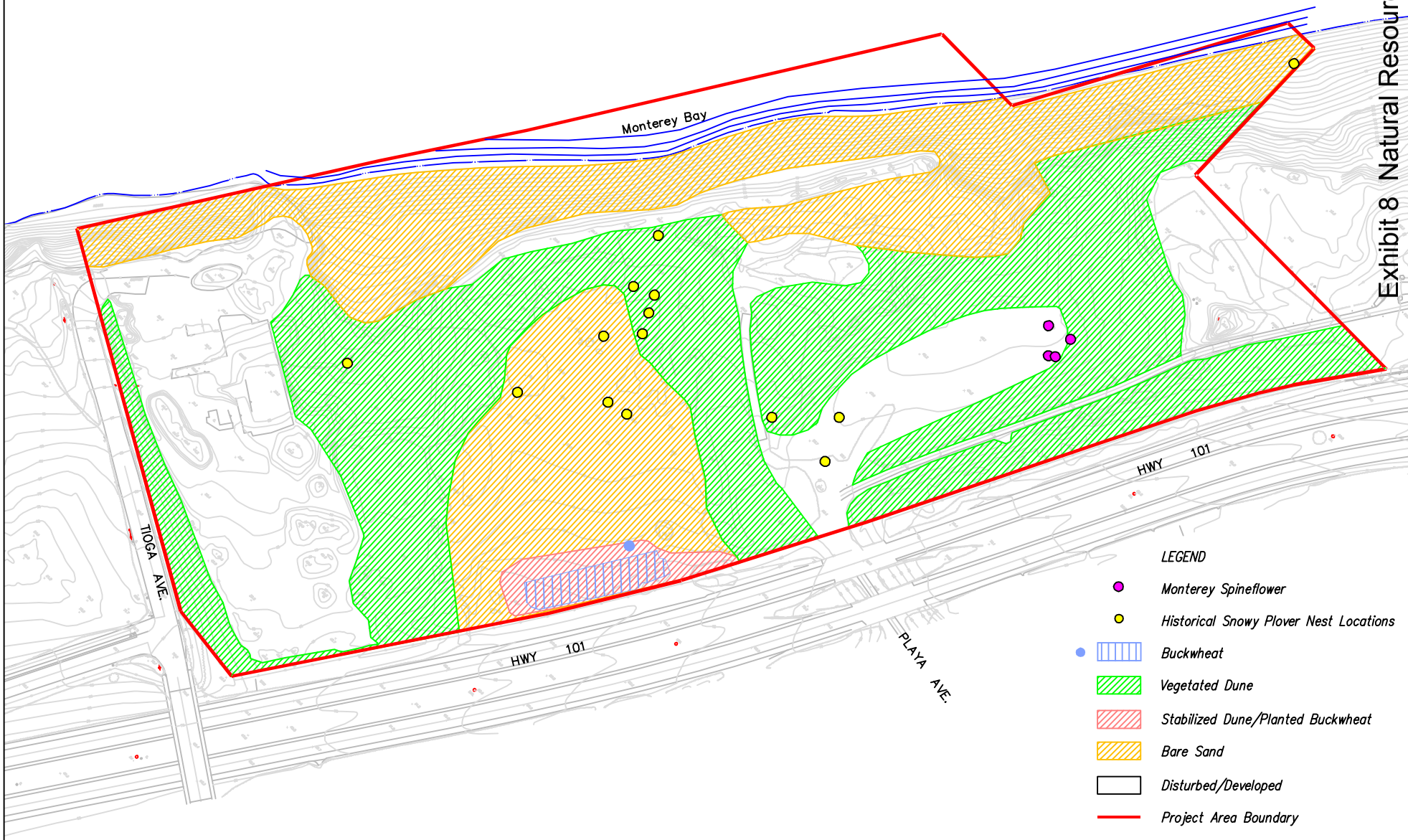
Exit Street View

© 2015 Google
© 2015 Google

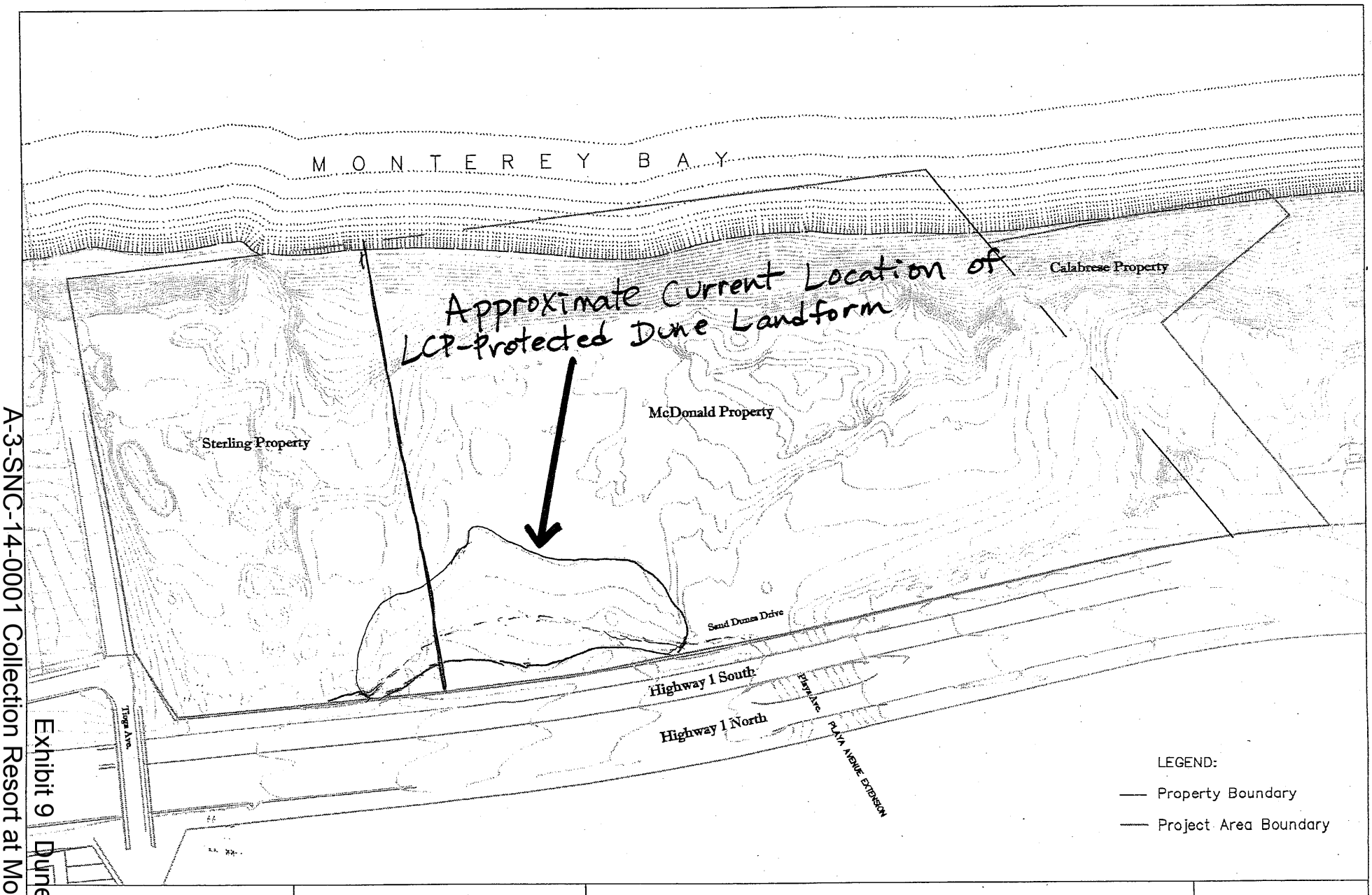
Report a problem

Exhibit 7
A-3-SNC-14-0001 Collection Resort at Monterey Bay
8 of 8

36°37'12.50" N 121°50'53.12" W elev 79 ft eye alt 77 ft



Zander Associates Environmental Consultants 150 Ford Way, Suite 101 Novato, CA 94945	Scale: 1" = 200' Date: 6/07	Habitat Types and Recorded Biological Resources The Collection at Monterey Bay Sand City, California	Figure 2



Zander Associates Environmental Consultants 150 Ford Way, Suite 101 Novato, CA 94945	Scale: 1" = 200' Date: 6/07	Existing Topography The Collection at Monterey Bay Sand City, California	Figure 2

Exhibit 9 Dune Landform

A-3-SNC-14-0001 Collection Resort at Monterey Bay
1 of 1

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO: 08EVEN00-2013-CPA-0030

January 15, 2013

Steve Matarazzo
Planning Department
City of Sand City
1 Sylvan Park
Sand City, California 93955

Subject: Comments on the Draft Environmental Impact Report for the Collection at Monterey Bay Resort Project, Sand City, Monterey County, California

Dear Mr. Matarazzo:

This letter provides the U.S. Fish and Wildlife Service's (Service) comments on the Draft Environmental Impact Report (DEIR) for the Collection at Monterey Bay Resort Project (Project) in Sand City, Monterey County, California. A copy of the DEIR was received in our office on November 21, 2012.

The DEIR evaluates environmental effects of the Project, which is proposed by King Ventures (Applicant) and would consist of a 342-room resort on a 26.5-acre ocean-front site in Sand City. The Project would include two hotels, restaurant and banquet facilities, conference facilities, a spa, public and guest parking, and public road and trail construction. The City of Sand City (City) has prepared the DEIR as a lead agency under the California Environmental Quality Act (CEQA).

The Service's responsibilities include administering the Endangered Species Act of 1973, as amended (Act), including sections 7, 9, and 10. Section 9 of the Act prohibits the taking of any federally listed endangered or threatened species. Section 3(18) of the Act defines "take" to mean "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species. Exemptions to the prohibitions against take may be obtained through coordination with the Service in two ways. If a project is to be funded, authorized, or carried out by a Federal agency, and may affect a listed species, the Federal agency must consult with the Service pursuant to section 7(a)(2) of the Act. If a proposed project does not involve a Federal agency but may result in the take of a listed animal species, the project proponent should apply to the Service for an incidental take permit pursuant to section

10(a)(1)(B) of the Act. To qualify for an incidental take permit, project proponents must submit an application to the Service together with a habitat conservation plan (HCP) that describes, among other things, how the impacts of the proposed taking of federally listed species would be minimized and mitigated to the maximum extent practicable and how the plan would be funded. A complete description of the requirements for a HCP can be found at section 10(a)(2)(B) of the Act and at 50 Code of Federal Regulations 17.32.

As it is not our primary responsibility to comment on documents prepared pursuant to CEQA, our comments for the DEIR will not constitute a full review of Project impacts. Rather, they address potential impacts of the proposed Project on species listed under the Act, including the federally endangered Smith's blue butterfly (*Euphilotes enoptes smithi*) and the federally threatened western snowy plover (*Charadrius nivosus*) and Monterey spineflower (*Chorizanthe pungens* var. *pungens*). We offer the following information and recommendations to aid in the conservation of sensitive wildlife habitats and federally listed species that occur in the proposed Project area, and as a means to assist you in complying with pertinent Federal statutes.

Smith's blue butterfly

The proposed Project area contains 0.21 acre of occupied Smith's blue butterfly habitat and this habitat may serve as a link that allows dispersal of Smith's blue butterfly populations from the north, east, and south (DEIR, appendix D-1, pp. 6-7). All of this habitat is proposed for removal, which would result in take of the Smith's blue butterfly and may reduce or preclude its dispersal across the Project area. The DEIR (page 138) identifies this habitat removal as a significant impact. The DEIR (page 140) proposes mitigation measures that include: requiring the Applicant to apply for an incidental take permit from the Service, replacement of approximately 0.21 acre of habitat, and implementing construction outside of the Smith's blue butterfly's flight season. The DEIR indicates that with these measures, the impact of Smith's blue butterfly habitat removal would be reduced to "less than significant." We agree that an incidental take permit would be needed for the Project as proposed. However, we believe that it is premature to assume that the impacts of the Project would be adequately mitigated (pursuant to the Act's statutory and regulatory permit issuance criteria for an incidental take permit) for the following reasons:

1. All habitat within the Project area would be removed and it is almost certain that all Smith's blue butterflies on site would be killed as a result. The DEIR (page 137) assumes that the Smith's blue butterflies on site have dispersed into the Project area from populations to the north or east, but provides no support for this assumption. Further data and analysis on the size of nearby populations and their distance from the Project area should be provided to support the DEIR's assertion that any new habitat established within the Project area would be colonized by the Smith's blue butterfly. Providing replacement mitigation habitat without Smith's blue butterflies being available to colonize the replacement habitat would likely not meet the Act's incidental take permit issuance criteria. In addition, we request further detail on where the proposed mitigation habitat would be provided and the likely future effects of sea level rise on that location.

2. Smith's blue butterflies overwinter as pupae on and under their host plants. Although difficult to detect as pupae, Smith's blue butterflies remain present outside the flight season. Construction outside of the flight season is useful to protect adult butterflies in some situations, but in this case would not protect the resident population within the Project area (i.e., removing all habitat in the Project area would still likely eliminate all Smith's blue butterflies within the Project area). Lacking analysis of source populations outside the Project area, we are concerned that the species may be permanently extirpated from the Project area as a result of the proposed Project.

3. The Service has not been contacted by the Applicant or the City regarding preparation or the necessary contents of a habitat conservation plan for the proposed Project. As noted previously, issuance criteria for an incidental take permit require, among other things, the Applicant to minimize and mitigate the effects of the take of listed species to the maximum extent practicable and to provide funding to assure that the habitat conservation plan is implemented. The DEIR (page 140) attempts to predict what an incidental take permit would require (providing replacement habitat at an approximately 1:1 ratio); however, determining the adequacy of an application for an incidental take permit is not within the City's discretion and we are concerned that including statements in the DEIR predicting how the Act's permit issuance criteria can be satisfied may mislead the reader to believe that the Service has been consulted in formulating the proposed mitigation measures.

Western snowy plover

The Project is proposed for construction within western snowy plover nesting habitat. Nests of this species were observed within the Project area from 1989 through 1998 (DEIR, appendix D-1, pp. 5-6). The DEIR indicates no nests were observed in the Project area during surveys from 2005 through 2008, but nests and chicks were observed both north and south of the Project area within Sand City in 2008. The DEIR does not appear to present any data regarding survey efforts for the periods from 1999 through 2004, or 2009 to the present, and it should not be assumed that the Project area was thoroughly surveyed in those years. Given the proposed removal of western snowy plover habitat (as acknowledged in the DEIR, page 12) and history of nesting within and surrounding the Project area, take of this species is likely to result from Project implementation. The Applicant should therefore address this species in a habitat conservation plan and apply for a permit for its incidental take. The DEIR (page 140) already prescribes that the Applicant apply for an incidental take permit for the Smith's blue butterfly. A habitat conservation plan would be required in support of any application for that incidental take permit, and that plan should also address the proposed Project's likely take of the western snowy plover.

We have four primary concerns regarding the effects of the proposed Project on the western snowy plover: (1) the direct removal of habitat due to construction of facilities, (2) the large increase in human disturbance that would be caused by users of the proposed facilities, (3) the expected increase in predators associated with increased human presence, and (4) the interaction between habitat removal and the expected rise in sea level.

The Project area totals 26.5 acres, of which 19.8 acres would be disturbed during construction and 11.7 acres would be permanently converted to developed areas (DEIR, appendix D-1, pp. 8-9); it should also be noted that 3 of the 26.5 acres are within the ocean. This calculates roughly to 84 percent of the terrestrial habitat area disturbed and 50 percent permanently removed. In addition, the site plan (DEIR page 33) indicates that the undeveloped areas would be intermixed with buildings, public access points, roads, and trails. Therefore, those areas that are not permanently developed would be small and discontinuous. The site plan (DEIR page 33) does not include a legend or scale and is not overlaid with the site habitat map (DEIR, appendix D-1, figure 2), so we are not able to make exact calculations on the size of areas that would be left undeveloped. However, it appears that less than 180 feet would be left undeveloped between the high tide line and the proposed facilities and that this setback is the only substantial portion of the Project area that is not proposed for development.

Pedestrians and their pets can cause direct mortality and harassment of western snowy plovers (Service 2007). The DEIR (page 137) acknowledges increased human use of beaches within Sand City has decreased the value of habitat for the western snowy plover. The proposed Project would contribute substantially to this ongoing loss, by attracting many guests to the proposed resort and by facilitating increased public access to sensitive habitat areas within and adjacent to the Project area. The proposed Project includes several components that would increase human activity within western snowy plover habitat: (1) public access at the north and south ends of the Project area, (2) a public trail across the Project area seaward of the proposed resort, (3) extension of public roads and bike trails, (4) new public parking, and (5) a new lifeguard station and restroom (DEIR pp. 33 and 41)). This increase in human activity is likely to result in take of western snowy plovers (through harassment and harm) both within the Project area and on habitat adjacent to the Project area.

The presence of humans facilitates increased populations of predators that prey on western snowy plovers. Human development and use of an area provides sources of food, water, and habitat features that benefit a variety of mammalian and avian predators (Service 2007). Therefore, the development of and increased human presence associated with the proposed Project would be expected to artificially increase predation on western snowy plovers.

The proposed Project would site resort facilities within areas that are projected to be below the high tide line within 50 years due to sea level rise (DEIR page 10). An alternative considered within the DEIR would move buildings above a 50-year sea level rise setback line, but would still leave portions of the public access trail system below this line ("Design Alternative", DEIR, page 24). Therefore, either the proposed Project or the Design Alternative would leave no western snowy plover habitat within the Project area on a 50-year timeframe. The setback between the high tide line and the developed area would be lost due to "coastal squeeze" (the process in which coastal habitat is lost because it is trapped between a rising sea and a hardened barrier (in this case the proposed resort)).

In summary, we expect the proposed Project would result in take of the western snowy plover and render the Project area unsuitable for the species. Habitat would be immediately lost upon construction and the amount of human disturbance and predation pressure would be increased within the Project area and on

adjacent areas. Take of the species is expected in the forms of harm, harassment, and/or direct mortality. To ensure compliance with the Act, the Applicant should prepare a habitat conservation plan and apply for an incidental take permit from the Service. Because the Project area is relatively small, most of it would be developed, and all western snowy plover habitat therein would ultimately be lost, we expect that off-site mitigation would be necessary to potentially meet the Act's permit issuance criteria.

Unit CA 22 of designated critical habitat for the western snowy plover overlaps the Project area (77 Federal Register (FR) 36728, http://criticalhabitat.fws.gov/crithab/). Unit CA 22 was designated because it was occupied at the time of listing, is currently occupied, and is an important area for breeding and wintering western snowy plovers (77 FR 36766). The primary constituent elements (PCEs) (77 FR 36747) of critical habitat for the western snowy plover include:

1. Areas that are below heavily vegetated areas or developed areas and above the daily high tides;

2. Shoreline habitat areas for feeding, with no or very sparse vegetation, that are between the annual low tide or lowwater flow and annual high tide or highwater flow, subject to inundation but not constantly under water, that support small invertebrates, such as crabs, worms, flies, beetles, spiders, sand hoppers, clams, and ostracods, that are essential food sources;

3. Surf- or water-deposited organic debris, such as seaweed (including kelp and eelgrass) or driftwood located on open substrates that supports and attracts small invertebrates described in PCE 2 for food, and provides cover or shelter from predators and weather, and assists in avoidance of detection (crypsis) for nests, chicks, and incubating adults; and

4. Minimal disturbance from the presence of humans, pets, vehicles, or human-attracted predators, which provide relatively undisturbed areas for individual and population growth and or normal behavior.

The DEIR provides no analysis of the proposed Project's effects on critical habitat; however, as discussed in the preceding paragraphs, our review indicates that the Project area would be rendered unsuitable for the species and that surrounding areas would also be adversely affected. The Project would reduce the amount of PCE 1 immediately upon construction by placing development closer to the high tide line. The Project would degrade PCE 4 by facilitating the presence of thousands of additional people within and surrounding the project area. We expect that PCEs 2 and 3 would also be degraded by the large increase in human use of the Project area and surrounding areas. All PCEs would eventually be completely eliminated from the Project area as sea level rises and any remaining habitat between the ocean and the development is inundated.

The DEIR (appendix D-2) includes a "Habitat Protection Plan," which is characterized by the DEIR as reducing the impacts of the proposed Project on western snowy plovers to "less than significant" (DEIR

pp. 12-13). While this plan proposes some potentially useful short-term minimization measures, such as requiring pre-construction surveys for western snowy plover nests to reduce the likelihood of direct mortality during Project construction, it does not substitute for a habitat conservation plan and its contents would not meet permit issuance criteria for an incidental take permit. The plan is largely reactionary, prescribing protection of western snowy plovers (at the discretion of a "steward" who reports to the Applicant) after their nests are found, rather than requiring that their habitat be protected to allow nesting. As previously discussed, we expect that removal of habitat coupled with increased human use of the Project area would preclude western snowy plover use. In that scenario, no nests would be found and no protection would be triggered.

Monterey spineflower

The Project area includes 37 square feet of occupied Monterey spineflower habitat, all of which would be removed (DEIR pp. 11-12). The DEIR (page 12) indicates replacement habitat for this species will be restored at a 5:1 ratio. We expect that this habitat restoration can be accomplished within the Project area in the short term, but we request further detail on where the proposed mitigation habitat would be provided and the likely future effects of sea level rise on that location. Due to the likely effects of the Project on this species, we recommend that it be treated as a covered species in the habitat conservation plan being developed for the Project.

Other sensitive plant species

Surveys for sensitive plants were conducted in the Project area on a total of 4 days in 2006 and 2007 (DEIR, Appendix D-1, page 1). Given that these surveys are now over 5 years old, we recommend that they be updated to reveal any additional listed plant species that may have colonized the Project area or been undetected during the original surveys.

Other comments

The DEIR (page 25) states that CEQA Guidelines require that an environmental impact report identify an alternative location that "would avoid or substantially lessen any of the significant effects of the project". The DEIR (page 25) presents a "Location Alternative" for the proposed Project. However, the only alternate location considered is the "Monterey Bay Shores" site, which is another proposed resort development area in Sand City on the southern border of the former Fort Ord. That site is occupied by all of the same listed species as the proposed Project site and construction and use there would be expected to have similar (or greater) adverse effects to listed species, also requiring an incidental take permit for the Smith's blue butterfly and western snowy plover to comply with the Act. We therefore recommend that the City consider other alternate Project site(s) with fewer sensitive resources, thereby reducing adverse effects to listed species.

The cumulative effects section of the DEIR (section 5) does not analyze the effects to biological resources of the proposed Project collectively with other projects. Section 5.3.3 (page 193) is intended to address

cumulative effects on biological resources, but only describes the effects of installation of a traffic signal. Section 5.3.3 should consider the effects to biological resources, including listed species, of the proposed Project when added to other projects in and near Sand City. We recommend considering the proposed Monterey Bay Shores development, the existing shopping centers in Sand City immediately inland and across Highway 1 from the Project area, the proposed development of the former Fort Ord (especially the coastal areas west of Highway 1), the California Coastal Trail, the existing coastal bike path in Sand City (see discussion in our January 3, 2002, letter), the projects listed on page 185 of the DEIR, and any other projects that have removed or would remove habitat or increase the number of people using habitat areas.

We appreciate the opportunity to provide comments on the DEIR. If you have any questions, please contact Jacob Martin of my staff at (805) 768-6953.

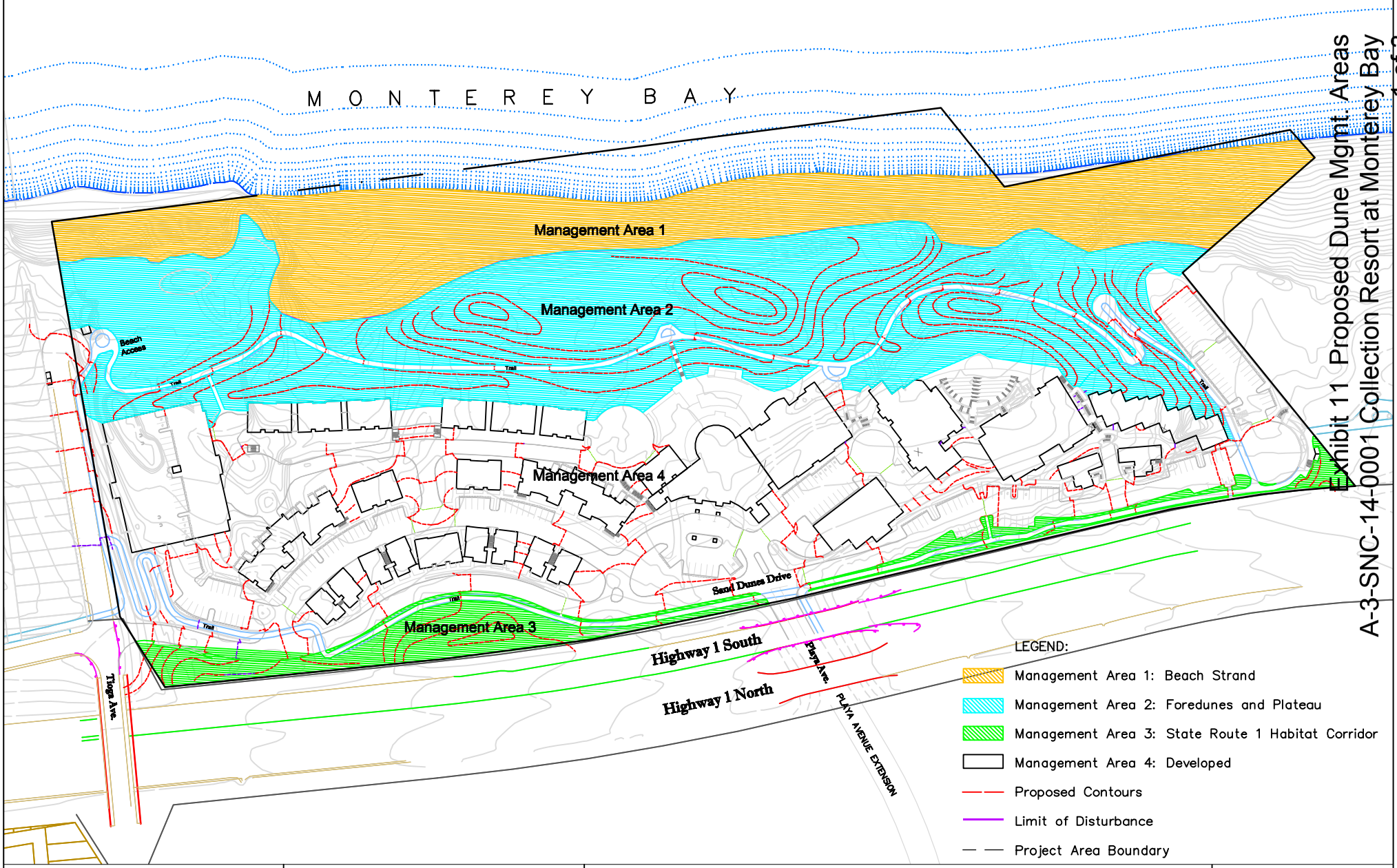
Sincerely,

/s/: Stephen P. Henry

For: Diane K. Noda
Field Supervisor

REFERENCES CITED

[Service] U.S. Fish and Wildlife Service. 2007. Recovery plan for the pacific coast population of the western snowy plover. 271 pp. plus appendices.



Zander Associates
Environmental Consultants
150 Ford Way, Suite 101
Novato, CA 94945

Scale: 1" = 200'
Date: 6/07

Management Areas
The Collection at Monterey Bay
Sand City, California

Figure
5

western snowy plover or other migratory bird species whose nests are protected by the California Fish and Game Code and the Migratory Bird Treaty Act. I also understand that the project site contains the federally endangered Smith's blue butterfly and may contain the California Department of Fish and Game Species of Special Concern black legless lizard. I understand that work may be restricted by the on-site biological monitor in order to protect these species and that grading is not permitted within any temporary construction fencing that may be erected around sensitive habitat areas. I understand that it may be a violation of federal and state law to work in areas restricted by the biological monitor or to grade within fenced habitat areas."

4.1.4 Project Design Restrictions

Artificial Lighting

Minimal lighting should be allowed along the vertical access trails or vista point within the development area and be subject to possible seasonal limitations based on the need to protect western snowy plovers that may nest in the vicinity. Outdoor lighting within the development area should be directed away from the beach and foredune and the associated native habitats.

Landscaping

Developed areas will contain a mix of native and ornamental species compatible with the dune landscape. Species should also be drought resistant, conforming to applicable local water conservation policies. Plant species that are recognized by the California Exotic Plant Council to be a threat to native habitats will be prohibited from the landscape palette.

4.2 Designation of Management Areas

Four specific management areas have been designated for the project site based on the proposed grading and development plan and on specific management goals for different areas of the site (Figure 5). Management Areas 1, 2 and 3 are the focus of proposed restoration and enhancement activities and Management Area 4 comprises the developed area. A description of each management area and the habitat restoration or protection goals follows.

4.2.1 Management Area 1: Beach Strand (4.0 acres)

This area is located bayward of the proposed limit of disturbance for the development and includes the beach from below the 15-foot elevation to the mean high tide line. No grading or recontouring is anticipated in this area and no revegetation is proposed. The primary focus is to manage access to improve conditions for western snowy plover should they return and attempt to nest in the vicinity. The primary goals in this management area are as follows:

- Improve/Enhance nesting habitat for western snowy plover.
- Control access and other activities that may affect the western snowy plover during the breeding season.

4.2.2 Management Area 2: Foredunes and Plateau (6.8 acres)

This management area currently exists as a long strip of coastal plateau that primarily supports iceplant mats and pioneer dune vegetation, but also includes large areas of bare sand and heavy disturbance, including a portion of the construction/contractor storage area at the south end of the site and portions of the coastal bluff that are covered by concrete tailings. The coastal bluff rises approximately 25 feet from the beach and at the top of the bluff the topography transitions to a more level plateau. This management area includes two beach inlets that will be expanded as part of the project to allow easy access for visitors. The focus in this management area will be to re-establish native coastal scrub vegetation that includes the buckwheat host plants for Smith's blue butterfly to create a movement corridor for this species on the west side of SR-1. The primary goals in this management area are as follows:

- Create buffers between developed areas and beach strand to protect western snowy plover.
- Stabilize created foredune areas.
- Revegetate temporarily disturbed areas with native coastal dune and scrub vegetation that includes coast and seacliff buckwheat.
- Remove and control exotic vegetation.

4.2.3 Management Area 3: State Route-One Habitat Corridor (1.0 acre)

Management Area 3 comprises the portion of the project area between SR-1 and the Sand Dunes Drive extension. It is a thin strip, no more than 80 feet in width at its widest point, that will be recontoured as part of the project for construction of the road and trail along the eastern property boundary. As with Management Area 2, the focus in this management area will be to create a movement corridor for Smith's blue butterfly by including the buckwheat host plants in the restored coastal scrub vegetation. The primary goals in this management area are as follows:

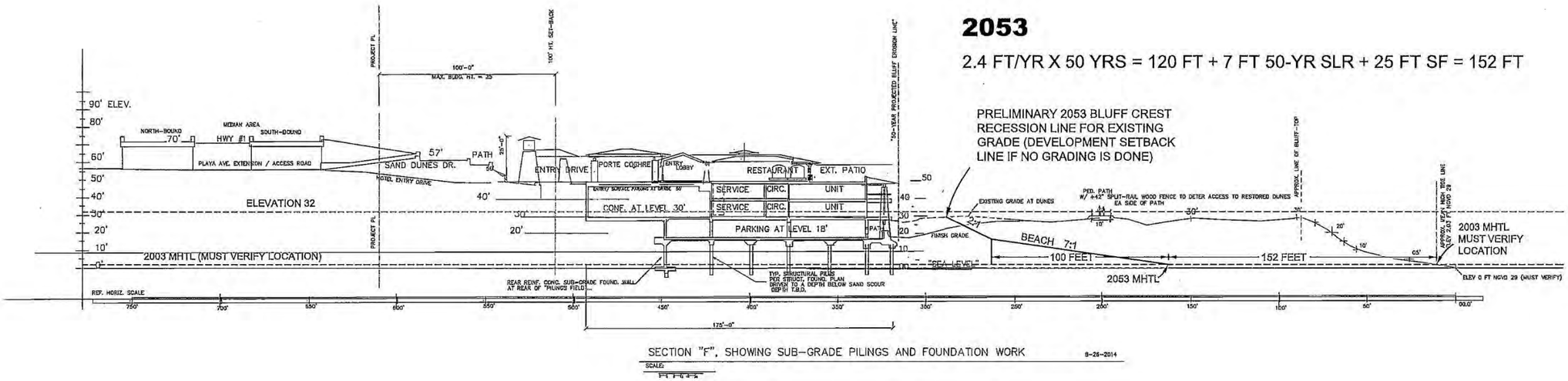
- Restore coastal scrub vegetation that includes coast and seacliff buckwheat.
- Remove and control exotic vegetation.

4.2.4 Management Area 4: Developed (11.7 acres)

This management area includes most of the lands that will be developed for the project. The focus in this area is to incorporate design restrictions and management activities that will reduce the effects of development on adjacent habitat restoration and enhancement sites.

4.3 Habitat Restoration

Areas that are temporarily disturbed during project construction and that are not within the permanent development envelope will be revegetated to create native coastal dune strand and scrub habitat. Approximately eight acres within Management Areas 2 and 3 will be restored through application of the following techniques.

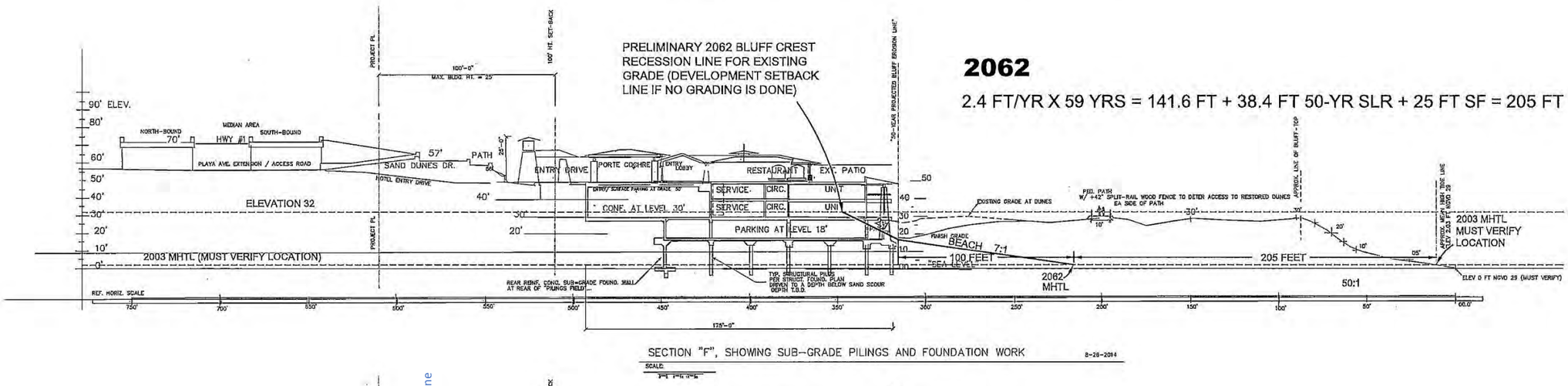


2053

2.4 FT/YR X 50 YRS = 120 FT + 7 FT 50-YR SLR + 25 FT SF = 152 FT

SECTION "F", SHOWING SUB-GRADE PILINGS AND FOUNDATION WORK 9-26-2014

SCALE:



2062

2.4 FT/YR X 59 YRS = 141.6 FT + 38.4 FT 50-YR SLR + 25 FT SF = 205 FT

SECTION "F", SHOWING SUB-GRADE PILINGS AND FOUNDATION WORK 8-28-2014

SCALE:

2090

2.4 FT/YR X 87 YRS = 208.8 FT + 58 FT 75-YR SLR FOR 2.2 FT OF RISE + 25 FT SF = 291.8 FT

2115 (2003 + 100 YRS) = 371.0'

Prelim 2115 (100 YR) Bluff Crest Recession Line

SECTION "F", SHOWING SUB-GRADE PILINGS AND FOUNDATION WORK 9-26-2014

SCALE:

WATSON PLANNING CONSULTANTS
Land Use Planning and Real Estate Development Solutions and Services Since 1969

D:\FOXX\Sand City\Sand City Collection\2014-9-4 Section F.dwg, 9/5/2014 10:05:29 AM

Exhibit 12 Erosion Setback Lines (50-75-100 years)
A-3-SNC-14-0001 Collection Resort at Monterey Bay
1 of 2

PRELIMINARY DRAFT
9/5/2014 HARO KASUNICH & ASSOCIATES

Haro-Kasunich **2062** Erosion Line

Haro-Kasunich **2090** Erosion Line

WPC / H-K **2115** Erosion Line

Exhibit 12 Erosion Setback Lines (50-75-100 years)
A-3-SNC-14-0001 Collection Resort at Monterey Bay
2 of 2

REVISIONS / DATE
1 REVISION-DATE-1
2 REVISION-DATE-2
3 REVISION-DATE-3
4 REVISION-DATE-4
5 REVISION-DATE-5

DATE:
DRAWN:
CHECKED:

design haus
architectural associates, inc.
285 bridge street, san luis obispo, ca. 93401
(805) 544-4444

SAND CITY RESORT
SAND CITY, CA

King VENTURES
285 Bridge Street
San Luis Obispo
California 93401
Telephone 805/544-4444
Fax 805/544-5837

SHEET NAME:
GRADING & DRAINAGE

24

Table 3.4-1 Signalized Intersection Level of Service Definitions		
Level of Service	**Description**	**Average Control Delay Per Vehicle (sec.)**
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, *Highway Capacity Manual* 2010.

Table 3.4-5 Freeway Mainline LOS Criteria		
Level of Service	**Description**	**Density[1]**
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11.0
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	11.1 to 18
C	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: [1]Density in passenger vehicles per mile per lane (veh/mi/ln).
**Demand flow exceeds capacity.
Source: Transportation Research Board, *Highway Capacity Manual*, 2000.

Exhibit 13 Definitions of LOS
A-3-SNC-14-0001 Collection Resort at Monterey Bay
1 of 1

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3077
TDD (805) 549-3259
http://www.dot.ca.gov/dist05/

Flex your power!
Be energy efficient!

January 10, 2013

MON-001-R80.09
SCH# 2006041070

Steve Matarazzo
City of Sand City
1 Sylvan Park
Sand City, CA 93955

Dear Mr. Matarazzo:

COMMENTS TO THE COLLECTIONS RESORT DRAFT EIR

The California Department of Transportation (Caltrans), District 5, Development Review, has reviewed the above referenced project and offers the following comments in response to your summary of impacts.

1. The Monterey County Regional Transportation Plan includes widening Highway 1 to three lanes in each direction between Fremont Boulevard and State Route 218. A project study report (PSR) was prepared to initiate these improvements in December 1998. While that PSR generally concluded that widening could occur on the inside medians, the report is no longer valid due to age. The widening project requires a new planning document/report to determine scope, impacts and alternatives. That said, since there is no guarantee that a new PSR would likewise recommend widening to the inside, The Collections Resort has the potential to be inconsistent and a barrier to other widening options. Project applicants should be made aware of this conflict and given an opportunity to discuss site-planning alternatives that account for possible widening to the west.

2. It appears that State Route 218 and Sand Dunes Drive was not analyzed in the traffic study. This is a significant omission because this intersection serves as the primary access to the project and has the potential to negatively impact southbound Highway 1 ramps. Caltrans is requesting the synchro files from the traffic study for all Highway 1/218 movements.

3. Figure 7, Section 4 shows proposed grading cuts into the State right-of-way just north of Playa Avenue. This grading could impact the highway roadbed and the drainage structure at post mile 80.30. The DEIR should discuss these potential impacts and provide mitigation or avoidance measures. The proposed conditions should accommodate the 25-year flow currently being conveyed by our facility. Since an encroachment permit will be required, detailed hydraulic calculations for the proposed work will need to be provided. A permit will not be issued until all Caltrans concerns are resolved (including Items #1 and #2 above).

If you have any questions, or need further clarification on items discussed above, please don't hesitate to call me at (805) 542-4751.

Sincerely,

JOHN J. OLEJNIK
Associate Transportation Planner
District 5 Development Review Coordinator
john.olejnik@dot.ca.gov

cc: Lyn Wickham (D5)
Brandy Rider (D5)
Mike Zeller (TAMC)
Carl Holm (MonCoPlng)
Jim Arnold (FORA)

Transportation Agency for Monterey County

Regional Development Impact Fee Program

2014 Strategic Expenditure Plan

Revenue Estimates	Previous Cycle 2009-2013	Tier 1 2014-2015	Tier 2 2016 - 2024	Tier 3 2025 - 2030
Revenue Distribution Forecasts (Derived from the 2014 Regional Transportation Plan)		5%	48%	47%
Regional Fees Collected	$ 3,711,311	$ 4,697,002	$ 56,318,783	$ 55,145,475
Balance from Previous Cycle		$ 1,169,538	$ 4,697,002	$ 8,314,962
Total Estimated Revenues	**$ 3,711,311**	**$ 5,866,540**	**$ 61,015,785**	**$ 63,460,437**

Completed Projects	Previous Cycle 2009-2013	Tier 1 2014-2015	Tier 2 2016 - 2024	Tier 3 2025 - 2030
US 101 San Juan Road Interchange	$ 2,234,375			
Total Regional Fee Expenditures on Completed Projects	**$ 2,234,375**	**$ -**	**$ -**	**$ -**

Expenditure Projections	Total Project Cost	Regional Fee Share of Cost	Previous Cycle 2009-2013	Tier 1 2014-2015	Tier 2 2016 - 2024	Tier 3 2025 - 2030
SR-1 Widening	$ 56,434,275	$ 2,698,901				$ 2,698,901
SR-68 (Holman Hwy) Widening	$ 26,619,941	$ 792,514		$ 342,496	$ 450,018	
SR-156 Widening	$ 268,000,000	$ 7,637,953		$ 514,837	$ 7,123,116	
Marina-Salinas Corridor	$ 90,507,800	$ 20,322,081				$ 20,322,081
Del Monte Corridor Improvements	$ 43,000,000	$ 2,388,773			$ 2,388,773	
US-101 - South County Phase 1 (Frontage Rds - Salinas to Chualar)	$ 80,334,105	$ 23,659,221			$ 9,463,688	$ 14,195,532
US-101 South County Phase 2 (Harris Road Interchange)	$ 57,662,128	$ 7,169,469				$ 7,169,469
SR-68 Commuter Improvements	$ 25,555,144	$ 4,213,734	$ 307,398	$ 312,205	$ 3,594,131	
Gloria Rd (Gonzales) Interchange	$ 29,960,000	$ 10,190,026			$ 10,190,026	
South Soledad Interchange	$ 14,020,499	$ 2,944,097			$ 2,944,097	
North Soledad Interchange	$ 13,037,040	$ 5,199,838			$ 5,199,838	
Walnut Ave / US 101 Interchange	$ 20,148,450	$ 6,370,864			$ 6,370,864	
US-101 / First Street Interchange (King City Loop Rd)	$ 29,814,334	$ 4,976,271			$ 4,976,271	
US 101 Widening from Airport Blvd to Boronda Rd	$ 52,000,000	$ 8,097,773				$ 8,097,773
G11 San Juan Road Improvements	$ 71,900,000	$ 2,751,207				$ 2,751,207
G12 San Miguel Canyon Improvements	$ 55,000,000	$ 6,467,621				$ 6,467,621
Salinas Road Improvements	$ 15,200,000	$ 1,757,852				$ 1,757,852
Total Regional Fee Projected Expenditures	**$ 949,193,716**	**$ 117,638,195**	**$ 307,398**	**$ 1,169,538**	**$ 52,700,822**	**$ 63,460,437**

Additional Projected Revenue Sources from 2014 Regional Transportation Plan	
City/County Developer Fees	$360,235,000
FORA Capital Improvement Program Fees	$116,713,000
Countywide Transportation Sales Tax	$380,000,000
Highway 156 Toll Revenues	$148,981,000
State Transportation Improvement Program (STIP)	$138,119,000
Regional Surface Transportation Program (RSTP)	$128,777,000
	$1,272,825,000

CALIFORNIA COASTAL COMMISSION
NORTH COAST DISTRICT
1385 8th Street, Suite 130
ARCATA, CA 95521
(707) 826-8950

M E M O R A N D U M

FROM: John D. Dixon, Ph.D.
Ecologist

TO: Michael Watson

SUBJECT: "The Collection at Monterey Bay"

DATE: March 25, 2015

Documents reviewed:

Baye, P.R. 2013. Memorandum dated January 15, 2013 to S. Mattarazo (City of Sand City) regarding "Comments on The Collection at Monterey Bay draft Environmental Impact Report, SCH#20006041070: biological resources and coastal ecological impacts."

City of Sand City. 2012. Draft Environmental Impact Report, The Collection at Monterey Bay

Noda, D.K. (U.S. Fish & Wildlife Service). 2013. Letter dated January 15, 2013 to S. Matarazzo (City of Sand City) regarding: "Comments on the draft Environmental Impact Report for the Collection at Monterey Bay resort project, Sand City, Monterey County, California. '

Thornton, E.B. 2013. Letter dated January 12, 2013 to Sand City Council regarding: "Comments on the DEIR for The Collection at Monterey Bay."

U.S. Fish and Wildlife Service. 1984. Smith's blue butterfly recovery plan. U.S. Fish and Wildlife Service, Portland, Oregon. 87 pages.

Zander and Associates. 2009a. Biological Resources Assessment, The Collection at Monterey Bay, Sand City, California. A February 2009 revision of an August 2007 report prepared for David J. Powers and Associates.

Zander and Associates. 2009b. Habitat protection plan for The Collection at Monterey Bay, Sand City, California. A February 2009 revision of an August 2007 report prepared for David J. Powers and Associates.

The project includes the construction of various resort facilities on a 26.5-acre site in disturbed sand dunes adjacent to the ocean in Sand City. Where not altered by human activities, the beach is backed by a 30- to 36-foot-high erosional coastal bluff cut into ancient dunes. There is no foredune. Historically, the sand dunes at this location were used for sand mining and were the site of a concrete batch plant. Currently, a portion of the site is used as a contractor's storage area. Invasive ice plant is abundant and was probably planted long ago. Portions of the dunes adjacent to the beach have been armored and about a half-acre area near Highway 1 has been stabilized with sand

fences and planted vegetation. As a result of these various activities, the dune morphology has been much changed and much of the dune habitat has been degraded. Nevertheless, the dune system in its degraded state continues to have significant habitat value for native biota and has the potential for significant restoration.

The EIR asserts that, "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 status species, would not be significant." In fact, the physical sand dune habitat is both rare in California and is clearly especially valuable for its support of a biota that is reliant on dune systems. The EIR includes no creditable analysis of the cumulative impacts to the physical habitat and the biota that relies upon it[1]. More than 50% of the Monterey Bay dune system has already been destroyed or significantly altered (USFWS 1984). Given this cumulative loss, a cumulative impact analysis should have been conducted for the proposed project. The disruption of 20 acres and the permanent loss of 12 acres of dune habitat resulting from this project, in the context of additional losses from other recent projects, seems significant.

Despite a history of environmental degradation, 9.1 acres of the site are vegetated with a mosaic comprised of elements of the rare native dune mat vegetation[2] and of non-native iceplant. In addition, there are several small patches of the federally Threatened Monterey spineflower (*Chorizanthe pungens* var. *pungens*), and the federally Endangered Smith's blue butterfly (*Euphilotes enoptes smithi*) has been observed among its native buckwheat host plants (*Eriogonum latifolium* and *E. parvifolium*) where these species were planted to stabilize the sand near Highway 1. The butterfly overwinters as pupae on buckwheat plants and is probably present outside the adult flight season. The interior dunes within the project site were used for nesting by the western snowy plover (federally Threatened and a state Species of Special Concern) in the 1980s and 1990s and is currently considered snowy plover nesting habitat by the U.S. Fish and Wildlife Service. Recently, plovers have nested both north and south of the site. A portion of the site is within designated Critical Habitat for the plover. Finally, although the abundance of ice plant makes the site suboptimal habitat for the black legless lizard (state Species of Special Concern), its documented presence in similar habitat on adjacent property to the south suggests that it is likely present on the project site.

Of the 26.5-acre project site, 3 acres are within the ocean, 19.8 acres would be disturbed during construction, 11.7 acres would be permanently converted to resort infrastructure and much of the remaining open space would be intermixed with development. The entire site, except the beach and ocean below the 15-foot contour, will be excavated and re-contoured for construction of the resort facilities and for construction of a new dune feature near the beach. This will entail the removal of nearly all the vegetation, including dune mat vegetation, the Monterey spineflower, and the buckwheat plants. In addition, much of the area identified as snowy plover nesting habitat, which is also black legless lizard habitat, will be lost to development.

[1] The EIR only considers the cumulative effect of installing a traffic signal on Highway 1.

[2] Including beach bur (*Ambrosia chamissonis*), pink sand verbena (*Abronia umbellata*), beach evening primrose (*Camissonia cheiranthifolia*), beach salt bush (*Atriplex leucophylla*), and silver beach lupine (*Lupinus chamissonis*).

Approximately half the site will be designated for habitat restoration and enhancement. This includes 4 acres of beach, an approximately 6.8-acre area of constructed dunes[3] rising 25 to 45 feet in height in a roughly 200- to 300-foot-wide band[4] between the resort and the beach that will be planted with native coastal dune and dune scrub vegetation, and about a 1-acre narrow (≤ 80 feet wide) strip of sand between Highway 1 and the resort that will be planted with coastal scrub vegetation. The constructed dunes between the resort and the beach will be planted with the species impacted by development and may provide suitable snowy plover nesting habitat. The Habitat Protection Plan that is based on the construction of this dune feature and its biological enhancement with native species is intended to mitigate for the various biological impacts of the project. Unfortunately, the planned mitigation has a short lifespan because this is an eroding coast.

According to calculations summarized in the EIR, within 50 years, all the dune habitat seaward of the project and significant portions of the project itself will be removed by coastal erosion and shoreline retreat ("coastal recession"). Given the transient, that is to say, ephemeral nature of the "restored" habitat and remaining plover habitat, no significant mitigation is proposed.

[3] In the EIR, it is stated that this activity would "reconstruct the coastal foredunes on the site." There were no foredunes along this section of the coast and the constructed dune will be a unique and anomalous feature, but will no doubt support some native dune species.

[4] The new dune feature will be within the 50-year coastal recession setback, which is reported in the EIR to be between 269 feet and 396 feet in width. The cross sections in the EIR that include the dune feature (Figures 5 & 7) have no horizontal scale, so their width was roughly estimated by eye.

CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105- 2219
VOICE (415) 904- 5200
FAX (415) 904- 5400
TDD (415) 597-5885

3 April 2015

GEOTECHNICAL REVIEW MEMORANDUM

To: Mike Watson, Coastal Program Analyst
From: Mark Johnsson, Staff Geologist
Re: King Ventures Resort Appeal (A-3-SNC-14-0001)

In connection with the above-referenced appeal, I have reviewed the following documents:

1) Nielson and Associates, 2006, "Geologic investigation for an Environmental Impact Report for the proposed Sand City Resort, The Collection at Monterey Bay, San Monterey County, California", 18 p. geologic report dated 26 November 2006 and signed by H. Nielsen (CEG 1390).

2) Haro, Kasunich and Associates, 2007, "Sand City Collection coastal recession and wave runup evaluation", 39 p. report dated 27 July 2007 and signed by Anonymous.

3) Haro, Kasunich and Associates, 2012, "Sand City Collection 2062 coastal recession setback evaluation", 5 p. memorandum dated 24 February 2012 and signed by J. E. Kasunich (GE 455) and M. Foxx (CEG 1493).

These three documents apparently constitute the sole basis for the "Geology, Seismicity, and Soils" section of the Environmental Impact Report, which I also reviewed. Several other documents, cited below, went into my analysis as well. I visited the site on 19 March 2015, and I have had telephone conversations with the Applicant's geotechnical consultant, Mark Foxx of Haro Kasunich and Associates, and his land use planning consultant Dave Watson of Watson Planning Consultants.

This memorandum addresses geologic hazards at the site including coastal erosion, slope stability, and seismic hazards. It is my understanding that the Commission's Coastal Engineer, Dr. Lesley Ewing, has provided comments addressing flooding and wave run-up issues (including tsunamis), and that these comments are reflected in the staff report analysis.

The site, much of which was historically the site of a former sand quarry, consists almost entirely of graded and modified sand dunes, overlain in part by varying amounts of artificial fill containing large amounts of rock, concrete, asphalt, and brick debris (reference 1). Much of the seaward-facing bluff is covered by concrete that reportedly was poured as a slurry over the bluff face over many years when the sand plant was in operation. According to the Coastal Regional Sediment Management Plan for southern Monterey Bay (Phillip Williams and Associates, 2008) says "until at least 1990, concrete slurry was dumped here parallel to the shoreline to form an 800 foot long concrete ridge that effectively acts as a seawall." Although not an engineered shoreline

protective device, this concrete has apparently been fairly effective at slowing coastal erosion at the site. Notably, the central portion of the site (the upcoast portion of the Sterling parcel) is not covered by this material and the bluff is largely missing from this portion of the site and there is a large, low indentation extending inland for several hundred feet until higher dunes are reached. It is my understanding that the applicant plans to remove this concrete and lower much of the seaward portion of the site by grading. The concrete mantling the bluff makes it difficult to estimate historic and future bluff retreat rates at the site, albeit future retreat rates must be understood in terms of these materials having been removed. Similarly, the rubble and debris placed on the bluffs on the downcoast portion of the Sterling site is unpermitted, and it cannot be factored into the future erosion analysis either.

Bluff Retreat and Coastal Erosion

In developing setbacks from coastal bluffs, the Commission must be able to make the finding that the development will be stable for its economic life without a reliance on shoreline protective devices. With regard to sliding, "stability" is generally taken to mean a minimum factor of safety against sliding of 1.5. Thus, the Commission must be able to find that the development with have a factor of safety of 1.5 for its economic life, which is commonly taken to be between 75 and 100 years. One common method of establishing a setback that will achieve this goal is to find the distance from the bluff edge where a factor of safety of 1.5 is attained *today*, and adding to that distance the distance that the bluff is expected to retreat in the next 75-100 years.

This is not the methodology followed by the Applicant's geotechnical consultants in references (2) and (3), shown in Exhibits 1 and 2, and described below. I do, however, find their methodology acceptable. Nevertheless, as I will describe in more detail below, I find the following problems with the "erosion lines" shown on Exhibit 2:

1) The erosion rate used (2.4 ft/yr) is on the low end of historically measured erosion rates in the area.

2) Although recession of the Mean High Tide Line does take into account continued sea level rise, the bluff retreat rate does not. The simplest approach recommended in the Commission's Draft Sea Level Rise Guidance Document is "to use the high range of historic erosion rates to represent average future trends." The Applicant's consultants have done just the opposite—used the lowest end of the range of historic rates in the area.

3) The sea-level rise values that were used in calculating the recession of the Mean High Tide Line are not the current best estimates (high end) as reported in National Research Council (2012).

4) The "erosion lines" depicted in Exhibit 2 were not drawn by the Applicant's geotechnical consultants based on calculations from multiple cross sections but were extrapolated by the Applicant's land use planning consultant based on a single cross

> section in the middle of the site and the estimated MHTL. There is no scientific support for creating such an erosion line with such little data.

Because of the unconsolidated nature of the sandy dunes at the project location, and the exposure of southern Monterey Bay to high wave energy, this region has among the highest long-term bluff retreat rates in the state. The LCP, which was drafted in 1982, identifies historical average annual erosion rates ranging between 1.4 and 5 feet per year, although it acknowledges that erosion rates vary at different points along the coast and that an average uniform erosion rate cannot be applied to Sand City's coastline.

The United States Geological Survey (USGS) in its document "National Assessment of Shoreline Change, Part 4: Historic Coastal Cliff Retreat along the California Coast" by Cheryl Hapke and David Reid (Open File Report 2007-1133), highlighted the southern Monterey area for its high erosion rates. The USGS report documented116 meters (381 feet) of retreat at the former Fort Ord military base (now Fort Ord Dunes State Park) over the 65 years between 1933 and 1998, based on a comparison of historic and current cliff edge positions. The historic cliff edge was estimated from 1933 aerial photographs, and the current cliff edge was estimated from a 1998 LIDAR survey. The USGS analysis shows an average annual long-term retreat rate of about 1.8 meters (5.9 feet) per year at that locality.

Closer to Sand City, and on the subject site, Griggs et al. reported an erosion rate of 74 inches (6.2 ft) per year just north of the end of Tioga Avenue.

Thornton et al., in their classic 2006 paper linking sand mining to coastal erosion (see discussion below) avoided the site itself, presumably because most of it includes anomalous "armoring" type features (i.e., the unpermitted debris and rubble and the hardened slurry). However, one of their transects, approximately 400 meters north of the subject site, showed an erosion rate of 6.4 ± 0.7 ft/yr for the period 1940-1984. The closest transects for which they provided erosion rates spanning the entire interval 1940-2004 are located 1300 meters south of the site, and 1200 meters north of the site. They yielded long term historic erosion rates of 2.3 ft/yr and 5.1 ft/yr, respectively. Taken together, these numbers yield an average erosion rate of 3.7 ft/yr, which is still significantly lower than the average calculated by Thornton et al. at the transect closest to this site.

In general, bluff erosion and retreat is episodic and correlated with events when storms and high tides coincide. As I reported in a 18 March 2014 memo to the Commission regarding proposed development approximately one quarter mile north of the subject site:

> It is well established that this site, like much of the Monterey Bay bluffed shoreline, experiences episodic bluff retreat in response to large storm events, particularly those correlating with El Niño events. Much less erosion occurs between these episodic events. Erosion and coastal bluff retreat associated with the 1982-1983 and 1997-1998 El Niño events are particularly well documented throughout Monterey Bay (see, for example, Griggs and Brown, 1998; Dingler and Reiss, 2002; Griggs et al. 2005).

> Most studies of coastal erosion in southern Monterey Bay have focused on long-term bluff retreat, smoothing out episodic events in an attempt to define averages over long time scales. There have been many anecdotal accounts of episodic erosion events, such as the 50 feet quoted in a report by Haro, Kasunich and Associates (2003), but documentation has been lacking. Where events are well documented, they have tended to be relatively far from the subjects site. For example, Dingler and Reiss (2002) measured (by survey) 70 feet of bluff retreat between 1982 and 1998 (a 15 year period) [at Pajaro Dunes, approximately 18 miles north of the subject site]. Of that, 25 feet occurred between February and April of 1983 and over 30 feet occurred during the 1997-19987 El Niño winter, with only 15 feet occurring during the remaining 14 years (as quoted in Phillip Williams and Associates, 2008). Thornton et al. (2006) measured coastal erosion by the volume of sand eroded, and found that during the 1997-1998 El Niño 2.4 million cubic yards of dunes were eroded, a seven-fold increase over the average annual volume.
>
> The best documentation of the amount of bluff retreat that might be expected during a severe El Niño event was reported in Quan et al. (2013). These authors, using ship-borne LIDAR, did surveys pre- and post- El Niño for the 1997-1998 event. They documented several erosion "hot spots" one to two miles north of the site of up to 15 m (49 feet) of bluff recession. Through repeated LIDAR surveys at other time intervals, they found that these "hot spots" tended to migrate with subsequent erosion events. Even though the amount of bluff retreat they measured at Sand City was only on the order of 7 m (23 feet) during the 1997-1998 El Niño, a principal conclusion to be drawn from their research is that the location of erosion hot spots moves throughout the area; erosion hot spots are not fixed in one or two locations and, there are no constraints that would prevent a future erosion hot spots from developing at the bluff fronting the proposed development. Indeed, the areas where the hotspots occurred during the 1997-1998 El Niño have generally the same geologic and wave characteristics as the proposed development site.

Erosion in the Sand City area cannot be completely analyzed without consideration of historic and ongoing sand mining. The time period of cliff retreat for the USGS analysis includes the time period when drag lines and dredge pond mining were occurring in the Marina (upcoast) and Sand City areas. The Coastal Regional Sediment Management Plan (CRSMP) for Southern Monterey Bay, prepared by Philip Williams and Associates in 2008, provided information on sand mining in the area. In general, there was about 111,000 cubic yards per year of sand mining at Sand City up until 1990, and 83,000 cubic yards per year from Marina. Most of these operations ceased in the late 1980s and early 1990s, leaving the sand dredge pond in Marina as the only currently active mining effort in the southern Monterey Bay. If sand mining were to decrease or stop, and that sand were allowed to stay in the system, instead of being exported out of the system, erosion rates may decrease.

Thus, the identified historic retreat rates of as much as 5.9 feet per year could be somewhat lower

in the future, after cessation of the remaining sand mining activities in the area, if all other factors affecting shoreline erosion remained the same. However, the CRSMP also found that the volumes mined from the Marina mine likely have increased over time to current rates of approximately 200,000 cubic yards per year, thereby reducing or muting the shoreline retreat benefits from closing the other drag line operations in Sand City and Marina. The CRSMP also documents increased erosion rates since 1984 in Marina, and south of the Salinas River, and finds that this may be related to the increased mining volumes in Marina.

The effects from the possible increased volume of sand extracted at Marina may take many years to propagate downcoast to Sand City, and the recent trends in shoreline change for the 1984 to 2004 period for Sand City that show a lower (2.8 feet per year, from Thornton et al. 2006) rate of bluff erosion, may represent an abnormal lull in bluff retreat. Even this possibly anomalous low erosion rate is about 17% higher than the rate (2.4 ft/yr) that has been used by the Applicant. Given the various factors in play, such as long-term erosion trends, decreasing and increasing mining at different locations, the episodic nature of erosion correlated to mean sea levels and storm events, there is considerable uncertainty concerning the relationship between sand mining and erosion rates.

In 1990, the City of Sand City adopted a resolution (SC-21) accepting a 1989 shoreline erosion study performed by Moffatt and Nichol and directing City staff to consider the findings and projections of the report when reviewing applications for development west of Highway One. In earlier project proposals for development west of Highway One, this 1989 report was helpful in projecting the location of the mean high tide line under low-, medium-, and high-risk scenarios. However, it is bluff erosion, not the location of the mean high tide line per se that most directly threatens development in this area. Although the level of wave run-up and flooding must be considered, where high bluffs occur it is more likely that bluff retreat and slope stability will determine when development is threatened.

Accordingly, in 2003 the City hired Haro, Kasunich and Associates (HKA) to prepare a “Coastal Recession Evaluation” which, by estimating typical equilibrium beach and dune profiles, developed an estimate of future bluff edge positions. This was not based solely on analysis of historical bluff retreat, but also accounted for sea level rise and slope flattening through time. HKA’s methodology was essentially as follows:

1) Multiply the historic long-term bluff retreat rate calculated from examination of aerial photographs (2.4 feet per year) by 50 years to establish the amount of shoreline retreat expected in 50 years (120 feet).

2) Add to this the amount of shoreline retreat expected due to 0.6 feet (7 inches) of sea level rise. I note that current sea level rise guidance from the 2012 NRC Report provides a range of estimates of 7 inches to 35 inches of sea level rise by 2065, and the 7 inches used here is at the lowest end of the range. Using the Bruun Rule (which estimates shoreline retreat through sea level rise assuming a simple horizontal retreat of the beach profile) and an estimated 0.6 feet of sea level rise over the next 50 years, together with assumptions about the closure depth of the shore profile, HKA calculated an additional seven feet of shoreline retreat due to sea level rise. To this

they added a 25-foot “safety factor” for a total retreat of the mean high tide line of 152 feet.

3) Assume an equilibrium condition in which beach width remains constant as the shoreline moves landward. The equilibrium beach, based on measurements taken in 2003, was assumed to have a slope of 7 horizontal:1 vertical and a width of 105 feet. The landward end of the beach, measured from the estimated 2053 mean high tide position, is taken to be the 2053 toe-of-bluff.

4) Assume bluff slope stability could be established by a 2 horizontal:1 vertical slope of the bluff face, an assumed worst-case for slope flattening through time. Where this 2:1 slope intersects current topography is assumed to be the position of the 2053 top of slope and is taken to be a development setback line.

Using this methodology, HKA established a 2053 bluff crest recession line for all of Sand City.

HKA (reference 3) applied the same methodology it used in its report for the City when it estimated a 2062 bluff recession line across the project area, with a modification in the sea level rise projection (1.8 feet of sea level rise by 2062). This calculation, done on a single cross section through the middle of the project site, yielded 205 feet of recession of the mean high tide line relative to 2003. Applying a 100 foot beach at a slope of 7 horizontal:1 vertical, and a layback of the bluff to a 2 horizontal:1 vertical slope, a “bluff crest recession line” was found to be approximately 330 feet landward of the current mean high tide line (see Exhibit 1). This was used by the Applicant’s land use planning consultant Dave Watson, to establish a “2062 erosion line” across the entire property, as well as a 2090 erosion line (see Exhibit 2). The Applicant’s geotechnical consultants, Haro, Kasunich, and Associates drew no such line. I feel that it is inappropriate to base an erosion line on a single cross section on this large, complex site.

I have several other significant concerns with these proposed lines. First, the erosion rate of 2.4 feet/year that was used is less than half the 5.9 feet/year erosion rate calculated by the USGS from historic trends, and is in fact lower than either Griggs et al. (2005) or Thornton et al. (2006) found for the site or its immediate vicinity. Thus, the Applicant’s analysis likely underestimated historic erosion rates.

Second, the Applicant’s analysis did not include how the project would be impacted under higher sea level rise estimates, such as those projected in the 2012 NRC report (i.e., up to 2.9 feet of sea level rise by 2065). In my conversation with Mark Foxx of HKA on 2 February 2015, I learned that HKA has provided to the Applicant new estimates of MHTL recession due to sea level rise under high-, middle-, and low-scenarios based on the 2012 NRC report and the Bruun Rule. Although Mr. Foxx provided these estimates to me verbally, the Applicant has not provided staff with an updated exhibit.

Third, the analysis provided to staff did not consider the effects of higher sea level rise on bluff retreat rates themselves. Instead, the analysis was based on a mid-range value of sea level rise (1.8 feet of sea level rise), and only considered sea level rise’s effect on translation of the beach profile. Higher rates of sea level rise would result in a larger amount of erosion than is currently

projected. Using only the Bruun rule methodology to approximate the effects of sea level rise significantly under-estimates those effects. The Bruun Rule does not take into account the effect that higher sea level has on the bluff retreat *rate*. As waves impact the toe of the bluff more frequently under higher sea level rise scenarios, the bluff will experience erosion for more of each tidal cycle than under lower sea level rise scenarios. To more accurately model the effects of higher sea levels on coastal recession, a variable bluff retreat rate should also be applied.

Fourth, the presence of existing rock, asphalt, hardened concrete slurry, and other debris currently impedes natural shoreline processes at this site. This unpermitted debris is proposed to be removed as part of this project. When this debris is removed, it is certain that bluff recession at the site will resume. The removal of armoring at Stillwell Hall has clearly demonstrated that once armoring is removed, the poorly lithified sand bluff is likely to retreat quickly until it forms a continuous line with the adjacent bluffs. The Applicant's erosion analysis has not considered or attempted to estimate the consequences of this rapid bluff adjustment in development of the safe setback distance.

Fifth, the Applicant's analysis is measuring from the Mean High Tide Line (MHTL), a location that represents one particular day's intersection of the MHT elevation with the level of the beach. However, the MHTL is ambulatory, and this is not a precise indication of where the bluff is located. In fact, at a dune site like this where the blufftop edge is hardly linear (see Exhibit 2), the MHT is not a good tool to be using as the basis for setbacks as it does not account for variations in the bluff edge position. For example, as I indicated above, the bluff edge at the Sterling property actually extnds inland for several hundred feet until higher dunes are reached, but the Applicant's setback is not measured from this location, rather it is measured from the much more linear MHTL.

In sum, there are significant inadequacies in the Applicant's geotechnical analysis. The average historic erosion rate is far too low, the effects of sea level rise are not adequately reflected in either the location of the setback or in the expected increase in the bluff retreat rate, and the effect of removing the debris fronting the site has not been considered.

In order to account for these types of deficiencies and the uncertainties inherent in the effects of future sea level rise, in my opinion it is more accurate to use the high end of historical erosion rates to estimate future erosion at this site. The 5.9 ft/yr value reported by USGS is at the high end of historic values for the region, and adopting it as a proxy for the rate expected over the economic life of the development due to higher sea levels is appropriate and consistent with the recommendations in the Commission's draft Sea Level Rise Guidance Document.

Slope Stability

Because coastal bluffs are generally unstable, development must be set back a sufficient distance to ensure stability throughout its lifetime. Generally, this is done through applying a quantitative slope stability analysis to the shoreline erosion/retreat analysis. Barring significant geologic differences between the landforms present today and those expected to be present at the end of

the life of the project, the amount of setback necessary to assure stability today can be added to the expected amount of shoreline erosion/retreat to arrive at a total setback that will ensure stability at the end of the development's lifetime.

Here, the Applicant used a methodology to arrive at a setback line that inherently assumes that the bluff will eventually reach and maintain a 2:1 slope, and sets the proposed development behind that line. I concur that setting back development behind a projected 2:1 slope measured from the expected bluff toe that is based on expected retreat over the project's lifetime likely offers a more conservative setback than is to be obtained by setting it behind a line indicating a factor of safety against sliding of 1.5, obtained by slope stability analysis, as is more commonly done.

Seismic Hazards

The site is located in a seismically active area and there is a high probability that the site will be subject to strong ground motion during the economic life of the development. There are no active faults on the site, but several faults, including the San Andreas, San Gregorio, Tularcitos, King City, and Chupines Faults, are located within 25 miles of the site. The Seaside fault, likely a splay of the Chupines fault, has been previously mapped through the property. However, as explained in the 2006 Nelson and Associates report (reference 1):

> *The location of the fault in the vicinity of the property was revised in the early 1990's. Clark (1974) first mapped the fault roughly through the middle of the property passing just south of the Playa Avenue extension under crossing of Highway One. Rosenberg and Clark (1994), however, were able to refine the probable location of the fault using more recent data. In the early 1990's, two groundwater test wells were drilled for the Monterey Peninsula Water Management District by Staal, Gardner and Dunne as part of a feasibility study for a desalination plant. Lew Rosenberg was their geologist, a person extremely familiar with the geology of the Monterey Bay Area. The wells were located south of the property, one just south of Tioga Avenue near the coast and the other at the water treatment plant about 1500 feet to the south. The data from the northern of these two wells proved that the fault had to be located south of that well which was their reasoning for remapping the fault on their 1994 maps.*

In a letter report dated February 10, 1998, HKA estimates an average maximum horizontal peak acceleration for the soils making up the site to range from 0.1 to 1.0 times the force of gravity. The Applicant has not submitted seismic design criteria, but it does not appear that there are any extraordinary design considerations that would significantly affect the project's ability to meet fault setback criteria as required by LUP Policy 4.3.9, and to withstand expected ground shaking during a major earthquake as required by LUP Policies 4.3.5 and 4.3.10.

Although the 25 July 2007 HKA report concludes that the site has a low potential for liquefaction, it is my opinion that the limited number of Cone Penetrometer Testing (CPT) borings and relatively low peak ground seismic acceleration of 0.54 g that were applied in their analysis, do not preclude the possibility of liquefaction-induced settlement. It is soils such as this that are particularly prone to liquefaction, and in my opinion further analysis is necessary to

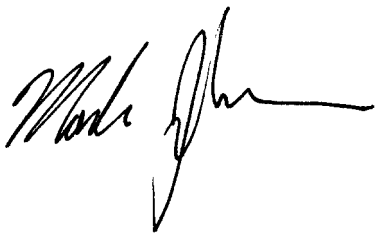
evaluate liquefaction and to design possible mitigation strategies.

Conclusions

In conclusion, the Applicant has not shown that the proposed project would be set back sufficiently to assure its stability from coastal erosion and bluff retreat over any foreseeable design life. In addition, insufficient data and modeling of potential soil liquifiability have been provided to rule out the possibility of liquefaction-induced settlement.

I hope that this review is helpful. Please do not hesitate to contact me with any further questions.

Sincerely,



Mark Johnsson, Ph.D., CEG, CHG
Staff Geologist

Additional References Cited

Clark, J.C., Dibblee Jr., T.W., Greeme, H.G., and Bowen Jr., O.E., 1974, Preliminary geologic map of the Monterey and Seaside 7.5 minute quadrangles, Monterey County, California with emphasis on active faults, USGS Miscellaneous Field Studies Map MF-577, 2 sheets, 1:24,000 scale.

Dingler, J.R. and Reiss, T.E., 2002, Changes to Monterey Bay beaches from the end of the 1982-83 El Niño through the 1997-98 El Niño: Marine Geology, v. 181, p. 249-263.

Griggs, G.B., and Brown, K.M., 1998, Erosion and shoreline damage along the central California coast: A comparison between the 1997-98 and 1982-83 ENSO winters: Shore and Beach, v. 1998, p. 18-23.

Griggs, G., Patsch, K., and Savoy, L., 2005, Living with the changing California coast: Berkeley, California, University of California Press, 540 p.

Hapke, C.J., and Reid, D., 2007, National Assessment of Shoreline Change, Part 4: Historical Coastal Cliff Retreat along the California Coast, U.S. Geological Survey, p. 51.

Haro, Kasunich and Associates, 2003, "Coastal recession evaluation for coastline of Sand City, California", 17 p. geotechnical report dated 23 December 2003 and signed by J. E. Kasunich (GE 455) and M. Foxx (CEG 1493).

Moffat and Nichol Engineers, 1989, "City of Sand City shore erosion study", report dated December 1989 and signed by Moffatt and Nichol Engineers.

National Research Council, 2012, Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future: Washington DC, Committee on Sea Level Rise in California, Oregon, and Washington: Board on Earth Sciences and Resources and Ocean Studies Board: Division on Earth and Life Studies: National Academies Press, p. 260.

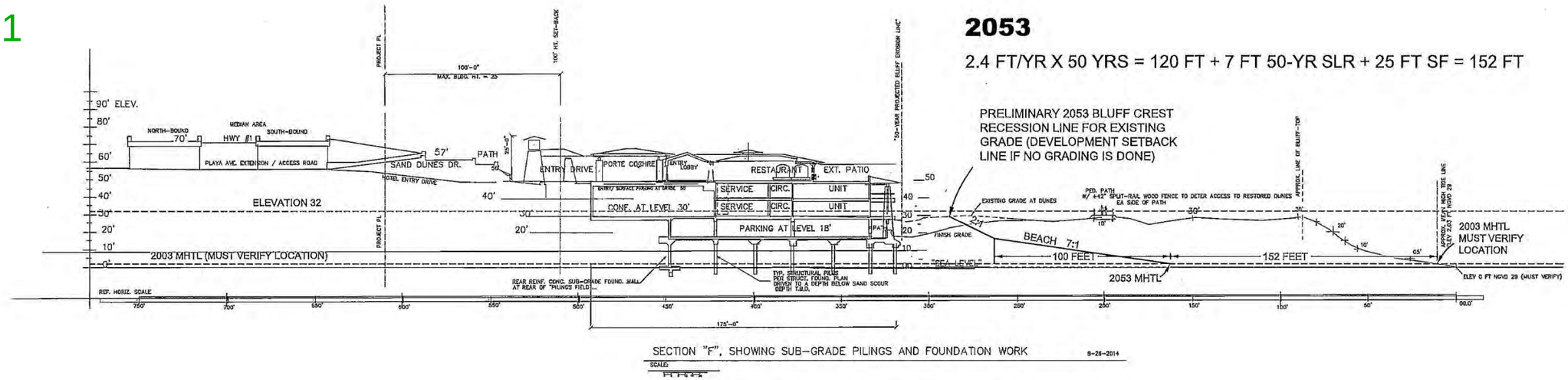
Phillip Williams and Associates, 2008, Coastal regional sediment management plan for southern Monterey Bay: San Francisco, Phillip Williams and Associates, p. 162.

Quan, S., Kvitek, R.G., Smith, D.P., and Griggs, G.B., 2013, Using vessel-based LIDAR to quantify coastal erosion during El Niño and inter-El Niño periods in Monterey Bay, California: Journal of Coastal Research, v. 29, p. 555-565.

Rosenberg, L.I., and Clark, J.C., 1994, Quaternary faulting of the greater Monterey area, California, USGS report, p. 45.

Thornton, E.B., Sallenger, A., Conforto Sesto, J., Egley, L., McGee, T., and Parsons, R., 2006, Sand mining impacts on long-term dune erosion in southern Monterey Bay: Marine Geology, v. 229, p. 45-58.

Exhibit 1



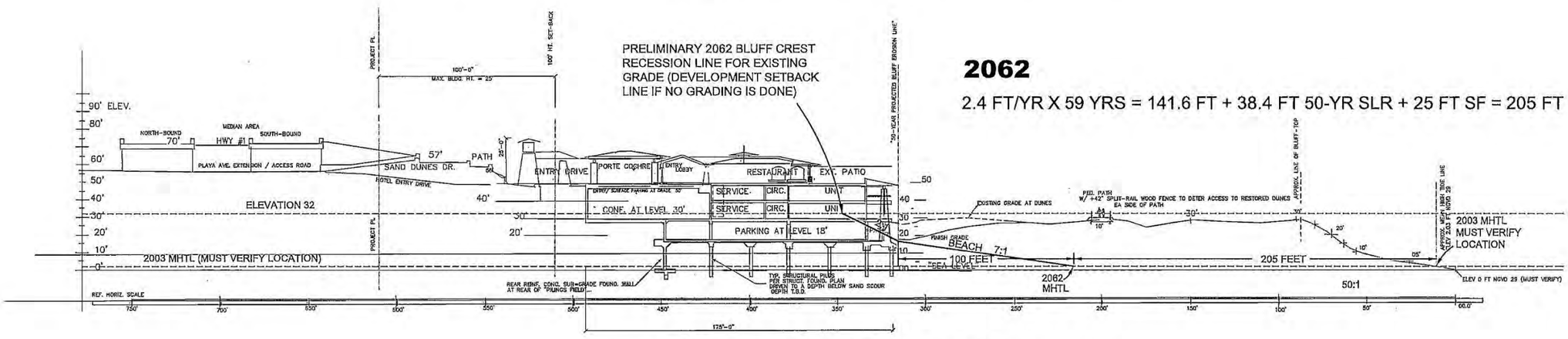
PRELIMINARY 2053 BLUFF CREST RECESSION LINE FOR EXISTING GRADE (DEVELOPMENT SETBACK LINE IF NO GRADING IS DONE)

2053

2.4 FT/YR X 50 YRS = 120 FT + 7 FT 50-YR SLR + 25 FT SF = 152 FT

SECTION "F", SHOWING SUB-GRADE PILINGS AND FOUNDATION WORK 9-26-2014

SCALE: 1"=10'-0"



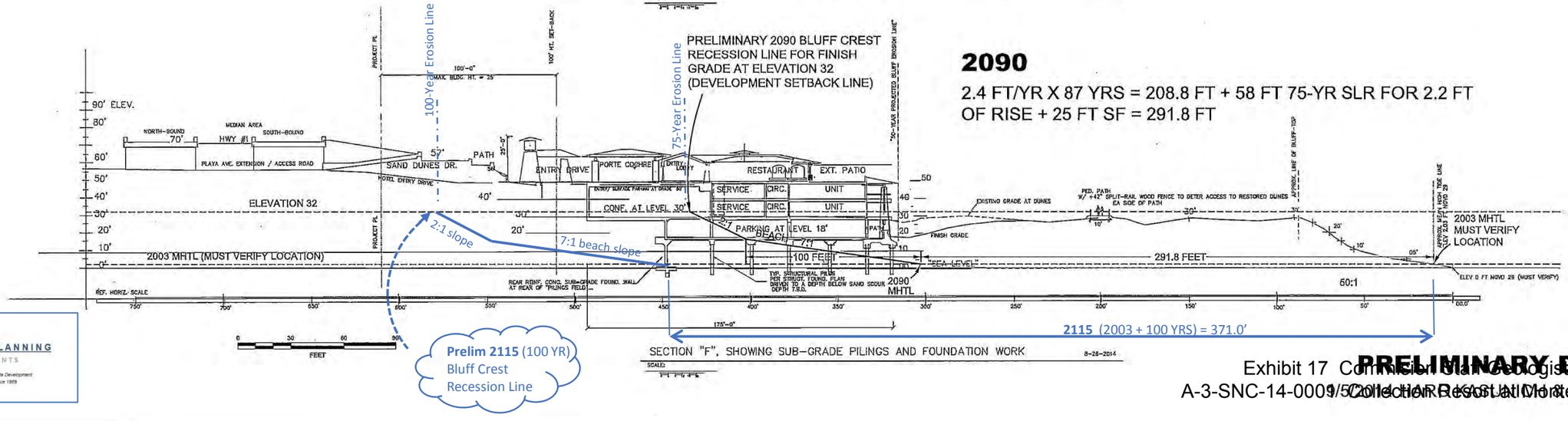
PRELIMINARY 2062 BLUFF CREST RECESSION LINE FOR EXISTING GRADE (DEVELOPMENT SETBACK LINE IF NO GRADING IS DONE)

2062

2.4 FT/YR X 59 YRS = 141.6 FT + 38.4 FT 50-YR SLR + 25 FT SF = 205 FT

SECTION "F", SHOWING SUB-GRADE PILINGS AND FOUNDATION WORK 8-26-2014

SCALE: 1"=10'-0"



PRELIMINARY 2090 BLUFF CREST RECESSION LINE FOR FINISH GRADE AT ELEVATION 32 (DEVELOPMENT SETBACK LINE)

2090

2.4 FT/YR X 87 YRS = 208.8 FT + 58 FT 75-YR SLR FOR 2.2 FT OF RISE + 25 FT SF = 291.8 FT

2115 (2003 + 100 YRS) = 371.0'

SECTION "F", SHOWING SUB-GRADE PILINGS AND FOUNDATION WORK 8-26-2014

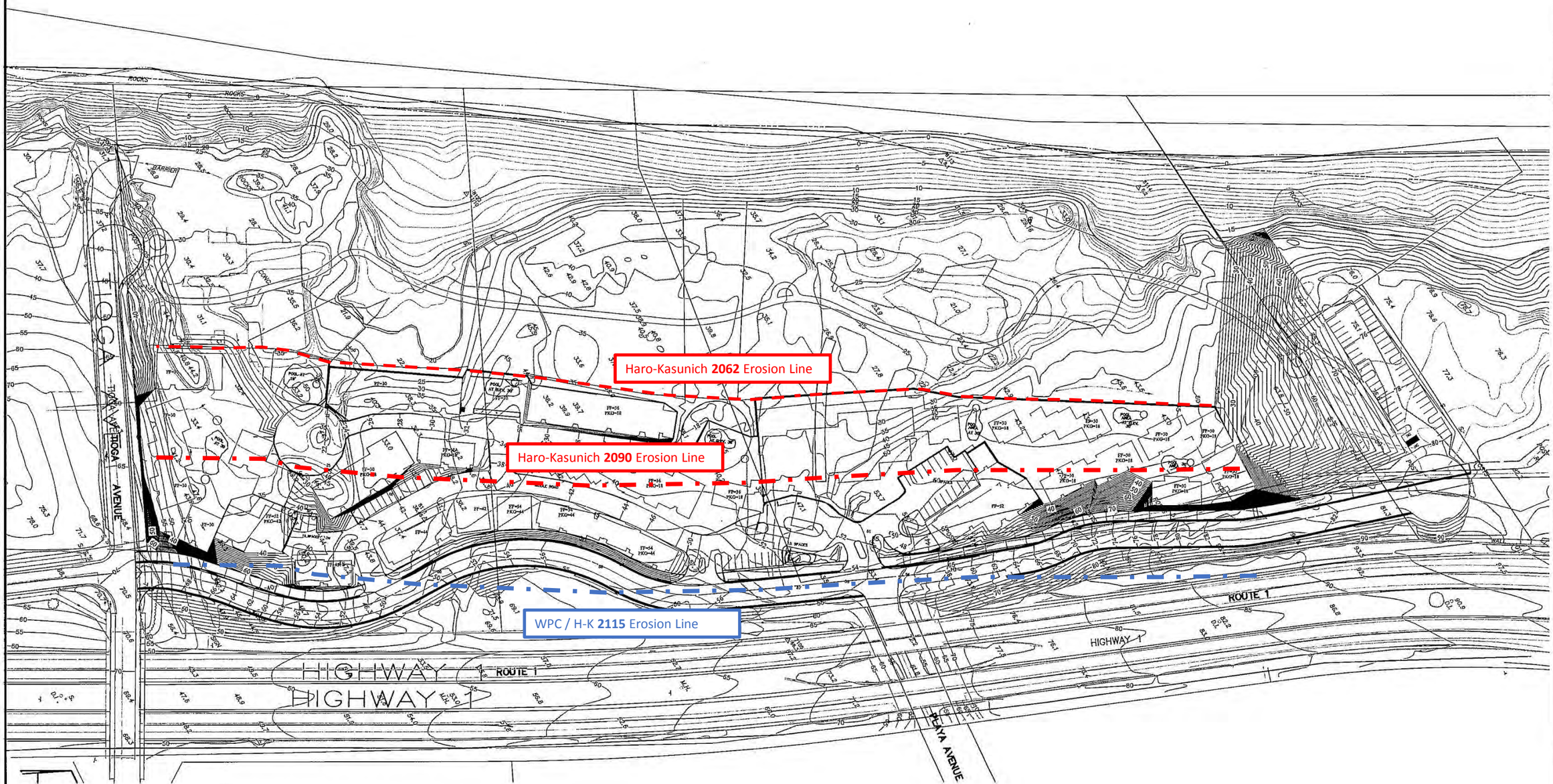
SCALE: 1"=10'-0"

Prelim 2115 (100 YR) Bluff Crest Recession Line

WATSON PLANNING CONSULTANTS
Land Use Planning and Real Estate Development Solutions and Services Since 1969

D:\FOXX\Sand City\Sand City Collection\2014-9-4 Section F.dwg, 9/5/2014 10:05:29 AM

Exhibit 2



REVISIONS / DATE
1 REVISION-DATE-1
2 REVISION-DATE-2
3 REVISION-DATE-3
4 REVISION-DATE-4
5 REVISION-DATE-5

DATE:
DRAWN:
CHECKED:

design haus
architectural associates, inc.
285 bridge street, san luis obispo, ca. 93401
(805) 544-4444

SAND CITY RESORT
SAND CITY, CA

King VENTURES
285 Bridge Street
San Luis Obispo
California 93401
Telephone 805/544-4444
Fax 805/544-5837

SHEET NAME:
GRADING & DRAINAGE
24

CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105- 2219
VOICE (415) 904- 5200
FAX (415) 904- 5400
TDD (415) 597-5885

March 3, 2015

TO: Michael Watson, Coastal Program Analyst
FROM: Lesley Ewing, Ph.D., PE, Sr. Coastal Engineer
SUBJECT: CDP Application for The Collection, Sand City, CA

I have reviewed the following submittals related to the proposed development in Sand City, CA, called The Collection.

- City Administrator/Community Development Director. (December 12, 2013). "Supplemental Report on The Collection at Monterey Bay (King Ventures) and Recommended Added Conditions of Permit Approval" prepared for the Mayor and City Council. Pages 8A-6 through 8S-74.

- Appendix B-1 Coastal Recession and Wave Run-up Analysis. Attachments include:
  - Haro, Kasunich and Associates. (July 2007) Draft Sand City Collection Coastal Recession and Wave Runup Analysis.
  - Nielsen and Associates. (November 2006) "Geologic Report for the Sand City Resort, The Collection at Monterey Bay," Job M-1183-G.

- Appendix B-2 Updated Coastal Recession Setback Evaluation. Attachment includes:
  - John Kasunich and Mark Foxx Memo to Will Burns. (24 February 2012) . "Sand City Collection 2062 Coastal Recession Setback Evacuation." Project No. M9166.

In addition, I have examined the following hazard information for this site:
- State of California, Department of Conservation, Tsunami Runup Maps; http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/Monterey/Documents/Tsunami_Inundation_Seaside_Quad_Monterey.pdf
- FEMA, Stay Dry and Flood Smart kmz.files; http://www.fema.gov/media-library-data/20130726-1629-20490-9036/stay_dry_kmz_user_guide.pdf
- Pacific Institute, Sea Level Rise, Flooding and Erosion Maps; http://www2.pacinst.org/reports/sea_level_rise/hazmaps/Seaside.pdf

The proposed project is a resort complex that would be built into the dunes on the seaward side of Highway 1 in Sand City. The analyses for this site have examined flooding and erosion risks. My review will discuss the flooding analysis and the sea level rise aspects of the erosion analysis. It is my understanding that Dr. Mark Johnsson will comment on the geologic hazards and the main erosion analysis.

Flood Hazards
The flood/wave runup analysis in Appendix B-1 shows that the site is likely to be at-risk from flooding over the proposed 50 year life of development. This is a finding from the provided analysis. I concur with the overall findings; however, the analysis uses a rather moderate

amount of sea level rise for the overtopping analysis, and if sea level is higher than the 1.5 feet that is used in the analysis, overtopping could be higher and more frequent than predicted in the analysis. Also, overtopping could become a problem for the project site sooner into the project life than the 40 to 50 years into the future that is noted in the flooding analysis.

The wave runup analysis is based upon a still water level of 8′ NGVD (4.1′ NGVD extreme high tide, 0.4′ of storm surge, 1.5′ short term water increase, 1.5 feet of sea level rise over 50 years, and 0.5 feet for a safety margin), an eroded beach and a 16-second, depth-limited wave. Under those conditions they calculate a runup elevation of 32.2′ NGVD. The assumed 1.5 feet of sea level rise over the 50 year project life is in the mid-range of the range of NRC Sea Level Rise projections for the areas south of Cape Mendocino. For the year 2065 (50 years from an assumed project start during 2015), the NRC projection range is from 0.6′ to 2.9′. If sea level rise is higher than the 1.5′ used in the analysis, all other conditions being equal, then the runup would be higher than 32.2′ NGVD. Also, the conditions under which storm runup could reach 32.2′ NGVD would occur earlier in the project life, and could be present for many years of the project, rather than just toward the end of the 50-year project life.

The consequences of high runup and dune overtopping could be significant. As noted in Appendix B-1, "During the project's design life, it is likely that as wave runup naturally penetrates further inland and reaches higher elevations that areas where building are now proposed will eventually become "A" zones or may even become "V" zones.[1] …Eventually, wave runup and coastal flooding will have severe and significant impacts." (page 26). Also from Appendix B-1, wave runup of +32 feet NGVD "will flow under many of the proposed buildings closest to the ocean. This wave runup will inundate the parking areas under these building and will exceed the elevation of the lowest habitable floors of a few of the proposed buildings. The building foundation elements will be subject to wave flooding impact forces as a result." (page 25).

The wave runup analysis in Appendix B-1 only analyzed runup for one projection of sea level rise – 1.5 feet. In addressing the uncertainty with future sea level rise, the Commission has often separated planning efforts from the design effort. In the planning stage, the project examines the possible consequences from a range of sea level rise amounts to understand the possible impacts that can occur in the future. With the knowledge of the possible impacts, the project design can use some amount of sea level rise that is likely to occur, and identify the possible adaptation options that could be used (along with their impacts) in the event that actual future sea level is higher than used in the design phase.

The analysis in Appendix B-1 only examined the consequences of 1.5-feet of sea level rise by 2065. There was no analysis of the consequences of 2-feet of sea level rise, or of 2.9 feet of sea level rise, the upper range of the sea level rise projections developed by the 2012 NRC Committee. Since runup will vary with water depth, a higher water level could increase runup beyond the anticipated maximum of 32.2′ NGVD. There is a recommendation that the habitable buildings be flood-proofed to +33′ NGVD, which could be viewed as one option for adaptation;

[1] "A" and "V" zones are FEMA designations for flood zones. The "A" zone is normally the area with a 1% annual probability of flooding and the "V" zone is an area where the flooding can be accompanied by high velocity water at a depth of 3-feet or more.

however, this is only adequate for a small increase in runup elevation. The Supplemental Report includes a geologic mitigation measure 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." (page 8A32). However, the impacts of this mitigation had not been analyzed in the supplied materials and this mitigation measure is counter to the Protective Devices Prohibited condition (11(f) 2. coastal Hazards Response.).

As noted earlier, the wave runup analysis has not examined the worst case condition, and as such, the analysis may underestimate the possible future impacts from runup, as well as the time when runup may start to pose significant risks to the proposed project. Development removal may be an appropriate response to runup; however, the triggers for building removal have not been carefully developed since runup could pose a significant flooding problem before the bluff retreat trigger is reached.

As a side note, the analysis uses NGVD 29 for the elevation datum. This datum was developed in the early part of the 20th century to align the geodetic datum with mean sea level. Over the decades, mean sea level and NGVD had diverged and in most locations they are no longer equivalent. In the 1980s, NGVD was replaced by the North American Vertical Datum, NAVD88. Currently, many locations in the US and Canada have switched from NGVD to NAVD and I have learned recently that the NOAA tidal benchmarks no longer provides the NGVD 29 datum in the benchmark data. If a project is approved for this site, the project plans should include an updated, NAVD88 vertical datum and all vertical triggers should be referenced to NAVD88.

Erosion and Sea Level Rise

The erosion analysis has acknowledged that sea level rise will influence the dune erosion. However, the analysis has used only 1.8 feet of sea level rise in this analysis. As noted earlier, this is in the mid-range of the NRC sea level rise projections, and the high amount of sea level rise, 2.9 feet by 2065 would result in a large amount of erosion than currently projected. The analysis of erosion for the higher sea level rise amount has not been provided.

The erosion also has not included the "stored recession" that occurs on the section of the bluff that is now covered by concrete slurry. And, finally, there has been no analysis of the impacts of routinely disturbing the frontal dunes to keep the dune at the historic profile as would occur with Recommendation 11(d) (page 8A-7).