

# **BIOLOGICAL TECHNICAL REPORT**

**FOR THE**

**LAKE ELSINORE 35 PROPERTY**

**LOCATED IN THE CITY OF LAKE ELSINORE  
RIVERSIDE COUNTY, CALIFORNIA**

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**September 30, 2021  
[Revised October 27, 2021]**

## INFORMATION SUMMARY

**A. Report Date:** September 30, 2021 [Revised October 27, 2021]

**B. Report Title:** Lake Elsinore 35 Residential Development Project

**C. Project Site Location:** Latitude 33.663728, Longitude -117.382324  
Unincorporated Riverside County, California

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## **1.0 INTRODUCTION**

### **1.1 Background and Scope of Work**

This document provides the results of general and focused biological surveys for the approximately 35-acre Lake Elsinore 35 Residential Development Project (the Project) located in the City of Lake Elsinore in Riverside County, California and its 1.65-acre off site impact area. This report identifies and evaluates impacts to biological resources associated with the proposed Project in the context of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the California Environmental Quality Act (CEQA), and State and Federal regulations such as the federal Endangered Species Act (FESA), Clean Water Act (CWA), California Endangered Species Act (CESA), Porter-Cologne Water Quality Act (Porter-Cologne), and the California Fish and Game Code (FGC).

The scope of this report includes a discussion of existing conditions for the approximately 35-acre Project site, all methods employed regarding the general and focused biological surveys, the documentation of botanical and wildlife resources identified (including special-status species), and an analysis of impacts to biological resources. Methods of the study include a review of relevant literature, field surveys, and a Geographical Information System (GIS)-based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

The field study focused on a number of primary objectives that would comply with CEQA and MSHCP requirements, including (1) general reconnaissance survey and vegetation mapping; (2) general biological surveys; (3) habitat assessments for special-status plant species (including species with applicable MSHCP survey requirements); (4) habitat assessments for special-status wildlife species (including species with applicable MSHCP survey requirements); (5) assessment for the presence of wildlife migration and colonial nursery sites; (6) assessments for MSHCP riparian/riverine areas and vernal pools; and (7) assessments for areas subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), State Water Quality Control Board pursuant to Section 401 of the CWA and Section 13260 of the California Water Code (CWC), and CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600–1617 of the California Fish and Game Code. Observations of all plant and wildlife species were recorded during the biological studies and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium.

### **1.2 Project Location**

The proposed Project consists of the development of a single-family residential development located in the City of Lake Elsinore, Riverside County [Exhibit 1 – Regional Map] at latitude 33.663728 and longitude -117.382324. The Project is located in Section 10 of Township 5 South, Range 4 West as depicted on the USGS Alberhill, California 7.5-minute topographic quadrangle map [Exhibit 2 – Vicinity Map]. The Project is bounded by Riverside Avenue to the north and west, Grand Avenue to the south and west, and Lake Elsinore to the northeast and is

within Assessor's Parcel Numbers 379-060-005, 379-060-022, and 379-060-027 [Exhibit 3 – Aerial Map].

### **1.3 Project Description**

The Study Area consists of the 34.80-acre Project Site and the 1.65-acre off site area. Together, the Study Area totals 36.45 acres of land. The Project is a development that is adjacent to the lake in Lake Elsinore. This community anticipates the design of up to 140 single-family residential homes offering a continuation of the three Westlake floor plans currently being sold at nearby Tri-Pointe Homes developments in the City. These homes are expected to target the underserved entry level buyer. The proposed plan is to offer two story homes, varying in lot size widths of 40 foot, 42 foot, and 44 foot x 65 square foot lots. Homes will range in size from approximately 1,794 square feet up to 2,288 square feet. Additionally, the site is anticipated to be gated with a central amenity consisting of a pool and park complex, as well as the preservation of 15.65 acres of open space. The community will include a water quality basin with a 24-inch storm drain line that will connect through the wall of the Hill Street Ditch.

There is also a 24-inch storm drain pipe that will connect off site to a portion of the Hill Street Ditch near Grand Avenue. The applicant is considering the impact area within these two storm drain outlets to be approximately four feet in length each which would result in permanent impact to 0.01 acre of the Hill Street Ditch at these two outlet points. The Project grading plan is attached as Exhibit 4.

### **1.4 Relationship of the Project Site to the MSHCP**

#### **1.4.1 MSHCP Background**

The Western Riverside County MSHCP is a comprehensive habitat conservation/planning program for Western Riverside County. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to special-status species and associated native habitats.

Through agreements with the U.S. Fish and Wildlife Service (USFWS) and CDFW, the MSHCP designates 146 special-status animal and plant species as Covered Species, of which the majority have no project-specific survey/conservation requirements. The MSHCP provides mitigation for project-specific impacts to these species for Projects that are compliant/consistent with MSHCP requirements, such that the impacts are reduced to below a level of significance pursuant to CEQA.

The Covered Species that are not yet adequately conserved have additional requirements in order for these species to ultimately be considered “adequately conserved”. A number of these species have survey requirements based on a project’s occurrence within a designated MSHCP Survey Area and/or based on the presence of suitable habitat. These include Narrow Endemic Plant Species (MSHCP *Volume I*, Section 6.1.3), as identified by the Narrow Endemic Plant Species

Survey Areas (NEPSSA); Criteria Area Plant Species (MSHCP *Volume I, Section 6.3.2*) identified by the Criteria Area Plant Species Survey Areas (CAPSSA); animals species (burrowing owl, mammals, amphibians) identified by Survey Areas (MSHCP *Volume I, Section 6.3.2*); and species associated with riparian/riverine areas and vernal pool habitats, i.e., least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and three species of listed fairy shrimp (MSHCP *Volume I, Section 6.1.2*). An additional 28 species (MSHCP *Volume I, Table 9.3*) not yet adequately conserved have species-specific objectives in order for the species to become adequately conserved. However, these species do not have project-specific survey requirements.

The goal of the MSHCP is to have a total Conservation Area in excess of 500,000 acres, including approximately 347,000 acres on existing Public/Quasi-Public (PQP) Lands, and approximately 153,000 acres of Additional Reserve Lands targeted within the MSHCP Criteria Area. The MSHCP is divided into 16 separate Area Plans, each with its own conservation goals and objectives. Within each Area Plan, the Criteria Area is divided into Subunits, and further divided into Criteria Cells and Cell Groups (a group of criteria cells). Each Cell Group and ungrouped, independent Cell has designated “criteria” for the purpose of targeting additional conservation lands for acquisition. Projects located within the Criteria Area are subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process to determine if lands are targeted for inclusion in the MSHCP Reserve. In addition, all Projects located within the Criteria Area are subject to the Joint Project Review (JPR) process, where the Project is reviewed by the Regional Conservation Authority (RCA) to determine overall compliance/consistency with the biological requirements of the MSHCP.

#### **1.4.2 Relationship of the Project Site to the MSHCP**

The Project site is located within the Elsinore Area Plan of the MSHCP and is not located within MSHCP criteria cells, cell groups, or public/quasi-public (PQP) lands [Exhibit 5 – MSHCP Map]. The Project site is not located within the MSHCP Criteria Area Plant Species Survey Area (CAPSSA), the Narrow Endemic Plant Species Survey Area (NEPSSA), Mammal Survey Areas, Burrowing Owl (*Athene cunicularia*) Survey Area, Amphibian Survey Area, or Core and Linkage areas.

Within designated Survey Areas, the MSHCP requires habitat assessments, and focused surveys within areas of suitable habitat. For locations with positive survey results, the MSHCP requires that 90 percent of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species have been met throughout the MSHCP. Findings of equivalency shall be made demonstrating that the 90-percent standard has been met, if applicable. If equivalency findings cannot be demonstrated, then “biologically equivalent or superior preservation” must be provided. No such survey areas are present on site.

## 2.0 METHODOLOGY

In order to adequately identify biological resources in accordance with the requirements of CEQA, Glenn Lukos Associates (GLA) assembled biological data consisting of following main components:

- Delineation of aquatic resources (including wetlands and riparian habitat) subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), CDFW, and MSHCP riparian/riverine areas and vernal pools policy;
- Performance of vegetation mapping for the Project site; and
- Performance of habitat assessments, and site-specific biological surveys, to evaluate the presence/absence of special-status species in accordance with the requirements of CEQA and the MSHCP.

The focus of the biological surveys was determined through initial site reconnaissance, a review of the CNDB [CDFW 2021], CNPS 8<sup>th</sup> edition online inventory (CNPS 2021), Natural Resource Conservation Service soil data (NRCS 2021), MSHCP species and habitat maps and sensitive soil maps (Dudek 2003), other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project site were conducted on foot in the proposed development areas for each target plant or animal species identified below as well as in the avoided open space (i.e., 500-foot buffer for burrowing owl). Table 2-1 provides a summary list of survey dates, survey types, and personnel.

**Table 2-1. Summary of Biological Surveys for the Project Site**

<b>Survey Type</b>	<b>Survey Dates</b>	<b>Biologist(s)</b>
General Biological Survey	06/24/2021	VP, DS
Evaluation of MSHCP Riparian/Riverine Areas	06/24/2021	LLG
Vegetation Mapping	06/24/2021	VP, DS
Evaluation of MSHCP Vernal Pools and Fairy Shrimp Habitat	06/24/2021	LLG
Delineation of Federal and State Jurisdictional Waters	06/24/2021	LLG

VP = Velvet Park, LLG = Lesley Lokovic-Gamber, DS= David Smith

Individual plants and wildlife species were evaluated in this report based on their “special-status.” For this report, plants were considered “special-status” based on one or more of the following criteria:

- Listing through the FESA and/or CESA; and/or
- CNPS Rare Plant Inventory Rank 1A, 1B, 2A, 2B, 3, or 4.

Wildlife species were considered “special-status” based on one or more of the following criteria:

- Listing through the FESA and/or CESA; and
- Designation by the State as a Species of Special Concern (SSC) or California Fully Protected (CFP) species.

Vegetation communities and habitats were considered “special-status” based on one or more of the following criteria:

- Global (G) and/or State (S) ranking of category 3 or less based on CDFW (see Section 3.2.2 below for further explanation); and
- Riparian/riverine habitat.

## **2.1 Botanical Resources**

A site-specific survey program was designed to accurately document the botanical resources within the Project site, and consisted of five components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project site; (3) general field reconnaissance survey(s); (4) vegetation mapping according to Holland (1986); and (5) habitat assessments and focused surveys for special-status plants (including those with MSHCP requirements).

### **2.1.1 Literature Search**

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included the following:

- California Native Plant Society, Rare Plant Program. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39) (CNPS 2021); and
- CNDDDB for the USGS 7.5' Alberhill, California quadrangle and surrounding quadrangles (CDFW 2021).

### **2.1.2 Vegetation Mapping**

Vegetation communities within the Project site were mapped according to Holland (1986) when possible. Plant communities were mapped in the field directly onto a 200-scale (1"=200') aerial photograph. A vegetation map is included as [Exhibit 9 – Vegetation Map]. Representative site photographs are included as [Exhibit 8 – Site Photographs].

### **2.1.3 Special-Status Plant Species and Habitats Evaluated for the Project Site**

A literature search was conducted to obtain a list of special-status plants with the potential to occur within the Project site. The CNDDDB was initially consulted to determine well-known occurrences of plants and habitats of special concern in the region. Other sources used to develop a list of target species for the survey program included the CNPS online inventory (2020) and the MSHCP (Dudek 2003).

The Project is not located within a NEPSSA or CAPSSA survey area.

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur within the Project site were developed and incorporated into a mapping and survey program to achieve the following goals: (1) characterize the vegetation associations and land use; (2) prepare a detailed floristic compendium; (3) identify the potential for any special-status plants that may occur within the Project site; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Project site, if applicable.

#### **2.1.4 Botanical Surveys**

GLA biologists visited the Project site on June 24, 2021 to conduct general biological surveys which included plant surveys. Surveys were conducted in accordance with accepted botanical survey guidelines (CDFG 2009, CNPS 2001, USFWS 2000). As applicable, survey(s) were conducted at appropriate times based on precipitation and flowering periods. An aerial photograph, a soil map, and/or a topographic map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Project site. Survey(s) were conducted by following meandering transects within target areas of suitable habitat. All plant species encountered during the general biological survey(s) were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984). A complete list of the plant species observed is provided in Appendix A. Scientific nomenclature and common names used in this report follow Baldwin et al (2012), and Munz (1974).

### **2.2 Wildlife Resources**

Wildlife species were evaluated and detected during the field survey(s) by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project site by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit(s). A complete list of wildlife species observed within the Project site is provided in Appendix B. Scientific nomenclature and common names for vertebrate species referred to in this report follow the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFG 2008), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians 6<sup>th</sup> Edition, Collins and Taggart (2009) for amphibians and reptiles, and the American Ornithologists' Union Checklist 7<sup>th</sup> Edition (2009) for birds. The methodology (including any applicable survey protocols) utilized to conduct general survey(s), habitat assessment(s), and/or focused surveys for special-status animals are included below.

#### **2.2.1 General Surveys**

##### ***Birds***

During the general biological and reconnaissance survey within the Project site, birds were identified incidentally within each habitat type. Birds were detected by both direct observation and by vocalizations and were recorded in field notes.

### ***Mammals***

During general surveys within the Project site, mammals were detected both by direct observations and by the presence of diagnostic sign (i.e., tracks, burrows, scat, etc.).

### ***Reptiles and Amphibians***

During general surveys within the Project site, reptiles and amphibians were identified incidentally during surveys within each habitat type. Habitats were examined for diagnostic reptile sign, which include shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed, as well as diagnostic sign, were recorded in field notes.

## **2.2.2 Special-Status Animal Species Evaluated for the Project Site**

A literature search was conducted to obtain a list of special-status wildlife species with the potential to occur within the Project site. Species were evaluated based on three factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in vicinity of the Project site, (2) species survey areas as identified by the MSHCP for the Project site; and 3) any other special-status animals that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs on the Project site.

## **2.2.3 Habitat Assessment for Special-Status Animal Species**

GLA biologists conducted habitat assessments for special-status animal species on June 24, 2021. An aerial photograph, soil map and/or topographic map were used to determine the community types and other physical features that may support special-status and uncommon taxa within the Project site.

## **2.2.4 Focused Surveys for Special-Status Animals Species**

### **Burrowing Owl**

The Project is not located within the burrowing owl survey area of the MSHCP; therefore, no burrowing owl surveys were conducted for the Project; however, as required by the MSHCP, a pre-construction burrowing owl survey shall occur within 30 days of site disturbance.

## **2.3 Jurisdictional Waters**

The Project site was delineated to identify the limits of jurisdictional waters, including waters of the U.S. (including wetlands) subject to the jurisdiction of the Corps and Regional Board, and waters of the State (including riparian vegetation) subject to the jurisdiction of CDFW and the Regional Board. Prior to beginning the field delineation, a 200-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine the locations of potential areas of Corps/CDFW/Regional Board jurisdiction. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Potential wetland habitats at the subject site were evaluated using the methodology

set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual<sup>1</sup> (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement)<sup>2</sup>. The presence of an Ordinary High Water Mark (OHWM) was determined using the 2008 Field Guide to Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States<sup>3</sup> in conjunction with the Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.<sup>4</sup> While in the field the limits of the OHWM, wetlands (if applicable), and CDFW jurisdiction were recorded using GPS technology and/or on copies of the aerial photography. Other data were recorded onto the appropriate datasheets.

## **2.4 MSHCP Riparian/Riverine Areas and Vernal Pools**

*Volume I, Section 6.1.2* of the MSHCP describes the process through which protection of riparian/riverine areas and vernal pools would occur within the MSHCP Plan Area. The purpose is to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained such that habitat values for species inside the MSHCP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall Plan Area, the effect of those projects on riparian/riverine areas and vernal pools must be addressed.

The MSHCP defines riparian/riverine areas as *lands which contain Habitat dominated by trees, shrubs, persistent emergent mosses and lichens, which occur close to or which depend upon soils moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.*

The MSHCP defines vernal pools as *seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season.*

With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

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<sup>1</sup> Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

<sup>2</sup> U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Version 2.0). Ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Research and Development Center.

<sup>3</sup> Lichvar, R. W., and S. M. McColley. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. ERDC/CRREL TR-08-12. Hanover, NH: U.S. Army Research and Development Center, Cold Regions Research and Engineering Laboratory. (<http://www.crrel.usace.army.mil/library/technicalreports/ERDC-CRREL-TR-08-12.pdf>).

<sup>4</sup> Curtis, Katherine E. and Robert Lichevar. 2010. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. ERDC/CRREL TN-10-1. Hanover, NH: U.S. Army Research and Development Center, Cold Regions Research and Engineering Laboratory.

GLA surveyed the Project site for riparian/riverine areas and vernal pool/seasonal pool habitat, including features with the potential to support fairy shrimp. To assess for vernal/seasonal pools (including fairy shrimp habitat), GLA biologists evaluated the topography of the site, including whether the site contained depressional features/topography with the potential to become inundated; whether the site contained soils associated with vernal/seasonal pools; and whether the site supported plants that suggested areas of localized ponding. The site was evaluated on June 24, 2021.

### **3.0 REGULATORY SETTING**

The proposed Project is subject to state and federal laws and regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including state- and federally-listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; special-status species which are not listed as threatened or endangered by the state or federal governments; and special-status vegetation communities.

#### **3.1 Endangered Species Acts**

##### **A. California Endangered Species Act**

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of

understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

### **B. Federal Endangered Species Act**

The FESA of 1973 defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to “take” any listed species. “Take” is defined in Section 3(18) of FESA: “...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Further, the USFWS, through regulation, has interpreted the terms “harm” and “harass” to include certain types of habitat modification that result in injury to, or death of species as forms of “take.” These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a Federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

### **C. State and Federal Take Authorizations**

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).
- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the CESA require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

#### **D. Take Authorizations Pursuant to the MSHCP**

The Western Riverside County MSHCP was adopted on June 17, 2003, and an Implementing Agreement (IA) was executed between the federal and state wildlife agencies and participating entities. The MSHCP is a comprehensive habitat conservation-planning program for western Riverside County. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. As such, the MSHCP is intended to streamline review of individual projects with respect to the species and habitats addressed in the MSHCP, and to provide for an overall Conservation Area that would be of greater benefit to biological resources than would result from a piecemeal regulatory approach. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to sensitive species pursuant to Section 10(a) of the FESA.

Through agreements with the USFWS and the CDFW, the MSHCP designates 146 special-status animal and plant species that receive some level of coverage under the plan. Of the 146 “Covered Species” designated under the MSHCP, the majority of these species have no additional survey/conservation requirements. In addition, through project participation with the MSHCP, the MSHCP provides mitigation for project-specific impacts to Covered Species so that the impacts would be reduced to below a level of significance pursuant to CEQA. As noted above, project-specific survey requirements exist for species designated as “Covered Species not yet adequately conserved”. These include Narrow Endemic Plant Species, as identified by the Narrow Endemic Plant Species Survey Areas (NEPSSA); Criteria Area Plant Species identified by the Criteria Area Plant Species Survey Areas (CAPSSA); animals species as identified by survey area; and plant and animal species associated with riparian/riverine areas and vernal pool habitats (*Volume I, Section 6.1.2* of the MSHCP document).

For projects that have a federal nexus such as through federal CWA Section 404 permitting, take authorization for federally listed covered species would occur under Section 7 (not Section 10) of FESA and that USFWS would provide a MSHCP consistency review of the proposed project, resulting in a biological opinion. The biological opinion would require no more compensation than what is required to be consistent with the MSHCP.

### **3.2 California Environmental Quality Act**

#### **A. CEQA Guidelines Section 15380**

CEQA requires evaluation of a project’s impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Sections 5.1.1 and 5.2.2 below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, CDFW recognizes that plants on Lists 1A, 1B, or 2 of the CNPS *Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants CNPS Ranked 3 or 4.

## **B. Special-Status Plants, Wildlife and Vegetation Communities Evaluated Under CEQA**

### ***Federally Designated Special-Status Species***

Within recent years, the USFWS instituted changes in the listing status of candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. This term is employed in this document but carries no official protections. All references to federally protected species in this report (whether listed, proposed for listing, or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS.

For this report the following acronyms are used for federal special-status species:

- FE                    Federally listed as Endangered
- FT                    Federally listed as Threatened
- FPE                  Federally proposed for listing as Endangered
- FPT                  Federally proposed for listing as Threatened
- FC                    Federal Candidate Species (former C1 species)

### ***State-Designated Special-Status Species***

Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC are designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDDB project. Informally listed taxa are not protected but warrant consideration in the preparation of biotic assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For this report the following acronyms are used for State special-status species:

- SE                    State-listed as Endangered
- ST                    State-listed as Threatened
- SR                    State-listed as Rare
- SCE                  State Candidate for listing as Endangered
- SCT                  State Candidate for listing as Threatened
- SFP                  State Fully Protected
- SP                    State Protected
- SSC                  State Species of Special Concern

## California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS's Eighth Edition of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* separates plants of interest into five ranks. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California. The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS has developed five categories of rarity that are summarized in Table 3-1.

**Table 3-1. CNPS Ranks 1, 2, 3, & 4, and Threat Code Extensions**

CNPS Rank	Comments
Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere	Thought to be extinct in California based on a lack of observation or detection for many years.
Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere	Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.
Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere	Species that are presumed extinct in California but more common outside of California
Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere	Species that are rare in California but more common outside of California
Rank 3 – Plants About Which More Information Is Needed (A Review List)	Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.
Rank 4 – Plants of Limited Distribution (A Watch List)	Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the "Inventory" and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.
Extension	Comments
.1 – Seriously endangered in California	Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.
.2 – Fairly endangered in California	Species with 20-80% of occurrences threatened.
.3 – Not very endangered in California	Species with <20% of occurrences threatened or with no current threats known.

### **3.3 Jurisdictional Waters**

#### **3.3.1 Army Corps of Engineers**

Pursuant to Section 404 of the CWA, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

- (1) *All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- (2) *All interstate waters including interstate wetlands;*
- (3) *All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*
  - (i) *Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
  - (ii) *From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or*
  - (iii) *Which are used or could be used for industrial purpose by industries in interstate commerce...*
- (4) *All impoundments of waters otherwise defined as waters of the United States under the definition;*
- (5) *Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;*
- (6) *The territorial seas;*
- (7) *Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.*
- (8) *Waters of the United States do not include prior converted cropland.<sup>5</sup>*  
Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

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<sup>5</sup> The term "prior converted cropland" is defined in the Corps' Regulatory Guidance Letter 90-7 (dated September 26, 1990) as "wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent that they no longer exhibit important wetland values. Specifically, prior converted cropland is inundated for no more than 14 consecutive days during the growing season...." [Emphasis added.]

*...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

## **1. Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.**

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, the U.S. Environmental Protection Agency (EPA) asserted that Corps jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of “waters of the United States” in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the CWA.

The written opinion notes that the court’s previous support of the Corps’ expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

*In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.*

Therefore, we believe that the court’s opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the CWA (regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

## **2. Rapanos v. United States and Carabell v. United States**

On June 5, 2007, the EPA and Corps issued joint guidance that addresses the scope of jurisdiction pursuant to the CWA in light of the Supreme Court’s decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (“Rapanos”). The chart below was provided in the joint EPA/Corps guidance.

For project sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPWs) tributary to TNWs and/or their adjacent wetlands as set forth in the chart below, the Corps must apply the significant nexus standard.

For “isolated” waters or wetlands, the joint guidance also requires an evaluation by the Corps and EPA to determine whether other interstate commerce clause nexuses, not addressed in the SWANCC decision are associated with isolated features on project sites for which a jurisdictional determination is being sought from the Corps.

The agencies will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months)
- Wetlands that directly abut such tributaries

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters
- Significant nexus includes consideration of hydrologic and ecologic factors

### **3. Wetland Definition Pursuant to Section 404 of the Clean Water Act**

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland

Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List<sup>67</sup>);
- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

### **3.3.2. Regional Water Quality Control Board**

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States<sup>8</sup> and waters of the State. Waters of the United States are defined above in Section II.A and waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do

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<sup>6</sup> Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. Arid West 2016 Regional Wetland Plant List. Phytoneuron 2016-30: 1-17. Published 28 April 2016.

<sup>7</sup> Note the Corps also publishes a National List of Plant Species that Occur in Wetlands (Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016.); however, the Regional Wetland Plant List should be used for wetland delineations within the Arid West Region.

<sup>8</sup> Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code of Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (Corps) to be “waters of the U.S.” in an approved jurisdictional determination; “waters of the U.S.” identified in an aquatic resource report verified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of “waters of the U.S.” or any current or historic federal regulation defining “waters of the U.S.” under the federal Clean Water Act.

not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

## 1. State Wetland Definition

The State Board Wetland Definition and Procedures define an area as wetland as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

The following wetlands are waters of the State:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;<sup>9</sup> and*
3. *Artificial wetlands<sup>10</sup> that meet any of the following criteria:*
  - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;*
  - b. Specifically identified in a water quality control plan as a wetland or other water of the state;*
  - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or*
  - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):*
    - i. Industrial or municipal wastewater treatment or disposal,*
    - ii. Settling of sediment,*
    - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,*
    - iv. Treatment of surface waters,*
    - v. Agricultural crop irrigation or stock watering,*
    - vi. Fire suppression,*
    - vii. Industrial processing or cooling,*

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<sup>9</sup> “Created by modification of a surface water of the state” means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.

<sup>10</sup> Artificial wetlands are wetlands that result from human activity.

- viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
- ix. Log storage,
- x. Treatment, storage, or distribution of recycled water, or
- xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
- xii. Fields flooded for rice growing.<sup>11</sup>

*All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.*

### 3.3.3 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1617 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a stream (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW also defines a stream as "a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators."

It is important to note that the Fish and Game Code defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

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<sup>11</sup> Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board's authority to issue or waive waste discharge requirements or take other actions as applicable.

## 4.0 RESULTS

This section provides the results of general biological surveys, vegetation mapping, habitat assessments and focused surveys for special-status plants and animals, an assessment for MSHCP riparian/riverine areas and vernal pools, and a jurisdictional delineation for Waters of the United States (including wetlands) subject to the jurisdiction of the Corps and Regional Board, and streams (including riparian vegetation) and lakes subject to the jurisdiction of CDFW.

### 4.1 Existing Conditions

The Study Area consists of the 34.80-acre Project Site and the 1.65-acre off site area. Together, the Study Area totals 36.45 acres of land. The Project site occurs south and east of Riverside Avenue, north and west of Grand Avenue, and west of Lake Elsinore. Based on historical aerial photography, the Project site has undergone extensive ground disturbances and hydrologic alteration. The topography within the Project site slopes downward from west to east from 1,304 feet (397 meters) to 1,250 feet (381 meters) above mean sea level (amsl). Soils on-site include very fine, fine, and coarse sandy loams consisting of Garretson very fine sandy loam, 2 to 8 percent slopes (GaC); Grangeville fine sandy loam, drained, 0 to 2 percent slopes (GtA); and Hanford coarse sandy loam, 2 to 8 percent slopes (HcC).

A depiction of soils found throughout the Project site can be found on Exhibit 6 - Soils Map. Due to the decades of site disturbances throughout the Project site, hydrology has been modified as a result. However, the topography conveys storm flows in a general west to east direction, depending on rainfall amounts, through the site towards Lake Elsinore.

No blue-line drainages occur within the Study area, but the Project site does support riparian/wetland habitat associated with Lake Elsinore and two concrete and earthen ephemeral ditches. Refer to Section 4.9 for additional details.

### 4.2 Vegetation Mapping

The Study Area consists of the 34.80-acre Project Site and the 1.65-acre off-site area. Together, the Study Area totals 36.45 acres of land. The Study Area supports the following vegetation/land cover types: disturbed, developed, non-native grassland, disturbed southern willow cottonwood riparian forest, and southern willow cottonwood riparian forest. Table 4-1 provides a summary of the vegetation/land cover types and their corresponding acreage for both the on- and off-site areas. Descriptions of each vegetation/land cover type follow the table. A Vegetation Map is attached as Exhibit 9. Photographs depicting the Project site are shown in Exhibit 8.

**Table 4-1. Summary of Vegetation/Land Use Types for the Project Site**

VEGETATION/LAND USE TYPE	PROJECT SITE (acres)	OFF SITE AREAS (acres)	TOTAL (acres)
Disturbed	4.55	0.03	4.58
Developed	0	1.14	1.14

VEGETATION/LAND USE TYPE	PROJECT SITE (acres)	OFF SITE AREAS (acres)	TOTAL (acres)
Non-Native Grassland	16.60	0.48	17.08
Disturbed Southern Willow Cottonwood Riparian Forest	1.99	0	1.99
Southern Willow Cottonwood Riparian Forest	11.66	0	11.66
<b>Total</b>	<b>34.80</b>	<b>1.65</b>	<b>36.45</b>

### Disturbed

Approximately 4.58 acres of disturbed areas occur throughout the Study Area in the form of parts of the property that have been routinely maintained on an annual basis. 4.55 acres of disturbed area is within the Project Site and 0.03 acre is within the off-site area. These areas are primarily unvegetated.

Dominant plant species in this vegetation community include barley (*Hordeum vulgare*), shortpod mustard (*Hirschfeldia incana*), and wild oat (*Avena fatua*).

Additional plant species include: annual bur-sage (*Ambrosia acanthicarpa*), acacia (*Acacia* sp.), unknown ornamentals, Brazilian pepper (*Schinus terebinthifolius*), alkali heliotrope (*Heliotropium curassavicum*), salt grass (*Distichlis spicata*), laurel sumac (*Malosma laurina*), ripgut grass (*Bromus diandrus*), white sweetclover (*Melilotus albus*), desert wild grape (*Vitis girdiana*), artichoke thistle (*Cynara cardunculus*), horehound (*Marrubium vulgare*), common fig (*Ficus carica*), bulrush (*Scirpoides holoschoenus*), pecan (*Carya illinoiensis*), and prickly lettuce (*Lactuca serriola*).

### Developed

Approximately 1.14 acres of developed areas occur throughout the off-site portion of the Project in the form of unpaved access roads and paved vehicular roads. These areas are routinely maintained and are primarily unvegetated.

### Non-Native Grassland

Approximately 17.08 acres of non-native grassland is located within the Study Area. This includes 16.60 acres of non-native grassland within the Project site and 0.48 acre of non-native grasslands within off-site areas.

Dominant plant species in this vegetation community include: ripgut grass (*Bromus diandrus*), wild oat (*Avena fatua*), field mustard (*Brassica rapa*), and common fiddleneck (*Amsinckia intermedia*).

Additional plant species include jimson weed (*Datura stramonium*), California cudweed (*Pseudognaphalium californicum*), Russian thistle (*Salsola tragus*), red-stem filaree (*Erodium cicutarium*), procumbent pigweed (*Amaranthus biltoides*), stinging nettle (*Urtica dioica*), field bindweed (*Convolvulus arvensis*), and telegraph weed (*Heterotheca grandiflora*).

## **Disturbed Southern Willow Cottonwood Riparian Forest**

The Project site supports 1.99 acres of Disturbed Southern Willow Cottonwood Riparian Forest habitat adjacent to the Southern Willow Cottonwood Riparian Forest habitat which is associated with the lake margins of Lake Elsinore. This area is differentiated from the Southern Willow Cottonwood Riparian Forest habitat as the disturbed habitat is maintained on an annual basis and willow and cottonwood trees that were formerly present have been removed.

Dominant plant species in this vegetation community include giant wild-rye (*Elymus condensatus*), Goodding's black willow (*Salix gooddingii*), and Fremont cottonwood (*Populus fremontii*).

Additional plant species include wild oat, common Mediterranean grass (*Schismus barbatus*), horehound, alkali heliotrope, shortpod mustard (*hirschfeldia incana*), jimson weed, western ragweed (*Ambrosia psilostachya*), Mexican fan palm (*Washingtonia robusta*), spruce (*Picea* sp.), procumbent pigweed, American black nightshade (*Solanum americanum*), prickly lettuce, silverleaf nightshade (*Solanum elaeagnifolium*), pumpkin (*Cucurbita* sp.), and arroyo willow (*Salix lasiolepis*).

## **Southern Willow Cottonwood Riparian Forest**

The Project site supports 11.66 acres of Southern Willow Cottonwood Riparian Forest habitat adjacent to the lake margins of Lake Elsinore. This area is primarily dominated with riparian species including Goodding's black willow, arroyo willow, salt-cedar (*Tamarix ramosissima*), mule fat (*Baccharis salicifolia*), alkali heliotrope, arrow weed (*Pluchea sericea*), castor bean (*Ricinus communis*), marsh fleabane (*Pluchea odorata*), sweetclover (*Melilotus* sp.), alkali mallow (*Malvella leprosa*), black mustard (*Brassica nigra*), stinging nettle, tocalote (*Centaurea melitensis*), California fan palm (*Washingtonia filifera*), field bindweed, bulrush (*Scirpoides holoschoenus*), and tree of heaven (*Ailanthus altissima*).

### **4.3 Special-Status Vegetation Communities**

The CNDDB identifies the following four special-status vegetation communities for the Alberhill, California and surrounding quadrangle maps: Canyon Live Oak Ravine Forest, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Interior Basalt Flow Vernal Pool, Southern Interior Cypress Forest, Southern Mixed Riparian Forest, Southern Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Valley Needlegrass Grassland. The Project site contains the following single special-status vegetation type: Southern Cottonwood Willow Riparian Forest (including disturbed).

### **4.4 Special-Status Plants**

As noted in Section 1.4.2, the Project site is not located within a sensitive plant survey area under the MSHCP. Any plants that could be found on site would be considered as covered species under the MSHCP and would not be viewed as a potential constraint to the Project under CEQA.

Plants not covered under the MSHCP are not expected to occur within the Project. Table 4-2 provides a list of special-status plants evaluated for the Project site through general biological surveys and habitat assessments. Species were evaluated based on the following factors: 1) species identified by the CNDDB and CNPS as occurring (either currently or historically) on or in the vicinity of the Project site, 2) applicable MSHCP Survey Areas, and 3) any other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs within the site.

No special-status plants were detected within the Project impact area.

**Table 4-2. Special-Status Plants Evaluated for the Project Site**

Species Name	Status	Habitat Requirements	Occurrence
Bottle liverwort <i>Sphaerocarpos drewiae</i>	Federal: None State: None CNPS: Rank 1B.1 MSHCP: None	Chaparral, Coastal scrub.	Not Expected
California ayenia <i>Ayenia compacta</i>	Federal: None State: None CNPS: Rank 2B.3 MSHCP: None	Desert wash, Mojavean desert scrub, Sonoran desert scrub.	Does not occur due to a lack of suitable habitat.
California Orcutt grass <i>Orcuttia californica</i>	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP: MSHCP(b)	Vernal pools	Does not occur due to a lack of suitable habitat.
California satintail <i>Imperata brevifolia</i>	Federal: None State: None CNPS: Rank 2B.1 MSHCP: None	Chaparral, Coastal scrub, Meadow & seep, Mojavean desert scrub, Riparian scrub, Wetland	Low Potential to Occur
California screw moss <i>Tortula californica</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: None	Sandy soil in chenopod scrub, and valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Campbell's liverwort <i>Geothallus tuberosus</i>	Federal: None State: None CNPS: Rank 1B.1 MSHCP: None	Coastal scrub, Vernal pool, Wetland	Low Potential to occur.
Chaparral nolina <i>Nolina cismontana</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Chaparral, Coastal scrub, Ultramafic	Does not occur due to a lack of suitable habitat.
Chaparral sand-verbena <i>Abronia villosa</i> var. <i>aurita</i>	Federal: None State: None CNPS: Rank 1B.1 MSHCP: None	Sandy soils in chaparral, coastal sage scrub.	Does not occur due to a lack of suitable habitat.
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None CNPS: Rank 1B.1 MSHCP: None	Alkali playa, Marsh & swamp, Salt marsh, Vernal pool, Wetland	Low to Moderate Potential to Occur.

Species Name	Status	Habitat Requirements	Occurrence
Coulter's saltbush <i>Atriplex coulteri</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley & foothill grassland.	Does not occur due to a lack of suitable habitat.
Hall's monardella <i>Monardella macrantha</i> ssp. <i>hallii</i>	Federal: None State: None CNPS: Rank 1B.3 MSHCP: MSHCP	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley & foothill grassland	Does not occur due to a lack of suitable habitat.
Hammitt's clay-cress <i>Sibaropsis hammittii</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Chaparral, Valley & foothill grassland	Does not occur due to a lack of suitable habitat.
Heart-leaved pitcher sage <i>Lepechinia cardiophylla</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Closed-cone coniferous forest, chaparral, and cismontane woodland.	Does not occur due to a lack of suitable habitat.
Intermediate mariposa-lily <i>Calochortus weedii</i> var. <i>intermedius</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Intermediate monardella <i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	Federal: None State: None CNPS: Rank 1B.3 MSHCP: MSHCP	Chaparral, Cismontane woodland, Lower montane coniferous forest	Does not occur due to a lack of suitable habitat.
La Purisima viguiera <i>Viguiera purisimae</i>	Federal: None State: None CNPS: Rank 2B.3 MSHCP: MSHCP	Chaparral, Coastal bluff scrub	Does not occur due to a lack of suitable habitat.
Lemon lily <i>Lilium parryi</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Lower montane coniferous forest, Meadow & seep, Riparian forest, Upper montane coniferous forest, Wetland	Low Potential to Occur.
Little mousetail <i>Myosurus minimus</i> ssp. <i>apus</i>	Federal: None State: None CNPS: Rank 3.1 MSHCP: MSHCP(d)	Valley and foothill grassland, vernal pools (alkaline soils).	Does not occur due to a lack of suitable habitat.
Long-spined spineflower <i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands	Does not occur due to a lack of suitable habitat.
Many-stemmed dudleya <i>Dudleya multicaulis</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur due to a lack of suitable habitat.
Mesa horkelia <i>Horkelia cuneata</i> var. <i>puberula</i>	Federal: None State: None CNPS: Rank 1B.1 MSHCP: None	Chaparral, Cismontane woodland, Coastal scrub	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Mud nama <i>Nama stenocarpum</i>	Federal: None State: None CNPS: Rank 2B.2 MSHCP: MSHCP(d)	Marshes and swamps	Low Potential to Occur.
Munz's onion <i>Allium munzii</i>	Federal: FE State: ST CNPS: Rank 1B.1 MSHCP: MSHCP(b)	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands	Does not occur due to a lack of suitable habitat.
Parish's meadowfoam <i>Limnanthes alba</i> ssp. <i>parishii</i>	Federal: None State: SE CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Lower montane coniferous forest, Meadow & seep, Vernal pool, Wetland	Low Potential to Occur
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Does not occur due to a lack of suitable habitat.
Parry's tetracoccus <i>Tetracoccus dioicus</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Chaparral, Coastal scrub, Ultramafic	Does not occur due to a lack of suitable habitat.
Prostrate vernal pool navarretia <i>Navarretia prostrata</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Coastal scrub, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland	Low Potential to Occur.
Rainbow manzanita <i>Arctostaphylos rainbowensis</i>	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP	Chaparral, Ultramafic	Does not occur due to a lack of suitable habitat.
Salt Spring checkerbloom <i>Sidalcea neomexicana</i>	Federal: None State: None CNPS: Rank 2B.2 MSHCP: Not covered	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur due to a lack of suitable habitat.
San Bernardino aster <i>Symphytum defoliatum</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: None	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Low Potential to Occur
San Diego ambrosia <i>Ambrosia pumila</i>	Federal: FE State: None CNPS: Rank 1B.1 MSHCP: MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.	Low Potential to Occur
San Diego button-celery <i>Eryngium aristulatum</i> var. <i>parishii</i>	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP: None	Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland	Low Potential to Occur
San Jacinto Valley crownscale <i>Atriplex coronata</i> var. <i>notarior</i>	Federal: FE State: None CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Alkaline soils in chenopod scrub, valley and foothill grassland, vernal pools.	Not Expected.

Species Name	Status	Habitat Requirements	Occurrence
San Miguel savory <i>Clinopodium chandlen</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Ultramafic, Valley & foothill grassland	Low Potential to Occur.
Santa Lucia dwarf rush <i>Juncus luciensis</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadow & seep, Vernal pool, Wetland	Low Potential to Occur
Santa Rosa Basalt brodiaea <i>Brodiaea satarosae</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Valley and Foothill grassland	Does not occur due to a lack of suitable habitat.
Santiago Peak phacelia <i>Phacelia keckii</i>	Federal: None State: None CNPS: Rank 1B.3 MSHCP: MSHCP(b)	Chaparral, Closed-cone coniferous forest	Does not occur due to a lack of suitable habitat.
Slender-horned spineflower <i>Dodecahema leptoceras</i>	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP: MSHCP(b)	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Does not occur due to a lack of suitable habitat.
Smooth tarplant <i>Centromadia pungens</i> ssp. <i>laevis</i>	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Confirmed present in preserved portion of Project. Not located within development footprint.
Southern mountains skullcap <i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Chaparral, Cismontane woodland, Lower montane coniferous forest	Does not occur due to a lack of suitable habitat.
Southern tarplant ( <i>Centromadia parryi</i> ssp. <i>australis</i> )	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP	Marsh & swamp, Salt marsh, Valley & foothill grassland, Vernal pool, Wetland	Low Potential to Occur.
Sticky dudleya <i>Dudleya viscida</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub	Does not occur due to a lack of suitable habitat.
Summer holly <i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Chaparral, Cismontane woodland	Does not occur due to a lack of suitable habitat.
Tecate cypress <i>Hesperocyparis forbesii</i>	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP	Chaparral, Closed-cone coniferous forest	Confirmed Absent.
Thread-leaved brodiaea <i>Brodiaea filifolia</i>	Federal: FT State: SE CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
White rabbit-tobacco <i>Pseudognaphalium leucocephalum</i>	Federal: None State: None CNPS: Rank 2B.2 MSHCP: MSHCP	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland	Low Potential to Occur.
Yucaipa onion <i>Allium marviniti</i>	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(b)	Chaparral (clay, openings).	Does not occur due to a lack of suitable soils and habitat.

## **STATUS**

### **Federal**

FE – Federally Endangered  
FT – Federally Threatened

### **State**

SE – State Endangered  
ST – State Threatened

### **CNPS**

Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.  
Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.  
Rank 2A – Plants presumed extirpated in California, but common elsewhere.  
Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.  
Rank 3 – Plants about which more information is needed (a review list).  
Rank 4 – Plants of limited distribution (a watch list).

### **CNPS Threat Code extension**

.1 – Seriously endangered in California (over 80% occurrences threatened)  
.2 – Fairly endangered in California (20-80% occurrences threatened)  
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

### **MSHCP**

MSHCP = No additional action necessary

MSHCP(a) = Surveys may be required as part of wetlands mapping

MSHCP(b) = Surveys may be required within the Narrow Endemic Plant Species survey area

MSHCP(c) = Surveys may be required within locations shown on survey maps

MSHCP(d) = Surveys may be required within Criteria Area

MSHCP(e) = Conservation requirements identified in species-specific conservation objectives need to be met before classified as a Covered Species

MSHCP(f) = Covered species when a Memorandum of Understanding is executed with the Forest Service Land

Not Covered = Species not adequately conserved under MSHCP

None = Species not considered for conservation coverage under MSHCP

## **OCCURRENCE**

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Confirmed absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur based on suitable habitat, however its presence/absence has not been confirmed.
- Confirmed present – The species was detected onsite incidentally or through focused surveys

#### **4.4.1 Special-Status Plants Detected at the Project Site**

##### **Smooth Tarplant**

Smooth tarplant (*Centromadia pungens* subsp. *laevis*) is a member of the sunflower family (Asteraceae) that is designated as a CNPS List 1B.1 species but is not a state or federal listed species. It is covered under the MSHCP, with surveys being required within Criteria Areas. This annual herb is known to occur in chenopod scrub, meadows and seeps, playas, riparian woodland and saline valley and foothill grasslands below 640 meters (2,100 feet) MSL. Smooth tarplant is known to occur from Riverside, San Bernardino and San Diego Counties and is known to bloom from April through September.

Smooth tarplant was found to occur at the Project site in the avoided southern willow cottonwood riparian forest, specifically on the northeastern boundary of the Property.

#### **4.4.2 Special-Status Plants Not Detected but with a Potential to Occur at the Project Site**

##### **California Satintail**

California satintail (*Imperata brevifolia*) is a member of the grass family (Poaceae) that is designated as a CNPS List 2.1 species but is not a state or federal listed species. This species is not covered under the MSHCP. This perennial herb is known to occur in chaparral, coastal scrub, Mojavean desert scrub, alkali meadows and seeps and vernal pools below 500 meters (1,640 feet) MSL. California satintail is known to occur from several counties in Southern California including Los Angeles, Orange, Riverside, San Bernardino and Imperial Counties and is known to bloom from September through May.

California satintail has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

##### **Campbell's liverwort**

Campbell's liverwort (*Geothallus tuberosus*) is a member of the bottle liverwort family (Sphaerocarpaceae) that is designated as a CNPS List 1B.1 species but is not a state or federal listed species. This species is not covered under the MSHCP. This ephemeral liverwort is known to occur in coastal scrub, vernal pools, and wetlands below 600 meters (1,970 feet) MSL. Campbell's liverwort is known to occur in Riverside and San Diego Counties.

Campbell's liverwort has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **Coulter's Goldfields**

Coulter's goldfields (*Lasthenia glabrata* subsp. *coulteri*) is a member of the sunflower family (Asteraceae) and is designated as a CNPS List 1B.1 species but is not a federal or state listed species. This species is not covered under the MSHCP. This annual herb is known to occur in marshes and swamps, playas, and vernal pools below 1,220 meters (4,000 feet) MSL. Coulter's goldfields is known to occur from San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego counties as well as some of the Channel Islands in southern California. This species is known to bloom from February through June.

Coulter's goldfields has a low to moderate potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **Lemon Lily**

Lemon Lily (*Lilium parryi*) is a member of the lily family (Liliaceae) that is designated as a CNPS List 1B.2 species but is not a state or federal listed species. This species is fully covered under the MSHCP. This perennial herb is known to occur in lower and upper montane coniferous forest, meadows and seeps and riparian forests from 1,220 to 2,745 meters (4,000 to 9,000 feet) MSL. This species is known to occur from Los Angeles, Riverside, Orange, and San Diego counties in southern California. This species blooms from July through August.

Lemon lily has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **Mud Nama**

Mud nama (*Nama stenocarpa*) is a member of the waterleaf family (Hydrophyllaceae) and is designated as a CNPS List 2B.2 species but is not designated as a state or federal listed species. It is covered under the MSHCP, with surveys being required within Criteria Areas. This annual and sometimes perennial herb is known to occur in marshes and swamps and sometimes on lake margins and riverbanks. Mud nama is known to occur from Los Angeles, Orange, Riverside, San Diego, and Imperial counties as well as San Clemente Island and Baja Mexico. This species is known to bloom from January through July.

Mud nama has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **Parish's Meadowfoam**

Parish's meadowfoam (*Limnanthes alba* subsp. *parishii*) is a member of the meadowfoam family (Limnanthaceae) that is designated as a state endangered species as well as a CNPS List 1B.2 species. It is covered under the MSHCP, with surveys being required within Criteria Areas.

This annual herb is known to occur in lower montane coniferous forest, meadows and seeps and vernal pools from 600 to 2,000 feet (1,968 to 6,560 feet) MSL. Parish's meadowfoam is known to occur from Riverside and San Diego counties and is known to bloom from April through June.

Parish's Meadowfoam has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **Prostrate Vernal Pool Navarretia**

Prostrate vernal pool navarretia (*Navarretia prostrata*) is a member of the Phlox family (Polemoniaceae) that is designated as a CNPS List 1B.2 species but is not a state or federal listed species. It is a fully covered species under the MSHCP. This annual herb is known to occur in coastal scrub, meadows and seeps, alkaline valley and foothill grasslands and vernal pools from 15 to 700 meters (50 to 2,296 feet) MSL. Prostrate vernal pool navarretia is known to occur from several counties in Southern California including San Luis Obispo, Los Angeles, Orange, Riverside and San Bernardino. This species is known to bloom from April through July.

Prostrate vernal pool navarretia has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **San Bernardino Aster**

San Bernardino aster (*Symphyotrichum defoliatum*) is a member of the sunflower family (Asteraceae) that is designated as a CNPS List 1B.2 species but is not a state or federal listed species. It is not a covered species under the MSHCP. This perennial rhizomatous herb is known to occur in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows, seeps, marshes, swamps, and vernally mesic valley and foothill grasslands from 2 to 2040 meters (5 to 6,695 feet) MSL. San Bernardino aster is known to occur from several counties in Southern California including Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, and Santa Barbara. This species is known to bloom from July through November.

San Bernardino aster has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **San Diego Ambrosia**

San Diego ambrosia (*Ambrosia pumila*) is a member of the sunflower family (Asteraceae) and is designated as a federal endangered species as well as a CNPS List 1B.1 species. It is covered under the MSHCP, with surveys being required within Narrow Endemic Plant Species Survey Areas. This perennial herb is known to occur in chaparral, coastal sage scrub, valley and foothill grasslands, and vernal pools from 20 to 415 meters (66 to 1,360 feet) MSL. San Diego ambrosia

is known to occur from Riverside and San Diego Counties as well as Baja California and is known to bloom from April through October.

San Diego ambrosia has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **San Diego Button Celery**

San Diego button celery (*Eryngium aristulatum* var. *parishii*) is a member of the carrot family (Apiaceae) and is designated as a federal and state listed endangered species as well as a CNPS List 1B.1 species. It is not covered under the MSHCP. This annual, sometimes perennial herb is known to occur in coastal scrub, valley and foothill grasslands and vernal pools from 20 to 620 meters (66 to 2,033 feet) MSL. San Diego button celery is known to occur from Riverside and San Diego counties as well as Baja California and is known to bloom from April through June.

San Diego button celery has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **San Miguel Savory**

San Miguel savory (*Clinopodium chandleri*) is a member of the mint family (Lamiaceae) that is designated as a CNPS List 1B.2 species but is not a state or federal listed species. It is covered under the MSHCP, with surveys being required within Criteria Areas. This perennial shrub is known to occur in chaparral, cismontane woodland, coastal scrub, riparian woodland and valley and foothill grasslands from 120 to 1,075 meters (394 to 3,526 feet) MSL. San Miguel savory is known to occur from Orange, Riverside and San Diego Counties as well as Baja California and is known to bloom from March through July.

San Miguel savory has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **Santa Lucia Dwarf Rush**

Santa Lucia dwarf rush (*Juncus luciensis*) is a member of the rush family (Juncaceae) and is designated as a CNPS List 1B.2 species but is not a state or federal listed species. It is covered under the MSHCP, with surveys being required within Narrow Endemic Plant Species Survey Areas. This annual herb is known to occur in chaparral, Great Basin scrub, lower montane coniferous forest, meadows, seeps, and vernal pools from 300 to 2040 meters (985 to 6,695 feet) MSL. Santa Lucia dwarf rush is known to occur in Lassen, Modoc, Monterey, Napa, Nevada, Placer, Plumas, Riverside, San Benito, San Diego, San Luis Obispo, Santa Barbara, and Shasta and is known to bloom from April through June.

Santa Lucia dwarf rush has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **Southern Tarplant**

Southern tarplant (*Centromadia parryi* subsp. *australis*) is a member of the sunflower family (Asteraceae) and is designated as a CNPS List 1B.1 species but is not designated as a state or federal listed species. It is a fully covered species under the MSHCP. This annual herb is known to occur in marshes and swamps, valley and foothill grasslands and vernal pools below 427 meters (1,400 feet) MSL. Southern tarplant is known to occur from Santa Barbara, Ventura, Los Angeles, Orange, San Diego as well as several of the Channel Islands in southern California. This species is known to bloom from May through November.

Southern tarplant has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **White Rabbit Tobacco**

White rabbit tobacco (*Pseudognaphalium leucocephalum*) is a member of the sunflower family (Asteraceae) and is designated as a CNPS List 2B.2 species but is not a federal or state listed species. It is a fully covered species under the MSHCP. This perennial herb is known to occur in chaparral, cismontane woodland, coastal scrub and riparian woodlands with sandy or gravelly soils below 2,000 meters (6,890 feet) MSL. This species is known to occur in San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, San Diego and Riverside Counties. This species blooms from July through December.

White rabbit tobacco has low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

### **4.5 Special-Status Animals**

The following special-status animal species was detected at the Project site: least Bell's vireo (*Vireo bellii pusillus*). Table 4-3 provides a list of special-status animals evaluated for the Project site through general biological surveys and habitat assessments. Species were evaluated based on the following factors, including: 1) species identified by the CNDDDB as occurring (either currently or historically) on or in the vicinity of the Project site, 2) applicable MSHCP Survey Areas, and 3) any other special-status animals that are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site.

**Table 4-3. Special-Status Wildlife Evaluated for the Project Site**

Species Name	Status	Habitat Requirements	Potential for Occurrence
<b>Invertebrates</b>			
Crotch bumble bee <i>Bombus crotchii</i>	Federal: None State: SCE MSHCP: None	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert.	Not expected to occur.
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	Federal: FE State: None MSHCP: MSHCP	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include <i>Plantago erecta</i> and <i>Castilleja exserta</i> . Adults occur on sparsely vegetated rounded hilltops and ridgelines and are known to disperse through disturbed habitats to reach suitable nectar plants.	Not expected to occur.
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	Federal: FE State: None MSHCP: MSHCP(a)	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Does not occur due to a lack of suitable habitat.
San Diego fairy shrimp <i>Branchinecta sandiegensis</i>	Federal: FE State: None MSHCP: MSHCP(a)	Chaparral, Coastal scrub, Vernal pool, Wetland	Does not occur due to a lack of suitable habitat.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Federal: FT State: None MSHCP: MSHCP(a)	Seasonal vernal pools	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
<b>Amphibians</b>			
Arroyo toad <i>Anaxyrus californicus</i>	Federal: FE State: None MSHCP: MSHCP(a)	Desert wash, Riparian scrub, Riparian woodland, South coast flowing waters, South coast standing waters	Not Expected.
California red-legged frog <i>Rana draytonii</i>	Federal: FE State: SSC MSHCP: MSHCP(a)	Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Marsh & swamp, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland	Does not occur due to a lack of suitable habitat.
Coast Range newt <i>Taricha torosa</i>	Federal: None State: SSC MSHCP: MSHCP		Low Potential to Occur.
Western spadefoot <i>Spea hammondii</i>	Federal: None State: SSC MSHCP: MSHCP	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur due to a lack of suitable habitat.
<b>Fish</b>			
Arroyo chub <i>Gila orcuttii</i>	Federal: FT State: SSC MSHCP: Not covered	Aquatic, South coast flowing waters	Does not occur due to a lack of suitable habitat.
Steelhead – Southern California DPS <i>Oncorhynchus mykiss irideus</i> pop. 10	Federal: FE State: None MSHCP: Not covered	Aquatic, South coast flowing waters	Does not occur due to a lack of suitable habitat.
<b>Reptiles</b>			
California glossy snake <i>Arizona elegans occidentalis</i>	Federal: None State: SSC MSHCP: Not covered	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Does not occur due to a lack of suitable habitat.
Coast patch-nosed snake <i>Salvadora hexalepis virgulnea</i>	Federal: None State: SSC MSHCP: Not covered	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas. This shy species avoids areas subject to high levels of human disturbance.	Does not occur due to a lack of suitable habitat.
Coastal whiptail <i>Aspidoscelis tigris stejnegeri</i> ( <i>multiscutatus</i> )	Federal: None State: SSC MSHCP: MSHCP	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Red-diamond rattlesnake <i>Crotalus ruber</i>	Federal: None State: SSC MSHCP: MSHCP	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Does not occur due to a lack of suitable habitat.
Southern California legless lizard <i>Anniella stebbinsi</i>	Federal: None State: SSC MSHCP: Not Covered	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats than any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans.	Low to Moderate Potential to Occur in Avoidance Area. Does not occur in development footprint.
Two-striped gartersnake <i>Thamnophis hammondii</i>	Federal: None State: SSC MSHCP: Not Covered	Marsh & swamp, Riparian scrub, Riparian woodland, Wetland	Not Expected.
<b>Birds</b>			
Bald eagle (nesting & wintering) <i>Haliaeetus leucocephalus</i>	Federal: Delisted State: SE, CFP MSHCP: MSHCP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	Not Expected.
Burrowing owl <i>Athene cunicularia</i>	Federal: None State: SSC MSHCP: MSHCP(c)	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Low to Moderate Potential to Occur. Not within burrowing owl survey area, but pre-construction survey is proposed.
Coastal cactus wren <i>Campylorhynchus brunneicapillus sandiegensis</i>	Federal: None State: SSC MSHCP: MSHCP	Coastal scrub	Does not occur due to a lack of suitable habitat.
Coastal California gnatcatcher <i>Polioptila californica</i>	Federal: FT State: SSC MSHCP: MSHCP	Low elevation coastal sage scrub and coastal bluff scrub.	Does not occur due to a lack of suitable habitat.
Golden eagle (nesting and wintering) <i>Aquila chrysaetos</i>	Federal: None State: CFP MSHCP: MSHCP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Low to potential to occur in a foraging role only.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Least Bell's vireo <i>Vireo bellii pusillus</i>	Federal: FE State: SE MSHCP: MSHCP(a)	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Confirmed present within the preserved portion of the Project.
Loggerhead shrike (nesting) <i>Lanius ludovicianus</i>	Federal: BCC State: SSC MSHCP: MSHCP	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	Moderate Potential to Occur.
Long-eared owl (nesting) <i>Asio otus</i>	Federal: None State: SSC MSHCP: Not covered	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Moderate Potential to Occur.
Northern harrier (nesting) <i>Circus cyaneus</i>	Federal: None State: SSC MSHCP: MSHCP	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Moderate Potential to Occur.
Southwestern willow flycatcher (nesting) <i>Empidonax traillii extimus</i>	Federal: FE State: SE MSHCP: MSHCP(a)	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Moderate Potential to Occur in the Preserved Portion of the Project. No suitable habitat within the development footprint.
Tricolored blackbird (nesting colony) <i>Agelaius tricolor</i>	Federal: BCC State: ST MSHCP: MSHCP	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur due to a lack of suitable habitat.
Western snowy plover (nesting) <i>Charadrius alexandrinus nivosus</i>	Federal: FT, BCC State: SSC MSHCP: Not covered	Sandy or gravelly beaches along the coast, estuarine salt ponds, alkali lakes, and at the Salton Sea.	Does not occur due to a lack of suitable habitat.
Yellow rail <i>Coturnicops noveboracensis</i>	Federal: None State: SSC MSHCP: MSHCP	Freshwater marsh, Meadow & seep	Does not occur due to a lack of suitable habitat.
Yellow-breasted chat (nesting) <i>Icteria virens</i>	Federal: None State: SSC MSHCP: MSHCP	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Moderate to High Potential to Occur in the Preserved Portion of the Project. No suitable habitat within the development footprint.
<b>Mammals</b>			
American badger <i>Taxidea taxus</i>	Federal: None State: SSC MSHCP: Not Covered	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Low Potential to Occur

Species Name	Status	Habitat Requirements	Potential for Occurrence
Northwestern San Diego pocket mouse <i>Chaetodipus fallax</i>	Federal: None State: SSC MSHCP: MSHCP	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Does not occur due to a lack of suitable habitat.
Pallid Bat <i>Antrozous pallidus</i>	Federal: None State: SSC WBWG: H MSHCP: MSHCP	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland	Low Potential to Occur in the Preserved Portion of the Project. No suitable habitat within the development footprint.
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	Federal: FE State: SCE MSHCP: MSHCP(c)	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	Does not occur due to a lack of suitable habitat.
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	Federal: None State: SSC MSHCP: MSHCP	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub but needs open habitats.	Not Expected.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	Federal: None State: SSC MSHCP: MSHCP	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Not Expected.
Stephens' kangaroo rat <i>Dipodomys stephensi</i>	Federal: FE State: ST SKR HCP: Covered	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Does not occur due to a lack of suitable habitat.
Western red bat <i>Lasiurus blossevillii</i>	Federal: None State: SSC WBWG: H MSHCP: Not Covered	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland	Moderate Potential to Occur in a foraging role in the Preserved Portion of the Project. No suitable habitat within the development footprint.
Western yellow bat <i>Lasiurus xanthinus</i>	Federal: None State: SSC WBWG: H MSHCP: Not Covered	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Moderate Potential to Occur in the Preserved Portion of the Project. No roosting habitat present. No suitable habitat within the development footprint.

## **STATUS**

### **Federal**

FE – Federally Endangered  
FT – Federally Threatened  
FPT – Federally Proposed Threatened  
FC – Federal Candidate  
BCC – Bird of Conservation Concern

### **State**

SE – State Endangered  
ST – State Threatened  
SCE – State Candidate for listing as Endangered  
CFP – California Fully-Protected Species  
SSC – Species of Special Concern

## **MSHCP**

MSHCP = No additional action necessary  
MSHCP(a) = Surveys may be required as part of wetlands mapping  
MSHCP(b) = Surveys may be required within the Narrow Endemic Plant Species survey area  
MSHCP(c) = Surveys may be required within locations shown on survey maps  
MSHCP(d) = Surveys may be required within Criteria Area  
MSHCP(e) = Conservation requirements identified in species-specific conservation objectives need to be met before classified as a Covered Species  
MSHCP(f) = Covered species when a Memorandum of Understanding is executed with the Forest Service Land  
Not Covered = Species not adequately conserved under MSHCP  
None = Species not considered for conservation coverage under MSHCP

## **Western Bat Working Group (WBWG)**

H – High Priority  
LM – Low-Medium Priority  
M – Medium Priority  
MH – Medium-High Priority

## **OCCURRENCE**

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Confirmed absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur based on suitable habitat, however its presence/absence has not been confirmed.
- Confirmed present – The species was detected onsite incidentally or through focused surveys

### **4.5.1 Special-Status Wildlife Species Observed within the Project Site**

#### **Birds**

**Least Bell's Vireo (*Vireo bellii pusillus*)** – The least Bell's vireo is designated as a federally and state endangered species. The least Bell's vireo is a covered species not adequately conserved under the MSHCP, which means that projects with wetland mapping components may have to evaluate avoidance measures if least Bell's vireo are present.

Least Bell's vireo primarily occupy riverine riparian habitats that typically feature dense cover within 1-2 meters of the ground and a dense, stratified canopy. It inhabits low, dense riparian growth along water or along dry parts of intermittent streams. Typically, it is associated with southern willow scrub, cottonwood forest, mule fat scrub, sycamore alluvial woodland, coast live oak riparian forest, arroyo willow riparian forest, wild blackberry, or mesquite in desert

localities. It uses habitat which is limited to the immediate vicinity of water courses below 1,500 feet elevation in the interior (USFWS 1986; Small 1994). In the coastal portions of Southern California, the least Bell's vireo occurs in willows and other low, dense valley foothill riparian habitat and lower portions of canyons and along the western edge of the deserts in desert riparian habitat.

Vireos were detected during general biological surveys in 2021. All suitable least Bell's vireo habitat within the Property boundary will be avoided. A total of 11.66 acres of suitable habitat is present.

#### **4.5.2 Special-Status Wildlife Species Not Observed but with a Potential to Occur at the Project Site**

##### **Amphibians**

**Coast Range Newt (*Taricha torosa torosa*)** – The coast range newt is designated as a CDFW California Species of Special Concern for populations in Monterey County and south only. It is a fully covered species under the MSHCP. Coast Range newts frequent terrestrial habitats, but breed in ponds, reservoirs, and slow-moving streams (Stebbins 1954b, 1985). Lack of data on the movement ecology of this species prevents a complete characterization of the microhabitats used. This species has been depleted by large-scale historical commercial exploitation coupled with the loss and degradation of stream habitats, especially in Los Angeles, Orange, Riverside, and San Diego counties.

Coast range newt has a low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

##### **Reptiles**

**Southern California legless lizard (*Anniella stebbinsi*)** - The southern California legless lizard is designated as a CDFW Species of Special Concern. This species is not covered under the MSHCP. The legless lizard is not a covered species under the MSHCP. Its primary habitats include broadleaved upland forest, chaparral, coastal dunes, alluvial fans, and coastal scrub, and can be found in a broader range of habitats than any other *Anniella* species.

Southern California legless lizard has a low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

##### **Birds**

**Burrowing Owl (*Athene cunicularia hypugaea*)** – The burrowing owl is designated as a CDFW California Species of Special Concern at burrow sites and some wintering sites. The burrowing owl is a covered species not adequately conserved under the MSHCP, which means that projects

located within the burrowing owl survey area may have to evaluate avoidance measures if burrowing owls are present.

The burrowing owl occurs in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-long resident (Haug, *et al.* 1993). They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. As a critical habitat feature need, they require the use of rodent or other burrows for roosting and nesting cover.

Burrowing owl has a low to moderate potential to occur within the disturbed areas and non-native grassland on site. A total of 21.66 acres of potential habitat is present.

**Golden Eagle (*Aquila chrysaetos*)** – The golden eagle is designated as a California Fully Protected Species and is considered a sensitive species when nesting or wintering. This species is a fully covered species under the MSHCP. Within Southern California, the species prefers grasslands, brushlands (coastal sage scrub and sparse chaparral), deserts, oak savannas, open coniferous forests, and montane valleys (Garrett and Dunn 1981). It uses rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops. The species requires a large expanse for foraging and suitable nest sites in the form of cliffs or large trees. Nesting is primarily restricted to rugged, mountainous country (Garrett and Dunn 1981). Secluded cliffs with overhanging ledges and large trees are used for cover (Zeiner, *et al.* 1990). Thus, the golden eagle uses a variety of habitats, nesting in cliffs or trees and rugged terrain and foraging over plains, grasslands, or low and open shrublands including chaparral and coastal sage scrub (Scott 1985).

Golden eagle has a low potential to forage within the disturbed areas and non-native grassland on site. A total of 21.66 acres of potential foraging habitat is present.

**Loggerhead Shrike (*Lanius ludovicianus*)** - The loggerhead shrike is designated as a CDFW California Species of Special Concern when nesting, and is a covered species under the MSHCP. The loggerhead shrike is known to forage over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs (Unit 1984; Yosef 1996). Individuals like to perch on posts, utility lines and often use the edges of denser habitats (Zeiner, *et al.* 1990). In some parts of its range, pasture lands have been shown to be a major habitat type for this species, especially during the winter season (Yosef 1996) and breeding pairs appear to settle near isolated trees or large shrubs (Yosef 1994).

Loggerhead shrike has a moderate potential to occur within the disturbed areas and non-native grassland on site. A total of 21.66 acres of potential habitat is present.

**Long-Eared Owl (*Asio otus*)** – The long-eared owl is designated as a CDFW California Species of Special Concern when nesting. This species is not covered under the MSHCP. The long-eared owl is found in deciduous and evergreen forests, orchards, wooded parks, farm woodlots,

river woods, and desert oases. Wooded areas with dense vegetation are needed for roosting and nesting, with open areas for hunting. It is often associated with conifers in eastern North America, also with deciduous woods near water in West. The long-eared owl nests in trees usually occupying old nests of crows, squirrels, hawks, magpies, or herons. It sometimes nests in tree cavities and it rarely nests on the ground (e.g., Maples et al. 1995, Wilson Bull. 107:563-565). Apparently commonly nests in same site in successive years.

Long-eared owl has a moderate potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

**Northern Harrier (*Circus cyaneus*)** - The northern harrier is designated as a CDFW California Species of Special Concern when nesting and is a covered species under the MSHCP. In California, the northern harrier occurs from annual grassland up to lodgepole pine and alpine meadow habitats, as high as 3,000 meters (10,000 feet) (Garrett and Dunn 1981). It breeds from sea level to 1,700 meters (0-5,700 feet) in the Central Valley and Sierra Nevada, and up to 800 meters (3,600 feet) in northeastern California. The northern harrier frequents open wetlands, wet and lightly grazed pastures, old fields, dry uplands, upland prairies, mesic grasslands, drained marshlands, croplands, shrub-steppe, meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands and is seldom found in wooded areas (Bent 1937; MacWhirter and Bildstein 1996). While it seems to prefer to nest in the vicinity of marshes, rivers, or ponds, it may be found nesting in grassy valleys or on grass and sagebrush flats many miles from the nearest water (Call 1978).

Northern harrier has a moderate potential to occur within the disturbed areas and non-native grassland on site. A total of 21.66 acres of potential foraging habitat is present.

**Southwestern Willow Flycatcher (*Empidonax traillii extimus*)** – The southwestern willow flycatcher is designated as a federal and state endangered species when nesting. Focused surveys may be required as part of mapping under the MSHCP. The southwestern willow flycatcher is restricted to riparian woodlands along streams and rivers with mature, dense stands of willows (*Salix* spp.), cottonwoods (*Populus* spp.) or smaller spring fed or boggy areas with willows or alders (*Alnus* spp.) (Sedgwick and Knopf 1992). It breeds in relatively dense riparian habitats in all or parts of seven southwestern states from near sea level in California to over 2,600 meters (8,500 feet) in Arizona and Colorado (USFWS 2001). Riparian habitat provides both breeding and foraging habitat for the species.

Southwestern willow flycatcher has a moderate potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

**Yellow-Breasted Chat (*Icteria virens*)** - The yellow-breasted chat is designated as a CDFW California Species of Special Concern when nesting and is a covered species under the MSHCP. Yellow-breasted chats as a whole may nest in second-growth, riparian thickets and brush (AOU 1998). By contrast, yellow-breasted chats in Southern California are primarily found in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with

well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Grinnell and Miller (1944) suggested that the plant cover in breeding habitat must be dense to provide shade and concealment.

Yellow-breasted chat has a moderate to high potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

## **Mammals**

**American Badger (*Taxidea taxus*)** - The American badger is designated as a CDFW Species of Special Concern and is not a covered species under the MSHCP. The American badger ranges from southern Canada (British Columbia, Alberta, Saskatchewan, Manitoba, and southern Ontario), south and west to Texas, and Puebla and Baja California, Mexico (Wozencraft, in Wilson and Reeder 1993; Long, in Wilson and Ruff 1999). The American badger prefers open areas and may also frequent brushlands with little groundcover. When inactive, occupies underground burrow. Young are born in underground burrows.

American badger has a low potential to occur within the disturbed areas and non-native grassland on site. A total of 21.66 acres of potential foraging habitat is present.

**Pallid Bat (*Antrozous pallidus*)** – The pallid bat is designated as a CDFW Species of Special Concern and WBWG high priority. It is also a covered species under the MSHCP. The pallid bat is found in arid deserts and grasslands, often near rocky outcrops and water. They are less abundant in evergreen and mixed conifer woodland. Pallid bats usually roost in rock crevice or building, less often in cave, tree hollow, mine, etc. Night roosts often or typically are in caves in Oklahoma (Caire et al. 1989). In Oregon, night roosts were in buildings, under rock overhangs, and under bridges; bats generally were faithful to particular night roosts both within and between years (Lewis 1994). Prefers narrow crevices in caves as hibernation sites (Caire et al. 1989).

Pallid bat has a low potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

**Western Red Bat (*Lasiurus blossevillii*)** – The western red bat is designated as a CDFW Species of Special Concern and WBWG high priority. This species is not covered under the MSHCP. The western red bat has occasionally been captured in riparian habitats dominated by cottonwoods, oaks, sycamores, and walnuts; rarely found in desert habitats (Findley et al. 1975, Hoffmeister 1986). The summer roost is usually in tree foliage. Avoids caves and buildings during summer/winter. Young are born and perch among tree foliage.

Western red bat has a moderate potential to forage within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

**Western Yellow Bat (*Lasiurus xanthinus*)** - The western yellow bat is designated as a CDFW Species of Special Concern and WBWG high priority. This species is not covered under the MSHCP. The western yellow bat preferentially roosts in trees, generally palms in the southern U.S. In New Mexico, associated with *Populus fremontii*, *Platanus wrightii*, and *Quercus arizonica*. In Tucson and Phoenix-Tempe, Arizona, often encountered among dead fronds of *Washingtonia* fan palms. Has been netted over water holes in southeastern Arizona and southwestern New Mexico.

Western yellow bat has a moderate potential to occur within the southern willow cottonwood riparian forest on site; however, if located, it would be within the proposed project avoidance and preservation area. A total of 11.66 acres of potential habitat is present.

#### 4.5.3 Raptor Use

The Project site provides suitable foraging and low quality breeding habitat for a number of raptor species, including special-status raptors.

Southern California holds a diversity of birds of prey (raptors), and many of these species are in decline. For most of the declining species, foraging requirements include extensive open, undisturbed, or lightly disturbed areas, especially grasslands. This type of habitat has declined severely in the region, affecting many species, but especially raptors. A few species, such as red-tailed hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius*), are somewhat adaptable to low-level human disturbance and can be readily observed adjacent to neighborhoods and other types of development. These species still require appropriate foraging habitat and low levels of disturbance in vicinity of nesting sites.

Many of the raptors that would be expected to forage and nest within western Riverside are fully covered species under the MSHCP with the MSHCP providing the necessary conservation of both foraging and nesting habitats. Some common raptor species (e.g., American kestrel and red-tailed hawk) are not covered by the MSHCP but are expected to be conserved with implementation of the Plan due to the parallel habitat needs with those raptors covered under the Plan.

It is important to understand that the MSHCP does not provide Fish and Game Code take for raptors covered under the Plan.

Appendix B (faunal compendium) provides a list of the hawks, falcons, and owls detected over the course of the field studies. These species were Cooper's hawk, red-tailed hawk, ferruginous hawk, northern harrier, white-tailed kite, American kestrel, and great horned owl (*Bubo virginianus*). As stated above, the ferruginous hawk migrates through the region in spring/fall and may over winter in the area. However, the Project site is outside of the known nesting range for this raptor species. The northern harrier was observed foraging on-site and as stated above, has a low potential to nest within the limited suitable habitat along the southeast Project boundary near the San Jacinto River. For the other raptor species observed, the Project site supports potential nesting habitat (e.g., mature trees, shrubs) and it is expected to provide

foraging habitat for other species in the form of insects, spiders, lizards, snakes, small mammals, and other birds.

#### **4.6 Nesting Birds**

The Project site contains trees, shrubs, and ground cover that provide suitable habitat for nesting native birds. Mortality of native birds (including eggs) is prohibited under the California Fish and Game Code.<sup>12</sup>

As stated above, the Project site does support suitable ground nesting habitat within the ruderal vegetation and disturbed areas. The riparian/wetland habitat exhibits a dense canopy of riparian or trees that would be utilized by the LBV as well as larger raptors such as Cooper's hawk or red-tailed hawk. These areas may also provide nesting habitat for additional raptor and songbird species. A specific measure to avoid potential impacts to nesting birds is included in Section 6, below.

#### **4.7 Wildlife Linkages/ Corridors and Nursery Sites**

Habitat linkages are areas which provide a communication between two or more other habitat areas which are often larger or superior in quality to the linkage. Such linkage sites can be quite small or constricted, but may be vital to the long-term health of connected habitats. Linkage values are often addressed in terms of "gene flow" between populations, with movement taking potentially many generations.

Corridors are similar to linkages but provide specific opportunities for individual animals to disperse or migrate between areas, generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different than that in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired. No wildlife corridors exist within the Project site.

Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species. No wildlife nurseries or maternity roosts for colonial bat species exist within the Project site.

#### **4.8 Critical Habitat**

The Project site does not occur within any USFWS proposed or designated critical habitat.

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<sup>12</sup> Sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

## **4.9 Jurisdictional Waters**

### **U.S. Army Corps of Engineers**

The Project site and its off-site study area include two drainage/ditch features known as the Riverside Avenue Ditch and the Hill Street Ditch, as well as riparian/wetland habitat associated with Lake Elsinore. In general, a majority of the Riverside Avenue Ditch and the Hill Street Ditch would be considered ephemeral streams subject to Corps jurisdiction under Section 404 of the CWA. The entirety of the Riverside Avenue Ditch is considered potentially jurisdictional as is the entirety of the Hill Street Ditch. The riparian habitat associated with Lake Elsinore would be considered Corps jurisdiction as this area is a wetland.

Corps jurisdiction associated with the Study Area totals 13.16 acres, of which 12.77 acres consists of wetland waters of the U.S and 0.39 acre consists of non-wetland waters of the U.S. A total of 3,820 linear feet of stream is present.

#### **Riverside Avenue Ditch**

The Riverside Avenue Ditch contains two reaches, Reach 1 and Reach 2. Reach 1 is an ephemeral, concrete ditch which does not support vegetation, but would be considered as non-wetland Waters of the United States as it contains bed, bank, and an ordinary high-water mark.

Reach 2 would be considered non-wetland Waters of the United States as the drainage feature itself does not meet the three-parameter wetland definition for Waters of the United States (wetland hydrology, hydrophytic vegetation, and hydric soils). There is vegetated riparian habitat adjacent to Reach 2, which is further discussed below in the *Riparian/Wetland Habitat Associated with Lake Elsinore* section of this report.

Vegetation adjacent to Reach 2 consists of Goooding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweetclover species, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

#### *Reach 1*

Corps jurisdiction associated with Reach 1 of the Riverside Avenue Ditch totals 0.12 acre, none of which is wetland. A total of 702 linear feet of streambed is present.

Reach 1 of the Riverside Avenue Ditch is a concrete-lined and concrete bottom channel that conveys surface water only in direct response to precipitation (i.e., rain). Reach 1 enters the Study Area from a culvert beneath Riverside Avenue and flows for 702 linear feet before meeting Reach 2 of the Riverside Avenue Ditch. At this point, the drainage feature transitions from a concrete channel to a soft-bottom channel.

This feature is subject to Corps jurisdiction pursuant to Section 404 of the CWA. No vegetation is present within Reach 1 of the Riverside Avenue Ditch as it is concrete.

Table 4-4 below summarizes Corps jurisdictional waters at the Project site. The boundaries of Corps jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 7A]. Site photographs are provided as Exhibit 8.

#### *Reach 2*

Corps jurisdiction associated with Reach 2 of the Riverside Avenue Ditch totals 0.13 acre, none of which is wetland. A total of 824 linear feet of streambed is present. Reach 2 is an ephemeral to intermittent adjacent, off site portion of the Riverside Avenue Ditch which flows along the northern and eastern project boundary. The drainage feature enters the areas surrounding the Project through a culvert beneath Riverside Avenue. The drainage feature flows for 702 linear feet as part of Reach 1 of this feature. The feature then flows for 824 linear feet along the eastern project boundary before discharging into Lake Elsinore.

Vegetation adjacent to Reach 2 consists of Gooding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweetclover species, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Photographs depicting the Riverside Avenue Ditch are attached as Exhibit 8 and a map depicting the limits of Corps jurisdiction is attached as Exhibit 7A.

#### **Hill Street Ditch**

Corps jurisdiction associated with the Hill Street Ditch totals 0.14 acre, none of which is wetland. A total of 1,655 linear feet of streambed is present.

The Hill Street Ditch is a concrete-lined and concrete bottom channel and earthen (soft-bottom) channel that conveys surface water only in direct response to precipitation (i.e., rain). The Hill Street Ditch enters the Study Area from a culvert beneath Grand Avenue and flows for 1,076 linear feet before the drainage feature transitions from a concrete channel to a soft-bottom channel and flows for 579 linear feet before discharging into Reach 2 of the Riverside Avenue Ditch.

This feature is subject to Corps jurisdiction pursuant to Section 404 of the CWA due to the presence of a bed, bank, and ordinary high water mark.

Vegetation adjacent to the Hill Street Ditch consists of Goodding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweetclover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Table 4-4 below summarizes Corps jurisdictional waters at the Project site. The boundaries of Corps jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 7A]. Site photographs are provided as Exhibit 8.

## **Riparian/Wetland Habitat Associated with Lake Elsinore**

Corps jurisdiction associated with the Riparian/Wetland Habitat Associated with Lake Elsinore totals 12.77 acres, all of which is wetland. An estimated 639 linear feet of streambed is associated with this wetland polygon. The Riparian/Wetland Habitat Associated with Lake Elsinore is groundwater-driven by ebb and flow associated with Lake Elsinore itself and it supports vegetation and hydric soils which would result in a determination that this area would be subject to Corps jurisdiction pursuant to Section 33 CFR 328.3(a)(4) {adjacent wetlands] which are defined as wetlands that;

- (i) Abut, meaning to touch at least at one point or side of, a water identified in paragraph (a)(1), (2), or (3) of this section;*
- (ii) Are inundated by flooding from a water identified in paragraph (a)(1), (2), or (3) of this section in a typical year;*
- (iii) Are physically separated from a water identified in paragraph (a)(1), (2), or (3) of this section only by a natural berm, bank, dune, or similar natural feature; or*
- (iv) Are physically separated from a water identified in paragraph (a)(1), (2), or (3) of this section only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection between the wetlands and the water identified in paragraph (a)(1), (2), or (3) of this section in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature. An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.*

Additionally, the Corps has determined that the OHWM for Lake Elsinore is at 1,260 feet amsl. The 1,260 line is approximated based on available elevation data. All habitat below that line is considered to be a water of the U.S. subject to Corps jurisdiction. Where appropriate, GLA has incorporated this line for reference as the limit of Corps jurisdiction, along with its adjacent wetlands.

Vegetation associated with the Riparian/Wetland Habitat Associated with Lake Elsinore consists of Gooodding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweet-clover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Photographs depicting the Riparian/Wetland Habitat Associated with Lake Elsinore are attached as Exhibit 8 and a map depicting the limits of Corps jurisdiction is attached as Exhibit 7A. Table 4-4 below documents the limits of Corps jurisdiction on site.

**Table 4-4: Summary of Corps Jurisdiction**

Drainage Name	Corps Non-Wetland Waters (acres)	Corps Jurisdictional Wetlands (acres)	Total Corps Jurisdiction (acres)	Length (linear feet)
Riverside Avenue Ditch Reach 1	0.12	0	0.12	702
Riverside Avenue Ditch Reach 2	0.13	0	0.13	824
Hill Street Ditch	0.14	0	0.14	1,655
Riparian/Wetland Habitat Area	0	12.77	12.77	639
<b>Total*</b>	<b>0.39</b>	<b>12.77</b>	<b>13.16</b>	<b>3,820</b>

### **Regional Water Quality Control Board**

Regional Board jurisdiction associated with the Study Area totals 13.16 acres, of which 12.90 acres consist of wetland waters of the State and 0.26 acre consist of non-wetland waters of the State. A total of 3,820 linear feet of stream is present. Of the total 13.16 acres, 12.90 acres and 1,463 linear feet comprise federal waters of the U.S. that are subject to Corps jurisdiction as described above and the remaining 0.26 acre and 2,357 linear feet comprise waters of the State that are subject to Regional Board jurisdiction only. This includes 12.90 acres of wetland waters of the State and 0.26 acre of non-wetland waters of the State.

Regional Board jurisdiction at the Project site includes Reaches 1 and 2 of the Riverside Avenue Ditch, the Hill Street Ditch, and the Riparian/Wetland Habitat Area associated with Lake Elsinore. As discussed above, Reach 2 of the Riverside Avenue Ditch and the Riparian/Wetland Habitat Area associated with Lake Elsinore are subject to Corps jurisdiction under Section 404 of the CWA. Reach 1 of the Riverside Avenue Ditch and the Hill Street Ditch are not subject to Corps jurisdiction and would be considered as waters of the State only. Each drainage feature is further discussed below.

### **Riverside Avenue Ditch**

#### *Reach 1*

Regional Board jurisdiction associated with Reach 1 of the Riverside Avenue Ditch totals 0.12 acre, none of which is wetland. A total of 702 linear feet of streambed is present.

Reach 1 of the Riverside Avenue Ditch is a concrete-lined and concrete bottom channel that conveys surface water only in direct response to precipitation (i.e., rain). Reach 1 enters the Study Area from a culvert beneath Riverside Avenue and flows for 702 linear feet before meeting Reach 2 of the Riverside Avenue Ditch. At this point, the drainage feature transitions from a concrete channel to a soft-bottom channel.

Since this feature is subject to Corps jurisdiction pursuant to Section 404 of the CWA, it is subject to Regional Board jurisdiction pursuant to Section 401 of the CWA. No vegetation is present within Reach 1 of the Riverside Avenue Ditch as it is concrete.

Table 4-5 below summarizes Regional Board jurisdictional waters at the Project site. The boundaries of Regional Board jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 7B]. Site photographs are provided as Exhibit 8.

#### *Reach 2*

Regional Board jurisdiction associated with Reach 2 of the Riverside Avenue Ditch totals 0.13 acre, all of which is wetland. A total of 824 linear feet of streambed is present. Reach 2 is an ephemeral to intermittent adjacent, off site portion of the Riverside Avenue Ditch which flows along the northern and eastern project boundary. The drainage feature enters the areas surrounding the Project through a culvert beneath Riverside Avenue. The drainage feature flows for 702 linear feet as part of Reach 1 of this feature. The feature then flows for 824 linear feet along the eastern project boundary before discharging into Lake Elsinore. Soils associated with Reach 2 are sandy redox soils with a depleted matrix. The soils depict a sandy gley appearance at six inches below the ground surface. As a result, Reach 2 meets the Regional Board definition of a wetland water of the State.

Vegetation adjacent to Reach 2 consists of Gooding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweetclover species, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Table 4-5 below summarizes Regional Board jurisdictional waters at the Project site. The boundaries of Regional Board jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 7B]. Site photographs are provided as Exhibit 8.

#### **Hill Street Ditch**

Regional Board jurisdiction associated with Hill Street Ditch totals 0.14 acre, none of which is wetland. A total of 1,655 linear feet of streambed is present.

The Hill Street Ditch is a concrete-lined and concrete bottom channel and earthen (soft-bottom) channel that conveys surface water only in direct response to precipitation (i.e., rain). The Hill Street Ditch enters the Study Area from a culvert beneath Grand Avenue and flows for 1,076 linear feet before the drainage feature transitions from a concrete channel to a soft-bottom channel and flows for 579 linear feet before discharging into Reach 2 of the Riverside Avenue Ditch.

Since this feature is subject to Corps jurisdiction pursuant to Section 404 of the CWA, it is subject to Regional Board jurisdiction pursuant to Section 401 of the CWA.

Vegetation adjacent to the Hill Street Ditch consists of Gooodding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweet-clover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Table 4-5 below summarizes Regional Board jurisdictional waters at the Project site. The boundaries of Regional Board jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 7B]. Site photographs are provided as Exhibit 8.

### **Riparian/Wetland Habitat Associated with Lake Elsinore**

Regional Board jurisdiction associated with the Riparian/Wetland Habitat Associated with Lake Elsinore totals 12.77 acres, all of which is wetland. An estimated 639 linear feet of streambed is associated with this wetland polygon. The Riparian/Wetland Habitat Associated with Lake Elsinore is groundwater-driven by ebb and flow associated with Lake Elsinore itself and it supports vegetation and hydric soils.

Vegetation associated with the Riparian/Wetland Habitat Associated with Lake Elsinore consists of Gooodding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweet-clover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Photographs depicting the Riparian/Wetland Habitat Associated with Lake Elsinore are attached as Exhibit 8 and a map depicting the limits of Regional Board jurisdiction is attached as Exhibit 7B. Table 4-5 below documents the limits of Regional Board jurisdiction on site.

**Table 4-5: Summary of Regional Board Jurisdiction**

<b>Drainage Name</b>	<b>Regional Board Non-Wetland Waters (acres)</b>	<b>Regional Board Jurisdictional Wetlands (acres)</b>	<b>Total Regional Board Jurisdiction (acres)</b>	<b>Length (linear feet)</b>
Riverside Avenue Ditch Reach 1	0.12	0	0.12	702
Riverside Avenue Ditch Reach 2	0	0.13	0.13	824
Hill Street Ditch	0.14	0	0.14	1,655
Riparian/Wetland Habitat Area	0	12.77	12.77	639
<b>Total</b>	<b>0.26</b>	<b>12.90</b>	<b>13.16</b>	<b>3,820</b>

## **California Fish and Wildlife Jurisdiction**

CDFW jurisdiction associated with the Study Area totals 16.86 acres, of which 12.90 acres consist of riparian stream/habitat and 3.96 acre consist of non-riparian stream. A total of 3,820 linear feet of stream is present.

CDFW jurisdiction at the Project site includes Reaches 1 and 2 of the Riverside Avenue Ditch, the Hill Street Ditch, and the Riparian/Wetland Habitat Area associated with Lake Elsinore.

Similar to the USACE the CDFW claims a specific elevation as the jurisdictional limit for Lake Elsinore. CDFW uses the elevation of 1,265 feet amsl for Lake Elsinore. The 1,265 line is estimated based on available elevation data. Each drainage feature is further discussed below.

### **Riverside Avenue Ditch**

#### **Reach 1**

CDFW jurisdiction associated with Reach 1 of the Riverside Avenue Ditch totals 0.24 acre, none of which is riparian stream. A total of 702 linear feet of streambed is present.

Reach 1 of the Riverside Avenue Ditch is a concrete-lined and concrete bottom channel that conveys surface water only in direct response to precipitation (i.e., rain). Reach 1 enters the Study Area from a culvert beneath Riverside Avenue and flows for 702 linear feet before meeting Reach 2 of the Riverside Avenue Ditch. At this point, the drainage feature transitions from a concrete channel to a soft-bottom channel.

No vegetation is present within Reach 1 of the Riverside Avenue Ditch as it is concrete.

Table 3 below summarizes CDFW jurisdictional waters at the Project site. The boundaries of CDFW jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 7C]. Site photographs are provided as Exhibit 8.

#### **Reach 2**

CDFW jurisdiction associated with Reach 2 of the Riverside Avenue Ditch totals 0.32 acre, of which 0.13 acre is riparian streambed and 0.19 acre is non-riparian streambed. A total of 824 linear feet of streambed is present. Reach 2 is an ephemeral to intermittent adjacent, off site portion of the Riverside Avenue Ditch which flows along the northern and eastern project boundary. The drainage feature enters the areas surrounding the Project through a culvert beneath Riverside Avenue. The drainage feature flows for 702 linear feet as part of Reach 1 of this feature. The feature then flows for 824 linear feet along the eastern project boundary before discharging into Lake Elsinore.

Vegetation adjacent to Reach 2 consists of Goodding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweet-clover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Table 3 below summarizes CDFW jurisdictional waters at the Project site. The boundaries of CDFW jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 7C]. Site photographs are provided as Exhibit 8.

### **Hill Street Ditch**

CDFW jurisdiction associated with Hill Street Ditch totals 0.45 acre, none of which is riparian streambed. A total of 1,655 linear feet of streambed is present.

The Hill Street Ditch is a concrete-lined and concrete bottom channel and earthen (soft-bottom) channel that conveys surface water only in direct response to precipitation (i.e., rain). The Hill Street Ditch enters the Study Area from a culvert beneath Grand Avenue and flows for 1,076 linear feet before the drainage feature transitions from a concrete channel to a soft-bottom channel and flows for 579 linear feet before discharging into Reach 2 of the Riverside Avenue Ditch.

Vegetation adjacent to the Hill Street Ditch consists of Goodding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweet-clover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Table 3 below summarizes CDFW jurisdictional waters at the Project site. The boundaries of CDFW jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 7C]. Site photographs are provided as Exhibit 8.

### **Riparian/Wetland Habitat Associated with Lake Elsinore**

CDFW jurisdiction associated with the Riparian/Wetland Habitat Associated with Lake Elsinore totals 15.85 acres, 12.77 acres of which is riparian habitat and 3.08 acres of which are non-riparian habitat areas below the 1,265 elevation. An estimated 639 linear feet of streambed is associated with this wetland/riparian polygon. The Riparian/Wetland Habitat Associated with Lake Elsinore is groundwater-driven by ebb and flow associated with Lake Elsinore itself and it supports vegetation and hydric soils.

Vegetation associated with the Riparian/Wetland Habitat Associated with Lake Elsinore consists of Goodding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweet-clover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Photographs depicting the Riparian/Wetland Habitat Associated with Lake Elsinore are attached as Exhibit 8 and a map depicting the limits of CDFW jurisdiction is attached as Exhibit 7C. Table 4-6 below documents the limits of CDFW jurisdiction on site.

**Table 4-6: Summary of CDFW Jurisdiction**

Drainage Name	CDFW Non-Riparian Stream (acres)	CDFW Riparian Stream (acres)	Total CDFW Jurisdiction (acres)	Length (linear feet)
Riverside Avenue Ditch Reach 1	0.24	0	0.24	702
Riverside Avenue Ditch Reach 2	0.19	0.13	0.32	824
Hill Street Ditch	0.45	0	0.45	1,655
Riparian/Wetland Habitat	3.08	12.77	15.85	639
<b>Total*</b>	<b>3.96</b>	<b>12.90</b>	<b>16.86</b>	<b>3,820</b>

\*Sum of individual parts may not equal total sum due to rounding error

#### **4.10 MSHCP Riparian/Riverine Areas and Vernal Pools**

MSHCP Riparian/Riverine habitat associated with the Study Area totals 16.86 acres, of which 12.90 acres consist of riparian stream/habitat and 3.96 acre consist of non-riparian riverine habitat. A total of 3,820 linear feet of stream is present.

MSHCP Riparian/Riverine habitat includes Reaches 1 and 2 of the Riverside Avenue Ditch, the Hill Street Ditch, and the Riparian/Wetland Habitat Area associated with Lake Elsinore.

The CDFW claims a specific elevation as the jurisdictional limit for Lake Elsinore. CDFW uses the elevation of 1,265 feet amsl for Lake Elsinore. We are utilizing that same elevation as the limit of MSHCP Riverine/Riparian habitat as well, where appropriate. The 1,265 line is estimated based on available elevation data. Each drainage feature is further discussed below.

#### **Riverside Avenue Ditch**

##### *Reach 1*

MSHCP Riverine habitat associated with Reach 1 of the Riverside Avenue Ditch totals 0.24 acre, none of which is riparian. A total of 702 linear feet of streambed is present.

Reach 1 of the Riverside Avenue Ditch is a concrete-lined and concrete bottom channel that conveys surface water only in direct response to precipitation (i.e., rain). Reach 1 enters the Study Area from a culvert beneath Riverside Avenue and flows for 702 linear feet before meeting Reach 2 of the Riverside Avenue Ditch. At this point, the drainage feature transitions from a concrete channel to a soft-bottom channel.

No vegetation is present within Reach 1 of the Riverside Avenue Ditch as it is concrete.

Table 4-7 below summarizes MSHCP Riparian/Riverine habitat at the Project site. The boundaries of MSHCP Riparian/Riverine habitat are depicted on the enclosed jurisdictional delineation map [Exhibit 7D]. Site photographs are provided as Exhibit 8.

#### *Reach 2*

MSHCP Riparian/Riverine habitat associated with Reach 2 of the Riverside Avenue Ditch totals 0.32 acre, of which 0.13 acre is riparian streambed and 0.19 acre is non-riverine streambed. A total of 824 linear feet of streambed is present. Reach 2 is an ephemeral to intermittent adjacent, off site portion of the Riverside Avenue Ditch which flows along the northern and eastern project boundary. The drainage feature enters the areas surrounding the Project through a culvert beneath Riverside Avenue. The drainage feature flows for 702 linear feet as part of Reach 1 of this feature. The feature then flows for 824 linear feet along the eastern project boundary before discharging into Lake Elsinore.

Vegetation adjacent to Reach 2 consists of Goooding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweet-clover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Table 4-7 below summarizes MSHCP Riparian/Riverine habitat at the Project site. The boundaries of MSHCP Riparian/Riverine habitat jurisdiction are depicted on the enclosed jurisdictional delineation map [Exhibit 7D]. Site photographs are provided as Exhibit 8.

#### **Hill Street Ditch**

MSHCP Riverine habitat associated with Hill Street Ditch totals 0.45 acre, none of which is riparian streambed. A total of 1,655 linear feet of streambed is present.

The Hill Street Ditch is a concrete-lined and concrete bottom channel and earthen (soft-bottom) channel that conveys surface water only in direct response to precipitation (i.e., rain). The Hill Street Ditch enters the Study Area from a culvert beneath Grand Avenue and flows for 1,076 linear feet before the drainage feature transitions from a concrete channel to a soft-bottom channel and flows for 579 linear feet before discharging into Reach 2 of the Riverside Avenue Ditch.

Vegetation adjacent to the Hill Street Ditch consists of Goooding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweet-clover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Table 4-7 below summarizes MSHCP Riparian/Riverine habitat at the Project site. The boundaries of MSHCP Riparian/Riverine habitat are depicted on the enclosed jurisdictional delineation map [Exhibit 7D]. Site photographs are provided as Exhibit 8.

## Riparian/Wetland Habitat Associated with Lake Elsinore

MSHCP Riparian/Riverine habitat associated with the Riparian/Wetland Habitat Associated with Lake Elsinore totals 15.85 acres, 12.77 acres of which is riparian habitat and 3.08 acres of which are non-riparian habitat areas below the 1,265 elevation. An estimated 639 linear feet of streambed is associated with this wetland/riparian polygon. The Riparian/Wetland Habitat Associated with Lake Elsinore is groundwater-driven by ebb and flow associated with Lake Elsinore itself and it supports vegetation and hydric soils.

Vegetation associated with the Riparian/Wetland Habitat Associated with Lake Elsinore consists of Gooodding's black willow, arroyo willow, salt-cedar, mule fat, alkali heliotrope, arrow weed, castor bean, marsh fleabane, white sweet-clover, alkali mallow, black mustard, stinging nettle, tocalote, California fan palm, field bindweed, bulrush, and tree of heaven.

Photographs depicting the Riparian/Wetland Habitat Associated with Lake Elsinore are attached as Exhibit 8 and a map depicting the limits of MSHCP Riparian/Riverine habitat is attached as Exhibit 7D. Table 4-7 below documents the limits of MSHCP Riparian/Riverine habitat on site.

**Table 4-7: Summary of MSHCP Riverine/Riparian Habitat**

Drainage Name	MSHCP Non-Riverine Areas (acres)	MSHCP Riparian Areas (acres)	Total MSHCP Riverine/Riparian Areas (acres)	Length (linear feet)
Riverside Avenue Ditch Reach 1	0.24	0	0.24	702
Riverside Avenue Ditch Reach 2	0.19	0.13	0.32	824
Hill Street Ditch	0.45	0	0.45	1,655
Riparian/Wetland Habitat	3.08	12.77	15.85	639
<b>Total*</b>	<b>3.96</b>	<b>12.90</b>	<b>16.86</b>	<b>3,820</b>

\*Sum of individual parts may not equal total sum due to rounding error

## 5.0 IMPACT ANALYSIS

The following discussion examines the potential impacts to plant and wildlife resources that would occur as a result of the proposed project. Impacts (or effects) can occur in two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Indirect impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other offsite areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as “edge effects” and may result in a slow replacement of native plants by non-native invasive species, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. A cumulative impact can occur from multiple individual effects from the same project, or from several projects. The cumulative impact from several projects is the change in the environment resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

## **5.1 California Environmental Quality Act (CEQA)**

### **5.1.1 Thresholds of Significance**

Environmental impacts to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California:

*“Prevent the elimination of fish or wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities...”*

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily

in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

*“The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species, ...”*

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed project.

### **5.1.2 Criteria for Determining Significance Pursuant to CEQA**

Appendix G of the State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.*
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

Appendix G(a) of the CEQA guidelines asks if a project is likely to “have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the

California Department of Fish and Game (now CA Department of Fish and Wildlife) or U.S. Fish and Wildlife Service.”

## **5.2. Impacts to Special-Status Plants**

The Project will not result in temporary or permanent impact to special-status plant species.

## **5.3 Impacts to Special-Status Animals**

### *Federal and/or State Listed Animals*

The Project site supports the least Bell’s vireo (*Vireo bellii pusillus*) within the 11.66-acre southern cottonwood willow riparian forest habitat in the preserved portion of the Project. The Project will not permanently or temporarily impact the least Bell’s vireo as the entirety of this 11.66-acre area is being avoided and is part of the Project’s preservation area.

### *Non-Listed Special-Status Animals, MSHCP Covered*

In addition to the listed species discussed above, the proposed Project will result in a loss of habitat that has potential to support the following non-listed, special-status species covered by the MSHCP: burrowing owl (SSC), golden eagle (CFP), loggerhead shrike (SSC), and northern harrier (SSC).

The proposed Project would remove potential nesting and foraging habitat for the loggerhead shrike and northern harrier, and foraging habitat for the golden eagle (20.81 acres). Although these species were not observed during biological surveys, the loss of potential habitat for the shrike, harrier, and golden eagle would not represent a CEQA-significant impact due to other available suitable nesting and foraging habitat in the immediate vicinity of Lake Elsinore, such as Lake Elsinore itself, the San Jacinto River, and Lee Lake. This impact would be further reduced through compliance with the biological requirements of the MSHCP, which conserves this species and associated suitable habitat on a regional level.

As burrowing owls were not observed within the Project footprint, the proposed Project would not cause impacts to burrowing owl. However, due to the mobile nature of the species, a pre-construction burrowing owl survey is required by Section 6.3.2 of the MSHCP. Refer to Section 6.0 for details.

### *Non-Listed Special-Status Animals, MSHCP Non-Covered*

The proposed Project will also result in a loss of habitat that has potential to support the following non-listed, special-status species that are not covered by the MSHCP in a foraging role: American badger (SSC). The Project would permanently impact 20.81 acres of habitat with the potential to support foraging for this species. The loss of this foraging habitat would not be a significant impact under CEQA due to the marginal quality and limited amount of potential foraging habitat removed by the proposed Project. Regardless, although these species are not covered under the MSHCP, the conservation lands that comprise the MSHCP reserve assembly

include habitat suitable to support foraging for these species on a regional level. Therefore, regardless of impacts, suitable foraging habitat for these species has been conserved on a regional level.

### *Impacts to Raptors*

Raptors (Birds of Prey) include owls, hawks, eagles, and falcons. Common species of raptors (e.g., red-tailed hawk, American kestrel, great horned owl) have potential to forage within the Project footprint. Raptors were not observed nesting within the Project site over the course of the surveys, and raptor nesting habitat is limited to the riparian habitat associated with Lake Elsinore which will be avoided by the proposed Project.

The proposed removal of 20.81 acres of suitable raptor foraging habitat within the Project footprint would not be a significant impact under CEQA due to the marginal quality and limited amount of potential foraging habitat removed by the proposed Project. Regardless, although the common raptor species (e.g., American kestrel and Red-tailed Hawk) are not covered under the MSHCP, the biological requirements of these species are expected to be supported due to the parallel habitat needs with those raptors covered under the Plan.

### **5.4 Sensitive Vegetation Communities**

Appendix G(a) of the CEQA guidelines asks if a project is likely to “have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.”

The proposed Project would not impact one sensitive special-status vegetation community which consists of disturbed southern willow cottonwood riparian forest habitat but the impact to this habitat would not be considered significant under CEQA due to the limited size and disturbed nature of the habitat. Table 5-1 provides a summary of vegetation community/land cover impacts. The proposed Project would permanently impact approximately 20.09 acres of generally non-native habitats consisting of non-native grassland and disturbed habitat, as well as 0.72 acre of disturbed southern willow cottonwood riparian forest native habitat. [Exhibit 11].

The MSHCP disturbed southern willow cottonwood riparian forest that would be impacted by the proposed Project consists of individual, maintained willow and/or cottonwood trees, as well as giant wild rye individuals totaling 0.72 acre, which, in the context of the Project site do not constitute riparian resources as they are consistently and historically maintained. As such, they do not have the density or a stratified canopy needed for these species nor is there a potential to support riparian associated species such as least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo. These maintained areas are isolated, and individually are a component of the assemblage of the surrounding non-riparian vegetation communities, including non-native grasslands and disturbed areas.

Proposed mitigation is discussed in Section 6.0 of this report, demonstrating that the proposed Project would meet the requirements of the MSHCP and hence reduce potentially significant impacts under CEQA to a level of less than significant.

**Table 5-1. Summary of Vegetation Community/Land Cover Impacts**

VEGETATION COMMUNITY/LAND COVER	Total Impacts On Site(acres)	Total Impacts Off Site(acres)	Total Impacts (acres)
Non-Native Grassland	14.67	0.48	15.15
Disturbed Southern Willow Cottonwood Riparian Forest	0.72	0	0.72
Disturbed	3.77	0.03	3.80
Developed	0	1.14	1.14
<b>Total</b>	<b>19.16</b>	<b>1.65</b>	<b>20.81</b>

## **5.5 Wildlife Movement and Native Wildlife Nursery Sites**

Appendix G(d) of the State CEQA guidelines asks if a project is likely to “interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.”

The Project footprint lacks migratory wildlife corridors and does not occur within MSHCP Cores or Linkages. The proposed Project would not interfere with or otherwise impact (1) the movement of native resident or migratory fish or wildlife species or (2) established native resident or migratory wildlife corridors. In addition, the Project site is not expected to support wildlife nursery sites for mammals, including bats.

### **5.5.1 Migratory Birds**

The Project has the potential to impact active bird nests if vegetation is removed during the nesting season (March 1 to August 31). Impacts to nesting birds are prohibited by the MBTA and California Fish and Game Code.

Although impacts to native birds are prohibited by the MBTA and similar provisions of California Fish and Game Code, impacts to native birds by the proposed Project would not be a significant impact under CEQA. The native birds with potential to nest on the Project site would be those that are extremely common to the region and highly adapted to human landscapes (e.g., house finch, killdeer). The number of individuals potentially affected by the Project would not significantly affect regional, let alone local populations of such species. A measure is identified in Section 6.0 of this report to avoid impacts to nesting birds.

## **5.6 Local Policies or Ordinances**

Appendix G(e) of the State CEQA guidelines asks if a project is likely to “conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.” The Project will not conflict with any local policies or ordinances protecting biological resources.

## **5.7 Habitat Conservation Plans**

Appendix G(f) of the State CEQA guidelines asks if a project is likely to “conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.” As discussed throughout this report, the Project is within the Western Riverside County MSHCP. Section 7.0 of this report analyzes consistency of the Project with the Reserve Assembly and species/habitat requirements of the MSHCP. Impacts to species/habitats with MSHCP requirements are summarized here. Through compliance with the applicable requirements, the Project will not conflict with the provisions of the MSHCP.

## **5.8 Impacts to Critical Habitat**

The Project will not affect or impact Critical Habitat.

## **5.9 Jurisdictional Waters**

### **5.9.1 Impacts to Corps Jurisdiction**

The Project will result in permanent impact to 0.01 acre and ten linear feet of Corps jurisdictional waters, none of which is wetland. Impacts would occur to a concrete portion of the Hill Street Ditch associated with the construction of two outlet structures into the ditch . Refer to Section 6.0, Recommended Mitigation/Avoidance Measures for measures to offset these impacts. A Corps impact map is attached as Exhibit 10A.

### **5.9.2 Impacts to Regional Board Jurisdiction**

The Project will result in permanent impact to 0.01 acre and approximately ten linear feet of Regional Board Waters of the State. Impacts would occur to a concrete portion of the Hill Street Ditch associated with the construction of two outlet structures into the ditch . Refer to Section 6.0, Recommended Mitigation/Avoidance Measures for measures to offset these impacts. A Regional Board impact map is attached as Exhibit 10B.

### **5.9.3 Impacts to CDFW Jurisdiction**

The Project will result in permanent impact to 0.01 acre and ten linear feet of CDFW non-riparian streambed. Impacts would occur to a concrete portion of the Hill Street Ditch associated with the construction of two outlet structures into the ditch . Refer to Section 6.0, Recommended

Mitigation/Avoidance Measures for measures to offset these impacts. A CDFW impact map is attached as Exhibit 10C.

#### **5.9.4 Impacts to MSHCP Riparian/Riverine Areas**

The MSHCP defines riparian/riverine areas as *lands which contain Habitat dominated by trees, shrubs, persistent emergent mosses and lichens, which occur close to or which depend upon soils moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.*

The MSHCP defines vernal pools as *seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season.*

The Project will result in permanent impact to 0.01 acre and ten linear feet of riverine streambed. Impacts would occur to a concrete portion of the Hill Street Ditch associated with the construction of two outlet structures into the ditch. Impacts to riverine resources will be minimal and avoid greater than 99 percent of resources on site. The impact area in question is an artificially created ditch.

As noted in Section 4.10 above, the Project will impact a ditch constructed in, and draining, wholly upland areas which does not support a relatively permanent flow of water. This ditch has been artificially constructed in the uplands and is not a natural drainage feature that would be considered riparian/riverine habitat. Instead, this feature is a human-induced, artificially constructed ditch which collects road runoff and does not meet the classification of riparian/riverine resources under the MSHCP as the ditch does not contain habitat dominated by trees, shrubs, or persistent emergent mosses and lichens, and the ditch is concrete-bottomed and concrete-sided, thus lacking habitat for species targeted for conservation under the MSHCP.

As a result, no riparian/riverine resources, as it relates to Section 6.1.2 under the MSHCP are present. No vernal or seasonal pools are present within the Study Area.

A riverine impact map is attached as Exhibit 10D.

#### **5.10 Indirect Impacts to Biological Resources**

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to adjacent native open space. Although the Project site is not located within or adjacent to the MSHCP Conservation Area, the ditches within the Project footprint drain to Lake Elsinore, which is located within the Conservation Area (Public Quasi-Public Land, and San Timoteo Creek - Public Quasi-Public Land and Regional Conservation Authority Lands). In addition, the proposed Project impact footprint is located approximately 50 to 320 feet north of habitat which represents long-term conservation value for LBV. The Project is not expected to result in significant indirect impacts to special-status biological resources within the downstream Conservation Area (Lake Elsinore) or nearby habitat representing long-term

conservation value for LBV, with the implementation of measures pursuant to the MSHCP Urban/Wildlands Interface Guidelines (*Volume I, Section 6.1.4* of the MSHCP). These guidelines are intended to address indirect effects associated with locating projects (particularly development) in proximity to the MSHCP Conservation Area. To minimize potential edge effects, the guidelines are to be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area. The Project will implement measures consistent with the MSHCP guidelines to address the following:

- Drainage;
- Toxics;
- Lighting;
- Noise; and
- Invasives.

### **5.10.1 Drainage**

Proposed Projects in proximity to the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV) shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV) is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV). This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.

The Project's contractor will develop a Stormwater Pollution Prevention Plan (SWPPP) to address runoff and water quality during construction.

### **5.10.2 Toxics**

Land uses proposed in proximity to the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV) that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, habitat or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV). Measures such as those employed to address drainage issues shall be implemented. The proposed Project will implement a SWPPP that will address runoff during construction.

### **5.10.3 Lighting**

Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV) from direct night lighting. If night lighting is required during construction, shielding shall be incorporated to ensure ambient lighting in the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV) is not increased.

### **5.10.4 Noise**

Proposed noise generating land uses affecting the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV) shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV) should not be subject to noise that would exceed residential noise standards.

### **5.10.5 Invasives**

Projects adjacent to the MSHCP Conservation Area and lands representing long-term conservation value for riparian/riverine-associated species (LBV) shall avoid the use of invasive plant species in landscaping, including invasive, non-native plant species listed in Volume I, *Table 6-2* of the MSHCP.

## **5.11 Cumulative Impacts to Biological Resources**

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. “Related projects” refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project.

As discussed throughout this report, the 20.81 acres proposed for impacts by the Project consist of relatively disturbed lands with remnant patches of native scrub habitat, surrounded primarily by active construction and vehicular roadways. The proposed Project would permanently impact potential Regional Board and CDFW jurisdiction, as well as MSHCP riverine resources; however, all impacts would be fully mitigated (refer to Section 6). The Project site is not located within the MSHCP Criteria Area and no special-status species, including plant or wildlife species, that are not covered under the MSHCP that could trigger a CEQA significant impact were observed or detected within the Project site. In addition, the conservation lands that comprise the MSHCP reserve assembly include habitat suitable to support non-MSHCP covered species on a regional level, as they have similar habitat requirements to many MSHCP covered species. Therefore, any potential cumulative impact is addressed through consistency with the MSHCP, pursuant to conservation requirements on a regional level.

As such, through compliance and participation with the MSHCP, the loss of this area will not contribute to a cumulatively significant impact to biological resources.

## **6.0 MITIGATION/AVOIDANCE MEASURES**

The following discussion provides project-specific mitigation/avoidance measures for actual or potential impacts to special-status resources.

### **6.1 Burrowing Owl**

The Project site is not within the burrowing owl survey area but does contain suitable habitat for burrowing owl. MSHCP Objective 6 for burrowing owls requires that pre-construction surveys occur prior to site grading. As such, the following measure is recommended to avoid direct impacts to burrowing owls and to ensure consistency with the MSHCP.

- **Pre-Construction Survey.** A 30-day pre-construction survey for burrowing owls is required prior to future ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, site watering, equipment staging, etc.) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Regional Conservation Authority (RCA) and the Wildlife Agencies and will need to coordinate with the RCA and the Wildlife Agencies at that time, including the potential for preparing a Burrowing Owl Protection and Relocation Plan prior to initiating ground disturbance, as determined through agency coordination. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure that burrowing owls have not colonized the site since it was last disturbed. If burrowing owls are found, the same coordination described above will be necessary.

### **6.2 Nesting Birds**

The Project site contains vegetation with the potential to support native nesting birds. As discussed above, the California Fish and Game Code prohibits mortality of native birds, including eggs. The following measure is recommended to avoid mortality to nesting birds. Potential impacts to native birds was not considered a biologically significant impact under CEQA however, to comply with state law, the following is recommended:

- As feasible, vegetation clearing should be conducted outside of the nesting season, which is generally identified as March 1 through September 15. If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a nesting bird survey within three days prior to any disturbance of the site, including disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests.

### **6.3 Least Bell's Vireo**

Willow cottonwood riparian habitat associated with Lake Elsinore occurs at various distances ranging from approximately 50 to 300 feet northerly and easterly of the Project footprint and is occupied habitat for the state and federally listed LBV with long-term conservation value. Although 100 percent of the habitat that is occupied or potentially occupied by LBV will be avoided by the proposed Project, and habitat that represents long-term conservation value for LBV will not be impacted by the proposed Project, GLA recommends the following measures to ensure the nesting/breeding activities of this species are not disrupted and no impact to habitat that represents long-term conservation value for LBV occurs as a result of the proposed Project:

- The project impact footprint, including any construction buffer, shall be staked and fenced (e.g., with orange snow fencing, silt fencing or a material that is clearly visible) and the boundary shall be confirmed by a qualified biological monitor prior to ground disturbance. The construction site manager shall ensure that the fencing is maintained for the duration of construction and that any required repairs are completed in a timely manner.
- Equipment operators and construction crews will be informed of the importance of the construction limits by the biological monitor prior to any ground disturbance.
- Construction activities within 200-300 feet of the nearest extent of adjacent riparian habitat associated with Lake Elsinore will be avoided from April 1<sup>st</sup> through August 31<sup>st</sup>.
- For any vegetation clearing or work within 100 feet of riparian habitat associated with Lake Elsinore, a biologist will monitor to ensure encroachment into the riparian habitat area does not occur.
- Active construction areas will be watered regularly (at least once every two hours) to control dust and thus minimize impacts on vegetation within and adjacent to Lake Elsinore.
- Construction personnel will strictly limit their activities, vehicles, equipment, and construction materials to the limits of disturbance and designated staging areas and routes of travel approved by the biological monitor.
- Vegetation will be covered while being transported, and vegetation materials removed from the site will be disposed of in accordance with applicable laws and regulations.
- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances will occur only in designated areas within the limits of disturbance and at least 200 feet from jurisdictional aquatic features. These designated areas will be clearly marked and located in such a manner as to contain runoff and will be approved by the biological monitor.
- To avoid attracting predators, the project site will be kept clear of trash and debris. All food related trash items will be enclosed in sealed containers and regularly removed from the site.

### **6.4 Jurisdictional Waters**

As noted above in Section 5, the Project will impact 0.01 acre of Corps and Regional Board jurisdiction and 0.01 acre of CDFW jurisdiction (non-riparian, concrete streambed). The following measure identifies mitigation proposed for impacts to jurisdictional waters:

- Impacts to Corps, Regional Board, and CDFW jurisdictional areas shall be mitigated at a minimum 1:1 ratio subject to approval of the resource agencies, and shall include the purchase of 0.01 acre of re-establishment mitigation credits at an accredited mitigation bank located within the Santa Ana River watershed, such as the Riverpark Mitigation Bank.

## 7.0 MSHCP CONSISTENCY ANALYSIS

The purpose of this section is to provide an analysis of the proposed Project with respect to compliance with biological aspects of the Western Riverside County MSHCP. Specifically, this analysis evaluates the proposed Project with respect to the Project's consistency with MSHCP Reserve assembly requirements, *Section 6.1.2* (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), *Section 6.1.3* (Protection of Narrow Endemic Plant Species), *Section 6.1.4* (Guidelines Pertaining to the Urban/Wildlands Interface), and *Section 6.3.2* (Additional Survey Needs and Procedures).

### **7.1 Project Relationship to Reserve Assembly**

The proposed Project is located within Elsinore Area Plan of the MSHCP. However, the Project site is not located within the MSHCP Criteria Area and would therefore not be subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process or the Joint Project Review (JPR) process. As such, the Project would not conflict with Reserve Assembly goals.

### **7.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools**

The MSHCP defines Riparian/Riverine Areas as “*lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source, or areas with fresh water flow during all or a portion of the year.*”

As discussed in Sections 4.10 and 5.9 above, the Project will result in permanent impact to 0.01 acre and ten linear feet of riverine streambed. Impacts would occur to a concrete portion of the Hill Street Ditch associated with the construction of two outlet structures into the ditch. Impacts to riverine resources will be minimal and avoid greater than 99 percent of resources on site. The impact area in question is an artificially created ditch.

As noted, the Project will impact a ditch constructed in, and draining, wholly upland areas which does not support a relatively permanent flow of water. This ditch has been artificially constructed in the uplands and is not a natural drainage feature that would be considered riparian/riverine habitat. Instead, this feature is a human-induced, artificially constructed ditch which collects road runoff and does not meet the classification of riparian/riverine resources under the MSHCP as the ditch does not contain habitat dominated by trees, shrubs, or persistent emergent mosses and lichens, and the ditch is concrete-bottomed and concrete-sided, thus lacking habitat for species targeted for conservation under the MSHCP.

As a result, no riparian/riverine resources, as it relates to Section 6.1.2 under the MSHCP are present and no DBESP for this minimal impact is necessary.

It should be noted that the Project will not impact habitat with the potential to support riparian birds or other species requiring additional surveys and procedures under MSHCP *Volume I, Section 6.1.2*, including the least Bell's vireo, southwestern willow flycatcher, or the western yellow-billed cuckoo; however, due to the proximity of the Project footprint to riparian habitat associated with Lake Elsinore, an LBV-specific measure is outlined in Section 6.2. With the implementation of this measure, the proposed Project will be consistent with MSHCP *Volume I, Section 6.1.2* of the MSHCP riparian/rivine-associated species.

The MSHCP defines vernal pools as “*seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season.*”

The proposed Project does not contain, and therefore will not impact, any MSHCP vernal pools. As such, the proposed Project is consistent with MSHCP *Volume I, Section 6.1.2* as it pertains to vernal pools.

### **7.3 Protection of Narrow Endemic Plants**

*Volume I, Section 6.1.3* of the MSHCP requires that within identified Narrow Endemic Plant Species Survey Areas (NEPSSA), site-specific focused surveys for Narrow Endemic Plants Species will be required for all public and private projects where appropriate soils and habitat are present.

The proposed Project site is not located within any MSHCP NEPSSA or CAPSSA-designated survey areas. As such, the proposed Project would be consistent with *Volume I, Section 6.1.3* of the MSHCP.

### **7.4 Guidelines Pertaining to the Urban/Wildland Interface**

The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. As the MSHCP Conservation Area is assembled, development is expected to occur adjacent to and drain into the Conservation Area. Future development in proximity to the MSHCP Conservation Area may result in edge effects with the potential to adversely affect biological resources within the Conservation Area. To minimize such edge effects, the guidelines shall be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area and address the following:

- Drainage;
- Toxics;
- Lighting;
- Noise;

- Invasive species;
- Barriers;
- Grading/Land Development.

The Project will implement applicable measures as it relates to temporary construction impacts to minimize adverse indirect impacts on special-status resources within Conserved Lands. The proposed Project will be consistent with *Section 6.1.4* of the MSHCP.

## **7.5 Additional Survey Needs and Procedures**

*Volume I, Section 6.3.2* of the MSHCP states that in addition to the Narrow Endemic Plant Species addressed in *Volume I, Section 6.1.3*, additional surveys may be needed for other certain plant and animal species in conjunction with MSHCP implementation in order to achieve full coverage for these species. Within areas of suitable habitat, focused surveys are required for additional plant species if a project site occurs within a designated Criteria Area Plant Species Survey Area. In addition, focused surveys are also required (with suitable habitat) for seven animal species as identified by the corresponding Survey Area.

The Project site is not located within the MSHCP Burrowing Owl Survey Area so focused burrowing owl surveys were not performed; however, as discussed above in Section 6.1, pre-construction surveys for the burrowing owl are required no more than 30 days prior to construction to confirm the absence of owls.

A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no burrowing owls have colonized the Project site in the days or weeks preceding the initial ground-disturbing activities. If burrowing owls are found to have colonized the Project site prior to the initiation of ground-disturbing activities, the Wildlife Agencies and the Regional Conservation Authority (RCA) will be immediately informed, and additional coordination with RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, will occur prior to initiating ground disturbance. If ground-disturbing activities occur but the Project site is left undisturbed for more than 30 days, an additional pre-construction survey will again be necessary to ensure that burrowing owls have not colonized the site since it was last disturbed. If burrow owls are found, the same coordination with the RCA and Wildlife Agencies described above will be necessary.

The Project site is not located within the CAPSSA, MSHCP Mammal Survey Area, or within the MSHCP Amphibian Survey Area. As a result, with the performance of pre-construction burrowing owl surveys, the proposed Project would be consistent with *Volume I, Section 6.3.2* of the MSHCP.

## **7.6 Conclusion of MSHCP Consistency**

As outlined above, the proposed Project will be consistent with the biological requirements of the MSHCP; specifically pertaining to the Project's relationship to reserve assembly, *Section 6.1.2* (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), *Section*

6.1.3 (Protection of Narrow Endemic Plant Species), Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface), and Section 6.3.2 (Additional Survey Needs and Procedures).

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## 9.0 CERTIFICATION

*I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.*

Signed:

A handwritten signature in black ink, appearing to read "Mac G. Reid".

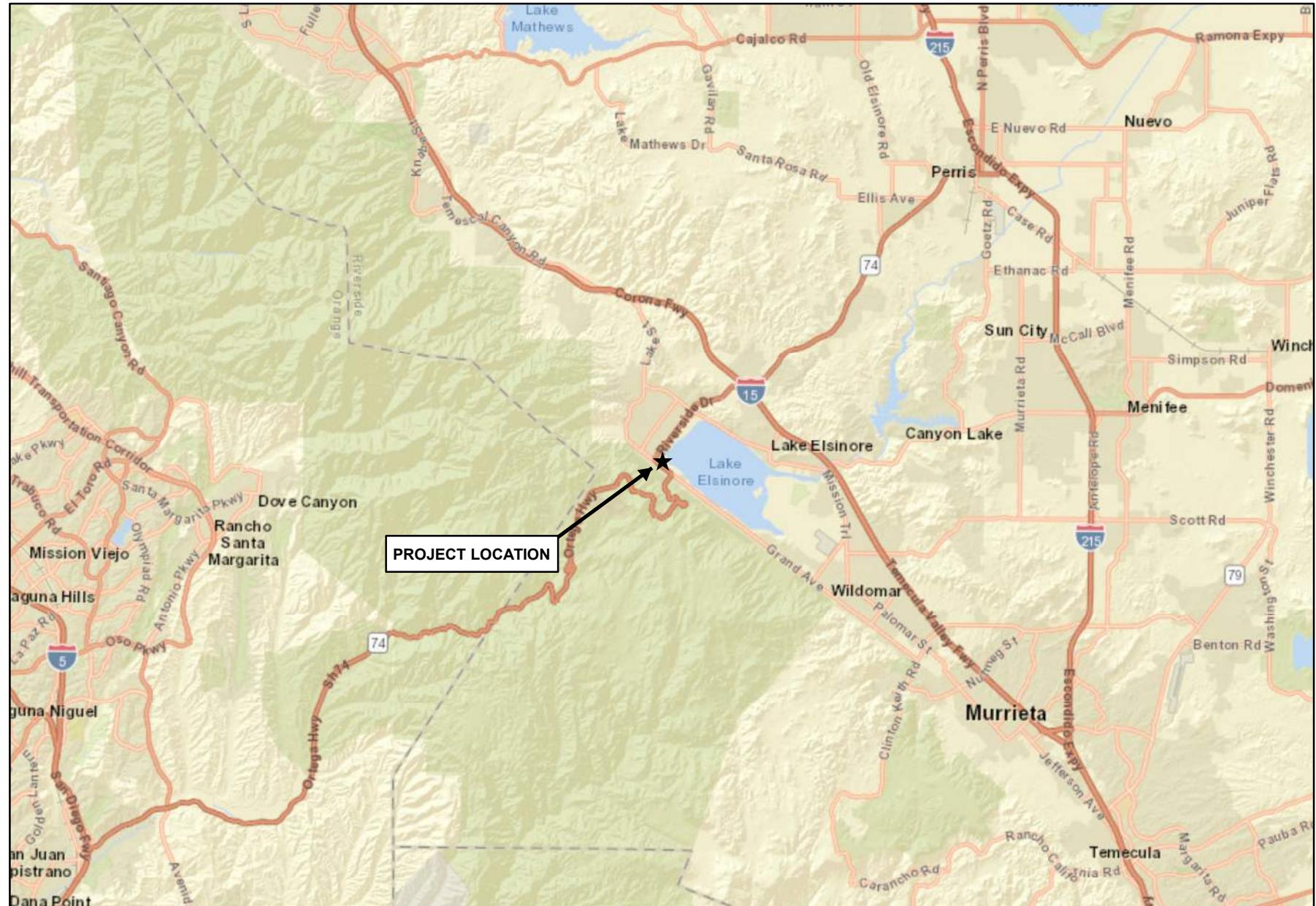
Date: 10/27/2021

p: 1011-9e.rpt

Source: ESRI World Street Map



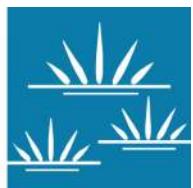
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Miles



**EL SINORE 35 PROJECT**  
Regional Map

**GLENN LUKOS ASSOCIATES**

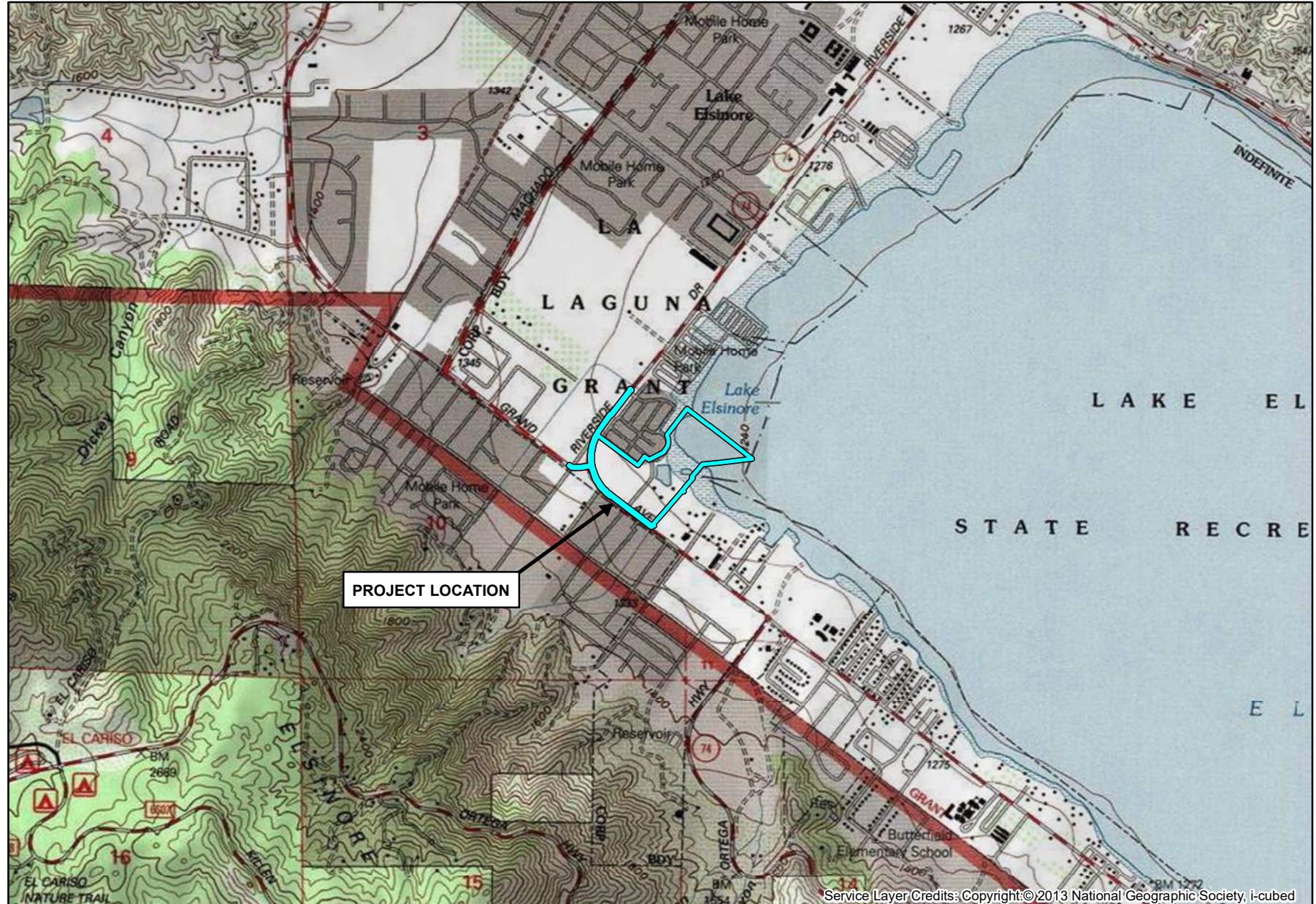
Exhibit 1



Adapted from USGS Alberhill, CA quadrangle



0  
1,000  
2,000  
4,000  
Feet



**EL SINORE 35 PROJECT**  
Vicinity Map

**GLENN LUKOS ASSOCIATES**

Exhibit 2





- Project Site
- Onsite Project Site
- Offsite Project Site



0 112.5 225 450  
Feet

1 inch = 225 feet

Coordinate System: State Plane 6 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD 1983 2011  
Map Prepared by: K. Kartunen, GLA  
Date Prepared: July 19, 2021

## EL SINORE 35 PROJECT

Aerial Map

GLENN LUKOS ASSOCIATES



Exhibit 3

## LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF LAKE ELSINORE IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1 (APN 379-060-022):  
BLOCK D OF A MAP OF A PORTION OF THE LA LAGUNA RANCH, IN THE CITY OF LAKE ELSINORE, AS SHOWN BY MAP ON FILE IN BOOK 1, PAGE 36 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE STATE OF CALIFORNIA BY DEED RECORDED OCTOBER 19, 1961 AS INSTRUMENT NO. 92163 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

ALSO EXCEPTING THEREFROM THAT PORTION LYING NORTHWEST OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT THE MOST WESTERLY CORNER OF THE LAND SHOWN AS PARCEL 3090-2C OF FILE IN BOOK 54, PAGE 49 OF RECORDS OF SURVEY, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA;

THENCE NORTH 37°02'20" EAST 383.77 FEET ON THE NORTHWEST LINE OF SAID PARCEL 3090-2C AND THE NORTHEASTERLY PROLONGATION THEREOF TO A 1/2" IRON PIPE SHOWN AS FOUND ON LAST SAID MAP;

THENCE SOUTH 52°57'40" EAST, 773.00 FEET TO THE TRUE POINT OF BEGINNING;

THENCE SOUTH 37°02'20" WEST, 511.06 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 193.00 FEET, A RADIAL TO SAID

BEGINNING BEARS NORTH 61°31'38" EAST;

THENCE SOUTHERLY 220.67 FEET ON SAID CURVE THROUGH A CENTRAL ANGLE OF 65°30'42";

THENCE SOUTH 37°02'20" WEST 50.00 FEET; THENCE SOUTH 61°20'49" WEST, 232.48 FEET; THENCE NORTH 52°57'40" WEST, 80.30 FEET TO A POINT WHICH BEARS SOUTH 57°57'40" EAST 76.00 FEET FROM THE CENTERLINE OF RIVERSIDE DRIVE, 60.00 FEET WIDE, AS SHOWN ON FIRST SAID MAP;

THENCE SOUTH 37°02'20" WEST 127.00 FEET;

THENCE SOUTH 52°57'40" EAST, 122.00 FEET;

THENCE SOUTH 37°02'20" WEST, 291.00 FEET; THENCE NORTH 52°57'40" WEST, 743.98 FEET TO THE EASTERLY LINE OF SAID LAND CONVEYED TO THE STATE OF CALIFORNIA AND THE END OF THE LINE TO BE DESCRIBED.

ALSO EXCEPTING THEREFROM THAT PORTION LYING NORTHEAST OF THE SOUTHWEST LINE OF THE LAND SHOWN AS PARCEL 3090-2A ON SAID MAP ON FILE IN BOOK 54, PAGE 49 OF RECORDS OF SURVEY, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 2 (A PORTION OF APN 379-060-005):  
THE NORTHWEST 4.00 ACRES OF LOT 1, BLOCK C OF A MAP SHOWING SUBDIVISIONS IN ELSINORE, IN THE CITY OF ELSINORE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 8 PAGE 377 OF MAPS, RECORDS OF SAN DIEGO COUNTY, CALIFORNIA.

SAID LAND IS SHOWN A PARCEL A IN LOT 1, BLOCK C OF RANCHO LA LAGUNA, ON FILE IN BOOK 12, PAGE 4 OF RECORDS OF SURVEY, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 3 (A PORTION OF APN 379-060-005):  
THAT PORTION OF LOT 1 IN BLOCK C OF A MAP SHOWING SUBDIVISIONS IN ELSINORE, IN THE CITY OF ELSINORE, AS SHOWN BY MAP ON FILE IN BOOK 8, PAGE 377 OF MAPS, RECORDS OF SAN DIEGO COUNTY, CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST SOUTHERLY CORNER OF THE NORTHWEST 4.00 ACRES OF SAID LOT 1;

THENCE SOUTHEAST 60.00 FEET ON THE SOUTHWEST LINE OF SAID LOT 1;

THENCE NORTHEAST PARALLEL WITH THE SOUTHEAST LINE OF SAID NORTHWEST 4.00 ACRES TO THE NORTHERLY LINE OF SAID LOT 1;

THENCE WESTERLY ON SAID NORTHERLY LINE TO THE MOST EASTERNLY CORNER OF SAID NORTHWEST 4.00 ACRES;

THENCE SOUTHWEST ON THE SOUTHEAST LINE OF SAID NORTHWEST 4.00 ACRES TO THE POINT OF BEGINNING.

EXCEPT THAT PORTION CONVEYED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT BY DEED RECORDED AUGUST 07, 1970 AS INSTRUMENT NO. 77806 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 4 (APN 379-060-027):  
PARCEL 2 OF THAT CERTAIN LOT LINE ADJUSTMENT NO 89-13 RECORDED JANUARY 30, 1990 AS INSTRUMENT NO. 90-037878, OFFICIAL RECORDS OF RIVERSIDE, CALIFORNIA, DESCRIBED AS FOLLOWS:

THAT PORTION OF BLOCK D OF RANCHO LA LAGUNA AS SHOWN BY MAP ON FILE IN BOOK 8, PAGE 377 OF MAPS, SAN DIEGO COUNTY RECORDS, ALL IN THE COUNTY OF RIVERSIDE, DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE SOUTHWEST LINE OF AND SHOWN AS PARCEL 3090-2C ON SHEET 3 OF THE MAP FILED IN BOOK 54, PAGE 49 OF RECORDS OF SURVEY, IN THE OFFICE OF SAID COUNTY RECORDER WITH THE SOUTHEAST RIGHT OF WAY RIVERSIDE DRIVE; THENCE SOUTHERLY ALONG THE RIGHT OF WAY THE FOLLOWING 6 COURSES:

SOUTH 37°02'20" WEST, 350.93 FEET;

THENCE NORTH 52°57'40" WEST 20.00 FEET;

THENCE SOUTH 30°02'05" WEST, 81.70 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 665.00 FEET;

THENCE SOUTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 02°03'19", A DISTANCE OF 23.86 FEET TO THE POINT OF BEGINNING, TO WHICH RADIAL LINE OF SAID CURVE BEARS NORTH 62°01'14" WEST;

THENCE CONTINUING SOUTHWESTERLY ALONG SAID CURVE CONCAVE SOUTHEASTERLY THROUGH A CENTRAL ANGLE OF 23°15'31" A DISTANCE OF 269.95 FEET;

THENCE SOUTH 52°57'40" EAST, 743.98 FEET;

THENCE NORTH 37°02'20" EAST, 291.00 FEET;

THENCE NORTH 52°57'40" WEST, 122.00 FEET;

THENCE SOUTH 37°02'20" WEST, 34.20 FEET;

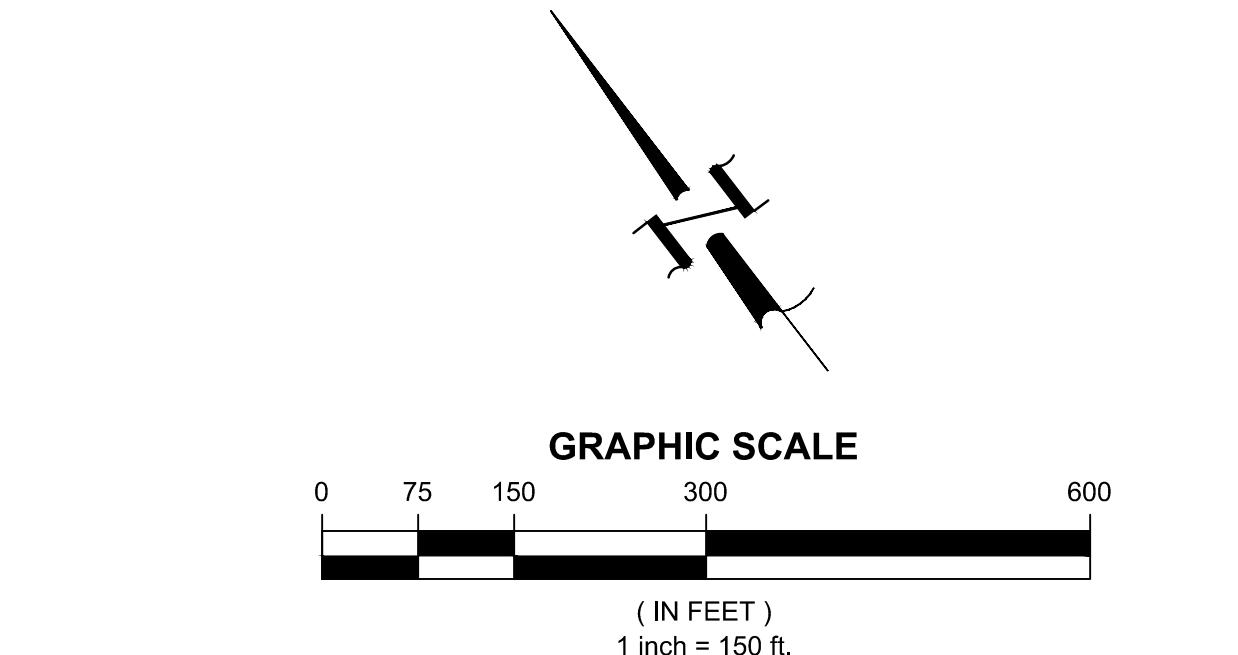
THENCE NORTH 53°26'24" WEST 716.72 FEET TO THE POINT OF BEGINNING.

PURSUANT TO LOT LINE ADJUSTMENT 89-13, RECORDED JANUARY 30, 1990 AS INSTRUMENT NO. 90-37878 OF OFFICIAL RECORDS.

## UTILITIES

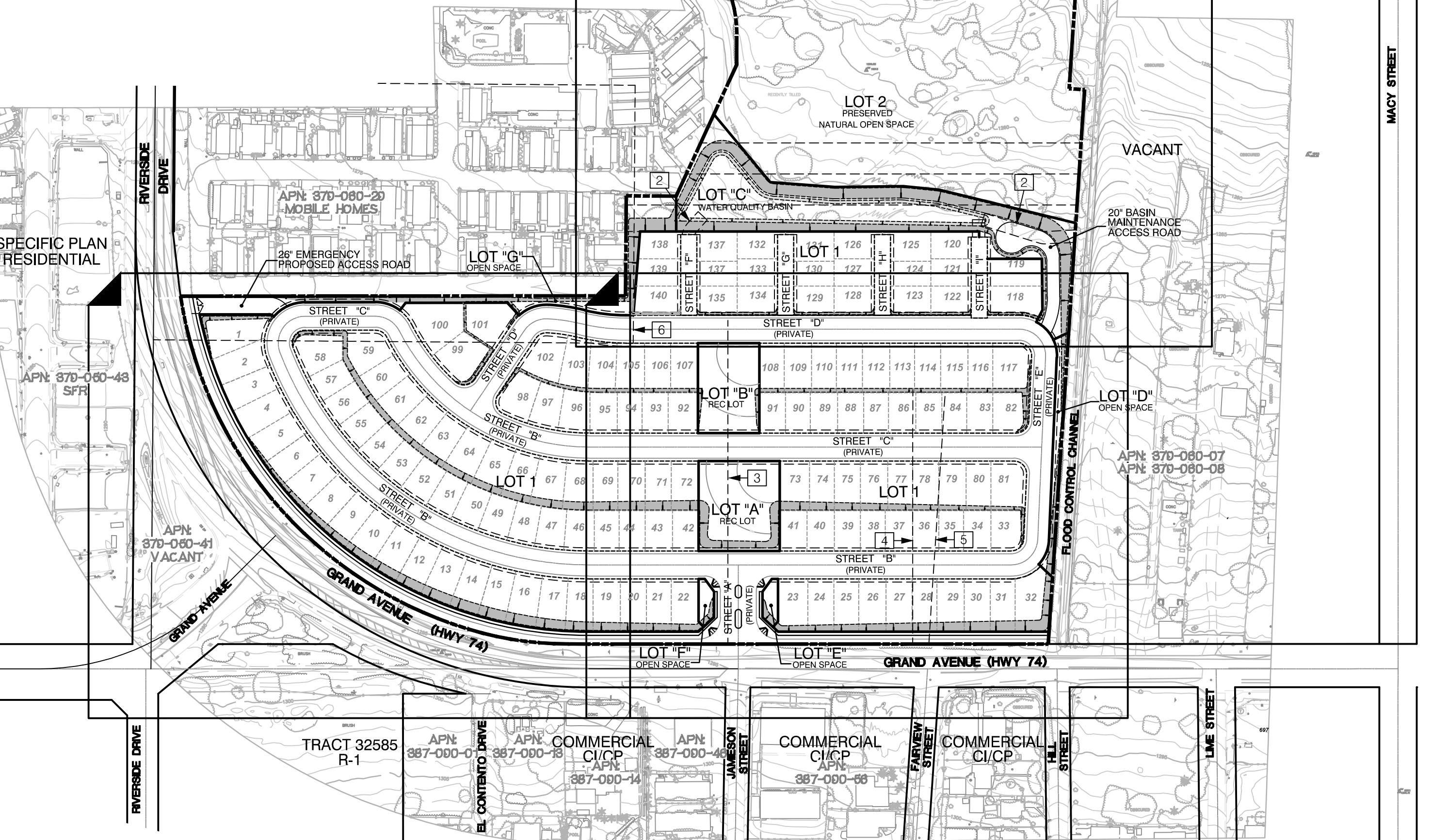
WATER ELMWID SOUTHERN CALIFORNIA EDISON  
31315 CHANEY ST. P.O. BOX 6400  
LAKE ELSINORE, CA 95530 (800) 655-4555

SEWER ELMWID SOUTHERN CALIFORNIA GAS COMPANY  
31315 CHANEY ST. 7000 INDIANA AVENUE, SUITE 105  
LAKE ELSINORE, CA 95530 (800) 427-2200



GRAPHIC SCALE

0 75 150 300 600  
(IN FEET)  
1 inch = 150 ft.



SHEET INDEX MAP

SCALE: 1"=150'

## SITE COVERAGE SUMMARY

LOT	LAND USE	AREA (AC)	PERCENT (%)
1	CONDOMINIUM UNITS	10.94	31.4%
2	PRESERVED OPEN SPACE	15.65	45.0%
"A" - "B"	RECREATION LOTS	0.77	2.2%
"C"	BIO-DETENTION BASIN	1.39	4.0%
"D" - "G"	OPEN SPACE	0.65	1.9%
PRIVATE STREET EAEMENTS:	4.60	13.2%	
GRAND AVENUE (RW TO TB)	0.81	2.3%	
TOTAL: (GROSS ACREAGE)	34.81	100%	

## TENTATIVE TRACT NO. 38116

NUMBER OF LOTS: TOTAL 9

DETACHED SINGLE FAMILY RESIDENTIAL 1

RESERVED OPEN SPACE LOT 1

BIO-DETENTION BASIN 1

RECREATION LOTS 2

LANDSCAPE OPEN SPACE 4

GROSS ACREAGE: 34.81 AC

CONTOUR INTERVAL: 1 FOOT

DATE : MATCH 25, 2021

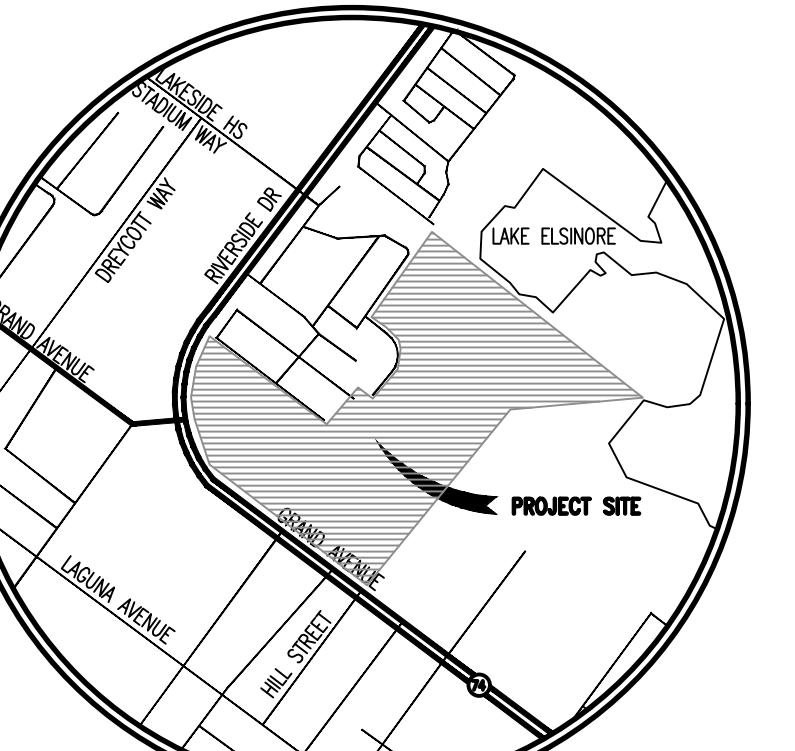
REVISED : AUGUST 6, 2021

## OPEN SPACE SUMMARY

LOTS	ACREAGE
D'	0.12 AC
E'	0.04 AC
F'	0.44 AC
G'	0.45 AC
TOTAL ACREAGE	0.65 AC

## LEGEND

5 1280.0	CONDOMINIUM UNIT NUMBER PAD ELEVATION	PROPOSED STREET GRADE TENTATIVE TRACT BOUNDARY PROPOSED RETAINING WALL (SEE PLAN FOR HEIGHT)
SD	CONDOMINIUM UNIT LINE	PROPOSED STREET LIGHT
SS	PROPOSED FIRE HYDRANT	PROPOSED STORM DRAIN
DW	PROPOSED SANITARY SEWER	PROPOSED NON-POTABLE WATER
RCW	PROPOSED POTABLE WATER	PROPOSED UTILITY EASEMENT
EX. SS	EXISTING STORM DRAIN	PROPOSED 2:1 SLOPE
EX. DW	EXISTING SANITARY SEWER	PROPOSED 4:1 SLOPE
EX. DW	EXISTING POTABLE WATER	PROPOSED CENTERLINE STREET GRADE
EX. G	EXISTING GAS LINE	



VICINITY MAP

N.T.S.  
2006 THOMAS BROTHERS  
MAP BOOK, PAGES 865, GRID H6

## SHEET INDEX

SHEET 1 TITLE SHEET  
SHEET 2 STREET SECTIONS  
SHEETS 3 & 6 TENTATIVE TRACT MAP

## EASEMENTS NOTES

- PROPOSED ESMIT FOR INGRESS/EGRESS AND PUBLIC UTILITY PURPOSES
- PROPOSED 2' SD ESMIT
- UTILITY ESMIT IN FAVOR OF SOUTHERN CALIFORNIA EDISON TO BE QUITCLAIMED
- UTILITY ESMIT IN FAVOR OF CALIFORNIA ELECTRIC POWER COMPANY & CALIFORNIA WATER AND TELEPHONE COMPANY TO BE QUITCLAIMED
- UTILITY ESMIT IN FAVOR OF SOUTHERN SIERRAS POWER COMPANY TO BE QUITCLAIMED
- UTILITY ESMIT IN FAVOR OF GENERAL TELEPHONE COMPANY OF CALIFORNIA TO BE QUITCLAIMED
- UTILITY ESMIT IN FAVOR OF GENERAL TELEPHONE COMPANY OF CALIFORNIA

## FLOOD ZONE NOTE

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD.

THE 1% ANNUAL FLOOD (100-YEAR FLOOD), ALSO KNOWN AS THE BASE FLOOD, IS THE FLOOD THAT HAS A 1% CHANCE OF BEING EQUALLED OR EXCEEDED IN ANY GIVEN YEAR.

THE SPECIAL FLOOD HAZARD AREA IS THE AREA SUBJECT TO FLOODING BY THE 1% ANNUAL CHANCE FLOOD. AREAS OF SPECIAL FLOOD HAZARD INCLUDE ZONES A, AE, AH, AO, AR, AR9, V AND VE. THE BASE FLOOD ELEVATION IS THE WATER-SURFACE ELEVATION OF THE 1% ANNUAL CHANCE FLOOD.

BEING A PORTION OF ZONE AE - BASE FLOOD ELEVATIONS DETERMINED = 1266.

BEING A PORTION OF ZONE X (OTHER FLOOD AREAS) - AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

BEING A PORTION OF ZONE X - AREAS DETERMINED TO BE OUTSIDE OF 0.2% ANNUAL CHANCE FLOODPLAIN. MAP NO. 06065C2017G DATED: AUGUST 28, 2008

## ASSESSORS PARCEL NUMBER

PARCEL 1 (APN 379-060-022)  
PARCEL 2 (A PORTION OF APN 379-060-005)  
PARCEL 3 (A PORTION OF APN 379-060-005)  
PARCEL 4 (APN 379-060-027)

## BENCHMARK:

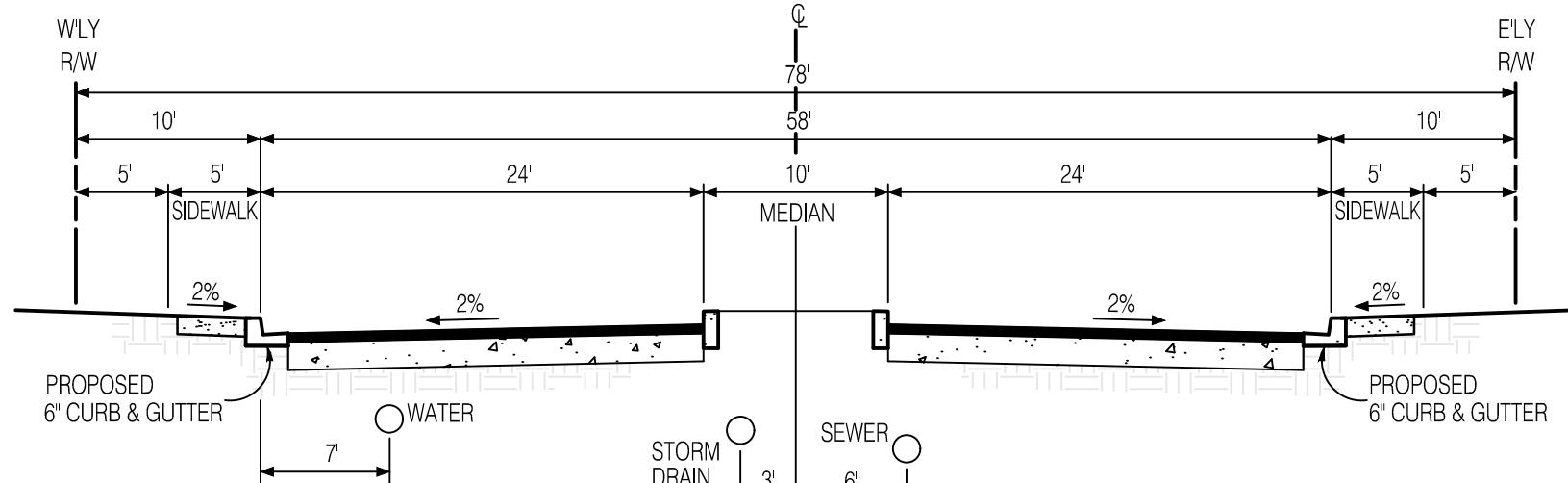
ELEVATION: 1281.62 (NGVD 29)  
DATE: DEC, 1994 LEVEL SUMMARY FILED MAP FILES 261838 TO REACH INFORMATION  
DESCRIPTION: BM-13-8-93 - SET CALDOTT BRASS DISK IN WLY CURB RIVERSIDE DR. (RTE 74) OPP FB 29' NYL OF A 40' DRIVEWAY (31461) RIVERSIDE DR. AND 365' NYL OF JOY ST. ±

## BASIS OF BEARINGS:

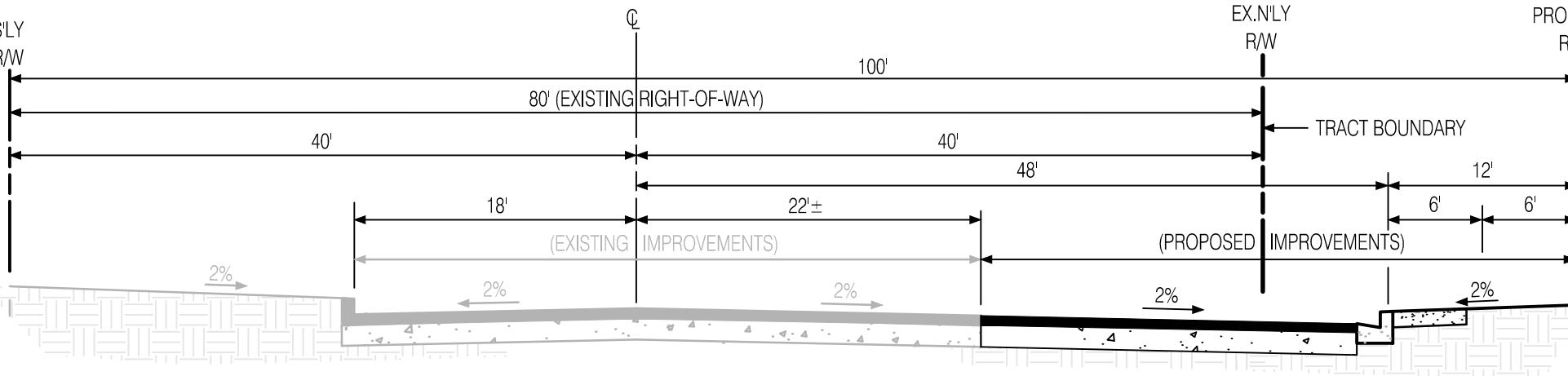
THE BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF GRAND AVENUE SHOWN AS N 52°52'57" W PER TRACT NO 33267 M.B. 471/11-13.

## APPLICANT/DEVELOPER

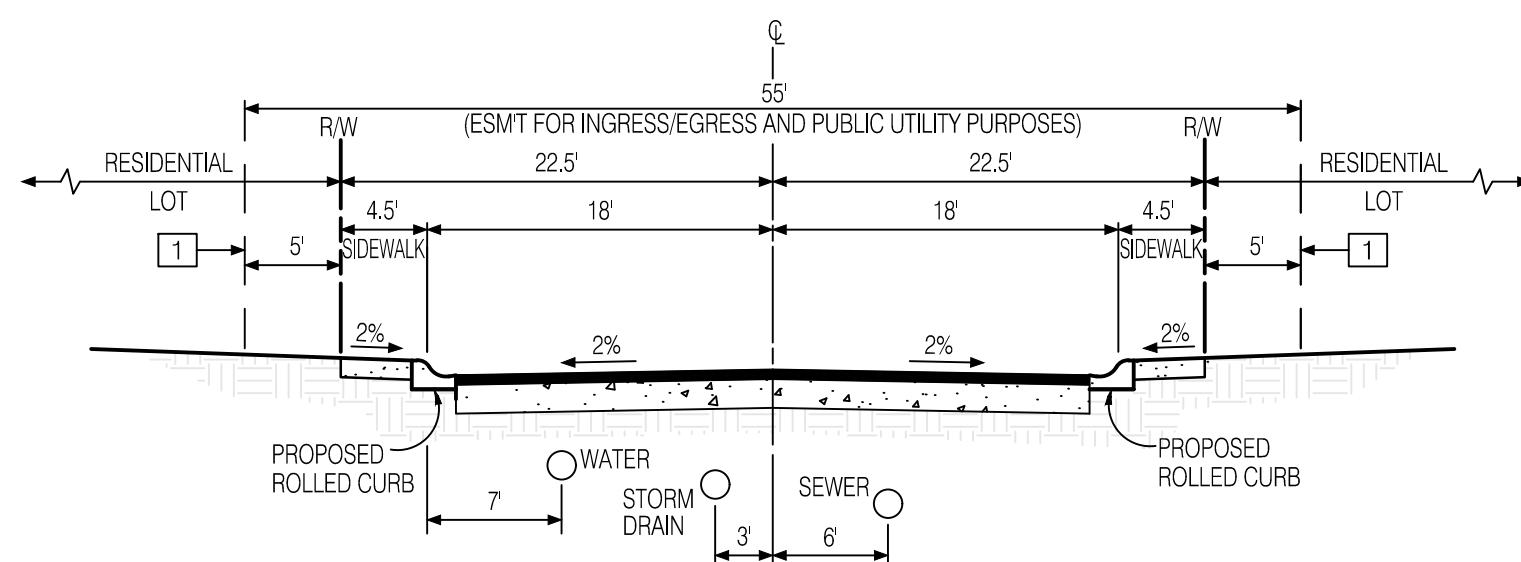
TRI POINTE HOMES  
1250 CORONA POINTE COURT, SU



**STREET "A" (PRIVATE)**  
(MODIFIED LOCAL RESIDENTIAL STREET)

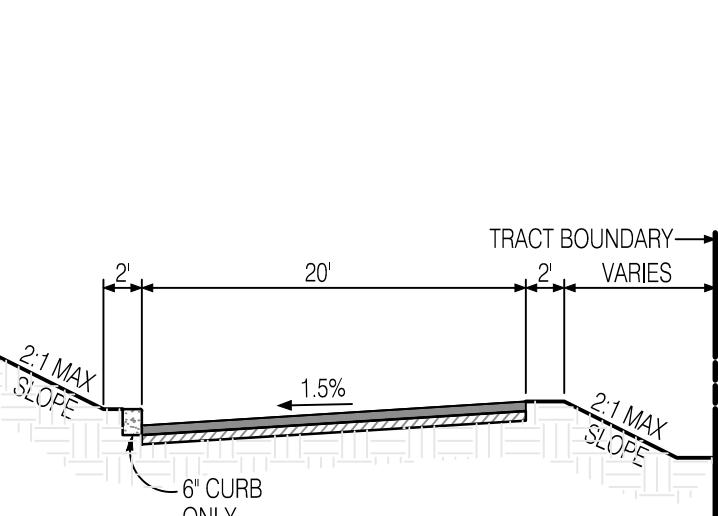


**PROPOSED GRAND AVENUE (PUBLIC)**

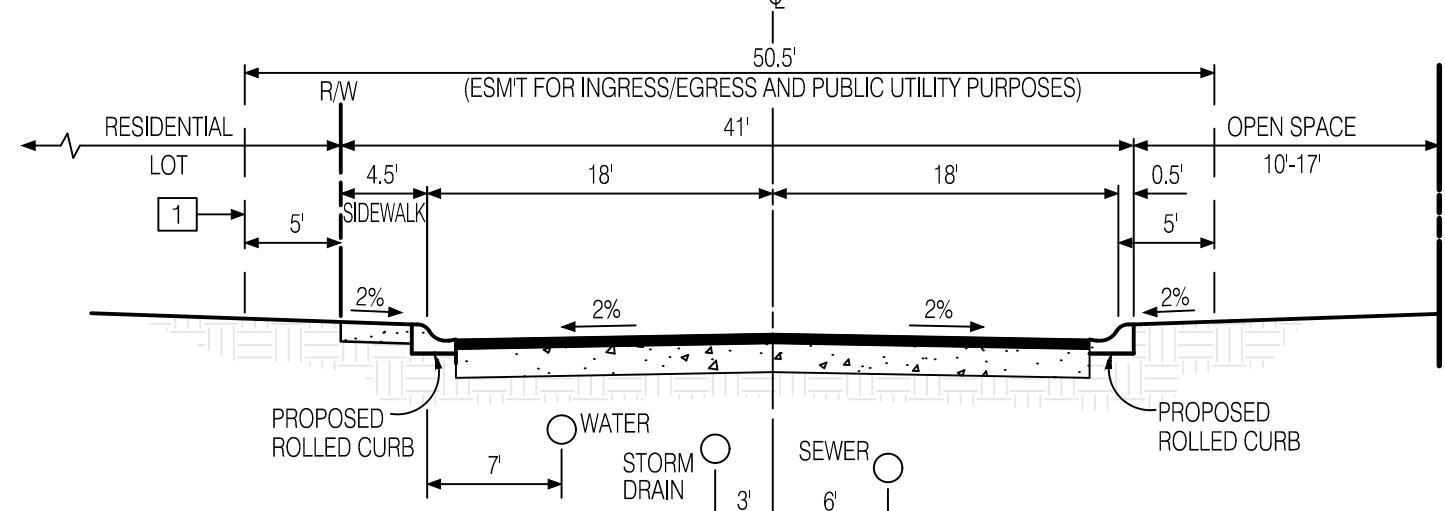


**STREETS "B" - "D" (PRIVATE)**  
(MODIFIED LOCAL RESIDENTIAL STREET)

[1] ESMT FOR INGRESS/EGRESS AND PUBLIC UTILITY PURPOSES

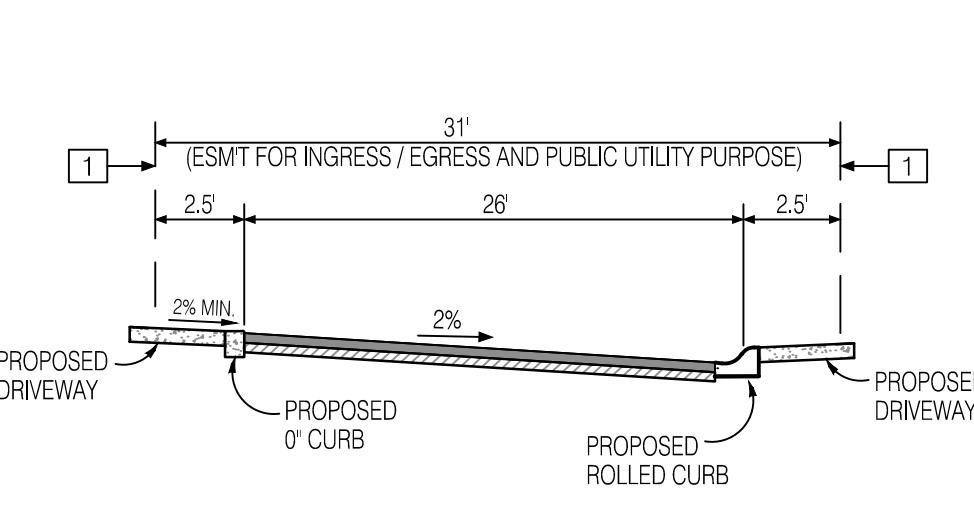


**ACCESS ROAD (PRIVATE)**  
FOR WATER QUALITY BASIN  
NTS



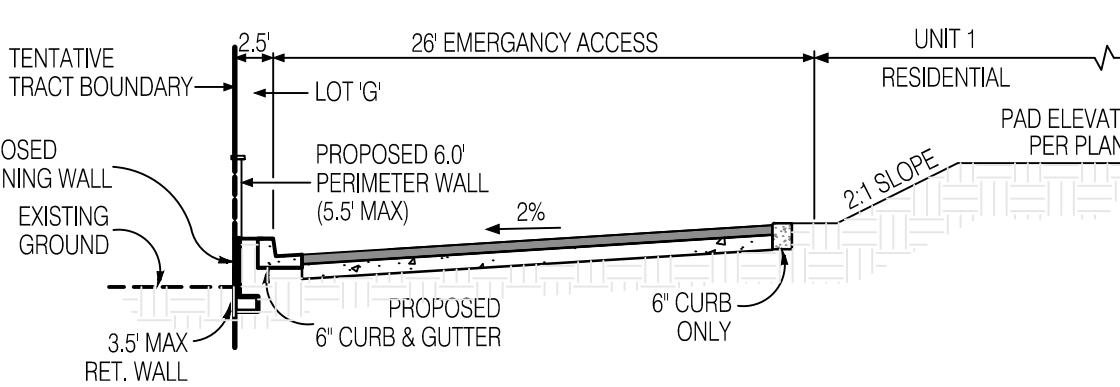
**STREET "E" (PRIVATE)**  
(MODIFIED LOCAL RESIDENTIAL STREET)

[1] ESMT FOR INGRESS/EGRESS AND PUBLIC UTILITY PURPOSES

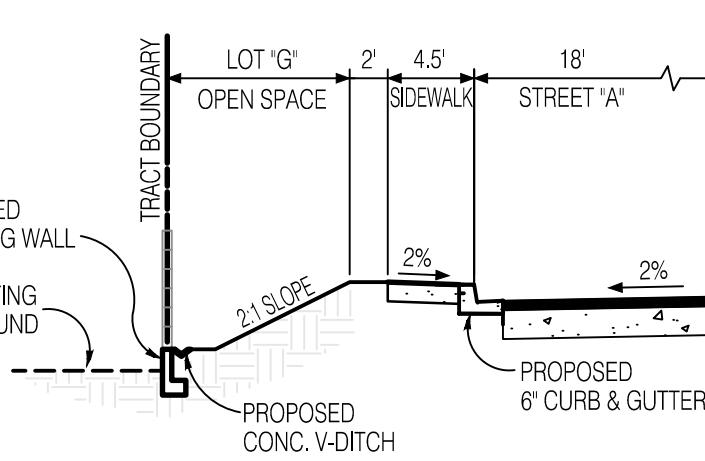


**STREETS "F", "G", "H" & "I" (PRIVATE)**  
FOR LOTS 120 AND 138  
NTS

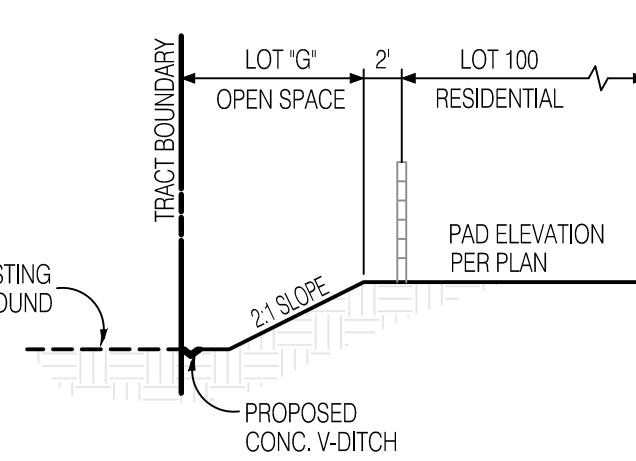
[1] ESMT FOR INGRESS/EGRESS AND PUBLIC UTILITY PURPOSES



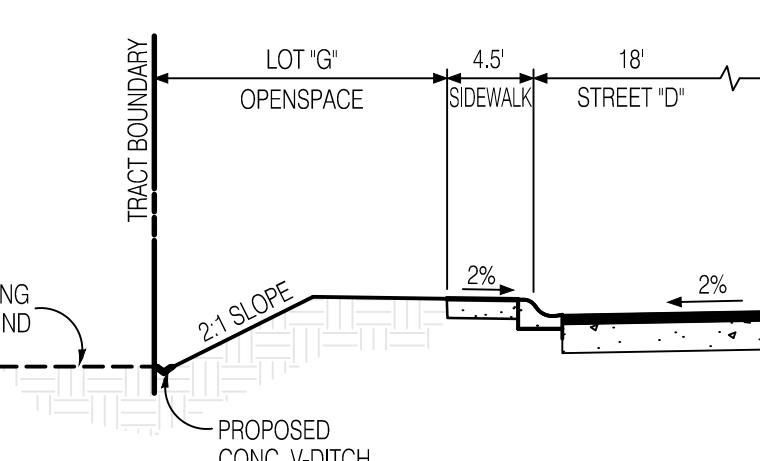
**PROPOSED 26' EMERGENCY ACCESS ROAD**  
(PRIVATE)  
NTS



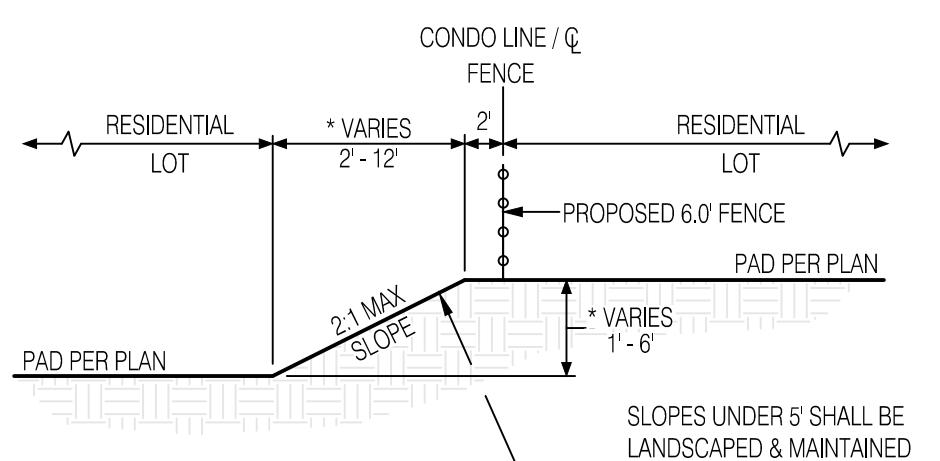
**SECTION A-A**  
NTS



**SECTION B-B**  
NTS

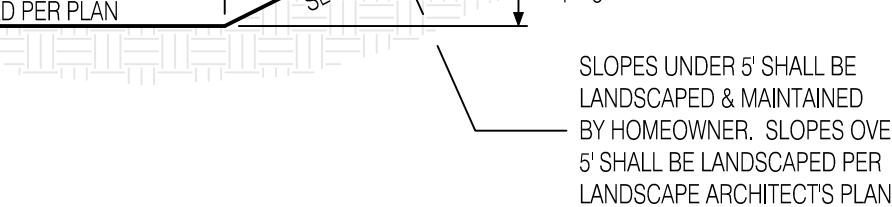


**SECTION C-C**  
NTS



**TYPICAL SIDE-YARD SLOPE SECTION**  
AT STREET CORNER LOT  
NTS

**TYPICAL REAR-YARD SLOPE SECTION**  
NTS



PREPARED FOR:

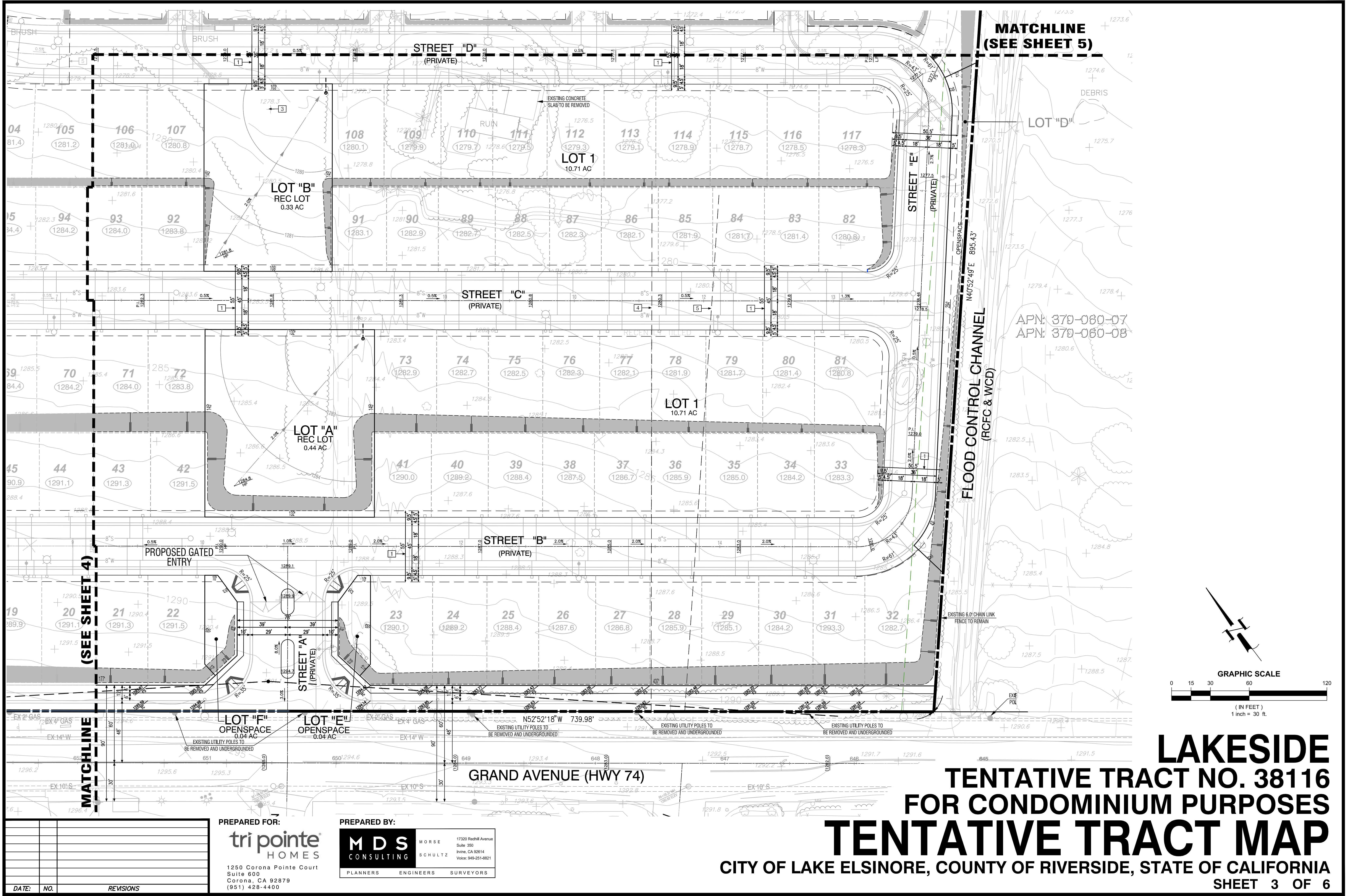
**tri pointe**  
HOMES  
1250 Corona Pointe Court  
Suite 600  
Corona, CA 92879  
(951) 428-4400

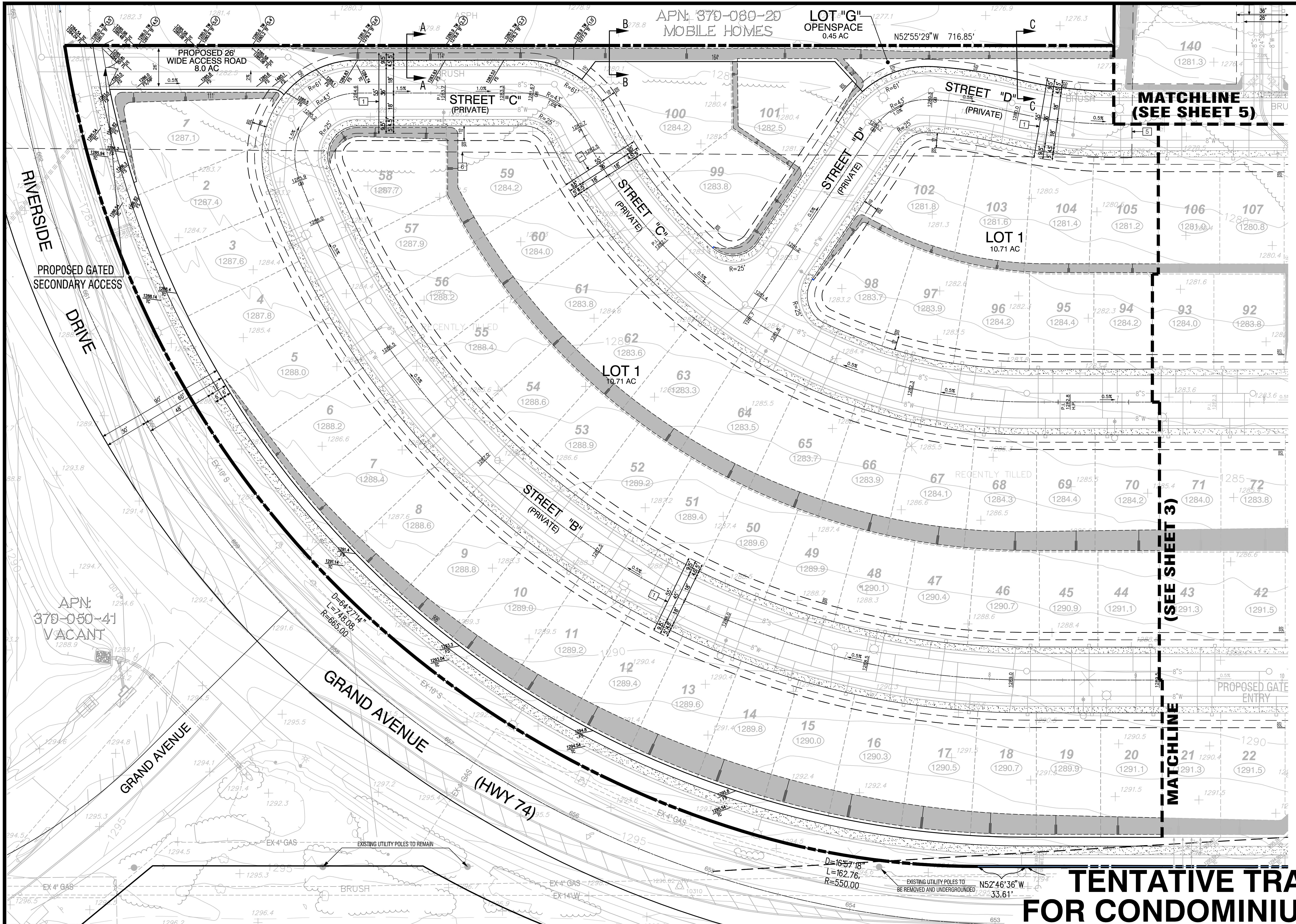
PREPARED BY:

**M D S**  
CONSULTING  
PLANNERS ENGINEERS SURVEYORS  
17320 Redhill Avenue  
Suite 350  
Irvine, CA 92614  
Voice: 949-251-8821

DATE:	NO.	REVISIONS

**LAKESIDE**  
**TENTATIVE TRACT NO. 38116**  
**FOR CONDOMINIUM PURPOSES**  
**TENTATIVE TRACT MAP**  
**CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**  
**SHEET 2 OF 6**

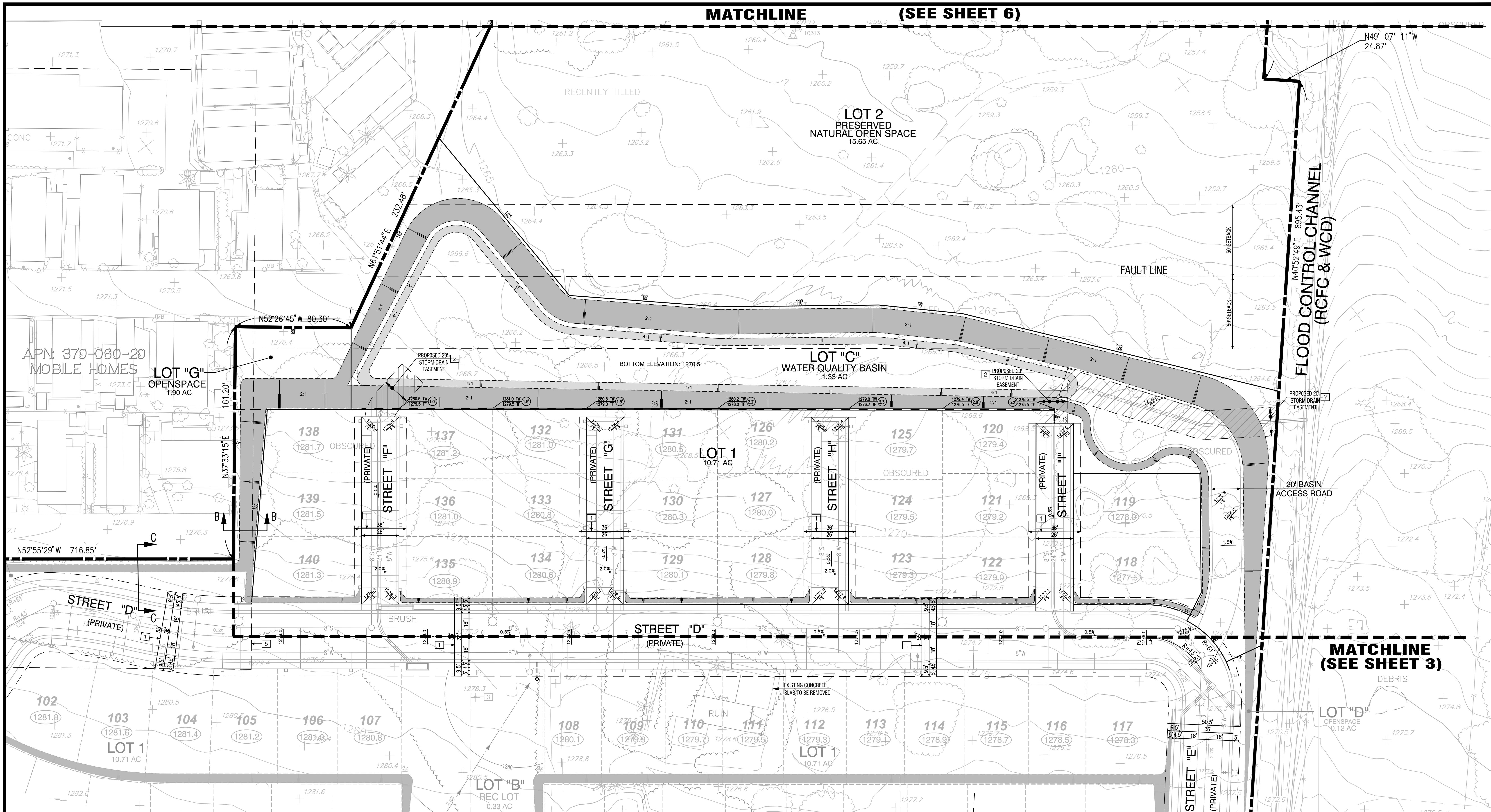




**LAKESIDE**  
**TENTATIVE TRACT NO. 38116**  
**FOR CONDOMINIUM PURPOSES**  
**TENTATIVE TRACT MAP**  
**CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**  
**SHEET 4 OF 6**

PREPARED FOR:	tri pointe <sup>®</sup> HOMES
PREPARED BY:	M D S CONSULTING
1250 Corona Pointe Court Suite 600 Corona, CA 92879 (951) 428-4400	MORSE SCHULTZ 17320 Redhill Avenue Suite 350 Irvine, CA 92614 Voice: 949-251-8821
DATE: NO.	REVISIONS

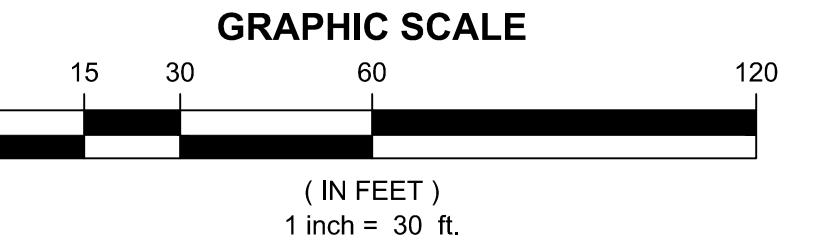
PREPARED BY:  
**M D S**  
**CONSULTING**  
 PLANNERS ENGINEERS SURVEYORS

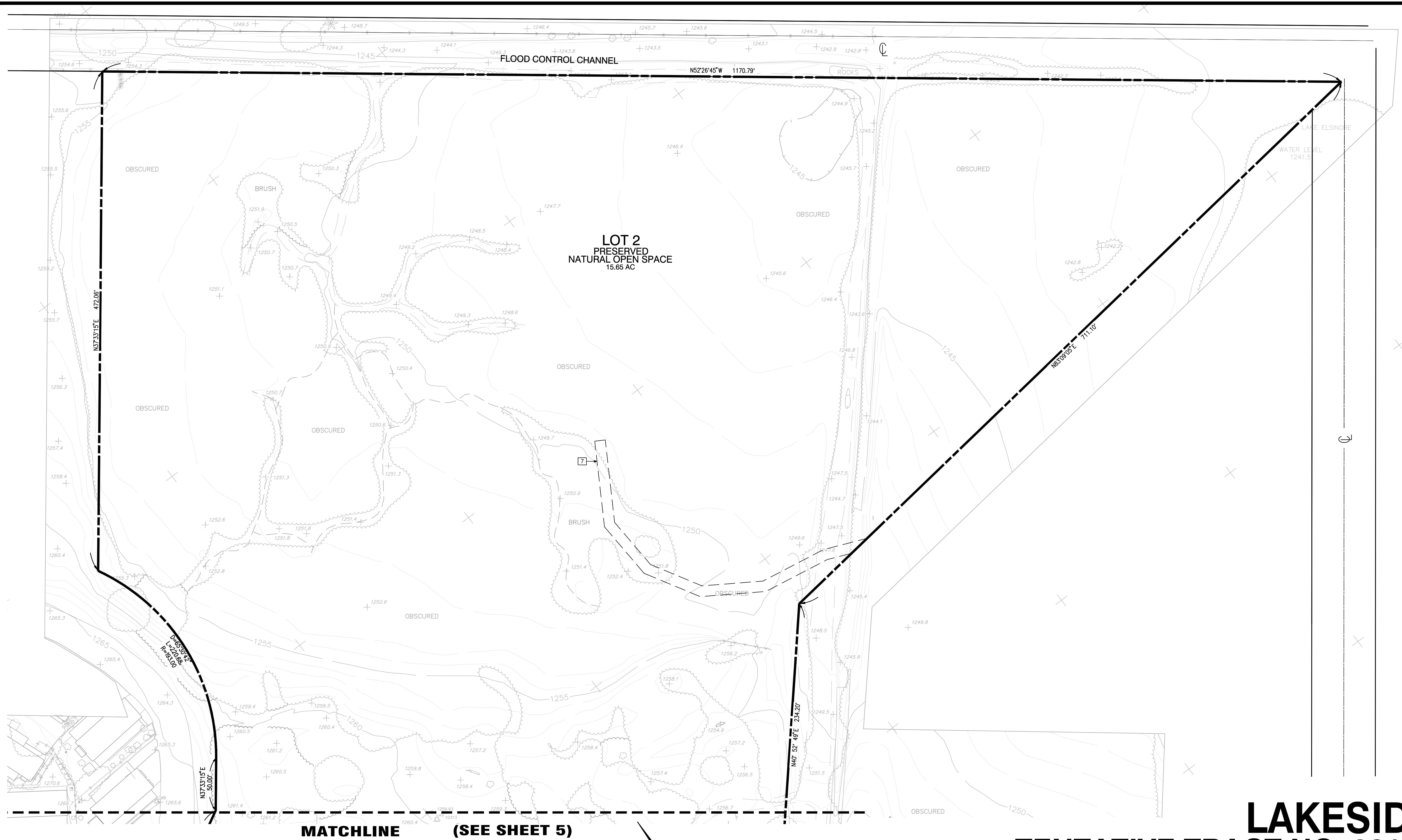


**LAKESIDE**  
**TENTATIVE TRACT NO. 38116**  
**FOR CONDOMINIUM PURPOSES**  
**TENTATIVE TRACT MAP**  
**CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**  
**SHEET 5 OF 6**

PREPARED FOR:	tri pointe <sup>®</sup> HOMES
1250 Corona Pointe Court Suite 600 Corona, CA 92879 (951) 428-4400	
DATE: NO. REVISIONS	

PREPARED BY:	M D S CONSULTING
MORSE SCHULTZ	17320 Redhill Avenue Suite 350 Irvine, CA 92614 Voice: 949-251-8821
PLANNERS	ENGINEERS
SURVEYORS	

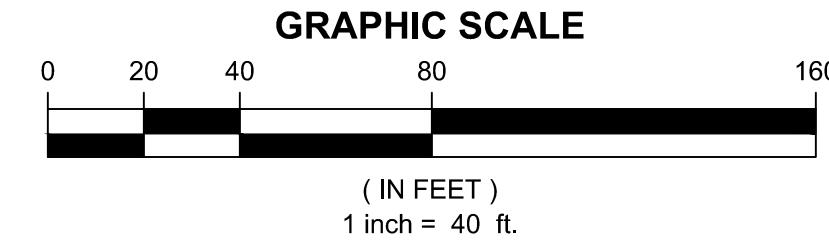




**LAKESIDE**  
**TENTATIVE TRACT NO. 38116**  
**FOR CONDOMINIUM PURPOSES**  
**TENTATIVE TRACT MAP**  
**CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**  
**SHEET 6 OF 6**

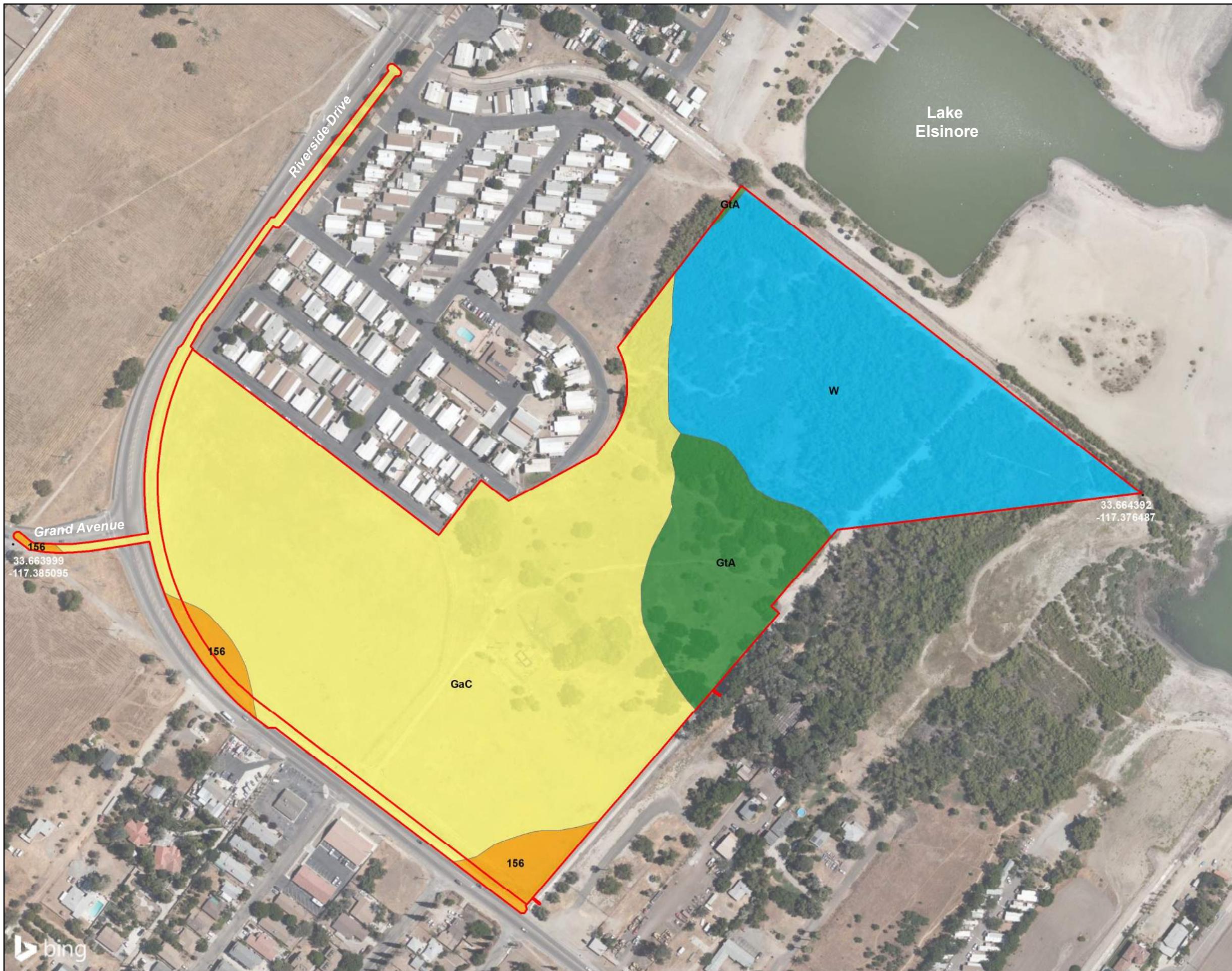
PREPARED FOR:		
<b>tri pointe<sup>®</sup></b> HOMES		
1250 Corona Pointe Court Suite 600 Corona, CA 92879 (951) 428-4400		
DATE:	NO.	REVISIONS

PREPARED BY:		
<b>M D S</b> CONSULTING		
MORSE	SCHULTZ	17320 Redhill Avenue Suite 350 Irvine, CA 92614 Voice: 949-251-8821
PLANNERS	ENGINEERS	SURVEYORS











Coordinate System: State Plane 6 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD 1983 2011  
Map Prepared by: K. Kartunen, GLA  
Date Prepared: October 26, 2021

ELSINORE 35 PROJECT

Corps Jurisdictional Delineation Map

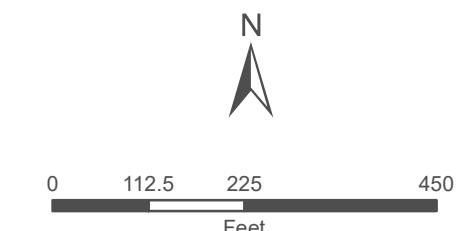
GLENN LUKOS ASSOCIATES

## Exhibit 7A





- Project Site
- Non-Wetland Waters of the U.S./Wetland Waters of the State
- Non-Wetland Waters of the State
- Wetland Waters of the U.S./State
- Width of Feature in Feet



Coordinate System: State Plane 6 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD 1983 2011  
Map Prepared by: K. Kartunen, GLA  
Date Prepared: July 19, 2021

## EL SINORE 35 PROJECT

RWQCB Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES



Exhibit 7B

X:\0363-THE REST\1011-09LAKE\1011-9GIS\DelinationGIS\1011-9\_RWQCB.mxd





Coordinate System: State Plane 6 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD 1983 2011  
Map Prepared by: K. Kartunen, GLA  
Date Prepared: July 20, 2021

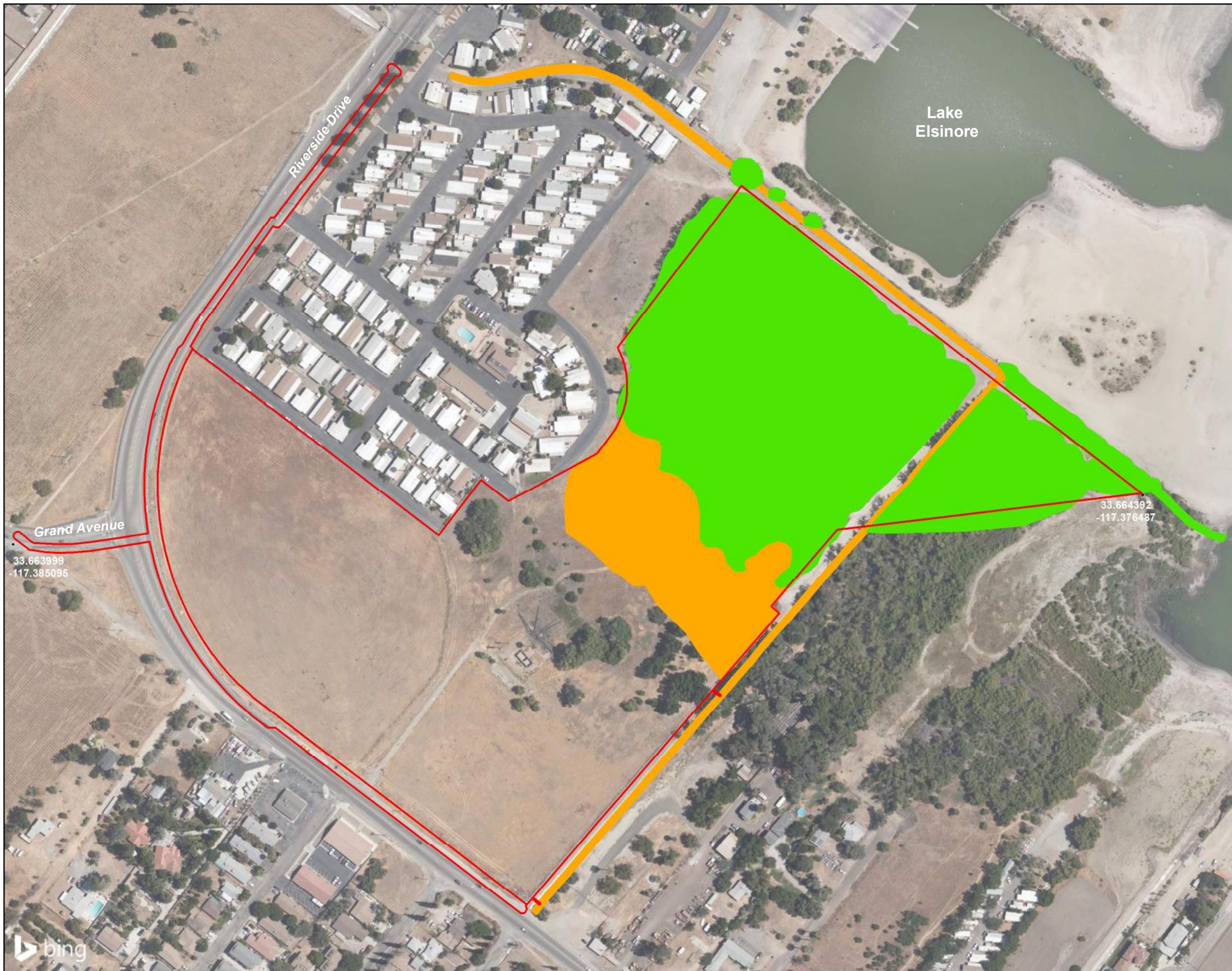
ELSINORE 35 PROJECT

CDFW Jurisdictional Delineation Map

GLENN LIUKOS ASSOCIATES

## Exhibit 7C







Photograph 1: June 2021. View of Riverside Avenue Channel Reach 2 (earthen) looking upstream towards Riverside Avenue Channel Reach 1 (concrete).



Photograph 2: June 2021. View of Riverside Avenue Channel Reach 2 looking downstream.



Photograph 3: June 2021. Sandy gleyed matrix starting within 6" of soil surface within downstream portion of Riverside Channel Reach 2.



Photograph 4: June 2021. View looking west/north west at Hill Street Ditch and Riverside Avenue Channel confluence. Riparian/wetland habitat associated with Lake Elsinore depicted in background.



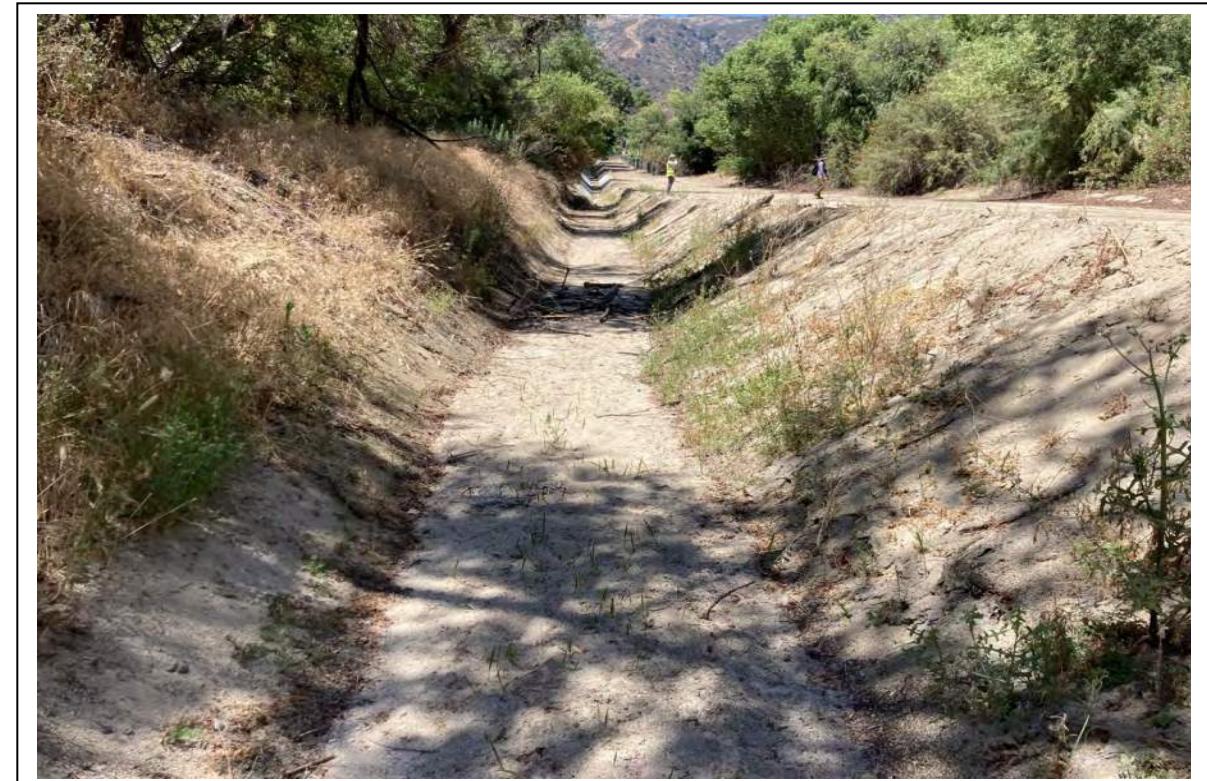
Photograph 5: June 2021. Representative view of concrete portion of Hill Street Channel looking upstream.



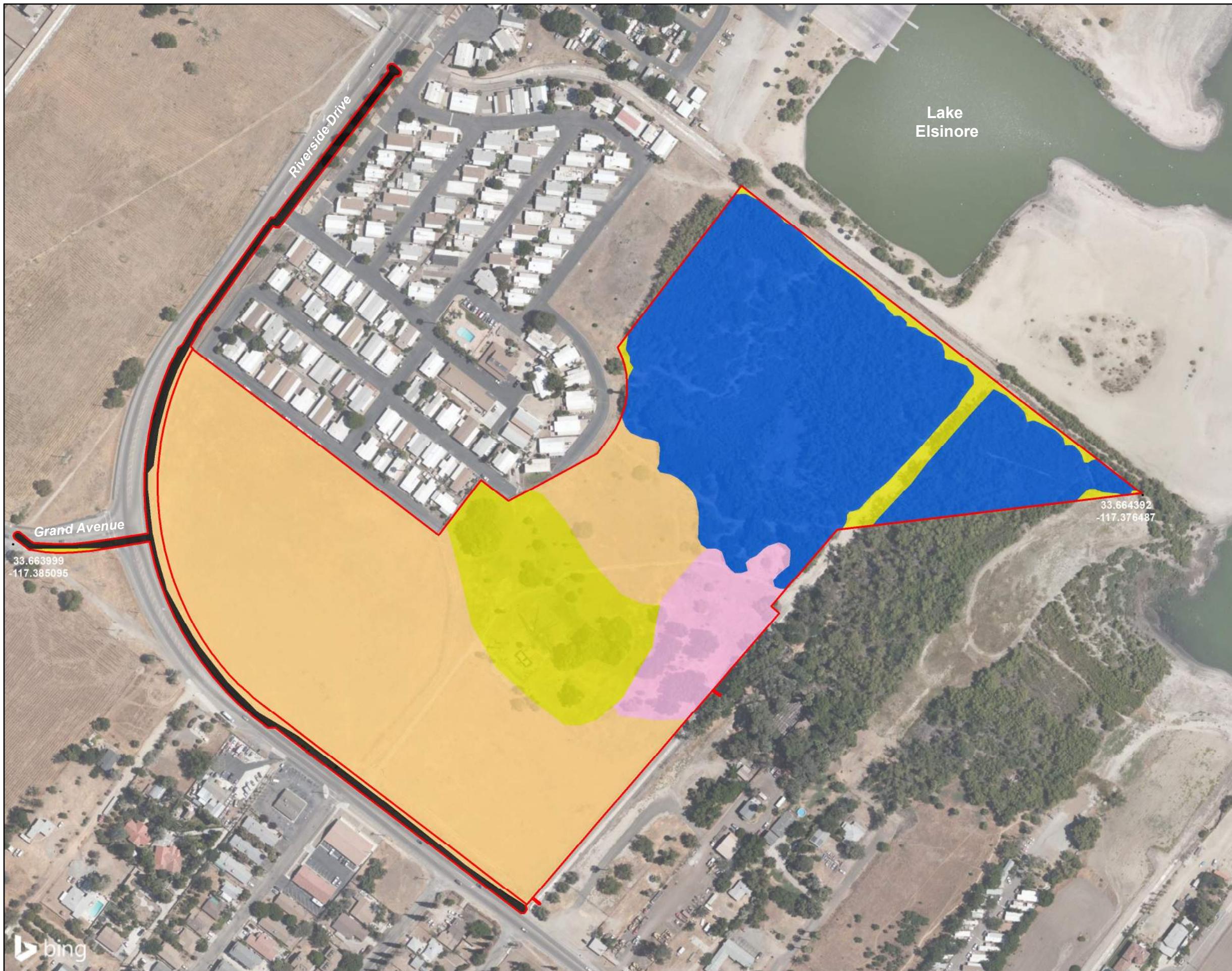
Photograph 6: June 2021. View depicting concrete portion of Hill Street Channel looking downstream towards Lake Elsinore. Note the transition to earthen channel in background.



Photograph 7: June 2021. View of eroded earthen portion of Hill Street Channel looking upstream at concrete transition.



Photograph 8: June 2021. Representative view of earthen portion of Hill Street Channel looking upstream.







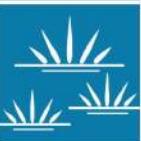


Coordinate System: State Plane 6 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD 1983 2011  
Map Prepared by: K. Kartunen, GLA  
Date Prepared: October 26, 2021

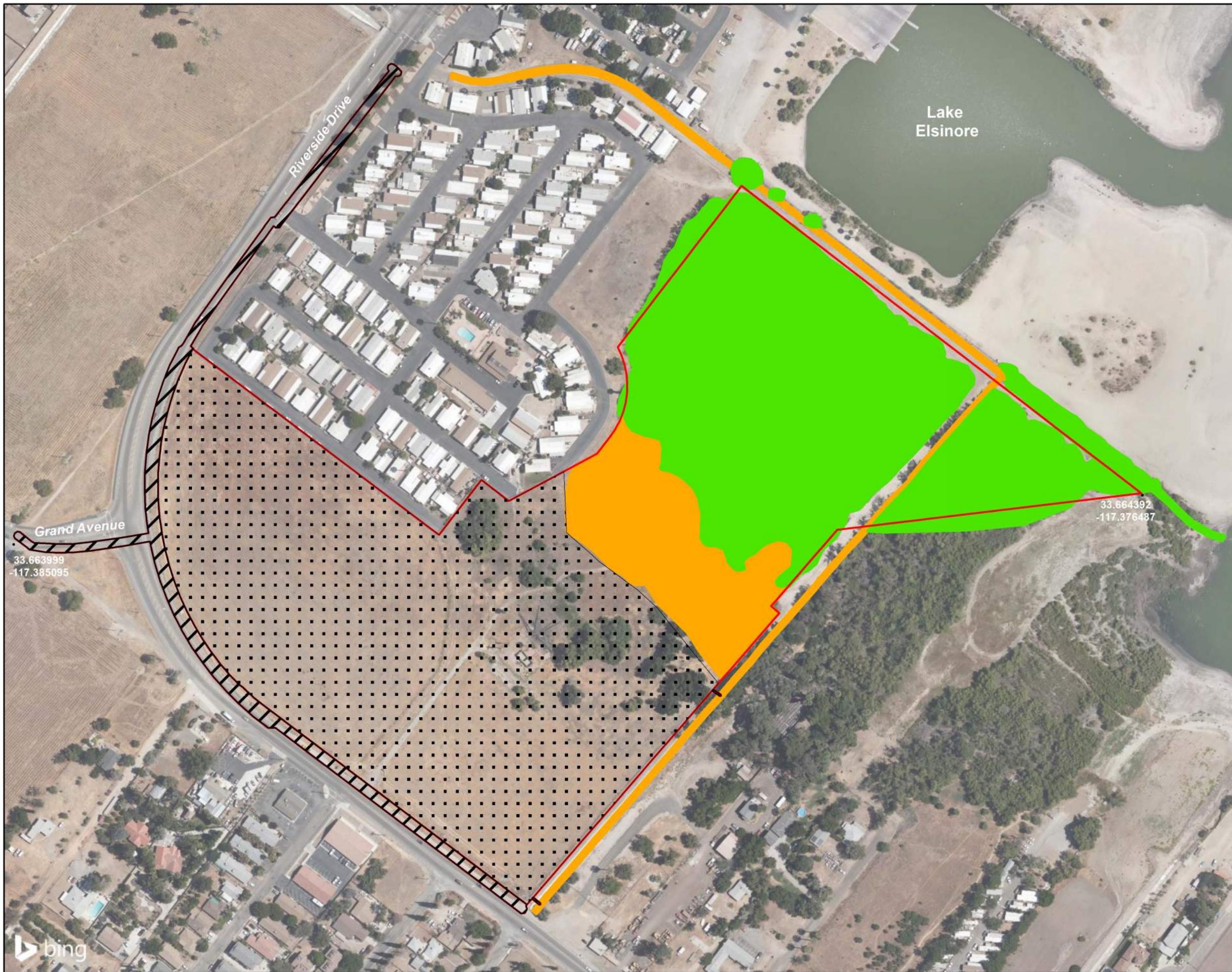
ELSINORE 35 PROJECT

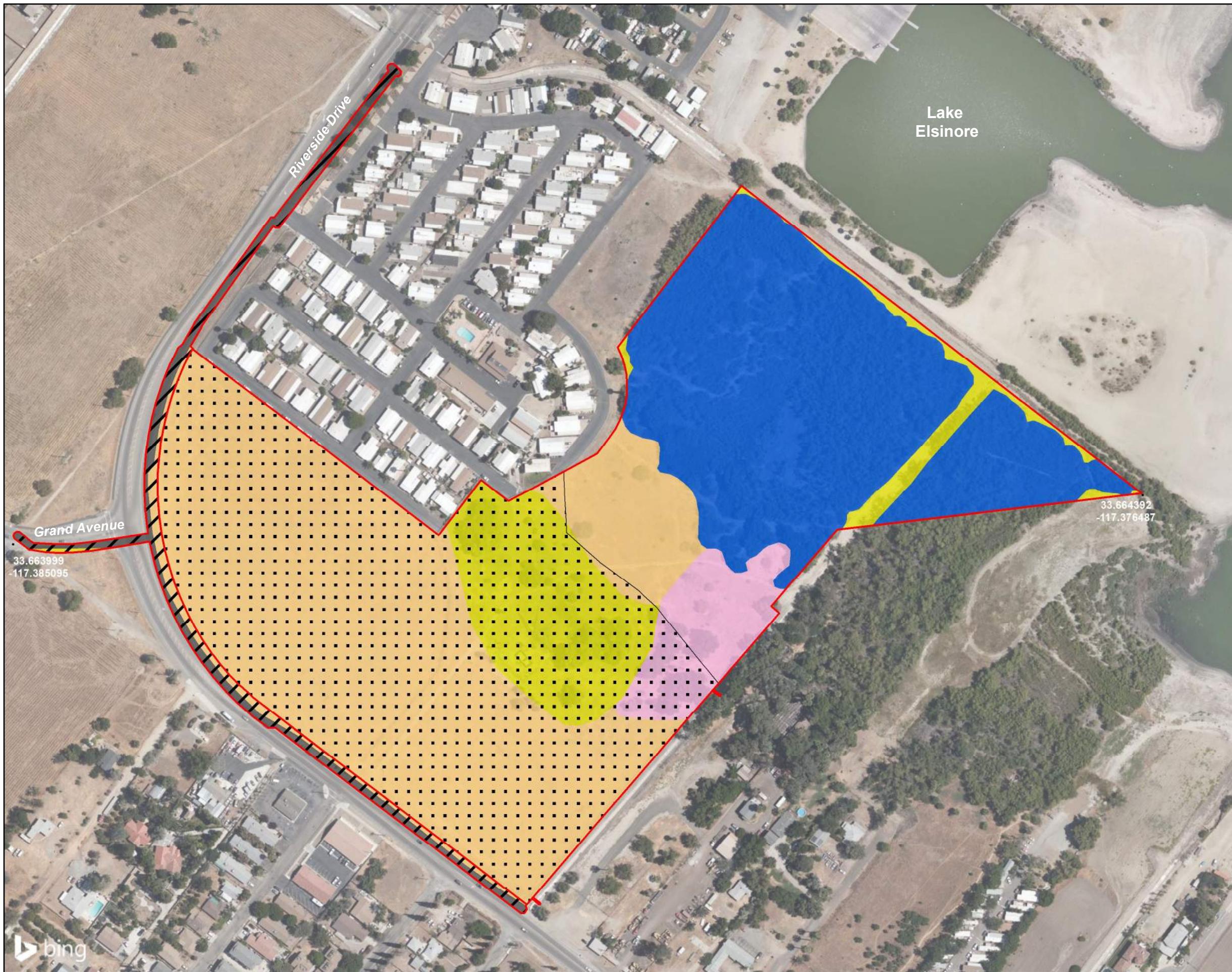
CDEW Jurisdictional Delineation Impact Map

GIFFEN LUKOS ASSOCIATES



## Exhibit 10C





- Project Site
- Onsite Project Footprint
- Offsite Project Footprint
- Developed
- Disturbed
- Disturbed Southern Willow Cottonwood
- Disturbed Southern Willow Cottonwood Riparian Forest
- Non-Native Grassland
- Southern Willow Cottonwood Riparian Forest



0 112.5 225 450  
Feet

1 inch = 225 feet

Coordinate System: State Plane 6 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD 1983 2011  
Map Prepared by: K. Kartunen, GLA  
Date Prepared: July 19, 2021

## EL SINORE 35 PROJECT

Vegetation Impact Map

GLENN LUKOS ASSOCIATES



Exhibit 11

# APPENDIX A

## FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows the Angiosperm Phylogeny Group (APG), which in some cases differs from The Jepson Manual (1993). Common plant names are taken from Hickman (1993), Munz (1974), and Roberts et al (2004) and Roberts (2008). An asterisk (\*) denotes a non-native species.

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<b>GYMNOSPERMS</b>	
<b>CONIFEROPHYTA</b>	<b>CONE-BEARING PLANTS</b>
<b>PINACEAE</b> <i>Psuedotsuga macrocarpa</i>	<b>Pine Family</b> bigcone spruce
<b>MAGNOLIOPHYTA</b>	<b>FLOWERING PLANTS</b>
<b>MAGNOLIIDS</b>	<b>MAGNOLIID CLADE</b>
<b>MONOCOTYLEDONS</b>	<b>MONOCOTS</b>
<b>ARECACEAE</b> * <i>Washingtonia robusta</i>	<b>Palm Family</b> Mexican fan palm
<b>CYPERACEAE</b> <i>Schoenoplectus americanus</i>	<b>Sedge Family</b> chairmaker's bulrush
<b>JUNCACEAE</b> <i>Juncus arcticus</i> var. <i>mexicanus</i>	<b>Rush Family</b> Mexican rush
<b>POACEAE</b> * <i>Avena fatua</i> * <i>Bromus diandrus</i> <i>Distichlis spicata</i> <i>Elymus condensatus</i> * <i>Hordeum vulgare</i> * <i>Schismus barbatus</i>	<b>Grass Family</b> common wild oat ripgut grass saltgrass giant wildrye cultivated barley Mediterranean grass

## EUDICOTLEDONS

### ADOXACEAE

*Sambucus nigra* subsp. *caerulea*

### AMARANTHACEAE

- \* *Amaranthus albus*
- \* *Salsola tragus*

### ANACARDIACEAE

*Malosma laurina*  
\* *Schinus terebinthifolius*

### ASTERACEAE

*Ambrosia acanthicarpa*  
*Ambrosia psilostachya*  
*Baccharis salicifolia*  
\* *Centaurea melitensis*  
*Centromadia pungens* subsp. *laevis*  
\* *Cynara cardunculus*  
*Heterotheca grandiflora*  
\* *Lactuca serriola*  
*Pluchea odorata*  
\* *Pluchea sericea*  
*Pseudognaphalium californicum*

### BORAGINACEAE

*Amsinckia menziesii* var. *intermedia*  
*Heliotropium curassavicum*

### BRASSICACEAE

- \* *Brassica nigra*
- Hirschfeldia incana*

### CONVOLVULACEAE

- \* *Convolvulus arvensis*

### CUCURBITACEAE

- \* *Cucurbita pepo*

### EUPHORBIACEAE

- \* *Ricinus communis*

### FABACEAE

- \* *Acacia* sp.

## EUDICOTS

### Elderberry Family

Blue elderberry

### Amaranth Family

tumbling pigweed  
Russian-thistle

### Sumac Family

laurel sumac  
Brazilian pepper tree

### Sunflower Family

annual bur-sage  
western ragweed  
mulefat  
tocalote  
smooth tarplant  
Artichoke thistle  
telegraph weed  
prickly lettuce  
marsh fleabane  
desert arrow weed  
California cudweed

### Borage Family

common fiddleneck  
salt heliotrope

### Mustard Family

black mustard  
field mustard

### Morning-Glory Family

field bindweed

### Gourd Family

field pumpkin

### Spurge Family

castor bean

### Legume Family

acacia

* <i>Melilotus alba</i>	white sweetclover
<b>GERANIACEAE</b>	<b>Geranium Family</b>
* <i>Erodium cicutarium</i>	red-stemmed filaree
<b>JUGLANDACEAE</b>	<b>Walnut Family</b>
* <i>Carya illinoiensis</i>	pecan
<b>LAMIACEAE</b>	<b>Mint Family</b>
* <i>Marrubium vulgare</i>	horehound
<b>MALVACEAE</b>	<b>Mallow Family</b>
<i>Malvella leprosa</i>	alkali-mallow
<b>MORACEAE</b>	<b>Mulberry Family</b>
* <i>Ficus carica</i>	common fig
<b>PHRYMACEAE</b>	<b>Monkeyflower Family</b>
<i>Mimulus guttatus</i>	seep monkey flower
<b>SALICACEAE</b>	<b>Willow Family</b>
<i>Populus fremontii</i> subsp. <i>fremontii</i>	western cottonwood
<i>Salix gooddingii</i>	Goodding's black willow
<i>Salix lasiolepis</i>	arroyo willow
<b>SIMAROUBACEAE</b>	<b>Simarouba Family</b>
* <i>Ailanthus altissima</i>	Tree of heaven
<b>SOLANACEAE</b>	<b>Nightshade Family</b>
<i>Datura wrightii</i>	jimsonweed
<i>Solanum americanum</i>	white nightshade
* <i>Solanum elaeagnifolium</i>	silver-leaved horse-nettle
<i>Solanum douglasii</i>	Douglas' nightshade
<b>TAMARICACEAE</b>	<b>Tamarisk Family</b>
* <i>Tamarix</i> sp.	tamarisk
<b>URTICACEAE</b>	<b>Nettle Family</b>
<i>Urtica dioica</i>	stinging nettle
<b>VITACEAE</b>	<b>Grape Family</b>
<i>Vitis girdiana</i>	desert wild grape

## APPENDIX B

### FAUNAL COMPENDIUM

The faunal compendium lists species that were either observed within or adjacent to the Study Area (denoted by a ‘\*’), or that have some potential to occur within or adjacent to the Study Area (denoted by a ‘+’). Taxonomy and common names are taken from the California Wildlife Habitat Relationships System (CDFW 2016); AOU (2009) and CDFW (2016) for birds; Stebbins (1985), Collins (1990), Jones et al. (1992), and CDFW (2016) for reptiles and amphibians; and CDFW (2016) for mammals.

### REPTILIA

#### PHRYNOSOMATIDAE

*Uta stansburiana*

### AVES

#### ARDEIDAE

*Ardea alba*

*Ardea herodias*

*Nycticorax nycticorax*

#### CATHARTIDAE

*Cathartes aura*

#### ACCIPITRIDAE

*Accipiter cooperii*

*Buteo jamaicensis*

#### CHARADRIIDAE

*Charadrius vociferus*

#### RECURVIROSTRIDAE

*Himantopus mexicanus*

#### LARIDAE

*Hydroprogne caspia*

#### COLUMBIDAE

\* *Columba livia*

### REPTILES

#### Phrynosomatid Lizards

common side-blotched lizard

### BIRDS

#### Herons And Bitterns

great egret

great blue heron

black-crowned night heron

#### New World Vultures

turkey vulture

#### Hawks And Old World Vultures

Cooper’s hawk

red-tailed hawk

#### Plovers And Relatives

killdeer

#### Avocets And Stilts

black-necked stilt

#### Skuas, Gulls, Terns And Skimmers

Caspian tern

#### Pigeons And doves

rock pigeon

*Zenaida macroura*

mourning dove

**TROCHILIDAE**

*Calypte anna*  
*Calypte costae*

**Hummingbirds**

Anna's hummingbird  
Costa's hummingbird

**PICIDAE**

*Melanerpes formicivorus*

**Woodpeckers And Allies**

acorn woodpecker

**TYRANNIDAE**

*Sayornis nigricans*  
*Tyrannus verticalis*

**Tyrant Flycatchers**

black phoebe  
western kingbird

**VIREONIDAE**

*Vireo bellii pusillus*

**Vireos**

least Bell's vireo

**CORVIDAE**

*Corvus brachyrhynchos*

**Crows And Jays**

American crow

**HIRUNDINIDAE**

*Hirundo rustica*  
*Petrochelidon pyrrhonota*

**Swallows**

barn swallow  
cliff swallow

**AEGITHALIDAE**

*Psaltriparus minimus*

**Long-Tailed Tits And Bushtits**

bushtit

**TROGLODYTIDAE**

*Thryomanes bewickii*

**Wrens**

Bewick's wren

**TURDIDAE**

*Sialia mexicana*

**Thrushes**

western bluebird

**MIMIDAE**

*Mimus polyglottos*

**Mockingbirds And Thrashers**

northern mockingbird

**PARULIDAE**

*Dendroica petechia*  
*Geothlypis trichas*

**Wood Warblers And Relatives**

yellow warbler  
common yellowthroat

**EMBERIZIDAE**

*Pipilo crissalis*  
*Pipilo maculatus*

**Emberizids**

California towhee  
spotted towhee

**CARDINALIDAE**

*Pheucticus melanocephalus*

**Cardinals, Grosbeaks And Allies**

black-headed grosbeak

**ICTERIDAE**

*Icterus cucullatus*  
*Quiscalus mexicanus*

**FRINGILLIDAE**

*Carpodacus mexicanus*  
*Spinus psaltria*

**MAMMALIA****LEPORIDAE**

*Sylvilagus audubonii*

**SCIURIDAE**

*Spermophilus beecheyi*

**Blackbirds**

hooded oriole  
great-tailed grackle

**Fringilline And Cardueline Finches and Allies**

house finch  
lesser goldfinch

**MAMMALS****Rabbits And Hares**

desert (Audubon's) cottontail

**Squirrels, Chipmunks, And Marmots**

California ground squirrel