

**FINAL**

**BIOLOGICAL RESOURCES ASSESSMENT**

**FOR**

**THE COTTAGES AT POINT SAN LUIS PROJECT**

**SAN LUIS OBISPO COUNTY, CALIFORNIA**

**APNS: 076-174-009, 076-171-026, 076-174-007, AND 076-174-008**

**MASTER DEVELOPMENT PLAN AMENDMENT PERMIT APPLICATION**



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Amended September 2018

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*As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the assessment and associated maps are true and correct to the best of my knowledge and belief. I further certify that I was present during one or more of the site surveys associated with this report.*

  
\_\_\_\_\_  
Signature

September 26, 2018  
\_\_\_\_\_  
Date

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## EXECUTIVE SUMMARY/SYNOPSIS

LSA Associates, Inc. (LSA) prepared this biological resources assessment (BRA) as part of the Master Development Plan (MDP) Amendment Application process regarding the proposed development of The Cottages at Point San Luis Project (proposed project). The project area includes an approximately 22-acre undeveloped parcel between Ana Bay Drive and Wild Cherry Canyon Road, near the Community of Avila Beach on the southern coast of San Luis Obispo County, California.

Within the approximately 22-acre project parcel, the approximate development envelope is 6.78 acres and includes the main lodge and associated amenities (e.g., pool and restaurant), cottages, surface and underground parking, and landscaping. The proposed access road improvements encompass another 1.65 acres. Three contemplated pedestrian footpath alternatives and a preliminary storm drain alignment are located to the west of the development envelope, ranging from 0.18 acre to 0.33 acre in total area. Standard CAL FIRE fuel modification zones account for an additional 3.76 acres. This assessment focuses on the biological resources (e.g., habitats, special-status species) occurring or with potential to occur within an overall survey area of approximately 44.5 acres, which includes the project parcel, a 100-foot corridor along the existing access road and a dirt road through Wild Cherry Canyon, areas subject to disturbance associated with the proposed storm drain and contemplated pedestrian footpath alternatives, and a buffer area north of the approximate development envelope to account for potential fuel modification zone impacts. This overall survey area was determined adequate to address all potential biological constraints for the proposed project during the planning process. The overall survey area is mostly undeveloped, with the exception of portions of the San Luis Bay Inn development, Ana Bay Road, the Point San Luis Lighthouse Tour parking area at Wild Cherry Canyon Road, and an existing network of dirt access roads. Much of the overall survey area is highly disturbed from ongoing livestock grazing, existing roadways, and developments. The overall survey area is immediately surrounded by commercial, residential, and recreational uses, including the San Luis Bay Inn, the Avila Beach Golf Resort, public beaches, the community of Avila Beach, and Port San Luis. Therefore, the overall survey area and surrounding areas experience a relatively high level of anthropogenic disturbance.

LSA biologists conducted a total of seven botanical and wildlife surveys between January 28, 2015 and September 7, 2018. Several tree inventory assessments and a jurisdictional delineation were also conducted within this period. The overall survey effort included focused botanical surveys, vegetation community mapping, wildlife surveys, and a habitat assessment for California red-legged frog (CRLF; *Rana draytonii*), a federally listed threatened species and California species of special concern. Four natural vegetation communities and three anthropogenic areas were documented within the overall survey area. The overall survey area is flanked by two jurisdictional waterways: the mouth of San Luis Obispo Creek to the east and the creek associated with Wild Cherry Canyon Creek to the west. Potentially State-jurisdictional features occur along the southern portion of the project area and in the supplemental survey area, but no wetland or riparian habitat is present within the development limits and the United States Army Corps of

Engineers (Corps) has confirmed that no waters of the United States occur on the project site. Based on direct observation, no special-status natural communities occur within the overall survey area. Likewise, no mapped or unmapped environmentally sensitive habitat areas (ESHAs) occur within the project area. One special-status plant, chaparral ragwort (*Senecio aphanactis*; California Rare Plant Rank 2B.2), was observed along the southern portion of the original survey area. Although no special-status animal species were observed, the overall survey area has the potential to support dispersing CRLF.

An impact analysis and subsequent mitigation discussion are provided in this report to help reduce the proposed project's potential impact on environmental resources on the project site. Native vegetation and individual coast live oak trees removed or damaged by the development shall be replaced at a minimum 1:1 ratio, or other ratio determined during local and County permit application processes. No protocol-level surveys for any species or formal consultation with resource agencies are expected to be needed. However, it is recommended that ground and vegetation disturbance activities occur outside the bird nesting season (i.e., should occur between September 1 through January 31) to avoid potential impacts to nesting birds. Should work occur during the nesting bird season (i.e., February 1 through August 31), a qualified biologist should conduct preconstruction surveys to determine whether active nests are present within the work area. If active nests are located, appropriate buffers should be established until the nest is no longer active to ensure project-related activities do not jeopardize bird reproduction. A qualified biological monitor should be present during initial clearing and grading activities and should conduct a preconstruction survey for special-status plants or animals. Additional preconstruction surveys should be conducted during the most likely conditions that CRLF would be present on the project site, given that potentially suitable dispersal habitat is present and the species has been documented as occurring in aquatic habitats in the general project vicinity. Appropriate best management practices (BMPs) should be implemented to prevent sediment and debris from entering waterways. The BMPs, such as a silt fence, would have the added benefit of minimizing the potential for CRLF to enter work areas during construction. With implementation of the described mitigation measures, there would be no direct or indirect impacts to special-status biological resources resulting from the proposed project.

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## 1.0 INTRODUCTION

This biological resources assessment (BRA) summarizes the results of a series of surveys conducted by LSA Associates, Inc. (LSA) of the habitat features within and adjacent to the proposed Cottages at Point San Luis Project (proposed project) near Avila Beach, California. This report is intended to provide a comprehensive review of the existing biological resources within and surrounding the overall survey area, and determine whether the construction and operation of the proposed project could potentially impact special-status biological resources. This assessment will be utilized to assist the applicant (SCM Avila Beach Partners, LLC.) with its Master Development Plan (MDP) Amendment Application to be submitted and approved by San Luis Obispo County (County). Additional environmental studies are anticipated to be required during the environmental review process for specific development activities.

The purpose of this BRA is to report the results of the biological surveys conducted within the survey area, which includes the following:

- Reviewing existing relevant scientific literature and other pertinent information related to the overall survey area;
- Creating a list of regionally occurring special-status species determined to have the potential to occur within the habitat communities identified within the overall survey area;
- Characterizing the vegetation communities present within the overall survey area;
- Evaluating the potential for the occurrence of special-status plant and wildlife species within the overall survey area;
- Assessing the potential for proposed activities to adversely impact existing biological resources; and
- Recommending mitigation measures to avoid or minimize any potential impacts to biological resources.

### 1.1 PROJECT DESCRIPTION

The proposed project involves an approximately 22-acre parcel located north of Avila Beach Road, west of the community of Avila. It is located on top of a slightly sloping hill above Avila Beach Road, with access from Ana Bay Road (east) and Wild Cherry Canyon Road (west). Currently, Ana Bay Road intersects with Avila Beach Road and will provide site access near the San Luis Bay Inn via an existing ranch road that will be improved as part of the proposed project. Wild Cherry Canyon Road was included in the original survey area for this biological resources assessment, but current site plans do not propose any changes to this area.

The proposed development includes 50 individual cottage-style rental units (480 to 1103 square feet each), a main lodge/restaurant (dining area, bar, and kitchen), guest and employee parking (both surface and subsurface lots), and other resort amenities (e.g., a pool and spas, a patio area, lawns, and landscaping). Approximately 8.43 acres of the 22-acre parcel will be permanently

impacted by the cottage hotel complex and access road. This approximate development envelope includes all proposed structures and landscaping within the western portion of the 22-acre parcel, as well as the primary access road improvements and landscaping that will approach the lodge and cottages from Ana Bay Road to the east. A 230-foot bridge is proposed to be constructed in the central portion of the site over an erosion gully on the hillside along the access road.

The original survey area for the proposed project was expanded in September 2018 to cover areas associated with contemplated pedestrian footpath alternatives and a storm drain on the slope between Wild Cherry Canyon and the approximate development envelope. Three alternative footpath designs and the preliminarily-identified placement of the storm drain are covered in this BRA. Each of these project components are subject to landowner approvals and refinement.

## 1.2 EXISTING CONDITIONS

The project area is situated on privately owned, unincorporated County land in the Irish Hills area near the coastal community of Avila Beach. Specifically, the project area is located on the San Miguelito Land Grant in the southeast quarter of the United States Geological Survey (USGS) *Pismo Beach, California*, 7.5-minute topographic quadrangle map (refer to Figure 1). Due to its proximity to the coast, this area receives regular coastal fog and experiences a strong maritime influence. The project site and surrounding areas support several plant communities, all of which are subject to a longstanding livestock (cattle and horse) ranching operation.

The “project area” discussed in this report refers to all areas where temporary and permanent ground disturbance will occur, including an approximately 6.78-acre “development boundary” in which the cottages and lodge will be located, a 1.65-acre “roadway improvement footprint,” a 0.55-acre “temporary impact area,” the three contemplated pedestrian footpath alternatives, a preliminary storm drain alignment located to the west of the development boundary, and preliminary fuel modification zones (refer to Figure 2). The “project area” does not include additional areas that were surveyed outside of where development activities would occur. The “original survey area” refers to the 35.7-acre area that was initially surveyed and mapped in 2015 as part of the biological resources assessment. The “supplemental survey area” refers to the 15.76-acre area that was surveyed in September 2018 (including small overlap areas within the original survey area) and covers the contemplated pedestrian footpath alternatives and the preliminary storm drain alignment, as well as areas that fall within the preliminary fuel modification zones. The “overall survey area” refers to the total areas surveyed (44.5 acres).

The project area is situated on a moderately steep, southwest-facing hillside between Wild Cherry Canyon and the bluffs above the mouth of San Luis Obispo Creek. The project area is a parcel of undeveloped open space along the coastal bluffs overlooking the Pacific Ocean. The area is inland and uphill from (north of) the ocean and Avila Beach Drive, and south of the existing Marre residence. Ana Bay Drive forms the eastern boundary and will be the primary access road to the development; this road currently provides access to the adjacent San Luis Bay Inn and the Avila Beach Golf Resort. Unpaved Wild Cherry Canyon Road forms the western boundary and currently provides access to local utility operations, rural residences, and a parking area for recreation and tourism. Wild Cherry Canyon Road was initially studied as a secondary access route; however, this route is no longer part of the proposed project and current site plans do not include any improvements in this area. Elevations within the project area range from 190 to 350 feet above mean sea level (amsl). Soils within the project area are composed of Los Osos loam,

15 to 30 percent slopes; Lodo clay loam, 30 to 50 percent slopes, Major Land Resource Area (MLRA) 15; and Xerorthents, escarpment.

The overall survey area was determined adequate to address all potential biological constraints for the proposed project during the planning process. San Luis Obispo Creek is outside of the overall survey and will not be affected by the proposed project. Similarly, the intermittent creek associated with Wild Cherry Canyon will not be affected by the proposed project (this area was initially surveyed in the event that secondary, emergency access would be provided through Wild Cherry Canyon, but this route is not included in the current design). Elevations within the overall survey area range from approximately 30 to 350 feet amsl. Soils within the survey include: Lodo clay loam, 30 to 50 percent slopes, MLRA 15; and Los Osos loam, 15 to 30 percent slopes, with smaller portions of Los Osos loam, 30 to 50 percent slopes; Riverwash; Still gravelly sandy clay loam, 2 to 9 percent slopes; and Xerorthents, escarpment.

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FIGURE 1

LSA

LEGEND

 Overall Survey Area



0 1000 2000  
FEET

SOURCE: USGS 7.5' Quad - Pismo Beach (1994)

I:\SOM1601\GIS\MXD\ProjectLocation\_USGS.mxd (9/14/2018)

*The Cottages  
at Point San Luis  
Project Location*

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FIGURE 2

LSA



0 125 250  
FEET

LEGEND

- Original Survey Area (35.70 acres)
- Approximate Project Parcel Boundary (22.20 acres)
- Temporary Impact Area (0.55 acres)
- Approximate Development Boundary (6.78 acres)
- Roadway Improvement Footprint (1.65 acres)

- Supplemental Survey Area (15.76 ac)
- Proposed Storm Drain\*
- Pathway Design Alternative 1\*
- Pathway Design Alternative 2\*
- Pathway Design Alternative 3\*

- Preliminary Fuel Modification Zones \*\*
- Clearing Zone - 30 ft from structures
  - Thinning Zone - 100 ft from structures

\*\* Features shown are approximations based on topographic and aerial measurements. This figure depicts standard CAL FIRE fuel modification buffers measured from the edges of the proposed building footprint.

\*Final design is subject to landowner approval and refinement.

SOURCE: Google (2017), Appleton Partners, LLP (2017)

I:\SOM1601\GIS\MXD\BioAssessmentReport\ProjectOverview.mxd (9/19/2018)

*The Cottages  
at Point San Luis*  
Project Overview Map

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## 2.0 METHODS

The biological resources assessment conducted within the survey area included focused botanical surveys, vegetation community mapping, wildlife inventory surveys, and a habitat assessment for CRLF (*Rana draytonii*), a federally listed threatened species and California species of special concern. Details regarding the methodology employed for each of the survey efforts are summarized below. A total of five wildlife and botanical surveys were conducted between January 28 and July 29, 2015, and one wildlife survey was conducted on January 29, 2018. A tree inventory was conducted in May 2015 and a jurisdictional delineation was conducted in August 2017. Refer to Table A below for all survey dates, times, surveyors, and weather conditions. All plant and wildlife species encountered during survey efforts were noted to the lowest possible taxonomic level, which is required for accurate identification and reporting. Refer to Appendix A for representative photographs taken during the surveys of the project area and notable features.

**Table A: LSA Personnel and Field Survey Schedule**

| LSA Personnel                     | Date and Time                          | Weather Conditions   | Survey Focus  | Survey Area |
|-----------------------------------|--|--|---|-------------|
| Matthew Willis                    | January 28, 2015<br>0900 to 1600 hours | 55 to 65°F, 0 to 10 mph wind, overcast skies                 | Botanical survey  | Original    |
| Matthew Willis<br>Tim Milliken    | April 23, 2015<br>1430 to 1900 hours   | 55 to 60°F, 2 to 10 mph wind, overcast to mostly clear skies | Botanical survey  | Original    |
| Matthew Willis<br>Tim Milliken    | April 24, 2015<br>0930 to 1300 hours   | 65 to 70°F, 2 to 15 mph wind, overcast to mostly clear skies | Botanical survey  | Original    |
| Matthew Willis<br>Eric Lichtwardt | May 11, 2015<br>1000 to 1700 hours     | 60 to 65°F, 2 to 8 mph wind, overcast to clear skies         | Wildlife survey, botanical check, and California red-legged frog habitat assessment | Original    |
| Tim Milliken                      | May 25, 2015<br>0930 to 1430 hours     | 55 to 60°F, 0 to 5 mph wind, partly cloudy                   | Oak Tree Inventory and Tree Assessment  | Original    |
| Matthew Willis                    | July 29, 2015<br>0900 to 1200 hours    | 70 to 75°F, 2 to 5 mph wind, clear skies                     | Botanical check for late-blooming plants  | Original    |
| Matthew Willis<br>Lauren Brown    | August 3, 2017<br>0900 to 1400 hours   | 65 to 75°F, 0 to 5 mph wind, foggy to clear skies            | Jurisdictional delineation  | Original    |
| Bo Gould                          | January 29, 2018<br>0930 to 1330 hours | 60 to 70°F, 0 to 5 mph wind, clear skies                     | Wildlife survey and jurisdictional delineation verification                         | Original    |

|          |   |   |   |              |
|----------|---|---|---|--------------|
| Bo Gould | September 7, 2018<br>0915 to 1730 hours | 65 to 80°F, 0 to 5 mph wind, passing fog to clear skies | Wildlife and botanical survey, habitat assessment, oak tree inventory and tree assessment | Supplemental |
|----------|---|---|---|--------------|

°F = degrees Fahrenheit  
 mph = miles per hour

## 2.1 LITERATURE REVIEW

A desktop analysis, including review of resource databases and existing literature, was conducted prior to commencing fieldwork to determine which regionally occurring special-status species may have the potential to occur within the overall survey area. These species served as the target species for the survey efforts, and surveys were planned accordingly. A list of species identified during the literature review is included in Appendix B.

In summary, LSA reviewed the following resources:

- Aerial imagery of the survey area
- The USGS *Pismo Beach, California* 7.5-minute topographic quad
- The California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDDB) for a list of State and federally protected special-status biological resources within the *Pismo Beach* quad and the surrounding six quads (proximity to the Pacific Ocean precludes additional quads), including *Port San Luis*, *Morro Bay South*, *San Luis Obispo*, *Lopez Mtn.*, *Arroyo Grande NE*, and *Oceano* (CDFW 2015). This search was repeated in March and September 2018 to verify the latest occurrence records.
- A CNDDDB map of State and federally listed special-status species that have been documented within a 10-mile radius of the survey area (CDFW 2015). This search was repeated in March and September 2018 to verify the latest occurrence records.
- The California Native Plant Society (CNPS) online inventory list of special-status plant species occurring within the *Pismo Beach* and surrounding quads (CNPS 2015). This search was repeated in March and September 2018 to verify the latest occurrence records.
- The United States Fish and Wildlife Service (USFWS) Critical Habitat Mapper (USFWS 2015) to determine whether critical habitat has been designated within or in the vicinity of the survey area. This search was repeated in March and September 2018 to verify the current extent of designated critical habitat.
- The Online Soil Survey of San Luis Obispo County, California – Avila Beach area (Natural Resources Conservation Service [NRCS] 2015)
- Botanical specimens and records at the Robert F. Hoover Herbarium at California Polytechnic State University, San Luis Obispo

A seven-quad search area results in a large and variable geographic and topographic search area containing several biological hotspots such as the Morro Bay Estuary, the Santa Lucia Mountains, and Oso Flaco Lake, with habitat types not found within or around the survey area. Therefore, the

focus of the database query and the subsequent surveys was reduced to a 10-mile radius around the survey area. This was deemed a sufficient search area to identify special-status species potentially occurring in the vicinity of the project area for inclusion in the study, since the larger seven-quad search radius elicits a number of plants and animals known from higher elevations in the Santa Lucia Mountains, the marshes of the Morro Bay Estuary, and dune complexes associated with Morro Bay to the northwest and Oceano to the southeast.

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidate for listing as threatened or endangered under the Federal Endangered Species Act (FESA); those listed or proposed for listing as rare, threatened, or endangered by the California Endangered Species Act (CESA); animals designated as State Species of Special Concern (SSC) or State fully protected (FP); and plants with California Rare Plant Ranks (CRPRs) of 1, 2, 3, or 4 as designated by CDFW and CNPS.

## 2.2 FOCUSED BOTANICAL SURVEYS AND VEGETATION MAPPING

The list of regionally occurring special-status species (Appendix B) was used to determine which botanical species' habitat requirements were similar to those expected within the survey area, and the blooming periods for these "target species" determined the timing of the botanical surveys.

Three botanical surveys were conducted within the original survey area on January 28 and April 23–24, 2015. Botanical resources were also surveyed for concurrent with the wildlife survey conducted on May 11, 2015, and a botanical check for late-blooming species within the original survey area was conducted on July 29, 2015. The surveys were conducted to coincide with the blooming periods (the ideal survey time when plants are most identifiable) of the target plant species. These blooming periods also applied to other special-status (and non-special-status) plant species that may occur in the region. A botanical inventory was conducted within the supplemental survey area on September 7, 2018.

During each survey, the entire survey areas were inspected, with a focus on the approximate areas that have potential to be directly affected by the project. The biologist(s) conducting the botanical surveys walked meandering transects to achieve even and adequate coverage. The surveys were floristic in nature and consistent with protocols provided by the CNPS (CNPS 2001), CDFW (CDFG 2009), and USFWS (USFWS 1996). All plant species observed during the surveys are documented in Appendix C, Floral and Faunal Compendia. During the surveys, the vegetation communities in the survey area were classified, mapped on aerial photographs, and further evaluated for the occurrence of and overall potential to support special-status plant and wildlife species. Vegetation community characterization was based on the classification systems presented in *A Manual of California Vegetation* (MCV) (Sawyer et al. 2009). Plant species identification, nomenclature, and taxonomy followed *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012).

Several species that could not be identified in the field were taken to the Hoover Herbarium. Botanical experts David Keil, Ph.D, and Jenn Yost, Ph.D, provided definitive identification for several species, including the one special-status plant observed within the original survey area, chaparral ragwort (*Senecio aphanactis*; CRPR 2B.2). Appendix D contains the CNDDDB Online Field Survey Form Report that was submitted to the CDFW for this population. Dr. Keil and Dr.

Yost also provided additional local knowledge regarding other regional special-status plant species and their likelihood to occur within the survey area.

The habitat requirements for each regionally occurring special-status plant species described in Appendix B were compared to the type and quality of habitats observed within the survey areas during the field surveys to determine whether each special-status plant species is expected to occur within the overall survey area. This analysis was based on LSA's field observations, review of resource agency materials and pertinent scientific literature, LSA staff members' knowledge of the area, and other local information. Several species were eliminated from consideration due to a lack of suitable habitat within the survey areas, elevation, range, lack of soils/substrate, and/or distribution. Special-status plant species determined to have the potential to occur within the overall survey area are discussed later in this report; special-status plant species that were not determined to have the potential to occur within the overall survey area are not discussed further in this report.

## **2.3 WILDLIFE SURVEYS**

Focused wildlife surveys were conducted within the original survey area on May 11, 2015 and January 29, 2018. A focused wildlife survey was conducted within the supplemental survey area on September 7, 2018. Additionally, all incidental sightings, tracks, scat, or other sign of wildlife within and adjacent to the survey area were noted during all survey efforts. Binoculars (8 x 42 power) were used to aid in the identification of wildlife species. Wildlife identification, nomenclature, and taxonomy followed standard reference texts, including Crother (2012) and online updates for amphibians and reptiles, the American Ornithologists' Union (AOU) Checklist of North American Birds (AOU 1998) and supplements for birds, and Baker et al. (2014) and Reid (2006) for mammals. A complete list of all wildlife species detected within the overall survey area is found in Appendix C.

The habitat requirements for each regionally occurring special-status animal species listed in Appendix B were compared to the type and quality of habitats observed within the survey areas during the field surveys to determine whether each special-status animal species is expected to occur within the overall survey area. Definitive surveys for the presence or absence of the special-status animal species that may be present were not conducted as they generally require specific survey protocols with extensive field survey time and can only be conducted at certain times of the year. Instead, this analysis was based on LSA's field observations, review of resource agency materials and pertinent scientific literature, LSA staff members' knowledge of the area and previous LSA biological investigations conducted in the Avila Beach area, and other local information. Several species were eliminated from consideration due to a lack of suitable habitat within the survey areas, elevation, range, lack of soils/substrate, and/or distribution. Special-status animal species determined to have the potential to occur within the overall survey area are discussed later in this report; special-status animal species that were not determined to have the potential to occur within the overall survey area are not discussed further in this report.

## **2.4 CALIFORNIA RED-LEGGED FROG HABITAT ASSESSMENT**

LSA conducted focused habitat assessments for CRLF within the overall survey area. These were not USFWS protocol-level surveys, but rather assessments of the habitats within and around the

overall survey area to determine the potential for CRLF to occur and whether further study is needed.

Prior to initiating field surveys, a desktop analysis was completed utilizing CNDDDB to identify known CRLF occurrences within a 2-mile radius of the overall survey area. Research of the scientific literature and regional documents was also conducted to gather information regarding CRLF occurrences in the vicinity of the survey areas.

Following background research, daytime field surveys were performed concurrent with the wildlife surveys on May 11, 2015 and September 7, 2018, to identify suitable habitat within the survey areas. The May 2015 survey was timed appropriately to occur shortly after the typical breeding season (November through April) and both surveys were performed under appropriate weather conditions to maximize the potential for observing CRLF. The accessible aquatic habitats and immediately surrounding riparian habitat areas within the overall survey area were assessed. The survey focused on the areas around the ephemeral creek associated with Wild Cherry Canyon. Aquatic habitat associated with San Luis Obispo Creek was not surveyed as it is outside the survey area, no impacts are anticipated to occur to that waterway, and LSA did not have access to the property.

Surveying biologists listened for CRLF vocalizations before initiating pedestrian surveys. The length of the intermittent creek associated with Wild Cherry Canyon was walked and searched for adult CRLF as well as larvae, metamorphs, and egg masses. Daytime visual-encounter survey techniques were employed, such as scanning (with and without using binoculars) the open water of the creek and along its banks, and investigating habitat features (e.g., overhanging banks and vegetation) that may provide refugia for CRLF. Other non-aquatic, more upland portions of the survey area were assessed for their potential to provide temporary refugia for dispersing CRLF.

## **2.5 OAK TREE INVENTORY AND TREE ASSESSMENT**

LSA certified arborist, Timothy Milliken (International Society of Arboriculture Certification #WE5539A), conducted a tree inventory survey within the original survey area on May 25, 2015. LSA Biologist Bo Gould conducted an inventory of trees within the supplemental survey area on September 7, 2018. Trees were mapped and assessed in the field. All surveyed trees were assessed regarding species, trunk diameter at breast height (in inches as measured 4.5 feet above natural grade), and condition. If an individual tree had multiple trunks, the diameters of all the trunks were totaled. The health and structural condition of each tree was also assessed. Please refer to Appendix E for the full Tree Inventory Report.

## **2.6 JURISDICTIONAL DELINEATION**

LSA Senior Biologists Matthew Willis and Lauren Brown conducted a jurisdictional delineation of site drainage features within the original survey area on August 3, 2017. This delineation studied the area of hillside erosion along the main access road and the series of roadside drainage ditches. The entire study area was surveyed on foot for potential wetland and non-wetland jurisdictional waters as well as streambed and adjacent riparian resources. Areas supporting species of plant life potentially indicative of wetlands were searched for and general site characteristics were noted. Areas exhibiting a bed and bank, and/or an Ordinary High Water Mark were evaluated according to routine streambed and wetland delineation procedures. LSA

Biologist Bo Gould met with United States Army Corps of Engineers (Corps) Los Angeles District North Coast Branch Project Manager Gerardo Hidalgo on January 29, 2018 to verify the results of the jurisdictional delineation. Please refer to Appendix F for the full Jurisdictional Delineation Report and Corps Approved Jurisdictional Determination.

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### 3.0 RESULTS

This section summarizes the results of the surveys and provides further analysis of the data collected in the field. Discussions regarding the existing survey area conditions, soils, vegetation communities identified on site, observed and potentially occurring special-status biological resources, and habitat connectivity are presented below.

The overall survey area consists of a mixture of exposed rolling hills, flats, wooded canyons, and coastal bluffs situated on a hillside between Wild Cherry Canyon and the bluffs above the mouth of San Luis Obispo Creek. This area is located immediately west of the existing San Luis Bay Inn and east of the multi-use operations along Wild Cherry Canyon Road. The survey areas are behind closed gates to limit public access and contain the long-running livestock ranching operation that occurs throughout the survey areas. There are existing paved and unpaved roads and some barbed-wire fencing along the southern perimeter. Much of the land within the overall survey area is highly disturbed from ongoing livestock grazing, existing roadways, and developments. While undeveloped, the development envelope is heavily grazed and primarily composed of weedy vegetation. Besides the intermittent creek associated with Wild Cherry Canyon, there are no special habitat features (e.g., waterfalls, rock outcrops, caves) within the overall survey area.

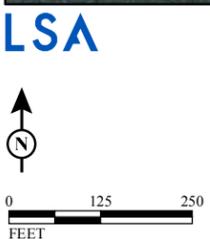
#### 3.1 VEGETATION COMMUNITIES

Four distinct natural vegetation communities and three anthropogenic areas were documented within the overall survey area (Figure 3). The identification and characterizations of these vegetation communities generally follow the plant community descriptions in the MCV (2009). Natural vegetation communities identified include: Annual Brome Grassland, California Sagebrush Scrub, Coast Live Oak Woodland, and Coast Live Oak Riparian Woodland. Anthropogenic areas are those areas that have been converted from their natural habitat to one that is subject to human maintenance and disturbance; these areas included developed areas and roads, ornamental landscape, and bare ground. The acreages for each vegetation community and other land cover type are shown in Table B, below. Representative photographs of the vegetation communities are presented in Appendix A.

**Table B: Vegetation Community Acreages Within the Overall Survey Area**

| Vegetation Community             | Acreage      |
|----------------------------------|--------------|
| Annual Brome Grassland           | 21.03        |
| California Sagebrush Scrub       | 13.57        |
| Coast Live Oak Woodland          | 7.23         |
| Coast Live Oak Riparian Woodland | 1.28         |
| Developed Areas and Roads        | 0.49         |
| Ornamental Landscape             | 0.71         |
| Bare Ground / Bluff Slope        | 0.19         |
| <b>Total</b>                     | <b>44.50</b> |

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SOURCE: Google (2017), Appleton Partners, LLP (2018)  
 I:\SOM1601\GIS\MXD\BioAssessmentReport\VegMapv3.mxd (9/19/2018)

**LEGEND**

- Approximate Development Limits (8.43 acres)
- Approximate Project Parcel Boundary (22.11 acres)
- Temporary Impact Area (0.55 acres)
- Original Survey Area (35.70 acres)
- Road
- ★ Senecio aphanactis
- Bare Ground / Bluff Slope
- Annual Brome Grassland
- Coast Live Oak Riparian Woodland
- Coast Live Oak Woodland
- California Sagebrush Scrub
- Developed
- Ornamental Landscape
- Supplemental Survey Area (15.76 ac)
- Proposed Storm Drain\*
- Pathway Design Alternative 1\*
- Pathway Design Alternative 2\*
- Pathway Design Alternative 3\*

\*Final design is subject to landowner approval and refinement.

FIGURE 3

*The Cottages  
 at Point San Luis*  
 Vegetation Community Map

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A total of 18 non-vascular plant species (lichens) and 148 vascular plant species were identified within the survey area during appropriately timed surveys. Vascular plants observed consisted of 70 (47 percent) native taxa, and 78 (53 percent) nonnative taxa. The percentage of nonnative taxa and cover is more than that of native taxa, reflecting a high level of disturbance within the survey area. Appendix C lists all plant species observed during the course of botanical surveys.

Six sensitive vegetation communities were identified by CNDDDB as occurring within 10 miles of the project area; however, none of these communities occur within the survey area.

### **3.1.1 Annual Brome Grassland (*Bromus Diandrus-Brachypodium distachyon* Semi-Natural Herbaceous Stands)**

Grassland habitat comprises the majority of the overall survey area as well as the approximate development envelope. The plant composition found in the grassland habitat within the survey area best corresponds to the annual brome grassland described in the MCV (2009). Annual brome grasslands are often found in rangelands, waste areas, and openings of oak woodlands and coastal scrub. The annual brome grassland observed in the survey area was a mixture of nonnative weeds and grasses dominated by red-stemmed filaree (*Erodium cicutarium*), purple false brome (*Brachypodium distachyon*), wild oats (*Avena barbata*), and other bromes (*Bromus* spp.). Interspersed with the nonnative grasses and weeds were patches of onionweed (*Asphodelus fistulosus*) along with native plants such as red maids (*Calandrinia ciliata*) and doveweed (*Croton setigerus*). Some sparse patches of purple needlegrass (*Stipa pulchra*) were also present but not in high enough quantities to warrant membership of Valley needlegrass grassland (a special-status natural vegetation community). Furthermore, these areas lack cover by other perennial native grasses included in the purple needlegrass grassland classification (MCV 2009). The dominance of nonnative weedy species such as red-stemmed filaree is indicative of the adverse effects to the native plant composition due to the long-term management of the area for livestock ranching.

Large tracts of grassland habitat provide foraging and/or breeding habitat and movement corridors for many wildlife species. The extensive rangeland within and surrounding the overall survey area provides suitable habitat for numerous invertebrate species (such as insects), many of which provide a food source for animals such as lizards, birds, and small mammals, which in turn serve as a prey base for larger predator animals, including snakes, raptors, and coyotes. Small mammals such as Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Spermophilus beecheyi*) were observed within the grassland habitats in the survey area. Due to the relatively small size and extensive weed coverage of the annual brome grassland within the survey area, it is not expected to provide high-quality foraging or nesting habitat for common or special-status wildlife species known to occur in the region. Most of the development envelope is composed of annual brome grassland. Therefore, impacts to annual brome grassland will occur in all but the southeastern portion of the development envelope. The vegetation described above within the approximate development envelope will be removed.

### **3.1.2 California Sagebrush Scrub (*Artemisia californica* Shrubland Alliance)**

After grassland habitat, coastal scrub habitat comprises the next-highest acreage within the overall survey area; however, most of the coastal scrub habitat occurs outside the approximate development envelope. The plant composition found in the coastal scrub habitat within the survey

areas best corresponds to the California sagebrush scrub described in the MCV (2009). California sagebrush scrub is often associated with rarely flooded coastal slopes with shallow soils. The California sagebrush scrub observed in the survey area is dominated by California sagebrush (*Artemisia californica*), coastal goldenbush (*Isocoma menziesii* var. *vernonioides*), and coyote brush (*Baccharis pilularis*). Also included in this shrub community are occurrences of seacliff wild buckwheat (*Eriogonum parvifolium*), deerweed (*Acmispon glaber*), and bush monkey flower (*Mimulus aurantiacus* var. *aurantiacus*). This type of low-diversity coastal scrub is typical of early seral stages transitioning from the past disturbances that occurred within the area to a shrub-dominated plant community. The herb layer observed in the California sagebrush scrub community generally consists of scattered occurrences of exotic herbs such as onionweed, sweet fennel (*Foeniculum vulgare*), and shortpod mustard (*Hirschfeldia incana*), and grasses such as various nonnative bromes and fescues (*Festuca* spp.) along with native purple needlegrass. These species grow in the interstitial spaces between the shrubs and along the transitional areas into the annual brome grassland described above.

One special-status plant, chaparral ragwort (CRPR 2B.2), was observed along the southern portion of the original survey area. The population that was discovered contained approximately 30–40 individuals. Although chaparral ragwort was not found within the development envelope, similar habitat and growing conditions occur in the California sagebrush scrub within the development envelope. Appendix D contains the CNDDDB Online Field Survey Form Report that was submitted to the CDFW for this population.

Several erosion features (described in Section 3.3.5, Potentially Jurisdictional Features) occur along the southern portion of the original survey area and along the western slope of the supplemental survey area within the California sagebrush scrub community. The vegetation within and around the erosion feature functions as California sagebrush scrub.

Native, intact California sagebrush scrub communities provide cover and nesting habitat for a variety of animals, such as lizards, snakes, songbirds, and small mammals. The field surveys indicate the presence of these types of animals as well as larger species such as mule deer (*Odocoileus hemionus*). However, due to the relatively small patch size of the California sagebrush scrub within the development limits, it is not expected to provide high-quality foraging or nesting habitat for common or special-status wildlife species known to occur in the region. Ongoing livestock grazing operations were also observed in these areas during multiple surveys. While most of the California sagebrush scrub habitat occurs outside the development envelope, potential impacts to California sagebrush scrub will primarily occur in the southeastern to eastern portion of the development envelope. The vegetation described above within the development envelope will be removed.

### 3.1.3 Coast Live Oak Woodland (*Quercus agrifolia* Woodland Alliance)

Oak woodland habitat comprised the third-highest acreage within the survey area; however, nearly all of the oak woodland habitat occurs outside the development limits. Coast live oak woodland within the survey areas occurs along the eastern boundary (along Ana Bay Drive), along the western boundary (along Wild Cherry Canyon), and in isolated patches within the central and western portions of the overall survey area. The plant composition found in the oak woodland habitat within the survey area best corresponds to the coast live oak woodland described in the MCV (2009). Coast live oak woodland is often associated with deep soils with

high organic matter on slopes, flats, canyon bottoms, streambanks, and alluvial terraces. The coast live oak woodland observed in the survey areas is dominated exclusively by coast live oak (*Quercus agrifolia* var. *agrifolia*). Also included in this woodland community are occurrences of toyon (*Heteromeles arbutifolia*), poison oak (*Toxicodendron diversilobum*), California sagebrush, and bush monkey flower. Leaf litter and other organic debris form the primary ground cover beneath the tree canopy. Where present, scattered patches of exotic herbs such as Italian thistle (*Carduus pycnocephalus*) and nonnative grasses such as various bromes and fescues form the vegetative understory. Several coast live oak trees are very large, indicating their presence within the area for many years.

Coast live oak woodland communities provide cover, foraging, and nesting habitat for a variety of animals, such as lizards, songbirds, raptors, and mammals. The field surveys indicate the presence of these types of animals. Ongoing livestock grazing operations were also observed in these areas during multiple surveys. While most of the coast live oak woodland habitat occurs outside the development envelope, potential impacts to coast live oak woodland will primarily occur along the proposed access road due to fire apparatus clearance, other road improvements, and Pedestrian Footpath Alternative 2. Specifically, coast live oak trees within oak woodland habitat that overhang or encroach upon the proposed access road or Pedestrian Footpath Alternative 2 would be trimmed or removed. Individual coast live oak trees are also present within the overall survey area, including several that may require trimming or removal under the proposed project (refer to Appendix E, Tree Inventory Report for further details).

### **3.1.4 Coast Live Oak Riparian Woodland (*Quercus agrifolia* Woodland Alliance, *Quercus agrifolia*/*Toxicodendron diversilobum* Riparian Association)**

Riparian oak woodland habitat comprised the remaining acreage of the natural plant communities found within the overall survey area. However, none of the riparian oak woodland habitat occurs within the development limits; all is found along Wild Cherry Canyon which will not be affected by the proposed project. The vegetation composition found in the riparian oak woodland habitat within the survey area best corresponds to the coast live oak riparian woodland association described in the MCV (2009). Coast live oak riparian woodland is associated with deep soils with high organic matter in canyon bottoms and streambanks. Though similar to the coast live oak woodland community described above, coast live oak riparian woodland is associated with the intermittent creek associated with Wild Cherry Canyon along the western edge of the survey area. The coast live oak riparian woodland observed in the survey area is dominated by coast live oak, with occurrences of poison oak, arroyo willow (*Salix lasiolepis*), and nonnative sticky snakeroot (*Ageratina adenophora*). Leaf litter and other organic debris form the primary ground cover beneath the tree canopy. Where present, scattered patches of exotic herbs, such as Italian thistle, and nonnative grasses, such as various bromes and fescues, form the vegetative understory. Several coast live oak trees are very large, indicating their presence within the area for many years.

Coast live oak riparian woodland functions much the same as coast live oak woodland, providing cover, foraging, and nesting habitat for a variety of animals. The field surveys reflected this, as this community supported high levels of bird activity (although no active nests were observed). None of the surveyed coast live oak riparian woodland habitat occurs inside the proposed development limits, and no riparian habitat will be directly impacted by the proposed project.

### 3.1.5 Developed Areas and Roads

Ana Bay Drive, Wild Cherry Canyon Road, and the network of existing unpaved access roads, as well as areas associated with the San Luis Bay Inn, were mapped as developed or roads. While these areas do not contain natural plant communities, they are mapped on Figure 3 to show their location within the overall survey area. Developed areas are primarily unvegetated and refer to the parking lots and buildings associated with the San Luis Bay Inn. Roads (both paved and unpaved) refer to the primary access route along the eastern portion of the survey area, Ana Bay Drive; the access route along the western portion of the original survey area, Wild Cherry Canyon Road; and the network of existing unpaved access roads emanating from the aforementioned roads and traversing the overall survey area. Because of the highly disturbed nature of this land cover type, it is of little to no value to wildlife.

### 3.1.6 Ornamental Landscape

Found adjacent to the developed areas along Ana Bay Drive and in two patches within the annual brome grassland community in the north-central portion of the survey area, a mixture of landscaped vegetation and escaped horticultural cultivars was mapped as ornamental landscape. This is not a natural plant community; however, it is mapped on Figure 3 to show its location within the overall survey area. Landscaped species associated with the San Luis Bay Inn include African daisy (*Osteospermum* sp.), sage (*Salvia* sp.), queen palm (*Syagrus romanzoffiana*), Monterey cypress (*Hesperocyparis macrocarpa*), and Monterey pine (*Pinus radiata*). A patch of glandular cassia (*Senna multiglandulosa*) occurs along an existing dirt access road in the north-central portion of the approximate development envelope. A stand of American century plant (*Agave americana*) occurs north of the approximate development envelope within the supplemental survey area. Several of the plants listed above will likely be removed due to road improvements. Because of the highly disturbed nature of this community, it is of little to no value to wildlife, although some tree and large shrubs may support nesting birds during the nesting season and ornamental flowering plants may support pollinators. Impacts to these ornamental plants during construction would be offset by new landscaping throughout the proposed development limits.

### 3.1.7 Bare Ground / Bluff Slope

Bare ground refers to the unpaved area devoid of vegetation near the intersection of Wild Cherry Canyon Road and Avila Beach Drive. This area is currently used as a parking lot and staging area for Point San Luis Lighthouse recreation and tourism. The steep bluff slopes located near the southeastern portion of the original survey area are also mostly unvegetated. No impacts to this area are anticipated.

## 3.2 SOILS

According to the NRCS online soil survey of San Luis Obispo County, six soil units occur within the overall survey area (NRCS 2015) (Figure 4). These include: Lodo clay loam, 30 to 50 percent slopes, MLRA 15; Los Osos loam, 15 to 30 percent slopes; Los Osos loam, 30 to 50 percent slopes; Riverwash; Still gravelly sandy clay loam, 2 to 9 percent slopes; and Xerorthents, escarpment, and are discussed in greater detail below.

### **3.2.1 149—Lodo Clay Loam, 30 to 50 Percent Slopes, MLRA 15 (15.2 Acres)**

The parent material of this soil type is residuum weathered from sandstone and shale. The drainage class of this soil type is somewhat excessively drained, and it is typically composed of clay loam and unweathered bedrock. Lodo clay loam usually occurs on hillslopes, mountain slopes, and ridges. This soil type occurs in the survey areas along a portion of Wild Cherry Canyon Road, a portion of the supplemental survey area north of the proposed storm drain alignment, and the eastern half of the approximate project parcel boundary.

### **3.2.2 160—Los Osos Loam, 15 to 30 Percent Slopes (11.7 Acres)**

The parent material of this soil type is residuum weathered from sandstone and shale. The drainage class of this soil type is well drained, and it is typically composed of loam, clay, sandy loam, and weathered bedrock. Los Osos loam usually occurs on hills and ridges. This soil type composes the western half of the approximate project parcel boundary and a portion of Wild Cherry Canyon Road north and west of the approximate development limits.

### **3.2.3 161—Los Osos Loam, 30 to 50 Percent Slopes (1.4 Acres)**

The parent material of this soil type is residuum weathered from sandstone and shale. The drainage class of this soil type is well drained, and it is typically composed of loam, clay, sandy loam, and weathered bedrock. Los Osos loam usually occurs on hills and ridges. This soil type occurs in the survey area along a portion of Wild Cherry Canyon Road and also along the northeastern section of the project parcel boundary.

### **3.2.4 194—Riverwash (<0.01 acre)**

The drainage class of this soil type is excessively drained, and it is typically composed of sand and stratified course sand to sandy loam. Riverwash usually occurs in channels. This soil type occurs in a very small area along the eastern extent of the original survey area.

### **3.2.5 210—Still Gravelly Sandy Clay Loam, 2 to 9 Percent Slopes (5.3 Acres)**

The parent material of this soil type is alluvium derived from sedimentary rock. The drainage class of this soil type is well drained, and it is typically composed of gravelly sandy clay loam and stratified gravelly loam to gravelly clay loam. Still gravelly sandy clay loam usually occurs in alluvial flats and terraces. This soil type occurs along Wild Cherry Canyon Road in the western extent of the survey areas.

### **3.2.6 223—Xerorthents, Escarpment (2.1 Acres)**

The parent material of this soil type is alluvium derived from mixed sources. This soil contains variable materials and occurs along escarpments. This soil type occurs on the steep coastal bluffs along the southern extent of the survey areas, just north of Avila Beach Drive.

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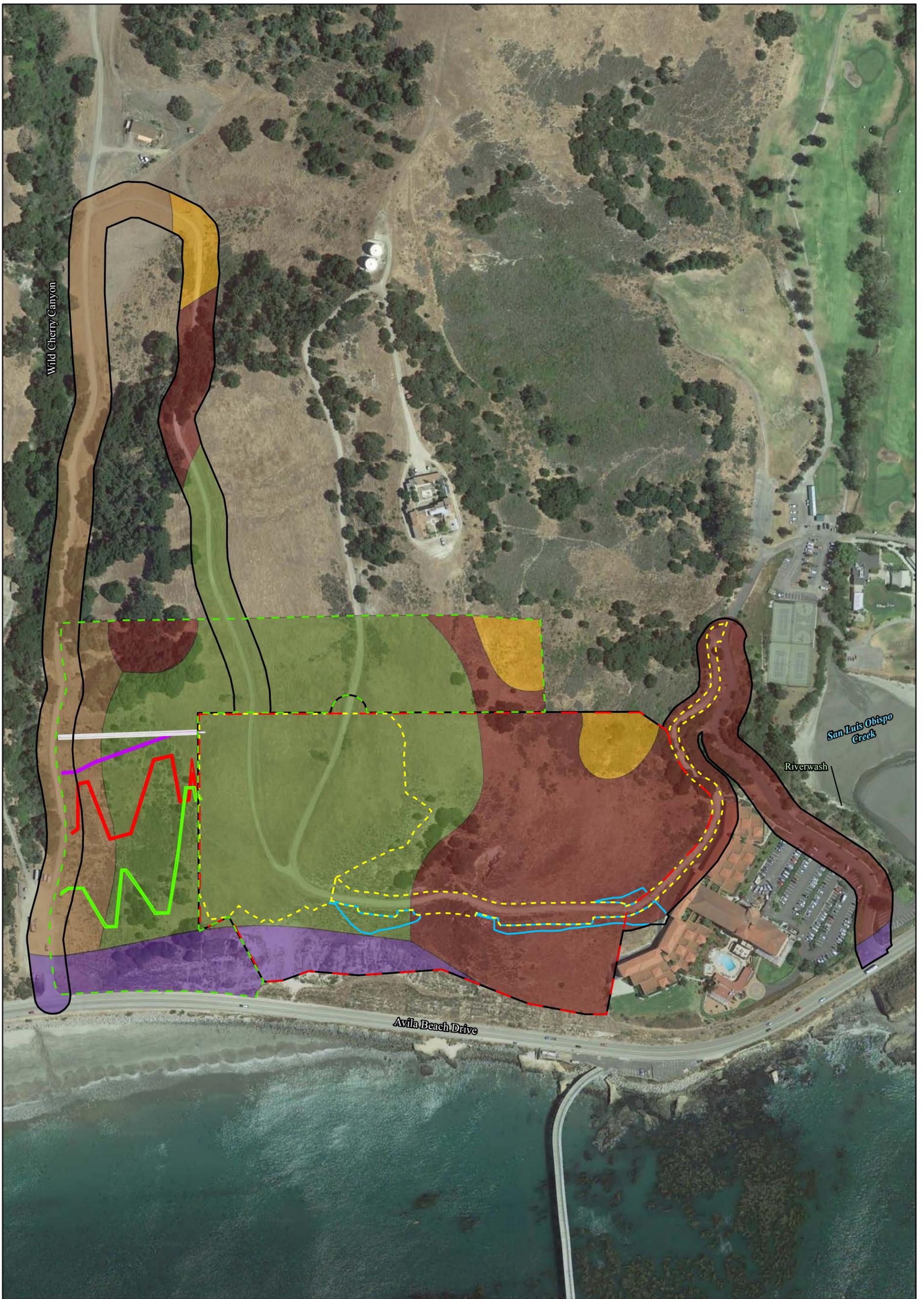


FIGURE 4

LSA



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FEET

LEGEND

- Original Survey Area (35.70 acres)
- Approximate Project Parcel Boundary (22.11 acres)
- Approximate Development Limits (8.43 acres)
- Temporary Impact Area (0.55 acres)
- Lodo clay loam, 30 to 50% slopes, MLRA 15

- Los Osos loam, 15 to 30% slopes
- Los Osos loam, 30 to 50% slopes
- Still gravelly sandy clay loam, 2 to 9% slopes
- Riverwash
- Xerorthents, escarpment

- Supplemental Survey Area (15.76 ac)
- Proposed Storm Drain\*
- Pathway Design Alternative 1\*
- Pathway Design Alternative 2\*
- Pathway Design Alternative 3\*

\*Final design is subject to landowner approval and refinement.

*The Cottages  
at Point San Luis*  
Soils Map

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### 3.3 SPECIAL-STATUS BIOLOGICAL RESOURCES

The Avila Beach region supports numerous special-status natural communities, plants, and animals. Appendix B provides a list of species identified during the literature review within a 10-mile search radius of the project area. As stated in the methodology section above, the background research started with a search of the *Pismo Beach, California* and surrounding six USGS topographic quadrangles. This search area was then reduced to a 10-mile search radius of the project area to identify special-status resources from the area, and to minimize the extraneous data resulting from the larger, standard CNDDDB search radius.

One special-status plant, chaparral ragwort, was identified within the original survey area; however, it is located outside of the development limits. No other special-status species were observed during the field surveys. Based on LSA's field observations during the botanical surveys, special-status plants are not expected to occur within the development limits primarily due to the long-term disturbance associated with ongoing livestock ranching. Furthermore, the extensive weed growth and disturbed soils preclude the potential for special-status plants known to occur in grassland habitats from growing within the survey area. Special-status animals are also not expected to occur within the project area based on the lack of suitable habitat, nor are any expected to be adversely affected by the proposed project.

#### 3.3.1 Special-Status Natural Communities

The CNDDDB search identified occurrences of six special-status natural (i.e., plant) communities within the 10-mile search area: central dune scrub, central foredunes, central maritime chaparral, coastal and valley freshwater marsh, serpentine bunchgrass, and valley needlegrass grassland. None of these special-status natural communities were observed within the survey area, and they are not expected to occur there. Some of these natural communities are associated with estuarine or coastal dune habitat, which do not occur within the survey area. Central maritime chaparral, serpentine bunchgrass, and valley needlegrass grassland are found growing in foothill locations similar to this project area. However, the dominant species in the central maritime chaparral habitat are typically manzanita (*Arctostaphylos* spp.) and chamise (*Adenostoma fasciculatum*), neither of which were found within the survey area. Purple needlegrass is the main species characterizing serpentine bunchgrass and valley needlegrass. The overall survey area does not contain serpentine soils, and although purple needlegrass is found in several areas within the overall survey area, it represents between 1 and 5 percent relative ground cover, therefore not occurring in high enough quantities (at least 10 percent cover) to warrant membership for valley needlegrass grassland. Furthermore, these areas lack cover by other perennial native grasses included in the purple needlegrass grassland classification (MCV 2009). Needlegrass must cover a minimum mapping unit of 0.5 acre to meet the special-status natural community definition used by CDFW. No special-status natural communities were observed on site, and the proposed project will not result in adverse effects to special-status natural communities.

#### 3.3.2 Special-Status Plants

The CNDDDB contains records of 54 special-status non-vascular and vascular plant species that are known to occur within a 10-mile radius of the survey area (refer to Appendix B). For the purpose of this report, special-status plants are those listed, proposed for listing, or candidates for listing as rare, threatened, or endangered under FESA or CESA, and plants with CRPR of 1, 2, 3, or 4 as designated by CDFW and CNPS. The majority of the rare plant species that were

identified in the database have specialized habitat requirements (e.g., they occur on serpentine rock outcrops and soils, in active and stabilized coastal dunes, brackish/freshwater marsh habitats, maritime chaparral, heavy clay soils, etc.) that do not occur within the overall survey area. While serpentine outcrops are present in the general project vicinity, there are no serpentine rock or soils present within the overall survey area. Therefore, species identified in the CNDDDB as occurring on serpentine-based soils and rock outcrops in the area, such as San Luis mariposa lily (*Calochortus obispoensis*), Brewer's spineflower (*Chorizanthe breweri*), Chorro Creek bog thistle (*Cirsium fontinale* ssp. *obispoense*), Eastwood's larkspur (*Delphinium parryi* ssp. *eastwoodiae*), dudleyas (*Dudleya* spp.), Jones' layia (*Layia jonesii*), and most beautiful jewel flower (*Streptanthus albidus* ssp. *peramoenus*), are not expected to occur within the survey areas due to the lack of suitable substrate. Similarly, special-status plants known to occur in coastal dune systems, such as Surf thistle (*Cirsium rhotophilum*), beach spectaclepod (*Dithyrea maritima*), and San Luis Obispo monardella (*Monardella undulata* ssp. *undulata*), are also not expected to occur within the survey areas due to lack of suitable habitat.

The survey area is located at a lower elevation along the coast rather than a more inland geographic setting in the foothills or mountains. Therefore, several species identified in the database search occur at higher elevations in the Santa Lucia Mountains, such as the San Benito fritillary (*Fritillaria viridea*). While elevation alone is not sufficient to rule out a species from a particular study area, this species is only found on serpentine soils and was also not observed during the field surveys. Therefore, it is not expected to occur within the survey areas. Additionally, special-status shrubs, such as several species of manzanita and Indian Knob mountainbalm (*Eriodictyon altissimum*), are not expected to occur within the survey areas as they are perennial and were not observed during the field surveys.

Nineteen special-status plant species known to occur in grassland, coastal scrub, or oak woodland habitats were identified during the literature review and have the potential to occur within the survey areas. These species include, but are not limited to, Hoover's bent grass (*Agrostis hooveri*), San Luis Obispo County morning-glory (*Calystegia subacaulis* ssp. *episcopalis*), San Luis Obispo owl's clover (*Castilleja densiflora* ssp. *obispoensis*), Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*), umbrella larkspur (*Delphinium umbraculorum*), woodland woollythreads (*Monolopia gracilens*), and black-flowered figwort (*Scrophularia atrata*). Surveys were scheduled as such to overlap with the blooming periods for each of the 19 species. Since the survey areas were thoroughly inspected and all plants observed were inventoried (see Appendix C), and because none of these species were observed during appropriately timed surveys, they are not expected to occur within the project area.

A small population of approximately 30–40 chaparral ragwort individuals was observed within the California sagebrush scrub vegetation community along the southern edge of the original survey area, approximately 200 feet from the development envelope. Somewhat similar growing conditions (California sagebrush scrub, but with more open spaces occupied by nonnative grasses and weeds, and slightly different slope aspect) occur within the approximate development limits and areas associated with the proposed storm drain alignment and contemplated pedestrian footpath alternatives; however, no chaparral ragwort was observed in those areas. This population was not previously recorded, and the species did not have an occurrence record within 5 miles of the project area. Per focused botanical survey protocols, a CNDDDB survey form for chaparral ragwort was completed and submitted to CDFW (see Appendix D). The March and September

2018 record searches included this population, but no additional recent records of special-status plant species in the project vicinity were identified. No other special-status plant species were observed within the survey areas.

Local reference sites for populations of several of the special-status plant species were visited. A reference site containing Jones' layia, dudleyas, Cambria morning-glory, and San Luis Obispo owl's clover was checked immediately following the botanical survey on April 24, 2015. Each of these species was observed at the reference site but not within the survey area. Additional reference sites for Pismo clarkia, San Luis Obispo mariposa-lily, and Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) were visited on July 29, 2015, where each of these species was observed. The original survey area (as well as large portions of the supplemental survey area) was checked later that day for the presence of these species; none were found.

The 2014–2015 rain season proved to be the fourth consecutive year with below-average rainfall totals and sporadic rain events. Some of the annual vegetation growth patterns within the survey area may have been affected by early and shortened growing seasons and blooming periods (some annual or bulbiferous species may not have emerged at all). Additionally, the long history of livestock ranching within the survey area has created an abundance of weedy species and has altered the native vegetation composition. Therefore, based on site observations coupled with the habitat suitability analysis, special-status plant species, with the exception of chaparral ragwort, are not expected to occur within the overall survey area. No special-status plant species are anticipated to be adversely affected by the proposed project.

### 3.3.3 Special-Status Animals

The CNDDDB contains records of 22 special-status animal species known to occur within a 10-mile radius of the survey area (refer to Appendix B). One additional bird species, American peregrine falcon (*Falco peregrinus anatum*) was added to Appendix B based on previous personal observations within 1 mile of the survey area. For the purpose of this report, special-status animals are those listed, proposed for listing, or candidates for listing as threatened or endangered under FESA or CESA, and animals designated as SSC or FP. Eleven special-status animal species known to occur in grassland, coastal scrub, or oak woodland habitats were identified during the literature review and have the potential to occur within the survey area. These species include, but are not limited to, CRLF, western pond turtle (*Emys marmorata*), white-tailed kite (*Elanus leucurus*), and American badger (*Taxidea taxus*). The overall survey area was thoroughly inspected, and all animal species observed were inventoried (refer to Appendix C). None of these species were observed during the surveys, and none are expected to be adversely affected by the proposed project.

Similar to the special-status plant evaluation above, many of these special-status animal species are not expected to occur within the survey area due to the lack of suitable habitat. Species such as western snowy plover (*Charadrius alexandrinus nivosus*) require coastal dune habitats that are not present within the survey area. All occurrences of Morro shoulderband snail (*Helminthoglypta walkeriana*) and Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*) are found in areas with sandy soils in the Los Osos or Morro Strand region, roughly 10 miles northwest of the survey area. No vernal pool complexes occur within the survey area, thus negating the potential for vernal pool fairy shrimp (*Branchinecta lynchi*) to occur. Bat species such as pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and

western mastiff bat (*Eumops perotis californicus*) may forage over and around the survey area, but there is no suitable roosting habitat within the survey area due to the lack of vertical structure (man-made or natural). Similarly, the Monarch butterfly (*Danaus plexippus*) is frequently seen in the region (an individual was observed flying over the survey area during a field survey) but would not be expected to roost or overwinter within the project site due to the lack of suitable habitat structure, such as tall, protected stands (not isolated landscaped individuals) of eucalyptus (*Eucalyptus* spp.), Monterey pine, or Monterey cypress.

While the project site supports elements of coastal scrub habitat with sandy soil, the soils are too dry and compact to provide preferred conditions for special-status fossorial reptiles such as legless lizards (*Anniella* spp.). Coast horned lizard (*Phrynosoma blainvillii*) is another special-status reptile that occurs in coastal scrub habitat but requires loose, friable soil for burial and an abundant supply of harvester ants (*Pogonomyrmex* sp.), its primary food source. These conditions were not observed within the survey area; therefore, legless lizards and coast horned lizard are not expected to occur within the overall survey area.

The survey area is flanked by the bluffs above the mouth of San Luis Obispo Creek to the east and the intermittent creek associated with Wild Cherry Canyon to the west. San Luis Obispo Creek is outside the overall survey area, while portions of the intermittent creek associated with Wild Cherry Canyon are within the original survey area. No aquatic habitat is found elsewhere within the survey area. See Figure 5, the USFWS Wetlands Inventory Map, for an overview of the drainage features within and around the survey area. Suitable habitat to support highly aquatic species such as foothill yellow-legged frog (*Rana boylei*), CRLF, Coast Range newt (*Taricha torosa*), and western pond turtle occurs in portions of the intermittent creek associated with Wild Cherry Canyon. Potentially regulated by the wastewater treatment facility within Wild Cherry Canyon, the drainage was flowing during all field surveys, but prolonged periods of no water flows or pools would lower the expectation that the aforementioned species could occur here. None of these species were observed during the surveys. Tidewater goby (*Eucyclogobius newberryi*), steelhead (south/central California coast Distinct Population Segment [DPS]; *Oncorhynchus mykiss irideus*), and CRLF are all known to occur within or adjacent to San Luis Obispo Creek. USFWS-Designated Critical Habitat for tidewater goby and steelhead occurs within San Luis Obispo Creek. Because this area is outside the overall survey area and proposed project-related activities would not impact this area, it was not assessed, and tidewater goby and steelhead are considered absent from the survey areas. The riparian woodland associated with San Luis Obispo Creek and the historic occurrence record for western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is well outside of the survey areas, and suitable habitat does not occur within the survey areas.

The Avila Beach region provides foraging and nesting habitat for diverse populations of birds, some of which are associated with the large expanses of open grasslands and mixed shrub/woodlands similar to those within the survey area. Special-status bird species identified in the CNDDDB or personal observation as occurring in the general area include white-tailed kite, American peregrine falcon, and loggerhead shrike (*Lanius ludovicianus*). Although none of these species were observed within the survey areas, they could use the survey areas as foraging habitat but would not be expected to nest within the project area due to the lack of suitable trees, shrubs, cliffs, large rock outcrops, or buildings.

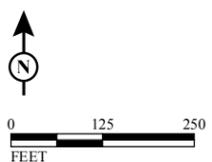


FIGURE 5

LSA

LEGEND

- Original Survey Area (35.70 acres)
- Supplemental Survey Area (15.76 ac)
- Approximate Project Parcel Boundary (22.11 acres)
- Approximate Development Limits (8.43 acres)
- Temporary Impact Area (0.55 acres)
- Proposed Storm Drain\*
- Pathway Design Alternative 1\*
- Pathway Design Alternative 2\*
- Pathway Design Alternative 3\*
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland



SOURCE: U.S.F.W. National Wetland Inventory (2018), Google (2017)  
 I:\SOM1601\GIS\MXD\BioAssessmentReport\Wetlands.mxd (9/14/2018)

\*Final design is subject to landowner approval and refinement.

*The Cottages  
 at Point San Luis*  
 USFWS Wetlands Inventory Map

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While not considered to be special-status species, several raptor species that are afforded specific protection under the California Fish and Game Code were observed flying over and around the overall survey area during project surveys, including prairie falcon (*Falco mexicanus*), American kestrel (*Falco sparverius*), and red-tailed hawk (*Buteo jamaicensis*). Larger raptors are more likely to nest to the north, east, and west of the survey area, such as the backcountry of the Irish Hills and along the San Luis Obispo Creek corridor that supports riparian and oak woodlands comingling with the open grasslands in the adjacent hills. Nevertheless, natural and anthropogenic vegetation communities within the survey areas provide suitable nesting habitat for birds protected under the California Fish and Game Code.

According to Patton et al (2007), San Diego desert woodrat (*Neotoma lepida intermedia*) is now considered a separate species, *Neotoma bryanti*, which is the correct name for woodrats occurring along the southern coast of California southward to Baja California. Marginally suitable habitat for *N. bryanti* is present within the survey area, but there are no rocky outcrops, cliffs, or slopes, which are the preferred nest locations. A woodrat midden belonging to *Neotoma macrotis* was observed in coast live oak woodland near the eastern portion of the survey area. It could not be determined whether the subspecies is *N. macrotis* ssp. *luciana* (SSC), known from the Coast Ranges to the north, or *N. macrotis* ssp. *macrotis* (a non-special-status species), known from areas to the south; both subspecies occur within San Luis Obispo County. Regardless, this midden is not anticipated to be affected by the project as it is located outside of the project area.

The survey area provides suitable habitat for larger animals, including special-status mammals such as American badger. The compacted loamy soils within the survey area (and especially within the approximate development envelope) and the adequate prey base increase the likelihood that badgers would attempt to use the survey areas for foraging and/or denning activities. However, no badgers or suitable badger burrows were observed, and there are no recorded occurrences of American badger within 5 miles of the overall survey area. American badger is not expected to occur within the survey areas.

As stated above, the evaluation of special-status animal species occurrence within the overall survey area was based on a habitat suitability analysis. It did not include exhaustive surveys to determine their presence or absence, but did include direct observation of on-site and off-site conditions and a review of the CNDDDB records documenting recorded occurrence data from the area to conclude whether or not a particular species could be expected to occur. Based on this analysis, it is unlikely that special-status wildlife species, with the exception of nesting birds, occur within the overall survey area. Adverse impacts to special-status wildlife species are not anticipated with the implementation of the recommended mitigation measures described in Section 4.3.

### **3.3.4 California Red-Legged Frog**

The CRLF is listed as a threatened species under FESA and is an SSC. This amphibian has declined in, or disappeared from, large portions of its former range in California (Stebbins 2003) but is still relatively common along the central coast of California, including portions of San Luis Obispo County (USFWS 2002). CRLF is known to occur in San Luis Obispo Creek; however, the only CNDDDB occurrence (CNDDDB #303) within 2 miles of the survey area is a 1998 observation at the Avila Beach Golf Resort, which is located approximately 700 feet northeast of the original survey area. Two new CRLF occurrences at the Avila Beach Golf Course property were

anecdotally reported to LSA in 2018.<sup>1</sup> No documented occurrences of CRLF were identified within Wild Cherry Canyon during LSA's literature review. CRLF occurs in aquatic habitats such as creeks, ponds, and marshes. Suitable breeding habitat usually includes a minimum water depth of 10 to 20 inches and must contain water during the entire development period for eggs and tadpoles. During wet weather, CRLF often occurs in upland habitats near aquatic sites, and these frogs can disperse widely over upland habitats during wet weather. For example, in Santa Cruz County, CRLF were documented to move through upland habitats for distances of over 2 miles, and these movements appear to be without regard to topographic features, vegetation communities, or riparian corridors (USFWS 2002).

Under FESA, the USFWS is required to designate critical habitat for listed species, and USFWS made the final designation of critical habitat for CRLF in 2010 (USFWS 2010). USFWS identified four habitat components, termed physical and biological features, to define critical habitat for CRLF (USFWS 2010). Although the survey area is not within designated critical habitat for this species, the habitat features used to define critical habitat are useful in evaluating CRLF habitat in areas outside critical habitat. Descriptions of these physical and biological features and their application to the survey area are provided below.

1. **Aquatic Breeding Habitat:** Standing bodies of fresh water, including natural and human constructed ponds, slow-flowing streams or pools within streams, and other ephemeral or permanent water bodies that become inundated during winter rains and hold water for a minimum of 20 weeks in all but the driest years. Suitable waterbodies for breeding are generally 10 to 20 inches in depth.

There is no suitable aquatic breeding habitat on or adjacent to the survey area. The intermittent creek associated with Wild Cherry Canyon, just west Wild Cherry Canyon Road, is very shallow (less than 2 inches) and lacks pools (e.g., 10 to 20 inches in depth). Permanent water within the creek is not expected, although flow may be regulated by the wastewater treatment facility that utilizes this area. The closest potential breeding habitat for CRLF is in the lagoon-type portions of San Luis Obispo Creek approximately 0.25 mile east of the approximate development envelope and ponds within the Avila Beach Golf Course property located over 0.5 mile north and east of the approximate development envelope. CRLF would not occur in the brackish portions of the San Luis Obispo Creek, which are more proximate to the survey areas. Other waterbodies in the general area include several constructed ponds associated with the wastewater treatment facility in Wild Cherry Canyon approximately 0.8 stream miles upstream of the overall survey area. Although some of the ponds contained water at the time of the survey, these ponds are active wastewater facilities that appear to be actively maintained, lack emergent or bankside vegetation, and are surrounded by open graded areas and roads. Active management of agricultural ponds reduces the potential for aquatic species such as CRLF to successfully maintain a breeding population that could be a source of migrating individuals. Based on these features, the wastewater ponds associated with Wild Cherry Canyon are not likely to provide quality aquatic breeding habitat for CRLF.

2. **Non-Breeding Aquatic Habitat:** Freshwater and wetted riparian habitats, as described above, that may not hold water long enough for CRLF eggs to hatch and complete their

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<sup>1</sup> Email communications with Brooke Langle, Terra Verde Environmental Consulting. September 2018.

aquatic lifecycle, but that do provide for shelter, foraging, predator avoidance, and aquatic dispersal for juvenile and adult frogs. Other wetland habitats that would be considered to meet these elements include, but are not limited to, pools in intermittent streams and seeps and springs of sufficient flow to withstand the summer dry period.

The intermittent creek associated with Wild Cherry Canyon provides potential non-breeding aquatic habitat. Dispersing frogs could use the creek as a foraging and hydrating area.

3. **Upland Habitat:** Habitat adjacent to breeding and non-breeding aquatic habitat up to a distance of 1 mile away in most cases and consisting of various vegetation types, such as grassland, scrublands, woodlands, and riparian areas that provide for CRLF shelter, foraging, and predator avoidance. Upland habitat should include structural features such as boulders, rocks, organic debris such as logs and/or moist leaf litter, and small mammal burrows.

The survey area provides limited upland habitat for CRLF. Most of the overall survey area is sparsely vegetated annual brome grassland with little cover suitable for amphibians, the exceptions being small areas of coast live oak woodland with some organic debris. The small mammal burrows within the survey area are primarily those of Botta's pocket gopher, which do not provide adequate upland refugia for CRLF.

4. **Dispersal Habitat:** Accessible upland or riparian dispersal habitat within designated units and between occupied locations within a minimum of 1 mile of each other and allowing for movement between such sites. Dispersal habitat includes various natural and altered habitats such as agricultural fields and vineyards that do not contain barriers (such as heavily traveled roads without bridges or culverts).

The survey area provides dispersal habitat between potential breeding habitat in San Luis Obispo Creek/Avila Beach Golf Course and potential non-breeding aquatic habitat along the intermittent creek associated with Wild Cherry Canyon. During wet weather, frogs could disperse through the survey area between these two waterways. However, the project area is not located directly between reported occupied habitats at the Avila Beach Golf Course and suitable aquatic habitat identified in Wild Cherry Canyon. The more direct, unobstructed migration corridor located to the north of the project area would remain unaffected.

Since CRLF may move long distances from breeding habitat (not present within the survey area) to forage and find suitable habitat to colonize, there is a chance, albeit unlikely, that foraging or dispersing CRLF could utilize portions of the overall survey area. Given that (1) no suitable breeding habitat is present on the project site, (2) a more direct, unobstructed migration corridor is located to the north of the project area, and (3) there is a very low likelihood that CRLF would occur within the project disturbance limits, no adverse effects to CRLF are anticipated. USFWS protocol-level surveys or agency consultation for CRLF are not necessary for this project as negative survey findings would be inconclusive on a site that lacks suitable breeding habitat for CRLF. Indeed, "for sites with no suitable aquatic breeding habitat, but where suitable upland dispersal habitat exists, it is difficult to support a negative finding with the results of any survey guidance" (USFWS 2005), especially since CRLF "may temporarily disappear from an area during periods of extended drought" or due to other factors (USFWS 2010).

Best management practices and the proposed mitigation measures discussed in Section 4.3 would further reduce the likelihood of adverse effects to this species.

### 3.3.5 Critical Habitat

USFWS-Designated Final Critical Habitat (January 2, 2006) for steelhead (South/Central California Coast DPS [#2662]) occurs approximately 0.75 mile east of the approximate development envelope and approximately 0.5 mile east of the survey area along San Luis Obispo Creek. Designated Re-Proposed Critical Habitat (October 19, 2011) for tidewater goby (#4735) occurs approximately 0.25 mile east of the approximate development envelope and immediately east of the survey area boundary in the mouth of San Luis Obispo Creek. No other critical habitat occurs within 5 miles of the survey area. The survey area is not located within designated critical habitat for any species and the project is not expected to adversely affect any designated critical habitat or primary constituent elements of critical habitat for tidewater goby or steelhead.

### 3.3.6 Potentially Jurisdictional Features

San Luis Obispo Creek, a jurisdictional waterway, was determined to be outside the survey area, and the development limits of the proposed project. The intermittent creek associated with Wild Cherry Canyon would also be considered a jurisdictional waterway. Although portions of the creek are located within the survey area, as with San Luis Obispo Creek, Wild Cherry Canyon is outside the development limits of the proposed project and would not be affected.

There are no wetlands or aquatic habitats present on the proposed project site. The two subsections below described the drainage features within each respective survey area.

#### *Original Survey Area*

A formal jurisdictional delineation report was prepared for the original survey area and is included in Appendix F. Along the southern portion of the original survey area, an erosion feature originates along the north side of the primary access road and conveys flow under the unpaved road via metal pipe culverts. Flow continues downslope, following topographical folds in the slope before flowing into another metal culvert that presumably connects to the Pacific Ocean, which is less than 200 feet from the edge of the survey area (refer to Appendix F). Although dry during every field survey, this feature is fed (and possibly created) by runoff from the existing road, resulting in an incised erosion channel of varying widths and depths. The vegetation within and around the feature functions more as California sagebrush scrub than riparian habitat; there is no hydrophytic vegetation and any storm water flows are ephemeral in nature. Additionally, the area is not shown as a blue line stream on topographic maps.

Pursuant to USACE Regulatory Guidance Letter (RGL) 16-01 (USACE 2016), the results of the jurisdictional delineation conducted within the original survey area were submitted in a request to the USACE for an Approved Jurisdictional Determination in September 2017. A field verification survey was conducted by Corps Regulatory Division (North Coast Branch) Project Manager Gerardo Hidalgo and LSA Biologist Bo Gould on January 29, 2018. The Corps issued an Approved Jurisdictional Determination for the project on February 7, 2018 (Attachment C of Appendix F). The USACE Approved Jurisdictional Determination for the project concludes that there are no waters of the United States within Clean Water Act (CWA) jurisdiction present on the project site.

### ***Supplemental Survey Area***

Three erosional features, each containing characteristics consistent with erosional features within the original survey area and reviewed by the USACE (determined to be not jurisdictional under the CWA), were mapped within the supplemental survey area. These features are shown in Appendix G. Features 1 and 2 originate north of the proposed development limits, where runoff along the unpaved access roads concentrate into several erosional features while draining downhill to the west, resulting in incised erosion channels of varying widths and depths. Storm water flows are ephemeral in nature, and in several areas, either dissipate or sheet flow before entering more incised erosional features that flow down to the road along Wild Cherry Canyon. Feature 3 concentrates upland sheet flows into an incised erosion channel of varying widths and depths. Feature 1 is the only feature within this survey area that has a defined connection (e.g., culvert) to the creek associated with Wild Cherry Canyon, which eventually drains to the Pacific Ocean. None of these features support riparian vegetation.

Although CWA jurisdiction has been determined to be absent by the USACE for the reviewed erosional features, the Regional Water Quality Control Board may assert authority over waters of the State pursuant to the Porter-Cologne Water Quality Control Act, which would require compliance with applicable waste discharge requirements. The project may also require a California Fish and Game Code Section 1602 Streambed Alteration Agreement from the CDFW, although the delineated erosion features do not support riparian vegetation or resources typically associated with rivers or streams. The CDFW may choose not to assert jurisdiction due to the ecological similarities of the erosional features with their immediately surrounding upland habitat and lack of importance to fish and wildlife resources that are normally associated with streams. The submission of a Notification of Streambed Alteration to the CDFW is recommended to determine whether a Streambed Alteration Agreement is required for the proposed project.

### **3.4 HABITAT CONNECTIVITY**

The project area is essentially a hillside directly north of the Pacific Ocean between Wild Cherry Canyon to the west and the bluffs above the mouth of San Luis Obispo Creek to the east. While subject to more human and livestock disturbance, portions of the survey areas are similar to those found deeper into the Irish Hills, which extend from the west to northeast of the survey areas. Wild Cherry Canyon Road is a private road that is not heavily traveled. Connectivity between habitat on either side of the road is not hindered by the presence of the road, and the coast live oak riparian woodland extends far to the north of the survey areas. Ana Bay Drive, along the eastern boundary of the survey area, is heavily traveled as it provides access to the San Luis Bay Inn, the Avila Beach Golf Resort, and private residences. The community of Avila Beach is located further to the east. Also east of the survey areas, the mouth of San Luis Obispo Creek is the terminus of a large network of creeks and streams comprising the San Luis Obispo Creek Watershed. Avila Beach Drive is the main roadway of the area and is located south of the overall survey area.

Avila Beach Drive and the Pacific Ocean limit habitat connectivity south of the survey areas. Heavily traveled Ana Bay Drive and the existing developments associated with the community of Avila Beach limit habitat connectivity east of the survey areas. However, there is no physical or natural barrier that limits habitat connectivity west and north of the survey areas. The proposed development will not further limit wildlife movement, as no permanent barriers to wildlife movement would be placed within any known wildlife movement corridor.

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## 4.0 IMPACT ASSESSMENT AND MITIGATION

The following impact assessment and recommended mitigation measures are intended to support the California Environmental Quality Act (CEQA) review process conducted by the County, which is acting as the lead agency. The project as proposed by the applicant, coupled with LSA's survey results and review of biological literature, provided the basis for this analysis. The impact discussion below addresses the range of impacts that would result from the proposed project.

### 4.1 SUFFICIENCY OF BIOLOGICAL DATA

The field surveys conducted by LSA were of sufficient technical detail and biological and botanical expertise. The survey efforts occurred during the appropriate bloom periods for special-status plant species and were both adequate and satisfactory for the purpose of determining special-status plant and animal species expected to occur within the overall survey area.

### 4.2 IMPACTS

As discussed above, the project area encompasses a hillside between Wild Cherry Canyon and the bluffs above the mouth of San Luis Obispo Creek. The field surveys yielded the discovery of one special-status plant, chaparral ragwort, although this species was not found within the proposed development limits. No other special-status species were observed during appropriately timed surveys for botanical resources. The overall survey area does not support any special-status natural communities, wetlands, or ESHAs. The overall survey area provides some suitable habitat for several special-status plant and animal species evaluated in this biological resources assessment, none of which are expected to occur within the overall survey area and especially not within the proposed development limits.

Although CRLF dispersal within the project area is unlikely, the overall survey area provides suitable upland/dispersal habitat for this species. However, CRLF is not known to occur on the project site and no adverse effects are anticipated for this species, especially with the implementation of best management practices (BMPs) and recommended mitigation measures BIO-5 and BIO-6 (discussed in Section 4.3, below). The proposed project will not adversely affect any designated critical habitat or the physical or biological features within any designated critical habitat for special-status wildlife species. Formal consultation with resource agencies regarding incidental take of rare, threatened, or endangered species is not expected.

The proposed project will result in permanent and temporary impacts to native and nonnative vegetation communities, as summarized in Tables C and D, below. Table E provides the acreages of land cover types mapped within the preliminary fuel modification zones. Refer to Figure 2 for the locations of all described project components. Permanent impacts would result from grading, constructing the cottage hotel complex and landscaping, and maintaining and operating the facility. Permanent impacts would also result in areas within the footprint of the proposed storm

drain alignment and final pedestrian footpath alignment, as well as areas cleared and maintained for fuel modification purposes. Vegetation for landscaping will be planted as part of the proposed project, thus potentially increasing the amount of nonnative vegetation within the project area. However, no invasive plant species (as identified by the California Invasive Plant Council’s Inventory for the Central Coast Region) will be used in any of the landscaping palettes, and plant species native to the project area have been incorporated into the project landscaping plans.

**Table C: Direct Impacts by Land Cover Type Within the Approximate Development Boundary and Roadway Improvement Footprint**

| Land Cover Type                      | Temporary Impact (acres) | Permanent Impact (acres) |
|--------------------------------------|--------------------------|--------------------------|
| Annual Brome Grassland               | 0.14                     | 5.53                     |
| California Sagebrush Scrub           | 0.38                     | 1.33                     |
| Coast Live Oak Woodland <sup>1</sup> | -                        | 0.16                     |
| Ornamental Landscaping               | -                        | 0.07                     |
| Dirt Roads                           | -                        | 1.34                     |
| <b>Total</b>                         | <b>0.52</b>              | <b>8.43</b>              |

<sup>1</sup> Oak tree canopies that overlap with the disturbance limits were included in this figure (0.16 acre) for the purpose of quantifying all impacts. While several individual coast live oak trees within the development limits would require removal or may experience disturbance due to the trimming of overhanging vegetation, a reduction in the extent of coast live oak woodland habitat within the overall survey area is not anticipated.

**Table D: Approximate Direct Impacts by Land Cover Type Within the Proposed Storm Drain Alignment and Pedestrian Footpath Alternatives**

| Project Component <sup>1</sup> | Land Cover Type                      | Temporary Impact (acres) <sup>2</sup> | Permanent Impact (acres) <sup>2</sup> |
|--------------------------------|--------------------------------------|---------------------------------------|---------------------------------------|
| Footpath Alternative 1         | Annual Brome Grassland               | 0.05                                  | 0.05                                  |
|                                | Coastal Sagebrush Scrub              | 0.07                                  | 0.07                                  |
| Footpath Alternative 2         | Annual Brome Grassland               | 0.01                                  | 0.01                                  |
|                                | Coast Live Oak Woodland <sup>3</sup> | 0.02                                  | 0.02                                  |
|                                | Coastal Sagebrush Scrub              | 0.08                                  | 0.08                                  |
| Footpath Alternative 3         | Annual Brome Grassland               | 0.03                                  | 0.02                                  |
|                                | Coastal Sagebrush Scrub              | 0.02                                  | 0.02                                  |
| Storm Drain Alignment          | Annual Brome Grassland               | -                                     | 0.03                                  |
|                                | Coastal Sagebrush Scrub              | -                                     | 0.06                                  |

<sup>1</sup> The final designs of these features are subject to landowner approval and refinement. Only one footpath is being considered to be included under the proposed project. This table provides approximate impact acreages for all footpath alternatives for planning purposes.

<sup>2</sup> Temporary impacts were calculated using a 5-foot buffer on the preliminary footpath alternative designs. Permanent impacts are assumed within the footprint of each identified alternative, as shown on Figure 3. Each footpath alternative is proposed to be 5 feet in width.

<sup>3</sup> Refer to Appendix E for information pertaining to potential project impacts to individual oak trees.

**Table E: Land Cover Types Within the Preliminary Fuel Modification Zones**

| <b>Fuel Modification Zone</b>                                   | <b>Land Cover Type</b>               | <b>Acreage</b> |
|---|--------------------------------------|----------------|
| Clearing Zone A<br>(30 feet from proposed occupied structures)  | Annual Brome Grassland               | 0.21           |
|   | Coast Live Oak Woodland <sup>1</sup> | 0.02           |
|   | Coastal Sagebrush Scrub              | 0.15           |
| Thinning Zone B<br>(100 feet from proposed occupied structures) | Annual Brome Grassland               | 1.84           |
|   | Coast Live Oak Woodland <sup>1</sup> | 0.54           |
|   | Coastal Sagebrush Scrub              | 0.98           |
|   | Ornamental Landscape                 | 0.02           |
| <b>Grand Total</b>  |                                      | <b>3.76</b>    |

<sup>1</sup> Oak tree canopies that overlap with the zone limits were included table for the purpose of quantifying the total size of the fuel modification zones. Note that coast live oak trees that fall within the identified fuel modification zones will likely not require clearance or trimming, as this species is exceptionally fire resistant and the densities of the tree canopies within such areas are relatively sparse.

Additional temporary indirect impacts may include noise, vibration, light, and dust created by construction-related activities. Mitigation measures BIO-1, BIO-2, and BIO-3 (discussed in Section 4.3, below) are recommended to avoid, minimize, and compensate for impacts to native vegetation communities. Implementation of these measures will ensure that there is no net loss of native vegetation communities, including California sagebrush scrub and coast live oak woodland or individual coast live oak trees, associated with the proposed project.

The proposed project is adjacent to an existing hotel development and a golf course, which are adjacent to the community and recreational beach areas of Avila Beach and Port San Luis. Therefore, the proposed project would be an extension of the existing developed areas of the Avila Beach community. The rural landscape within and around the project area will be integrated into the design of the cottage hotel development. The vast majority of the coast live oak trees within the survey areas will not be impacted or removed; refer to Appendix E for additional information pertaining to potential project impacts to individual oak trees.

Birds may nest in the vegetation that is planned for removal or trimming within the development area and along the eastern access road. Potential impacts to nesting birds will be avoided with implementation of recommended mitigation measure BIO-4 (discussed in Section 4.3, below).

Direct impacts to the creek running through Wild Cherry Canyon and San Luis Obispo Creek, along with associated riparian vegetation, are not anticipated. Potential temporary indirect impacts may include noise, vibration, light, erosion, and dust created by construction-related activities. In accordance with recommended mitigation measure BIO-6 (described below), appropriate BMPs such as silt fencing should be implemented to prevent debris and sediment from entering nearby jurisdictional waterways located outside of the project development limits.

No drainage features identified within the disturbance limits of the proposed project meet the definition of waters of the United States; therefore, no Clean Water Act (CWA) Section 401 or 404 permits will be required. However, erosional features, which are described more fully in

Section 3.3.6 and the Jurisdictional Delineation Report provided in Appendix F, were identified on the project site and work within them may require authorization from the CDFW or RWQCB. Regulatory compliance for impacts to any feature(s) deemed to be jurisdictional by the applicable state resource agencies within the development envelope should be achieved through full compliance with all relevant terms and conditions contained in applicable regulatory agency permits, including any Coastal Development Permit, RWQCB Waste Discharge Requirement, and/or CDFW 1600 Streambed Alteration Agreement.

### 4.3 RECOMMENDED MITIGATION MEASURES

The following section provides a summary of project impacts on biological resources, as well as recommended mitigation measures that would avoid, reduce, or compensate for such impacts.

**Impact BIO-1:** The proposed project will clear and grub existing vegetation and grade the area to the engineered design. This will result in permanent impacts to annual brome grassland, California sagebrush scrub, ornamental landscaping, and individual coast live oak trees.

**Mitigation Measure BIO-1. Revegetation Plans.** Prior to issuance of a grading permit, the Project Applicant shall submit a revegetation plan, consistent with the County of San Luis Obispo's Coastal Zone Land Use Ordinance and Local Coastal Program, to the County for review and approval. Additionally, prior to project development, a qualified arborist will review coast live oak trees that are within or immediately adjacent to the final project disturbance limits. An Oak Tree Impact and Mitigation Plan shall be prepared and implemented based on the arborist's review to compensate for all project-related impacts to oak trees. The following measures shall be included in the revegetation plans and implemented prior to occupancy of any buildings:

- Native vegetation within California sagebrush scrub and coast live oak woodland removed or damaged by project activities shall be replaced by planting and/or seeding like-kind native vegetation at a minimum 1:1 ratio in areas adjacent to existing similar habitats outside the project grading limits.
- The revegetation plan shall incorporate purple needlegrass and other native grass/herbaceous understory species that occur within the vegetation communities impacted by the project.
- Coast live oak trees removed or damaged by project activities shall be replaced at a minimum 1:1 ratio (or as otherwise required by the County) in areas adjacent to existing similar habitats outside the project grading limits. Replacement coast live oak trees shall be grown from locally collected acorns. Because portions of the project

parcel boundary may not be suitable for oak tree planting, off-site planting and/or preservation may be warranted, as approved by the County.

***Impact BIO-2:***

The proposed project will involve construction activities adjacent to coast live oak trees that shall be protected in place. The following measures are to be included in the Oak Tree Impact and Mitigation Plan described in Mitigation Measure BIO-1, above.

**Mitigation Measure BIO-2.**

**Tree Protection Measures.** Prior to the start of construction, the project contractor shall ensure that the following tree protection measures, consistent with the recommendations outlined in the Tree Inventory Report, are implemented during the construction period.

*Tree Avoidance.* The project should avoid impacts to as many trees as feasible. The proposed project plans should incorporate placement of tree protection fencing outside of the drip line of protected trees. Preserved trees on the project site should be avoided during the construction phase by following best management practices as outlined in the following paragraphs.

*Tree Maintenance during Construction.* Tree roots often extend far beyond the canopy dripline. Excavation work within the dripline of avoided trees shall not be allowed.

*Tree Protection Fencing.* Prior to the start of construction, Tree Protection Fencing (TPF) should be installed around the stand of coast live oak woodland located in the central survey area and shown on Figure 3E and other oak trees to be protected along the access road. The TPF should be maintained during the entire development process to prevent direct damage to trees and their growing environment. The TPF should consist of blaze orange barrier fencing supported by metal "T bar" fence posts. The TPF should be placed at a distance that is at or outside of the drip lines of avoided trees. The TPF should be installed as part of the site preparation before construction or tree removal/trimming begins and should be installed under the supervision of a qualified arborist. The TPF should not be altered in any way that would increase the encroachment on the avoided trees during construction activities.

*Use of Heavy Equipment.* Heavy machinery should not be allowed to operate (excavation, grading, drainage and leveling) or park within the drip line of avoided trees unless approved by a qualified arborist.

*Storage of Construction Materials and Debris.* Fill materials should not be placed against the trunks of avoided trees. Disposal or depositing of oil, gasoline, chemicals or other harmful materials within the drip line is prohibited. Fueling should also take place outside of and away from the TPF.

*Incidental Damage to Protected Trees.* The attachment of wires, signs, and ropes to any protected tree is strictly prohibited. Workers may be allowed to rest under trees, but they must not injure trees by any means.

*Trimming.* All pruning of protected trees shall be performed by a licensed contractor familiar with International Society of Arboriculture pruning guidelines and shall comply with the guidelines established by the International Society of Arboriculture; Best Management Practices; Tree Pruning and any special conditions as determined by a certified arborist. A certified arborist shall coordinate all activities involving protected trees.

**Impact BIO-3:** The proposed project will result in temporary disturbance of up to 0.38 acres of California sagebrush scrub within the temporary impact area associated with the access road improvements, and up to 0.08 acre of California sagebrush scrub associated with the pedestrian footpath designs.

**Mitigation Measure BIO-3. Restoration of Native Vegetation Temporarily Impacted.** Following the completion of project construction, the Project Contractor shall ensure that all California sagebrush scrub vegetation temporarily impacted during project construction shall be restored in-place at a 1:1 ratio by planting or seeding the area with native vegetation consisting of the same species components.

**Impact BIO-4:** The proposed project could adversely affect nesting birds protected under the California Fish and Game Code.

**Mitigation Measure BIO-4. Nesting Birds.** To avoid impacts to native bird species that may utilize the survey area, all work (at a minimum, vegetation removal or trimming and initial site grading) shall take place outside the typical nesting bird season (September 1 through January 31), as feasible. If any construction activities are scheduled to occur during the bird nesting season (February 1 through August 31), a qualified biologist shall conduct preconstruction surveys for active bird nests within 300 feet of the work area within 3 calendar days of the scheduled construction activity. If no active nests are located, ground-disturbing/construction activities can proceed. If active nests are located, then construction work shall be conducted outside an

exclusion zone to be developed by the qualified biologist, based on the geographic setting of the nest and the species (i.e., 50 feet for common species and upwards of 300 feet for special-status or raptor species). Construction activities shall avoid the exclusion zones until the qualified biologist determines that the young have successfully fledged or the nest is no longer considered active. A qualified biologist shall conduct regular site inspections while the nest is active to ensure that the exclusion zone is maintained and to monitor the nesting progression.

***Impact BIO-5:***

The proposed project has potential to affect suitable habitat for several special-status plant and animal species.

**Mitigation Measure BIO-5. Worker Environmental Awareness Program (WEAP), Preconstruction Surveys, Compliance Monitoring, and Reporting.**

**WEAP:** Prior to any ground disturbance or construction activities, a qualified biologist will conduct a training session for all construction personnel. At a minimum, the training will include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to avoid adverse effects to biological resources, and the boundaries within which the project may be accomplished. The training shall explain local, State, and federal regulations/authorizations pertaining to biological resources that are/may be applicable to the project, as well as all measures related to biological resources that must be implemented during construction.

**Preconstruction Surveys, Compliance Monitoring, and Reporting:** Within 2 days prior to initiation of vegetation removal and grading activities, a qualified biologist shall conduct a preconstruction survey to ascertain the presence or absence of special-status species. A qualified biological monitor shall be present during all vegetation clearing and grading activities.

In addition to the required survey and monitoring described above, a preconstruction survey of the project area by a qualified biologist shall be required each day prior to the start of any construction activity during the following circumstances: (1) during a measurable rain event (0.01 inch or greater), (2) within 48 hours of a rain event, and (3) if standing water is present on the project site. The biologist shall survey all areas to be directly affected during scheduled construction activities, with a particular focus on areas that have potential to support California red-legged frog dispersal or sheltering.

If a federally- and/or State-listed or fully-protected species is observed on the project site, work activities with potential to directly or indirectly disturb the plant or animal (as determined by the qualified biologist) shall not occur until the appropriate regulatory agency (California Department of Fish and Wildlife and/or United States Fish and Wildlife Service) has authorized the work to proceed.

The work areas should be clearly marked (i.e., with stakes, flagging, fencing, and/or temporary signage) to ensure that no work occurs outside the approved limits of disturbance. The qualified biologist will receive project-specific approvals from the resource agencies prior to handling any special-status wildlife species. Speed limits shall be restricted to 15 miles per hour, and work shall be limited to daylight hours. The results of all pre-construction surveys and compliance monitoring shall be documented by the qualified biologist and the documentation shall be available upon request throughout the duration of construction activities.

***Impact BIO-6:***

During temporary construction activities, the proposed project could indirectly affect riparian areas and potentially jurisdictional aquatic resources that contain suitable habitat for CRLF.

**Mitigation Measure BIO-6.**

**Erosion Control and California Red-Legged Frog**

**Exclusionary Fencing.** To avoid erosion and sedimentation impacts to nearby creeks and water quality, grading and construction resulting in ground disturbance should be limited to the typical dry season (April 15 through October 15). Additionally, prior to ground disturbance, the Project Contractor shall install adequate erosion and sedimentation barriers (e.g., silt fencing, as described below) to prevent any sediment-laden runoff or debris from adjacent waterways or the Pacific Ocean. This silt fencing will also serve as a temporary barrier to minimize the potential for California red legged frog (CRLF) to enter work areas during construction. The barriers shall consist of 3-foot-tall silt fencing buried to a depth of at least 6 inches below the soil surface along the outer limits of all work areas. These barriers shall be inspected daily by construction personnel and maintained and repaired as necessary for the duration of construction to ensure that they are functional and are not a hazard to CRLF on the outer side of the fence. A qualified biologist shall monitor all fence installation. All barriers shall be removed following completion of construction.

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## 5.0 CONCLUSION

The overall survey area consists of a mixture of native and nonnative vegetation within four natural plant communities and other anthropogenic areas. The field surveys identified and located various natural communities, plants, and animals, and other biological resources within the survey area that have potential to be affected by the proposed project. However, based on field observations coupled with the habitat suitability analysis conducted for this assessment, and fact that much of the survey area is highly altered from its natural state, special-status biological resources are not likely to occur within the project area. Still, a portion of the overall survey area contained one special-status plant species, chaparral ragwort, and the overall survey area could potentially support nesting birds during the spring and summer months (i.e., February through September) as well as dispersing CRLF.

The proposed project will result in permanent and temporary impacts within the 8.98-acre development limits as well as areas within the final alignments of the proposed storm drain, pedestrian footpath (if constructed), and fuel modification zones. By conducting vegetation removal or trimming and initial site grading outside the nesting bird season, having a qualified biologist conduct a preconstruction survey and monitor these activities (at a minimum), conducting preconstruction surveys during the most likely conditions that CRLF would be present on the project site, and compensating for the loss of coastal sage scrub and coast live oak trees, the proposed project is not expected to have an adverse effect on special-status plants or animals. By implementing BMPs such as a silt fence along the disturbance limits, erosion and off-site sedimentation will be kept out of nearby riparian areas. Additionally, the fence will act to minimize the potential for CRLF to enter work areas during construction. With implementation of Mitigation Measures BIO-1 through BIO-6, the proposed project will result in no direct or indirect impacts to special-status plant or wildlife species and potential impacts to other biological and aquatic resources will be effectively minimized or avoided.

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## 6.0 REFERENCES

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**APPENDIX A**

**REPRESENTATIVE PHOTOGRAPHS**

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**Photo 1.** Overall view of the approximate development envelope from the northern boundary of the survey area, facing southwest. This photograph also shows the annual brome grassland community.



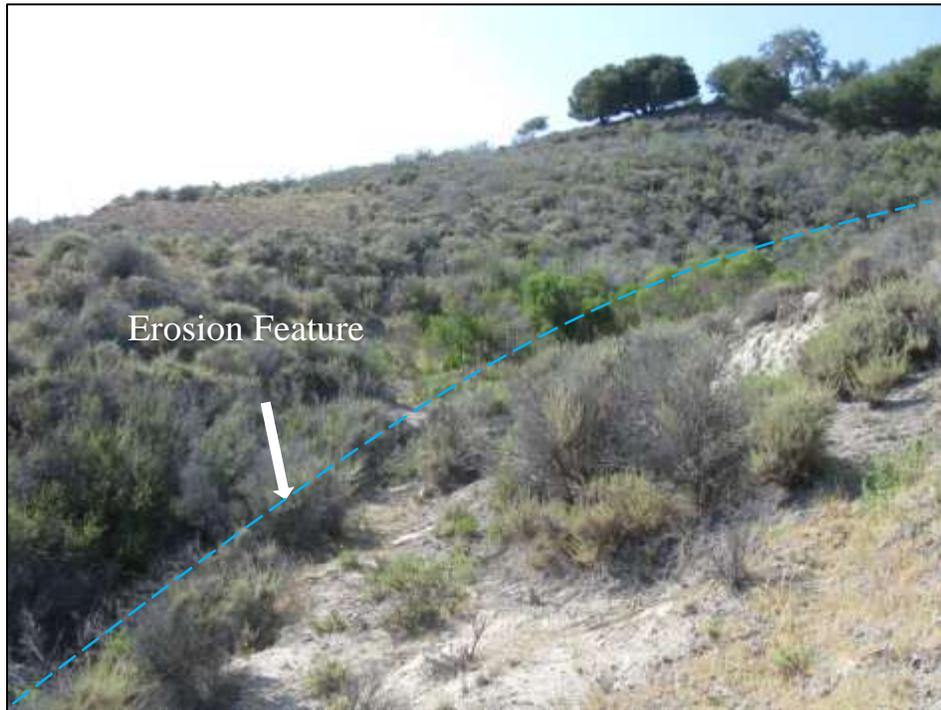
**Photo 2.** Overall view of the approximate development envelope from the northeastern boundary of the survey area, facing west. This photograph also shows the annual brome grassland community.



**Photo 3.** Representative photograph of the annual brome grassland community within the approximate development envelope and survey area, facing northeast.



**Photo 4.** Representative photograph of the California sagebrush scrub community within the survey area, facing east. Avila Beach Drive is shown for reference.



**Photo 5.** The erosion feature potentially subject to state jurisdiction within California sagebrush scrub along the southern boundary of the original survey area, facing north.



**Photo 6.** The erosion feature and a corrugated metal pipe culvert within California sagebrush scrub along the southern boundary of the original survey area, facing south.



**Photo 7.** Representative photograph of the coast live oak woodland community near the central portion of the original survey area, facing north.



**Photo 8.** Representative photograph of the coast live oak riparian woodland community along the intermittent creek associated with Wild Cherry Canyon, facing northwest.



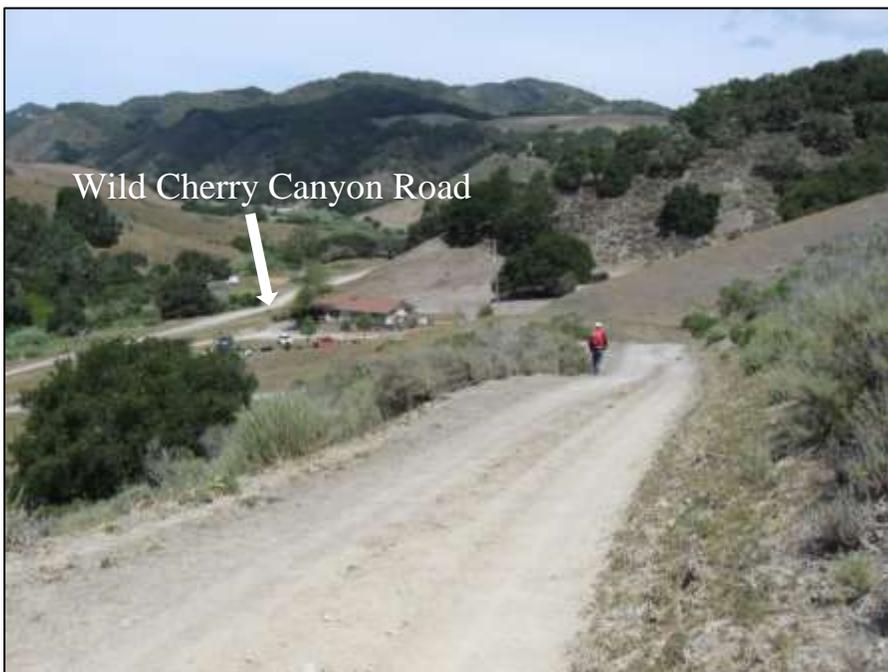
**Photo 9.** Representative photograph of the developed areas along Ana Bay Drive and ornamental landscape vegetation associated with the San Luis Bay Inn, facing southeast.



**Photo 10.** The primary access road emanating from behind the San Luis Bay Inn, facing east. The photograph also shows a portion of the annual brome grassland community inundated with nonnative onionweed.



**Photo 11.** Coast live oak woodland along and overhanging the access road heading towards Wild Cherry Canyon, facing north. This area is outside of the proposed disturbance limits of the project.



**Photo 12.** California sagebrush scrub along the access road heading toward Wild Cherry Canyon, facing northwest. This area is outside of the proposed disturbance limits of the project.



**Photo 13.** Annual brome grassland, California sagebrush scrub, coast live oak woodland, and coast live oak riparian woodland along Wild Cherry Canyon Road, facing south. This area is outside of the proposed disturbance limits of the project.



**Photo 14.** Chaparral ragwort (*Senecio aphanactis*) as found within California sagebrush scrub along the southern boundary of the original survey area (outside of the approximate development envelope).



**Photo 15.** Annual brome grassland within the northernmost portion of the supplemental survey area, facing northwest toward Wild Cherry Canyon.



**Photo 16.** Annual brome grassland, California sagebrush scrub, and coast live oak woodland within the supplemental survey area (west of the proposed development envelope), facing south. Erosion Feature 2 (refer to Appendix G) is shown in the foreground. Note livestock and game trails near the central portion of the photo.



**Photo 17.** Livestock (cattle and horse) grazing was observed within the original survey area in April 2015 and January 2018. Photo taken in the northernmost portion of the original survey area, facing north.



**Photo 18.** Annual brome grassland, California sagebrush scrub, and coast live oak woodland within the supplemental survey area (west of the proposed development envelope), facing east from Wild Cherry Canyon Road.

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## **APPENDIX B**

# **REGIONALLY OCCURRING SPECIAL-STATUS SPECIES AND NATURAL COMMUNITIES**

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### Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name                  | Common Name                 | Status Federal/State/ Other† | General Habitat Description  | Habitat: Present/ Absent | Rationale  |
|----------------------------------|-----------------------------|------------------------------|--|--------------------------|--|
| <b>PLANTS</b>                    |                             |                              |  |                          |  |
| <i>Agrostis hooveri</i>          | Hoover's bent grass         | --/--/1B.2                   | Sandy sites within chaparral, cismontane woodland, closed-cone coniferous forest, and valley and foothill grassland.<br>Elevation: 60–610 meters<br>Blooming period: April–July  | Present                  | Suitable habitat within the survey area. Not observed during appropriately timed surveys.  |
| <i>Arctostaphylos cruzensis</i>  | Arroyo de la Cruz manzanita | --/--/1B.2                   | Sandy soils in habitats ranging from chaparral to coastal scrub to woodland.<br>Elevation: 60–310 meters<br>Blooming period: December–March  | Present                  | Suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.                             |
| <i>Arctostaphylos luciana</i>    | Santa Lucia manzanita       | --/--/1B.2                   | Shale outcrops on slopes, in chaparral and cismontane woodland.<br>Elevation: 350–850 meters<br>Blooming period February–March   | Absent                   | No suitable habitat within the survey area. Outside elevation range. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |
| <i>Arctostaphylos morroensis</i> | Morro manzanita             | FT/--/1B.1                   | Baywood sands, usually within chaparral, cismontane woodland, coastal dunes, and coastal scrub.<br>Elevation: 5–205 meters<br>Blooming period: December–March  | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.                          |
| <i>Arctostaphylos pechoensis</i> | Pecho manzanita             | --/--/1B.2                   | Siliceous shale soils within chaparral, closed-cone coniferous forest, and coastal scrub.<br>Elevation: 125–850 meters<br>Blooming period: November–March  | Present                  | Suitable habitat within the survey area. Not observed during appropriately timed surveys.  |
| <i>Arctostaphylos pilosula</i>   | Santa Margarita manzanita   | --/--/1B.2                   | Shale outcrops and slopes within closed-cone coniferous forest and chaparral; reported growing on decomposed granite or sandstone in San Luis Obispo.<br>Elevation: 170–1100 meters<br>Blooming period: December–March | Absent                   | No suitable habitat within the survey area. Outside elevation range. Not observed during appropriately timed surveys.  |
| <i>Arenaria paludicola</i>       | Marsh sandwort              | FE/SE/1B.1                   | Freshwater wetlands, marshes, and swamps.<br>Elevation: 5–250 meters<br>Blooming period: May–August  | Absent                   | No suitable habitat within the survey area. Not observed during appropriately timed surveys.   |

## Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name                                       | Common Name                | Status Federal/State/ Other† | General Habitat Description   | Habitat: Present/ Absent | Rationale  |
|---|----------------------------|------------------------------|---|--------------------------|--|
| <i>Astragalus didymocarpus</i> var. <i>milesianus</i> | Miles' milk-vetch          | --/--/1B.2                   | Coastal scrub and grassy areas near the coast.<br>Elevation: 20–90 meters<br>Blooming period: March–June  | Present                  | Suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.                           |
| <i>Atriplex coulteri</i>                              | Coulter's saltbush         | --/--/1B.2                   | Ocean bluffs, ridgetops, as well as alkaline low places within coastal dunes, coastal scrub, and valley and foothill grassland.<br>Elevation: 10–440 meters<br>Blooming period: March–October                         | Present                  | Suitable habitat and elevation range within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.       |
| <i>Bryoria spiralifera</i>                            | Twisted horsehair lichen   | --/--/1B.1                   | Usually on conifers in north coast coniferous forest.<br>Elevation: 0–30 meters   | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |
| <i>Calochortus obispoensis</i>                        | San Luis mariposa-lily     | --/--/1B.2                   | Serpentine soils within chaparral, coastal scrub, and valley and foothill grassland.<br>Elevation: 50–730 meters<br>Blooming period: May–July   | Absent                   | No suitable habitat within the survey area and no serpentine soils. Observed at local reference population but not within survey area during appropriately timed surveys.    |
| <i>Calochortus simulans</i>                           | La Panza mariposa-lily     | --/--/1B.3                   | Decomposed granite, serpentine, or sandy soil within in valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest.<br>Elevation: 395–1,100 meters<br>Blooming period: April–May. | Present                  | Marginally suitable habitat within the survey area. No decomposed granite or serpentine substrate. Outside elevation range. Not observed during appropriately timed surveys. |
| <i>Calystegia subacaulis</i> ssp. <i>episcopalis</i>  | Cambria morning-glory      | --/--/4.2                    | Dry, open scrub, woodland, or grasslands.<br>Elevation: 60–500 meters<br>Blooming period: April–June  | Present                  | Suitable habitat within the survey area. Observed at local reference population but not within survey area during appropriately timed surveys.                               |
| <i>Camissoniopsis hardhamiae</i>                      | Hardham's evening-primrose | --/--/1B.2                   | Decomposed carbonate in chaparral or cismontane woodland.<br>Elevation: 330–500 meters<br>Blooming period: April–May  | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.                        |

### Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name   | Common Name                  | Status Federal/State/ Other† | General Habitat Description   | Habitat: Present/ Absent | Rationale   |
|---|------------------------------|------------------------------|---|--------------------------|---|
| <i>Carex obispoensis</i>                                | San Luis Obispo sedge        | --/--/1B.2                   | Usually in transition zone on sand, clay, or serpentine within closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland, and seeps.<br>Elevation: 10–820 meters<br>Blooming period: April–June | Present                  | Suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.  |
| <i>Castilleja densiflora</i><br>var. <i>obispoensis</i> | San Luis Obispo owl's-clover | --/--/1B.2                   | Valley and foothill grasslands, meadows, and seeps. Often associated with serpentine soils.<br>Elevation: 10–400 meters<br>Blooming period: March–June  | Present                  | Marginally suitable habitat within the survey area - no serpentine soils. Observed at local reference population, but not within survey area during appropriately timed surveys.  |
| <i>Centromadia parryi</i><br>ssp. <i>congonii</i>       | Congdon's tarplant           | --/--/1B.1                   | Alkaline soils within valley and foothill grassland.<br>Elevation: 1–230 meters<br>Blooming period: June–November   | Present                  | Suitable habitat within the survey area, but marginally suitable soils. Closest CNDDDB occurrence record more than 5 miles away. Observed at local reference population, but not within survey area during appropriately timed surveys. |
| <i>Chenopodium littoreum</i>                            | Coastal goosefoot            | --/--/1B.2                   | Sandy soils in coastal dunes.<br>Elevation: 10–30 meters<br>Blooming period: April–August   | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.   |
| <i>Chorizanthe breweri</i>                              | Brewer's spineflower         | --/--/1B.3                   | Rocky or gravelly serpentine sites, usually in barren areas, within chaparral, cismontane woodland, coastal scrub, and closed-cone coniferous forest.<br>Elevation: 45–800 meters<br>Blooming period: April–August                            | Absent                   | No suitable habitat or substrate within the survey area. Not observed during appropriately timed surveys.   |
| <i>Chorizanthe rectispina</i>                           | Straight-awned spineflower   | --/--/1B.3                   | Granite or sandy soil within chaparral, cismontane woodland, and coastal scrub.<br>Elevation: 85–1,035 meters.<br>Blooming period: April–July   | Present                  | Suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys   |

## Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name                                  | Common Name                      | Status Federal/State/ Other† | General Habitat Description   | Habitat: Present/Absent | Rationale   |
|--|----------------------------------|------------------------------|---|-------------------------|---|
| <i>Cirsium fontinale</i> var. <i>obispoense</i>  | San Luis Obispo fountain thistle | FE/SE/1B.2                   | Serpentine seeps and streams within chaparral, cismontane woodland, and grasslands.<br>Elevation: 35–365 meters<br>Blooming period: February–July.  | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Observed at local reference population, but not within survey area during appropriately timed surveys. |
| <i>Cirsium occidentale</i> var. <i>lucianum</i>  | Cuesta Ridge thistle             | --/--/1B.2                   | Often on steep rocky slopes and along disturbed roadsides, and openings on serpentine soils within chaparral.<br>Elevation: 500–750 meters<br>Blooming period: April–June                                     | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.   |
| <i>Cirsium rhotophilum</i>                       | Surf thistle                     | --/ST/1B.2                   | Coastal dunes or open areas in central dune scrub and coastal bluff scrub.<br>Elevation: 3–60 meters<br>Blooming period: April–June   | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.   |
| <i>Cirsium scariosum</i> var. <i>loncholepis</i> | La Graciosa thistle              | FE/ST/1B.1                   | Mesic/sandy soils within coastal dune, scrub, brackish marshes, riparian scrub, valley and foothill grassland, and cismontane woodland.<br>Elevation: 4–220 meters<br>Blooming period: May–August             | Absent                  | No suitable habitat or substrate within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.  |
| <i>Cladonia firma</i>                            | Popcorn lichen                   | --/--/2B.1                   | On soil and detritus on stabilized coastal sand dunes, in pure stands or intermixed with other lichens and mosses forming biotic soil crusts, covering areas up to several meters.<br>Elevation: 30–75 meters | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.   |
| <i>Clarkia speciosa</i> ssp. <i>immaculata</i>   | Pismo clarkia                    | FE/SR/1B.1                   | Sandy soils or openings on ancient coastal dunes, chaparral, cismontane woodland, and valley and foothill grassland.<br>Elevation: 25–185 meters<br>Blooming period: May–July                                 | Present                 | Suitable habitat within the survey area. Observed at local reference population, but not within survey area during appropriately timed surveys.   |
| <i>Delphinium parryi</i> ssp. <i>blochmaniae</i> | Dune larkspur                    | --/--/1B.2                   | Rocky areas within chaparral and coastal dunes.<br>Elevation: 0–200 meters<br>Blooming period: April–May  | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.   |

### Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name                                    | Common Name            | Status Federal/State/ Other† | General Habitat Description   | Habitat: Present/ Absent | Rationale   |
|--|------------------------|------------------------------|---|--------------------------|---|
| <i>Delphinium parryi</i> ssp. <i>eastwoodiae</i>   | Eastwood's larkspur    | --/--/1B.2                   | Serpentine soils in openings within chaparral and valley and foothill grassland.<br>Elevation: 75–500 meters<br>Blooming period: March–May  | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |
| <i>Delphinium umbracolorum</i>                     | Umbrella larkspur      | --/--/1B.3                   | Mesic sites in cismontane woodland and oak woodlands.<br>Elevation: 400–1,600 meters<br>Blooming period: April–June.  | Present                  | Suitable habitat within the survey area. Not observed during appropriately timed surveys.   |
| <i>Dithyrea maritima</i>                           | Beach spectaclepod     | --/ST/1B.1                   | Sea shores, sand dunes, and sandy places near the shore within coastal dunes and coastal scrub.<br>Elevation: 3–50 meters<br>Blooming period March–May.   | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |
| <i>Dudleya abramsii</i> ssp. <i>bettinae</i>       | Betty's dudleya        | --/--/1B.2                   | On rocky, barren exposures of serpentine within coastal scrub, valley and foothill grassland, and chaparral.<br>Elevation: 20–180 meters<br>Blooming period: May–July   | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |
| <i>Dudleya abramsii</i> ssp. <i>murina</i>         | Mouse-gray dudleya     | --/--/1B.3                   | Serpentine outcrops within chaparral, cismontane woodland, and valley and foothill grassland.<br>Elevation: 90–440 meters<br>Blooming period May–June.  | Absent                   | No suitable habitat within the survey area. Not observed during appropriately timed surveys.  |
| <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> | Blochman's dudleya     | --/--/1B.1                   | Shallow clays over serpentine or in open, rocky areas with little soil within coastal scrub, coastal bluff scrub, chaparral, and valley and foothill grassland.<br>Elevation: 5–450 meters<br>Blooming period: April–June | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |
| <i>Erigeron blochmaniae</i>                        | Blochman's leafy daisy | --/--/1B.2                   | Sand dunes and hills within coastal dunes and coastal scrub.<br>Elevation: 3–45 meters<br>Blooming period: July–August  | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |

### Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name                                 | Common Name                   | Status Federal/State/ Other† | General Habitat Description  | Habitat: Present/Absent | Rationale  |
|---|-------------------------------|------------------------------|--|-------------------------|--|
| <i>Eriodictyon altissimum</i>                   | Indian Knob mountainbalm      | FE/SE/1B.1                   | Ridges in open, disturbed areas within chaparral (maritime), cismontane woodland, and coastal scrub on Pismo sandstone.<br>Elevation: 80–270 meters<br>Blooming period: March–June | Absent                  | No suitable habitat within the survey area. Not observed during appropriately timed surveys.   |
| <i>Eryngium aristulatum</i> var. <i>hooveri</i> | Hoover's button-celery        | --/--/1B.1                   | Alkaline depressions, vernal pools, roadside ditches, and other wet places near the coast.<br>Elevation: 3–45 meters<br>Blooming period: July–August                               | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.  |
| <i>Fritillaria viridea</i>                      | San Benito fritillary         | --/--/1B.2                   | Serpentine slopes in chaparral.<br>Elevation: 200–1525 meters<br>Blooming period: March–May  | Absent                  | No suitable habitat or elevation range within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed within during appropriately timed surveys.                            |
| <i>Horkelia cuneata</i> var. <i>puberula</i>    | Mesa horkelia                 | --/--/1B.1                   | Sandy or gravelly sites within chaparral, cismontane woodland, and coastal scrub.<br>Elevation: 70–810 meters<br>Blooming period: February–September                               | Present                 | Suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.   |
| <i>Layia jonesii</i>                            | Jones' layia                  | --/--/1B.2                   | Clay soils and serpentine outcrops within chaparral and valley and foothill grassland.<br>Elevation: 5–400 meters<br>Blooming period March–May.                                    | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Observed at local reference population, but not within survey area during appropriately timed surveys |
| <i>Lupinus ludovicianus</i>                     | San Luis Obispo County lupine | --/--/1B.2                   | On limestone within open, grassy areas or oak woodland within the South Coast Ranges (San Luis Obispo County).<br>Elevation: 50–500 meters<br>Blooming period: April–July          | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.  |
| <i>Monardella palmeri</i>                       | Palmer's monardella           | --/--/1B.2                   | On serpentine within cismontane woodland and chaparral, often found associated with Sargent cypress forests.<br>Elevation: 200–800 meters<br>Blooming period: June–August          | Absent                  | No suitable habitat or elevation range within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.                                   |

### Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name                                 | Common Name                      | Status Federal/State/ Other† | General Habitat Description  | Habitat: Present/Absent | Rationale   |
|---|----------------------------------|------------------------------|--|-------------------------|---|
| <i>Monardella sinuata</i> ssp. <i>sinuata</i>   | Southern curly-leaved monardella | --/--/1B.2                   | Sandy soils within coastal dunes, coastal scrub, chaparral, and cismontane woodlands.<br>Elevation: 0–300 meters<br>Blooming period: May–July  | Present                 | Suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.    |
| <i>Monardella undulata</i> ssp. <i>crispa</i>   | Crisp monardella                 | --/--/1B.2                   | Borders of open, sand areas, usually adjacent to typical backdune scrub vegetation within coastal dunes and coastal scrub.<br>Elevation: 10–120 meters<br>Blooming period: May–September   | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |
| <i>Monardella undulata</i> ssp. <i>undulata</i> | San Luis Obispo monardella       | --/--/1B.2                   | Stabilized sand of the immediate coast within coastal dunes and coastal scrub.<br>Elevation: 10–200 meters<br>Blooming period: May–September   | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |
| <i>Monolopia gracilens</i>                      | Woodland woollythreads           | --/--/1B.2                   | Grassy sites, in openings; and sandy to rocky soils within chaparral, valley and foothill grasslands, cismontane woodland, broad-leaved upland forests, and north coast coniferous forest. Often seen on serpentine after burns but may have only weak affinity to serpentine.<br>Elevation: 100–1,200 meters<br>Blooming period: March–July | Present                 | Suitable habitat within the survey area. Not observed during appropriately timed surveys.   |
| <i>Nasturtium gambelii</i>                      | Gambel’s water cress             | FE/ST/1B.1                   | Freshwater and brackish marshes, swamps, at the margins of lakes and along streams, in or just above the water level.<br>Elevation: 5–330 meters<br>Blooming period: April–September   | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |
| <i>Nemacaulis denudata</i> var. <i>denudate</i> | Coast woolly-heads               | --/--/1B.2                   | Coastal dunes and beaches.<br>Elevation: 0–100 meters<br>Blooming period: April–September  | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys. |

**Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area**

| Scientific Name                                       | Common Name                | Status Federal/State/ Other† | General Habitat Description  | Habitat: Present/Absent | Rationale  |
|---|----------------------------|------------------------------|--|-------------------------|--|
| <i>Poa diaboli</i>                                    | Diablo Canyon blue grass   | --/--/1B.2                   | Mesic sites on shale soils within chaparral cismontane woodland, coastal scrub, closed-cone coniferous forest.<br>Elevation: 120–400 meters<br>Blooming period: March–April  | Present                 | Suitable habitat within the survey area. Not observed during appropriately timed surveys.  |
| <i>Sanicula maritima</i>                              | Adobe sanicle              | --/SR/1B.1                   | Moist clay or ultramafic soils within meadows and seeps, valley and foothill grassland, chaparral, and coastal prairie.<br>Elevation: 30–240 meters<br>Blooming period: February–May.  | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.                          |
| <i>Scrophularia atrata</i>                            | Black-flowered figwort     | --/--/1B.2                   | Sand, diatomaceous shales, and soils derived from other parent material around swales and in sand dunes within closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, and riparian scrub.<br>Elevation: 10–500 meters<br>Blooming period: April–July. | Present                 | Suitable habitat within the survey area. Not observed during appropriately timed surveys.  |
| <i>Senecio aphanactis</i>                             | Chaparral ragwort          | --/--/2B.2                   | Alkaline flats and dry, rocky open areas within chaparral, cismontane woodland, and coastal scrub.<br>Elevation: 15–800 meters<br>Blooming period: February–May  | Present                 | Species observed in California sagebrush scrub (coastal scrub) along the southern edge of survey area, but not in similar habitat within the approximate development envelope. |
| <i>Streptanthus albidus</i><br>ssp. <i>peramoenus</i> | Most beautiful jewelflower | --/--/1B.2                   | Serpentine outcrops, ridges, and slopes within chaparral, valley and foothill grasslands, and cismontane woodlands.<br>Elevation: 95–1,000 meters<br>Blooming period: April–June   | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.                          |
| <i>Sulcaria isidiifera</i>                            | Splitting yarn lichen      | --/--/1B.1                   | On branches of oaks and shrubs in old growth coastal chaparral scrub.<br>Elevation: 20–30 meters<br>Blooming period May–June.  | Absent                  | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |

### Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name                   | Common Name                                  | Status Federal/State/ Other† | General Habitat Description   | Habitat: Present/ Absent | Rationale  |
|-----------------------------------|--|------------------------------|---|--------------------------|--|
| <i>Trifolium hydrophilum</i>      | Saline clover                                | --/--/1B.2                   | Mesic, alkaline sites within marshes and swamps, valley and foothill grassland, and vernal pools.<br>Elevation: 0–300 meters<br>Blooming period April–June  | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during appropriately timed surveys.  |
| <b>ANIMALS</b>                    |  |                              |   |                          |  |
| <b>Insects</b>                    |  |                              |   |                          |  |
| <i>Danaus plexippus</i>           | Monarch butterfly (Overwintering population) | --/--/--                     | Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.  | Absent                   | An individual monarch butterfly was observed flying over the survey area. Although individual trees preferred by monarchs are within the survey area, there are no areas suitable for roosting within the survey area.           |
| <b>Crustaceans</b>                |  |                              |   |                          |  |
| <i>Branchinecta lynchi</i>        | Vernal pool fairy shrimp                     | FT/--/--                     | Vernal pools and grasslands where they inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.   | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |
| <b>Mollusks</b>                   |  |                              |   |                          |  |
| <i>Helminthoglypta walkeriana</i> | Morro shoulderband (=banded dune) snail      | FE/--/--                     | Restricted to the coastal strand in the immediate vicinity of Morro Bay. Usually found in moist areas under bushes or vegetative duff in coastal dune and scrub communities and maritime chaparral. Associated with <i>Ericameria</i> , <i>Eriogonum</i> , <i>Lupinus</i> , <i>Salvia</i> , and iceplant.               | Absent                   | No suitable habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |
| <b>Fish</b>                       |  |                              |   |                          |  |
| <i>Eucyclogobius newberryi</i>    | Tidewater goby                               | FE/--/SSC                    | Shallow brackish lagoons and low-gradient stream reaches with aquatic vegetation and areas of open bottom. Most common in the upstream portions of lagoons with barrier beaches. Generally not found in lagoons with open mouths and strong tidal flow. Favors low salinity, generally less than 10 parts per thousand. | Absent                   | No aquatic or suitable habitat within the survey area. However, suitable habitat (also USFWS-Designated Re-Proposed Critical Habitat) occurs in San Luis Obispo Creek just east of the survey area. Not observed during surveys. |

### Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name                    | Common Name                                    | Status Federal/State/ Other† | General Habitat Description   | Habitat: Present/ Absent | Rationale   |
|------------------------------------|--|------------------------------|---|--------------------------|---|
| <i>Oncorhynchus mykiss irideus</i> | Steelhead – south/central California coast DPS | FT/--/SSC                    | Coastal rivers and streams with cold water and deep (3 feet or greater) pools and runs; for spawning requires clean, silt-free gravel (0.5–5 inches) beds, with clear-flowing water and shaded stream reaches. Spawning adults occur during winter high water. Adults are wide-ranging in offshore and inshore pelagic marine waters. | Absent                   | No aquatic or suitable habitat suitable habitat within the survey area. However, suitable habitat (also USFWS-Designated Final Critical Habitat) occurs in San Luis Obispo Creek just east of the survey area. Not observed during surveys.   |
| <b>Amphibians</b>                  |  |                              |   |                          |   |
| <i>Rana boylei</i>                 | Foothill yellow-legged frog                    | --/--/SSC                    | Partly shaded, shallow streams and riffles with a rocky substrate in lowlands, foothills, and mountains. Needs at least some cobble-sized substrate for egg laying.   | Present                  | Marginally suitable habitat within the Wild Cherry Canyon portion of the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.   |
| <i>Rana draytonii</i>              | California red-legged frog                     | FT/--/SSC                    | Creeks, ponds, and marshes. Prefers aquatic habitat with deep (2 feet or deeper) areas with undercut banks, emergent aquatic vegetation, and bank cover. Does not occur in salt marshes or wetland with brackish water.   | Present                  | Aquatic or suitable habitat within the survey area (Wild Cherry Canyon), but not the approximate development envelope. Suitable habitat and occurrence records occur in San Luis Obispo Creek just east of the survey area. A Habitat Assessment was conducted within the survey area (focusing on Wild Cherry Canyon area). Majority of survey area (and approximate development envelope) is not suitable habitat, but may be temporarily used by dispersing adults. Species was not observed during surveys. |
| <i>Taricha torosa</i>              | Coast Range newt                               | --/--/SSC                    | Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 kilometer to breed in ponds, reservoirs, and slow-moving streams.  | Present                  | Suitable habitat within the Wild Cherry Canyon portion of the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |

### Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area

| Scientific Name                 | Common Name            | Status Federal/State/ Other† | General Habitat Description   | Habitat: Present/ Absent | Rationale   |
|---------------------------------|------------------------|------------------------------|---|--------------------------|---|
| <b>Reptiles</b>                 |                        |                              |   |                          |   |
| <i>Anniella pulchra nigra</i>   | Black legless lizard   | --/--/SSC                    | Sandy soil, leaf litter/dunes within beach dunes and chaparral where bush lupine and mock heather are often dominant plants. Moist soil and deep humus are important habitat elements.  | Absent                   | Marginally suitable habitat but not suitable conditions (soils are too dry and compact) within scrub and woodland habitats within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |
| <i>Anniella pulchra pulchra</i> | Silvery legless lizard | --/--/SSC                    | Moist loose loamy soil with plant cover and under leaf litter. Found in beach dunes, chaparral, foothill woodlands, desert scrub, sandy washes, and stream terraces.  | Absent                   | Marginally suitable habitat but not suitable conditions (soils are too dry and compact) within scrub and woodland habitats within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |
| <i>Emys marmorata</i>           | Western pond turtle    | --/--/SSC                    | Occurs in a wide variety of freshwater habitats with deep water, including slow-flowing pools of rivers and streams, ponds, and marshes. Prefers aquatic habitats with a muddy or sand bottom, but also occurs in areas with a rocky or cobble bottom. Generally most common in areas with abundant basking habitat such as fallen trees. Must have access to upland areas with friable soils for egg laying. | Present                  | Suitable habitat within the Wild Cherry Canyon portion of the survey area. Reported as occurring at the Avila Beach Golf Course. Not observed during surveys.   |
| <i>Phrynosoma blainvillii</i>   | coast horned lizard    | --/--/SSC                    | Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Habitat types include chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert washes, pinon and juniper woodlands, riparian scrub, riparian woodlands, and valley and foothill grasslands.   | Absent                   | Suitable habitat but not suitable conditions (soils are too dry and compact) within scrub and grassland habitats within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys. Harvester ants, the species' primary food source, were also not observed within the survey area. |

**Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area**

| Scientific Name                         | Common Name                  | Status Federal/State/ Other† | General Habitat Description   | Habitat: Present/ Absent | Rationale   |
|---|------------------------------|------------------------------|---|--------------------------|---|
| <b>Birds</b>                            |                              |                              |   |                          |   |
| <i>Charadrius alexandrinus nivosus</i>  | Western snowy plover         | FT/--/SSC                    | Sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.   | Absent                   | No suitable nesting or foraging habitat within the survey area. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.   |
| <i>Coccyzus americanus occidentalis</i> | Western yellow-billed cuckoo | FT/SE/--                     | Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.   | Absent                   | No suitable nesting or foraging habitat within the survey area. Riparian forest of San Luis Obispo Creek (occurrence record location) is well outside the survey area. Not observed during surveys.   |
| <i>Elanus leucurus</i>                  | White-tailed kite            | --/--/FP                     | Forages over grasslands, dry areas of marshes, road verges, and other open habitats. Nests in isolated trees and shrubs in grasslands, pasturelands and savannahs.  | Present                  | Suitable foraging habitat within scrub and grassland habitats within the survey area, but not much suitable nesting habitat. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |
| <i>Falco peregrinus anatum</i>          | American peregrine falcon    | D/D/FP                       | Inhabits open areas of grasslands, scrublands, woodlands, forests, and wetlands. Commonly found along rocky coastlines with cliffs for nesting. Also nests on large rock outcrops and buildings.                          | Present                  | Suitable foraging habitat within the survey area, but no suitable nesting habitat. No CNDDDB occurrence records within 10 miles away of the survey area. Not observed during surveys; however, personal observations on several occasions within 1 mile of the survey area. |
| <i>Lanius ludovicianus</i>              | loggerhead shrike            | --/--/SSC                    | Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting within broken pinyon-juniper, Joshua tree, and riparian woodlands; savannahs; desert oases; scrub, and washes. | Present                  | Suitable foraging habitat within scrub and grassland habitats within the survey area, but marginally suitable nesting habitat. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |
| <b>Mammals</b>                          |                              |                              |   |                          |   |
| <i>Antrozous pallidus</i>               | Pallid bat                   | --/--/SSC                    | Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Very sensitive to disturbance of roosting sites.  | Present                  | Suitable foraging habitat within the survey area, but no suitable roosting habitat. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.   |

**Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area**

| Scientific Name  | Common Name              | Status Federal/State/ Other† | General Habitat Description  | Habitat: Present/ Absent | Rationale   |
|--|--------------------------|------------------------------|--|--------------------------|---|
| <i>Corynorhinus townsendii</i>                                 | Townsend's big-eared bat | --/SCT/SSC                   | Most common in mesic sites in a wide variety of habitats throughout California. Roosts in the open, hanging from walls and ceilings in caves, mines, or abandoned buildings. Extremely sensitive to human disturbance. | Present                  | Suitable foraging habitat within the survey area, but no suitable roosting habitat. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.   |
| <i>Dipodomys heermanni morroensis</i>                          | Morro Bay kangaroo rat   | FE/SE/FP                     | Coastal scrub on the south side of Morro Bay. Needs sandy soil, but not active dunes; prefers early seral stages.  | Absent                   | Coastal scrub habitat present, but not preferred sandy substrate. Survey area is beyond known range of species, which is considered extinct by some. No kangaroo rat burrows observed during surveys.   |
| <i>Eumops perotis californicus</i>                             | Western mastiff bat      | --/--/SSC                    | Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in cliff face crevices, high buildings, trees, and tunnels.                         | Present                  | Suitable foraging habitat within the survey area, but no suitable roosting habitat. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.   |
| <i>Neotoma lepida intermedia</i><br>[ <i>Neotoma bryanti</i> ] | San Diego desert woodrat | --/--/SSC                    | Coastal scrub of Central and Southern California. Moderate to dense canopies preferred. Particularly abundant in rock outcrops and rocky cliffs and slopes.  | Absent                   | Marginally suitable habitat present, but no rocky outcrops, cliffs, or slopes. A woodrat midden, likely belonging to <i>Neotoma macrotis</i> , was observed in coast live oak woodland. This midden is not anticipated to be removed for the project. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys. |
| <i>Taxidea taxus</i>   | American Badger          | --/--/SSC                    | Open undeveloped country supporting grasslands, open woodlands, deserts, and valleys with abundant populations of prey (e.g., ground squirrels, pocket gophers, voles).  | Present                  | Suitable habitat present, but no badger burrows observed during surveys. Closest CNDDDB occurrence record more than 5 miles away. Not observed during surveys.  |

**Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area**

| Scientific Name                     | Common Name | Status Federal/State/ Other† | General Habitat Description  | Habitat: Present/ Absent | Rationale  |
|-------------------------------------|-------------|------------------------------|--|--------------------------|--|
| <b>Natural Communities</b>          |             |                              |  |                          |  |
| Central Dune Scrub                  |             |                              | Restricted to coastal areas with stabilized back dunes, slopes, ridges, and flats. Vegetation consists of shrubs, subshrubs, and herbs less than 1 meter tall. Indicator species include <i>Lupinus chamissonis</i> .  | Absent                   | This community was not observed during the surveys.  |
| Central Foredunes                   |             |                              | Adjacent to shoreline with harsh environmental conditions such as strong, salt-laden breezes and salt water inundation. Characterized by plants that are prostrate; with deep taproots; fleshy roots, stems, and leaves; and leaves covered with thick mats of gray hairs. Often referred to as pioneer dune community or coastal strand | Absent                   | This community was not observed during the surveys.  |
| Central Maritime Chaparral          |             |                              | Associated with well-drained/dry soils. Exposed upland location with moderate to high cover. Typically dominated by <i>Arctostaphylos</i> species that develop into dense patches of vegetation.   | Absent                   | This community was not observed, and no <i>Arctostaphylos</i> species were identified on site.                                   |
| Coastal and Valley Freshwater Marsh |             |                              | Dominated by perennial, emergent, and tall monocots that often form closed canopies. Tend to be <i>Typha</i> dominated and permanently flooded with fresh water which results in deep peaty soils.   | Absent                   | This community was not observed during the surveys.  |
| Serpentine Bunchgrass               |             |                              | Associated with serpentine soils. Vegetation dominated by bunches of <i>Stipa pulchra</i> with other natives and introduced annuals. Often associated with ridgelines, slopes, and rock outcrops.  | Absent                   | This community was not observed. Although <i>Stipa pulchra</i> was identified within the survey area, serpentine soils were not. |

**Appendix B: Regionally Occurring Special-Status Species, and Critical Habitat Within 10 Miles of the Survey Area**

| Scientific Name              | Common Name | Status Federal/State/ Other† | General Habitat Description   | Habitat: Present/Absent | Rationale  |
|------------------------------|-------------|------------------------------|---|-------------------------|--|
| Valley Needlegrass Grassland |             |                              | Associated with fine textured/clay soils or moist, waterlogged soils. Vegetation dominated by bunches of <i>Stipa pulchra</i> with other natives and introduced annuals. Often associated with oak woodlands. | Absent                  | This community was not observed. Although <i>Stipa pulchra</i> was identified within the survey area, it does not occur in relatively high enough quantities to warrant membership for valley needlegrass grassland. |

† Status:

- Federal Endangered (FE)
- Federal Threatened (FT)
- Federal/State Delisted (D)
- State Endangered (SE)
- State Threatened (ST)

California Rare Plant Rank (1B, 2B)

- 1B = Rare, threatened or endangered in CA and elsewhere
- 2B = Rare, threatened or endangered in CA, but more common elsewhere
- .1 = seriously endangered; .2 = fairly endangered; .3 = not very endangered

State Rare (SR) (plants)

- California Species of Special Concern (SSC) (animal)
- California Fully Protected (FP) (animal)

DPS = Distinct Population Segment

USFWS = United States Fish and Wildlife Service

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**APPENDIX C**

**FLORAL AND FAUNAL COMPENDIA**

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## Non-Vascular and Vascular Plant Species Observed

The following non-vascular and vascular plant species were observed in the specified survey area by LSA biologists on January 28, April 23 and 24, May 11, and July 29, 2015.

\* Introduced species not native to California or the survey area

NCN = No common name

| Scientific Name  | Common Name                   |
|--|-------------------------------|
| <b>LICHENS</b>   |                               |
| <i>Acorospora contigua</i>                               | NCN                           |
| <i>Caloplaca</i> sp.                                     | NCN                           |
| <i>Cladonia fimbriata</i>                                | NCN                           |
| <i>Evernia prunastri</i>                                 | NCN                           |
| <i>Flavoparmelia caperata</i>                            | NCN                           |
| <i>Flavoparmelia</i> sp.                                 | NCN                           |
| <i>Lecanora</i> sp.                                      | NCN                           |
| <i>Lecidea</i> sp.                                       | NCN                           |
| <i>Lepraria</i> sp.                                      | NCN                           |
| <i>Niebla cephalota</i>                                  | NCN                           |
| <i>Ochrolechia</i> sp.                                   | NCN                           |
| <i>Parmotrema perlatum</i>                               | NCN                           |
| <i>Parmotrema dilatatum</i>                              | NCN                           |
| <i>Peltula euploca</i>                                   | NCN                           |
| <i>Ramalina leptocarpha</i>                              | NCN                           |
| <i>Ramalina menziesii</i>                                | NCN                           |
| <i>Ramalina subleptocarpha</i>                           | NCN                           |
| <i>Ramalina dilacerata</i>                               | NCN                           |
| <b>FERNS</b>   |                               |
| <b>Dryopteridaceae</b>                                   | <b>Wood Fern Family</b>       |
| <i>Dryopteris arguta</i>                                 | Coastal wood fern             |
| <b>Pteridaceae</b>                                       | <b>Laurel Family</b>          |
| <i>Pellaea mucronata</i> var. <i>mucronata</i>           | Bird's foot cliff-brake       |
| <i>Pentagramma triangularis</i> ssp. <i>triangularis</i> | Goldenback fern               |
| <b>GYMNOSPERMS</b>                                       |                               |
| <b>Cupressaceae</b>                                      | <b>Cypress Family</b>         |
| <i>Hesperocyparis macrocarpa</i> *                       | Monterey cypress (landscaped) |
| <b>Pinaceae</b>  | <b>Pine Family</b>            |
| <i>Pinus</i> sp.*  | Pine (landscaped)             |
| <b>EUDICOTS</b>  |                               |
| <b>Adoxaceae</b>   | <b>Muskroot Family</b>        |
| <i>Sambucus nigra</i> ssp. <i>caerulea</i>               | Blue elderberry               |
| <b>Aizoaceae</b>   | <b>Iceplant Family</b>        |
| <i>Carpobrotus edulis</i> *                              | Hottentot-fig                 |
| <b>Anacardiaceae</b>                                     | <b>Sumac Family</b>           |
| <i>Schinus molle</i> *                                   | Peruvian pepper tree          |
| <i>Toxicodendron diversilobum</i>                        | Poison oak                    |

| Scientific Name  | Common Name             |
|--|-------------------------|
| <b>Apiaceae</b>  | <b>Carrot Family</b>    |
| <i>Anthriscus caucalis</i> *                                 | Bur chervil             |
| <i>Conium maculatum</i> *                                    | Poison hemlock          |
| <i>Foeniculum vulgare</i> *                                  | Sweet fennel            |
| <i>Sanicula arguta</i>                                       | Sharp-toothed sanicle   |
| <i>Sanicula crassicaulis</i>                                 | Pacific sanicle         |
| <b>Asclepiadaceae</b>  | <b>Milkweed Family</b>  |
| <i>Asclepias fascicularis</i>                                | Narrow-leaf milkweed    |
| <b>Asteraceae</b>  | <b>Sunflower Family</b> |
| <i>Ageratina adenophora</i> *                                | Sticky snakeroot        |
| <i>Ambrosia psilostachya</i>                                 | Western ragweed         |
| <i>Artemisia californica</i>                                 | California sagebrush    |
| <i>Baccharis pilularis</i>                                   | Coyote brush            |
| <i>Carduus pycnocephalus</i> *                               | Italian thistle         |
| <i>Centaurea melitensis</i> *                                | Tocalote                |
| <i>Corethrogyne filaginifolia</i> var. <i>californica</i>    | California aster        |
| <i>Erigeron karvinskianus</i> *                              | Santa Barbara daisy     |
| <i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i> | Golden yarrow           |
| <i>Gamochaeta ustulata</i>                                   | Featherweed             |
| <i>Hedynois cretica</i> *                                    | Crete hedynois          |
| <i>Heterotheca grandiflora</i>                               | Telegraph weed          |
| <i>Helminthotheca echioides</i> *                            | Bristly ox-tongue       |
| <i>Hypochaeris glabra</i> *                                  | Smooth cat's-ear        |
| <i>Isocoma menziesii</i> var. <i>vernonioides</i>            | Coastal goldenbush      |
| <i>Lactuca serriola</i> *                                    | Prickly lettuce         |
| <i>Logfia gallica</i> *                                      | Narrowleaf cottonrose   |
| <i>Madia sativa</i>  | Coast tarweed           |
| <i>Matricaria discoidea</i> *                                | Pineapple weed          |
| <i>Osteospermum</i> sp.*                                     | African daisy           |
| <i>Pseudognaphalium biolettii</i>                            | Bicolored cudweed       |
| <i>Pseudognaphalium californicum</i>                         | California everlasting  |
| <i>Pseudognaphalium luteoalbum</i> *                         | Jersey cudweed          |
| <i>Senecio aphanactis</i>                                    | Chaparral ragwort       |
| <i>Senecio vulgaris</i> *                                    | Common groundsel        |
| <i>Silybum marianum</i> *                                    | Milk thistle            |
| <i>Solidago velutina</i> ssp. <i>californica</i>             | Oreja de liebre         |
| <i>Sonchus asper</i> ssp. <i>asper</i> *                     | Prickly sow thistle     |
| <i>Stephanomeria virgata</i> ssp. <i>virgata</i>             | Tall wreath-plant       |
| <i>Taraxacum officinale</i> *                                | Common dandelion        |
| <b>Boraginaceae</b>  | <b>Mustard Family</b>   |
| <i>Amsinckia menziesii</i> var. <i>intermedia</i>            | Common fiddleneck       |
| <i>Pholistoma auritum</i> var. <i>auritum</i>                | Fiesta flower           |
| <b>Brassicaceae</b>  | <b>Mustard Family</b>   |
| <i>Brassica nigra</i> *                                      | Black mustard           |
| <i>Hirschfeldia incana</i> *                                 | Shortpod mustard        |
| <i>Lepidium nitidum</i> var. <i>nitidum</i>                  | Shining peppergrass     |
| <i>Sisymbrium orientale</i> *                                | Oriental hedge mustard  |
| <b>Cactaceae</b>   | <b>Cactus Family</b>    |
| <i>Opuntia ficus-indica</i> *                                | Mission prickly-pear    |

| Scientific Name                                       | Common Name                 |
|---|-----------------------------|
| <b>Caprifoliaceae</b>                                 | <b>Honeysuckle Family</b>   |
| <i>Lonicera japonica</i> *                            | Japanese honeysuckle        |
| <b>Caryophyllaceae</b>                                | <b>Pink Family</b>          |
| <i>Cerastium glomeratum</i>                           | Mouse-ear chickweed         |
| <i>Silene gallica</i> *                               | Windmill pink               |
| <i>Spergularia macrotheca</i> var. <i>macrotheca</i>  | Sticky sandspurry           |
| <i>Spergularia rubra</i> *                            | Red sandspurry              |
| <i>Stellaria media</i> *                              | Common chickweed            |
| <b>Chenopodiaceae</b>                                 | <b>Goosefoot Family</b>     |
| <i>Atriplex leucophylla</i>                           | Beach saltbush              |
| <i>Atriplex semibaccata</i> *                         | Australian saltbush         |
| <i>Atriplex watsonii</i>                              | Watson's saltbush           |
| <i>Chenopodium album</i> *                            | Lamb's quarters             |
| <i>Chenopodium macrospermum</i> *                     | Largeseed goosefoot         |
| <i>Chenopodium murale</i> *                           | Nettle-leaved goosefoot     |
| <b>Convolvulaceae</b>                                 | <b>Morning-Glory Family</b> |
| <i>Calystegia macrostegia</i> ssp. <i>cyclostegia</i> | Coast morning-glory         |
| <b>Cucurbitaceae</b>                                  | <b>Spurge Family</b>        |
| <i>Marah fabacea</i>                                  | California man-root         |
| <b>Dipsacaceae</b>                                    | <b>Teasel Family</b>        |
| <i>Dipsacus sativus</i> *                             | Teasel                      |
| <b>Euphorbiaceae</b>                                  | <b>Spurge Family</b>        |
| <i>Croton setigerus</i>                               | Doveweed                    |
| <i>Euphorbia peplus</i> *                             | Petty spurge                |
| <b>Fabaceae</b>                                       | <b>Legume Family</b>        |
| <i>Acmispon glaber</i>                                | Deerweed                    |
| <i>Acmispon strigosus</i>                             | Bishop lotus                |
| <i>Lupinus bicolor</i>                                | Miniature lupine            |
| <i>Lupinus hirsutissimus</i>                          | Stinging lupine             |
| <i>Lupinus succulentus</i>                            | Arroyo lupine               |
| <i>Lupinus truncatus</i>                              | Collar lupine               |
| <i>Medicago polymorpha</i> *                          | Bur-clover                  |
| <i>Melilotus indicus</i> *                            | Sourclover                  |
| <i>Senna multiglandulosa</i> *                        | Glandular cassia            |
| <i>Trifolium hirtum</i> *                             | Rose clover                 |
| <i>Vicia villosa</i> *                                | Winter vetch                |
| <b>Fagaceae</b>                                       | <b>Beech Family</b>         |
| <i>Quercus agrifolia</i> var. <i>agrifolia</i>        | Coast live oak              |
| <b>Geraniaceae</b>                                    | <b>Geranium Family</b>      |
| <i>Erodium botrys</i> *                               | Long-beaked filaree         |
| <i>Erodium cicutarium</i> *                           | Redstem filaree             |
| <i>Erodium moschatum</i> *                            | Whitestem filaree           |
| <i>Geranium dissectum</i> *                           | Cutleaf geranium            |
| <b>Lamiaceae</b>                                      | <b>Mint Family</b>          |
| <i>Marrubium vulgare</i> *                            | Horehound                   |
| <i>Salvia</i> sp.*                                    | Sage (landscaped)           |
| <i>Salvia mellifera</i>                               | Black sage                  |
| <i>Salvia spathacea</i>                               | Hummingbird sage            |
| <i>Stachys bullata</i>                                | California hedge-nettle     |

| Scientific Name                                     | Common Name                    |
|---|--------------------------------|
| <b>Malvaceae</b>                                    | <b>Mallow Family</b>           |
| <i>Malva parviflora</i> *                           | Cheeseweed                     |
| <b>Montiaceae</b>                                   | <b>Miner's Lettuce Family</b>  |
| <i>Calandrinia ciliata</i>                          | Red maids                      |
| <i>Claytonia perfoliata</i> var. <i>perfoliata</i>  | Miner's lettuce                |
| <b>Myrsinaceae</b>                                  | <b>Myrsine Family</b>          |
| <i>Lysimachia arvensis</i> *                        | Scarlet pimpernel              |
| <b>Myrtaceae</b>                                    | <b>Myrtle Family</b>           |
| <i>Callistemon</i> sp.*                             | Bottlebrush                    |
| <b>Oleaceae</b>                                     | <b>Olive Family</b>            |
| <i>Fraxinus</i> sp.*                                | Ash                            |
| <b>Onagraceae</b>                                   | <b>Evening-primrose Family</b> |
| <i>Epilobium brachycarpum</i>                       | Autumn willowherb              |
| <i>Epilobium canum</i>                              | California fuchsia             |
| <b>Oxalidaceae</b>                                  | <b>Oxalis Family</b>           |
| <i>Oxalis pes-caprae</i>                            | Bermuda buttercup              |
| <b>Papaveraceae</b>                                 | <b>Poppy Family</b>            |
| <i>Eschscholzia californica</i>                     | California poppy               |
| <b>Phymaceae</b>                                    | <b>Lopseed Family</b>          |
| <i>Mimulus aurantiacus</i> var. <i>aurantiacus</i>  | Bush monkey flower             |
| <b>Plantaginaceae</b>                               | <b>Plantain Family</b>         |
| <i>Plantago erecta</i>                              | Foothill plantain              |
| <i>Plantago lanceolata</i> *                        | English plantain               |
| <b>Polygonaceae</b>                                 | <b>Buckwheat Family</b>        |
| <i>Eriogonum fasciculatum</i>                       | California buckwheat           |
| <i>Eriogonum parvifolium</i>                        | Seacliff wild buckwheat        |
| <i>Polygonum aviculare</i> ssp. <i>depressum</i> *  | Prostrate knotweed             |
| <i>Rumex acetosella</i> *                           | Sheep sorrel                   |
| <i>Rumex crispus</i> *                              | Curly dock                     |
| <i>Rumex pulcher</i> *                              | Fiddle dock                    |
| <b>Ranunculaceae</b>                                | <b>Buttercup Family</b>        |
| <i>Thalictrum fendleri</i> var. <i>polycarpum</i>   | Common meadow-rue              |
| <b>Rhamnaceae</b>                                   | <b>Buckthorn Family</b>        |
| <i>Frangula californica</i> ssp. <i>californica</i> | California coffeeberry         |
| <i>Rhamnus crocea</i>                               | Spiny redberry                 |
| <b>Rosaceae</b>                                     | <b>Rose Family</b>             |
| <i>Heteromeles arbutifolia</i>                      | Toyon                          |
| <i>Rosa californica</i>                             | California wild rose           |
| <i>Rubus ursinus</i>                                | California blackberry          |
| <b>Rubiaceae</b>                                    | <b>Madder Family</b>           |
| <i>Galium aparine</i>                               | Common bedstraw                |
| <i>Galium porrigens</i> var. <i>porrigens</i>       | Graceful bedstraw              |
| <b>Salicaceae</b>                                   | <b>Willow Family</b>           |
| <i>Salix lasiolepis</i>                             | Arroyo willow                  |
| <b>Scrophulariaceae</b>                             | <b>Figwort Family</b>          |
| <i>Myoporum laetum</i> *                            | Ngaio tree                     |
| <b>Solanaceae</b>                                   | <b>Nightshade Family</b>       |
| <i>Nicotiana glauca</i> *                           | Tree tobacco                   |
| <i>Solanum douglasii</i>                            | Douglas' nightshade            |

| Scientific Name  | Common Name                 |
|--|-----------------------------|
| <b>Ulmaceae</b>  | <b>Elm Family</b>           |
| <i>Ulmus pumila</i> *                                      | Siberian elm                |
| <b>Urticaceae</b>  | <b>Nettle Family</b>        |
| <i>Urtica dioica</i> ssp. <i>holosericea</i>               | Hoary nettle                |
| <b>Verbenaceae</b>   | <b>Vervain Family</b>       |
| <i>Verbena lasiostachys</i>                                | Western verbena             |
| <b>Viscaceae</b>   | <b>Mistletoe Family</b>     |
| <i>Phoradendron serotinum</i> ssp. <i>tomentosum</i>       | Oak mistletoe               |
| <b>MONOCOTS</b>  |                             |
| <b>Agavaceae</b>   | <b>Century Plant Family</b> |
| <i>Agave americana</i> *                                   | American century plant      |
| <b>Arecaceae</b>   | <b>Palm Family</b>          |
| <i>Syagrus romanzoffiana</i> *                             | Queen palm                  |
| <b>Asphodelaceae</b>                                       | <b>Asphodel Family</b>      |
| <i>Asphodelus fistulosus</i> *                             | Onionweed                   |
| <b>Juncaceae</b>   | <b>Rush Family</b>          |
| <i>Juncus patens</i>                                       | Spreading rush              |
| <b>Poaceae</b>   | <b>Grass Family</b>         |
| <i>Avena barbata</i> *                                     | Slender wild oat            |
| <i>Avena fatua</i> *                                       | Common wild oat             |
| <i>Brachypodium distachyon</i> *                           | Purple false brome          |
| <i>Bromus carinatus</i>                                    | California brome            |
| <i>Bromus diandrus</i> *                                   | Ripgut grass                |
| <i>Bromus hordeaceus</i> *                                 | Soft chess                  |
| <i>Bromus madritensis</i> ssp. <i>rubens</i> *             | Red brome                   |
| <i>Cynodon dactylon</i> *                                  | Bermuda grass               |
| <i>Distichlis spicata</i> *                                | Salt grass                  |
| <i>Festuca myuros</i> *                                    | Rat's tail fescue           |
| <i>Festuca perrenis</i> *                                  | Perennial ryegrass          |
| <i>Hordeum brachyantherum</i> ssp. <i>brachyantherum</i> * | Northern barley             |
| <i>Hordeum marinum</i> *                                   | Seaside barley              |
| <i>Hordeum murinum</i> *                                   | Foxtail barley              |
| <i>Lamarckia aurea</i> *                                   | Goldentop                   |
| <i>Leymus condensatus</i>                                  | Giant wild-rye              |
| <i>Melica imperfecta</i>                                   | Small-flowered melic        |
| <i>Stipa pulchra</i>                                       | Purple needlegrass          |
| <b>Themidaceae</b>   | <b>Brodiaea Family</b>      |
| <i>Dichelostemma capitatum</i> ssp. <i>capitatum</i>       | Wild hyacinth               |

## Animal Species Detected

The following list of conspicuous aerial insect (e.g., butterflies), amphibian, reptile, bird, and mammal species were seen, heard, or identified by the presence of tracks, scat, or other signs in the specified survey areas by LSA biologists on January 28, April 23 and 24, May 11, and July 29, 2015, as well as on September 7, 2018.

\*Introduced species not native to California

| Common Name                 | Scientific Name                            |
|-----------------------------|--|
| <b>Invertebrates</b>        |  |
| European honey bee*         | <i>Apis mellifera</i>                      |
| Common green darner         | <i>Anax junius</i>                         |
| Monarch butterfly           | <i>Danaus plexippus</i>                    |
| Western tiger swallowtail   | <i>Papilio rutulus</i>                     |
| <b>Amphibians</b>           |  |
| Sierra tree frog            | <i>Pseudacris sierra</i>                   |
| <b>Reptiles</b>             |  |
| California alligator lizard | <i>Elgaria multicarinata multicarinata</i> |
| Coast Range fence lizard    | <i>Sceloporus occidentalis bocourtii</i>   |
| <b>Birds</b>                |  |
| Canada goose                | <i>Branta canadensis</i>                   |
| Mallard                     | <i>Anas platyrhynchos</i>                  |
| California quail            | <i>Callipepla californica</i>              |
| Double-crested cormorant    | <i>Phalacrocorax auritus</i>               |
| Great blue heron            | <i>Ardea herodias</i>                      |
| Great egret                 | <i>Ardea alba</i>                          |
| Turkey vulture              | <i>Cathartes aura</i>                      |
| Osprey                      | <i>Pandion haliaetus</i>                   |
| Red-tailed hawk             | <i>Buteo jamaicensis</i>                   |
| Prairie falcon              | <i>Falco mexicanus</i>                     |
| American kestrel            | <i>Falco sparverius</i>                    |
| Western gull                | <i>Larus occidentalis</i>                  |
| Mourning dove               | <i>Zenaida macroura</i>                    |
| Greater roadrunner          | <i>Geococcyx californianus</i>             |
| Allen's hummingbird         | <i>Selasphorus sasin</i>                   |
| Anna's hummingbird          | <i>Calypte anna</i>                        |
| Acorn woodpecker            | <i>Melanerpes formicivorus</i>             |
| Nuttall's woodpecker        | <i>Picoides nuttallii</i>                  |
| Ash-throated flycatcher     | <i>Myiarchus cinerascens</i>               |
| Black phoebe                | <i>Sayornis nigricans</i>                  |
| Pacific slope flycatcher    | <i>Empidonax difficilis</i>                |
| Say's phoebe                | <i>Sayornis saya</i>                       |
| Western kingbird            | <i>Tyrannus verticalis</i>                 |
| Hutton's vireo              | <i>Vireo huttoni</i>                       |
| American crow               | <i>Corvus brachyrhynchos</i>               |
| Western scrub jay           | <i>Aphelocoma californica</i>              |
| Barn swallow                | <i>Hirundo rustica</i>                     |

| Common Name                | Scientific Name                 |
|----------------------------|---------------------------------|
| Cliff swallow              | <i>Petrochelidon pyrrhonota</i> |
| Oak titmouse               | <i>Baeolophus inornatus</i>     |
| Bushtit                    | <i>Psaltriparus minimus</i>     |
| Bewick's wren              | <i>Thryomanes bewickii</i>      |
| House wren                 | <i>Troglodytes aedon</i>        |
| Blue-gray gnatcatcher      | <i>Polioptila caerulea</i>      |
| Wrentit                    | <i>Chamaea fasciata</i>         |
| Western bluebird           | <i>Sialia mexicana</i>          |
| Hermit thrush              | <i>Catharus guttatus</i>        |
| American robin             | <i>Turdus migratorius</i>       |
| Varied thrush              | <i>Ixoreus naevius</i>          |
| California thrasher        | <i>Toxostoma redivivum</i>      |
| European starling*         | <i>Sturnus vulgaris</i>         |
| Cedar waxwing              | <i>Bombycilla cedrorum</i>      |
| Orange-crowned warbler     | <i>Vermivora celata</i>         |
| Yellow-rumped warbler      | <i>Setophaga coronata</i>       |
| Spotted towhee             | <i>Pipilo maculatus</i>         |
| California towhee          | <i>Melospiza crissalis</i>      |
| Golden-crowned sparrow     | <i>Zonotrichia atricapilla</i>  |
| Lark sparrow               | <i>Chondestes grammacus</i>     |
| Song sparrow               | <i>Melospiza melodia</i>        |
| White-crowned sparrow      | <i>Zonotrichia leucophrys</i>   |
| Dark-eyed junco            | <i>Junco hyemalis</i>           |
| Brewer's blackbird         | <i>Euphagus cyanocephalus</i>   |
| Red-winged blackbird       | <i>Agelaius phoeniceus</i>      |
| Hooded oriole              | <i>Icterus cucullatus</i>       |
| House finch                | <i>Carpodacus mexicanus</i>     |
| Lesser goldfinch           | <i>Carduelis psaltria</i>       |
| American goldfinch         | <i>Carduelis tristis</i>        |
| Wild turkey*               | <i>Meleagris gallopavo</i>      |
| <b>Mammals</b>             |                                 |
| California ground squirrel | <i>Spermophilus beecheyi</i>    |
| Botta's pocket gopher      | <i>Thomomys bottae</i>          |
| California vole            | <i>Microtus californicus</i>    |
| Dusky-footed woodrat       | <i>Neotoma fuscipes</i>         |
| Audubon's cottontail       | <i>Sylvilagus audubonii</i>     |
| Coyote                     | <i>Canis latrans</i>            |
| Mule deer                  | <i>Odocoileus hemionus</i>      |

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**APPENDIX D**

**CNDDDB ONLINE FIELD SURVEY FORM REPORT**

# CNDDDB Online Field Survey Form Report



California Natural Diversity Database  
Department of Fish and Wildlife  
1416 9th Street, Suite 1266  
Sacramento, CA 95814  
Fax: 916.324.0475  
Email: [cnddb@wildlife.ca.gov](mailto:cnddb@wildlife.ca.gov)  
[www.dfg.ca.gov/biogeodata/cnddb/](http://www.dfg.ca.gov/biogeodata/cnddb/)



Source code WIL15F0011  
Quad code 3512026  
Occ. no. \_\_\_\_\_  
EO index no. \_\_\_\_\_  
Map index no. \_\_\_\_\_

This data has been reported to the CNDDDB, but may not have been evaluated by the CNDDDB staff

Scientific name: *Senecio aphanactis*

Common name: *chaparral ragwort*

Date of field work: 05-11-2015

Comment about field work date(s):

Observer: *Matthew Willis*

Affiliation:

Address: 285 South St , San Luis Obispo, CA 93401

Email: [matthew.willis@lsa-assoc.com](mailto:matthew.willis@lsa-assoc.com)

Phone: (805) 782-0745

Other observers: *Timothy Milliken*

How identified:

Keyed in: *Jepson Manual*

Compared w/ specimen at:

Compared w/ image in:

By another person: *Timothy Milliken*

Other: *Confirmed by Dr. David Keil*

Identification explanation:

Identification confidence: *Very confident*

Species found: *Yes*

Total no. individuals: 30-40

Collection? *Yes*

Collection no.: *Matthew Willis*

Museum/Herbarium: *Hoover Herbarium*

## Plant Information

|            |              |             |             |
|------------|--------------|-------------|-------------|
| Phenology: | <u>100 %</u> | <u>90 %</u> | <u>10 %</u> |
|            | vegetative   | flowering   | fruiting    |

## Site Information

Habitat description: *Shale soil within California sagebrush scrub along top of coastal bluff. Associated with Isocoma menziesii, Artemisia californica, Acmispon glaber, Bromus spp., Brachypodium distachyon, Festuca perennis.*

Slope: *5 to 10%*

Land owner/manager: *Private*

Aspect: *south*

Site condition + population viability: *Good*

Immediate & surrounding land use: *Undeveloped rangeland adjacent to major roadway and hotel development*

Visible disturbances: *Some grazing*

Threats: *Development, grazing, erosion*

General comments:

Image URL: <https://nrm.dfg.ca.gov/fieldSurvey/File.ashx?id=1819>



| ID | County             | 24K Quadrangle  | Elev. (ft) | Latitude NAD83 | Longitude NAD83 | UTM E NAD83 | UTM N NAD83 | UTM Zone |
|----|--------------------|-----------------|------------|----------------|-----------------|-------------|-------------|----------|
|    | San Luis Obispo    | Pismo Beach     | 159        | 35.17887       | -120.74321      | 705504      | 3895213     | 10       |
| 1  | Public Land Survey | Feature Comment |            |                |                 |             |             |          |
|    | M T31S R11E 36     |                 |            |                |                 |             |             |          |

The mapped feature is accurate within: 5 m

Source of mapped feature: [CNDDDB online filed survey tool](#)

Mapping notes: [On top of coastal bluff](#)

Location/directions comments:

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Attachment(s): [Senecio\\_aphanactis.pdf](#); [IMG\\_4615.JPG](#); [IMG\\_4625.JPG](#), Photo of setting and habitat. Plant in foreground.

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**APPENDIX E**

**TREE INVENTORY REPORT**



CARLSBAD  
FRESNO  
IRVINE  
LOS ANGELES  
PALM SPRINGS  
POINT RICHMOND  
RIVERSIDE  
ROSEVILLE  
SAN LUIS OBISPO

Original: September 16, 2015  
Updated: March 7, 2018  
2<sup>nd</sup> Update: September 21, 2018

David Brown  
President  
SCM Avila Beach Partners, LLC  
115 W. Canon Perdido Street  
Santa Barbara, California 93101

Subject: The Cottages at Point San Luis Project: Tree Inventory Report

Dear Mr. Brown:

This Tree Inventory Report provides the results of a survey of trees associated with the proposed Cottages at Point San Luis Project (proposed project), including trees along all roads leading to the project site (original survey area). This report was updated in March 2018 to include an impact analysis relevant to an updated site plan dated February 2018. This report has since been updated to include an inventory of trees and impact analysis associated with (1) a new storm drain and several contemplated pedestrian footpath alternatives located to the west of the proposed project and (2) standard County Fire Department (CAL FIRE) fuel modification zones measured from the edge of all proposed occupied structures. These two project components fall partially within the “supplemental survey area,” which was assessed in September 2018.

## BACKGROUND

The proposed project is located on top of the bluffs north of Avila Beach Road, with access from Ana Bay Road to the east and Wild Cherry Canyon Road to the west (Figure 1; all figures are presented in Attachment A). Ana Bay Road intersects with Avila Beach Road and would provide site access near the existing San Luis Bay Inn. Wild Cherry Canyon Road was initially studied as a secondary access route to the proposed development and the trees located along this route are presented in this report; however, this route is no longer part of the proposed project and current site plans do not include any improvements in this area. As such, the majority of the trees presented in this report would not be directly affected by the proposed project. The project site is currently accessed via a gravel road off of Ana Bay Road. This road will provide access to the proposed project and will be widened to meet San Luis Obispo County (County) Public Works and Fire Department standards.

This tree inventory plan was prepared in order to satisfy Measure G of the County’s Master Development Plan Amendment.<sup>1</sup> LSA also referenced provisions and policies of the County’s Site

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<sup>1</sup> As identified in SWCA’s letter to Ryan Hostetter, County of San Luis Obispo; subject: Preliminary Application Review, Seaside Garden Cottages Project; dated: August 19, 2013.

Development Standards for trees<sup>2</sup> (Ordinance), the California Fire Code (CFC)<sup>3</sup> and CAL FIRE's San Luis Obispo County Fire Department's Standard 4: Access Roads and Driveways<sup>4</sup> (County fire regulations).

The original survey area included all trees within the approximate development envelope (building envelope) and a 100-foot corridor (50 feet on either side of the centerline) of the access roads as indicated by the black line on Figure 2. The supplemental survey area includes all areas between the building envelope and Wild Chery Canyon, as well as a buffer area north of the building envelope to account for potential fuel modification areas (refer to the green dashed line on Figure 2).

The precise designs of the proposed storm drain, utilities, pedestrian foot path located west of the building footprint, and fuel modification areas (refer to Figure 2) are subject to refinement, and the precise number of trees required to be trimmed or removed may change during final project design. Furthermore, it is difficult to definitively quantify all potential detrimental effects (based on draft project component designs) that often manifest over a period of many years following construction or development activities conducted near the root zones of individual trees. Sometimes the trees can adapt or recover, and other times they cannot. Therefore, while not identifying the extent of specific impacts to any particular tree, this tree inventory report uses a conservative approach to identify the extent to which individual trees may need to be removed, trimmed, and/or protected based on assumed impacts to maintain fire apparatus clearance, road maintenance, and the construction limits of the proposed project.

Prior to project development or issuance of a grading permit, a qualified arborist will review the trees that are within or immediately adjacent to the final project disturbance limits. An Oak Tree Impact and Mitigation Plan shall be prepared and implemented based on the arborist's review to compensate for all project-related impacts to oak trees. Measures to be included in the Oak Tree Impact and Mitigation Plan are outlined herein.

## METHODS

LSA certified arborist, Timothy Milliken (International Society of Arboriculture Certification #WE5539A), conducted the tree survey within the original survey area on May 25, 2015. Trees within the original survey area were mapped and assessed in the field. The individual surveyed trees in this area were assigned a number and mapped on an aerial photo of the site (Figure 3). A follow-up survey of the original survey area was conducted in September 2018 to map and assess eight oak trees located within and adjacent to the refined development envelope. Detailed tree data recorded in the original survey area are presented in Table B-1 of Attachment B.

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<sup>2</sup> County of San Luis Obispo Coastal Zone Land Use Ordinance, Title 23 of the County Code; Chapter 5 – Site Development Standards – Tree Removal (§23.05.060), Tree Removal Permit Required (§23.05.062), and Tree Removal Standards (§23.05.064).

<sup>3</sup> Section 503.2.1 of the California Fire Code.

<sup>4</sup> Standard 4 amends section 503.2.1 with additional County requirements that access roads shall: have a minimum road width of 24 feet, and provide a 10 foot fuel modification zone on each side of the road (road width + 10 feet on each side of the road).

On September 7, 2018, LSA Biologist Bo Gould conducted a tree survey within the supplemental survey area. Trees were mapped and assessed in the field. The individual surveyed trees in this area were assigned a number and mapped on an aerial photo of the site (Figure 4). Detailed tree data recorded in the supplemental survey area are presented in Table B-2 of Attachment B.

The County fire regulations combined with current project site plans provided the parameters upon which to categorize trees in the survey areas that may need trimming or removal.

### Tree Assessment

Trees were assessed individually in the field. The stand of mature coast live oak woodland located within the original survey area near the southeastern edge of the building envelope was identified as a collective resource and trees were not assessed individually. Similarly, not all trees within the mature coast live oak woodland to the northwest of building envelope were assessed individually as this area will be protected as a sensitive habitat area. All other trees within the survey areas were individually assessed according to species, trunk diameter at breast height (DBH; in inches as measured 4.5 feet above natural grade), and condition. If an individual tree had multiple trunks, the diameters of all the trunks were totaled. The health and structural condition of each tree was classified as follows:

- Good – Trees observed to be in good health and structure, with no outward sign of rot or disease, and may have potential for longevity on site;
- Fair – Trees observed to be in moderate health and/or have structural defects that can be corrected with proper tree care; or
- Poor – Trees observed to be in declining health or with significant structural defects that cannot be mitigated. Trees in this category are expected to continue to decline.

### Tree Ordinance

The tree ordinance lists the conditions upon which a tree removal permit might be required. Information collected during the tree assessment is sufficient to determine the need for a tree removal permit. All trees over 5 inches in DBH, with the exception of the groves of mature oak woodland to be protected in place (as described above), were assessed. Although no trees were tagged or otherwise marked in the field, each tree's location is indicated on the tree maps (Figures 3 and 4).

### County Fire Regulations

Trees adjacent to the access road were assessed for fire apparatus clearance per the dimensions provided in the County fire regulations (unobstructed vertical clearance of not less than 13 feet 6 inches and a minimum access road width of 24 feet with a 10 foot fuel modification zone on each side of the road). During this assessment, the arborist visually estimated the horizontal and vertical clearance of trees and their branches from the edges of the access road within the tree survey area. The results of this assessment provide the general location of trees that may need to be trimmed or removed in order to achieve the clearance mandated by County fire regulations. Note that coast live oak trees that fall within the identified fuel modification zones will likely not require clearance or

trimming, as this species is exceptionally fire resistant and the densities of the tree canopies within such areas are relatively sparse.

## RESULTS

### Original Survey Area

A total of 177 trees were assessed within the original survey area as summarized in Table 1 and depicted on Figure 3. In addition to the trees along the access roads, a small stand of mature coast live oak trees is present near the central survey area, north of the access road. This stand of coast live oak woodland was identified as a collective resource and the trees were not assessed individually as they will be protected in place (refer to Figure 3E). Eight trees located outside of this woodland are within or near the refined development boundaries, and these trees were assessed individually (refer to Trees 170-177 shown on Figure 3E and described in Table B-1). All tree species inventoried within in the original survey area are native to the region. These trees include toyon (*Heteromeles arbutifolia*), coast live oak (*Quercus agrifolia*), arroyo willow (*Salix lasiolepis*), and blue elderberry (*Sambucus nigra* subsp. *caerulea*). Toyon and blue elderberry are generally considered shrubs; however, this species can sometimes reach tree-like proportions such as on the project site. Attachment B contains the survey data on trees observed within the survey area including: tree ID number, species name (common and scientific), DBH, and notes.

**Table 1: Summary of Trees in the Original Survey Area**

| Tree Species   | Trees within Original Survey Area | Potential Impact |
|--|-----------------------------------|------------------|
| Toyon ( <i>Heteromeles arbutifolia</i> )                         | 3                                 | 3                |
| Coast live oak ( <i>Quercus agrifolia</i> )                      | 172                               | 18               |
| Arroyo willow ( <i>Salix lasiolepis</i> )                        | 1                                 | 1                |
| Blue elderberry ( <i>Sambucus nigra</i> subsp. <i>caerulea</i> ) | 1                                 | 1                |
| <b>Grand Total</b>   | <b>177</b>                        | <b>23</b>        |

### Potential Impacts

Approximately 17 trees were identified to have probable impacts related to the access road (refer to Figure 3D and Table B-1), and approximately 6 trees have potential to be removed within the development limits (refer to Figure 3E and Table B-1). Trees along the access road may be impacted in order to provide fire apparatus clearance as mandated by County fire regulations (minimum road width of 24 feet with a 10 foot fuel modification zone on each side of the road, and unobstructed vertical clearance of 13 feet 6 inches). These impacts are exempt from County tree removal permit requirements. Depending on the size of construction related equipment (i.e., scrapers, dump trucks, etc.) and the final development limits, several trees will likely require additional trimming or removal beyond the County fire code regulations.

The removal of one or more individual trees may be needed to accommodate required access road improvements for the proposed project, and up to 6 trees will likely be removed within the development limits based on the current site plans. The proposed project will likely require a tree

removal permit due to the removal of individual trees required for construction related reasons (i.e., retaining wall construction, placement of proposed structures) which are not associated with improvements mandated by County fire regulations, which as noted above, are exempt from County tree removal permit requirements. No loss of oak woodland acreage is anticipated within the original survey area.

**Trees To Protect**

A stand of coast live oak woodland is present within the central survey area just north of the proposed access road. The limit of the wooded area is designated by an outline of the canopy on Figure 3E. These trees are not planned to be impacted and should be protected as outlined in the section below, titled *Tree Protection Measures*.

**Supplemental Survey Area**

A total of 106 coast live oak trees were surveyed within the supplemental survey area, as summarized in Table 2 and depicted on Figure 4. In addition to a small grove of oak trees to the northeast of the building footprint and the oak trees between the proposed building footprint and Wild Cherry Canyon, a woodland consisting of mature coast live oak trees is present to the northwest of the proposed building footprint. This stand contains many mature heritage oak tree specimens and was identified as a collective resource; not all trees were assessed individually as they will be protected in place. No other native or nonnative trees were observed in the supplemental survey area.

**Table 2: Summary of Trees in the Supplemental Survey Area**

| Tree Species                                | Trees within Supplemental Survey Area | Potential Impact <sup>1</sup> |                       |                       |
|---|---------------------------------------|-------------------------------|-----------------------|-----------------------|
|   |                                       | Pathway Alternative 1         | Pathway Alternative 2 | Pathway Alternative 3 |
| Coast live oak ( <i>Quercus agrifolia</i> ) | 106                                   | 7                             | 18                    | 8                     |

<sup>1</sup>Coast live oak trees within the preliminary fuel modification zones, as shown on Figure 4, are not anticipated to be impacted. The numbers of trees presented are those that may need to be trimmed or removed for construction of the storm drain and each identified pathway alternatives. The final designs of these features are subject to landowner approval and refinement.

**Potential Impacts**

Between 7 and 18 mapped coast live oak trees were identified to have probable impacts related to the preliminary storm drain alignment and each identified pathway alternative. Trees within these impact areas may be affected by direct trimming or removal, or construction activities (e.g., trenching, excavation, or slope contouring) within the root zones. A total of five trees are located within the identified storm drain alignment, so between 2 and 13 of the trees within the proposed impact limits are associated with the pathway alternatives.

While several additional trees are located within the preliminary fuel modification zones, these coast live oak trees are not anticipated to require clearance or trimming as this species is

exceptionally fire resistant and the densities of the tree canopies within such areas are relatively sparse.

### ***Trees To Protect***

A woodland consisting of mature coast live oak trees is present to the northwest of the proposed building footprint. This stand contains many mature heritage oak tree specimens and was identified as a collective resource; not all trees were assessed individually as they will be protected in place (refer to Figure 4, sheet 3, trees 83-106). In addition, coast live oak trees that fall outside of the final storm drain and pathway alignments should be protected as outlined in the section below titled *Tree Protection Measures*.

## **CONCLUSIONS**

The proposed project may require direct impacts to up to 41 trees associated with access road clearance trimming and the storm drain and contemplated pedestrian footpath alignments located to the west of the building envelope. With the exception of Pathway Design Alternative 2, direct removal of oak trees would be associated with individual trees rather than oak woodlands. All major stands of mature oak woodland within the survey areas would be protected in place.

Prior to development, the general contractor and the project arborist will determine (based on the size of construction equipment, nature of work, and refined limits of the project) which trees will need trimming and/or removal. An Oak Tree Impact and Mitigation Plan shall be prepared and implemented, based on the arborist's review, to compensate for all project-related impacts to oak trees. Measures to be included in the Oak Tree Impact and Mitigation Plan are outlined herein.

To off-set impacts related to potential tree removal or damage to individual oak trees, LSA recommends on-site tree replacement in accordance with current County policies. Because portions of the project parcel boundary may not be suitable for oak tree planting, off-site planting and/or preservation may be warranted.

The tree planting should be monitored for successful establishment of installed trees. Establishment will be considered successful if 50 percent of the numbers of total plantings (if required by the County) have become established, with no significant intervention<sup>5</sup> for at least two years.

## **TREE PROTECTION MEASURES**

The following standard recommendations are made to protect retained trees during project construction.

**Tree Avoidance.** The proposed project should avoid impacts to as many trees as feasible. The

---

<sup>5</sup> Significant intervention in the context of this performance standard is considered to include new plantings and on-going regular in excess of watering necessary to establish a planting (e.g., twice monthly or more frequently through the dry season). Periodic watering to assist established trees during drought or excessive heat is not considered to meet the "substantial intervention" standard for this project.

proposed project plans should incorporate placement of tree protection fencing outside of the drip line of protected trees (as depicted on Figure 3E). Preserved trees on the project site should be avoided during the construction phase by following best management practices as outlined in the following paragraphs.

**Tree Maintenance during Construction, Root Zones.** Tree roots often extend far beyond the canopy dripline. Excavation work within the dripline of avoided trees shall not be allowed.

**Tree Protection Fencing.** Prior to the start of construction, Tree Protection Fencing (TPF) should be installed around the stands of coast live oak woodland and individual oak trees in proximity to ground disturbance areas. The TPF should be maintained during the entire development process to prevent direct damage to trees and their growing environment. The TPF should consist of blaze orange barrier fencing supported by metal “T bar” fence posts. The TPF should be placed at a distance that is at or outside of the drip lines of avoided trees. The TPF should be installed as part of the site preparation before construction or tree removal/trimming begins and should be installed under the supervision of a qualified arborist. The TPF should not be altered in any way that would increase the encroachment on the avoided trees during construction activities.

**Use of Heavy Equipment.** Heavy machinery should not be allowed to operate (excavation, grading, drainage and leveling) or park within the drip line of avoided trees unless approved by a qualified arborist.

**Storage of Construction Materials and Debris.** Fill materials should not be placed against the trunks of avoided trees. Disposal or depositing of oil, gasoline, chemicals or other harmful materials within the drip line is prohibited. Fueling should also take place outside of and away from the TPF.

**Incidental Damage to Protected Trees.** The attachment of wires, signs, and ropes to any protected tree is strictly prohibited. Workers may be allowed to rest under trees, but they must not injure trees by any means.

**Trimming.** All pruning of protected trees shall be performed by a licensed contractor familiar with International Society of Arboriculture pruning guidelines and shall comply with the guidelines established by the International Society of Arboriculture; Best Management Practices; Tree Pruning and any special conditions as determined by a certified arborist. A certified arborist shall coordinate all activities involving protected trees.

## SUMMARY

- A total of 283 trees were individually assessed within the survey areas;
- The project may require trimming or removal of individual trees, but is not anticipated to adversely affect oak woodland habitat;
- Approximately 17 trees adjacent to the proposed access road were identified as having the potential to be impacted for fire apparatus clearance or during construction (including trimming and removal);

- Between 7 and 18 mapped coast live oak trees were identified as having the potential to be impacted by the preliminary storm drain alignment and each identified pathway alternative.
- Up to 6 mapped coast live oak trees within the approximate development limits have potential to be removed during construction activities.
- Precise tree impacts will be identified and quantified during a pre-construction arborist survey and meeting with the general contractor/engineer.
- A tree removal permit is likely to be required from the County due to construction-related tree impacts.
- All stands of coast live oak woodland in proximity to the development limits shall be protected during construction with a tree protection zone marked by tree protection fencing.
- The County’s Coastal Zone Land Ordinance and Local Coastal Program policies require revegetation plans for development projects with impacts to trees and native vegetation within the coastal zone; impacted native trees should be replaced at a minimum ratio of 1:1 and the revegetation effort should be monitored to ensure consistency with the County and Local Coastal Program policies;
- Recommended mitigation for removal of native trees includes the planting and maintaining (until established) trees on site as follows or otherwise required by County;
  - 1:1 minimum replacement ratio of one tree planted for each tree removed (plant the same species as those removed). Higher ratios are warranted for the removal of heritage oak trees (36 inches DBH or greater, as required by the County). The survival of replacement trees should be monitored for successful establishment.

LSA appreciates the opportunity to provide this Tree Inventory Report to you, and we are available to answer questions regarding it if needed. Please feel free to contact us if you have questions or comments.

Sincerely,

**LSA ASSOCIATES, INC.**



Timothy Milliken  
International Society of Arboriculture (ISA)  
Certified Arborist WE-5539A



Bo Gould  
Biologist

Attachment A: Figures

Figure 1: Regional and Project Location

Figure 2: Project Overview Map

Figure 3: Tree Survey Map – Original Survey Area

Figure 4: Tree Survey Map – Supplemental Survey Area

Attachment B: Tree Data Tables

**ATTACHMENT A**  
**FIGURES**



FIGURE 1

LSA

LEGEND

 Overall Survey Area



0 1000 2000  
FEET

SOURCE: USGS 7.5' Quad - Pismo Beach (1994)

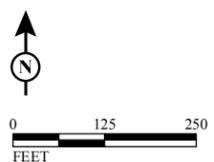
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*The Cottages  
at Point San Luis  
Project Location*



FIGURE 2

LSA



LEGEND

- Original Survey Area (35.70 acres)
- Approximate Project Parcel Boundary (22.20 acres)
- Temporary Impact Area (0.55 acres)
- Approximate Development Boundary (6.78 acres)
- Roadway Improvement Footprint (1.65 acres)

- Supplemental Survey Area (15.76 ac)
- Proposed Storm Drain\*
- Pathway Design Alternative 1\*
- Pathway Design Alternative 2\*
- Pathway Design Alternative 3\*

- Preliminary Fuel Modification Zones \*\*
- Clearing Zone - 30 ft from structures
  - Thinning Zone - 100 ft from structures

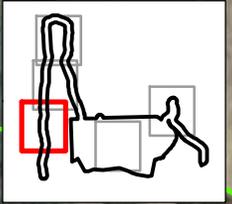
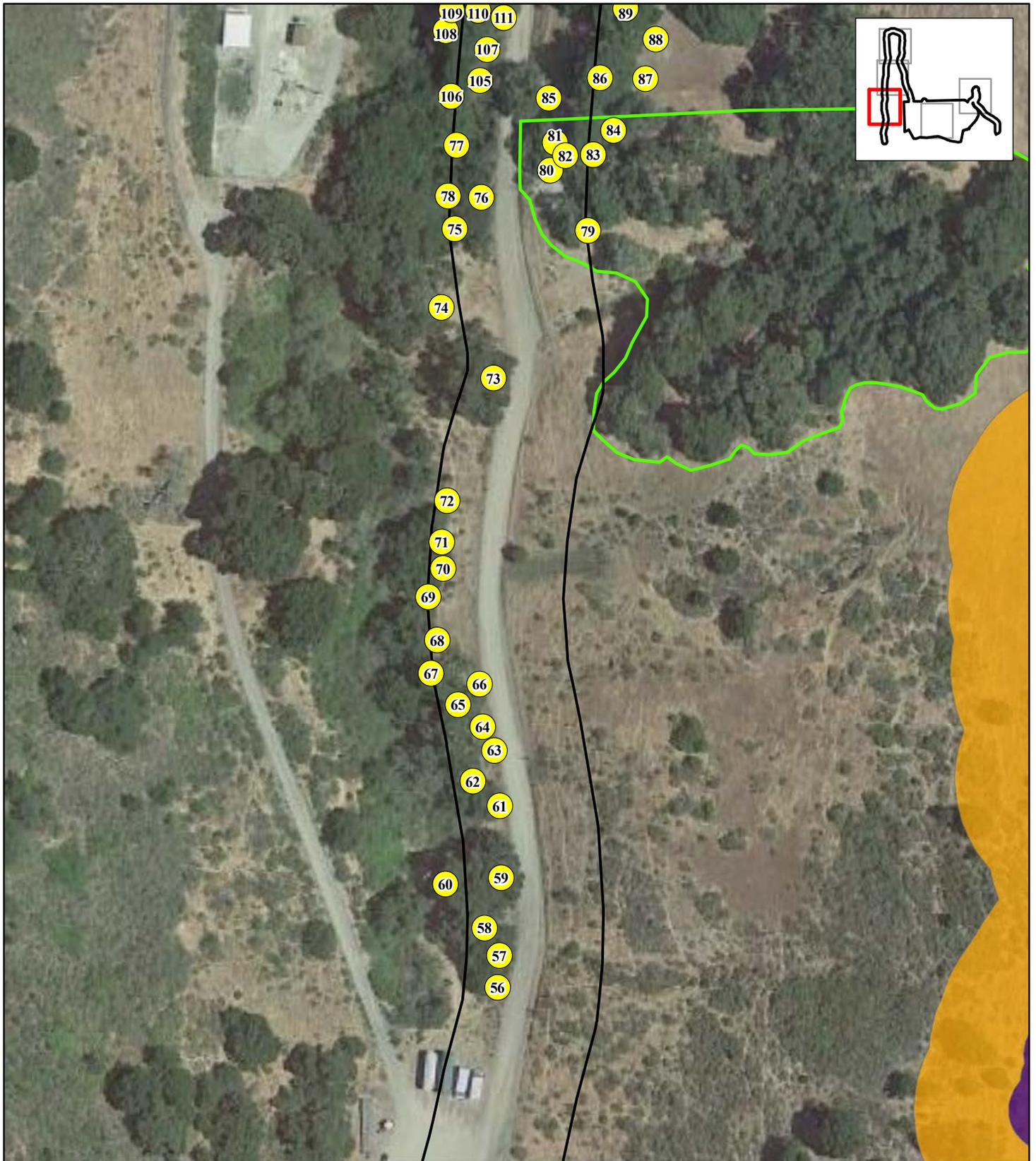
\*\* Features shown are approximations based on topographic and aerial measurements. This figure depicts standard CAL FIRE fuel modification buffers measured from the edges of the proposed building footprint.

\*Final design is subject to landowner approval and refinement.

SOURCE: Google (2017), Appleton Partners, LLP (2017)

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*The Cottages  
at Point San Luis*  
Project Overview Map



LSA

LEGEND

- Tree Protection Zone
- Original Survey Area (35.70 acres)
- Trees

Preliminary Fuel Modification Zones \*\*

- Clearing Zone - 30 ft from structures
- Thinning Zone - 100 ft from structures

\*\* Features shown are approximations based on topographic and aerial measurements. This figure depicts standard CAL FIRE fuel modification buffers measured from the edges of the proposed building footprint.



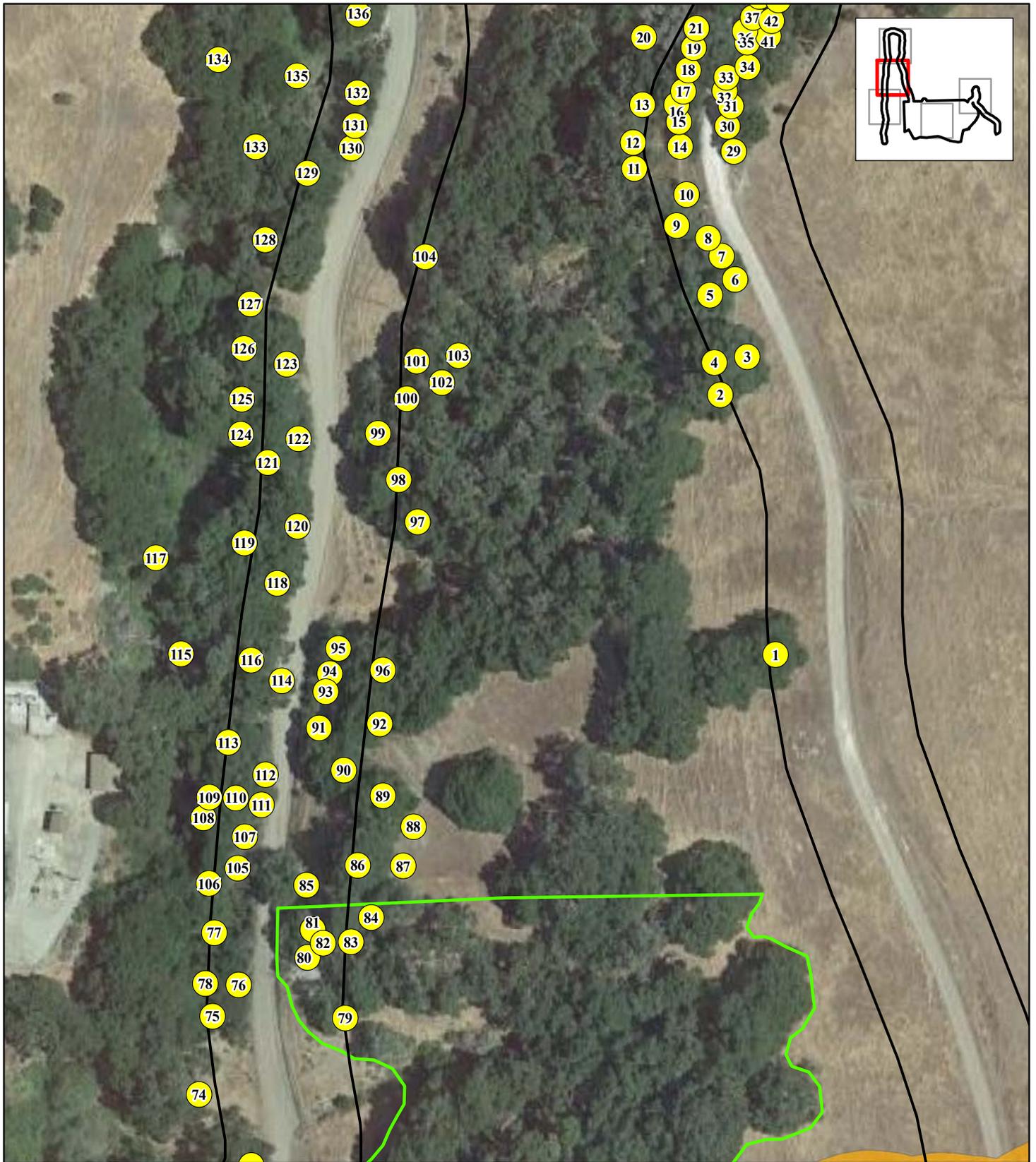
SOURCE: Google (2017), ALTA (2014)

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FIGURE 3A

*The Cottages  
at Point San Luis*

Tree Survey Map  
Original Survey Area



LSA

LEGEND

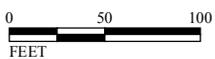
- Tree Protection Zone
- Original Survey Area (35.70 acres)
- Trees

Preliminary Fuel Modification Zones \*\*

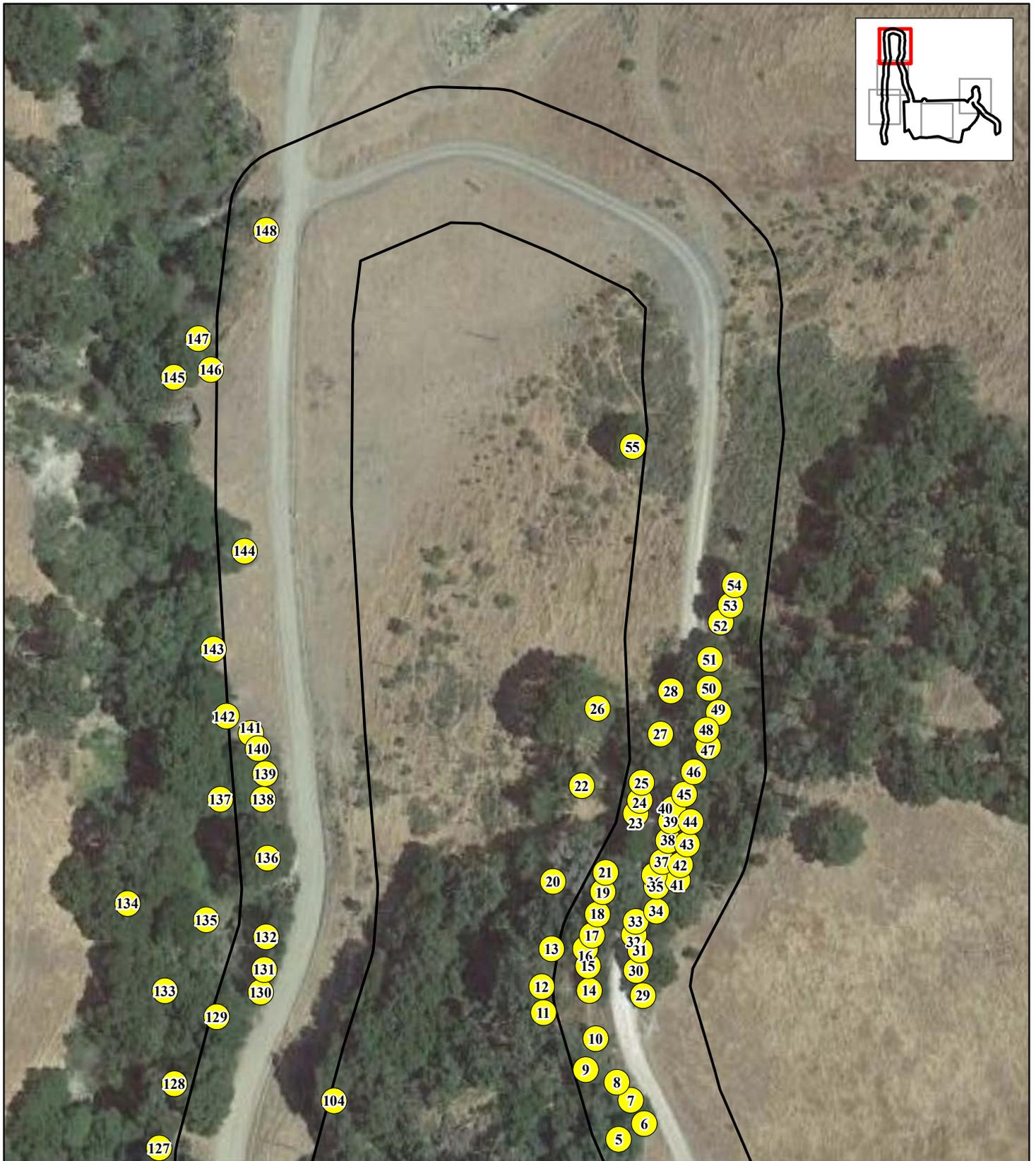
- Thinning Zone - 100 ft from structures

\*\* Features shown are approximations based on topographic and aerial measurements. This figure depicts standard CAL FIRE fuel modification buffers measured from the edges of the proposed building footprint.

FIGURE 3B



*The Cottages  
 at Point San Luis*  
 Tree Survey Map  
 Original Survey Area



LSA

LEGEND

- Original Survey Area (35.70 acres)
- Trees



SOURCE: Google (2017), ALTA (2014)  
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FIGURE 3C

*The Cottages  
 at Point San Luis*  
 Tree Survey Map  
 Original Survey Area



LSA

LEGEND

-  Approximate Project Parcel Boundary (22.2 acres)
-  Development Limits (8.43 acres)
-  Original Survey Area (35.70 acres)
-  Trees



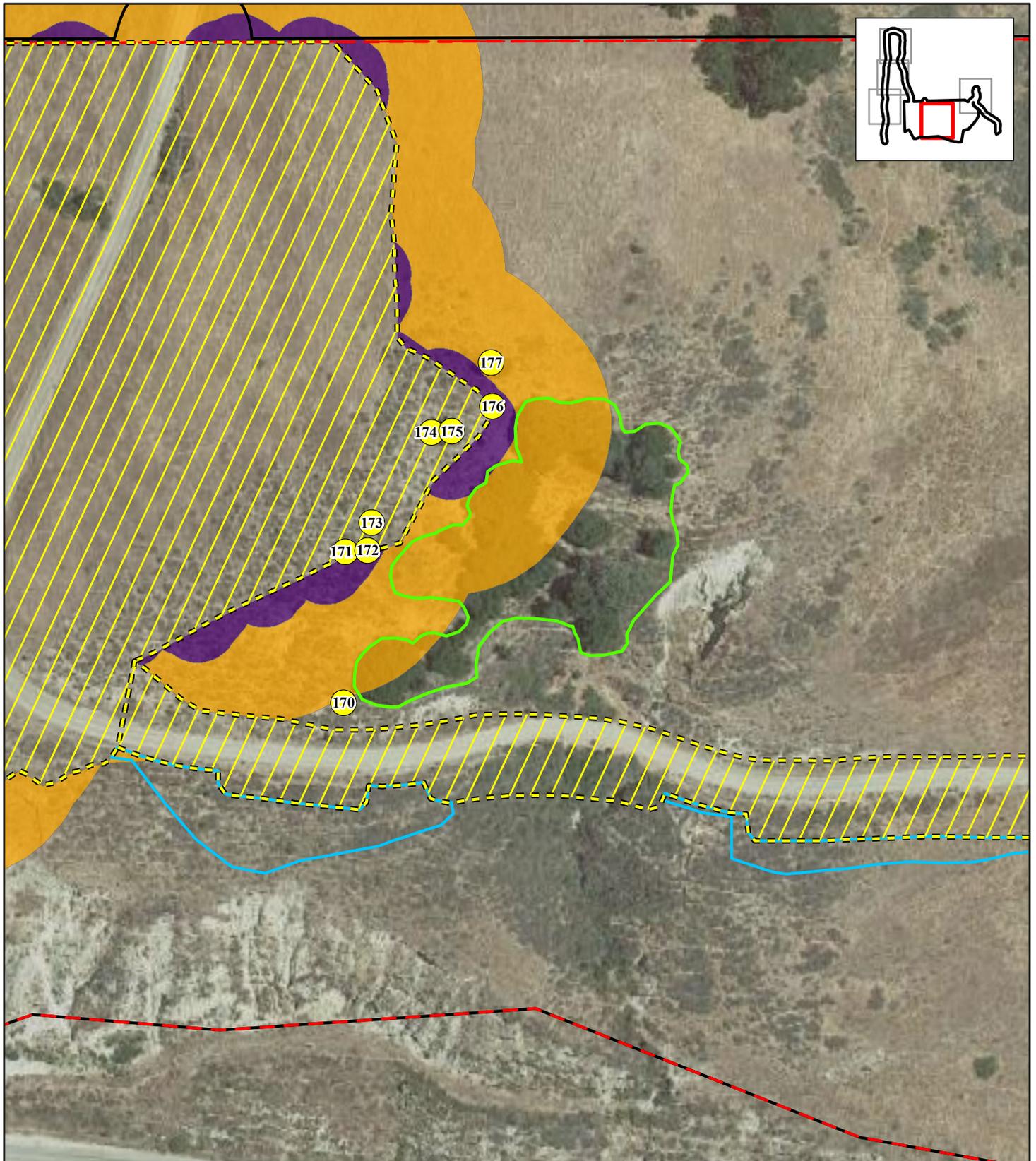
SOURCE: Google (2017), ALTA (2014)

F:\SOM1601\GIS\MXD\TreeSurvey.mxd (9/19/2018)

FIGURE 3D

*The Cottages  
at Point San Luis*

Tree Survey Map  
Original Survey Area



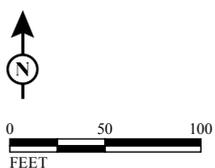
LSA

FIGURE 3E

LEGEND

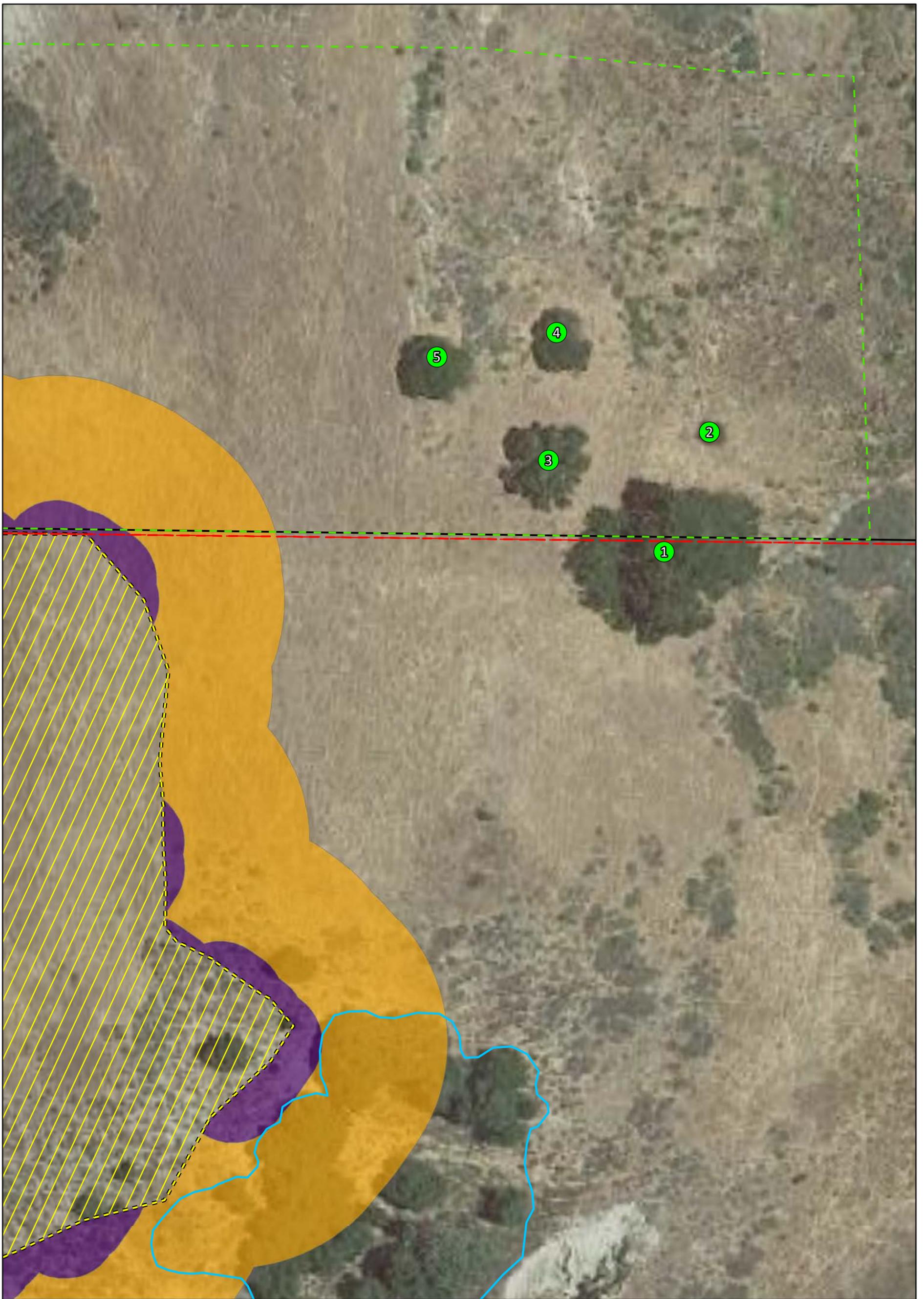
- Approximate Project Parcel Boundary (22.2 acres)
- Tree Protection Zone
- Development Limits (8.43 acres)
- Original Survey Area (35.70 acres)
- Temporary Impact Area (0.55 acres)
- Trees
- Preliminary Fuel Modification Zones \*\***
- Clearing Zone - 30 ft from structures
- Thinning Zone - 100 ft from structures

\*\* Features shown are approximations based on topographic and aerial measurements. This figure depicts standard CAL FIRE fuel modification buffers measured from the edges of the proposed building footprint.



SOURCE: Google (2017), ALTA (2014)  
 F:\SOM1601\GIS\MXD\TreeSurvey.mxd (9/20/2018)

*The Cottages  
 at Point San Luis*  
 Tree Survey Map  
 Original Survey Area





LSA

LEGEND

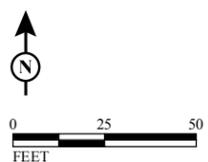
- Trees
  - Approximate Project Parcel Boundary (22.2 acres)
  - Development Limits (8.43 acres)
  - Original Survey Area (35.70 acres)
- Note: Refer to Figure 3 for Trees within Original Survey Area

- Supplemental Survey Area (15.76 ac)
  - Proposed Storm Drain\*
  - Pathway Design Alternative 1\*
  - Pathway Design Alternative 2\*
  - Pathway Design Alternative 3\*
- \*Final design is subject to landowner approval and refinement.

Preliminary Fuel Modification Zones \*\*

- Clearing Zone - 30 ft from structures
- Thinning Zone - 100 ft from structures

\*\* Features shown are approximations based on topographic and aerial measurements. This figure depicts standard CAL FIRE fuel modification buffers measured from the edges of the proposed building footprint.

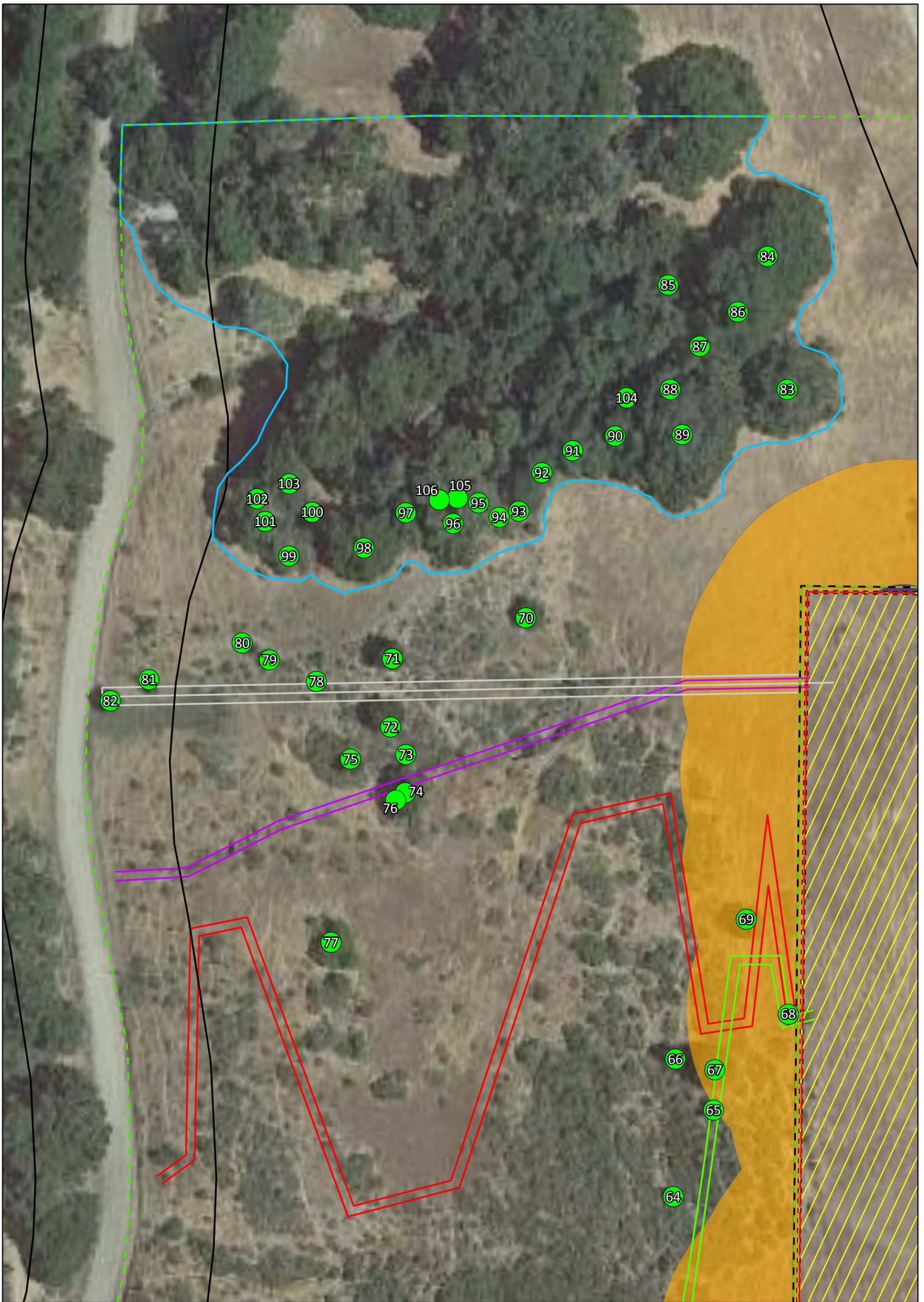


SOURCE: Google (2017)

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FIGURE 4  
Page 2 of 3

*The Cottages  
at Point San Luis*  
Tree Survey Map  
Supplemental Survey Area



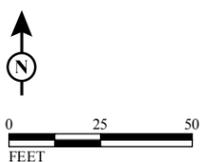
LSA

LEGEND

- Trees
  - Approximate Project Parcel Boundary (22.2 acres)
  - Tree Protection Zone
  - Development Limits (8.43 acres)
  - Original Survey Area (35.70 acres)
- Note: Refer to Figure 3 for Trees within Original Survey Area

- Supplemental Survey Area (15.76 ac)
  - Proposed Storm Drain\*
  - Pathway Design Alternative 1\*
  - Pathway Design Alternative 2\*
  - Pathway Design Alternative 3\*
- \*Final design is subject to landowner approval and refinement.

- Preliminary Fuel Modification Zones \*\*
- Clearing Zone - 30 ft from structures
  - Thinning Zone - 100 ft from structures
- \*\* Features shown are approximations based on topographic and aerial measurements. This figure depicts standard CAL FIRE fuel modification buffers measured from the edges of the proposed building footprint.



SOURCE: Google (2017)

I:\SOM1601\GIS\MXD\SupplementalTreeSurvey.mxd (9/19/2018)

FIGURE 4  
Page 3 of 3

*The Cottages  
at Point San Luis*  
Tree Survey Map  
Supplemental Survey Area

**ATTACHMENT B**  
**DATA FOR TREES SURVEYED FOR THE COTTAGES AT POINT SAN LUIS PROJECT**

**Table B-1: Detailed Data for Trees Surveyed in the Original Survey Area for the Cottages at Point San Luis Project**

| Tree # | Common Name<br>( <i>Species Name</i> )         | Diameter<br>(inches) | Condition | Notes |
|--------|--|----------------------|-----------|-------|
| 1      | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 54                   | Good      |       |
| 2      | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 3      | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 48                   | Poor      |       |
| 4      | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |       |
| 5      | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 100                  | Good      |       |
| 6      | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |       |
| 7      | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 16                   | Good      |       |
| 8      | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 9      | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 10     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Fair      |       |
| 11     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 12                   | Fair      |       |
| 12     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |       |
| 13     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 52                   | Good      |       |
| 14     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |       |
| 15     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |       |
| 16     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 17     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 18     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 19     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 20     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 150                  | Good      |       |
| 21     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 16                   | Good      |       |
| 22     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 52                   | Good      |       |
| 23     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 24     | Coast live oak                                 | 10                   | Good      |       |

| Tree # | Common Name<br>(Species Name)                | Diameter<br>(inches) | Condition | Notes |
|--------|--|----------------------|-----------|-------|
|        | <i>(Quercus agrifolia)</i>                   |                      |           |       |
| 25     | Coast live oak<br><i>(Quercus agrifolia)</i> | 14                   | Good      |       |
| 26     | Coast live oak<br><i>(Quercus agrifolia)</i> | 100                  | Good      |       |
| 27     | Coast live oak<br><i>(Quercus agrifolia)</i> | 36                   | Fair      |       |
| 28     | Coast live oak<br><i>(Quercus agrifolia)</i> | 28                   | Fair      |       |
| 29     | Coast live oak<br><i>(Quercus agrifolia)</i> | 48                   | Good      |       |
| 30     | Coast live oak<br><i>(Quercus agrifolia)</i> | 36                   | Good      |       |
| 31     | Coast live oak<br><i>(Quercus agrifolia)</i> | 36                   | Good      |       |
| 32     | Coast live oak<br><i>(Quercus agrifolia)</i> | 36                   | Fair      |       |
| 33     | Coast live oak<br><i>(Quercus agrifolia)</i> | 24                   | Good      |       |
| 34     | Coast live oak<br><i>(Quercus agrifolia)</i> | 58                   | Good      |       |
| 35     | Coast live oak<br><i>(Quercus agrifolia)</i> | 32                   | Good      |       |
| 36     | Coast live oak<br><i>(Quercus agrifolia)</i> | 6                    | Good      |       |
| 37     | Coast live oak<br><i>(Quercus agrifolia)</i> | 9                    | Good      |       |
| 38     | Coast live oak<br><i>(Quercus agrifolia)</i> | 12                   | Good      |       |
| 39     | Coast live oak<br><i>(Quercus agrifolia)</i> | 9                    | Good      |       |
| 40     | Coast live oak<br><i>(Quercus agrifolia)</i> | 14                   | Good      |       |
| 41     | Coast live oak<br><i>(Quercus agrifolia)</i> | 48                   | Good      |       |
| 42     | Coast live oak<br><i>(Quercus agrifolia)</i> | 18                   | Good      |       |
| 43     | Coast live oak<br><i>(Quercus agrifolia)</i> | 12                   | Good      |       |
| 44     | Coast live oak<br><i>(Quercus agrifolia)</i> | 12                   | Good      |       |
| 45     | Coast live oak<br><i>(Quercus agrifolia)</i> | 24                   | Fair      |       |
| 46     | Coast live oak<br><i>(Quercus agrifolia)</i> | 100                  | Good      |       |
| 47     | Coast live oak<br><i>(Quercus agrifolia)</i> | 48                   | Good      |       |
| 48     | Coast live oak<br><i>(Quercus agrifolia)</i> | 36                   | Good      |       |

| Tree # | Common Name<br>(Species Name)                  | Diameter<br>(inches) | Condition | Notes |
|--------|--|----------------------|-----------|-------|
| 49     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 32                   | Fair      |       |
| 50     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 32                   | Good      |       |
| 51     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 52     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 46                   | Good      |       |
| 53     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 54     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 12                   | Good      |       |
| 55     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 6                    | Good      |       |
| 56     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |       |
| 57     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 72                   | Good      |       |
| 58     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 48                   | Good      |       |
| 59     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 48                   | Good      |       |
| 60     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 48                   | Good      |       |
| 61     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 62     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 63     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 100                  | Good      |       |
| 64     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 65     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 66     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 67     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 68     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 48                   | Good      |       |
| 69     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 70     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 12                   | Good      |       |
| 71     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 72     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |       |
| 73     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 60                   | Good      |       |
| 74     | Coast live oak                                 | 96                   | Good      |       |

| Tree # | Common Name<br>(Species Name)                  | Diameter<br>(inches) | Condition | Notes |
|--------|--|----------------------|-----------|-------|
|        | ( <i>Quercus agrifolia</i> )                   |                      |           |       |
| 75     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 76     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 56                   | Good      |       |
| 77     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 78     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 79     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 96                   | Good      |       |
| 80     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 6                    | Good      |       |
| 81     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 82     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 60                   | Good      |       |
| 83     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 84     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 60                   | Fair      |       |
| 85     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 45                   | Good      |       |
| 86     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 87     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 60                   | Good      |       |
| 88     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |       |
| 89     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 52                   | Good      |       |
| 90     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 100                  | Good      |       |
| 91     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 6                    | Good      |       |
| 92     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 48                   | Good      |       |
| 93     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 100                  | Good      |       |
| 94     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 6                    | Good      |       |
| 95     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |       |
| 96     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |       |
| 97     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 98     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |       |
| 99     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |

| Tree # | Common Name<br>(Species Name)                  | Diameter<br>(inches) | Condition | Notes |
|--------|--|----------------------|-----------|-------|
| 100    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |       |
| 101    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Fair      |       |
| 102    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 72                   | Poor      |       |
| 103    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 72                   | Fair      |       |
| 104    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 96                   | Good      |       |
| 105    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 6                    | Good      |       |
| 106    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 107    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |       |
| 108    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 109    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 12                   | Good      |       |
| 110    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 12                   | Good      |       |
| 111    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |       |
| 112    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 48                   | Good      |       |
| 113    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 114    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 115    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 36                   | Good      |       |
| 116    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 12                   | Good      |       |
| 117    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 60                   | Good      |       |
| 118    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 75                   | Good      |       |
| 119    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 120    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 32                   | Good      |       |
| 121    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 122    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |       |
| 123    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |       |
| 124    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 32                   | Good      |       |

| Tree # | Common Name<br>(Species Name)                  | Diameter<br>(inches) | Condition | Notes                             |
|--------|--|----------------------|-----------|-----------------------------------|
| 125    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |                                   |
| 126    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |                                   |
| 127    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |                                   |
| 128    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |                                   |
| 129    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |                                   |
| 130    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 6                    | Good      |                                   |
| 131    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 6                    | Good      |                                   |
| 132    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 6                    | Good      |                                   |
| 133    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 60                   | Good      |                                   |
| 134    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 100                  | Good      |                                   |
| 135    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 48                   | Good      |                                   |
| 136    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 100                  | Good      |                                   |
| 137    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 48                   | Good      |                                   |
| 138    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |                                   |
| 139    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 12                   | Good      |                                   |
| 140    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |                                   |
| 141    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |                                   |
| 142    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 96                   | Good      |                                   |
| 143    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |                                   |
| 144    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |                                   |
| 145    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      |                                   |
| 146    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |                                   |
| 147    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      |                                   |
| 148    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 60                   | Poor      | Old snag                          |
| 149    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 24                   | Good      | Tree may need clearance trimming. |
| 150    | Coast live oak                                 | 36                   | Good      | Tree may need clearance trimming. |

| Tree # | Common Name (Species Name)  | Diameter (inches) | Condition | Notes   |
|--------|---|-------------------|-----------|---|
|        | ( <i>Quercus agrifolia</i> )  |                   |           |   |
| 151    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 10                | Good      | Tree may need clearance trimming.   |
| 152    | Blue elderberry<br>( <i>Sambucus nigra</i> subsp. <i>caerulea</i> ) | 24                | Good      | Tree may need clearance trimming.   |
| 153    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 9                 | Good      | Tree may need clearance trimming.   |
| 154    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 12                | Good      | Tree may need clearance trimming.   |
| 155    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 12                | Good      | Tree may need clearance trimming.   |
| 156    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 10                | Good      | Tree may need clearance trimming.   |
| 157    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 16                | Good      | Tree may need clearance trimming.   |
| 158    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 6                 | Good      |   |
| 159    | Toyon<br>( <i>Heteromeles arbutifolia</i> )                         | 10                | Good      | Tree may need clearance trimming.   |
| 160    | Arroyo willow<br>( <i>Salix lasiolepis</i> )                        | 6                 | Good      | Tree may need clearance trimming.   |
| 161    | Toyon<br>( <i>Heteromeles arbutifolia</i> )                         | 6                 | Good      | Tree may need clearance trimming.   |
| 162    | Toyon<br>( <i>Heteromeles arbutifolia</i> )                         | 6                 | Good      | Tree may need clearance trimming.   |
| 163    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 6                 | Good      | Tree may need clearance trimming.   |
| 164    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 9                 | Good      | Tree may need clearance trimming.   |
| 165    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 12                | Good      |   |
| 166    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 61                | Good      | Tree may need clearance trimming.   |
| 167    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 12                | Good      | Tree may need clearance trimming.   |
| 168    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 10                | Good      |   |
| 169    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 10                | Good      |   |
| 170    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 10                | Good      | Surveyed September 2018.  |
| 171    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 13                | Fair      | Surveyed September 2018; several large fissures on trunk and branches. Within development footprint; may require removal. |
| 172    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 7                 | Good      | Surveyed September 2018; Within development footprint; may require removal.   |
| 173    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 27                | Good      | Surveyed September 2018; Within development footprint; may require removal.   |
| 174    | Coast live oak<br>( <i>Quercus agrifolia</i> )                      | 13                | Good      | Surveyed September 2018; Within development footprint; may require removal.   |
| 175    | Coast live oak  | 36                | Fair      | Surveyed September 2018; several large  |

| Tree # | Common Name (Species Name)                  | Diameter (inches) | Condition | Notes   |
|--------|---|-------------------|-----------|---|
|        | ( <i>Quercus agrifolia</i> )                |                   |           | fissures on trunk and branches. Within development footprint; may require removal.            |
| 176    | Coast live oak ( <i>Quercus agrifolia</i> ) | 14                | Good      | Surveyed September 2018. Near edge of development footprint; may require trimming or removal. |
| 177    | Coast live oak ( <i>Quercus agrifolia</i> ) | 17                | Good      | Surveyed September 2018.  |

Note: Trees that fall within the fuel modification areas are not anticipated to be affected.

**Table B-2: Detailed Data for Trees Surveyed in the Supplemental Survey Area for the Cottages at Point San Luis Project**

| Tree # | Common Name (Species Name)                  | Diameter (inches) | Condition | Notes                    |
|--------|---|-------------------|-----------|--------------------------|
| 1      | Coast live oak ( <i>Quercus agrifolia</i> ) | 122               | Good      |                          |
| 2      | Coast live oak ( <i>Quercus agrifolia</i> ) | 18                | Good      |                          |
| 3      | Coast live oak ( <i>Quercus agrifolia</i> ) | 30                | Good      |                          |
| 4      | Coast live oak ( <i>Quercus agrifolia</i> ) | 29                | Good      |                          |
| 5      | Coast live oak ( <i>Quercus agrifolia</i> ) | 115               | Good      |                          |
| 6      | Coast live oak ( <i>Quercus agrifolia</i> ) | 103               | Good      |                          |
| 7      | Coast live oak ( <i>Quercus agrifolia</i> ) | 4                 | Good      |                          |
| 8      | Coast live oak ( <i>Quercus agrifolia</i> ) | 15                | Good      |                          |
| 9      | Coast live oak ( <i>Quercus agrifolia</i> ) | 4                 | Good      |                          |
| 10     | Coast live oak ( <i>Quercus agrifolia</i> ) | 4                 | Good      |                          |
| 11     | Coast live oak ( <i>Quercus agrifolia</i> ) | 4                 | Good      |                          |
| 12     | Coast live oak ( <i>Quercus agrifolia</i> ) | 4                 | Good      |                          |
| 13     | Coast live oak ( <i>Quercus agrifolia</i> ) | 6                 | Good      |                          |
| 14     | Coast live oak ( <i>Quercus agrifolia</i> ) | 76                | Poor      | Large cracks on branches |
| 15     | Coast live oak ( <i>Quercus agrifolia</i> ) | 38                | Good      |                          |
| 16     | Coast live oak ( <i>Quercus agrifolia</i> ) | 8                 | Good      |                          |
| 17     | Coast live oak ( <i>Quercus agrifolia</i> ) | 8                 | Good      |                          |
| 18     | Coast live oak                              | 8                 | Good      |                          |

| Tree # | Common Name<br>(Species Name)                | Diameter<br>(inches) | Condition | Notes  |
|--------|--|----------------------|-----------|--|
|        | <i>(Quercus agrifolia)</i>                   |                      |           |  |
| 19     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 20     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 21     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 22     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 23     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 24     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 25     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 26     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 27     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 28     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 29     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 30     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |
| 31     | Coast live oak<br><i>(Quercus agrifolia)</i> | 65                   | Good      |  |
| 32     | Coast live oak<br><i>(Quercus agrifolia)</i> | 13                   | Good      |  |
| 33     | Coast live oak<br><i>(Quercus agrifolia)</i> | 13                   | Good      |  |
| 34     | Coast live oak<br><i>(Quercus agrifolia)</i> | 13                   | Good      |  |
| 35     | Coast live oak<br><i>(Quercus agrifolia)</i> | 13                   | Good      |  |
| 36     | Coast live oak<br><i>(Quercus agrifolia)</i> | 18                   | Good      |  |
| 37     | Coast live oak<br><i>(Quercus agrifolia)</i> | 4                    | Good      |  |
| 38     | Coast live oak<br><i>(Quercus agrifolia)</i> | 29                   | Good      |  |
| 39     | Coast live oak<br><i>(Quercus agrifolia)</i> | 15                   | Good      |  |
| 40     | Coast live oak<br><i>(Quercus agrifolia)</i> | 17                   | Good      |  |
| 41     | Coast live oak<br><i>(Quercus agrifolia)</i> | 4                    | Good      | Within footprint of Pathway Design Alternative 2; may require removal. |
| 42     | Coast live oak<br><i>(Quercus agrifolia)</i> | 28                   | Good      |  |
| 43     | Coast live oak<br><i>(Quercus agrifolia)</i> | 8                    | Good      |  |

| Tree # | Common Name<br>(Species Name)                  | Diameter<br>(inches) | Condition | Notes  |
|--------|--|----------------------|-----------|--|
| 44     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 25                   | Good      |  |
| 45     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 21                   | Good      |  |
| 46     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 37                   | Good      | Within footprint of Pathway Design Alternative 2; may require trimming or removal.                       |
| 47     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 15                   | Good      |  |
| 48     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 69                   | Good      |  |
| 49     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 18                   | Good      |  |
| 50     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 19                   | Good      |  |
| 51     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 23                   | Good      |  |
| 52     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 4                    | Good      | Within footprint of Pathway Design Alternative 2; may require removal.                                   |
| 53     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 7                    | Good      |  |
| 54     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 6                    | Good      | Near footprint of Pathway Design Alternative 2; may require trimming or removal due to slope contouring. |
| 55     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 4                    | Good      | Near footprint of Pathway Design Alternative 2; may require trimming or removal due to slope contouring. |
| 56     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 14                   | Good      | Near footprint of Pathway Design Alternative 2; may require trimming or removal due to slope contouring. |
| 57     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 23                   | Good      |  |
| 58     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 9                    | Good      | Near footprint of Pathway Design Alternative 2; may require trimming or removal due to slope contouring. |
| 59     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 15                   | Good      |  |
| 60     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 28                   | Good      | Near footprint of Pathway Design Alternative 2; may require trimming.                                    |
| 61     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 34                   | Good      | Within footprint of Pathway Design Alternative 2; may require removal.                                   |
| 62     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 31                   | Good      | Estimated size due to bee hive. May require trimming under Pathway Design Alternative 2.                 |
| 63     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 2                    | Good      |  |
| 64     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 13                   | Good      |  |
| 65     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 13                   | Good      | Within footprint of Pathway Design Alternative 2; may require removal.                                   |
| 66     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 10                   | Good      |  |
| 67     | Coast live oak                                 | 34                   | Good      | Within footprint of Pathway Design Alternative   |

| Tree # | Common Name (Species Name)                  | Diameter (inches) | Condition | Notes   |
|--------|---|-------------------|-----------|---|
|        | ( <i>Quercus agrifolia</i> )                |                   |           | 2; may require removal.   |
| 68     | Coast live oak ( <i>Quercus agrifolia</i> ) | 31                | Poor      | Large stump with new growth. May require removal under Pathway Design Alternatives 1 and 2.         |
| 69     | Coast live oak ( <i>Quercus agrifolia</i> ) | 18                | Good      | Near footprint of Pathway Design Alternatives 1; may require trimming or removal.                   |
| 70     | Coast live oak ( <i>Quercus agrifolia</i> ) | 19                | Good      |   |
| 71     | Coast live oak ( <i>Quercus agrifolia</i> ) | 27                | Good      | Near preliminary storm drain alignment footprint; may need clearance trimming.                      |
| 72     | Coast live oak ( <i>Quercus agrifolia</i> ) | 22                | Good      | Near preliminary storm drain alignment footprint; may need clearance trimming.                      |
| 73     | Coast live oak ( <i>Quercus agrifolia</i> ) | 11                | Good      | Within banks of erosion feature and footprint of Pathway Design Alternative 3; may require removal. |
| 74     | Coast live oak ( <i>Quercus agrifolia</i> ) | 19                | Good      | Within footprint of Pathway Design Alternative 3; may require removal.                              |
| 75     | Coast live oak ( <i>Quercus agrifolia</i> ) | 19                | Good      |   |
| 76     | Coast live oak ( <i>Quercus agrifolia</i> ) | 19                | Good      | Near footprint of Pathway Design Alternative 3; may require trimming or removal.                    |
| 77     | Coast live oak ( <i>Quercus agrifolia</i> ) | 4                 | Good      |   |
| 78     | Coast live oak ( <i>Quercus agrifolia</i> ) | 3                 | Good      | Within preliminary storm drain alignment footprint; may require removal.                            |
| 79     | Coast live oak ( <i>Quercus agrifolia</i> ) | 6                 | Good      |   |
| 80     | Coast live oak ( <i>Quercus agrifolia</i> ) | 5                 | Good      |   |
| 81     | Coast live oak ( <i>Quercus agrifolia</i> ) | 11                | Good      | Within preliminary storm drain alignment footprint; may require removal.                            |
| 82     | Coast live oak ( <i>Quercus agrifolia</i> ) | 7                 | Good      | Within preliminary storm drain alignment footprint; may require removal.                            |
| 83     | Coast live oak ( <i>Quercus agrifolia</i> ) | 31                | Good      |   |
| 84     | Coast live oak ( <i>Quercus agrifolia</i> ) | 31                | Good      |   |
| 85     | Coast live oak ( <i>Quercus agrifolia</i> ) | 24                | Good      |   |
| 86     | Coast live oak ( <i>Quercus agrifolia</i> ) | 32                | Good      |   |
| 87     | Coast live oak ( <i>Quercus agrifolia</i> ) | 23                | Good      |   |
| 88     | Coast live oak ( <i>Quercus agrifolia</i> ) | 23                | Good      |   |
| 89     | Coast live oak ( <i>Quercus agrifolia</i> ) | 72                | Good      |   |
| 90     | Coast live oak ( <i>Quercus agrifolia</i> ) | 31                | Good      |   |
| 91     | Coast live oak ( <i>Quercus agrifolia</i> ) | 33                | Good      |   |

| Tree # | Common Name<br>(Species Name)                  | Diameter<br>(inches) | Condition | Notes |
|--------|--|----------------------|-----------|-------|
| 92     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 11                   | Good      |       |
| 93     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 11                   | Good      |       |
| 94     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 8                    | Good      |       |
| 95     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 23                   | Good      |       |
| 96     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 76                   | Good      |       |
| 97     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 23                   | Good      |       |
| 98     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 35                   | Good      |       |
| 99     | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 19                   | Good      |       |
| 100    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 23                   | Good      |       |
| 101    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 46                   | Good      |       |
| 102    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 23                   | Good      |       |
| 103    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 23                   | Good      |       |
| 104    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 23                   | Good      |       |
| 105    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 23                   | Good      |       |
| 106    | Coast live oak<br>( <i>Quercus agrifolia</i> ) | 27                   | Good      |       |

Note: Trees that fall within the fuel modification areas are not anticipated to be affected.

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**APPENDIX F**

**JURISDICTIONAL DELINEATION REPORT**



BERKELEY  
CARLSBAD  
FRESNO  
IRVINE  
LOS ANGELES  
PALM SPRINGS  
POINT RICHMOND  
RIVERSIDE  
ROSEVILLE  
SAN LUIS OBISPO

March 7, 2018

T.J. Gamble  
Senior Vice President  
Somera Capital Management, LLC  
115 West Canon Perdido Street  
Santa Barbara, CA 93101

Subject: Final Jurisdictional Delineation Report for The Cottages at Point San Luis Project

Dear Mr. Gamble:

This jurisdictional delineation letter report presents the results of a delineation conducted by LSA to assess the potential presence of wetlands and waters that may be subject to the jurisdiction of the United States Army Corps of Engineers (Corps), the California Department of Fish and Wildlife (CDFW), the Regional Water Quality Control Board (RWQCB), and the California Coastal Commission (CCC) as part of the evaluation of the need for permit authorization(s) from these agencies for the development of The Cottages at Point San Luis Project (proposed project).

## PROJECT DESCRIPTION

The applicants propose to construct a cottage style hotel on an approximately 22-acre property located on privately owned land in unincorporated San Luis Obispo County (County) near the coastal communities of Avila Beach and Port San Luis, California (Figure 1; all figures contained in Attachment A). The County Assessor's Parcel Number (APN) is identified as 076-174-009. The proposed development is located on top of the bluffs north of Avila Beach Road, with access from Ana Bay Road to the east and Wild Cherry Canyon Road to the west. Ana Bay Road intersects with Avila Beach Road and would provide site access near the existing San Luis Bay Inn. Wild Cherry Canyon Road was initially studied as a secondary access route; however, this route is no longer part of the proposed project.

The proposed project includes 50 cottages, parking and storage areas, and a main lodge area with a restaurant, spa and fitness area, pool, landscaping, and other associated amenities. The total structural footprint is estimated to be 60,087 square feet (net) with 20,349 square feet of that area located below grade. The placement of the proposed structures (i.e., the cottages, main lodge, pool, etc.) would be restricted to the western 7 acres of the property. The project site is currently accessed via a gravel road off of Ana Bay Road which connects to Avila Bay Drive. The gravel road will be widened to meet County Public Works and Fire Department standards. In addition to road widening, road improvements will include the construction of a 230-foot bridge in the central portion of the project site, which will span an erosional feature. Figure 2 provides an overview of the proposed development limits (including buildings, landscaping, and road improvements) in relation to nearby aquatic resources mapped by the United States Fish and Wildlife Service's (USFWS) National Wetlands Inventory.

## METHODOLOGY

The fieldwork for this evaluation was conducted by LSA Senior Biologists Matthew Willis and Lauren Brown on August 3, 2017. The delineation studied the area of hillside erosion along the main access road and the series of roadside drainage ditches (study area). The entire study area was surveyed on foot for potential wetland and non-wetland jurisdictional waters as well as streambed and adjacent riparian resources. Areas supporting species of plant life potentially indicative of wetlands were searched for and general site characteristics were noted. Areas exhibiting a bed and bank, and/or an Ordinary High Water Mark (OHWM) were evaluated according to routine wetland delineation procedures described in the *Corps Wetlands Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (Environmental Laboratory, 2008a). The *Corps A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (Lichvar, 2008) was also considered; however, the procedures presented in the Field Guide are not intended for use in the settings found in the project area. Those areas identified as potential jurisdictional waters of the U.S./streambeds of the CDFW were examined in the field for evidence of jurisdiction (wetland parameters, OHWM, streambed and bank, and/or riparian habitat). The relevant indicators were recorded on a 1 inch = 150-foot scale aerial photograph, and were subsequently transferred to LSA's geographic information system database. Widths of potential jurisdictional areas mapped during the course of the field investigation were determined by direct measurements taken in the field. Attachment B contains completed OHWM forms for each of the three transect areas.

Information from this letter report was included in a request to the Corps for an Approved Jurisdictional Determination in September 2017. A field verification survey was conducted by Corps Regulatory Division (North Coast Branch) Project Manager Gerardo Hidalgo and LSA Biologist Bo Gould on January 29, 2018. The Corps issued an Approved Jurisdictional Determination for the project on February 7, 2018 (Attachment C).

## SITE DESCRIPTION

The project area is located on the San Miguelito Land Grant in the southeast quarter of the United States Geological Survey (USGS) *Pismo Beach, California*, 7.5-minute topographic quadrangle map (Figure 1). The project area is situated on a moderately steep, undeveloped southwest-facing hillside subject to an existing longstanding livestock (cattle and horse) ranching operation along the coastal bluffs overlooking the Pacific Ocean. The area is inland and uphill from (north of) the ocean and Avila Beach Drive, and south of the existing Marre residence. Ana Bay Drive, along the bluffs above the mouth of San Luis Obispo Creek, forms the eastern boundary. Unpaved Wild Cherry Canyon Road forms the western boundary. Elevations within the project area range from 30 to 350 feet above mean sea level.

The regional climate is classified as Mediterranean, with warm, dry summers and cool, moist winters. The average annual precipitation is approximately 18 inches. Most of the precipitation occurs from November through April and average temperatures typically range between approximately 48 and 69 degrees Fahrenheit. The project area experiences a strong maritime influence and coastal fog is common in the summer due to cool ocean temperatures and warm inland air flows.

Soils within the western half of the study area are composed of Los Osos loam, 15 to 30 percent slopes. Soils within the eastern half of the study area are composed of Lodo clay loam, 30 to 50 percent slopes. A small portion of Xerorthents escarpment<sup>1</sup> occurs on the coastal bluffs along the southern boundary of the study area. Hydric soils are not present within the study area. A soil map is provided in Figure 3. Most of the study area is within the Meadow Creek-Frontal Pacific Ocean Watershed, but the easternmost portion along the access road and Ana Bay Road is within the Lower San Luis Obispo Creek Watershed; both watersheds are within Hydrologic Unit 12. The study area does not contain previously mapped waters of the United States according to USFWS's National Wetlands Inventory; however, estuarine and marine wetland associated with San Luis Obispo Creek and the Pacific Ocean are in close proximity to the study area (Figure 2).

The study area is located in an entirely upland setting. The vegetation community present is best classified as California sagebrush scrub (*Artemisia californica*-*Baccharis pilularis*/*Leymus condensatus* Shrubland Alliance Association) (Sawyer et al., 2009). Shrubs observed included California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), bush monkeyflower (*Mimulus aurantiacus*), coastal goldenbush (*Isocoma menziesii* var. *vernonioides*), and giant wildrye (*Leymus condensatus*). The herb layer observed in the study area generally consisted of scattered occurrences of exotic herbs such as onionweed (*Asphodelus fistulosus*) and nonnative grasses such as various bromes (*Bromus* spp.) and fescues (*Festuca* spp.). These species grow in the interstitial spaces between the shrubs and within the roadside drainage ditches and erosional features. Several coast live oaks (*Quercus agrifolia*) grow on the hillside above the erosional features and along the access road to Ana Bay Road. No riparian or hydrophytic vegetation is associated with the study area.

The project area does not lie within designated critical habitat for federally listed species; however, designated critical habitat for tidewater goby (*Eucyclogobius newberryi*) is located approximately adjacent to the project area in San Luis Obispo Creek. No active bird nests were observed. One large intact abalone (*Haliotis* sp.) shell was found within the bed of one of the erosional features.

## RESULTS

The source of water for the entire project area is storm water runoff. A series of roadside drainage ditches along the main access road were constructed to collect runoff from the access road and sheet flow from the hillsides to avoid washing out the road (Figure 4). These ditches follow the contour of the inland side of the road conveying flow downhill to several different culverts.

A high density polyethylene (HDPE) culvert (Culvert 1) in the northwestern portion of the project area conveys flow from the top of the hill, under the access road, and dissipates flow onto the hillside west of the road. The roadside drainage ditch starts again immediately downslope until it reaches a small basin with 2 culverts (Culvert Collection Basin 1) near the grove of coast live oak trees. This basin collects flow from the roadside drainage ditch and sheet flows from the steep hillside above. From here, an HDPE culvert (Culvert 2) conveys the flow under the road and onto the hillside below where it follows a topographical fold in the slope, thus creating an erosional gully

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<sup>1</sup> USDA, Natural Resources Conservation Service (2015)

(Figures 4 and 5). A corrugated metal pipe (CMP) culvert (Culvert 3) collects overflow from Culvert Collection Basin 1 and conveys flow under the road and onto the hillside. This flow has created a braided erosional feature which mostly dissipates onto the hillside, but at least one braid connects with the erosional feature from Culvert 2 in the gully. This combined erosional feature continues downslope to another small basin with 2 culverts (Culvert Collection Basin 2) located at the top of the bluff above Avila Beach Drive (outside the property boundary and project area). From here, an HDPE culvert (Culvert 4) conveys the main flow west under an abandoned access road/erosion control terrace. Flow is directed down the bluff via this culvert and a series of two CMP standpipes, the lower of which is located along Avila Beach Drive. From here, an HDPE culvert conveys flow under Avila Beach Drive and has its outfall in the shoreline protection rocks along the ocean. The second culvert (Culvert 5) at Culvert Collection Basin 2 conveys overflow via an above ground HDPE pipe which extends down the bluff face and terminates with a small perpendicular HDPE pipe which acts as an energy dissipating device before overflows are directed onto the shoulder of Avila Beach Drive. This overflow culvert does not connect with the ocean.

After Culvert Collection Basin 1, the roadside drainage ditch starts again and follows the inland shoulder of the access road until it reaches Ana Bay Road. From here a CMP culvert (Culvert 6) conveys flow under Ana Bay Road and down the hillside to a concrete ditch along the Avila Beach Golf Resort tennis courts (outside the property boundary and project area). This ditch empties into the mouth of San Luis Obispo Creek.

None of the roadside drainage ditches or the erosional features exhibited an OHWM; however, a defined scoured bed and erosion bank was observed due to the ephemeral flows these features convey. The roadside drainage ditches exhibit a defined bed and bank mostly at their connection with a culvert, but not for the duration of their courses. The erosional feature (Feature 1) associated with Culvert 2 exhibited a scoured bed that varied in width from 6 inches to 6 feet and erosion cut banks that varied from 1 to 10 feet (Transect 2). The erosional feature (Feature 2) associated with Culvert 3 exhibited a scoured bed that varied in width from 6 inches to 1 foot and banks that varied from 1 to 3 feet (Transect 3). The combined erosional features associated with Culverts 2 and 3 exhibited a scoured bed that varied in width from 1 to 3 feet and banks that varied from 3 to 10 feet (Transect 1). The hillside supporting the oak trees above Culverts 2 and 3 is a topographical fold; however, there is no discernable hydrologic feature and it appears that water sheet flows down the hillside during rain events.

The sides (i.e., banks) of the erosional features (especially in the gully) have slumped off leaving the bed and banks mostly unvegetated. Otherwise the features consist of upland species associated with coastal sage scrub. Soil pits were not dug because none of the features are natural hydrologic features and there was no hydrophytic vegetation. The study area is extremely unlikely to support hydric soils and does not contain wetlands as defined by the Corps or the CCC.

Representative photographs are included at the end of this report.

## **JURISDICTIONAL STATUS DISCUSSION**

Potentially jurisdictional features within the study area are identified below in Table A and shown in Figures 4 and 5. The study area does not contain any features subject to federal Clean Water Act

(CWA) jurisdiction, as confirmed by the Corps Approved Jurisdictional Determination issued February 7, 2018 (Attachment C).

### Potentially Jurisdictional Resources within the Study Area

| Aquatic Resource | Cowardin Type | Vegetation         | Latitude, Longitude | Non-wetland Waters of the State <sup>1</sup> |               | Streambed and Bank (acres) |
|------------------|---------------|--------------------|---------------------|--|---------------|----------------------------|
|                  |               |                    |                     | Acres  | Linear Feet   |                            |
| Feature 1        | N/A           | Coastal sage scrub | 35.1791, -120.7429  | 0.013  | 321.02        | 0.033                      |
| Feature 2        | N/A           | Coastal sage scrub | 35.1790, -120.7426  | 0.004  | 167.41        | 0.006                      |
| <b>TOTAL</b>     |               |                    |                     | <b>0.017</b>                                 | <b>488.43</b> | <b>0.039</b>               |

Source: LSA 2017

<sup>1</sup> No Waters or Wetland Waters of the United States

N/A: Not Applicable

The findings and conclusions presented in this report, including the location and extent of areas subject to regulatory jurisdiction, represent the professional opinion of the consultant biologists. With the exception of Corps jurisdiction which has been confirmed to be absent from the project site, conclusions regarding potential CDFW/RWQCB/CCC jurisdiction in this report should be considered preliminary and at final discretion of the applicable resource agencies.

### UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTION

No hydrophytic vegetation or riparian, hydric soils, and/or wetland hydrology is present within the survey area. No wetlands occur with the survey area.

Definitive OHWMs were not observed within the study area; however, three transects in order to identify the lateral limits of the features were evaluated. San Luis Obispo Creek and the Pacific Ocean, which exist outside of the study area, are considered by the Corps to be traditional navigable waters of the United States.

The roadside drainage ditches in the project area are nontidal drainage ditches excavated on dry land for the purpose of draining storm water runoff from upland areas. One of these ditches has resulted in creation of an erosional gully by collecting runoff. There is no current or prehistoric natural drainage feature up or downstream of the study area. Therefore, the roadside drainage ditches and culvert system did not replace a natural drainage. Under natural conditions, runoff from the hillsides would be in the form of sheet flow over the coastal bluffs with potentially ephemeral flows in the topographical fold only during extreme rain events.

According to the Rapanos guidance (Corps 2008b), the Corps generally will not assert jurisdiction over roadside ditches and “swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow).” In February 2018, the Corps issued an Approved Jurisdictional Determination for the project that concludes there are no waters of the United States within CWA or Rivers and Harbors Act jurisdiction present on the project site (Attachment C).

## REGIONAL WATER QUALITY CONTROL BOARD

There is currently no approved guidance for delineating areas potentially subject to RWQCB jurisdiction. Generally, areas subject to RWQCB regulation are typically determined to coincide with areas subject to Corps jurisdiction as recommended by the State Water Resources Control Board's September 2004 Workplan. CWA jurisdiction has been determined to be absent by the Corps. However, the RWQCB may assert authority over some of the delineated features as "waters of the State" subject to waste discharge requirements pursuant to the Porter-Cologne Act.

## CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION

The CDFW, through provisions of the California Fish and Game Code (Section 1600 et seq.), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks and at least an intermittent flow of water.

Although no features in the study area exhibited an OHWM, defined bed and banks were evident in the erosional features making them potentially subject to the jurisdiction of the CDFW per Section 1602 of the California Fish and Game Code. However, the beds of the erosional features do not support wetland or riparian vegetation; instead the vegetation consists of upland species associated with California sagebrush scrub vegetation that is essentially the same as the adjacent areas. The CDFW may choose not to assert jurisdiction due to the ecological similarities of the erosional features with their immediately surrounding upland habitat and lack of importance to fish and wildlife resources that are normally associated with streams. As shown in Table A, the total acreage of potential CDFW jurisdiction within the study area is 0.039 acre.

## CALIFORNIA COASTAL COMMISSION

The project area is located within the Coastal Zone. Therefore, through provisions of the California Coastal Act (CCA), the CCC is empowered to issue a Coastal Development Permit (CDP) for many projects located within the Coastal Zone. In areas where a local entity has a certified Local Coastal Program (LCP), the local entity (e.g., the County) can issue a CDP only if it is consistent with the LCP. The CCC, however, has appeal authority for portions of LCPs and retains jurisdiction over certain public trust lands and in areas without an LCP. The entire project area is located within the San Luis Bay Planning Area of the LCP.

Areas within the coastal zone exhibiting a stream bank that is potentially subject to CDFW jurisdiction could also be considered for designation as streams under the CCA. However, none of the features within the project area are identified as streams on the USGS quadrangle map or in the LCP, and they do not exhibit significant habitat value beyond that of the contiguous uplands; therefore, they should not be considered as streams under the CCA. No areas satisfy the CCC wetland criteria.

## CONCLUSIONS

The roadside drainage ditches and erosional features are caused by concentrating runoff into ditches and culverts which have resulted in features with discontinuous scour beds and erosion banks and that connect to the ocean after passing through a series of culverts.

The Corps has determined that the project site does not contain waters of the United States within CWA or Rivers and Harbors Act jurisdiction. Although CWA jurisdiction has been determined to be absent by the Corps, the RWQCB may assert authority over waters of the State pursuant to the Porter-Cologne Water Quality Control Act, which would require compliance with applicable waste discharge requirements. The project may also require a California Fish and Game Code Section 1602 Streambed Alteration Agreement from the CDFW, although the delineated features do not support riparian vegetation or resources typically associated with rivers or streams.

The project will require a Stormwater Control Plan in compliance with the requirements of the SWRCB Phase II Small MS4 Permit and coverage under and preparation of a Stormwater Pollution Prevention Plan in accordance with the requirements of the SWRCB Construction General Permit. If groundwater dewatering during construction is required, which depends on the depth of groundwater and depth of excavation, the project may require coverage under the Central Coast RWQCB General Permit For Discharges With Low Threat To Water Quality.

Sincerely,

**LSA ASSOCIATES, INC.**



and



Matthew Willis  
Senior Biologist

Bo Gould  
Biologist

## REFERENCES

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REPRESENTATIVE SITE PHOTOGRAPHS



**Photo 1.** Roadside drainage ditch and Culvert 1 in northwestern portion of the project area, facing south.



**Photo 2.** Roadside drainage ditch and Culvert Collection Basin1, facing southeast.



**Photo 3.** Roadside drainage ditch and Culvert Collection Basin1, facing southeast.



**Photo 4.** Erosion feature downslope of Culvert 2 where a gully has been created, facing southwest.



**Photo 5.** Transect 2 in the erosional feature downslope of Culvert 2, facing northeast.



**Photo 6.** Bed of Transect 2. Note the lack of riparian or hydrophytic vegetation.



**Photo 7.** Erosional feature downslope of Culvert 3, facing southwest. The gully is west of this erosional feature.



**Photo 8.** Transect 2 in the erosional feature downslope of Culvert 3, facing north.



**Photo 9.** Bed of Transect 3. Note the lack of riparian or hydrophytic vegetation.



**Photo 10.** Erosional feature downslope of Culvert 3 where it connects with the gully, facing east.



**Photo 11.** Erosional feature in the gully, facing north. Note the presence of debris in the bed of the gully.



**Photo12.** Bed of the erosional feature in the gully. Note the lack of hydrophytic vegetation.



**Photo 13.** Transect 3 in the erosional feature in the gully, facing south.



**Photo 14.** Bed of Transect 3. The bed is deeply incised here.



**Photo 15.** Culvert Collection Basin 2 at the end of the erosional feature in the gully, facing southwest.



**Photo 16.** Culvert 4 in Culvert Collection Basin 2 that conveys flow down the coastal bluff (under an abandoned access road/erosion control terrace) to a series of standpipes before crossing under Avila Beach Drive and emptying into the ocean, facing west.



**Photo 17.** Culvert 4 outfall under Avila Beach Drive, facing west.



**Photo 18.** Overflow culvert (Culvert 5) from Culvert Collection Basin 2 conveying flow down the coastal bluff and onto the shoulder of Avila Beach Drive, facing north.



**Photo 19.** Roadside drainage ditch near Ana Bay Road, facing northwest.



**Photo 20.** Concrete ditch along the Avila Beach Golf Resort tennis courts, facing south. The ditch conveys flow from the roadside drainage ditch which empties into the mouth of San Luis Obispo Creek just downstream of this location.

**ATTACHMENT A**

**FIGURES 1-5**

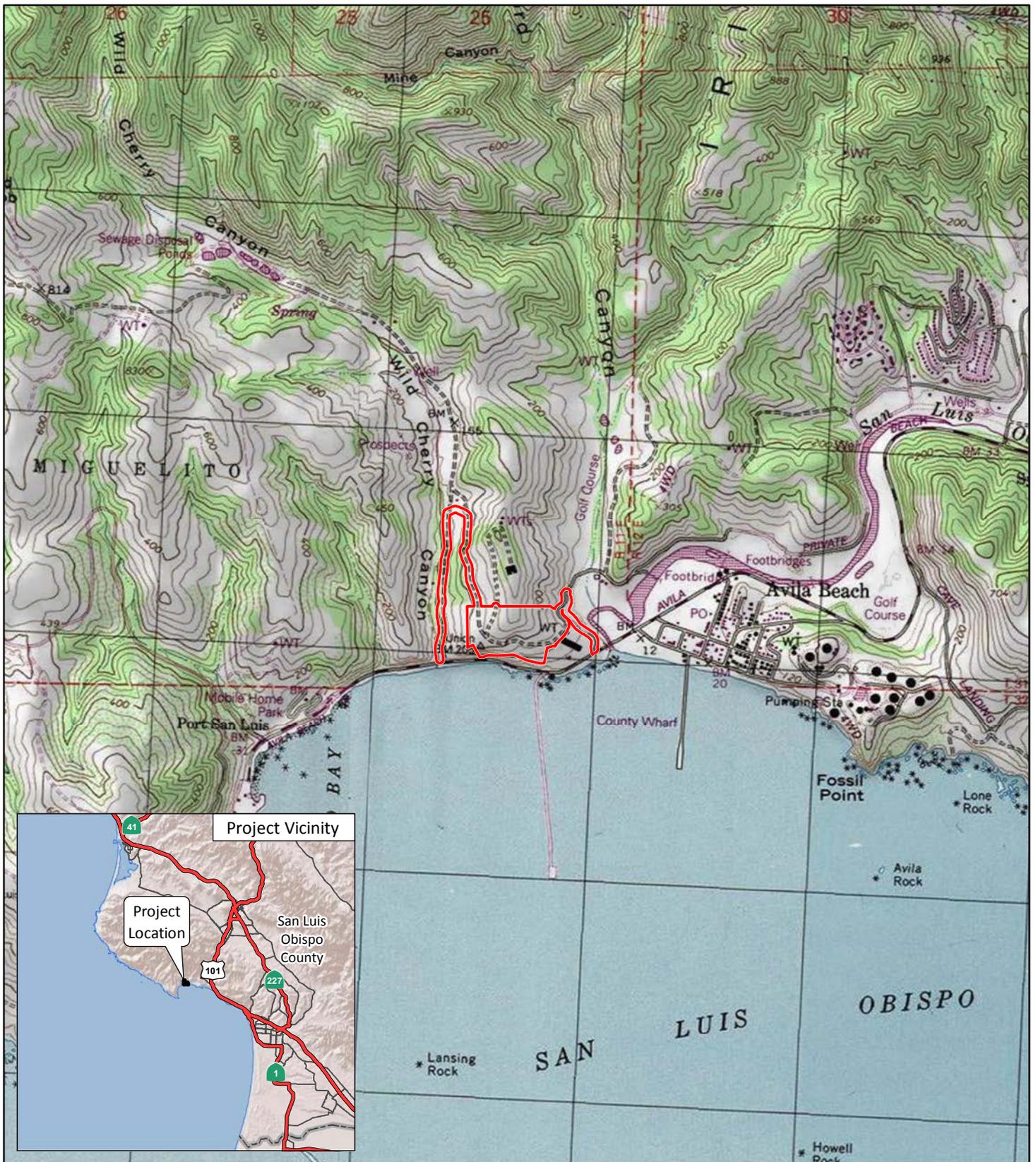
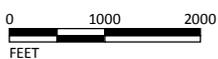


FIGURE 1

LSA

LEGEND

Project Location (35.1791°, -120.7431°)



SOURCE: USGS 7.5' Quad - Pismo Beach (1994)

I:\SOM1601\GIS\MXD\ProjectLocation\_USGS.mxd (3/7/2018)

*The Cottages  
at Point San Luis  
Project Location*

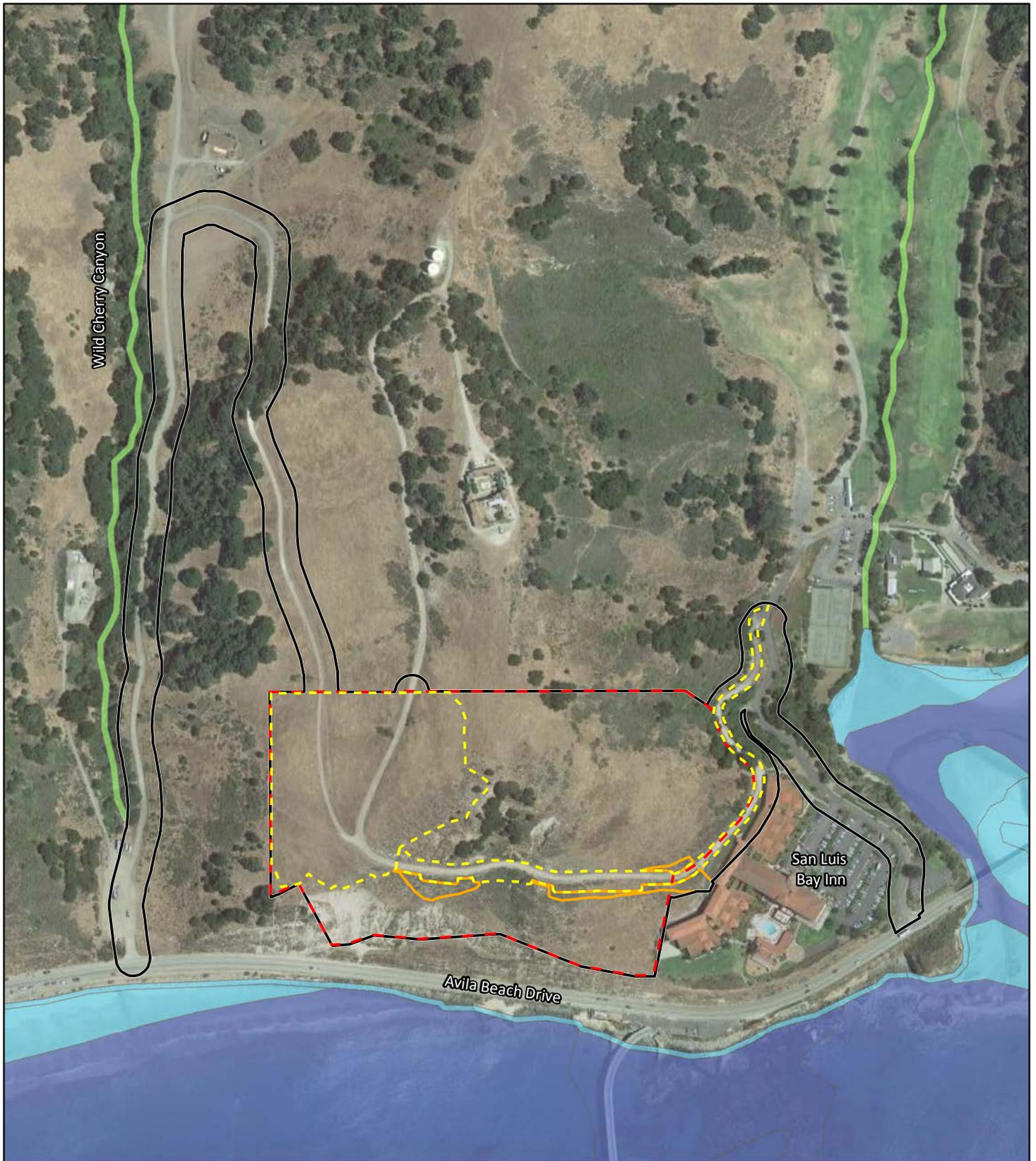


FIGURE 2

LSA

LEGEND

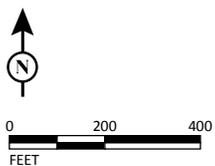
- Project Area
- Property (Approximately 22 acres)
- Development Limits (Approximately 8 acres)
- Temporary Impact Area (0.55 acres)

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland

\* USACE Approved Jurisdictional Determination (2/7/18) states that no waters of the U.S. occur on the project site.

*The Cottages at Point San Luis*

USFWS Wetlands Inventory Map



SOURCE: Google (2017); USFW National Wetland Inventory (2016)

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LSA

LEGEND

- Project Area
- Property (Approximately 22 acres)
- Development Limits (Approximately 8 acres)

- Soils
- 149 - Lodo clay loam, 30 to 50 percent slopes
  - 160 - Los Osos loam, 15 to 30 percent slopes

- 161 - Los Osos loam, 30 to 50 percent slopes
- 194 - Riverwash
- 210 - Still gravelly sandy clay loam, 2 to 9 percent slopes
- 223 - Xerorthents, escarpment

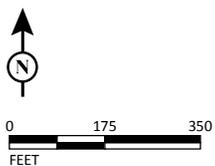
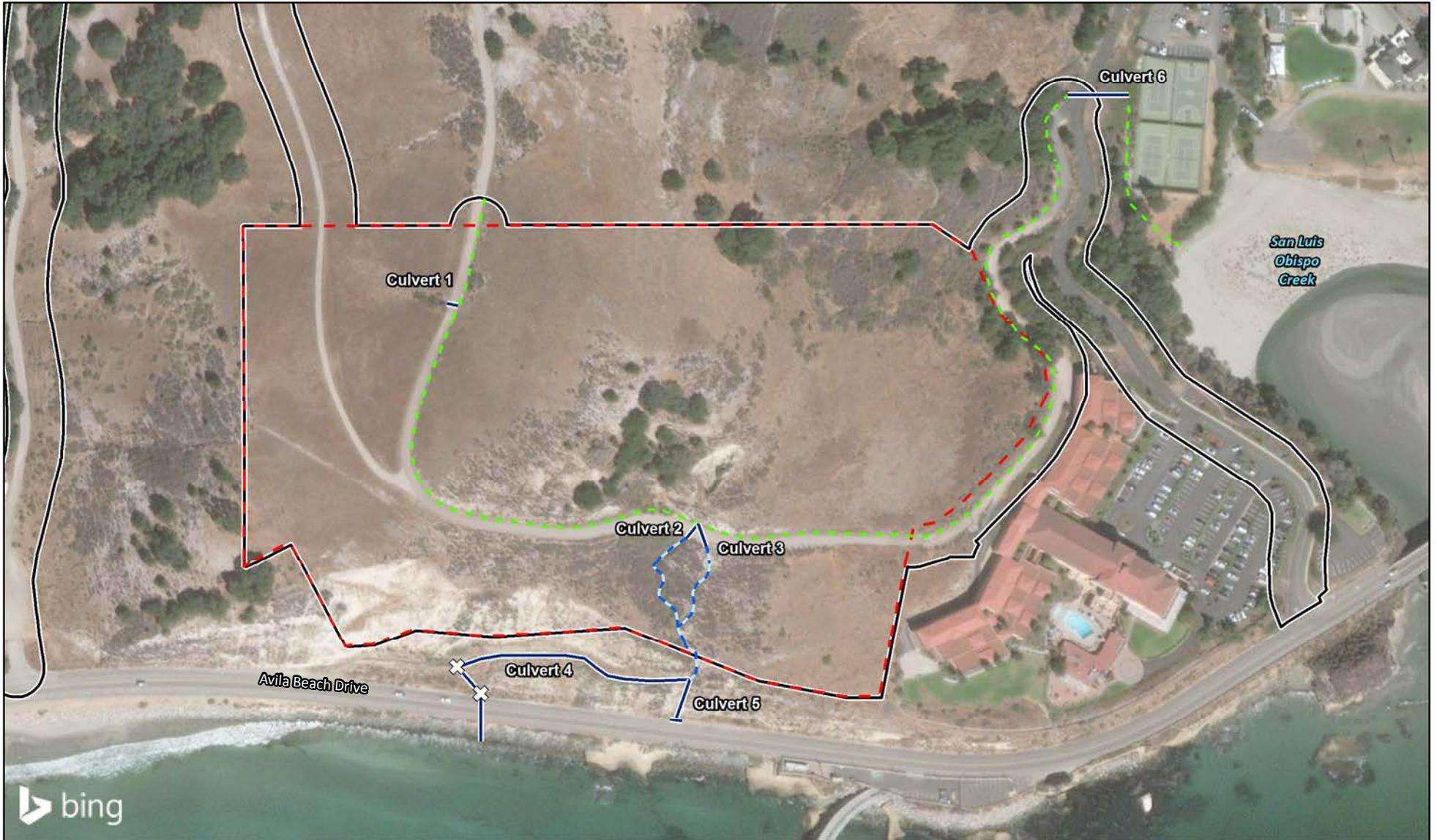


FIGURE 3

*The Cottages at Point San Luis*  
Soil Map

SOURCE: Bing Maps (2015); SSURGO (2015)  
I:\SOM1601\GIS\MXD\JD\Soils.mxd (3/7/2018)

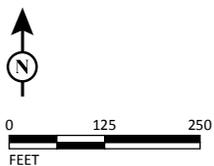


LSA

LEGEND

- ⊗ Standpipe
- ▭ Survey Area
- - - Property (Approximately 22 acres)
- - - Roadside Drainage Ditch
- Culvert
- - - Erosional Features

\* USACE Approved Jurisdictional Determination (2/7/18) states that no waters of the U.S. occur on the project site.



SOURCE: Bing (2017)

I:\SOM1601\GIS\MXD\JD\JD\_Overview.mxd (3/7/2018)

FIGURE 4

*The Cottages  
at Point San Luis*  
Delineation Overview Map

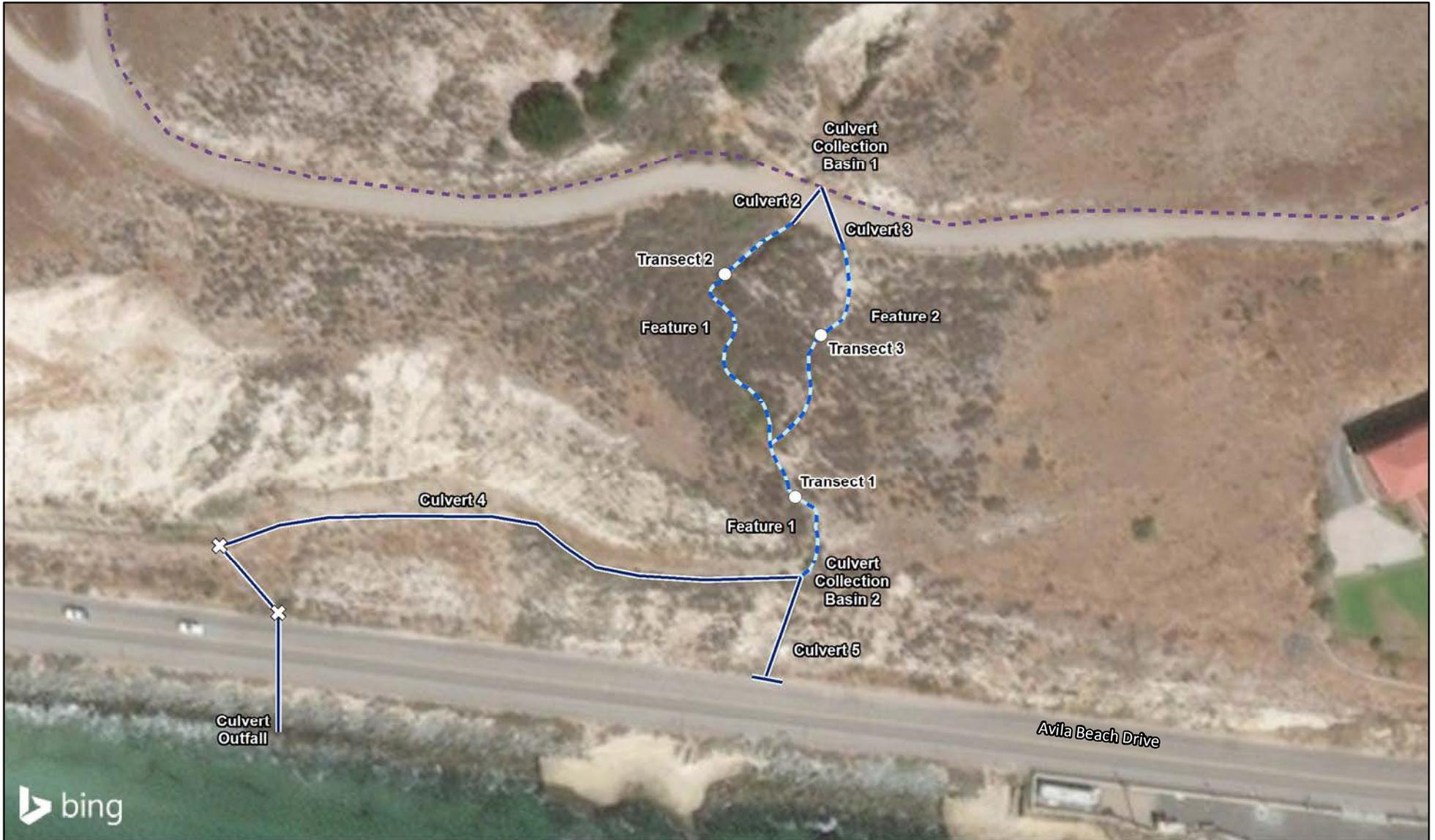
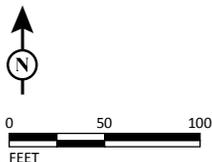


FIGURE 5

**LSA**

LEGEND

- - - Roadside Drainage Ditch
- Transect Locations
- Culvert
- ⊗ Standpipe
- - - Erosional Features



SOURCE: Bing (2017)  
 I:\SOM1601\GIS\MXD\JD\JD\_Detail.mxd (3/7/2018)

*The Cottages  
 at Point San Luis  
 Delineation Detail Map*

**ATTACHMENT B**

**COMPLETED OHWM SHEETS**

## Arid West Ephemeral and Intermittent Streams OSHWM Datasheet

|   |   |
|---|---|
| <b>Project:</b><br><b>Project Number:</b><br><b>Stream:</b> unnamed drainage<br><b>Investigator(s):</b> Matt Willis, Lauren Brown | <b>Date:</b> Aug 4, 2017 <b>Time:</b><br><b>Town:</b> Avila Beach <b>State:</b> Ca<br><b>Photo begin file#:</b> <b>Photo end file#:</b> |
|---|---|

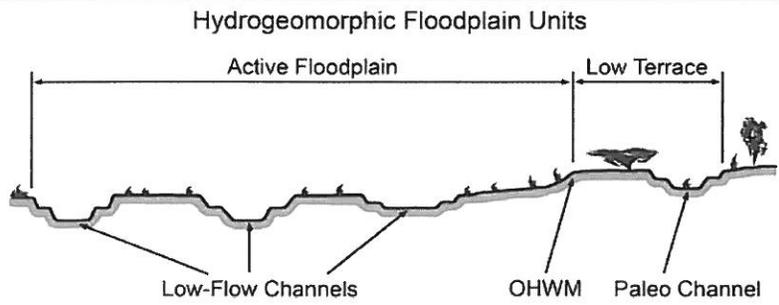
|  |  |
|--|--|
| Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Do normal circumstances exist on the site?<br><br>Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Is the site significantly disturbed? | <b>Location Details:</b> Avila Beach Drive near Cal Poly Pier<br><br><b>Projection:</b> <b>Datum:</b><br><b>Coordinates:</b> |
|--|--|

**Potential anthropogenic influences on the channel system:** Erosional channel, created from culverts under dirt road above drainage. Ephemeral, only flows from rain.

**Brief site description:** Steep slope, natural runoff seems to be sheet flow down slopes. This drainage formed as a result of water concentration with culverts

**Checklist of resources (if available):**

|   |   |
|---|---|
| <input checked="" type="checkbox"/> Aerial photography<br>Dates:<br><input type="checkbox"/> Topographic maps<br><input type="checkbox"/> Geologic maps<br><input type="checkbox"/> Vegetation maps<br><input type="checkbox"/> Soils maps<br><input type="checkbox"/> Rainfall/precipitation maps<br><input type="checkbox"/> Existing delineation(s) for site<br><input type="checkbox"/> Global positioning system (GPS)<br><input type="checkbox"/> Other studies | <input type="checkbox"/> Stream gage data<br>Gage number:<br>Period of record:<br><input type="checkbox"/> History of recent effective discharges<br><input type="checkbox"/> Results of flood frequency analysis<br><input type="checkbox"/> Most recent shift-adjusted rating<br><input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event |
|---|---|



- Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:**
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
  2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
  3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
    - a) Record the floodplain unit and GPS position.
    - b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
    - c) Identify any indicators present at the location.
  4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
  5. Identify the OHWM and record the indicators. Record the OHWM position via:
 

|   |                                 |
|---|---------------------------------|
| <input type="checkbox"/> Mapping on aerial photograph | <input type="checkbox"/> GPS    |
| <input type="checkbox"/> Digitized on computer        | <input type="checkbox"/> Other: |

Project ID:

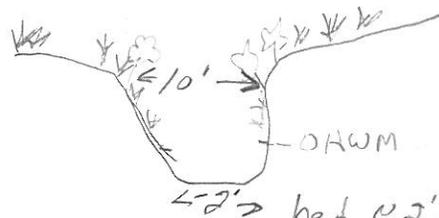
Cross section ID: Transect 1

Date: 06-04-17 Time: 11:40

**Cross section drawing:**

Hills are  
NW, C. South

Top of Bluff



N ← Flows  
E to West  
Ephemeral

bed ~10' wide - varies in channel

**OHWM - BED/BANK**

GPS point: 35.1786, -120.7427

**Indicators:**

- Change in average sediment texture
- Change in vegetation species
- Change in vegetation cover
- Break in bank slope
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

**Comments:**

Erosional drying, steep banks. No vegetation on lower banks or in bed. Upland species outside banks and on upper slopes

**Floodplain unit:**

- Low-Flow Channel
- Active Floodplain
- Low Terrace

GPS point: \_\_\_\_\_

**Characteristics of the floodplain unit:**

Average sediment texture: cobble - sand

Total veg cover: 0% Tree: \_\_\_\_\_% Shrub: \_\_\_\_\_% Herb: \_\_\_\_\_%

**Community successional stage:**

- NA
- Early (herbaceous & seedlings)
- Mid (herbaceous, shrubs, saplings)
- Late (herbaceous, shrubs, mature trees)

**Indicators:**

- Mudcracks
- Ripples
- Drift and/or debris
- Presence of bed and bank
- Benches
- Soil development
- Surface relief
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

**Comments:**

At transect 1, thin layer of moss present in bed.

Project ID:

Cross section ID:

Date:

Time:

**Floodplain unit:**

Low-Flow Channel

Active Floodplain

Low Terrace

GPS point: \_\_\_\_\_

*none*

**Characteristics of the floodplain unit:**

Average sediment texture: \_\_\_\_\_

Total veg cover: \_\_\_\_\_% Tree: \_\_\_\_\_% Shrub: \_\_\_\_\_% Herb: \_\_\_\_\_%

Community successional stage:

NA

Mid (herbaceous, shrubs, saplings)

Early (herbaceous & seedlings)

Late (herbaceous, shrubs, mature trees)

**Indicators:**

Mudcracks

Soil development

Ripples

Surface relief

Drift and/or debris

Other: \_\_\_\_\_

Presence of bed and bank

Other: \_\_\_\_\_

Benches

Other: \_\_\_\_\_

**Comments:**

**Floodplain unit:**

Low-Flow Channel

Active Floodplain

Low Terrace

GPS point: \_\_\_\_\_

*No*

**Characteristics of the floodplain unit:**

Average sediment texture: \_\_\_\_\_

Total veg cover: \_\_\_\_\_% Tree: \_\_\_\_\_% Shrub: \_\_\_\_\_% Herb: \_\_\_\_\_%

Community successional stage:

NA

Mid (herbaceous, shrubs, saplings)

Early (herbaceous & seedlings)

Late (herbaceous, shrubs, mature trees)

**Indicators:**

Mudcracks

Soil development

Ripples

Surface relief

Drift and/or debris

Other: \_\_\_\_\_

Presence of bed and bank

Other: \_\_\_\_\_

Benches

Other: \_\_\_\_\_

**Comments:**

*Drainage is through slope & vegetated with  
Non-native grasses and upland shrubs*

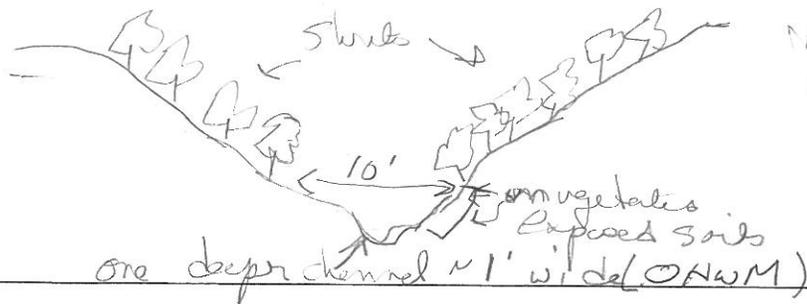
Project ID:

Cross section ID: Traverse 2 Date:

Time:

**Cross section drawing:**

Road + culvert  
about 25' from  
traverse



**OHWM - BED/BANK**

GPS point: 35.1791, -120.7429

**Indicators:**

- Change in average sediment texture
- Change in vegetation species
- Change in vegetation cover
- Break in bank slope
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

**Comments:**

Erosion, change, bars present, exposed soils define bars no OHWM indicator. Soils are erodible shale or marine terrace.

**Floodplain unit:**

- Low-Flow Channel
- Active Floodplain
- Low Terrace

GPS point: \_\_\_\_\_

**Characteristics of the floodplain unit:**

Average sediment texture: \_\_\_\_\_  
 Total veg cover: \_\_\_\_\_% Tree: \_\_\_\_\_% Shrub: \_\_\_\_\_% Herb: \_\_\_\_\_%  
 Community successional stage:

- NA
- Early (herbaceous & seedlings)
- Mid (herbaceous, shrubs, saplings)
- Late (herbaceous, shrubs, mature trees)

**Indicators:**

- Mudcracks
- Ripples
- Drift and/or debris
- Presence of bed and bank
- Benches
- Soil development
- Surface relief
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

**Comments:**

No vegetation in flow channel. narrow, about 1' wide with larger area. Likely defined by types of flows during rain events

Project ID:

Cross section ID:

Date:

Time:

**Floodplain unit:**  Low-Flow Channel  Active Floodplain  Low Terrace

GPS point: \_\_\_\_\_

**Characteristics of the floodplain unit:**

Average sediment texture: \_\_\_\_\_

Total veg cover: \_\_\_\_\_% Tree: \_\_\_\_\_% Shrub: \_\_\_\_\_% Herb: \_\_\_\_\_%

Community successional stage:

- NA
- Early (herbaceous & seedlings)
- Mid (herbaceous, shrubs, saplings)
- Late (herbaceous, shrubs, mature trees)

**Indicators:**

- Mudcracks
- Ripples
- Drift and/or debris
- Presence of bed and bank
- Benches
- Soil development
- Surface relief
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

Comments:

**Floodplain unit:**  Low-Flow Channel  Active Floodplain  Low Terrace

GPS point: \_\_\_\_\_

**Characteristics of the floodplain unit:**

Average sediment texture: \_\_\_\_\_

Total veg cover: \_\_\_\_\_% Tree: \_\_\_\_\_% Shrub: \_\_\_\_\_% Herb: \_\_\_\_\_%

Community successional stage:

- NA
- Early (herbaceous & seedlings)
- Mid (herbaceous, shrubs, saplings)
- Late (herbaceous, shrubs, mature trees)

**Indicators:**

- Mudcracks
- Ripples
- Drift and/or debris
- Presence of bed and bank
- Benches
- Soil development
- Surface relief
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

Comments:

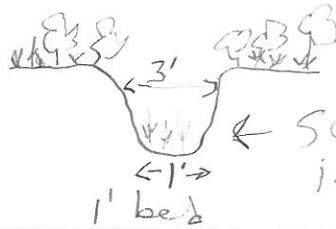
*Upland slopes are vegetated with coastal syc scrub.*

Project ID:

Cross section ID: Trend 3 Date: Aug 4, 2017 Time:

**Cross section drawing:**

N 25' from culvert  
Upland is  
coastal scrub +  
grasses.



N ← ↑ E Road  
↓ W Ocean

Some annual grasses rooted in channel

**OHWM - BED/BANK**

GPS point: 35.1790, -120.7426

**Indicators:**

- Change in average sediment texture
- Change in vegetation species
- Change in vegetation cover
- Break in bank slope
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

**Comments:**

Erosion channel through upland slopes.

**Floodplain unit:**

- Low-Flow Channel
- Active Floodplain
- Low Terrace

GPS point: \_\_\_\_\_

**Characteristics of the floodplain unit:**

Average sediment texture: bedrock - shale

Total veg cover: 10 % Tree: \_\_\_\_\_ % Shrub: 3 % Herb: 7 %

Community successional stage:

- NA
- Early (herbaceous & seedlings)
- Mid (herbaceous, shrubs, saplings)
- Late (herbaceous, shrubs, mature trees)

**Indicators:**

- Mudcracks
- Ripples
- Drift and/or debris
- Presence of bed and bank
- Benches
- Soil development
- Surface relief
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

**Comments:**

Grasses Bromus mad, B. diand, Bromus catharticus  
one distichlis spic on edge of bank, and Isoetes  
on bank

Project ID: \_\_\_\_\_ Cross section ID: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

**Floodplain unit:**  Low-Flow Channel  Active Floodplain  Low Terrace

GPS point: \_\_\_\_\_

**Characteristics of the floodplain unit:**  
 Average sediment texture: \_\_\_\_\_  
 Total veg cover: \_\_\_\_\_% Tree: \_\_\_\_\_% Shrub: \_\_\_\_\_% Herb: \_\_\_\_\_%  
 Community successional stage:  
 NA  Mid (herbaceous, shrubs, saplings)  
 Early (herbaceous & seedlings)  Late (herbaceous, shrubs, mature trees)

**Indicators:**  
 Mudcracks  Soil development  
 Ripples  Surface relief  
 Drift and/or debris  Other: \_\_\_\_\_  
 Presence of bed and bank  Other: \_\_\_\_\_  
 Benches  Other: \_\_\_\_\_

Comments: \_\_\_\_\_

**Floodplain unit:**  Low-Flow Channel  Active Floodplain  Low Terrace

GPS point: \_\_\_\_\_

**Characteristics of the floodplain unit:**  
 Average sediment texture: \_\_\_\_\_  
 Total veg cover: \_\_\_\_\_% Tree: \_\_\_\_\_% Shrub: \_\_\_\_\_% Herb: \_\_\_\_\_%  
 Community successional stage:  
 NA  Mid (herbaceous, shrubs, saplings)  
 Early (herbaceous & seedlings)  Late (herbaceous, shrubs, mature trees)

**Indicators:**  
 Mudcracks  Soil development  
 Ripples  Surface relief  
 Drift and/or debris  Other: \_\_\_\_\_  
 Presence of bed and bank  Other: \_\_\_\_\_  
 Benches  Other: \_\_\_\_\_

Comments: Upland outside of bunes is coastal scrub and herbaceous species (mostly grasses)

**ATTACHMENT C**

**CORPS APPROVED JURISDICTIONAL DETERMINATION**



**DEPARTMENT OF THE ARMY**  
**LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS**  
**2151 ALESSANDRO DRIVE, SUITE 110**  
**VENTURA, CALIFORNIA 93001-3766**

February 7, 2018

**SUBJECT: Approved Jurisdictional Determination**

T.J. Gamble  
Senior Vice President  
Somera Capital Management, LLC  
115 West Canon Perdido Street  
Santa Barbara, California 93101

Dear Mr. Gamble:

I am responding to your request (File No. SPL-2017-00624-GLH), for a Department of the Army jurisdictional determination (JD) for the Cottages at Port San Luis Project site (lat. 35.179493°N, long. -120.744065°W) located in the city of Avila Beach, San Luis Obispo County, California.

The Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. If both tests are met, a permit would likely be required. The first test determines whether or not the proposed project is located within the Corps' geographic jurisdiction (i.e., it is within a water of the United States). The second test determines whether or not the proposed project is a regulated activity under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act. This evaluation pertains only to geographic jurisdiction.

Based on available information, I have determined waters of the United States do not occur on the project site. The basis for our determination can be found in the enclosed Approved Jurisdictional Determination (JD) form.

This letter includes an approved jurisdictional determination for the Cottages at Port San Luis Project site. If you wish to submit new information regarding this jurisdictional determination, please do so within 60 days. We will consider any new information so submitted and respond within 60 days by either revising the prior determination, if appropriate, or reissuing the prior determination. If you object to this or any revised or reissued jurisdictional determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you wish to appeal this decision, you must submit a completed RFA form within 60 days of the date on the NAP to the Corps South Pacific Division Office at the following address:

Tom Cavanaugh  
Administrative Appeal Review Officer  
U.S. Army Corps of Engineers  
South Pacific Division, CESPDPDS-O, 2042B  
1455 Market Street  
San Francisco, California 94103-1399

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5 (see below), and that it has been received by the Division Office by **April 8, 2018**.

This determination has been conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the particular project site identified in your request, and is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Thank you for participating in the regulatory program. If you have any questions, please contact Jerry Hidalgo at (805) 585-2145 or via e-mail at [Gerardo.L.Hidalgo@usace.army.mil](mailto:Gerardo.L.Hidalgo@usace.army.mil). Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey).

Sincerely,

Antal Szijj  
Team Lead  
Ventura Field Office  
Regulatory Division

Enclosures

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND  
REQUEST FOR APPEAL**

|  |  |                              |                           |
|--|--|------------------------------|---------------------------|
| Applicant: Somera Capital Management, LLC<br>Attn: Mr. T.J. Gamble |  | File No.: SPL-2017-00624-GLH | Date: February 7,<br>2018 |
| Attached is:   |  |                              | See Section below         |
|  | INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission) |                              | A                         |
|  | PROFFERED PERMIT (Standard Permit or Letter of permission)         |                              | B                         |
|  | PERMIT DENIAL  |                              | C                         |
| X  | APPROVED JURISDICTIONAL DETERMINATION                              |                              | D                         |
|  | PRELIMINARY JURISDICTIONAL DETERMINATION                           |                              | E                         |

**SECTION I -** The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at [http://www.usace.army.mil/cecw/pages/reg\\_materials.aspx](http://www.usace.army.mil/cecw/pages/reg_materials.aspx) or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Gerardo L. Hidalgo  
North Coast Branch  
Regulatory Division  
U.S. Army Corps of Engineers  
2151 Alessandro Drive, Suite 110  
Ventura, California 93001  
Phone: 805-585-2145, FAX 805-585-2154  
Email: Gerardo.L.Hidalgo@usace.army.mil

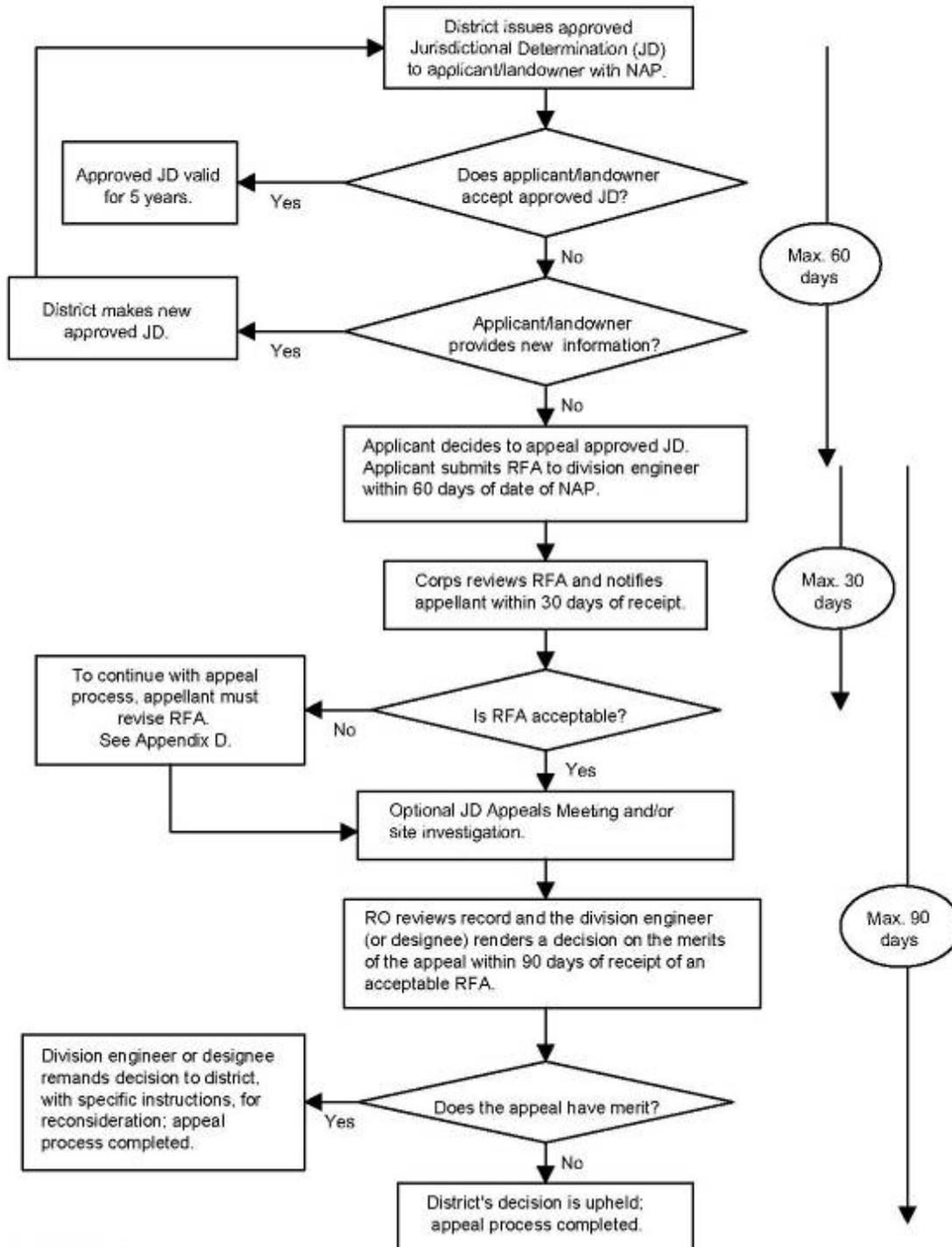
If you only have questions regarding the appeal process you may also contact:

Thomas J. Cavanaugh  
Administrative Appeal Review Officer  
U.S. Army Corps of Engineers  
South Pacific Division  
1455 Market Street, 2052B  
San Francisco, California 94103-1399  
Phone: 415-503-6574, FAX 415-503-6646  
Email: Thomas.J.Cavanaugh@usace.army.mil

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

|   |              |                          |
|---|--------------|--------------------------|
| <hr/> <b>Signature of appellant or agent.</b> | <b>Date:</b> | <b>Telephone number:</b> |
|---|--------------|--------------------------|

## Administrative Appeal Process for Approved Jurisdictional Determinations



### § 331.5 Criteria.

(a) *Criteria for appeal* —(1) *Submission of RFA*. The appellant must submit a completed RFA (as defined at §331.2) to the appropriate division office in order to appeal an approved JD, a permit denial, or a declined permit. An individual permit that has been signed by the applicant, and subsequently unilaterally modified by the district engineer pursuant to 33 CFR 325.7, may be appealed under this process, provided that the applicant has not started work in waters of the United States authorized by the permit. The RFA must be received by the division engineer within 60 days of the date of the NAP.

(2) *Reasons for appeal*. The reason(s) for requesting an appeal of an approved JD, a permit denial, or a declined permit must be specifically stated in the RFA and must be more than a simple request for appeal because the affected party did not like the approved JD, permit decision, or the permit conditions. Examples of reasons for appeals include, but are not limited to, the following: A procedural error; an incorrect application of law, regulation or officially promulgated policy; omission of material fact; incorrect application of the current regulatory criteria and associated guidance for identifying and delineating wetlands; incorrect application of the Section 404(b)(1) Guidelines (see 40 CFR Part 230); or use of incorrect data. The reasons for appealing a permit denial or a declined permit may include jurisdiction issues, whether or not a previous approved JD was appealed.

(b) *Actions not appealable*. An action or decision is not subject to an administrative appeal under this part if it falls into one or more of the following categories:

(1) An individual permit decision (including a letter of permission or a standard permit with special conditions), where the permit has been accepted and signed by the permittee. By signing the permit, the applicant waives all rights to appeal the terms and conditions of the permit, unless the authorized work has not started in waters of the United States and that issued permit is subsequently modified by the district engineer pursuant to 33 CFR 325.7;

(2) Any site-specific matter that has been the subject of a final decision of the Federal courts;

(3) A final Corps decision that has resulted from additional analysis and evaluation, as directed by a final appeal decision;

(4) A permit denial without prejudice or a declined permit, where the controlling factor cannot be changed by the Corps decision maker (e.g., the requirements of a binding statute, regulation, state Section 401 water quality certification, state coastal zone management disapproval, etc. (See 33 CFR 320.4(j)));

(5) A permit denial case where the applicant has subsequently modified the proposed project, because this would constitute an amended application that would require a new public interest review, rather than an appeal of the existing record and decision;

(6) Any request for the appeal of an approved JD, a denied permit, or a declined permit where the RFA has not been received by the division engineer within 60 days of the date of the NAP;

(7) A previously approved JD that has been superseded by another approved JD based on new information or data submitted by the applicant. The new approved JD is an appealable action;

(8) An approved JD associated with an individual permit where the permit has been accepted and signed by the permittee;

(9) A preliminary JD; or

(10) A JD associated with unauthorized activities except as provided in §331.11.

**DRY LAND APPROVED JURISDICTIONAL DETERMINATION FORM<sup>1</sup>**  
**U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): February 6, 2018**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: The Cottages at Port San Luis (SPL-2017-00624-GLH)**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: California County/parish/borough: San Luis Obispo City: Avila Beach  
Center coordinates of site (lat/long in degree decimal format): Lat. 35.179485 °, Long. -120.742971 °  
Universal Transverse Mercator:

Name of nearest waterbody: Pacific Ocean

Name of watershed or Hydrologic Unit Code (HUC): 1806000607 Pismo Creek-Frontal Pacific Ocean

- Check if map/diagram of review area is available upon request.  
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date: January 10, 2018

Field Determination. Date(s): January 29, 2018

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There are **no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There are **no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**SECTION III: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Jurisdictional Delineation Report dated 08/18/2017.

Data sheets prepared/submitted by or on behalf of the applicant/consultant.

Office concurs with data sheets/delineation report.

Office does not concur with data sheets/delineation report.

Data sheets prepared by the Corps: [Click here to enter text.](#)

U.S. Geological Survey Hydrologic Atlas: [Click here to enter text.](#)

USGS NHD data.

USGS 8 and 12 digit HUC maps.

U.S. Geological Survey map(s). Cite scale & quad name: Pismo Beach

USDA Natural Resources Conservation Service Soil Survey. Citation: [Click here to enter text.](#)

National wetlands inventory map(s). Cite name: USFWS National Wetland Inventory Map

State/Local wetland inventory map(s): [Click here to enter text.](#)

FEMA/FIRM maps: [Click here to enter text.](#)

100-year Floodplain Elevation is: [Click here to enter text.](#) (National Geodetic Vertical Datum of 1929)

Photographs:  Aerial (Name & Date): Google Earth, 2017

or  Other (Name & Date): January 29, 2018

Previous determination(s). File no. and date of response letter: [Click here to enter text.](#)

Applicable/supporting case law: [Click here to enter text.](#)

Applicable/supporting scientific literature: [Click here to enter text.](#)

Other information (please specify): [Click here to enter text.](#)

**B. REQUIRED ADDITIONAL COMMENTS TO SUPPORT JD. EXPLAIN RATIONALE FOR DETERMINATION THAT THE**

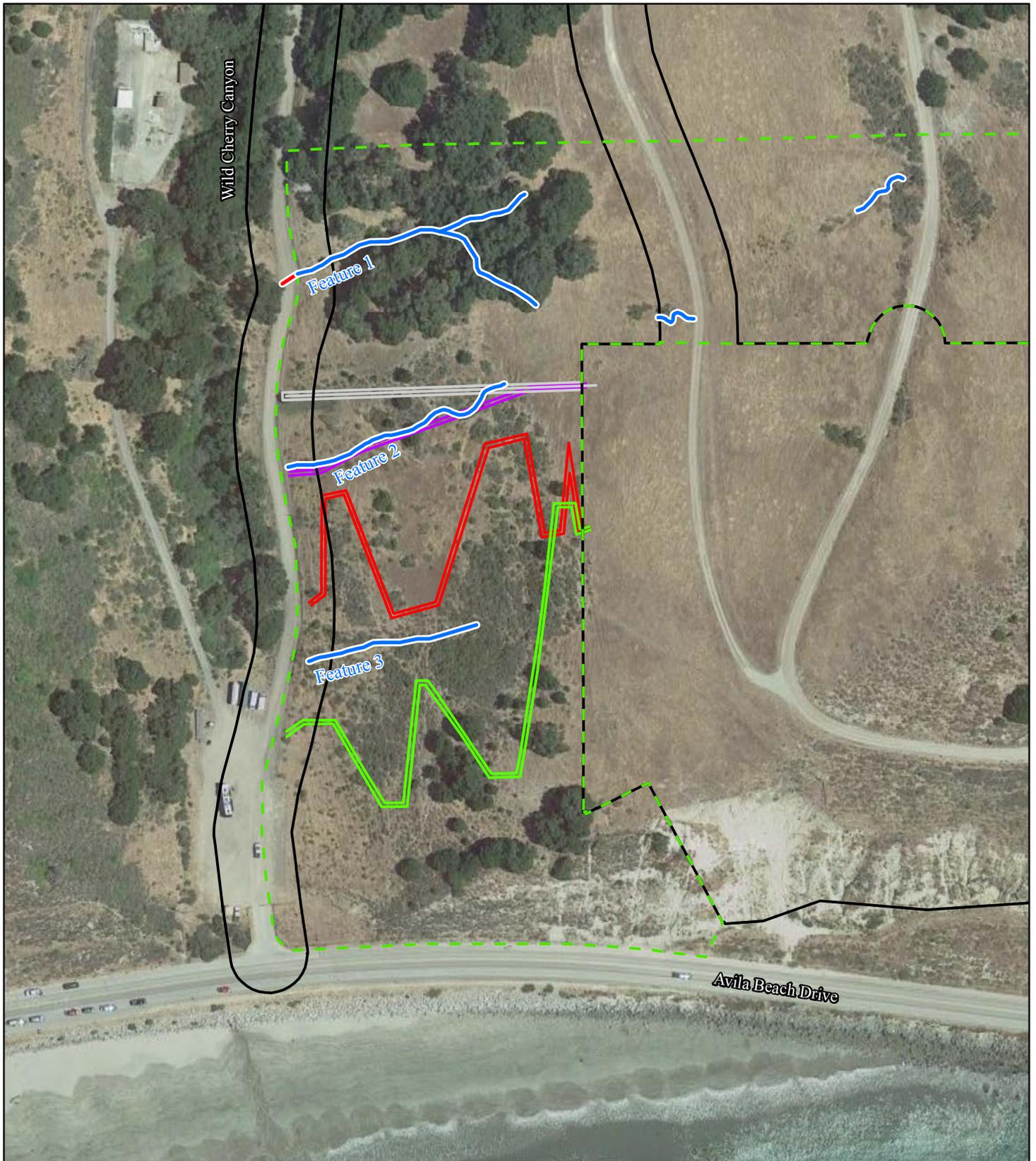
**REVIEW AREA ONLY INCLUDES DRY LAND:** The AJD review area features a roadside drainage ditch excavated wholly in uplands. The roadside drainage ditch consists of annual grassland upland species and does not carry relatively permanent flow of water. The AJD review area also features two erosional features (e.g. gullies) characterized by low volume, infrequent and short duration flow and lacking Ordinary High Water Mark features. The AJD review area does not consist of features as defined by 33 CFR 328.3(a). In accordance with the *Rapanos* Guidance, the AJD review area consists strictly of uplands. Consequently, there are no aquatic resources or potential aquatic resources in the AJD review area.

<sup>1</sup> This form is for use only in recording approved JDs involving dry land. It extracts the relevant elements of the longer approved JD form in use since 2007 for aquatic areas and adds no new fields.

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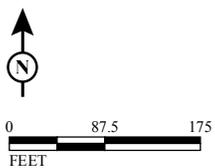
**APPENDIX G**

**EROSION FEATURES WITHIN THE SUPPLEMENTAL SURVEY  
AREA**



LSA

Appendix G



LEGEND

- Original Survey Area (35.70 acres)
- Supplemental Survey Area (15.76 ac)
- Culvert
- Erosional Features\*
- Proposed Storm Drain\*\*
- Pathway Design Alternative 1\*\*
- Pathway Design Alternative 2\*\*
- Pathway Design Alternative 3\*\*

\*Not formally delineated.

\*\*Final design is subject to landowner approval and refinement.

*The Cottages  
at Point San Luis*  
Erosion Features within the  
Supplemental Survey Area

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