BIOLOGICAL TECHNICAL REPORT

FOR THE

SAN JACINTO MDP LINE C STAGE 2, B AND C-5 PROJECT

Prepared For:

Albert A. Webb Associates
3788 McCray Street
Riverside, California 92506
Contact: Cheryl DeGano
Phone: (951) 320-6052
Fax: (951) 788-1256

Prepared By:

Glenn Lukos Associates, Inc.
29 Orchard
Lake Forest, California 92630
Report Preparer: David F. Moskovitz
Phone: (949) 837-0404, ext. 42
Fax: (949) 837-5834

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1.0 INTRODUCTION

1.1 Report Purpose

This report provides the results of general biological surveys, habitat assessments, and focused surveys conducted by Glenn Lukos Associates, Inc. (GLA) for the San Jacinto Master Drainage Plan (MDP) Line C Stage 2, B and C-5 Project (the "Project"), located in San Jacinto, Riverside County, California. This report identifies and evaluates impacts to biological resources associated with the proposed Project, and the relationship of the Project to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the California Environmental Quality Act (CEQA), and State and Federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), and the California Fish and Game Code.

1.2 Project Location

The Project occurs in the Cities of San Jacinto and Hemet within Western Riverside County, California [Exhibit 1 – Regional Map]. The Project is located south of Esplanade Avenue, east of State Street, north of Menlo Avenue, and west of San Jacinto Avenue. The Project site is depicted on the U.S. Geological Survey 7.5' (USGS) topographic map San Jacinto (dated 1953, photorevised 1979), at Township 5 South, Range 1 West [Exhibit 2 – Vicinity Map].

1.3 Project Description

The proposed Project involves the construction of four storm drain lines identified in the San Jacinto Master Drainage Plan as: Line C, Line C-5, Line C-4, and Line B [Exhibit 3 – Proposed Project]. The Line C alignment will connect to an existing Riverside County Flood Control and Water Conservation District (District)-maintained, double reinforced concrete box (RCB) on Esplanade Avenue (existing Line C) and continue south and south easterly through undeveloped parcels to the intersection of Santa Fe Street and Midway Street, and then east along Midway Street to the intersection of San Jacinto Street and Midway Street. Line B will continue south along San Jacinto Street from Line C at the intersection of San Jacinto Street and Midway Street and end just east of the intersection of Menlo Avenue and San Jacinto Street. Line C-5 will connect to Line C at approximately 1,700 feet south of Esplanade Avenue, continue east and terminate at Santa Fe Street. Line C-4 will connect to Line C at the intersection of Santa Fe Street and Midway Street and continue south for 260 feet along Santa Fe Street before termination. The proposed facilities will alleviate the flooding issues experienced by the residents and community within the area generally bounded by Esplanade Avenue to the north, San Jacinto Avenue to the east, Menlo Avenue to the south, and Buena Vista Avenue to the west by collecting sheet flows in an underground reinforced concrete box (RCB) system that will ultimately discharge into the San Jacinto River.

Proposed Line C will collect flows from an existing watershed area that currently drains to the intersection of Midway Street and San Jacinto Avenue. In the existing condition, an artificially-created roadside ditch extends east-west for approximately 1,250 linear feet along the south side of Midway Street between San Jacinto Avenue and Santa Fe Street. The ditch collects flows from an approximately 500-acre watershed to the southeast, and conveys those flows west to the

southeast corner of the intersection of Midway Street and Santa Fe Street [Exhibit 4 - Existing Hydrologic Conditions]. At the intersection, flows currently exit the ditch, crossing Santa Fe Street to a large vacant lot located on the west side of the street. Flows continue for approximately 3,500 feet in a northerly direction in a broad swale across undeveloped parcels west of Santa Fe Street to the District's existing Line C at Esplanade Avenue. Line C, a double reinforced concrete box, conveys flows northerly for approximately 1,050 feet to the District's Buena Vista Retention Basin. Buena Vista Retention Basin is an earthen basin that covers about 18 acres. Storms flows exit the basin westerly in the District's San Jacinto Line E Channel. Line E is a rectangular concrete channel from the basin to the west side of State Street (700 feet) and continues as an earthen trapezoidal channel for approximately 2 miles in a northwesterly direction to the San Jacinto Reservoir. The approximately 150-acre San Jacinto Reservoir is owned and operated by Eastern Municipal Water District (EMWD) for groundwater recharge. The Reservoir retains flows prior to discharging over a spillway to the west. Flows that manage to release from the Reservoir flow in a northwesterly direction over large undeveloped parcels and farmland for about 3 miles before reaching the San Jacinto River.

As described above, the proposed Line C will start at the intersection of San Jacinto Street and Midway Street, and extend west along Midway Street to the intersection of Santa Fe Street and Midway Street. From the intersection, proposed Line C will extend northwest and then north through undeveloped parcels, and then connect with existing Line C at Esplanade Avenue. The proposed Project will replace the Midway Street ditch with an underground concrete storm drain that will connect to the existing Line C.

1.4 Scope and Methodology

Biologists/Regulatory Specialists from Glenn Lukos Associates, Inc. (GLA) conducted site-specific surveys at the Project site in 2011 (February 15 and 22, April 6, June 24, July 15, and August 10 and 16), and 2012 (July 27, 28, 30, and 31). This report provides a discussion of existing conditions for the Project Site, all methods employed regarding general and focused surveys, the documentation of botanical and wildlife resources identified (including any special-status species), an analysis of impacts to biological resources, and proposed mitigation measures to offset resource impacts pursuant to the MSHCP and CEQA. Methods of study included a review of relevant literature, general and focused field surveys, and a Geographical Information System (GIS)-based impact analysis. Where applicable, this report is consistent with accepted scientific and technical standards and survey guidelines per the MSHCP, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and the California Native Plant Society (CNPS). This report also discusses the relationship of the Project to the MSHCP, including the presence/absence of Covered Species, and compliance with provisions of the MSHCP, including requirements as outlined in *Volume I, Sections 6.1.2, 6.1.3, 6.1.4,* and *6.3.2* of the MSHCP document.

The field studies focused on a number of primary objectives that would satisfy the applicable biological requirements of the MSHCP and also comply with CEQA requirements, including: (1) general biological surveys and vegetation mapping; (2) habitat assessments for special-status plants (including species with applicable MSHCP survey requirements; (3) habitat assessments and focused surveys for special-status animals (including species with applicable MSHCP survey

requirements); (4) assessments for riparian/riverine areas and vernal pools; and (5) 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, and CDFG jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the California Fish and Game Code. Observations of plant and wildlife species were recorded during each of the above mentioned survey efforts.

1.5 Relationship of the Project to the MSHCP

1.5.1 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 CDFG, 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 meeting the definition of a "Covered Activity" are not required to set aside land pursuant to the Cell Criteria. However, all Projects within the Criteria Area must go through the Joint Project Review (JPR) process, where the Project is reviewed to ensure overall compliance/consistency with the biological requirements of the MSHCP.

1.5.2 Relationship of the Project Site to the MSHCP

The Project site does not occur within a MSHCP Criteria Area, and therefore, the Project is not subject to the Joint Project Review (JPR) process. However, the Project site does occur within the MSHCP survey area for the burrowing owl (*Athene cunicularia*). As such, focused burrowing owl surveys are required within areas of suitable habitat. The Project site does not occur within other MSHCP survey areas, including the Narrow Endemic Plant Species Survey Area (NEPSSA), Criteria Area Plant Species Survey Area (CAPSSA), or any of the MSHCP Mammal or Amphibian survey areas. Therefore, the Project is not required per the MSHCP to survey for any of the NEPPSA, CAPSSA, Mammal, or Amphibian target species. Exhibit 5 [MSHCP Overlay Map] provides an overlay of the burrowing owl survey area in relationship to the Project site.

Within the 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.

2.0 METHODOLOGY

Glenn Lukos Associates, Inc. (GLA) conducted biological surveys in order to identify and evaluate impacts to biological resources associated with the Project. The scope of the biological surveys was determined through initial site reconnaissance, a review of the California Natural Diversity Database (CNDDB) [CDFG 2012], the California Native Plant Society (CNPS) On-Line Inventory of Rare and Endangered Plants of California (2012), MSHCP species and habitat maps, MSHCP sensitive soil maps, Natural Resource Conservation Service's (NRCS) soil data, other pertinent literature, and knowledge of the region. Site-specific focused surveys were conducted for all areas of suitable habitat for the western burrowing owl, however no other focused surveys were required. In addition, the site was evaluated to determine the presence/absence of waters of the United States, including wetlands (Corps jurisdiction); stream/lakes, including riparian vegetation (CDFG jurisdiction); and MSHCP riparian/riverine areas and vernal pools.

Individual plant and animal species are evaluated in this report based on their "special-status". For the purpose of this report, plants were considered "special-status" based on one or more of the following criteria:

- Listing through the Federal and/or State ESA;
- Occurrence in the CNPS Rare Plant Inventory (List 1B, 2, 3, or 4); and/or
- Evaluation and coverage under the MSHCP.

Animals were considered "special-status" based on one or more of the following criteria:

- Listing through the Federal and/or State ESA;
- Designation as a Federal Species of Concern;
- Designation by the State as a California Species of Special Concern (SSC) or California Fully-Protected Species (CFP); and/or
- Evaluation and coverage under the MSHCP.

2.1 Summary of Surveys

Site-specific surveys focused on a number of primary objectives that would satisfy the requirements of the MSHCP and also comply with CEQA requirements: (1) general biological surveys; (2) vegetation mapping; (3) habitat assessments for special-status plants; (4) habitat assessments and focused surveys for special-status animals (including species designated by *Sections 6.1.2 and 6.3.2* of the MSHCP document); (5) assessments for MSHCP riparian/riverine areas and vernal pools; and (6) assessments for areas subject to the jurisdiction of the Corps and CDFG. Observations of all plant and animal species were recorded during each of the above-mentioned survey efforts. 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.

Survey Type	Survey Dates	Biologists
General Biological Survey	2011 – 2/22 and 4/6 2012 – 7/26	AF KL
Focused Burrowing Owl Surveys	2011 – 6/24, 7/15, 8/10, and 8/16 2012 – 7/26, 7/27, 7/30, and 7/31	AF, JA KL
Jurisdictional Delineation	2011 – 2/15 and 2/22 2012 – 7/26	AF, MR KL

AF = Alisa Flint-Tench, KL = Kevin Livergood, JA = Jeff Ahrens, MR = Martin Rasnick

2.2 Botanical Resources

A site-specific survey program was designed to accurately document the botanical resources within the Project Site, including: (1) literature search; (2) general biological survey and habitat assessments; and (3) vegetation mapping.

2.2.1 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, but was not limited to, the following:

- California Native Plant Society *Online Inventory of Rare and Endangered Plants of California* (Eighth Edition) [CNPS 2010];
- California Natural Diversity Database (CNDDB) for the San Jacinto, Lakeview, Winchester, and Hemet USGS quadrangle maps (CDFG 2012); and
- MSHCP Document, including *Volume I, Sections 6.1.2, 6.1.3, and 6.3.2* (Riverside County Integrated Project 2003).

2.2.2 Vegetation Mapping

Vegetation communities were mapped based on the MSHCP community designations, and where appropriate, the Holland Classification System. Vegetation communities were mapped in the field onto an aerial photograph. Exhibit 6 [Vegetation/Land Use Map] provides a detailed vegetation map produced for the Project site. Exhibit 7 [Site Photographs] provides representative photographs of site conditions.

2.2.3 Special-Status Plant Species Evaluated for the Project Site

The CNDDB and MSHCP were initially consulted to determine known occurrences of special-status plants in the region. Other sources used to develop a list of target species for the survey program included the CNPS Online Inventory (CNPS 2012). Based on this information, a list of special-status plant species and habitats that could occur within the Project Site were developed and incorporated into a mapping and survey program for the Project Site. As noted above, the Project site does not occur within the NEPPSA or CAPPSA. As such, habitat assessments and focused plant surveys are not required by the MSHCP for Narrow Endemic Plants or Criteria Area Plants.

2.3 <u>Wildlife Resources</u>

Wildlife species were evaluated and detected during field surveys 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. Wildlife species detected through direct sightings, or based on physical evidence, were recorded in field notes during each visit. Scientific nomenclature and common names for vertebrate species referred to in this report follows a number of sources, including the CDFG Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFG 2008); Collins (1997) for amphibians and reptiles; Jones, et al. (1992) for mammals; and the AOU Checklist (1998) for birds. The methodology (including any applicable survey protocols) utilized to conduct habitat assessments and focused surveys for special-status animals are included below.

2.3.1 General Biological Surveys

All wildlife species that were detected incidentally during biological surveys were documented. For reptiles, habitats were examined for diagnostic sign, which include shed skins, tracks, snake prints, and lizard tail drag marks. Birds were detected by both direct observation and by vocalizations. Mammals were detected both by direct observations and by the presence of diagnostic sign (i.e., tracks, burrows, scat, etc.).

2.3.2 Special-Status Animal Species Evaluated for the Project Site

The CNDDB and MSHCP were initially consulted to determine known occurrences of special-status animals in the region. Based on this information, a list of target animal species (including their suitable habitats) was developed for evaluation in this Biological Technical Report.

2.3.3 Habitat Assessments/Focused Surveys for the Western Burrowing Owl

The Project Site is located within the MSCHP Survey Area for the western burrowing owl (*Athene cunicularia*). Focused burrowing owl surveys were conducted following the 2006 MSHCP Burrowing Owl Survey Instructions.

Step I of the MSHCP Survey Instructions requires that an assessment be conducted to determine the presence of suitable habitat for the burrowing owl. Habitat assessments must be conducted by walking the subject property. Habitat assessments should consider a 150-meter (500 foot) buffer zone around the property.

Habitat for the burrowing owl is varied, including short-grass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident (Haug, et al. 1993). Burrowing owls require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows (e.g., ground squirrels, etc.). As a critical habitat feature need, they require the use of rodent or other burrows for roosting and nesting cover. Burrowing owls may also dig their own burrows in soft, friable soil (as found in Florida) and may also use pipes, culverts, and nest boxes where burrows are scarce (Robertson 1929). The mammal burrows are modified and enlarged. In the case of nesting owls, one burrow is typically selected for use as the nest; however, satellite burrows are usually found within the immediate vicinity of the nest burrow within the defended territory of the owl.

The MSHCP Survey Instructions acknowledge that the presence of suitable burrows is not the deciding factor on whether a site contains suitable habitat for burrowing owls. Basic suitability is more broadly defined by the vegetation structure of a given site. Once basic suitability has been confirmed, the presence/absence of suitable burrows is to be determined through focused burrow surveys (Step II of the Survey Instructions). The majority of the Project Site consists of an existing dirt road, which is not suitable habitat for the burrowing owl. The Project study area includes vegetated areas located immediately north and south of the road, portions of which provide potentially suitable habitat for burrowing owls. As such, focused burrow and burrowing owl surveys were conducted.

The MSHCP Survey Instructions require a minimum of four survey visits to determine the presence/absence of burrowing owls. The Project Site was first assessed for burrowing owl habitat on February 22, 2012, including the mapping of potentially suitable burrows. Focused surveys were conducted on June 24, July 15, and August 10 and 16, 2011, and were updated on July 26, 27, 30 and 31, 2012. Pedestrian survey transects were walked along the Project alignment in all areas of suitable habitat, with transects spaced adequately to allow for complete visual inspection of the suitable habitat areas. Burrows were inspected for the presence of diagnostic owl sign; including "whitewash" (owl excrement), regurgitated pellets, bones, feathers, etc. Table 2-2 provides a summary of the 2012 burrowing owl survey dates. The results of focused surveys are discussed in Section 4.0 of this report.

Table 2-2. Summary of Burrowing Owl Survey Dates

Date	Start Time	End Time	Surveyor	Temp ºF, (start/end)	Wind Speed (mph) (start/end)	% Cloud Cover (start/end)
7/26/12	0800	1000	KL	59 – 79	0	Clear
7/27/12	0715	1000	KL	62 – 77	0	Clear
7/30/12	0730	0940	KL	66 – 78	0	Clear
8/1/12	0730	0945	KL	66 – 79	0	Clear

KL – Kevin Livergood

2.4 MSHCP Riparian/Riverine Areas and Vernal Pools

GLA surveyed the site for riparian/riverine areas and vernal pool/seasonal pool habitat. *Volume I, Section 6.1.2* of the MSHCP describes the procedures through which protection of riparian/riverine areas and vernal pools would occur within the MSHCP Plan Area. The purpose of the procedures is to ensure that the biological functions and values of riparian/riverine areas and vernal pools throughout the MSHCP Plan Area are maintained such that habitat values for Covered Species inside the MSCHP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall MSHCP Plan Area, the affect of those projects on riparian/riverine areas and vernal pools 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 indictors 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.

2.5 Jurisdictional Waters

The Project site was evaluated to determine the limits of (1) U.S. Army Corps of Engineers (Corps) jurisdiction pursuant to Section 404 of the Clean Water Act; (2) Regional Water Quality Control Board (Regional Board) jurisdiction pursuant to Section 401 of the Clean Water Act and Section 13260 of the Porter Cologne Act; and (3) California Department of Fish and Game (CDFG) jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code. The evaluation for Corps jurisdiction was based on regulatory guidance pursuant to the recent U.S. Supreme Court decisions of *Rapanos v. United States* and *Carabell v. United States*, which updated/incorporated guidance pursuant to *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et. al.* (SWANCC). Please refer to the Project's Jurisdictional Delineation Report for more details [Appendix A].

3.0 REGULATORY SETTING

The proposed Project is subject to state and federal 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; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

3.1 State and/or Federally Listed Plants or Animals

3.1.1 State of 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 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.

3.1.2 Federal Endangered Species Act

The Federal Endangered Species Act (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.

3.1.3 State and Federal Take Authorizations for Listed Species

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 California Endangered Species Act (CESA) require that the state lead agency consult with CDFG on projects with potential impacts on state-listed species. These provisions also require CDFG 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 CDFG 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.

3.1.4 Take Authorization 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 (USFWS and CDFG) 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.

Through agreements with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG), 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 Species Survey Areas (CASSA); 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).

3.2 California Environmental Quality Act

3.2.1 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, CDFG recognizes that plants on Lists 1A, 1B, or 2 of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered under CEQA. CDFG also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 or 4.

3.2.2 Special-Status Plants and Animals 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. However, some USFWS field offices have issued memoranda stating that former C2 species are to be

considered federal Species of Concern (FSC). 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)
- FSC Federal Species of Concern (former C2 species)

State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (CFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California Species of Special Concern (SSC) are species 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 CDFG's CNDDB project. Informally listed taxa are not protected, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB 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
- CFP California Fully-Protected
- CP California Protected
- SSC California 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 California Native Plant Society's Sixth Edition of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* separates plants of interest into five categories. 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 (Tibor 2001). CNPS maintains an updated Online Inventory. The 8th Edition of the Online Inventory was released in December

2010. The Inventory serves as the candidate list for listing as threatened and endangered by CDFG.

CNPS has developed five categories of rarity that are summarized in Table 3-1.

Table 3-1. CNPS Lists

CNPS List	**Comments**
List 1A – Presumed Extinct in California	Thought to be extinct in California based on a lack of observation or detection for many years.
List 1B – Rare 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.
List 2 - Rare or Endangered in California, More Common Elsewhere	Species that are rare in California but more common outside of California
List 3 – Need More Information	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 list. In addition, many of the List 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.
List 4 – Plants of Limited Distribution	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 List 3 species above, CNPS lacks survey data to accurately determine status in California. Many species have been placed on List 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 Code	***Comment***
.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.

4.0 RESULTS

This section discusses the results of biological surveys conducted for the Project, including general surveys; vegetation mapping; habitat assessments; focused burrowing owl surveys; and assessments for Corps and CDFG jurisdictional waters, and MSHCP riparian/riverine areas and vernal pools.

4.1 Vegetation Types/Land Uses

Nearly all of the Project area is disturbed or developed, with approximately 5.66 acres consisting of paved roads, landscaping, and other disturbed/developed areas; and approximately 8.74 acres of areas supporting ruderal vegetation. Many of the ruderal areas area subject to regular discing/mowing. Approximately 0.04 acre of ornamental trees were mapped separately from ornamental vegetation associated with the developed areas. Approximately 0.014 acre of riparian vegetation was identified within the Project area, including one black willow (0.01 acre) associated with an offsite drainage facility, and 0.002 acre of emergent wetland/riparian vegetation associated with a roadside ditch along Midway Street. Table 4-1 provides a summary of vegetation acreages for the Project Site. Exhibit 6 provides a vegetation map for the Project site. Exhibit 7 provides representative site photographs.

Table 4-1. Summary of Vegetation Mapping

Vegetation	Acreage
Disturbed/Developed	5.66
Ruderal	8.74
Ornamental	0.04
Black Willow	0.01
Emergent Wetland	0.002
Total	**14.452**

Vegetation associated with disturbed/ruderal portions of the site included Russian thistle (*Salsola australis*), lamb's quarters (*Chenopodium album*), common sunflower (*Helianthus annuus*), summer mustard (*Hirschfeldia incana*), coyote gourd (*Cucurbita palmata*), puncture vine (*Tribulus terrestris*), alkali heliotrope (*Heliotropium curassavicum*), ripgut brome (*Bromus diandrus*), horseweed (*Conyza canadensis*), Jimsonweed (*Datura wrightii*), Bermuda grass (*Cynodon dactylon*), fourwing saltbush (*Atriplex canescens*), field bindweed (*Convolvulus arvensis*), and prickly lettuce (*Lactuca serriola*).

Vegetation assocated with the emergent wetland area included southern cattail (*Typha domingensis*), rabbitsfoot grass (*Polypogon monspeliensis*), tall flatsedge (*Cyperus eragrostis*), and curly dock (*Rumex crispus*).

4.2 Special-Status Plants

The Project site does not occur in the MSHCP NEPPSA or CAPSSA. As such, focused plant surveys are not required pursuant to the MSHCP. Table 4-2 provides a list of special-status plants evaluated for the Project site. Plant species were considered based on a number of factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project Site, 2) 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 Project site.

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

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence
Abronia villosa var. *aurita*	Chaparral sand verbena	Federal: None State: None CNPS: List 1B.1	Sandy soils in chaparral, coastal sage scrub.	Does not occur on site due to a lack of suitable habitat.
Allium marvinii	Yucaipa onion	Federal: None State: None CNPS: List 1B.1	Openings in chaparral (clay soils).	Does not occur on site due to a lack of suitable habitat.
Allium munzii	Munz's onion	Federal: FE State: ST CNPS: List 1B.1	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands	Does not occur on site due to a lack of suitable habitat.
Astragalus pachypus var. *jaegeri*	Jaeger's milk-vetch	Federal: None State: None CNPS: List 1B.1	Sandy or rocky soils in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland.	Does not occur on site due to a lack of suitable habitat.
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	Federal: FE State: None CNPS: List 1B	Alkaline soils in chenopod scrub, valley and foothill grassland, vernal pools.	Does not occur on site due to a lack of suitable habitat.
Atriplex parishii	Parish's brittlescale	Federal: None State: None CNPS: List 1B	Chenopod scrub, playas, vernal pools.	Does not occur on site due to a lack of suitable habitat.
Atriplex serenana var. *davidsonii*	Davidson's saltscale	Federal: None State: None CNPS: List 1B	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Does not occur on site due to a lack of suitable habitat.
Brodiaea filifolia	Thread-leaved brodiaea	Federal: FT State: SE CNPS: List 1B.1	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Does not occur on site due to a lack of suitable habitat.
California macrophylla	Round-leaved filaree	Federal: None State: None CNPS: List 1B.1	Clay soils in cismontane woodland, valley and foothill grassland	Does not occur on site due to a lack of suitable habitat.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence
Calochortus plummerae	Plummer's mariposa lily	Federal: None State: None CNPS: List 1B.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur on site due to a lack of suitable habitat.
Calochortus weedii var. *intermedius*	Intermediate mariposa lily	Federal: None State: None CNPS: List 1B.2	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur on site due to a lack of suitable habitat.
Caulanthus simulans	Payson's jewelflower	Federal: None State: None CNPS: List 4.2	Sandy or granitic soils in chaparral and coastal scrub.	Does not occur on site due to a lack of suitable habitat.
Centromadia pungens ssp. *laevis*	Smooth tarplant	Federal: None State: None CNPS: List 1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Potential to occur on site.
Chorizanthe parryi var. *parryi*	Parry's spineflower	Federal: None State: None CNPS: List 1B.1	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Does not occur on site due to a lack of suitable habitat.
Chorizanthe polygonoides var. *longispina*	Long-spined spineflower	Federal: None State: None CNPS: List 1B.2	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands	Does not occur on site due to a lack of suitable habitat.
Clinopodium chandleri	San Miguel savory	Federal: None State: None CNPS: List 1B.2	Rocky, gabbroic, or metavolcanic soils in chaparral, cismontane woodland, coastal sage scrub, riparian woodland, valley and foothill grassland.	Does not occur on site due to a lack of suitable habitat.
Deinandra mohavensis	Mojave tarplant	Federal: None State: SE CNPS: List 1B.3	Chaparral (mesic soils) and riparian scrub.	Does not occur on site due to a lack of suitable habitat.
Dodecahema leptoceras	Slender-horned spineflower	Federal: FE State: SE CNPS: List 1B.1	Sandy soils in alluvial scrub, chaparral, and cismontane woodland.	Does not occur on site due to a lack of suitable habitat.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Federal: None State: None CNPS: List 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur on site due to a lack of suitable habitat.
Lepidium virginicum var. *robinsonii*	Robinson's pepper grass	Federal: None State: None CNPS: List 1B.2	Chaparral, coastal sage scrub	Does not occur on site due to a lack of suitable habitat.
Myosurus minimus ssp. *apus*	Little mousetail	Federal: None State: None CNPS: List 3	Valley and foothill grassland, vernal pools (alkaline soils).	Does not occur on site due to a lack of suitable habitat.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence
Nama stenocarpum	Mud nama	Federal: None State: None CNPS: List 2	Marshes and swamps	Does not occur on site due to a lack of suitable habitat.
Navarretia fossalis	Spreading navarretia	Federal: FT State: None CNPS: List 1B	Vernal pools, playas, chenopod scrub, marshes and swamps (assorted shallow freshwater).	Does not occur on site due to a lack of suitable habitat.
Orcuttia californica	California Orcutt grass	Federal: FE State: SE CNPS: List 1B	Vernal pools	Does not occur on site due to a lack of suitable habitat.
Sidalcea neomexicana	Salt spring checkerbloom	Federal: None State: None CNPS: List 2.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur on site due to a lack of suitable habitat.
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	Federal: None State: None CNPS: List 2	Alkaline soils in meadows and seeps, marshes and swamps, riparian scrub, vernal pools.	Does not occur on site due to a lack of suitable habitat.

Federal
FE – Federally Endangered
FT – Federally Threatened

State
SE – State Endangered
ST – State Threatened

CNPS
List 1B – Plants rare, threatened, or endangered in California and elsewhere.
List 2 – Plants rare, threatened, or endangered in California, but more common elsewhere.
List 3 – Plants about which more information is needed.
List 4 – Plants of limited distribution (a watch list).

CNPS Threat Code Extensions
.1 – Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

4.3 Special-Status Animals

No special-status animals were detected within the Project Site, although a number of special-status animals have the potential to occur on site. Table 4-3 provides a list of special-status animals evaluated for the Project Site, including MSHCP Covered Species with additional survey requirements. Species were evaluated based on a number of factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the property, 2) MSHCP species survey areas for which the property occurs within, 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 within the Project site.

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

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence
Invertebrates				
Euphydryas editha quino	Quino checkerspot butterfly	Federal: FE State: None	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include *Plantago erecta* and *Castilleja exserta*. Adults occur on sparsely vegetated rounded hilltops and ridgelines, and are known to disperse through disturbed habitats to reach suitable nectar plants.	Does not occur onsite due to a lack of suitable habitat.
Streptocephalus woottoni	Riverside fairy shrimp	Federal: FE State: None	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Does not occur onsite due to a lack of suitable habitat.
Branchinecta lynchi	Vernal pool fairy shrimp	Federal: FT State: None	Seasonal vernal pools	Does not occur onsite due to a lack of suitable habitat.
Amphibians				
Scaphiopus hammondii	Western spadefoot	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur onsite due to a lack of suitable habitat.
Reptiles				
Salvadora hexalepis virgultea	Coast patch-nosed snake	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Does not occur onsite due to a lack of suitable habitat.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence
Phrynosoma blainvillii	Coast horned lizard	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Does not occur onsite due to a lack of suitable habitat.
Aspidoscelis tigris	Coastal whiptail	Federal: None State: None	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur onsite due to a lack of suitable habitat.
Crotalus exsul	Northern red-diamond rattlesnake	Federal: None State: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Does not occur onsite due to a lack of suitable habitat.
Aspidoscelis hyperythra	Orangethroat whiptail	Federal: None State: SSC	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	Does not occur onsite due to a lack of suitable habitat.
Charina trivirgata	Rosy boa	Federal: None State: SSC	Coastal sage scrub, chaparral, or mixed habitats, commonly with rocky soils and outcrops. Also in oak woodlands and riparian areas bordering scrub habitats.	Does not occur onsite due to a lack of suitable habitat.
Coleonyx variegatus abbotti	San Diego banded gecko	Federal: None State: None	Primarily a desert species, but also occurs in cismontane chaparral, desert scrub, and open sand dunes.	Does not occur onsite due to a lack of suitable habitat.
Thamnophis hammondii	Two-striped garter snake	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	Does not occur onsite due to a lack of suitable habitat.
Birds				
Amphispiza belli belli	Bell's sage sparrow	Federal: FSC State: SSC	Chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains.	Does not occur onsite due to a lack of suitable habitat.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence
Athene cunicularia	Burrowing owl	Federal: None State: SSC	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.	Not detected during focused surveys.
Eremophila alpestris actia	California horned lark	Federal: None State: None	Occupies a variety of open habitats, usually where trees and large shrubs are absent.	Potential to occur onsite.
Accipiter cooperi	Cooper's hawk (nesting)	Federal: None State: None	Primarily occurs in riparian areas and oak woodlands, most commonly in montane canyons. Known to use urban areas, occupying trees among residential and commercial.	Potential to occur onsite for foraging, however the site does not contain suitable nesting habitat.
Buteo regalis	Ferruginous hawk (wintering)	Federal: FSC State: SSC	Open, dry country, perching on trees, posts, and mounds. In California, wintering habitat consists of open terrain and grasslands of the plains and foothills.	Potential to occur onsite for winter foraging.
Aquila chrysaetos	Golden eagle	Federal: None State: SSC	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Potential to occur onsite for foraging, however the site does not contain suitable nesting habitat.
Vireo bellii pusillus	Least Bell's vireo	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Does not occur onsite due to a lack of suitable habitat.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence
Lanius ludovicianus	Loggerhead shrike	Federal: None State: SSC	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.	Does not occur onsite due to a lack of suitable habitat.
Circus cyaneus	Northern harrier (nesting)	Federal: None State: SSC	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Potential to occur onsite for foraging, however the site does not contain suitable nesting habitat.
Falco peregrinus anatum	Peregrine falcon (nesting)	Federal: FSC State: SE, CFP	Although part of its historic breeding range, this species does not breed in southern California. In the west, breeding habitat consists of high cliffs along the coast.	Potential to occur onsite for foraging, however does not breed in the region.
Falco mexicanus	Prairie falcon (nesting)	Federal: None State: SSC	Breeds in mountainous regions and shortgrass prairies, nesting on cliff ledges.	Potential to occur onsite for foraging, however does not breed in the region.
Accipiter striatus	Sharp-shinned hawk (nesting)	Federal: None State: SSC	Breeds in young coniferous forests with high canopy associations. Habitats that they are documented to use include ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine.	Potential to occur onsite for foraging, however does not breed in the region.
Empidonax traillii extimus	Southwestern willow flycatcher	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur onsite due to a lack of suitable habitat.
Agelaius tricolor	Tricolored blackbird	Federal: FSC State: SSC	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur onsite due to a lack of suitable habitat.
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	Federal: FC State: SE	Dense, wide riparian woodlands with well-developed understories.	Does not occur onsite due to a lack of suitable habitat.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence
Plegadis chihi	White-faced ibis (nesting colony)	Federal: FSC State: SSC	Winter foraging occurs in wet meadows, marshes, ponds, lakes, rivers, and agricultural fields. Requires extensive marshes for nesting.	Does not occur onsite due to a lack of suitable habitat.
Elanus leucurus	White-tailed kite (nesting)	Federal: None State: CFP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Potential to occur onsite for foraging, however the site does not contain suitable nesting habitat.
Icteria virens	Yellow-breasted chat	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Does not occur onsite due to a lack of suitable habitat.
Setophaga petechia	Yellow warbler	Federal: None State: SSC	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Does not occur onsite due to a lack of suitable habitat.
Mammals				
Taxidea taxus	American badger	Federal: None State: SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Does not occur onsite due to a lack of suitable habitat.
Chaetodipus califronicus femoralis	Dulzura pocket mouse	Federal: None State: None CDFG: CSC	Coastal scrub, grassland, and chaparral, especially at grass-chaparral edges	Does not occur onsite due to a lack of suitable habitat.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	Federal: None State: SSC	Fine, sandy soils in coastal sage scrub and grasslands.	Does not occur onsite due to a lack of suitable habitat.
Chaetodipus fallax fallax	Northwestern San Diego pocket mouse	Federal: None State: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Does not occur onsite due to a lack of suitable habitat.
Dipodomys merriami parvus	San Bernardino kangaroo rat	Federal: FE State: SSC	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 onsite due to a lack of suitable habitat.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Federal: None State: SSC	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	Potential to occur onsite.
Neotoma lepida intermedia	San Diego desert woodrat	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Does not occur onsite due to a lack of suitable habitat.
Dipodomys stephensi	Stephens' kangaroo rat	Federal: FE State: ST	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Potential to occur onsite.

Federal (FESA)
FE - Federally Endangered
FT - Federally Threatened
FSC - Federal Species of Concern
BCC – Birds of Conservation Concern

State (CESA)
SE - State Endangered
ST - State Threatened

CDFG
SSC - California Species of Special Concern
CFP - Fully Protected
WL – Watch List

4.3.1 Burrowing Owl

The burrowing owl is designated as a CDFG California Species of Special Concern. Zeiner *et al.* (1990) describe the distribution, abundance, and seasonality of the burrowing owl within California as follows. It is a year-long resident formerly common in appropriate habitats throughout the state, excluding the humid northwest coastal forests and high mountains. It is present on the larger offshore islands and is found as high as 1,600 m (5,300 ft) in Lassen County. In California, burrowing owls are restricted to the central valley extending from Redding south to the Grapevine, east through the Mojave Desert and west to San Jose, the San Francisco Bay area, the outer coastal foothills area which extend from Monterey south to San Diego and the Sonoran desert (Grinnell and Miller 1944). It is a resident in the open areas of the lowlands over much of the Southern California region (Garrett and Dunn 1981).

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 may also use golf courses, cemeteries, road allowances within cities, airports, vacant lots in residential areas and university campuses, fairgrounds, abandoned buildings, and irrigation ditches (Haug, *et al.* 1993). They may also occur in forb and open shrub stages of pinyon-juniper and ponderosa pine habitats (Zeiner, *et al.*

1990). 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. They may also dig their own burrow in soft, friable soil (as found in Florida) and may also use pipes, culverts, and nest boxes where burrows are scarce (Robertson 1929). The mammal burrows are modified and enlarged. One burrow is typically selected for use as the nest, however, satellite burrows are usually found within the immediate vicinity of the nest burrow within the defended territory of the owl.

The Project area contains potentially suitable habitat for burrowing owls, including the presence of suitable burrows. However, burrowing owls were not detected within or adjacent to the Project area during focused surveys, and diagnostic owl sign (e.g., regurgitated pellets, whitewash, bones, etc.) was not detected near any of the onsite burrows. Therefore, it has been determined that the burrowing owl is currently absent from the site.

4.3.2 Stephens' Kangaroo Rat

SKR is found almost exclusively in open grasslands or sparse shrublands with cover of less than 50% during the summer (e.g., Bleich 1973; Bleich and Schwartz 1974; Grinnell 1933; Lackey 1967; O'Farrell 1990; Thomas 1973). O'Farrell (1990) further clarified this association and argues that the proportion of annual forbs and grasses is important because SKR avoid dense grasses (for example, non-native bromes [*Bromus* spp.]) and are more likely to inhabit areas where the annual forbs disarticulate in the summer and leave more open areas. Soil type also is an important habitat factor for SKR occupation (O'Farrell and Uptain 1989; Price and Endo 1989). As a fossorial (burrowing) animal, the Stephens' kangaroo rat typically is found in sandy and sandy loam soils with low clay to gravel content, although there are exceptions where they can utilize the burrows of Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Spermophilus beecheyi*).

The Project site has a potential to support Stephens' kangaroo rat (SKR). The Project site occurs within the Western Riverside County SKR Habitat Conservation Plan (HCP) and occurs within the SKR Fee Assessment Area.

4.4 <u>Nesting Birds</u>

The Project site contains vegetation with the potential to support nesting birds. The Migratory Bird Treaty Act (MBTA) and California Fish and Game Code prohibit impacts to nesting birds.[1]

[1] The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, 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.

4.5 Raptor Foraging Habitat

The Project site offers limited habitat for raptor foraging, including the potential for several special-status raptor species. The portions of the Project alignment extending through disturbed, ruderal areas are adjacent to larger areas of open field that represent foraging habitat for raptors.

4.6 MSHCP Riparian/Riverine Areas and Vernal Pools

As noted above in Section 2.4 of this report, *Volume I, Section 6.1.2* of the MSHCP describes the procedures through which protection of riparian/riverine areas and vernal pools would occur within the MSHCP Plan Area. The purpose of the procedures is to ensure that the biological functions and values of riparian/riverine areas and vernal pools throughout the MSHCP Plan Area are maintained such that habitat values for Covered Species inside the MSCHP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall MSHCP Plan Area, the affect of those projects on riparian/riverine areas and vernal pools must be addressed.

The Project site does not contain any natural riparian/riverine areas or vernal pools, but does contain two drainage areas that collect and convey runoff generally from the southeast to the northwest towards the San Jacinto River [Exhibit 8 – Potential Jurisdictional Waters]. The southest end of the Project alignment (southeast corner of Menlo Avenue and San Jacinto Street) intercepts a drainage swale (Drainage A) that originates offsite to the southeast. The swale extends approximately 115 linear feet through the Project site to Menlo Avenue, where runoff then flows along Menlo Avenue, and then in street gutters north along San Jacinto Street to Midway Street. The portion of the swale (Drainage A) occurring within the Project alignment is approximately 0.02 acre, and does not support any wetlands/riparian habitat.

At the intersection of San Jacinto Street and Midway Street, an artificially-created drainage ditch (Drainage B) collects flows from an approximately 500-acre watershed area and extends west for approximately 1,250 linear feet along the south side of Midway Street to the intersection of Midway Street and Santa Fe Avenue, at which point flows are conveyed north along Santa Fe Avenue, away from the proposed Line C alignment. The drainage ditch comprises approximately 0.20 acre. The eastern end of the ditch supports a small (0.002 acre) emergent wetland vegetated with southern cattails (*Typha domingensis*), rabbitsfoot grass (*Polypogon monspeliensis*), tall flatsedge (*Cyperus eragrostis*), and curly dock (*Rumex crispus*). This minimal amount of emergent vegetation does not provide habitat value for MSHCP Covered Species associated with riparian areas.

The northern portion of the Project alignment (proposed Line C), which extends from the intersection of Midway Street and Santa Fe Street to Esplanade Avenue, occurs through undeveloped parcels west of Santa Fe Street. At a few points along the proposed Line C, the Project will intercept runoff that comes off of adjacent development areas. However, the Project will not impact any riparian/riverine features at these locations. Construction of the Project may result in the trimming of a single black willow that is associated with an offsite drainage facility; however, the willow tree will not be removed, and attempts will be made to avoid the willow.

4.7 Jurisdictional Waters

The Project site contains approximately 0.22 acre of potential Corps, Regional Board, and CDFG jurisdiction associated with one drainage swale (Drainage A), and one roadside drainage ditch (Drainage B), of which 0.002 acre suports wetlands/riparian vegetation. As discussed above in Section 4.6, Drainage A extends from the southeast to south side of Menlo Avenue, where flows then extend along Menlo Avenue to the intersection of Menlo Avenue and San Jacinto Street.

Drainage B consists of an artificially-created roadside ditch located along the south side of Midway Street between Santa Fe Street and San Jacinto Street. The location of potential jurisdictional waters are depicted on the enclosed maps [Exhibit 8]. The results of the jurisdictional delineation are detailed in a separate Jurisdictional Delineation Report [Appendix A].

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 off site 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 invasives, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Cumulative impacts refers 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 <u>California Environmental Quality Act (CEQA)</u>

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 1998 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 federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

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.

5.2 Impacts to Vegetation/Land Use Types

The Project will not have a substantial adverse effect on wetland/riparian habitat or other sensitive natural communities. Nearly all of the Project impacts will consist of temporary impacts to disturbed/developed and ruderal areas. The Project will permanently impact the small area (0.002 acre) within the Midway Street roadside ditch supporting emergent wetland vegetation. In addition, the Project may have to trim a single black willow associated with an offsite drainage facility. However, the proposed activities would not remove the willow, and the potential trimming will be avoided if feasible. Regardless, the minimal vegetation does not provide habitat for special-status species, including MSHCP Covered Species. Impacts to vegetation would be less than significant.

5.3 Impacts to Special-Status Species

The Project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species. The Project will temporarily impact disturbed areas with the potential for use by a number of special-status animal species, including small mammals such as Stephens' kangaroo rat and San Diego black-tailed jack rabbit, and birds such as the California horned lark. However, due to the temporary nature of impacts to disturbed habitats, the proposed impacts would be less than significant.

The Project site occurs within the SKR HCP and occurs within the SKR Fee Assessment Area. Through coverage afforded by the HCP, through payment of the SKR fee, impacts to SKR would be less than significant.

5.4 Impacts to Nesting Birds

The Project will impact vegetation with the potential to support nesting birds, if vegetation is to be removed during the nesting season (February 1 to August 31).

5.5 Impacts to Raptor Foraging Habitat

The Project will result in minor, temporary impacts to distubed areas with a potential support foraging raptors. Impacts to raptor foraging habitat would be less than significant.

5.6 Impacts to MSHCP Riparian/Riverine Areas

As discussed above, *Volume I, Section 6.1.2* of the MSHCP describes the procedures through which protection of riparian/riverine areas would occur within the MSHCP Plan Area. The purpose of the procedures is to ensure that the biological functions and values of riparian/riverine areas and vernal pools throughout the MSHCP Plan Area are maintained such that habitat values for Covered Species inside the MSCHP Conservation Area are maintained.

As discussed in Section 4.6 of this report, the Project will impact two artificially-created drainage features that convey runoff through developed areas of the City of San Jacinto towards to the San Jacinto River; however, the drainage features do not contain riparian/wetland habitat capable of supporting the *Section 6.1.2* ripairan/riverine species. As such, the Project will not adversely affect riparian habitat function as it pertains to MSHCP Covered Species.

The two drainage features discussed in this report should be kept in context with the overall existing hydrologic conditions that will be improved by the overall Project. As discussed in Section 1.3 of this report, the Midway Street ditch (Drainage B) collects flows from an approximately 500-acre watershed to the southeast (which includes the Drainage A segment), and then temporarily conveys flows over a short distance to the intersection of Midway Street and Santa Fe Street, where the water then extends north along Santa Fe Street and through undeveloped parcels before being intercepted and collected into the existing Line C at Esplanade Avenue. Flows are conveyed in the existing Line C to the District's Buena Vista Retention Basin, and then exit the basin into the District's San Jacinto Line E Channel. Line E extends for approximately 2 miles in a northwesterly direction to the San Jacinto Reservoir, which is owned and operated by EMWD for groundwater recharge. The Reservoir retains flows prior to discharging over a spillway to the west. Flows that manage to release from the Reservoir flow in a northwesterly direction over large undeveloped parcels and farmland for about 3 miles before reaching the San Jacinto River.

The proposed Project will not alter the ultimate pathway of water to the San Jacinto River along the "Line C" pathway. Flows will continue to reach the existing Line C at Esplanade, but instead will be collected in the newly proposed (extended) Line C, as well as three additional lines (B, C-5, and C-4), instead of flowing uncontrolled through existing streets and undeveloped parcels. Furthermore, the proposed facilities will alleviate flooding issues experienced by the residents and community within the area generally bounded by Esplanade Avenue to the north, San Jacinto Avenue to the east, Menlo Avenue to the south, and Buena Vista Avenue to the west by more efficiently collecting sheet flows in the existing RCB system at Esplanade Avenue.

The proposed Project will not result in a loss of biological functions and values as it pertains to riparian/riverine species. As such, mitigation is not required, and the Determination of Biologically Equivalent or Preservation (DBESP) is not applicable to this Project.

5.7 Impacts to Jurisdictional Waters

The Project will permanently impact 0.22 acre of areas that may be considered jurisdictional waters by the Corps, Regional Board, and CDFG jurisdiction. The potential areas of jurisdiction

are associated with one drainage swale (Drainage A) and a segment of roadside ditch (Drainage B). Both of these features are part of a larger system of coveyance through developed portions of the City of San Jacinto, where the majority of flows are conveyed along developed and disturbed areas to the existing Line C at Esplanade Avenue. With the exception of a very small amount of emergent wetland vegetation (0.002 acre) within the Midway Street ditch (Drainage B), the Project will not impact wetlands or remove riparian habitat. Furthermore, these artificially-created features provide no to mininal aquatic resource function. As such, pursuant to CEQA, the Project will not "have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means"; and will not "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." Therefore, no mitigation is proposed for the impacts pursuant to CEQA.

The District will coordinate with the Corps, Regional Board, and CDFG to determine if the agencies will regulate impacts to Drainage A and B pursuant to Section 404 (Corps) and 401 (Regional Board) of the Clean Water Act, and Section 1602 (CDFG) of the California Fish and Game Code. The District will obtain any permits as determined necessary by the Corps, Regional Board, and/or CDFG.

5.8 Indirect Impacts to Biological Resources

The Project does not occur adjacent to sensitive habitats, including MSHCP conservation areas, and therefore is not expected to result in significant indirect impacts to special-status biological resources. As such, the MSHCP Urban/Wildland Interface Guidelines (MSHCP *Volume I, Section 6.1.4*) do not apply to this Project.

- Drainage;
- Toxics;
- Lighting;
- Noise;
- Invasives;
- Barriers; and
- Grading/Land Development.

5.9 Cumulative Impacts

The Project will not result in significant, cumulative impacts to special-status biological resources.

6.0 MITIGATION

The following discussion provides project-specific mitigation measures for actual or potential impacts to special-status resources. In addition to these specific measures, mitigation is also provided by the MSHCP, through participation with the MSHCP and compliance with applicable MSHCP requirements.

6.1 Burrowing Owl

Portions of the Project alignments contain potentially suitable habitat for the western burrowing owl, although burrowing owls were not detected onsite or immediately adjacent to the site during focused surveys. However, since potentially suitable habitat is present, the Project should conduct pre-construction owl surveys pursuant to Objective 6 of the MSHCP burrowing owl objectives (*Volume II, Section B – Birds*). The following measure is recommended:

- A qualified biologist shall conduct a pre-construction presence/absence survey for burrowing owls within suitable habitat located within the Project alignments. The survey shall be conducted within 30 days prior to ground disturbance. If burrowing owls are detected within the Project alignments, then the owls shall be passively excluded from the site by installing one-way doors and collapsing the burrows. However, if the pre-construction survey is conducted during the owl breeding season (March 1st through August 31st), and breeding owls are detected within the Project alignments, then the nest burrows (and potentially other adjacent burrows) will be avoided until the nests are no longer active.

6.2 Nesting Birds

The Project will remove vegetation with the potential to supporting nesting birds, including trees, shrubs, and ground cover. If vegetation removal/trimming shall occur during the nesting season (February 1st through August 31st), nesting birds surveys should be conducted. The following measure is recommended to avoid impacts to nesting birds:

- A qualified biologist shall conduct a nesting bird survey of the Project alignments if vegetation is to be removed during the nesting season (March 1st to August 31st). As feasible, the surveys should include trees and shrubs within 200 feet to either side of the Project alignments. If nesting birds are detected, then the Project shall establish appropriate buffers (as determined by the biologist) around the active nest depending on the species detected and where the nest is located. Buffers may be as large as 500 feet for nesting raptors and 200 feet for non-raptors. Construction activities shall not occur within the established buffer areas until nests are no longer active, and the offspring are independent from the nest.

6.3 Jurisdictional Waters

The Project applicant shall coordinate with the Corps, Regional Board, and CDFG to determine if any of the agencies will regulate impacts to the potential jurisdictional waters identified within

the Project alignments, namely the drainage swale southeast of Menlo Avenue and San Jacinto Street (Drainage A), and the roadside ditch along Midway Street (Drainage B). If it is determined that one or more of the agencies will regulate impacts to these features, then Project applicant shall obtain any necessary resource agency permits, including a Section 404 permit from the Corps, Section 401 Water Quality Certification or Waste Discharge Requirement (WDR) from the Regional Board, and/or a Section 1602 Streambed Alteration Agreement from CDFG. No mitigation is proposed for impacts to potential jurisdictional waters, as the Project would not result in a substantial adverse effect to jurisdictional waters, including wetlands or riparian habitat.

6.4 Level of Significance After Mitigation

With the Project's participation and compliance with the Western Riverside County MSHCP, with coverage afforded by the MSHCP, and with the mitigation measures as described above, direct, indirect, and cumulative impacts to sensitive biological resources will be less than significant.

7.0 MSHCP CONSISTENCY

The purpose of this section is to provide an analysis of the proposed Project with respect to consistency with Western Riverside County MSHCP policies and procedures. 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 does not occur within the MSHCP Criteria Area, and is therefore not subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process, or the Joint Project Review (JPR) process.

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

The Project will permanently impact portions of a drainage swale and roadside ditch that, along with street gutters, convey runoff through developed portions of the City of San Jacinto towards the San Jacinto River. Neither the swale nor the ditch supports riparian vegetation providing habitat for species addressed in *Volume I, Section 6.1.2* of the MSHCP. As such there will be no loss of habitat function for riparian/riverine species. As discussed in Section 1.3 and 5.6 of this report, the Project will collect runoff that is currently conveyed through the drainage features and street gutters, and will place the runoff into underground lines that will ultimately connect to an underground RCB system at Esplanade Avenue. The RCB system ultimately conveys the runoff to the San Jacinto River. The Project will not adversely affect the hydrologic function of the drainage features, as the water will still be conveyed to the existing Line C. As such, there will

be no loss of riparian/riverine function as a result of the Project, and therefore the DBESP procedures do not apply to this Project.

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 Project alignments do not occur within the NEPSSA. Therefore, focused plant surveys are not required pursuant to 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 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.

As discussed in Section 5.8 of this report, the Project does not occur adjacent to sensitive habitats, including MSHCP conservation areas, and therefore is not expected to result in significant indirect impacts to special-status biological resources. As such, the MSHCP Urban/Wildland Interface Guidelines (MSHCP *Volume I, Section 6.1.4*) do not apply to the Project.

7.5 Additional Survey Needs and Procedures

Volume I, Section 6.3.2 of the MSHCP addresses additional species for which habitat assessments and focused surveys are required when Projects occur within designated survey areas. These include the Criteria Area Plant Species Survey Areas (CAPSSA), and survey areas for burrowing owls, specific amphibians, and specific small mammals. Portions of the Project alignments occur within the burrowing owl survey area, but not within the CAPSSA, amphibian, or mammal survey areas. Focused burrowing owl surveys were conducted following the

MSHCP Burrowing Owl Survey Instructions; however, no burrowing owls were detected on or adjacent to the site. As noted in Section 6.1 of this report, pre-construction owl surveys will be required pursuant to 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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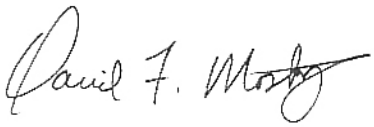
9.0 CERTIFICATION

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:_____ Date: 11/9/2012

s:0640-35b.biotech.docx

Source: ESRI World Street Map

NORTH

0 2 4 8 Miles

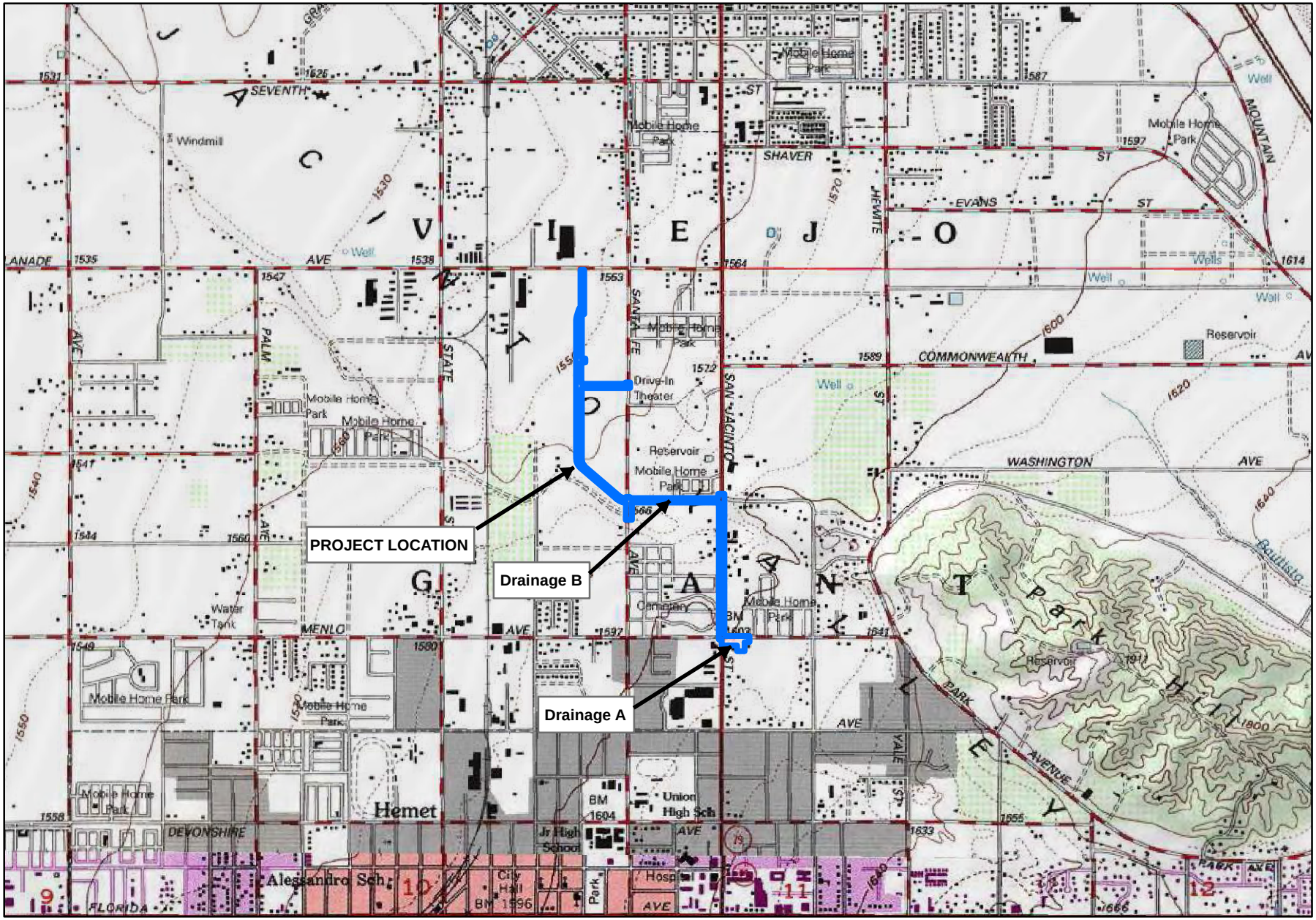
SAN JACINTO MDP LINE C
STAGE 2, B, AND C-5 PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1

Adapted from USGS San Jacinto, CA quadrangle



NORTH

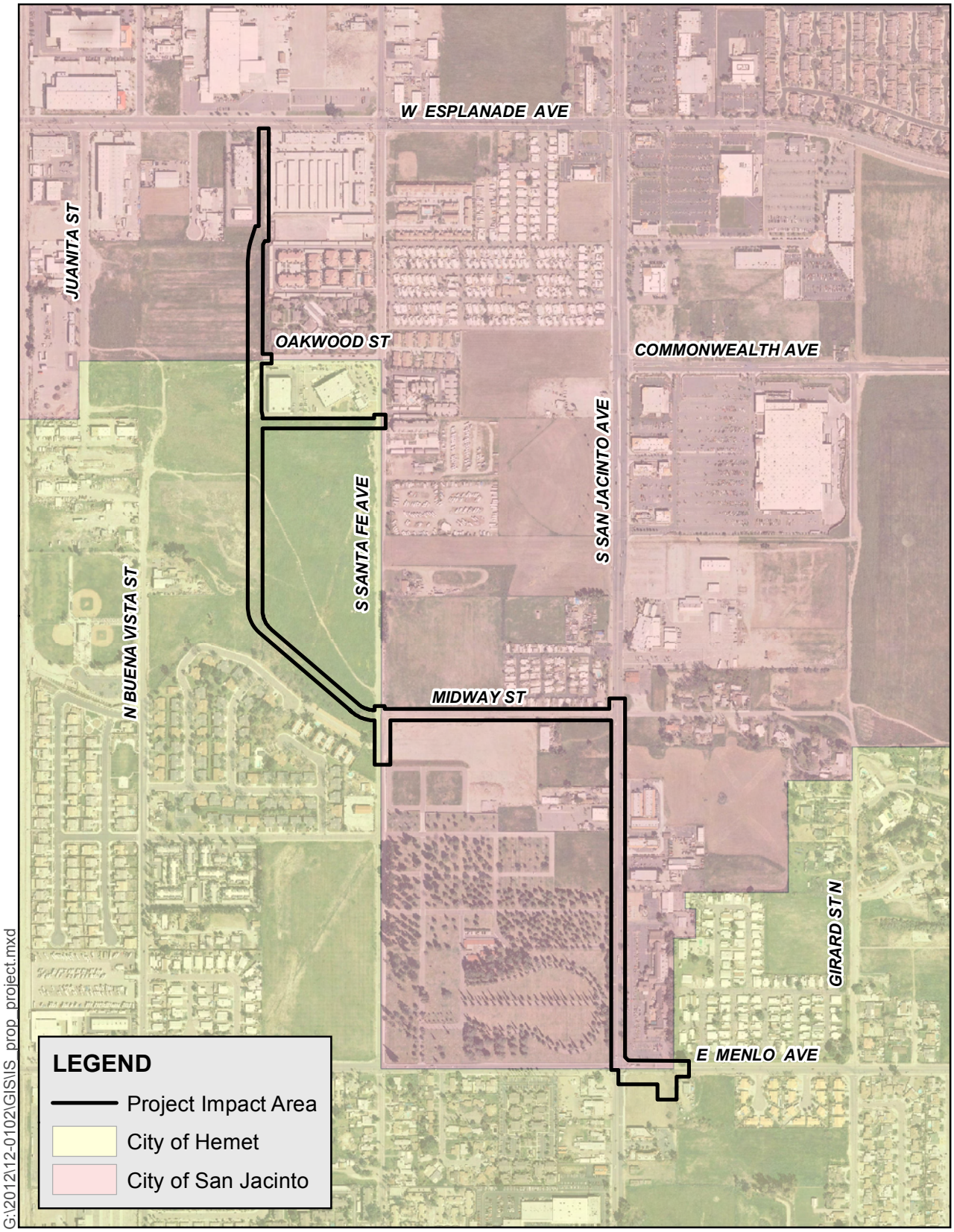
0 1,000 2,000 4,000 Feet

SAN JACINTO MDP LINE C
STAGE 2, B, AND C-5 PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2



Sources: Riverside Co. FCD&WCD, April 2012;
Eagle Aerial, April 2010.

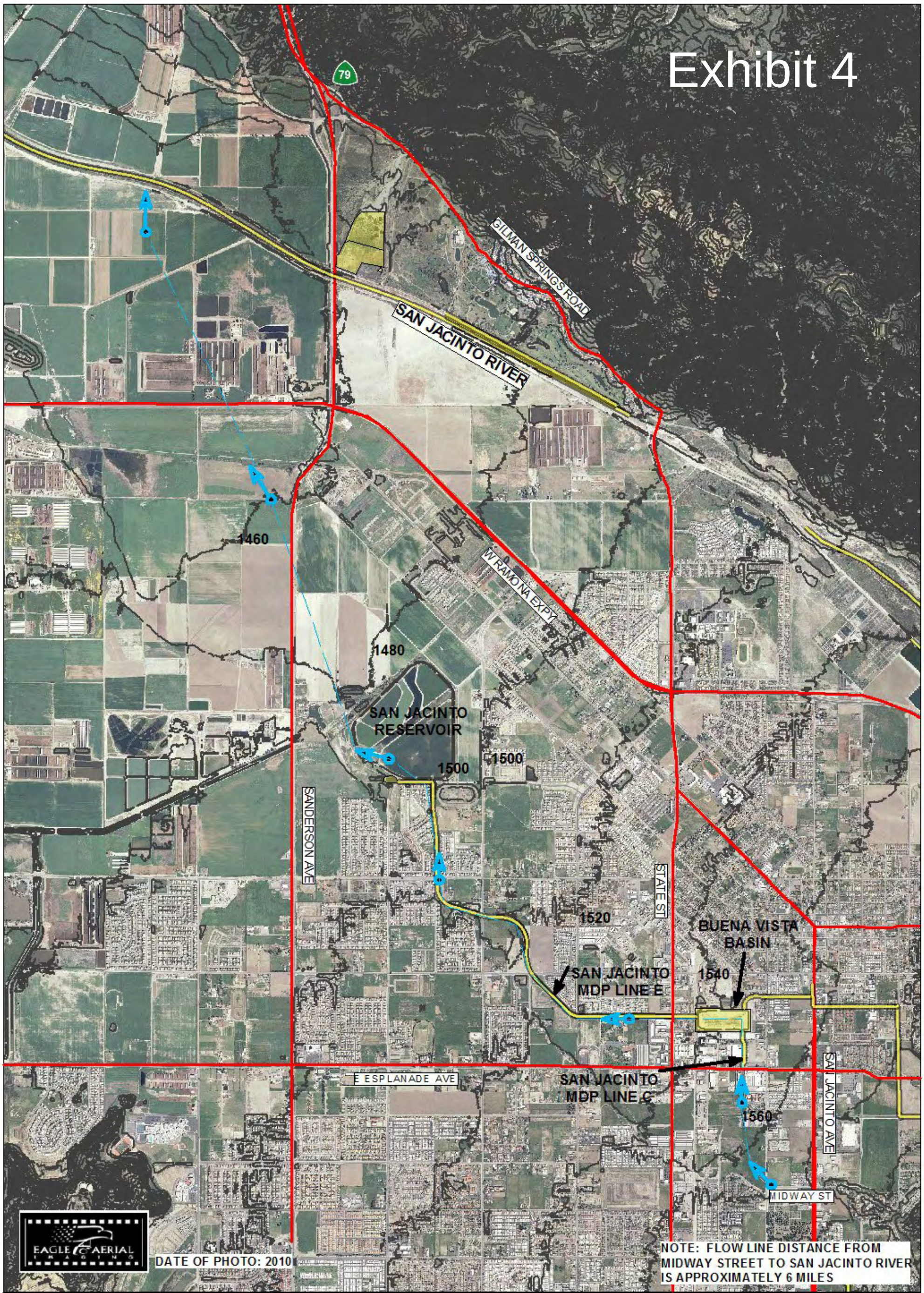
Exhibit 3 - Proposed Project

Lines C, Stage 2, C-4, C-5 and Line B
San Jacinto MDP

0 500 1,000 1,500
Feet

Albert A. WEBB Associates

Exhibit 4



RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

SAN JACINTO MDP LINES C STAGE 2, C-4, C-5, AND B

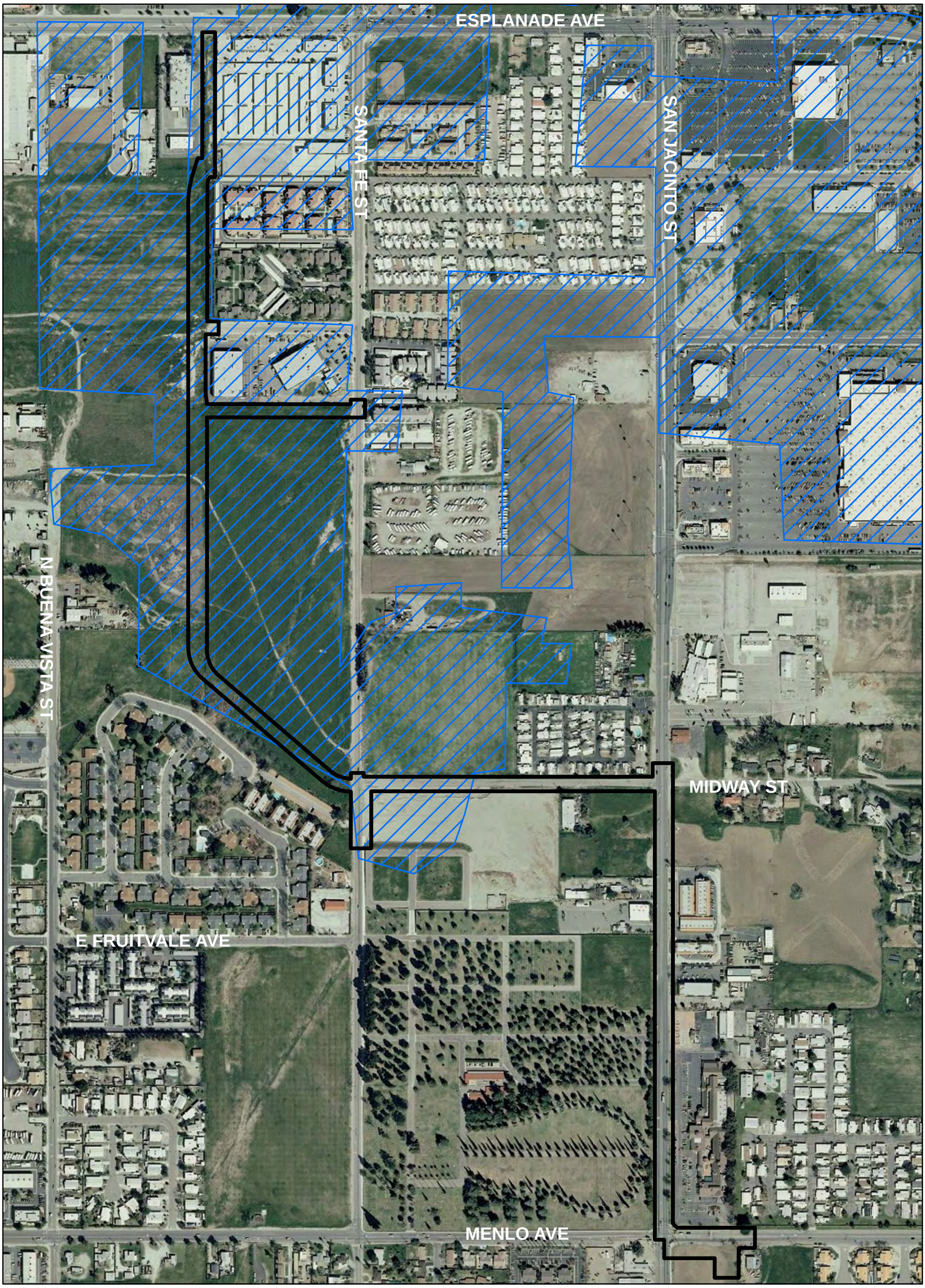
PROJECT NO. 4-0-00124

Legend

- INDEX CONTOUR
- RCFC FACILITIES ALIGNMENT
- RCFC FACILITIES AREA
- MAJOR ROADS
- GENERAL FLOW PATH

N W E S

0 1250 2500
Feet



Legend

Project Alignment

MSHCP Burrowing Owl Survey Area

N

0 200 400 800

Feet

SAN JACINTO MDP LINE C
STAGE 2, B, AND C-5 PROJECT

MSHCP Overlay Map

GLENN LUKOS ASSOCIATES

Exhibit 5

X:\0363-THE REST\0640-35MDPL\640-35_GIS\MSHCPGIS\640-35MSHCP.mxd
August 21, 2012