ZANDER ASSOCIATES

Environmental Consultants

June 8, 2010

Massy Mehdipour
1425 Dana Ave.
Palo Alto, CA 94301

Biological Resource Assessment
1170 Signal Hill Road
Pebble Beach, Monterey County, California

Dear Ms. Mehdipour:

Zander Associates has completed a baseline biological resource assessment of your property located at 1170 Signal Hill Road at Pebble Beach. We reviewed background documents, including current records of special status species in the California Natural Diversity Data Base (CNDDB, 2010), and visited the property on two separate occasions during the spring blooming season to characterize vegetation/habitat types and conduct focused plant surveys. Our findings are presented below.

Property Overview

The property is an approximately 2.13-acre residential lot with an exiting house overlooking 17-Mile Drive and the Pebble Beach shoreline on the Monterey Peninsula (Figure 1). The property is situated in an older (ca 1950's) residential subdivision on sandy dune substrates between two existing golf courses: Spyglass Hill & Cypress Point. The property also sits near the base of Signal Hill Dune, a protected remnant of a once more extensive dune system that historically occurred along the Monterey Peninsula shoreline. The historic dune system has been fragmented by sand mining, the construction of roads, golf courses, houses and other development over the years.

The existing house, driveway, landscaping and other residential amenities occupy approximately 0.40-acre of the site on a graded pad adjacent to Signal Hill Road. Several mature trees and shrubs, including Monterey cypress (*Cupressus macrocarpa*), eucalyptus (*Eucalyptus* sp.) and tea tree (*Leptospermum* sp.) are growing as landscape elements along Signal Hill Road and at the edge of the pad near the house.[1] West of the pad, the site slopes down (southwesterly) toward 17-Mile Drive through sandy dune terraces. Most of the undeveloped areas on the property are heavily colonized by non-native European beach grass

[1]Native habitat for Monterey cypress occurs at Cypress Point, just south of the property; however, the trees on the site appear to have been planted as landscape elements.

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(*Ammophila arenaria*) and iceplant (*Carpobrotus* spp.) but there are also limited areas of more native dune habitat.

Methods

Zander Associates queried current (2010) CNDDB online records for listings of special status plant and animal species for the Monterey 7.5' USGS quadrangle. We also consulted the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants and reviewed our own extensive files on the Pebble Beach area to compile a list of special status species known or suspected to occur in the vicinity of the site (Table 1).

Zander Associates biologists visited the site on two separate occasions during 2010 to survey the site and verify existing habitat conditions. On April 8, 2010 and again on May 5, 2010, we systematically traversed the entire site to search for target special status plants. We also visited known ("reference") locations for special status plant species in the Signal Hill area (primarily annual sand dune species with a limited blooming season) to confirm the appropriate timing of our surveys. We paid particular attention to potential habitat for special status wildlife species but did not conduct any focused surveys for animals. Following are descriptions of the general vegetation and wildlife habitat characteristics of the site and the results of our special status species assessment.

Vegetation Types

Four general but overlapping and intergraded vegetation types occur on the property: European beach grass dominant, iceplant dominant, sparsely vegetated open sand, and mixed coastal dune scrub. Figure 2 indicates the general distribution and extent of these vegetation communities and a description of each is provided below.

European beach grass covers large areas of the lot and is especially dominant on the slopes west of the existing house (Photo 1). It often occurs in pure stands at the exclusion of other vegetation, but is also mixed with non-native iceplant and native coastal scrub elements such as mock heather (*Ericameria ericoides*) and coyote brush (*Baccharis pilularis*).[2] European beach grass was originally introduced to California in the late 1800s for the purpose of stabilizing dunes but is now considered one of the most pervasive exotic plants currently threatening dune environments on the west coast, driving out native species, reducing biodiversity and altering native dune morphology. The species spreads almost exclusively by rhizomes which form extensive underground systems and can rapidly colonize large areas, especially in sandy substrates.

Iceplant-dominated areas also occur on parts of the property, mostly well downslope of the existing house and pad toward the westerly borders of the lot (Photo 2). Dense iceplant mats largely preclude the establishment of other vegetation, but do allow occasional scattered

[2] A solitary Monterey pine (*Pinus radiata*) sapling is also growing in a matrix of beachgrass and iceplant below the house and pad.

patches of aggressive colonizers like poison oak (*Toxicodendron diversilobum*) and a few isolated individuals of plants such as seacliff buckwheat (*Eriogonum parvifolium*) and mock heather. Iceplant is also interspersed with other vegetation types throughout the property. The species was brought to California in the early 1900s to stabilize soil along railroad tracks and roadways with thousands of acres planted until the 1970s. It has also been promoted as an ornamental plant because of its succulent foliage, bright magenta or yellow flowers and adaptability to harsh (e.g. dry, salty, windy) conditions. Ice plant grows very quickly, producing large, spreading mats. It flowers prolifically and the seeds disburse easily. The plant also reproduces vegetatively; even small pieces of the plant can root and grow easily. Consequently it has invaded foredune, dune scrub, coastal bluff scrub, coastal prairie, and maritime chaparral communities throughout coastal California. It is considered among the most invasive wildland pest plants by the California Exotic Pest Plant Council (CalEPPC), documented as aggressive invaders that displace natives and disrupt natural habitats.

Sparsely vegetated open sand occurs patchily on the property and is comprised of mostly bare white sands that support only scattered dune species, such as beach sagewort (*Artemisia pycnocephala*), mock heather, woolly lotus (*Lotus heermannii* var. *orbicularis*), sand verbena *(Abronia sp.*) and beach evening primrose (*Camissonia cheiranthifolia*). The open sandy areas with sparse native shrubs provide the best potential habitat on the property for plant species, most of which are annual and cannot tolerate much, if any, competition from other plants. The mapped open sand habitat just downslope and westerly of the existing house occurs as a small terrace on deep, loose sands that appears to have been created through sand excavation or movement relatively recently (Photos 3 & 4). Rhizomes of European beach grass are already colonizing the area and other invasives including iceplant and French broom (*Genista monspessulana*) are growing nearby. The open sandy areas to the west are more compacted but are also vulnerable to colonization by non-natives.

Coastal dune scrub vegetation, characterized by native shrubby species such as coyote brush, silver lupine (*Lupinus chamissonis*), coffee berry (*Rhamnus californica*), Pacific blackberry (*Rubus ursinus*), and mock heather, occurs in some areas as the dominant cover in a matrix of iceplant, beach grass and dune sedge (*Carex pansa*). Other prevalent species include seacliff buckwheat, poison oak, Pacific reed grass (*Calamagrostis nutkatensis*) and Mexican rush (*Juncus mexicanus*). Dune sedge is the significant ground cover in large areas dominated by this vegetation type, giving way to iceplant toward the southwesterly parts of the site and beach grass to the south and east (Photo 5). Prominent granitic outcrops, colonized by a mix of non-native and native scrub species and open sand, are found toward the westerly property boundary (Photo 6).

Wildlife Habitat

Animals likely to use the project site include species adapted to sand dune and ruderal plant communities. Burrowing rodents such as the California ground squirrel (*Spermophilus beecheyi*), pocket gopher (*Thomomys umbrinus*), Norway rat (*Rattus norvegicus*) and the house mouse (*Mus musculus*) can live in dense beach grass and ice plant patches. In more

open areas, reptiles such as the coast horned lizard (*Phrynosoma coronatum frontale)*, western fence lizard (*Sceloporus occidentalis*) and northern alligator lizard (*Gerrhonotus coeruleus*) may be found. The fossorial (sand burrowing) California legless lizard (*Anniella pulchra*) has been observed in the vicinity. Common mammals in the Del Monte Forest area such as raccoons (*Procyon lotor*), skunks (*Mephitis mephitis*), opossums (*Didelphis virginiana*) and black-tailed deer (*Odocoileus hemionus*) and birds such as Brewer's blackbird (*Euphagus cyanocephalus*), scrub-jay (*Aphelocoma californica*) and white crowned sparrow (*Zonotrichia leucophrys*) would also be expected.

Special Status Species

For this assessment, special status species are defined as: those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS); those listed or proposed for listing as rare, threatened or endangered by the California Department of Fish and Game (CDFG); plants occurring on list 1A, 1B or 2 of the CNPS Inventory of Rare and Endangered Vascular Plants of California (2001); and animals designated as "Species of Special Concern" by CDFG. Nesting migratory birds and raptors, protected by the Migratory Bird Treaty Act (16 USC 703) and the California Fish and Game Code (Section 3503.5), are also afforded special status.

We searched the current CNDDB listings of special status plant and animal species for the Monterey 7.5' USGS quadrangle and checked other sources to develop a list of potential species for our 2010 surveys (see Table 1). During our field surveys, we were particularly focused on plant species (primarily annual or ephemeral plants) known to occur in dune environments in the area. We also paid attention to potential habitat for special status wildlife associated with dunes, although we did not conduct focused surveys for any animal species. A discussion of the primary plant and animal species we targeted and evaluated is presented below. Notes on a more comprehensive list of potential species are provided in Table 1.

Dune plants

Monterey spineflower (*Chorizanthe pungens* var. *pungens*), Menzies' wallflower (*Erysimum menziesii*), sand gilia (*Gilia tenuiflora* var. *arenaria*), beach layia (*Layia carnosa*) and Tidestrom's lupine (*Lupinus tidestromii*) have all been observed in the dune habitats associated with Signal Hill. Each is listed at either the state or federal level (or both) as rare, threatened or endangered (see Table 1 for regulatory standing of each). These endemic dune species have a limited season of blooming and mostly depend on seed for their reproduction and continued survival. We visited known locations for each of these species and found them in bloom at Signal Hill and at sites along the 17-Mile Drive shoreline during both of our 2010 site visits. We did not find these or any other special status plants, except for Monterey pine and Monterey cypress (see below) on the property at 1170 Signal Hill Road.

Monterey pine and Monterey cypress

Both Monterey pine and Monterey cypress are native to the Del Monte Forest and are included on the CNPS List 1B, species considered rare, threatened or endangered in California and elsewhere. Several mature specimens of Monterey cypress are growing adjacent to (northwesterly of) the pad for the house and one relatively young (just beyond sapling stage) individual Monterey pine is growing downslope and southerly of the house. The cypress appear to have been planted as ornamental landscape elements and the pine is likely a seedling of trees in the landscape of adjacent houses. Nonetheless, because these trees are in their native range, they are afforded special consideration; their removal would be subject to review by the Pebble Beach Company Forester and/or Monterey County.

California black legless lizard (*Anniella pulchra nigra*)

The black legless lizard is a CDFG Species of Special Concern.[3] This species lives in a number of habitats in dunes and sandy areas, from immediately above high tide, the crest of sand dunes, and the edge of the hind dunes to inland sandy areas associated with oak woodlands, grasslands, maritime chaparral and other habitats. They are fossorial animals that burrow in sand and leaf litter beneath plants growing in these habitats and feed on insects and other invertebrates. Some plant cover is required to support insects that, in turn, serve as food for the lizards.

Legless lizards are most abundant in dune habitats where native vegetation is present. While they have also been found along the edges of ice plant mats within dune ecosystems, ice plant mats are not considered suitable habitat for the species. The dense root structure of ice plant and lack of leaf litter and duff produced by the plant appear to provide poor burrowing conditions. The species was found as a result of directed surveys on a nearby lot along Signal Hill Road in 2006 and anecdotal sightings have been reported from the area. The sandy substrates on the property provide potential habitat for this species.

Coast horned lizard (*Phrynosoma coronatum frontale*)

This lizard is also a CDFG Species of Special Concern. Coast horned lizards inhabit open country, especially sandy areas, washes, flood plains, and wind-blown deposits in a wide variety of habitats, including coastal dunes, shrublands, woodlands, riparian habitats and annual grassland. Warm, sunny, open areas are a main habitat requirement, along with patches of loose soil where the lizard can bury itself. The California horned lizard is known to occur in many habitat types, and it could possibly occur in the sandy soils of the site, especially where there are open sandy areas with sparse native vegetation.

[3] Some herpetologists and authorities consider the black legless lizard a melanistic (darker colored) adult form of the California legless lizard (*A. pulchra*) that occurs in the Monterey area; both are CSC species.

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

Smith's blue butterfly is a federally endangered species that occurs within sand dune habitats. It is completely dependent upon coast and/or seacliff buckwheat during all life stages. During its one-year lifespan, mate location, copulation, oviposition and pupae emergence all occur on the flowerheads of the buckwheat species during peak flowering season, June through September. The dormant pupal form takes place during non-flowering periods. During our floristic surveys we found seacliff buckwheat (*Eriogonum parvifolium*) plants, primarily within dune scrub habitat.

Smith's blue butterfly has not been recorded in the Pebble Beach area and there are historic gaps in its distribution between the City of Monterey shoreline and the Carmel Valley area. Although apparently suitable habitat and host plants for this species occur along the 17-Mile Drive shoreline and in the vicinity of Signal Hill Dune, no butterflies have ever been recorded and none were observed in these areas or anywhere along the entire 17-Mile Drive during several regular, seasonally-timed summer surveys of the area conducted between 2000 and 2008 by Dr. Richard Arnold, a noted expert on Smith's blue butterfly. It is reasonable to assume that, given the species' history of absence from the area, Smith's blue butterfly is unlikely to occur on the property at 1170 Signal Hill Road.

Migratory birds

The Migratory Bird Treaty Act (16 USC 703) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, and their eggs and nests. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." Section 3503.5 of the California Fish and Game Code also protects the nests and eggs of birds-of-prey and essentially overlaps with the Migratory Bird Treaty Act. No bird nests were observed on the project site during our surveys but the few trees, shrubs and open sandy areas could provide marginally suitable nesting habitat for some species.

Conclusion

We did not find any of the dune plant species on the target list or any other special status plants during our spring 2010 focused site surveys.[4] We assume the potential presence of black legless lizards and coast horned lizards based on habitat characteristics on the site. Although coast buckwheat, the host plant for the federally-listed Smith's blue butterfly (*smithi*) occurs on the site, we do not expect the butterfly to occur in the vicinity based on previous years of surveys and assessment in the area.

[4] Not including Monterey pine and Monterey cypress as discussed above

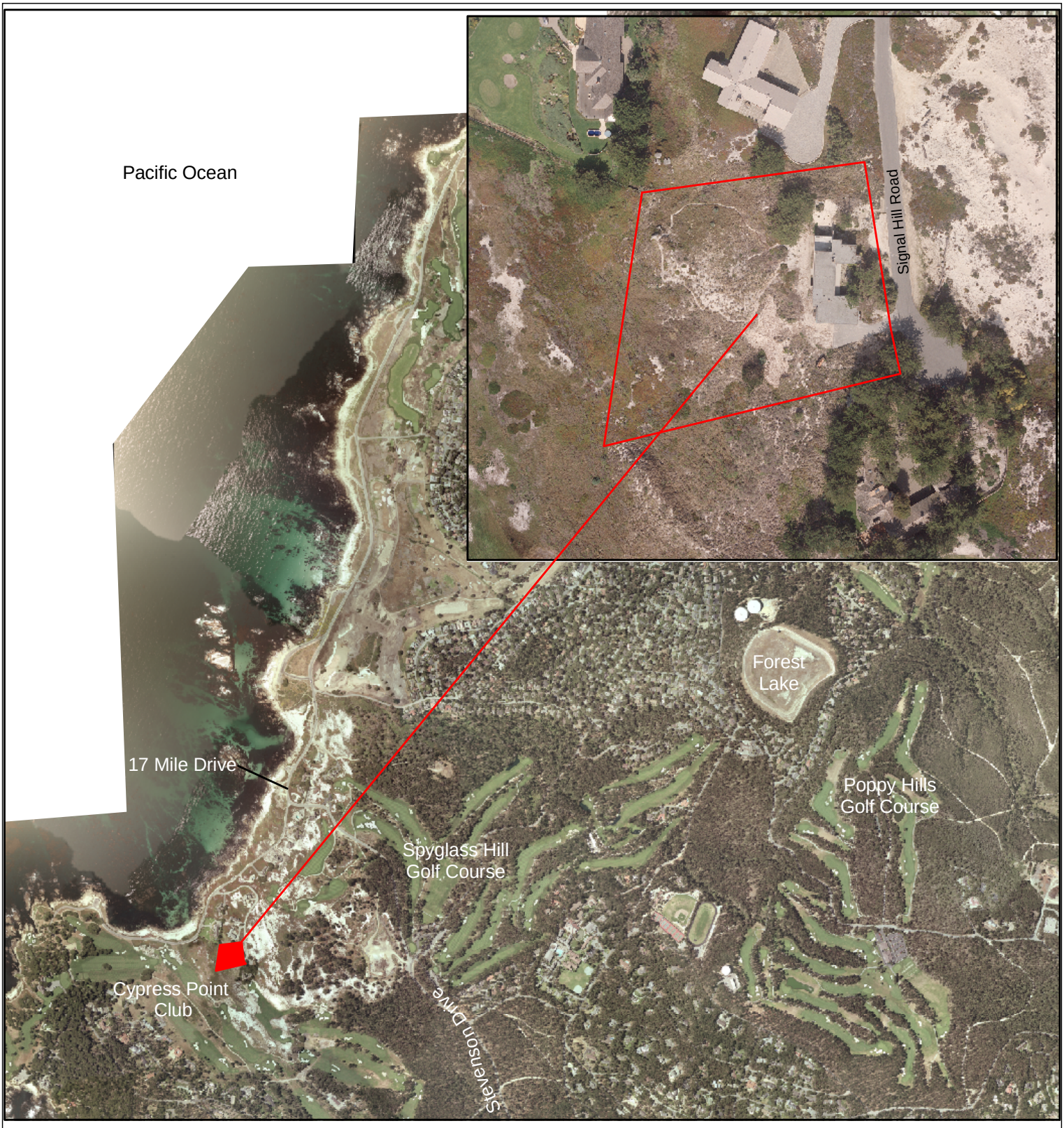
We trust that this assessment will assist you in your application process with Monterey County. Please call or email (mzander@zanderassociates.com) me if you have any questions.

Sincerely,

Michael Zander
Principal

Attachments:
Figure 1, Site Location
Figure 2, Vegetation Types
Table 1, Special Status Species
Table 2, Plants Observed on the Site
Site Photographs

Copies (via email)
Bill Bernstein,
Maureen Wruck



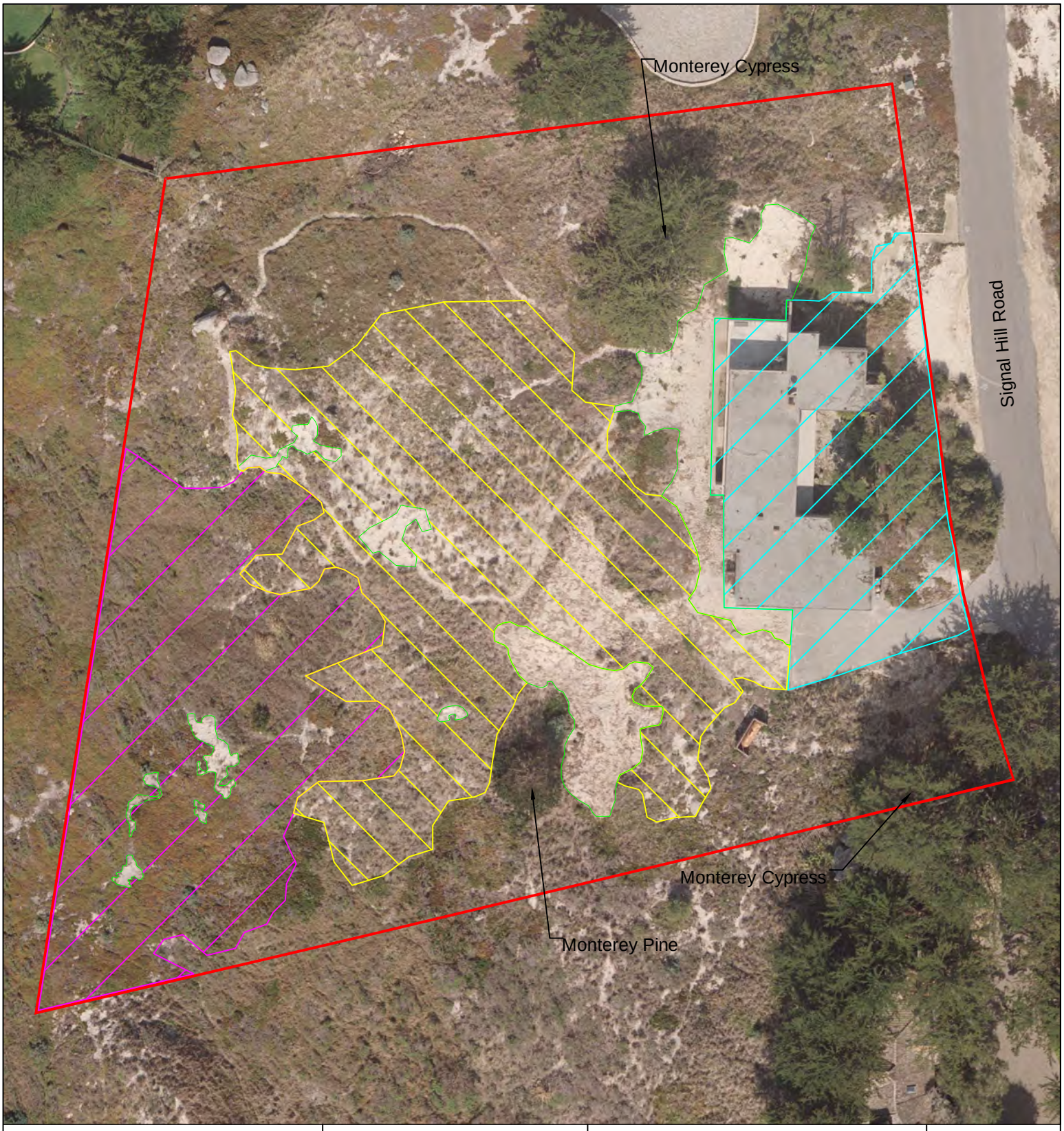
Legend

Property Boundary

1 inch equals 1,667 feet

N

Zander Associates Environmental Consultants 4460 Redwood Hwy, Suite 16-240 San Rafael, CA 94903	Site Location Mehdipour Property Pebble Beach, California Date: 6/10	Figure 1



Scale: 1" = 50'

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LEGEND:

- Open Sand
- Beach Grass Dominant
- Iceplant Dominant
- Coastal Scrub
- Existing Residence and Landscaping
- Property Boundary

Vegetation Types
Mehdipour Property
Pebble Beach, California

Date: 6/10

Figure 2

Table 1: Special Status Species Evaluated for Potential to Occur on the Mehdipour Property*

PLANTS	Status[1] Fed/CA/CNPS	Habitat and Blooming Period	Findings[2]
Allium hickmanii (Hickman's onion)	--/--/1B.2	Sandy loam soils and vernal swales in a variety of habitats including, closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland, and coastal prairies; blooming period April through May	No suitable habitat for species on site. Not observed and not expected to occur.
Arctostaphylos hookeri ssp. hookeri (Hooker's manzanita)	--/--/1B.2	Sandy soils, sandstone outcrops in coastal scrub, chaparral, cismontane woodland, and closed-cone coniferous forest habitats in Monterey and Santa Cruz counties; blooms February through May (evergreen)	Marginal habitat present for species on site. Not observed and not expected to occur.
Arctostaphylos pumila (Sandmat manzanita)	--/--/1B.2	Closed-cone coniferous forest, chaparral, coastal dines, and cismontane woodland habitats; sandy soil with other chaparral associates; blooms February through May (evergreen)	Potential to occur on sandy substrates, usually more inland/less exposed than those on site. Species not present during directed surveys.
Astragalus tener var. titi (coastal dunes milk-vetch)	***E/E/1B.1***	Low ground, alkali flats, and flooded lands in coastal bluff scrub or coastal dunes along the coast; blooms March through June	Marginal habitat present for species on site. Not observed and not expected to occur.
Callitropsis goveniana (Gowan cypress)	T/--/1B.2	Closed-cone coniferous forest on coastal terraces, usually on sandy soils at 30-300 meters.	Not within local native range of species. Not observed and not expected to occur on site.
Callitropsiss macrocarpa (Monterey cypress)	--/--1B.2	Closed-cone coniferous forest usually on granitic soils at 10-30 meters.	Present on site. Several mature Monterey cypress trees that appear to have been planted as landscape elements on site.
Chorizanthe pungens var. *pungens* (Monterey spineflower)	T/--/1B.2	Coastal dunes, chaparral, cismontane woodland, and coastal scrub habitats in Monterey and Santa Cruz counties; blooming period April through June	Not present. Species not present during directed surveys.
Chorizanthe robusta var. *robusta* (Robust spineflower)	E/--/1B.1	Sandy soils in cismontane woodland openings and coastal dune and scrub habitats; blooms May through September	Not present. Species not present during directed surveys.
Clarkia jolonensis (Jolon clarkia)	--/--1B.2	Chaparral, cismontane woodland, and coastal scrub habitats; blooms April through June (evergreen)	No suitable habitat for species on site. Not observed and not expected to occur.
Collinsia multicolor (San Francisco collinsia)	--/--1B.2	Closed-cone coniferous forest and coastal scrub, usually on decomposed shale (mudstone) mixed with humous; blooms March through May	No suitable habitat for species on site. Not observed and not expected to occur.
Cordylanthus rigidus ssp. *littoralis* (Seadside bird's-beak)	--/E/1B.1	Often found on disturbed closed-cone coniferous, chaparral, cismontane woodland, coastal scrub or dune sites; blooming period May through September	Marginal habitat present for species on site. Not observed and not expected to occur.
Delphinium hutchinsoniae (Hutchinson's larkspur)	--/--/1B.2	Semi-shaded, slightly moist slopes in broad leaf upland forest, chaparral, coastal prairie or coastal scrub habitats in Monterey County; blooms March through June	No suitable habitat for species on site. Not observed and not expected to occur.
Ericameria fasciculatum (Eastwood's goldenbush)	--/--/1B	Sandy openings of closed-cone coniferous forest, maritime chaparral, coastal scrub or coastal dune habitats in Monterey County; blooming period July through October	Not present. Species not present during directed surveys.

Table 1: Special Status Species Evaluated for Potential to Occur on the Mehdipour Property*

PLANTS	Status[1] Fed/CA/CNPS	Habitat and Blooming Period	Findings[2]
Eriogonum nortonii (Pinnacles buckwheat)	***--/--/1B.3***	Sandy soils, often on recent burns in chaparral, and valley and foothill grassland; blooms May through August	Only marginal habitat present for species on site and outside of species range. Not observed and not expected to occur.
Erysimum ammophilum (Coast wallflower)	***--/--/1B.2***	Sandy openings in maritime chaparral, coastal dunes and coastal scrub; blooms February through June	Not present. Species not present during directed surveys.
Erysimum menziesii ssp. menziesii (Menzies's wallflower)	***E/E/1B.1***	Localized on coastal dunes; blooms March through June	Not present. Species not present during directed surveys.
Fritillaria liliacea (Fragrant fritillary)	***--/--/1B.2***	Coastal scrub, coastal prairie, valley and foothill grasslands, often on serpentine soils; generally blooms from February-April	No suitable habitat for species on site. Not observed and not expected to occur.
Gilia tenuiflora ssp. *arenaria* (Sand gilia)	E/T/1B.2	Cismontane woodland, maritime chaparral, coastal scrub and dune habitats in Monterey County, in particular bare, wind-sheltered areas near dune summits or in hind dunes; blooming period April through May	Not present. Species not present during directed surveys.
Grindelia hirsutula var. maritima (San Fransico gumplant)	--/--/1B.2	Sandy or serpentine soils on sea bluffs in coastal bluff scrub, coastal scrub, valley and foothill grassland; blooms June through September	Only marginal habitat present for species on site and outside of species range. Not observed and not expected to occur..
Horkelia cuneata ssp. *sericea* (Kellogg's horkelia)	--/--/1B.1	Closed-cone coniferous forest, chaparral, and coastal scrub habitats, old dunes and coastal sand hills; blooms April through September	Only marginal habitat present for species on site and outside of species range. Not observed and not expected to occur.
Layia carnosa (Beach layia)	E/E/1B.1	On sparsely vegetetated semi-stabilized dunes; blooms March through July	Not present. Species not present during directed surveys.
Lupinus tidestromii (Tidestrom's lupine)	E/E/1B.1	Adjacent to ocean on partially stabilized dunes; blooms April through June	Not present. Species not present during directed surveys.
Malacothamnus palmeri var. involucratus (Carmel Valley bush mallow)	--/--/1B.2	Burn follower on tallus hilltops and slopes in chaparral, cismontane woodland and coastal scrub; blooms May through August	No suitable habitat for species on site. Not observed and not expected to occur.
Malacothamnus palmeri var. palmeri (Santa lucia bush mallow)	--/--/1B.2	Dry rocky slopes within chaparral at 60 to 360 meters, blooms May through July	No suitable habitat for species on site. Not observed and not expected to occur.
Malacothrix saxatilis var. arachnoidea (Carmel Valley malacothrix)	--/--/1B.2	Rock outcrops within chaparral; blooms June through December	No suitable habitat for species on site. Not observed and not expected to occur.
Microseris paludosa (Marsh malacothrix)	--/--/1B.2	Moist habitat within closed-cone coniferous forest, cismontane woodland, coastal scrub and valley and foothill grassland; blooms April through June	No suitable habitat for species on site. Not observed and not expected to occur.
Pinus radiata (Monterey pine)	--/--/1B.1	Closed-cone coniferous forest and cismontane woodland.	Present. Single individual of this species occurs on slope below existing house.

Table 1: Special Status Species Evaluated for Potential to Occur on the Mehdipour Property*

PLANTS	**Status[1] Fed/CA/CNPS**	**Habitat and Blooming Period**	**Findings[2]**
Piperia yadonii (Yadon's rein orchid)	E/--/1B.1	Poorly drained sandy soils of closed-cone coniferous forest, chaparral and coastal scrub habitats; blooms May through August	No suitable habitat for species on site. Not observed and not expected to occur.
Plagiobothrys uncinatus (Hooked popcorn-flower)	--/--/1B.2	Sandstone outcrops and canyon sides often in burned or disturbed areas at 300 to 820 meters, within chaparral, cismontane woodland, valley and foothill grassland and coastal bluff scrub; blooms April through May	Habitat conditions not appropriate and outside of species range. Not observed and not expected to occur..
Potentilla hickmanii (Hickman's cinquefoil)	E/E/1B.1	Freshwater marshes, seeps and small streams in open or forested areas along the coast; blooms April through August	No suitable habitat for species on site. Not observed and not expected to occur.
Rosa pinetorum (Pine rose)	--/--/1B.2	Perennial shrub found in closed-cone coniferous forest; blooms May through July	No suitable habitat for species on site. Not observed and not expected to occur.
Trifolium polyodon (Pacific Grove clover)	--/R/1B.1	Along small springs and seeps in grassy openings in closed-cone coniferous forest, meadows and coastal prairie; blooms April through June	No suitable habitat for species on site. Not observed and not expected to occur.
Trifolium trichocalyx (Monterey clover)	E/E/1B.1	Poorly drained low nutrient soil underlain with hardpan or burn areas within closed-cone coniferous forest; blooms April through June	No suitable habitat for species on site. Not observed and not expected to occur.
ANIMALS	**Status[1] Fed/CA**	**Habitat**	**Findings[2]**
INVERTEBRATES			
Euphilotes enoptes smithi (Smith's blue butterly)	E/--	Most commonly found in coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz counties. Found in association with host plant, *Eriogonum latifolium* and *Eriogonum parvifolium*, which are utilized as both larval and adult foodplants.	Very limited potential to occur. Host plants occur on site, but species has not been found along the 17-Mile Drive shoreline during directed surveys over the last ten years.
AMPHIBIANS / REPTILES			
Ambystoma californiense (California tiger salamander)	T/CE	Grasslands and open oak woodlands with ground squirrel or gopher burrows for underground retreats, and breeding ponds such as seasonal wetlands, vernal pools or slow-moving streams that do not support predatory fish or frog populations	No suitable habitat. No suitable breeding or aestivation habitat available on site. Nearest recorded location is approximately 6.4 miles south of site at Palo Corona Ranch.
Rana draytonii (California red-legged frog)	T/CSC	Lowlands and foothills in or near permanent sources of deep water within streams, marshes, and occasionally ponds with dense, shrubby, or emergent riparian vegetation.	No suitable habitat. Ponds, streams and moist forest understory not present. Nearest recorded location is approximately 0.49 mile north of site at Seal Rock Creek.
Actinemys marmorata pallida (Southwestern pond turtle)	--/CSC	Requires aquatic habitats with permanent or persistent water and protected areas for basking such as partially submerged rocks or logs, floating vegetation mats or open mud banks	No suitable habitat. Deep waters, ponds and streams not present.
Phrynosoma coronatum (Coast horned lizard)	--/CSC	Occurs in areas with loose sandy soils and moderate cover of chaparral, scrub and/or grasslands.	Potential to occur on site. Species could occur in open sands associated with mixed coastal scrub vegetation.

Table 1: Special Status Species Evaluated for Potential to Occur on the Mehdipour Property*

ANIMALS	Status[1] Fed/CA	Habitat	Findings[2]
Anniella pulchra nigra (Black legless lizard)	--/CSC	Monterey and Morro Bay areas in moist dunes or sandy soils with mock heather & bush lupine	Potential to occur on site. Species could occur in open sands associated with mixed coastal scrub vegetation.
BIRDS			
Pelicanus occidentalis californicus (California brown pelican)	D/E	Is a colonial nester on coastal islands just outside the surf line. Islands are of small to moderate size and afford immunity from attack by ground-dwelling predators.	No suitable nesting habitat on site.
Charadrius alexandrinus nivosus (Western snowy plover)	T/CSC	Federal listing applies to nesting sites of pacific coastal populations only. For nesting, require sandy, gravelly or friable soils that are found on sandy beaches, salt pond levees and shores of large alkali lakes.	No suitable nesting habitat. Property too far removed from coastline to provide suitable nesting habitat.
Athene cunicularia (Burrowing owl)	--/CSC	Ground nester in open dry annual or perennial grasslands, deserts and scrublands with low-growing vegetation, dependent upon burrowing mammals (i.e. California ground squirrel)	Only marginal habitat present for species on site and no evidence of ground squirrel or other burrows. Species (or sign) not observed and not expected to occur on site.
Cypseloides niger (Black swift)	--/CSC	Breed in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above surf. Forage widely.	No suitable nesting habitat on site
MAMMALS			
Antrozous pallidus (Pallid bat)	--/CSC	Variety of habitats, most common in open, dry communities with rocky and/or forested areas for roosting.	No suitable roosting habitat on site. The cypress trees that occur on site are not of adequate density to provide suitable roosting habitat.

1. Status Explanations

Federal (Fed)
E = listed as endangered under the federal Endangered Species Act
T = listed as threatened under the federal Endangered Species Act
D = delisted
-- = no designation

California State (CA)
R = listed as rare under the California Endangered Species Act
E = listed as endangered under the California Endangered Species Act
T = listed as threatened under the California Endangered Species Act
CE – candidate for endangered under the California Endangered Species Act
CSC = California Department of Fish and Game Species of Special Concern
-- = no designation

California Native Plant Society (CNPS)
1B = plants considered rare, threatened or endangered in California and elsewhere.
1B.1 = seriously endangered in CA
1B.2 = fairly endangered in CA
1B.3 – not very endangered in CA

2. Findings based on literature review, field surveys and assessment of habitat types present, and knowledge of species habitat requirements.

*Source: Search of the California Department of Fish and Game's Natural Diversity Database (CDFG 2010) occurrences and the California Native Plant Society's On-line Inventory (CNPS 2010) for the Monterey 7.5-minute USGS quadrangle.

Table 2
Plants Observed on the Site

SCIENTIFIC NAME	COMMON NAME
Abronia latifolia	yellow sand verbena
Abronia umbellata	pink sand verbena
Aira caryophyllea	*hair grass
Ammophila arenaria	*European beachgrass
Artemisia pycnocephala	beach sagewort
Baccharis pilularis	coyote brush
Briza maxima	*rattlesnake grass
Bromus diandrus	*ripgut grass
Bromus madritensis ssp. *madritensis*	*Spanish brome
Calamagrostis nutkaensis	Pacific reed-grass
Calystegia soldanella	beach morning-glory
Camissonia cheiranthifolia	beach evening primrose
Cardionema ramosissimum	sand mat
Carex pansa	sand dune sedge
Carpobrotus chilense	*sea fig
Carpobrotus edulis	*Hottentot fig
Cryptantha leiocarpa	coast popcorn flower
Cupressus macrocarpa	Monterey cypress
Dudleya caespitosa	sea lettuce
Ericameria ericoides	mock-heather
Erigeron glaucus	seaside daisy
Eriogonum parvifolium	seacliff buckwheat
Eschscholzia californica var. *maritima*	California poppy
Euphorbia peplus	*petty spurge
Eucalyptus sp.	*eucalyptus
Filago gallica	*narrow-leaved filago
Galium aparine	*goose-grass
Genista monspessulana	*French broom
Juncus mexicanus	Mexican rush
Leptospermum sp.	*tea tree
Lessingia californica var. *californica*	California beach-aster
Lotus heermannii var. *orbicularis*	woolly lotus
Lotus scoparius var. *perplexans*	Hoover's lotus
Lupinus chamissonis	silver bush lupine
Madia sativa	coast tarweed
Marah fabaceus	man-root
Medicago polymorpha	*bur-clover
Oxalis pes-caprae	*Bermuda buttercup
Phalaris californica	California canary-grass
Pinus radiata	Monterey pine
Plantago coronopus	*cut-leaf plantain
Poa unilateralis	San Francisco blue grass
Rhamnus californica ssp. *californica*	California coffee-berry
Rubus ursinus	Pacific blackberry
Senecio vulgaris	*common groundsel
Sonchus asper	*prickly sow-thistle
Sonchus oleraceus	*common sow thistle
Toxicodendron diversilobum	poison-oak
Vulpia octoflora var. *octoflora*	slender fescue

Site Photographs
1170 Signal Hill Road

Photo 1: European beachgrass on slopes below existing house

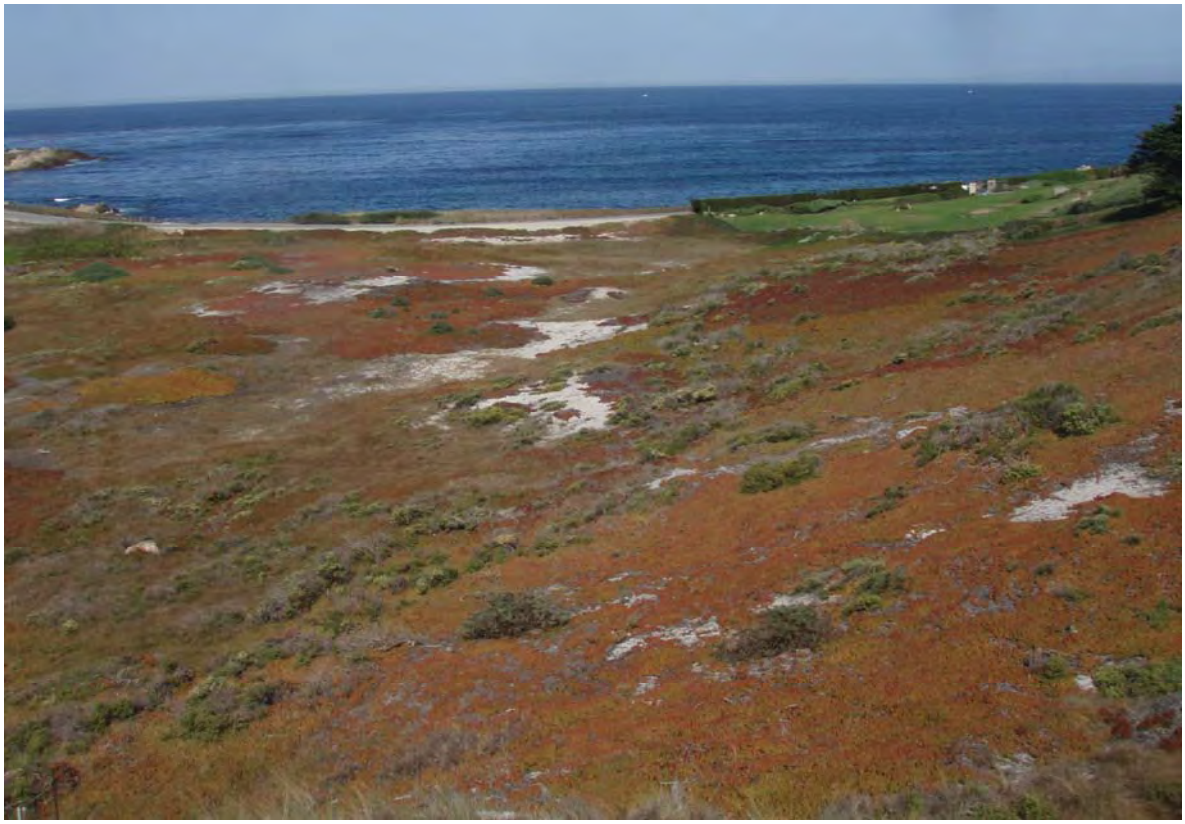

Photo 2: Iceplant dominated slopes along westerly site border

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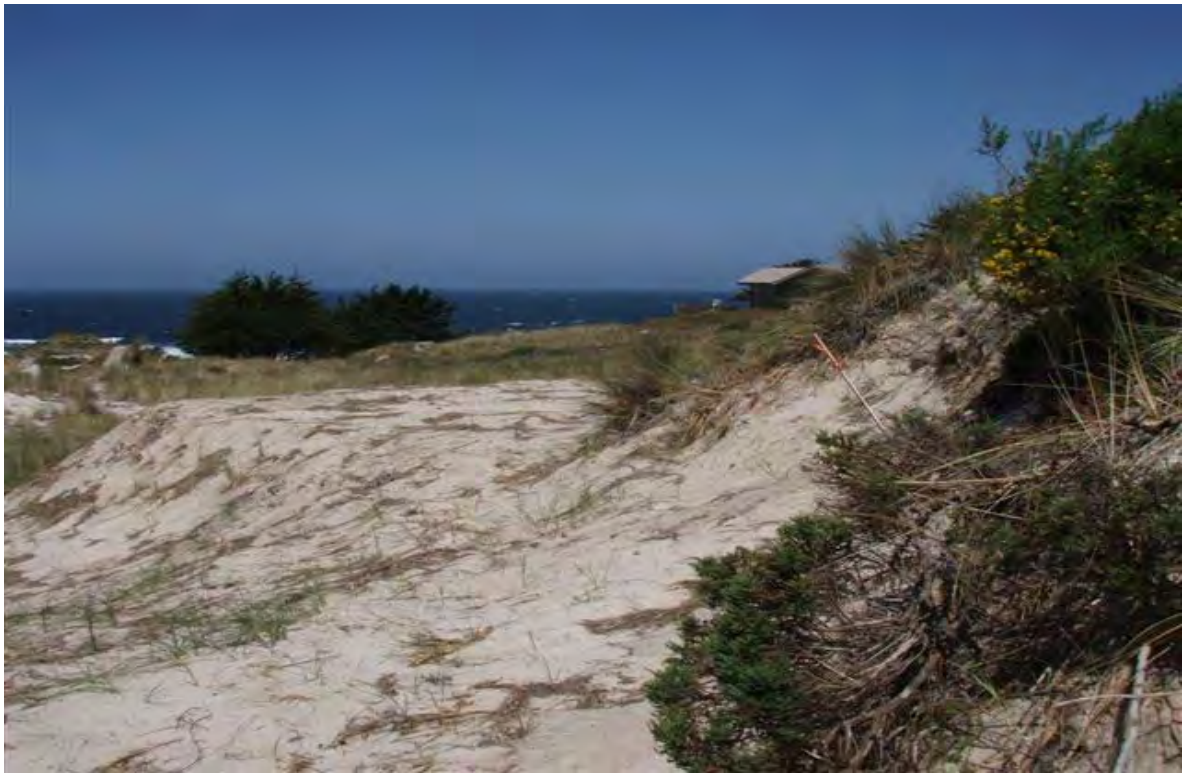

Photo 3: Looking northerly toward recent open sandy terrace below residence

Photo 4: Looking southerly toward recent open sandy terrace surrounded by beachgrass below residence

Site Photographs
1170 Signal Hill Road

Photo 5: Coastal scrub with dune sedge understory merging to beachgrass

Photo 6: Coastal scrub with granitic outcrop in middle distance