BIOLOGICAL TECHNICAL REPORT

FOR

THE STONERIDGE COMMERCE CENTER AND OFF SITE TRUCK ROUTE ROAD IMPROVEMENTS AND USE AREAS LOCATED BOTH NORTHERLY AND SOUTHERLY OF THE PROJECT SITE [SP00239A01]

LOCATED NEAR THE CITY OF PERRIS UNINCORPORATED RIVERSIDE COUNTY, CALIFORNIA

Prepared For:

Richland Communities
3161 Michelson Drive, Suite 425
Irvine, California 92612
Contact: Brian Hardy
Phone: (949) 698-2191

Prepared By:

Glenn Lukos Associates, Inc.
1940 E. Deere Avenue, Suite 250
Santa Ana, California 92705
Phone: (949) 987-0404
Report Preparers: Chris Waterston, Jillian Stephens, and Martin Rasnick

February 24, 2022

INFORMATION SUMMARY

A. Report Date: February 24, 2022

B. Report Title: Stoneridge Commerce Center and Off Site Truck Route Road Improvements Northerly and Southerly of the Project Site [SP00239A01]

C. Project Site Location: Latitude 33.814494, Longitude -117.165347
Unincorporated Riverside County, California

D. Owner/Applicant:
Brian Hardy
Richland Communities
Vice President, Land Entitlement
3161 Michelson Drive Suite 425, Irvine California 92621
Phone: (949) 698-2191
Email: bhardy@richlandcommunities.com

E. Principal Investigator:
Glenn Lukos Associates, Inc.
1940 E. Deere Avenue, Suite 250
Santa Ana, California 92705
Phone: (949) 837-0404
Report Preparers: Chris Waterston, Jillian Stephens

F. Individuals Conducting Fieldwork: Stephanie Cashin, Dave Moskovitz, Jillian Stephens, Zack West, Lesley Lokovic-Gamber, Chris Waterston, David Smith, Trina Ming, April Nakagawa, Jeff Ahrens, and Philippe Vergne (ENVIRA)

TABLE OF CONTENTS

Page #

TABLES

EXHIBITS

APPENDICES

1.0 INTRODUCTION

1.1 Background and Scope of Work

This document provides the results of general and focused biological surveys for the approximately 614-acre Stoneridge Commerce Center [SP00239A01] (the Project) located near the City of Perris in unincorporated Riverside County, California and its 96.69 acres of off site improvements located north/northwesterly and southerly of the Project. This report identifies and evaluates impacts to biological resources associated with the proposed Project in the context of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the California Environmental Quality Act (CEQA), and State and Federal regulations such as the federal Endangered Species Act (FESA), Clean Water Act (CWA), California Endangered Species Act (CESA), Porter-Cologne Water Quality Act (Porter-Cologne), and the California Fish and Game Code (FGC).

The scope of this report includes a discussion of existing conditions for the approximately 614-acre Project site and its off site improvement and use areas north/northwesterly and southerly of the Project site (Northerly and Southerly Off Site Road Improvement and Use Areas), all methods employed regarding the general and focused biological surveys, the documentation of botanical and wildlife resources identified (including special-status species), and an analysis of impacts to biological resources. Methods of the study include a review of relevant literature, field surveys, and a Geographical Information System (GIS)-based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

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

1.2 Project Location

The Project site comprises approximately 614 acres in unincorporated Riverside County, California [Exhibit 1 – Regional Map], consisting of seven Assessor's Parcels: 307-070-003, 307-070-004, 307-070-005, 307-090-001, 307-080-008, 307-100-004, and 307-110-008.

The Northerly and Southerly Off Site Road Improvement and Use Areas portion of the Project is contained within portions of APNs 294-210-049, 294-210-050, 294-210-059, 294-220-003, 294-220-006, 294-220-007, 294-220-019, 295-310-071, 295-310-072, 302-020-027, 302-020-028, 302-020-030, 302-020-031, 302-020-045, 302-090-021, 302-090-022, 302-090-027, 302-020-028, 303-050-003, 303-303-090-007, 303-090-036, 303-130-027, 305-030-013, 305-305-070-006,310-180-020, 310-180-024, 310-180-025, 310-180-026, 310-180-029, 310-180-043, 310-180-044, 310-190-009, 310-190-010, 310-240-010,314-153-001, 314-153-002, 314-153-009, 314-153-011, 314-153-012, 314-153-013, 314-153-014, 314-153-072, 314-153-073, 314-153-076, 314-153-077, 314-153-078, and 314-153-079 totals 96.69 acres.[1]

The Project Site is located within Sections 13, 14,16, and 23 of Township 4 South, Range 3 West, of the U.S. Geological Survey (USGS) 7.5" Perris, California topographic quadrangle map (dated 1967 and photorevised in 1979) [Exhibit 2A – Project Vicinity Map]. The Project site is bordered by Ramona Expressway to the north, open agricultural land and the San Jacinto River to the east, Nuevo Road to the south, and undeveloped land to the west [Exhibit 3 – Aerial Map].

The Northerly and Southerly Off Site Road Improvement and Use Areas are located within Sections 6, 7, 18, 22, 27, 28, 32, and 33, Township 4 South, Range 3 West, as well as Sections 19, 30, and 31 of Township 3 South and Range 3 West, Section 36 of Township 3 South and Range 4 West, and Section 31 of Township 4 South and Range 4 West of the U.S. Geological Survey (USGS) 7.5" quadrangle map Perris, California, Steele Peak, California, and Sunnymead, California) [Exhibit 2B – Northerly and Southerly Off Site Road Improvement and Use Areas Vicinity Map]. The (Northerly and Southerly Off Site Road Improvement and Use Areas consists of the off site use of Dunlap Drive, San Jacinto Avenue, Nuevo Road, and Redlands Avenue within the existing paved portion of each roadway, other than a small expansion of roadway at the intersection of Nuevo Road and Dunlap Drive, and the intersection of Dunlap Drive and San Jacinto Avenue to accommodate the use of the area for truck traffic southerly of the Project site. The northerly off site areas will consist of the use of existing roadways within the existing paved roads along Perris Boulevard from Placentia Avenue to Morgan Street, Morgan Street from Perris Boulevard to Indian Avenue, Indian Avenue from Morgan Street to Placentia Avenue, and Placentia Avenue from Indian Avenue to Perris Boulevard. One additional segment of Perris Boulevard will be utilized from just north of Iris Avenue to Harley Knox Boulevard, and Harley Knox Boulevard from Perris Boulevard to the Interstate 215 Freeway.

1.3 Project Description

The proposed Project's Environmental Impact Report (EIR) discloses two alternatives, the "Primary Land Use Plan" and the "Alternative Land Use Plan" (Exhibit 4A and 4B). For the purposes of this report, each alternative is within the same Project boundary and study area. The differences in the two land use plans are dependent on future approvals and improvements to adjacent transportation facilities by the Riverside County Transportation Commission (RCTC). The "Alternative Land Use Plan" anticipates that the "Mid-County Parkway (MCP)" would be constructed through the northwest portions of the site and merge with the existing Ramona

[1] Please note that portions of the 96.69-acre off site areas north and south of the Project site include roadway right-of-way that does not include assessor's parcel numbers or data as they are existing city general plan roads.

Expressway, as depicted on Exhibit 4B. If approved, the Project proponent would adjust the land use areas slightly, but the Project footprint and impacts to on-site and off-site areas analyzed for the purposes of this report would remain identical.

For this report, the term *Project Site* is defined as both on-site and off-site lands proposed for direct impacts and proposed reserve/open space lands that will not be impacted by the Project, which total approximately 614 acres. The term *Northerly and Southerly Off Site Road Improvement and Use Areas* refers to the proposed use of existing roadways southerly of the Project site to accommodate truck traffic, which totals 96.69 acres of off site land. The term *Burrowing Owl Survey Area* refers to the Project site and a 500-foot buffer scanned through the use of binoculars, as physical access was not granted for these areas. The Project would develop up to 512.11 acres of land (484.89 acres onsite and up to 27.22 acres of off-site infrastructure improvements) of the 614 acre Project site. A total of 97.70 acres will be undisturbed and dedicated as conservation and/or open space, as depicted in the Land Use Plan Exhibits 4A and 4B. Under the "Primary Land Use Plan", the Project Applicant is proposing to construct the Stoneridge Commerce Center to include 389.2 acres of Light Industrial land uses, 49.1 acres of Business Park land uses, 8.0 acres of Commercial Retail land uses, 37.3 acres of roadways, 17.4 acres of Open Space including parks, and 81.6 acres of dedicated Open Space including conserved habitat.

Under the "Alternative Land Use Plan", the 389.2 acre Project site would remain the same, but slight changes to the land use acreage would adjust for MCP roadway improvements. As such, the Alternative Land Use Plan would include 51.5 acres of Business Park land uses (of which 8.5 acres would be within the alignment of the MCP and would not be developed with Business Park land uses), 8.5 acres of Commercial Retail land uses (of which 0.2 acre would occur within the alignment of the MCP and would not be developed with Commercial Retail land uses), 34.4 acres of roadways, 17.4 acres of Open Space including parks, and 81.6 acres of Open Space including conserved habitat, as depicted in Exhibit 4B.

Under both of the Land Use Plan Alternatives, proposed roadway improvements to Nuevo Road would occur between the Antelope Road Extension and Pico Avenue. It should be noted that this segment of Nuevo Road would require the widening of the Nuevo Road Bridge over the San Jacinto River. Although the Nuevo Road Bridge is identified for improvement as part of the County's Transportation Uniform Mitigation Fee (TUMF) program, impacts to the San Jacinto River for the proposed bridge widening is analyzed in this report.

The Northerly and Southerly Off Site Road Improvement and Use Areas would consist of the use of existing, paved City General Plan roadways to accommodate truck traffic from the southerly/southeasterly boundary of the Project site westerly along Nuevo Road, southerly along Dunlap Drive from Nuevo Road to San Jacinto Avenue, westerly along San Jacinto Avenue to Redlands Avenue, and then southerly along Redlands Avenue until reaching the Interstate 215 Freeway (I-215 Freeway). The northern road use areas would only occur within existing, paved right-of-way and would not extend into adjacent properties beyond the existing road. These use areas would occur along Perris Boulevard from Placentia Avenue to Morgan Street, Morgan Street from Perris Boulevard to Indian Avenue, Indian Avenue from Morgan Street to Placentia Avenue, and Placentia Avenue from Indian Avenue to Perris Boulevard. One additional segment

of Perris Boulevard will be utilized from just north of Iris Avenue to Harley Knox Boulevard, and Harley Knox Boulevard from Perris Boulevard to the Interstate 215 Freeway. The use of these existing roadways to accommodate truck traffic will result in roadway improvement to approximately 0.37 acre of compacted soil within the Northerly and Southerly Off Site Road Improvement and Use Areas while the remaining 96.32 acres will not be impacted as they are already existing City General Plan roads.

For purposes of analysis, it is assumed that all Project-related truck trips would utilize the Mid-County Parkway (MCP) to access I-215, once the MCP has been constructed and is in place. However, in the event the Project is implemented prior to completion of the MCP, or in the event the MCP project is not implemented by Riverside County, then this report evaluates three different alternatives for Project-related truck access to I-15.

The first alternative (herein, "Primary Truck Route") assumes that Project-related truck traffic would utilize truck routes as identified by the City of Perris General Plan to access the I-215. Although the City of Perris General Plan and Section 10.40.020 of the City's Municipal Code show that Ramona Expressway is a designated truck route between I-215 and the eastern City boundary, City of Perris staff have indicated that Ramona Expressway is planned to be removed as a designated truck route. Accordingly, the Primary Truck Route anticipates that Project-related truck traffic would utilize Ramona Expressway only as necessary to access other designated truck routes within the City of Perris, including Redlands Avenue, portions of Perris Boulevard, Harley Knox Boulevard, Morgan Street, Indian Avenue, and Placentia Avenue.

The second alternative (herein, "Secondary Truck Route") assumes that most Project-related truck traffic would utilize Ramona Expressway to access I-215. Although City of Perris staff have indicated that the Ramona Expressway will be eliminated as a designated truck route in the City, the City's General Plan and Municipal Code (Section 10.40.020) still identify Ramona Expressway as a designated truck route within the City. Accordingly, the Secondary Truck Route is evaluated herein because it cannot be assured that truck traffic generated by the Project would utilize the remaining designated truck routes in the City to access I-215 (as assumed under the Primary Truck Route), and because the City does not have any enforcement authority over trucks using Ramona Expressway until the City updates Section 10.40.020 of the Municipal Code to eliminate Ramona Expressway as a designated truck route.

The third alternative ("Southern Truck Route") assumes that Project-related truck trips heading south on I-215 would utilize Nuevo Road to access I-215 instead of Ramona Expressway. All Project-related truck trips that would head north on I-215 would continue to utilize Ramona Expressway to access the remaining City of Perris designated truck routes, similar to what is described above for the Primary Truck Route. Specifically, the Southern Truck Route assumes that approximately 38% of Project-related truck trips would head west along Nuevo Road, south along Dunlap Drive, and west along San Jacinto Avenue to access the I-215 at the Redlands Avenue interchange. The Southern Truck Route is identified in order to minimize the amount of Project-related truck traffic that is routed through the City of Perris.

The Project would potentially impact a total of 0.97 acre of Corps jurisdiction [0.15 acre wetland Waters of the U.S. (WoUS) and 0.82 non-wetland WoUS]; 0.991 acre of Waters of the State

(WoS) (0.15 acre wetland WoUS/WoS and 0.841 non-wetland WoS) under potential Regional Board jurisdiction; and 1.701 acres (1.411 acres of non-riparian streambed and 0.29 acre of riparian streambed) of CDFW jurisdiction. Please note that this biological report excludes the Perris Valley Storm Drain (PVSD) as this feature will not be impacted by the Project; however, the jurisdictional limits of this feature are mapped for reference on Exhibits 11E and 11G of this report, but the PVSD is not a part of the Project and not further discussed in this report.

The Northerly and Southerly Off Site Road Improvement and Use Areas would not result in an impact to Corps jurisdiction as the drainage feature in question within this study area is a roadside ditch which would be considered non-jurisdictional pursuant to the Corps' regulations. Permanent impact to Regional Board jurisdiction would total approximately 0.01 acre of ephemeral WoS and 285 linear feet of streambed. Impacts to CDFW jurisdiction would also total 0.01 acre of non-riparian streambed and 285 linear feet of stream.

For the analysis within this report, all features that qualify as CDFW jurisdiction are considered MSHCP riparian/riverine resources.

Refer to Section 4.9 below for a discussion of Jurisdictional Waters and Exhibits 11A-G (Jurisdictional Maps, Project Site [Exhibits 11A-D] and Northerly and Southerly Off Site Road Improvement and Use Areas [Exhibits 11E-G]).

1.4 Relationship of the Project Site and Northerly and Southerly Off Site Road Improvement and Use Areas to the MSHCP

1.4.1 MSHCP Background

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

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

The Covered Species that are not yet adequately conserved have additional requirements in order for these species to ultimately be considered "adequately conserved". A number of these species have survey requirements based on a project's occurrence within a designated MSHCP Survey Area and/or based on the presence of suitable habitat. These include Narrow Endemic Plant Species (MSHCP *Volume I, Section 6.1.3*), as identified by the Narrow Endemic Plant Species Survey Areas (NEPSSA); Criteria Area Plant Species (MSHCP *Volume I, Section 6.3.2*)

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

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

1.4.2 Relationship of the Project Site and (Northerly and Southerly Off Site Road Improvement and Use Areas to the MSHCP

Project Site

The Project site is located within the Lakeview/Nuevo Area Plan of the MSHCP and is included within the MSHCP Criteria Area. Specifically, the Project site falls within or portions of Criteria Cells: 2442, 2547, 2651, 2761, 2762, 2865, 2863, and 2867 [Exhibit 5A – MSHCP Map]. The Project site is located within the MSHCP Criteria Area Plant Species Survey Area (CAPSSA), Narrow Endemic Plant Species Survey Area (NEPSSA), Mammal Survey Area for the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*; LAPM), and Burrowing Owl (*Athene cunicularia*) Survey Area [Exhibit 5B – MSHCP Survey Areas Map]. Pursuant to the MSHCP, the following CAPSSA target species must be evaluated through habitat assessments and focused surveys (if suitable habitat is present): San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri),* little mousetail (*Myosurus minimus* ssp. *apus*), and mud nama (*Nama stenocarpa*). The site occurs within or portions of NEPSSA 3. Pursuant to the MSHCP, the following target species must be evaluated through habitat assessments and focused surveys (if suitable habitat is present): Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California orcutt grass (*Orcuttia californica*), and Wright's trichocoronis

(*Trichocoronis wrightii* var. *wrightii*). The Project site is not located within the MSHCP Amphibian Survey Area, or Core and Linkage areas.

The project development footprint, minus its off-site improvements, was previously determined to be consistent with the MSHCP as part of JPR 06-08-18-01, dated September 15, 2006. This JRP required the conservation of 80 acres of land along the San Jacinto River as part of the project. A HANS determination letter, HANS 269, was also approved for the Project, dated September 18, 2006. This letter determined that the RCA concurred with the partial site conservation documented in the JPR. It is expected that amendments to the HANS and JPR may be needed to cover off-site improvements. A copy of the HANS determination letter is attached as Exhibit 13 and a copy of the JPR approval letter is attached as Exhibit 14.

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.

Northerly and Southerly Off Site Road Improvement and Use Areas

A majority of the Northerly and Southerly Off Site Road Improvement and Use Areas is located within existing roadway right-of-way for City General Plan Roads covered under the MSHCP. These roadways include Perris Boulevard, Indian Avenue, Morgan Street, Placentia Avenue, Harley Knox Boulevard, Nuevo Road, Dunlap Drive, San Jacinto Avenue, and Redlands Avenue. Portions of the off site areas are located within the Lakeview/Nuevo Area Plan and the Reche Canyon/Badlands Area Plan. Other portions of the Northerly and Southerly Off Site Road Improvement and Use Areas are located within the Mead Valley Area Plan of the MSHCP and are included within the MSHCP Criteria Area. Specifically, the site falls within portions of Criteria Cells: 2969 and 3069 in Cell Group G [Exhibit 5C – MSHCP Map]. Portions of the site are located within the MSHCP Criteria Area Plant Species Survey Area (CAPSSA), Narrow Endemic Plant Species Survey Area (NEPSSA), Mammal Survey Area for the LAPM (*Perognathus longimembris brevinasus*), and Burrowing Owl (*Athene cunicularia*) Survey Area [Exhibit 5B – MSHCP Survey Areas Map]. Pursuant to the MSHCP, the following CAPSSA target species must be evaluated through habitat assessments and focused surveys (if suitable habitat is present): San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri),* little mousetail (*Myosurus minimus* ssp. *apus*), and mud nama (*Nama stenocarpa*). The site occurs within or portions of NEPSSA 3 and 10. Pursuant to the MSHCP, the following target species must be evaluated through habitat assessments and focused surveys (if suitable habitat is present): Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*),

California orcutt grass (*Orcuttia californica*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), Hammitt's clay cress (*Sibarpsis hammittii*), many-stemmed dudleya (*Dudleya multicaulis*), and San Miguel savory (*Clinopodium chandleri*). The Project site is not located within the MSHCP Amphibian Survey Area, or Core and Linkage areas.

The Project development footprint, minus its off-site improvements, was previously determined to be consistent with the MSHCP as part of JPR 06-08-18-01, dated September 15, 2006. This JRP required the conservation of 80 acres of land along the San Jacinto River as part of the project. A HANS determination letter, HANS 269, was also approved for the Project, dated September 18, 2006. This letter determined that the RCA concurred with the partial site conservation documented in the JPR. It is expected that amendments to the HANS and/or JPR may be needed to cover off-site improvements. A copy of the HANS determination letter is attached as Exhibit 13 and a copy of the JPR approval letter is attached as Exhibit 14.

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

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

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

The focus of the biological surveys was determined through initial site reconnaissance, a review of the CNDDB [CDFW 2019 and 2020], CNPS 8th edition online inventory (CNPS 2019 and 2020), Natural Resource Conservation Service soil data (NRCS 2020), MSHCP species and habitat maps and sensitive soil maps (Dudek 2003), other pertinent literature, and knowledge of

the region. Site-specific general surveys within the Project site were conducted on foot in the proposed development areas for each target plant or animal species identified below as well as in the avoided open space (i.e., 500-foot buffer for burrowing owl). Table 2-1 provides a summary list of survey dates, survey types, and personnel.

Table 2-1. Summary of Biological Surveys for the Project Site and Northerly and Southerly Off Site Road Improvement and Use Areas

Survey Type	Survey Dates	Biologist(s)
General Biological Survey	3/8/2019 Off Site Survey on 04/21/2021	SC, JS, ZW CW, AN
Evaluation of MSHCP Riparian/Riverine Areas	On Site 3/8/2019 Off Site 04/20/2021	DM, ZW LLG
Evaluation of MSHCP Vernal Pools and Fairy Shrimp Habitat	3/8/2019 Off Site 04/20/2021	DM, ZW LLG
Delineation of Federal and State Jurisdictional Waters	11/12/19 and 9/3/2020 Off Site 04/20/2021	DM, ZW, LLG, CW LLG
Focused Surveys for Rare Plants (On-site)	3/26, 4/25, 5/28, 6/5, and 6/27 2019	SC, JS, DM, ZW
Focused Surveys for Rare Plants (Off-site)	3/3 and 4/7/2020 and 04/21/2021	DM, CW
Focused Surveys for MSHCP Mammals	6/27-7/5/2020 Off Site Habitat Assessment 08/01/2021	PV
Focused Burrowing Owl Surveys (On-site)*	8/12, 8/15, 8/16, 8/19, 8/20, 8/21, 8/22, 8/23, and 8/26 2019	TM, AN, JS, DS, JA
Focused Burrowing Owl Surveys (Off-site)**	5/14, 6/11, 6/25, and 7/8 2020 and 04/06, 04/21, 05/06, and 05/12/2021	AN, CW

SC = Stephanie Cashin, DM = Dave Moskovitz, JS = Jillian Stephens, ZW = Zack West, LLG = Lesley Lokovic-Gamber, CW = Chris Waterston, PV = Philippe Vergne (ENVIRA) DS= David Smith, TM = Trina Ming, AN = April Nakagawa JA = Jeff Ahrens

*Onsite BUOW Surveys consisted of Polygons 1-7 each less than 100 acres

**Offsite BUOW Surveys consisted of multiple areas less than 100 acres in total

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

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

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

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

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

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

2.1 Botanical Resources

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

2.1.1 Literature Search

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

- California Native Plant Society, Rare Plant Program. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39) (CNPS 2020); and

- CNDDB for the USGS 7.5' Perris, California quadrangle and surrounding quadrangles (CDFW 2020).

2.1.2 Vegetation Mapping

Vegetation communities within the Project site and Northerly and Southerly Off Site Road Improvement and Use Areas were mapped according to Holland (1986) when possible. Plant communities were mapped in the field directly onto a 200-scale (1"=200') aerial photograph. A vegetation map for the Project site is included as Exhibit 9A – Vegetation Map, Project Site, and Exhibit 9B, Vegetation Map-Northerly and Southerly Off Site Road Improvement and Use Areas. Representative site photographs are included as [Exhibit 12 – Site Photographs].

2.1.3 Special-Status Plant Species and Habitats Evaluated for the Project Site and Northerly and Southerly Off Site Road Improvement and Use Areas

Project Site

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

The Project is located within a NEPSSA and CAPSSA. Pursuant to the MSHCP, the following target species must be evaluated through habitat assessments and focused surveys (if suitable habitat is present): Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, Wright's trichocoronis, San Jacinto Valley crownscale, Parish's brittlescale, Davidson's saltscale, thread-leaved brodiaea, round-leaved filaree, smooth tarplant, Coulter's goldfields, little mousetail, and mud nama.

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

Northerly and Southerly Off Site Road Improvement and Use Areas

A literature search was conducted to obtain a list of special-status plants with the potential to occur within the Northerly and Southerly Off Site Road Improvement and Use Areas. The CNDDB was initially consulted to determine well-known occurrences of plants and habitats of special concern in the region. Other sources used to develop a list of target species for the survey program included the CNPS online inventory (2021) and the MSHCP (Dudek 2003).

Portions of the Northerly and Southerly Off Site Road Improvement and Use Areas are located within the MSHCP CAPSSA and NEPSSA [Exhibit 5C – MSHCP Survey Areas Map, Northerly and Southerly Off Site Road Improvement and Use Areas].

Pursuant to the MSHCP, the following CAPSSA target species must be evaluated through habitat assessments and focused surveys (if suitable habitat is present): San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri),* little mousetail (*Myosurus minimus* ssp. *apus*), and mud nama (*Nama stenocarpa*).

The site occurs within or portions of NEPSSA 3 and 10. Pursuant to the MSHCP, the following target species must be evaluated through habitat assessments and focused surveys (if suitable habitat is present): Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California orcutt grass (*Orcuttia californica*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), Hammitt's clay cress (*Sibarpsis hammittii*), many-stemmed dudleya (*Dudleya multicaulis*), and San Miguel savory (*Clinopodium chandleri*).

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

2.1.4 Botanical Surveys

GLA biologists visited the Project site on 3/26, 4/25, 5/28, 6/5, 6/27/2019, 3/3 and 4/7/2020 to conduct general and focused plant surveys. The Northerly and Southerly Off Site Road Improvement and Use Areas was reviewed on 04/21/2021. Surveys were conducted in accordance with accepted botanical survey guidelines (CDFG 2009, CNPS 2001, USFWS 2000). As applicable, survey(s) were conducted at appropriate times based on precipitation and flowering periods. An aerial photograph, a soil map, and/or a topographic map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Project site. Survey(s) were conducted by following meandering transects within target areas of suitable habitat. All plant species encountered during the field survey(s) were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984). A complete list of the plant species observed is provided in Appendix A. Scientific nomenclature and common names used in this report follow Baldwin et al (2012), and Munz (1974).

2.2 Wildlife Resources

Wildlife species were evaluated and detected during the field survey(s) by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project site and Northerly and Southerly Off Site Road Improvement and Use Areas by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit(s). A complete list of wildlife species observed within the Project site is provided in Appendix B. Scientific nomenclature and common names for vertebrate species referred to in this report follow the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFG 2008), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians 6th Edition, Collins and Taggert (2009) for amphibians and reptiles, and the American Ornithologists' Union Checklist 7th Edition (2009) for birds. The methodology (including any

applicable survey protocols) utilized to conduct general survey(s), habitat assessment(s), and/or focused surveys for special-status animals are included below.

2.2.1 General Surveys

Birds

During the general biological and reconnaissance survey within the Project site and Northerly and Southerly Off Site Road Improvement and Use Areas, birds were identified incidentally within each habitat type. Birds were detected by both direct observation and by vocalizations and were recorded in field notes.

Mammals

During general and focused surveys within the Project site and Northerly and Southerly Off Site Road Improvement and Use Areas, mammals were detected both by direct observations and by the presence of diagnostic sign (i.e. tracks, burrows, scat, etc.).

Reptiles and Amphibians

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

2.2.2 Special-Status Animal Species Evaluated for the Project Site and (Northerly and Southerly Off Site Road Improvement and Use Areas

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

2.2.3 Habitat Assessment for Special-Status Animal Species

GLA biologists conducted habitat assessments for special-status animal species on 3/8/2019, April 21, 2021, and August 1, 2021 . An aerial photograph, soil map and/or topographic map were used to determine the community types and other physical features that may support

special-status and uncommon taxa within the Project site and/or the Northerly and Southerly Off Site Road Improvement and Use Areas.

2.2.4 Focused Surveys for Special-Status Animals Species

Burrowing Owl

Project Site

Portions of the Project site are located within the MSHCP Survey Area for the burrowing owl. GLA biologists conducted focused surveys for the burrowing owl for all suitable habitat areas within the Project site. Surveys were conducted in accordance with survey guidelines described in the 2006 MSHCP Burrowing Owl Survey Instructions. The guidelines stipulate that four focused survey visits be conducted on separate dates between March 1 and August 31. Within areas of suitable habitat, the MSHCP first requires a focused burrow survey to map all potentially suitable burrows. The focused burrow survey was conducted on 8/12 and 8/15/2019. Focused burrowing owl surveys were conducted on 8/12, 8/15, 8/16, 8/19, 8/20, 8/21, 8/22, 8/23, and 8/26/2019 for the seven (7) on-site survey polygons and on 5/14, 6/11, 6/25, and 7/8/2020 for the off-site areas. Per the MSHCP burrowing owl survey instructions, burrowing owl survey visits were conducted from one hour prior to sunrise to two hours after sunrise or two hours before sunset to one hour after sunset.

Both the burrow and owl surveys were conducted during weather that was conducive to observing owls outside their burrows and detecting burrowing owl sign and not during rain, high winds (> 20 mph), dense fog, or temperatures over 90°F. Additionally, all work was performed more than 5 days after a rain event. Refer to Table 2-1 in Section 2.0 for survey condition details.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Exhibit 6A identifies the Burrowing Owl Survey Areas at the Project site. Transects were spaced no further than 30 meters (98.4 feet) apart, adjusting for vegetation height and density, in order to provide adequate visual coverage of the survey areas. At the start of each transect, and at least every 320 feet along transects, the survey area was scanned for burrowing owls using binoculars. All suitable burrows were inspected for diagnostic owl sign (e.g., pellets, prey remains, whitewash, feathers, bones, and/or decoration) in order to identify potentially occupied burrows. An area associated with the off-site improvements occurred on private lands south of Nuevo Road and access was not feasible, therefore the biologist scanned the area with binoculars. Table 2-2 summarizes the burrowing owl survey visits. The results of the burrowing owl surveys are documented in Section 4.0 of this report.

Table 2-2. Summary of Burrowing Owl Surveys

Survey Date	Biologist(s)	Polygon #	Start/End Time	Start/End Temperature (°F)	Start/End Wind Speed (mph)	Start/End Cloud Cover (%)
8/12/2019	TM, AN, JS, DS,	1,2,3,4	0605/0830	57/68	0/1	0
8/15/2019	TM, DS, JS	5,6,7	0610/0850	56/81	0	0
8/16/2019	TM	1	0600/0905	61/72	0/1	0
8/19/2019	TM, AN, DS,	2,3,4	0605/0845	55/73	0/1	0
8/20/2019	JA, AN, DS,	5,6,7	0545/0850	61/75	0/1	0
8/21/2019	JA, AN, DS	1,2,3	0550/0845	59/75	0/0	0
8/22/2019	JA, DS, JS, TM	4,5,6,7	0600/0900	61/68	0	0
8/23/2019	JA, AN, DS	1,2,3	0545/0830	57/63	0/3	0
8/26/2019	JA, TM, AN, DS	4,5,6,7	0550/0850	70/80	0	0
5/14/2020	CW	Offsite	0550/0815	62/68	0/3	50/10
6/11/2020	CW	Offsite	0600/0830	68/73	2/3	0
6/25/2020	CW	Offsite	0600/0835	63/75	1/3	100/50
7/8/2020	CW	Offsite	0550/0815	71/76	1/5	0

JS = Jillian Stephens, CW = Chris Waterston, DS= David Smith, TM = Trina Ming, AN = April Nakagawa, JA = Jeff Ahrens
*On-site BUOW Surveys consisted of seven survey polygons, each less than 100 acres.
**Off-site BUOW Surveys consisted of multiple areas less than 100 acres in total.

Northerly and Southerly Off Site Road Improvement and Use Areas

Portions of the (Northerly and Southerly Off Site Road Improvement and Use Areas are located within the MSHCP Survey Area for the burrowing owl. GLA biologists conducted focused surveys for the burrowing owl for all suitable habitat areas within the (Northerly and Southerly Off Site Road Improvement and Use Areas. Surveys were conducted in accordance with survey guidelines described in the 2006 MSHCP Burrowing Owl Survey Instructions. The guidelines stipulate that four focused survey visits be conducted on separate dates between March 1 and August 31. Within areas of suitable habitat, the MSHCP first requires a focused burrow survey to map all potentially suitable burrows. The focused burrow survey was conducted on 04/08/2021. Focused burrowing owl surveys were conducted on 04/08, 04/21, 05/06, and 05/12/2021. Per the MSHCP burrowing owl survey instructions, burrowing owl survey visits were conducted from one hour prior to sunrise to two hours after sunrise or two hours before sunset to one hour after sunset.

Both the burrow and owl surveys were conducted during weather that was conducive to observing owls outside their burrows and detecting burrowing owl sign and not during rain, high winds (> 20 mph), dense fog, or temperatures over 90°F. Additionally, all work was performed more than 5 days after a rain event. Refer to Table 2-1 in Section 2.0 for survey condition details.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Exhibit 6B identifies the Burrowing Owl Survey Areas at the Northerly and Southerly Off Site Road Improvement and Use Areas. Transects were spaced no further than 30 meters (98.4 feet)

apart, adjusting for vegetation height and density, in order to provide adequate visual coverage of the survey areas. At the start of each transect, and at least every 320 feet along transects, the survey area was scanned for burrowing owls using binoculars. All suitable burrows were inspected for diagnostic owl sign (e.g., pellets, prey remains, whitewash, feathers, bones, and/or decoration) in order to identify potentially occupied burrows. An area associated with the off-site improvements occurred on private lands south of Nuevo Road and access was not feasible, therefore the biologist scanned the area with binoculars. Table 2-3 summarizes the burrowing owl survey visits. The results of the burrowing owl surveys are documented in Section 4.0 of this report.

Table 2-3. Summary of Burrowing Owl Surveys, Northerly and Southerly Off Site Road Improvement and Use Areas

Survey Date	Biologist(s)	Polygon #	Start/End Time	Start/End Temperature (°F)	Start/End Wind Speed (mph)	Start/End Cloud Cover (%)
04/08/2021	AN/CW	Offsite	0630/0830	54/63	1/2	15
04/21/2021	AN/CW	Offsite	0630/0830	48/54	5/6	100
05/06/2021	CW	Offsite	0620/0830	58/60	1/2	100
05/12/2021	**AN**	Offsite	0600/0815	59/62	1/2	100

JS = Jillian Stephens, CW = Chris Waterston, DS= David Smith, TM = Trina Ming, AN = April Nakagawa, JA = Jeff Ahrens
*On-site BUOW Surveys consisted of seven survey polygons, each less than 100 acres.
**Off-site BUOW Surveys consisted of multiple areas less than 100 acres in total.

Los Angeles Pocket Mouse

Project Site

Portions of the Project site are located within the MSHCP Mammal Survey Area for the LAPM. ENVIRA biologist Philippe Vergne performed focused-level surveys for the LAPM in accordance with the MSHCP survey guidelines. The guidelines stipulate that a qualified biologist with a Memorandum of Understanding (MOU) with CDFW will perform a habitat assessment on foot to determine the distribution of suitable habitat for LAPM within the Project site. Within suitable habitat, a live-trapping program will be conducted over five (5) consecutive nights by the qualified biologist between May 1 and September 15. The trapping program at a given site will be terminated if an LAPM is trapped prior to the fifth night. If more than one site is present in a project area, trapping would continue up to five nights in areas where LAPM have not yet been trapped. Traps shall be checked at least twice per night, once near midnight and again close to sunrise. Trapping will be conducted under mild weather conditions, with minimum temperatures than 50 degrees Fahrenheit and atmospheric conditions relatively dry, and calm. Trapping shall not be conducted in extended periods of rain, wind, or fog that may jeopardize the survival of LAPM. All traps shall be 9- or 12-inch Sherman live traps or traps of similar design and efficiency.

Trapping lines of 20 traps were set at trapping areas 1 through 27 (See Exhibit 7 – Small Mammal Survey Results and Appendix C-1 – LAPM Trapping Report). Traps were placed in suitable habitat areas on the project, concentrating on locating traps in areas containing sandy soils, small

mammal sign, and open vegetation. Distance between traps varied according to sign from 5 to 12 meters (6.4 to 39 feet) apart. Each trap was baited with a mixture of bird seed and rolled oats placed at the back of the traps. The traps were left in place, set at dusk each night and inspected once during the night and at dawn each morning. All animals were identified and released at the point of capture. LAPM were passively marked with magic marker. The traps on each line with an LAPM capture were moved post capture to another trapping area within the project boundary. Notes and photographs were taken on the habitat conditions where the traps were placed. The weather conditions at the time of the trapping studies were also noted. Table 2-4 below summarizes the LAPM survey visits.

Table 2-4 Summary of Los Angeles Pocket Mouse Surveys

Day	Biologist	Night Temp F.	Morning Temp F.	Cloud Cover %	Wind MPH
6/28/2020	**PV**	**56**	**54**	**0 Clear**	**0**
6/29/2020	**PV**	**55**	**54**	**0 Clear**	**0**
6/30/2020	**PV**	**57**	**55**	**0 Clear**	**0-2**
7/1/2020	**PV**	**54**	**54**	**0 Clear**	**0-2**
7/2/2020	**PV**	**57**	**56**	**0 Clear**	**0**
7/3/2020	**PV**	**58**	**58**	**0 Clear**	**0**
7/4/2020	**PV**	**55**	**54**	**0 Clear**	**0**
7/5/2020	**PV**	**57**	**55**	**0 Clear**	**0**

PV = Philippe Vergne

Northerly and Southerly Off Site Road Improvement and Use Areas

Portions of the Northerly and Southerly Off Site Road Improvement and Use Areas are located within the MSHCP Mammal Survey Area for the LAPM. ENVIRA biologist Philippe Vergne conducted a habitat assessment for the LAPM in accordance with the MSHCP guidelines. The guidelines stipulate that a qualified biologist with a Memorandum of Understanding (MOU) with CDFW will perform a habitat assessment on foot to determine the distribution of suitable habitat for LAPM within the Project site. Within suitable habitat, a live-trapping program will be conducted over five (5) consecutive nights by the qualified biologist between May 1 and September 15. The trapping program at a given site will be terminated if an LAPM is trapped prior to the fifth night. If more than one site is present in a project area, trapping would continue up to five nights in areas where LAPM have not yet been trapped. Traps shall be checked at least twice per night, once near midnight and again close to sunrise. Trapping will be conducted under mild weather conditions, with minimum temperatures than 50 degrees Fahrenheit and atmospheric conditions relatively dry, and calm. Trapping shall not be conducted in extended periods of rain, wind, or fog that may jeopardize the survival of LAPM. All traps shall be 9- or 12-inch Sherman live traps or traps of similar design and efficiency.

2.3 Jurisdictional Waters

The Project site and the Northerly and Southerly Off Site Road Improvement and Use Areas were delineated to identify the limits of jurisdictional waters, including waters of the U.S. (including wetlands) subject to the jurisdiction of the Corps and Regional Board, and waters of the State (including riparian vegetation) subject to the jurisdiction of CDFW and the Regional Board. Prior to beginning the field delineation, a 200-scale color aerial photograph and the

previously cited USGS topographic maps were examined to determine the locations of potential areas of Corps/CDFW/Regional Board jurisdiction. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Potential wetland habitats at the subject site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual[2] (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement)[3]. The presence of an Ordinary High Water Mark (OHWM) was determined using the 2008 Field Guide to Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States[4] in conjunction with the Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.[5] While in the field the limits of the OHWM, wetlands (if applicable), and CDFW jurisdiction were recorded using GPS technology and/or on copies of the aerial photography. Other data were recorded onto the appropriate datasheets.

2.4 MSHCP Riparian/Riverine Areas and Vernal Pools

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

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

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

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[2] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

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

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

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

demonstrating characteristics as described above which are artificially created are not included in these definitions.

GLA surveyed the Project site and the Northerly and Southerly Off Site Road Improvement and Use Areas for riparian/riverine areas and vernal pool/seasonal pool habitat, including features with the potential to support fairy shrimp. To assess for vernal/seasonal pools (including fairy shrimp habitat), GLA biologists evaluated the topography of the site, including whether the site contained depressional features/topography with the potential to become inundated; whether the site contained soils associated with vernal/seasonal pools; and whether the site supported plants that suggested areas of localized ponding. The site was evaluated during the rainfall season on April 20, 2021.

3.0 REGULATORY SETTING

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

3.1 Endangered Species Acts

A. California Endangered Species Act

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

Article 3, Sections 2080 through 2085 of the CESA addresses the taking of threatened, endangered, or candidate species by stating "No person shall import into this state, export out of

this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

B. Federal Endangered Species Act

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

C. State and Federal Take Authorizations

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

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).

- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.

- Sections 2090-2097 of the CESA require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

D. Take Authorizations Pursuant to the MSHCP

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

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

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

3.2 California Environmental Quality Act

A. CEQA Guidelines Section 15380

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

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

Federally Designated Special-Status Species

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

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

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

State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC are designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's 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
- SFP State Fully Protected
- SP State Protected
- SSC State Species of Special Concern

California Native Plant Society

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

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

CNPS Rank	Comments
Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere	Thought to be extinct in California based on a lack of observation or detection for many years.
Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere	Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.
Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere	Species that are presumed extinct in California but more common outside of California
Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere	Species that are rare in California but more common outside of California
Rank 3 – Plants About Which More Information Is Needed (A Review List)	Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.

CNPS Rank	Comments
Rank 4 – Plants of Limited Distribution (A Watch List)	Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the "Inventory" and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.
Extension	**Comments**
.1 – Seriously endangered in California	Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.
.2 – Fairly endangered in California	Species with 20-80% of occurrences threatened.
.3 – Not very endangered in California	Species with <20% of occurrences threatened or with no current threats known.

3.3 Jurisdictional Waters

3.3.1 Army Corps of Engineers

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

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(2) All interstate waters including interstate wetlands;
(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:
(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or
(iii) Which are used or could be used for industrial purpose by industries in interstate commerce...
(4) All impoundments of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;
(6) The territorial seas;
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.

(8) Waters of the United States do not include prior converted cropland.[6] Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The agencies will assert jurisdiction over the following waters:

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

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

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

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

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow)

- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies will apply the significant nexus standard as follows:

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

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

The term "wetlands" (a subset of "waters of the United States") is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List[7][8]);

- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

[7] Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. Arid West 2016 Regional Wetland Plant List. Phytoneuron 2016-30: 1-17. Published 28 April 2016.

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

B. Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States[9] and waters of the State. Waters of the United States are defined above in Section II.A and waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code 13050[e]).

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

1. State Wetland Definition

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

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;*[10] *and*
3. *Artificial wetlands*[11] *that meet any of the following criteria:*

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

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

[11] Artificial wetlands are wetlands that result from human activity.

a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
b. Specifically identified in a water quality control plan as a wetland or other water of the state;
c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

i. Industrial or municipal wastewater treatment or disposal,
ii. Settling of sediment,
iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
iv. Treatment of surface waters,
v. Agricultural crop irrigation or stock watering,
vi. Fire suppression,
vii. Industrial processing or cooling,
viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
ix. Log storage,
x. Treatment, storage, or distribution of recycled water, or
xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
xii. Fields flooded for rice growing.[12]

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

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

3.3.3 California Department of Fish and Wildlife

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

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

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

4.0 RESULTS

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

4.1 Existing Conditions

Project Site

The Project site occurs between Ramona Expressway to the north and Nuevo Road to the south; the San Jacinto River, River Park Mitigation Bank, and agricultural land occur to the east; and undeveloped land occurs to the west, with existing residential development beyond. Based on historical aerial photography dating back to the 1960s, the Project site has been developed for agricultural uses resulting in extensive ground disturbances and hydrologic alterations. Existing conditions have varied over the last few years as the northern half of the Project site has mainly been utilized for agriculture, while the southern half is maintained by regular mowing and disking. The topography within the Project site slopes downward from the northwest to southeast from 1,660 feet (560 meters) to 1,420 feet (432 meters) above mean sea level (amsl). Soils on-site include a majority of sandy loam to course loam soils including Greenfield sandy

loam, Hanford course sandy loam, and Ramona sandy loam. Smaller areas of silty clay and Riverwash soils occur within the eastern and southeastern Project boundaries and are associated with the San Jacinto River historic flood plain. A depiction of soils found throughout the Project site can be found on Exhibit 8A - Soils Map, Project Site. Due to the decades of agriculture practices and disturbances throughout the Project site, hydrology has been modified as a result. However, the topography conveys storm flows in a general west to east direction, depending on rainfall amounts, through the site towards the San Jacinto River channel. A portion of the San Jacinto River occurs within the southeastern Project boundary and is an ephemeral-to-intermittent drainage, only flowing directly following storm events, and with the discharge of municipal water for groundwater recharge, flowing in a southwesterly direction through the southeastern portion of the Project site and under the Nuevo Road Bridge adjacent to Eastern Municipal Water District (EMWD) Property.

No other blue-line drainages occur within the Study area, but the Project site does support non-riparian earthen ephemeral drainages. Refer to Section 4.10 for additional details.

Northerly and Southerly Off Site Road Improvement and Use Areas

The Southerly Off Site Area consists of Dunlap Drive to the east, San Jacinto Avenue to the south, Nuevo Road to the north, and Redlands Avenue to the west within the existing paved portion of each roadway, other than a small expansion of roadway at the intersection of Nuevo Road and Dunlap Drive, and the intersection of Dunlap Drive and San Jacinto Avenue to accommodate the use of the area for truck traffic southerly of the Project site.

Based on historical aerial photography dating back to the 1960s, the Project site consists of paved roadways. Soils within the Project site and the Northerly and Southerly Off Site Road Improvement and Use Areas consist of the following:

- Arlington fine sandy loam, deep, 2 to 8 percent slopes (AoC)
- Cieneba sandy loam, 8 to 15 percent slopes, eroded (ChD2);
- Cieneba rocky sandy loam, 8 to 15 percent slopes, eroded (CkD2);
- Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded (CkF2);
- Domino fine sandy loam, saline-alkali (Dt);
- Domino silt loam, saline-alkali (Dv);
- Domino silt loam, strongly saline-alkali (Dw);
- Exeter sandy loam, 0 to 2 percent slopes (EnA);
- Exeter sandy loam, 2 to 8 percent slopes, eroded (EnC2);
- Exeter sandy loam, deep, 0 to 2 percent slopes (EpA);
- Exeter sandy loam, deep, 2 to 8 percent slopes, eroded (EpC2);
- Exeter very fine sandy loam, 0 to 5 percent slopes (EwB);
- Exeter very fine sandy loam, deep, 0 to 5 percent slopes (EyB);
- Fallbrook sandy loam, 8 to 15 percent slopes, eroded (FaD2);
- Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded (FfC2);
- Greenfield sandy loam, 0 to 2 percent slopes (GyA);
- Greenfield sandy loam, 2 to 8 percent slopes, eroded (GyC2);

- Hanford coarse sandy loam, 0 to 2 percent slopes (HcA);
- Hanford coarse sandy loam, 2 to 8 percent slopes (HcC);
- Hanford coarse sandy loam, 8 to 15 percent slopes, eroded (HcD2);
- Hanford fine sandy loam, 0 to 2 percent slopes (HgA);
- Monserate sandy loam, 8 to 15 percent slopes, eroded (MmD2);
- Pachappa fine sandy loam, 0 to 2 percent slopes (PaA);
- Pachappa fine sandy loam, 2 to 8 percent slopes, eroded (PaC2);
- Ramona sandy loam, 0 to 2 percent slopes (RaA);
- Ramona sandy loam, 0 to 5 percent slopes, severely eroded (RaB3)
- Ramona sandy loam, 5 to 8 percent slopes, eroded (RaC2);
- Ramona very fine sandy loam, 0 to 8 percent slopes, eroded (ReC2);
- Riverwash (RsC);
- Traver loamy find sand, eroded (Tp2);
- Vista coarse sandy loam, 8 to 15 percent slopes, eroded (VsD2);
- Vista rocky coarse sandy loam, 2 to 35 percent slopes, eroded (VtF2);
- Water (W);
- Willows silty clay (Wf);
- Willows silty clay, saline-alkali (Wg);
- Willows silty clay, strongly saline-alkali (Wh); and
- Willows silty clay, deep, strongly saline-alkali (Wn).

A depiction of soils found throughout the Northerly and Southerly Off Site Road Improvement and Use Areas can be found on Exhibit 8B - Soils Map, Northerly and Southerly Off Site Road Improvement and Use Areas. The eastern boundary of the Northerly and Southerly Off Site Road Improvement and Use Areas contains a roadside ditch adjacent to Dunlap Drive. This feature only flows directly following storm events.

No blue-line drainage occurs within the Northerly and Southerly Off Site Road Improvement and Use Areas. Refer to Section 4.10 for additional details.

4.2 Vegetation Mapping

Project Site

The Project site supports the following vegetation/land cover types: agriculture, disturbed alkali playa, disturbed/developed, non-native grassland, ornamental, Riversidean sage scrub, ruderal, and southern riparian scrub. Table 4-1 provides a summary of the vegetation/land cover types and their corresponding acreage. Descriptions of each vegetation/land cover type follow the table. A Vegetation Map is attached as Exhibit 9A. Photographs depicting the Project site are shown in Exhibit 12.

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

VEGETATION/LAND USE TYPE	PROJECT SITE (acres)
Agriculture	176.82
Disturbed Alkali Playa	21.30
Disturbed/Developed	21.19
Non-Native Grassland	2.92
Ornamental	0.97
Riversidean Sage Scrub	26.36
Ruderal	362.82
Southern Riparian Scrub	1.50
Total	**613.89**

Agriculture

The Project site supports 176.82 acres of active agriculture in the northeastern portion of the Project site. During the September 2020 site visit, GLA biologists observed an actively cultivated watermelon (*Citrullus lanatus*) field being actively managed on the Project site. Agriculture practices have been noted on the Project site historically and are subject to varying crop types and acreages. Refer to Table 5-1: Summary of Vegetation/Land Use Impacts below for a summary of the land use impact acreage.

Disturbed Alkali Playa

The Project site supports 21.30 acres of disturbed alkali playa, with the largest area occurring along the northeastern Project boundary, and several smaller patches occurring within the southern portion of the Project site. Each of these areas exhibits sign of temporary inundation and is within the historic floodplain of the San Jacinto River. The disturbed alkali playas include a mosaic of alkali adapted species including silverscale saltbush (*Atriplex argentea*), alkali weed (*Cressa truxillensis*), bush seepweed (*Suaeda nigra*), salt heliotrope (*Heliotropium curassavicum*), alkali mallow (*Malvella leprosa*), and special-status San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*; federally Endangered [FE], California Rare Plant Rank [CRPR] 1B.1) and smooth tarplant (*Centromadia pungens* ssp. *laevis*; CRPR 1B.1). However, dense patches of non-native species also occur within these areas, including foxtail barley (*Hordeum murinum*), summer mustard (*Hirschfeldia incana*), prickly lettuce (*Lactuca serriola*), saltcedar (*Tamarix ramosissima*). Native ground cover species within these areas included Jimsonweed (*Datura wrightii*) and doveweed (*Croton setiger*).

Disturbed/Developed

Approximately 21.19 acres of disturbed/developed areas occur throughout the Project site in the form of unpaved access roads, paved vehicular roads, and developed infrastructure such as the San Jacinto River levee. These areas are routinely maintained and are primarily unvegetated.

Non-Native Grasslands

The Project site contains 2.92 acres of non-native grassland in two discrete areas within the Project site. The non-native grassland areas were differentiated from the ruderal vegetation classification as they are not as routinely maintained and were allowed to develop into a functioning grassland ecosystem. Dominant species found within the non-native grassland areas were common fiddleneck (*Amsinckia menziesii*), ripgut grass (*Bromus diandrus*), red brome

(*Bromus madritensis* ssp. *rubens*), tocalote (*Centaurea melitensis*), Russian thistle (*Salsola tragus*), and barbwire Russian thistle (*Salsola australis*).

Ornamental
Approximately 0.97 acre of ornamental plantings occur along the northern portion of the Project site, associated with residential land use adjacent to proposed off-site impacts.

Riversidean Sage Scrub
Approximately 26.36 acres of Riversidean sage scrub occurs sporadically throughout the Project site, with the largest area occurring along the southwestern Project site boundary. While the majority of these areas have been disturbed due to off-road vehicles, the largest area on-site has remained primarily undisturbed due to the steepness of the terrain and large boulders that occur throughout. These areas are dominated with California buckwheat (*Eriogonum fasciculatum* var. *polifolium*), California sagebrush (*Artemisia californica*), sticky monkeyflower (*Diplacus aurantiacus*), brittlebush (*Encelia farinosa*), ripgut brome, and red brome.

Ruderal
Ruderal vegetation covers the majority of the Project site, accounting for approximately 362.82 acres. These areas are routinely disked for weed abatement, as was the case during the biological study. Dominant plant species observed included stinknet (*Oncosiphon piluliferum*), puncture vine (*Tribulus terrestris*), London rocket (*Sisymbrium irio*), red-stemmed filaree (*Erodium cicutarium*), cheeseweed (*Malva parviflora*), common fiddleneck, ripgut grass, red brome, tocalote, Russian thistle, barbwire Russian thistle, and doveweed.

Southern Riparian Scrub
The Project site supports 1.50 acres of Southern Riparian Scrub within and along the banks of the San Jacinto River, which traverses the southeastern portion of the Project site. This area is primarily dominated with riparian species including Goodding's black willow (*Salix gooddingii*), saltcedar, and mulefat (*Baccharis salicifolia*), with herbaceous species including common spikerush (*Eleocharis palustris*) and toothed dock (*Rumex dentatus*). Non-native species such as summer mustard, foxtail barley, and annual brome grasses are also dominant along the banks of the river.

The Northerly and Southerly Off Site Road Improvement and Use Areas supports the following vegetation/land cover type: disturbed/developed. Table 4-2 provides a summary of the vegetation/land cover types and their corresponding acreage. Descriptions of each vegetation/land cover type follow the table. A Vegetation Map is attached as Exhibit 9B. Photographs depicting the Project site are shown in Exhibit 12.

Table 4-2. Summary of Vegetation/Land Use Types for the Northerly and Southerly Off Site Road Improvement and Use Areas

VEGETATION/LAND USE TYPE	PROJECT SITE (acres)
Disturbed/Developed	96.69
Total	**96.69**

Disturbed/Developed
Approximately 96.69 acres of disturbed/developed areas occur throughout the Southern Off Site Area in the form of paved roads and disturbed land which is typically farmed. These areas are routinely maintained and are primarily unvegetated.

4.3 Special-Status Vegetation Communities

The CNDDB identifies the following four special-status vegetation communities for the Perris, California and surrounding quadrangle maps: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Scrub, and Southern Sycamore Alder Riparian Woodland. The Northerly and Southerly Off Site Road Improvement and Use Areas does not contain special-status vegetation types.

4.4 Special-Status Plants

As noted in Section 1.4.2, the Project site and Northerly and Southerly Off Site Road Improvement and Use Areas occur within MSHCP NEPSSA designated Survey Areas 3 and/or 10, as well as CAPSSA designated Survey Area 3; San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri),* little mousetail (*Myosurus minimus* ssp. *apus*), and mud nama (*Nama stenocarpa*), Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California orcutt grass (*Orcuttia californica*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), Hammitt's clay cress (*Sibarpsis hammittii*), and San Miguel savory (*Clinopodium chandleri*) along with other special-status plants that could cause a potential constraint to the Project under CEQA. Table 4-3 provides a list of special-status plants evaluated for the Project site through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors: 1) species identified by the CNDDB and CNPS as occurring (either currently or historically) on or in the vicinity of the Project site, 2) applicable MSHCP Survey Areas, and 3) any other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs within the site.

The following special-status plants were detected at the Project site and are described in detail following the table: Coulter's goldfields (CRPR 1B.1), San Jacinto Valley crownscale (federally -Endangered, CRPR 1B.1), smooth tarplant (CRPR 1B.1), and spreading navarretia (federally-Threatened, CRPR 1B.1). No special status plants were identified in the Northerly and Southerly Off Site Road Improvement and Use Areas.

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

Species Name	Status	Habitat Requirements	Occurrence
Buxbaum's sedge *Carex buxbaumii*	Federal: None State: None CNPS: Rank 4.2 MSHCP: None	Bogs and fens, Meadows and seeps (mesic) and marshes and swamps.	Confirmed absent.
California Orcutt grass *Orcuttia californica*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP: MSHCP(b)	Vernal pools	Confirmed absent.
California screw moss *Tortula californica*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: None	Sandy soil in chenopod scrub, and valley and foothill grassland.	Does not occur due to a lack of suitable habitat.
Chaparral ragwort *Senecio aphanactis*	Federal: None State: None CNPS: Rank 2B.2 MSHCP: None	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Confirmed absent.
Chaparral sand-verbena *Abronia villosa* var. *aurita*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: None	Sandy soils in chaparral, coastal sage scrub.	Species was confirmed absent during focused plant surveys.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Playas, vernal pools, marshes and swamps (coastal salt).	Confirmed present.
Coulter's matilija poppy *Romneya coulteri*	Federal: None State: None CNPS: Rank 4.2 MSHCP: MSHCP	Often in burns in chaparral and coastal scrub.	Confirmed absent.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Confirmed absent.
Hammitt's clay-cress *Sibaropsis hammittii*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Chaparral, Valley & foothill grassland	Confirmed absent.
Heart-leaved pitcher sage *Lepechinia cardiophylla*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Closed-cone coniferous forest, chaparral, and cismontane woodland.	Does not occur due to a lack of suitable habitat.
Intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Confirmed absent.
Jaeger's (bush) milk-vetch *Astragalus pachypus* var. *jaegeri*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP	Sandy or rocky soils in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland.	Confirmed absent.

Species Name	Status	Habitat Requirements	Occurrence
Little mousetail *Myosurus minimus* ssp. *apus*	Federal: None State: None CNPS: Rank 3.1 MSHCP: MSHCP(d)	Valley and foothill grassland, vernal pools (alkaline soils).	Confirmed absent.
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands	Does not occur due to a lack of suitable soils within Riversidean sage scrub vegetation.
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur due to a lack of suitable soils within Riversidean sage scrub vegetation.
Marsh sandwort *Arenaria paludicola*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP: None	Bogs and fens, freshwater marshes and swamps.	Confirmed absent.
Mud nama *Nama stenocarpum*	Federal: None State: None CNPS: Rank 2B.2 MSHCP: MSHCP(d)	Marshes and swamps	Confirmed absent.
Munz's onion *Allium munzii*	Federal: FE State: ST CNPS: Rank 1B.1 MSHCP: MSHCP(b)	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands	Does not occur due to a lack of suitable soils within Riversidean sage scrub vegetation.
Nevin's barberry *Berberis nevinii*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	Confirmed absent.
Palmer's grapplinghook *Harpagonella palmeri*	Federal: None State: None CNPS: Rank 4.2 MSHCP: MSHCP	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Does not occur due to a lack of suitable soils within Riversidean sage scrub vegetation.
Paniculate tarplant *Deinandra paniculata*	Federal: None State: None CNPS: Rank 4.2 MSHCP: None	Usually in vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grassland, and vernal pools.	Confirmed absent.
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Chenopod scrub, playas, vernal pools.	Confirmed absent.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Confirmed absent.
Payson's jewelflower *Caulanthus simulans*	Federal: None State: None CNPS: Rank 4.2 MSHCP: MSHCP	Sandy or granitic soils in chaparral and coastal scrub.	Confirmed absent.

Species Name	Status	Habitat Requirements	Occurrence
Peninsular spineflower *Chorizanthe leptotheca*	Federal: None State: None CNPS: Rank 4.2 MSHCP: MSHCP	Alluvial fan, granitic. Chaparral, coastal scrub, lower montane coniferous forest.	Confirmed absent.
Plummer's mariposa lily *Calochortus plummerae*	Federal: None State: None CNPS: Rank 4.2 MSHCP: MSHCP	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Confirmed absent.
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CNPS: Rank 4.3 MSHCP: Not covered	Chaparral, coastal sage scrub	Confirmed absent.
Round-leaved filaree *California macrophylla*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Clay soils in cismontane woodland, valley and foothill grassland	Does not occur due to a lack of suitable soils and habitat.
Salt Spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CNPS: Rank 2B.2 MSHCP: Not covered	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Confirmed absent.
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: None	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Confirmed absent.
San Diego ambrosia *Ambrosia pumila*	Federal: FE State: None CNPS: Rank 1B.1 MSHCP: MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.	Confirmed absent.
San Diego sagewort *Artemisia palmeri*	Federal: None State: None CNPS: Rank 4.2 MSHCP: None	Sandy and mesic soils in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland.	Confirmed absent.
San Jacinto Valley crownscale *Atriplex coronata* var. *notatior*	Federal: FE State: None CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Alkaline soils in chenopod scrub, valley and foothill grassland, vernal pools.	Confirmed present.
San Miguel savory *Clinopodium chandlen*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(d)	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Ultramafic, Valley & foothill grassland	Confirmed present.
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP: MSHCP(b)	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Does not occur due to a lack of suitable habitat.
Small-flowered microseris *Microseris douglasii* ssp. *platycarpha*	Federal: None State: None CNPS: Rank 4.2 MSHCP: MSHCP	Cismontane woodland, coastal sage scrub, valley and foothill grassland, vernal pools. Occurring on clay soils.	Confirmed absent.

Species Name	Status	Habitat Requirements	Occurrence
Small-flowered morning-glory *Convolvulus simulans*	Federal: None State: None CNPS: Rank 4.2 MSHCP: MSHCP	Chaparral (openings), coastal sage scrub, valley and foothill grassland. Occurring on clay soils and serpentinite seeps.	Confirmed absent.
Smooth tarplant *Centromadia pungens* ssp. *laevis*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Confirmed present.
Snake cholla *Cylindropuntia californica* var. *californica*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: Not covered	Chaparral, coastal sage scrub.	Confirmed absent.
South coast saltscale *Atriplex pacifica*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: Not covered	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	Confirmed absent.
Southern California black walnut *Juglans californica*	Federal: None State: None CNPS: Rank 4.2 MSHCP: MSHCP	Chaparral, cismontane woodland, coastal sage scrub, alluvial surfaces.	Confirmed absent.
Spreading navarretia *Navarretia fossalis*	Federal: FT State: None CNPS: Rank 1B.1 MSHCP: MSHCP(b)	Vernal pools, playas, chenopod scrub, marshes and swamps (assorted shallow freshwater).	Confirmed present.
Thread-leaved brodiaea *Brodiaea filifolia*	Federal: FT State: SE CNPS: Rank 1B.1 MSHCP: MSHCP(d)	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Confirmed absent.
Vernal barley *Hordeum intercedens*	Federal: None State: None CNPS: Rank 3.2 MSHCP: MSHCP	Coastal dunes, coastal sage scrub, valley and foothill grassland (saline flats and depressions), vernal pools.	Confirmed absent.
Woven-spored lichen *Texosporium sancti-jacobi*	Federal: None State: None CNPS: Rank 3 MSHCP: None	On soil, small mammal pellets, dead twigs, and on *Selaginella* spp. found within chaparral (openings).	Does not occur due to a lack of suitable habitat.
Wright's trichocoronis *Trichocoronis wrightii* var. *wrightii*	Federal: None State: None CNPS: Rank 2B.1 MSHCP: MSHCP(b)	Alkaline soils in meadows and seeps, marshes and swamps, riparian scrub, vernal pools.	Confirmed absent.
Yucaipa onion *Allium marvinii*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: MSHCP(b)	Chaparral (clay, openings).	Does not occur due to a lack of suitable soils and habitat.

STATUS

Federal	**State**
FE – Federally Endangered	SE – State Endangered
FT – Federally Threatened	ST – State Threatened

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

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

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

OCCURRENCE

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

4.4.1 Special-Status Plants Detected at the Project Site and/or the Southern Off Site Area

Coulter's Goldfields (*Lasthenia glabrata* ssp. *coulteri*) – This species is a member of the sunflower family (Asteraceae) and is designated as a CNPS List 1B.1 species but is not a state or federally listed species. This annual herb is known to occur in marshes and swamps, as well as playas and vernal pools below 4,000 feet (1,220 meters) amsl. Coulter's goldfields is known to occur from San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties. It is known to bloom from February through June. As depicted on Exhibit 10, a large population of Coulter's goldfields was observed near the

northeastern Project boundary, as well as two smaller populations near the southern Project boundary, all of which occur within the disturbed alkali playa vegetation community. The large population, estimated in the thousands, of Coulter's goldfields in the northeastern portion of the Project site extends outside the Project boundary, both east and south toward the San Jacinto River. Each of the three documented populations of Coulter's goldfields on-site were initially observed in flower during the focused rare plant survey visit on March 26, 2019; however, fruiting individuals and vegetative remains were also observed throughout the duration of the field surveys.

San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) – This species is a member of the amaranth family (Amaranthaceae) and is designated as a federally Endangered species, as well as a CNPS List 1B.1 species. This annual herb is known to occur in playas, valley and foothill grasslands, and alkaline vernal pools from 456 to 1,640 feet (139 to 500 meters) amsl. San Jacinto valley crownscale is known to occur from Kern and Riverside Counties and is known to bloom from April through August. An estimated 700 San Jacinto Valley crownscale individuals were observed and documented within the disturbed alkali playa which occurs along the northeastern Project boundary [Exhibit 10]. The population occurs in multiple discrete patches and was initially observed during the focused rare plant survey visit on March 26, 2019.

Smooth Tarplant (*Centromadia pungens* ssp. *laevis*) – This species is a member of the sunflower family and is designated as a CNPS List 1B.1 species but is not a state or federally listed species. This annual herb is known to occur in chenopod scrub, meadows and seeps, playas, riparian woodland and saline valley and foothill grasslands below 2,100 feet (640 meters) amsl. Smooth tarplant is known to occur from Riverside, San Bernardino, and San Diego Counties and is known to bloom from April through September. An estimated 143,000 smooth tarplant individuals were observed and documented within the disturbed alkali playa which occurs along the northeastern Project boundary [Exhibit 10]. The population of smooth tarplant on-site is dense and extends outside the Project boundary, both east and south toward the San Jacinto River. The smooth tarplant individuals were detected primarily in flower; however, vegetative and fruiting individuals were also observed throughout the duration of field surveys, as well as vegetative remains of past season individuals.

Spreading Navarretia (*Navarretia fossalis*) – This species is a member of the phlox family (Polemoniaceae) and is designated as a federally Threatened species, as well as a CNPS List 1B.1 species. This annual herb is known to occur in chenopod scrub, marshes and swamps, as well as playas and vernal pools from 30 to 4,265 feet (1,300 meters) amsl. Spreading navarretia is known to occur from San Luis Obispo, Los Angeles, Riverside, and San Diego Counties, and is known to bloom from April through June. An estimated 1,450 spreading navarretia individuals in multiple patches near the northeastern and southern Project boundaries were observed and documented, all occurring within the disturbed alkali playa vegetation community [Exhibit 10]. The population in the northeastern portion of the property extends outside the Project boundary, south toward the San Jacinto River. Spreading navarretia on-site were observed both vegetatively and flowering during the focused rare plant surveys conducted in spring of 2019.

4.4.2 Special-Status Plants Not Detected but with a Potential to Occur at the Project Site and the Northerly and Southerly Off Site Road Improvement and Use Areas

In addition to the plant species described above in Section 4.4.1, the following MSHCP target species were also evaluated: Parish's brittlescale, Davidson's saltscale, thread-leaved brodiaea, round-leaved filaree, little mousetail, mud nama, Munz's onion, San Diego ambrosia, many-stemmed dudleya, California orcutt grass, and Wright's trichocoronis. Of these, many-stemmed dudleya, Munz's onion, round-leaved filaree, and other special-status plant species with potential to cause a constraint to development were confirmed absent through the focused rare plant surveys, as noted in Table 4-3 above.

4.5 Special-Status Animals

Project Site

The following special-status animals were detected at the Project site: ferruginous hawk (*Buteo regalis*, CDFW-SSC), northern harrier (*Circus cyaneus*, CDFW-SSC), white-tailed kite (*Elanus leucurus* CDFW-FP), loggerhead shrike (*Lanius ludovicianus*, CDFW-SSC), LAPM (*Perognathus longimembris brevinasus*, CDFW-SSC), northwestern San Diego pocket mouse (*Chaetodipus fallax*, CDFW-SSC), San Diego desert woodrat (*Neotoma lepida intermedia*, CDFW-SSC), Stephens' kangaroo rat (*Dipodomys stephensi*, ST, FE), and San Diego black-tailed jackrabbit (*Lepus californicus sandiogensis*, CDFW-SSC). Table 4-4 provides a list of special-status animals evaluated for the Project site through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site, 2) applicable MSHCP Survey Areas, and 3) any other special-status animals that are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site.

Northerly and Southerly Off Site Road Improvement and Use Areas

No special-status animals were detected within the Northerly and Southerly Off Site Road Improvement and Use Areas, nor are any special-status animals expected to be present within this area due to the paved condition of the roadways and the disturbed condition of areas adjacent to the roadways. Table 4-4 provides a list of special-status animals evaluated for the Northerly and Southerly Off Site Road Improvement and Use Areas through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site, 2) applicable MSHCP Survey Areas, and 3) any other special-status animals that are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site.

Table 4-4. Special-Status Wildlife Evaluated for the Project Site and Northerly and Southerly Off Site Road Improvement and Use Areas

Species Name	Status	Habitat Requirements	Potential for Occurrence
Invertebrates			
Crotch bumble bee *Bombus crotchii*	Federal: None State: SCE MSHCP: None	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert.	Not expected to occur. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Quino checkerspot butterfly *Euphydryas editha quino*	Federal: FE State: None MSHCP: MSHCP	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include *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.	Not expected to occur. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Riverside fairy shrimp *Streptocephalus woottoni*	Federal: FE State: None MSHCP: MSHCP(a)	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Not expected to occur. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Vernal pool fairy shrimp *Branchinecta lynchi*	Federal: FT State: None MSHCP: MSHCP(a)	Seasonal vernal pools	Not expected to occur. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Amphibians			
Western spadefoot *Spea hammondii*	Federal: None State: SSC MSHCP: MSHCP	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Moderate potential to occur within Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Reptiles			
California glossy snake *Arizona elegans occidentalis*	Federal: None State: SSC MSHCP: Not covered	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Moderate potential to occur within the CSS habitat within Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC MSHCP: MSHCP	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Moderate potential to occur within the CSS habitat within Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	Federal: None State: SSC MSHCP: Not covered	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas. This shy species avoids areas subject to high levels of human disturbance.	Not expected to occur. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Coastal whiptail *Aspidoscelis tigris stejnegeri (multiscutatus)*	Federal: None State: SSC MSCHP: MSHCP	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Low potential to occur within Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: SSC MSHCP: MSHCP	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Low potential to occur within Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
San Diego banded gecko *Coleonyx variegatus abbotti*	Federal: None State: SSC MSHCP: MSHCP	Primarily a desert species, but also occurs in cismontane chaparral, desert scrub, and open sand dunes.	Not expected to occur. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Southern California legless lizard *Anniella stebbinsi*	Federal: None State: SSC MSHCP: Not Covered	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats that any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans.	Not expected to occur. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Western pond turtle *Emys marmorata*	Federal: None State: SSC MSHCP: MSHCP	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	Does not occur. No permanent water sources within the Project site or Northerly and Southerly Off Site Road Improvement and Use Areas.
Birds			
Bald eagle (nesting & wintering) *Haliaeetus leucocephalus*	Federal: Delisted State: SE, CFP MSHCP: MSHCP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	Potential to forage within the Project site, but no nesting habitat present. Not expected to occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Burrowing owl *Athene cunicularia*	Federal: None State: SSC MSHCP: MSHCP(c)	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Confirmed absent.
California black rail *Laterallus jamaicensis coturniculus*	Federal: BCC State: ST, CFP MSHCP: Not covered	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded meter-high or taller grassy vegetation.	Does not occur. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Coastal California gnatcatcher *Polioptila californica*	Federal: FT State: SSC MSHCP: MSHCP	Low elevation coastal sage scrub and coastal bluff scrub.	Low potential to occur within the CSS. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Ferruginous hawk Buteo regalis	Federal: None State: SSC MSHCP: MSHCP	Wintering habitat consists of open terrain and grasslands of plains and foothills.	Observed foraging within study area, but Project site is outside of the nesting range for this species. Not expected to occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat
Golden eagle (nesting and wintering) *Aquila chrysaetos*	Federal: None State: CFP MSHCP: MSHCP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Low to moderate potential to occur in a foraging role only. Not expected to occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat

Species Name	Status	Habitat Requirements	Potential for Occurrence
Least Bell's vireo *Vireo bellii pusillus*	Federal: FE State: SE MSHCP: MSHCP(a)	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Does not occur. No suitable nesting habitat within the Project site. Riparian scrub onsite is too sparse to support nesting for this species. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Loggerhead shrike (nesting) *Lanius ludovicianus*	Federal: BCC State: SSC MSHCP: MSHCP	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	Confirmed present. Suitable nesting habitat within and on the banks of the San Jacinto River. Not expected to occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Long-eared owl (nesting) *Asio otus*	Federal: None State: SSC MSHCP: Not covered	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Does not occur. No suitable nesting habitat within the Project site. Riparian scrub onsite is too sparse to support nesting for this species. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Northern harrier (nesting) *Circus cyaneus*	Federal: None State: SSC MSHCP: MSHCP	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Confirmed present. Very low potential to nest onsite near the San Jacinto River. Not expected to occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE MSHCP: MSHCP(a)	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur. No suitable habitat within the Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: BCC State: ST MSHCP: MSHCP	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Potential to forage within the Project site, but no colonial nesting habitat present. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Western snowy plover (nesting) *Charadrius alexandrinus nivosus*	Federal: FT, BCC State: SSC MSHCP: Not covered	Sandy or gravelly beaches along the coast, estuarine salt ponds, alkali lakes, and at the Salton Sea.	Does not occur. No suitable nesting habitat within the Project site. Disturbed alkali playas not large enough to support a nesting colony. Not expected to occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT, BCC State: SE MSHCP: MSHCP(a)	Dense, wide riparian woodlands with well-developed understories.	Does not occur. No suitable habitat within the Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: CFP MSHCP: MSHCP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Confirmed present. Observed foraging within the Project site. Low to moderate potential to nest within the Project site within trees associated with the San Jacinto River.

Species Name	Status	Habitat Requirements	Potential for Occurrence
			Not expected to occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Yellow warbler (nesting) *Setophaga petechia*	Federal: BCC State: SSC MSHCP: MSHCP	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.	Potential to occur for foraging only. No suitable nesting habitat within the Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Yellow-breasted chat (nesting) *Icteria virens*	Federal: None State: SSC MSHCP: MSHCP	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Does not occur. No suitable habitat within the Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Yellow-headed blackbird (nesting) *Xanthocephalus*	Federal: None State: SSC MSHCP: None	Breed and roost in freshwater wetlands with dense, emergent vegetation such as cattails. Often forage in fields, typically wintering in large, open agricultural areas.	Potential to occur for foraging only. No suitable nesting habitat within the Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Mammals			
American badger *Taxidea taxus*	Federal: None State: SSC MSHCP: Not Covered	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Confirmed absent. Burrows not detected within the Project site during field efforts. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Dulzura pocket mouse *Chaetodipus californicus femoralis*	Federal: None State: SSC MSHCP: Not covered	Coastal scrub, grassland, and chaparral, especially at grass-chaparral edges	Confirmed absent. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	Federal: None State: SSC MSHCP: MSHCP(c)	Fine, sandy soils in coastal sage scrub and grasslands.	Confirmed present within Project Site but no long-term conservation value for this species on site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Northwestern San Diego pocket mouse *Chaetodipus fallax*	Federal: None State: SSC MSHCP: MSHCP	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Confirmed present within Project Site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: SSC WBWG: M MSHCP: Not covered	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Moderate potential to forage onsite. No suitable roosting habitat present. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
San Bernardino kangaroo rat *Dipodomys merriami parvus*	Federal: FE State: SSC MSHCP: MSHCP(c)	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	Confirmed absent. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	Federal: None State: SSC MSHCP: MSHCP	Occupies a variety of habitats but is most common among shortgrass habitats. Also occurs in sage scrub but needs open habitats.	Confirmed present within Project site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: SSC MSHCP: MSHCP	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Confirmed present within Project Site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Southern grasshopper mouse *Onychomys torridus ramona*	Federal: None State: SSC MSHCP: Not covered	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Confirmed absent. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Stephens' kangaroo rat *Dipodomys stephensi*	Federal: FE State: ST SKR HCP: Covered	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Confirmed present within Project Site. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.
Western mastiff bat *Eumops perotis californicus*	Federal: None State: SSC WBWG: H MSHCP: Not Covered	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Moderate potential to forage onsite. No suitable roosting habitat present. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC WBWG: H MSHCP: Not Covered	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Not expected to occur. Does not occur within Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat.

STATUS

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

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

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

Western Bat Working Group (WBWG)
H – High Priority
LM – Low-Medium Priority
M – Medium Priority
MH – Medium-High Priority

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

4.5.1 Special-Status Wildlife Species Observed within the Project Site and Northerly and Southerly Off Site Road Improvement and Use Areas

Birds

Ferruginous Hawk (*Buteo regalis*) – The ferruginous hawk does not have a federal or state designation, however this species is considered locally rare when wintering and is a California Species of Special Concern (SSC). The species winters west of the Great Plains, throughout California, and southward to Baja California and northern mainland Mexico. The ferruginous hawk is a fairly common winter resident of grassland and agricultural areas in southwestern California (Garrett and Dunn 1981). The ferruginous hawk breeds in northern Nevada, eastern Oregon and Washington, and eastward to the western Dakotas. Threats to the ferruginous hawk include habitat destruction and fragmentation throughout its range.

A single ferruginous hawk was observed foraging over the Project site in March of 2019 during general habitat surveys by GLA biologists. This species is not expected to nest within the Project site as it is located outside of the breeding range for this species. It is also not expected to occur within the Northerly and Southerly Off Site Road Improvement and Use Areas as this area mainly consists of paved roads.

Loggerhead Shrike (*Lanius ludovicianus*) – The loggerhead shrike is designated as a SSC when nesting and is a covered species under the MSHCP. The loggerhead shrike is found throughout the foothills and lowlands of California as a resident (Zeiner *et al.* 1990). The loggerhead shrike is known to forage over open ground within areas of short vegetation, pastures with fence rows, grasslands, riparian areas, open woodland, agricultural fields, desert washes, and desert scrub. This species commonly nests within dense, mainly thorny, vegetation and may use areas where tumbleweed has concentrated. Displacement of habitat through urban development, the use of pesticides, and competition with species that are more tolerant of human-induced changes may be resulting in population declines (Yosef 1996).

Individual loggerhead shrikes were observed multiple times foraging near the San Jacinto River and off-site areas adjacent to the Eastern Municipal Water District (EMWD) lands to the south on separate occasions by GLA biologists during general and focused surveys in 2019 and 2020. The loggerhead shrike is expected to forage on-site and has a low to moderate potential to nest within the limited suitable nesting habitat associated with the San Jacinto River. It is not expected to occur within the Northerly and Southerly Off Site Road Improvement and Use Areas as this area mainly consists of paved roads.

Northern Harrier (*Circus cyaneus*) – The northern harrier is designated as a SSC when nesting and is a covered species under the MSHCP. The northern harrier frequents open wetlands, upland prairies, mesic grasslands, drained marshlands, croplands, shrub-steppe, meadows, grasslands, desert sinks, fresh and saltwater emergent wetlands, and is seldom found in wooded areas (MacWhirter and Bildstein, 1996). Harriers nest on the ground in marshland habitats and prefer dense areas of grasses, willows, and cattails. Threats to northern harriers include conversion of native grassland to agriculture, habitat fragmentation, and loss of wetland/marsh habitats.

GLA biologists observed an individual northern harrier foraging on three separate visits to the Project site in 2019. It is unknown if the same individual was observed on each occasion. This species is expected to forage on-site and has low potential to nest within the limited suitable habitat along the southeast Project boundary near the San Jacinto River. It is not expected to occur within the Northerly and Southerly Off Site Road Improvement and Use Areas as this area mainly consists of paved roads.

White-Tailed Kite (*Elanus leucurus*) – The white-tailed kite does not have a federal or state designation, however this species is considered locally rare when nesting and is a California Fully Protected (CFP) species and is a covered species under the MSHCP. The white-tailed kite inhabits low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Riparian areas and forest edges adjacent to open areas are used for nesting. Threats to the white-tailed kite include conversion of natural or agricultural lands to urban or commercial property, clean farming techniques that leave few residual vegetation areas for prey abundance; and degradation of habitat, especially the loss of nest trees and foraging habitat (Dunk 1995).

GLA biologists observed multiple individual white-tailed kites foraging on separate visits to the Project site. This species is expected to forage on-site and has moderate potential to nest within the limited suitable habitat along the southeast Project boundary associated with the San Jacinto River. It is not expected to occur within the Northerly and Southerly Off Site Road Improvement and Use Areas as this area mainly consists of paved roads.

Mammals

Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*) – The LAPM is designated as a SSC and is a covered species under the MSHCP. The LAPM prefers fine, sandy soils and may utilize these soil types for burrowing. Vegetation communities associated with LAPM habitat include non-native grassland, Riversidean sage scrub, Riversidean alluvial fan sage scrub, and chaparral. Urbanization, agriculture, sand and gravel mining, and flood control projects are serious threats to the LAPM. Loss of and disruptions in the continuity of drainages and alluvial fan habitats that support patchy distributions of the species probably results in isolation of local populations and preclude or limit the amount of genetic exchange between populations. Such isolation can result in loss of genetic drift resulting in loss of heterogeneity in the populations, leaving small local populations at high risk of extirpation (Jameson 1988). ENVIRA Consulting performed protocol trapping for the LAPM, as required by the MSHCP Mammal Survey Area, over eight nights from June 27 to July 5, 2020. Fourteen (14) LAPM individuals were captured during the survey. Presence of this species is confirmed on the Project site with most captures occurring along the edges of the dirt roads and berms throughout the Project site. See Appendix C-1, LAPM Trapping Report for more details.

ENVIRA conducted a habitat assessment for the LAPM within the Northerly and Southerly Off Site Road Improvement and Use Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. A copy of this Habitat Assessment letter is attached as Appendix C-2.

Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*) – The northwestern San Diego pocket mouse is designated as a SSC and is a covered species under the MSHCP. The

northwestern San Diego pocket mouse inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. It inhabits open, sandy areas of both the Upper and Lower Sonoran life-zones of southwestern California and northern Baja California (McClenaghan 1983). Like other small mammals in the area, the San Diego pocket mouse is threatened with habitat fragmentation, degradation, and development.

During LAPM protocol surveys performed by ENVIRA Consulting, 27 northwestern San Diego pocket mice were captured during the surveys. Presence of this species is confirmed on the Project site. See Appendix C-1, LAPM Trapping Report for more details.

ENVIRA conducted a habitat assessment for the LAPM within the Northerly and Southerly Off Site Road Improvement and Use Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the Northwestern San Diego Pocket Mouse as they occupy similar habitats. A copy of this Habitat Assessment letter is attached as Appendix C-2.

San Diego Black-Tailed Jackrabbit (*Lepus californicus bennettii*) – The San Diego black-tailed jackrabbit is designated as a SSC and is a covered species under the MSHCP. The black-tailed-jackrabbit occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats. Jackrabbits typically are not found in high grass or dense brush where movement is difficult, and the openness of open scrub habitat probably is preferred over dense chaparral. Black-tailed jackrabbits are found in most areas that support annual grassland, Riversidean sage scrub, alluvial fan sage scrub, Great Basin sagebrush, chaparral, disturbed habitat, and agriculture (MWD and RCHCA 1995). Urban development, habitat loss, habitat fragmentation, and isolation of populations are all potential long-term risks to jackrabbits.

Individual black-tailed jackrabbits were observed within the Project site on multiple occasions during general and focused surveys. This species is expected to occur on the marginal areas between the Riversidean sage scrub in the western portion of the Project site and to the east near the open non-native grasslands and San Jacinto River banks where the vegetation is not disturbed as frequently. This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas as this area mainly consists of paved roads

San Diego Desert Woodrat (*Neotoma lepida intermedia*) – The San Diego desert woodrat is designated as a SSC and is a covered species under the MSHCP. The San Diego desert woodrat is a sub-species of the desert woodrat (*N. lepida*); which is more widespread and found throughout central and Southern California and the Great Basin, Mojave, and Colorado deserts. Woodrats are noted for their flexibility or plasticity in utilizing various materials, such as twigs and other debris (sticks, rocks, dung), to build elaborate homes or "middens," which typically include several chambers for nesting and food, as well as several entrances. Middens may be used by several generations of woodrats (Cameron and Rainey 1972). The most common natural habitats utilized by the San Diego sub-species are chaparral, coastal sage scrub (including Riversidean sage scrub and Diegan coastal sage scrub) and grassland. Where substantial patches of these habitats are still intact, San Diego desert woodrats should still occur.
Threats to the San Diego desert woodrat include loss of habitat through development, farming practices (disking), and frequent wildfires that impact historic stands of cactus. This species is

relatively sedentary and may not be capable of dispersing long distances between suitable habitat patches. Isolation may also result in loss of genetic diversity because of impediments to dispersal and genetic exchange.

During LAPM protocol surveys performed by ENVIRA Consulting, one (1) San Diego desert woodrat was captured during the surveys. Presence of this species is confirmed on the Project site with the one capture occurring along the western edges of the Project site. See Appendix C-1, LAPM Trapping Report for more details.

ENVIRA conducted a habitat assessment for the LAPM within the Northerly and Southerly Off Site Road Improvement and Use Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the San Diego Desert Woodrat as they occupy similar habitats. A copy of this Habitat Assessment letter is attached as Appendix C-2.

Stephens' Kangaroo Rat (*Dipodomys stephensi*) – The Stephens' kangaroo rat (SKR) is designated as a federally endangered (FE) species, a state threatened (ST) species, and is a covered species under the USFWS Habitat Conservation Plan (HCP). The SKR is found almost exclusively in open grasslands or sparse shrublands with cover of less than 50 percent during the summer (Bleich 1973). As a fossorial (burrowing) animal, SKR typically is found in sandy and sandy loam soils with a 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 (*Otospermophilus beecheyi*).

Historically, conversion of habitat to agricultural uses was the main threat to the SKR. However, kangaroo rats can rapidly colonize farm land left fallow. Over the last decades, permanent loss and severe fragmentation of habitat to urban development has emerged as the more serious threat to the species (USFWS 1997).

During LAPM protocol surveys performed by ENVIRA Consulting, five SKR individuals were captured. Presence of this species is confirmed on the Project site with most captures occurring along the edges of the dirt roads and berms throughout the Project site. See Appendix C-1, LAPM Trapping Report for more details.

ENVIRA conducted a habitat assessment for the LAPM and the Stephens' Kangaroo Rat (SKR) within the Northerly and Southerly Off Site Road Improvement and Use Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM or SKR was present. A copy of this Habitat Assessment letter is attached as Appendix C-2.

4.5.2 Special-Status Wildlife Species Not Observed but with a Potential to Occur at the Project Site and Northerly and Southerly Off Site Road Improvement and Use Areas

Amphibians

Western Spadefoot (*Spea hammondii*) – The western spadefoot is designated as a CDFW SSC and is a covered species under the MSHCP. Western spadefoots require temporary rain pools

with water temperatures of > 9°C and < 30°C (Brown 1966, 1967) in which to reproduce and that last > 3 weeks (Feaver 1971) in order to metamorphose successfully. Rain pools in which western spadefoots reproduce and from which they are able to metamorphose successfully lack fishes, bullfrogs, and crayfishes; many indications exist that the western spadefoot cannot recruit successfully in the presence of exotic predators, primarily introduced fishes, but also bullfrogs and crayfishes. These non-native/invasive aquatic predators are the main cause to the western spadefoot's decline throughout its range, as well as hydrological modification and loss of aquatic habitat.

This species is known to occur within seasonal pools in the vicinity of the Project site and has low to moderate potential to occur within the historic floodplain and of the San Jacinto River. This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

Reptiles

California glossy snake (*Arizona elegans occidentalis*) – The California glossy snake is designated as a SSC and is a covered species under the MSHCP. The California glossy snake ranges throughout southern California especially in desert regions, but also occurs in chaparral, sagebrush, pine-juniper woodlands, and annual grasslands. Primarily nocturnal, glossy snakes spend periods of inactivity during the day and winter months within mammal burrows and rock outcrops (Zeiner, D.C., et al, 1990). Threats to the California glossy snake include habitat modification through development, fragmentation, and on- and off-road vehicle collisions.

In review of the CNDDB's element occurrences, this species is known to occur within the northwestern Project boundary within the Riversidean sage scrub and rock outcrops.

This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

Coast Horned Lizard (*Phrynosoma blainvilli*) – The coast horned lizard is designated as a SSC and is a covered species under the MSHCP. In California, the coast horned lizard ranges from the Transverse Ranges south to the Mexican border west of the deserts, although the taxon occurs on scattered sites along the extreme western desert slope of the Peninsular Ranges (Jennings, 1988). The known elevation range of this species is from 33 feet (10 meters) to approximately 7,000 feet (2,130 meters) in the San Jacinto Mountains, in Riverside County. This species is found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest (Klauber, 1939; Stebbins, 1954). In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (*e.g.*, floods, fire, roads, grazed areas, fire breaks) (Jennings and Hayes, 1994). Extensive habitat loss from agriculture and urbanization, have been the main reasons cited for the decline of this species.

In review of the CNDDB's element occurrences, has been known to occur within the vicinity of the Project site and it has a low to moderate potential to occur within the Riversidean sage scrub and rock outcrops.

This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

Coastal Whiptail (*Aspidoscelis tigris stejnegeri*) – The coastal whiptail is designated as a SSC and is a covered species under the MSHCP. The coastal whiptail ranges through the semi-arid lowlands of coastal southern California. The coastal whiptail is often found open areas of grassland, sage scrub, chaparral, and alluvial wash habitats. Threats to the coastal whiptail include habitat loss due to development, widespread use of insecticides, off-road vehicle use, and genetic isolation.

This species is known to occur in the vicinity of the Project site and has low to moderate potential to occur within the Riversidean sage scrub and non-native grasslands.

This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

Red-Diamond Rattlesnake (*Crotalus ruber*) – The red-diamond rattlesnake is designated as a SSC and is a covered species under the MSHCP. From an ecological standpoint, this rattlesnake species has a wide tolerance for varying environments. Although *C. ruber* is recorded from a number of vegetation types, it is most commonly associated with heavy brush with large rocks or boulders (Klauber, 1972). Threats to the red-diamond rattlesnake include habitat loss due to development, fragmentation, off-road vehicle use, and the deliberate removal of individuals near residential and recreational lands.

This species is known to occur in the vicinity of the Project and has a moderate potential to occur within the rock outcrops, Riversidean sage scrub, and non-native grasslands within the Project site.

This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

Birds

Coastal California Gnatcatcher (*Polioptila californica californica*) – The coastal California gnatcatcher (gnatcatcher) is designated as a federally threatened (FT) species, a California SSC, and is a covered species under the MSHCP. Historically, gnatcatchers occurred from southern Ventura County southward through Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, and into Baja California, Mexico. The gnatcatcher is a small member of the thrush family (Muscicapidae). The gnatcatcher typically occurs in or near sage scrub habitat,

which is a broad category of vegetation that includes the following plant communities as classified by Holland (1986): Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub. declines in numbers and distribution of the gnatcatcher resulted from numerous factors, habitat destruction, fragmentation and adverse modification are the principal reasons for the gnatcatcher's current threatened status (USFWS 1993).

This species has a low to moderate potential to occur within the Riversidean sage scrub within the western portions of the Project boundary.

This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

Tricolored Blackbird (*Agelaius tricolor*) - The tricolor blackbird is designated as a Federal Species of Concern, a California SSC when associated with a nesting colony, and is a covered species under the MSHCP. The tricolored blackbird forms the largest colonies of any North American passerine bird. Breeding colonies may attract thousands of birds to a single site. These colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat composed of grassland, woodland, or agricultural cropland. In winter, they often form single-species, and sometimes single-sex, flocks, but they also flock with other blackbird species.

The tricolored blackbird breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs and forages in grassland and cropland Habitats (Ziener *et al.* 1990). Core areas have been identified as the San Jacinto Valley, considered the floodplain of the San Jacinto River, Mystic Lake/San Jacinto Wildlife Area, based on recent surveys within the Plan Area (Cooper 2001). Other Core Areas that have been important in the past and may continue to provide important core nesting areas include Collier Marsh, Alberhill, and Vail Lake/Wilson Valley/eastern Temecula Creek (Cooper 2001, Dehaven *et al.* 1975).

The MSHCP species-specific conservation objectives include suitable primary habitat for the blackbird, including freshwater marsh and cismontane alkali marsh habitats within the Riverside Lowlands and Foothills Bioregions. In addition, the objectives include secondary habitat, including playa and vernal pool, grasslands, agriculture land, and riparian scrub, woodland, and forest. Objective 5 specifically targets the San Jacinto River floodplain and the Mystic Lake/San Jacinto Wildlife Area, with the specific objectives of ensuring that habitat support functions by maintaining, preserving, and/or if feasible, restoring hydrological processes and habitat suitable for tricolored blackbird breeding.

The Project site does not contain suitable breeding habitat for the tricolored blackbird, although the species has the potential to forage throughout the site within the disturbed alkali playas, non-native grasslands, and San Jacinto River floodplain.

This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

Mammals

Pocketed Free-Tailed Bat (*Nyctinomops femorosaccus*) - The pocketed free-tailed bat is designated as a CDFW SSC and WBWG medium priority. The pocketed free-tailed bat ranges from southern California (Constantine 1998), central Arizona, southern New Mexico, and western Texas, south to western Mexico; and also, Baja California. The pocketed free-tailed bat is usually associated with rugged canyons, high cliffs, and rock outcroppings. Roosts in rock crevices and caves during the day; may also roost in buildings or under roof tiles. Threats to this species include habitat modification, pesticide use, and human disturbances of roosting colonies.

This Project site is within the known range of this species, and therefore; it has a low to moderate potential to forage within the Project site, but no suitable habitat is present for roosting.

This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

Western Mastiff Bat (*Eumops perotis californicus*) – The western mastiff bat is designated as a CDFW SSC and WBWG high priority. The western mastiff bat ranges from central California southeastward to southern Nevada, central Arizona, and west Texas, and south through northern Baja California, northern Sinaloa, and Zacatecas. The western mastiff bat is apparently a permanent resident in the U.S. This species mainly roosts in crevices and shallow caves on the sides of cliffs and rock walls, and occasionally buildings. Roosts usually high above the ground with unobstructed approach. Most roosts are not used throughout the year and individuals may alternate between different day roosts (Constantine, D. G. 1998).

This species is known to occur in the vicinity of the Project site and is expected to forage over the Project site, but no suitable habitat is present for roosting.

This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

4.5.3 Special-Status Wildlife Species Confirmed Absent Through Focused Surveys at the Project Site and the Northerly and Southerly Off Site Road Improvement and Use Areas

Burrowing Owl (*Athene cunicularia*) – The burrowing owl is designated as a SSC and requires surveys if within a designated survey are under the MSHCP. 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 an essential habitat feature, they require the use of rodent or other burrows for roosting and nesting cover. 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 site occurs within the MSHCP Burrowing Owl Survey Area. As such, focused surveys were performed in 2019 (on-site) and 2020 (off-site) [Exhibit 6A – Burrowing Owl Focused Survey Map]. Burrowing owls were not detected during the focused surveys. The Project site supports potential habitat (ruderal and non-native grassland) for burrowing owl, and a pre-construction burrowing owl survey will be performed within 30 days prior to project construction activities, as required by the MSHCP

This species does not occur within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of this off site area consists of paved roads.

Mammals

Dulzura Pocket Mouse (*Chaetodipus californicus femoralis*) – The Dulzura pocket mouse is designated as a SSC, however it is not covered under the MSHCP. The Dulzura pocket mouse ranges from southwestern California south to north-central Baja California, Mexico. The Dulzura pocket mouse is found primarily on slopes with chaparral and grassland edges.

During focused surveys for the LAPM in July 2020, this species was not detected and is considered absent from the Project site.

ENVIRA conducted a habitat assessment for the LAPM within the Northerly and Southerly Off Site Road Improvement and Use Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the Dulzura Pocket Mouse as they occupy similar habitats. A copy of this Habitat Assessment letter is attached as Appendix C-2.

San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*) – The San Bernardino kangaroo rat (SBKR) is designated as a federally endangered species, a SCC, and is a covered species under the MSHCP and requires surveys when the project is located within the MSHCP Mammal Survey Area for SBKR. The SBKR is a subspecies of the Merriam's kangaroo rat (*Dipodomys merriami*) and is typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans, flood plains, and along washes with nearby sage scrub. Soil texture is a primary factor in this subspecies' occurrence. Sandy loam substrates allow for the digging of simple, shallow burrows (McKernan 1997 as cited by USFWS 1998).

During focused surveys for the LAPM in July 2020, this species was not detected and is considered absent from the Project site.

ENVIRA conducted a habitat assessment for the LAPM within the Northerly and Southerly Off Site Road Improvement and Use Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the San Bernardino Kangaroo Rat. A copy of this Habitat Assessment letter is attached as Appendix C-2.

Southern Grasshopper Mouse (*Onychomys torridus ramona*) - The southern grasshopper mouse is designated as a SSC and is not covered by the MSHCP. The southern grasshopper mouse is found in hot, arid valleys and scrub deserts of Lower Sonoran life zone, with sparse and scattered vegetation such as mesquite, huisache, creosote bush, cholla, yucca, and various short grasses. Young are born in underground burrow systems that may have been abandoned by other small mammals (Musser and Carleton 1993).

During focused surveys for the LAPM in July 2020, this species was not detected and is considered absent from the Project site.

ENVIRA conducted a habitat assessment for the LAPM within the Northerly and Southerly Off Site Road Improvement and Use Areas on August 1, 2021. ENVIRA determined that no suitable habitat for the LAPM was present. This determination would also be valid for the Southern Grasshopper Mouse. A copy of this Habitat Assessment letter is attached as Appendix C-2.

4.5.4 Raptor Use

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

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

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

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

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

It should also be noted that raptors are not expected to nest or forage within the Northerly and Southerly Off Site Road Improvement and Use Areas due to a lack of suitable habitat and the fact that a majority of the off site area consists of existing paved roadways.

4.6 Nesting Birds

The Project site contains trees, shrubs, and ground cover that provide suitable habitat for nesting native birds. Mortality of native birds (including eggs) is prohibited under the California Fish and Game Code.[13]

As stated above, the Project site does support suitable ground nesting habitat within the ruderal vegetation and disturbed areas. The San Jacinto River, adjacent to the Project site, does not exhibit a dense canopy of riparian or old growth trees that would be utilized by larger raptors such as Cooper's hawk or red-tailed hawk. However, these areas may provide nesting habitat for smaller bird species. A specific measure to avoid potential impacts to nesting birds is included in Section 6, below for the Project Site.

The Northerly and Southerly Off Site Road Improvement and Use Areas does not contain suitable habitat for nesting birds as a majority of this area consists of existing paved roadways. However, the Project Proponent will abide by the same nesting bird mitigation measure noted above and contained within Section 6 below.

4.7 Wildlife Linkages/ Corridors and Nursery Sites

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

Corridors are similar to linkages but provide specific opportunities for individual animals to disperse or migrate between areas, generally extensive but otherwise partially or wholly

[13] 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.

separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different than that in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired. Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species. No wildlife nurseries or maternity bat colony roosts exist within the Project site or the Northerly and Southerly Off Site Road Improvement and Use Areas.

Project Site

The Project site is located within the proposed extension of Existing Core 4 within MSHCP Cell Groups C, D, E, F, and G. The proposed extension of Existing Core 4 is composed of the middle reach of the San Jacinto River and is contiguous with Core Area in Lake Perris Recreation Area to the north of the Project site. It provides habitat for a number of Narrow Endemic Plant Species and movement for species connecting to Lake Perris and areas downstream of the San Jacinto River in Canyon Lake. Planning Species within this proposed Extension of Existing Core include San Jacinto Valley crownscale, thread-leaved brodiaea, arroyo toad, and LAPM. More specifically, the San Jacinto River drainage, to the south and east of the Project site, would provide a movement corridor for medium to small mammals such as coyote, bobcat, and racoon between the adjacent open space associated with the Lake Perris reserve to the north and open space to the southwest of the Project site. The river drainage would also provide an aerial corridor for various bird and bat species moving through the landscape. Refer to Section 5.5 below for a discussion on impacts to wildlife linkages/corridors and nursery sites.

Northerly and Southerly Off Site Road Improvement and Use Areas

A majority of the Northerly and Southerly Off Site Road Improvement and Use Areas is located within existing roadway right-of-way for General Plan Roads covered under the MSHCP. These roadways include Nuevo Road, Dunlap Drive, San Jacinto Avenue, and Redlands Avenue. Portions of the Northerly and Southerly Off Site Road Improvement and Use Areas are located within the Mead Valley Area Plan of the MSHCP and are included within the MSHCP Criteria Area. Specifically, the site falls within portions of Criteria Cells: 2969 and 3069 in Cell Group G [Exhibit 5C – MSHCP Map]. Portions of the site are located within the MSHCP CAPSSA, NEPSSA, Mammal Survey Area for the LAPM (*Perognathus longimembris brevinasus*), and Burrowing Owl (*Athene cunicularia*) Survey Area [Exhibit 5B – MSHCP Survey Areas Map]. The following CAPSSA target species were evaluated through habitat assessments and focused surveys (if suitable habitat is present): San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri),* little mousetail (*Myosurus minimus* ssp. *apus*), and mud nama (*Nama stenocarpa*). No suitable habitat for the CAPSSA is present within the Northerly and Southerly Off Site Road Improvement and Use Areas.

The site occurs within or portions of NEPSSA 3 and 10. The following target species were evaluated through habitat assessments and focused surveys (if suitable habitat is present): Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California orcutt grass (*Orcuttia californica*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), Hammitt's clay cress (*Sibarpsis hammittii*), many-stemmed dudleya (*Dudleya multicaulis*), and San Miguel savory (*Clinopodium chandleri*). The Project site is not located within the MSHCP Amphibian Survey Area, or Core and Linkage areas. No suitable habitat for NEPSSA is present within the Northerly and Southerly Off Site Road Improvement and Use Areas.

The Northerly and Southerly Off Site Road Improvement and Use Areas is also located within the LAPM Survey Area and burrowing owl survey area. Neither species was identified on site during either focused surveys and/or habitat assessments. Refer to Section 5.5 below for a discussion on impacts to wildlife linkages/corridors and nursery sites.

4.8 Critical Habitat

A 55.56-acre portion of the Project site is located within USFWS Designated Critical Habitat for spreading navarretia (*Navarretia fossalis*) in the eastern and southeastern portions of the Project boundary within the floodplain of the San Jacinto River. As stated above, spreading navarretia was observed on the Project site within the disturbed alkali playa; however, these areas will be conserved by the project proponent and will not be impacted by the Project, thus achieving the 90% conservation requirement per Sections 6.1.3 and 6.3.2 of the MSHCP for this species. Refer to Section 5.8 below for a discussion on impacts to Critical Habitat.

No Critical Habitat is present within the Northerly and Southerly Off Site Road Improvement and Use Areas.

4.9 Jurisdictional Waters

U.S. Amy Corps of Engineers

Corps jurisdiction at the Project site totals 23.27 acres, of which 22.45 acres consist of federal wetland waters of the U.S. and 0.82 acre consists of non-wetland waters of the U.S. A total of 8,314 linear feet of stream is present. This includes 1,394 linear feet of wetland stream and 6,920 linear feet of ephemeral, non-wetland stream.

Corps jurisdiction is limited to eight features, referenced herein as the San Jacinto River, Disturbed Alkali Playa, and Drainages A-F. These features are considered ephemeral-to-intermittent features that are subject to Corps jurisdiction under Section 404 of the CWA.

The Project site also contains two roadside ditches and two erosional features. The ditches were excavated wholly in and drain only upland areas and the erosional features lack an OHWM and are characterized by infrequent duration flow. As these features do not carry a relatively permanent flow of water, they are not subject to Corps jurisdiction under Section 404 of the CWA.

A graphic depicting the limits of Corps jurisdiction is provided as Exhibit 11A and site photographs are provided as Exhibit 12. Please note that no Corps jurisdiction is present within the northern or southern off site improvement areas. Table 4-5 below summarizes Corps jurisdiction at the Project site, followed by a description of each feature.

Table 4-5: Corps Jurisdiction

Drainage Name	Corps Non-Wetland Waters (Acres)	Corps Wetland Waters (Acres)	Total Corps Jurisdiction (Acres)	Total Length (Linear Feet)
Waters of the U.S.				
San Jacinto River	0	1.15	1.15	1,394
Disturbed Alkali Playa	0	21.30	21.30	N/A
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625
TOTAL	**0.82**	**22.45**	**23.27**	**8,314**

San Jacinto River

Corps jurisdiction associated with the San Jacinto River totals 1.15 acres, all of which consist of wetland waters of the U.S. A total of 1,394 linear feet of stream is present.

The San Jacinto River is an ephemeral-to-intermittent stream entering the Project in the southern portion of the site along its eastern boundary. The San Jacinto River flows from northeast to southwest across the Project for approximately 1,394 feet before exiting the Project site beneath Nuevo Road. The drainage exhibits an OHWM approximately 75 feet wide as evidenced by the presence of water marks, sediment deposits, and debris.

Vegetation within and along the banks of the San Jacinto River is primarily dominated with riparian species including black willow (*Salix gooddingii*), tamarisk (T*amarix* ssp.), and mulefat (*Baccharis salicifolia*), with herbaceous species including common spikerush (*Eleocharis palustris*) and toothed dock (*Rumex dentatus*). Non-native species such as summer mustard, foxtail barley, and annual brome grasses are also dominant along the banks of the river.

Based on the presence of a restrictive layer preventing penetration of the upper 12 inches, a soil profile was not obtainable. However, the area is mapped as containing Riverwash and saline-alkali silty clay soils and meets the indicators for wetland hydrology. In addition, areas within and adjacent to the channel support a prevalence of riparian/wetland vegetation; therefore, hydric soils are assumed present.

Disturbed Alkali Playa

Corps jurisdiction associated with Disturbed Alkali Playa totals 21.30 acres, all of which consist of wetland waters of the U.S. This feature is within the historical floodplain of the San Jacinto River and exhibits sign of temporary inundation during the wet season as evidenced by the presence of surface soil cracks during the dry season and impenetrable clay soils. This feature contains high concentrations of alkali salts and is currently mapped by the NCSS as containing (Wn) - *Willows silty clay, deep, strongly saline alkali* soils.

While decades of agriculture practices and disturbances throughout the site have modified onsite conditions, site topography continues to convey storm flows in a general west to east direction, depending on rainfall amounts, through the site towards the San Jacinto River. Since this playa is both adjacent to, and hydrologically connected to, the San Jacinto River, it is subject to Corps jurisdiction under Section 404 of the CWA.

The playa contains a mosaic of patchy Facultative (FAC) or wetter alkali-adapted species, including silverscale saltbush (*Atriplex argentea*), alkali weed (*Cressa truxillensis*), bush seepweed (*Suaeda nigra*), heliotrope (*Heliotropium curassavicum*), alkali mallow (*Malvella leprosa*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), and San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*). Additional non-native species occur in this area as well including foxtail barley (*Hordeum murinum*), summer mustard (*Hirschfeldia incana*), Jimsonweed (*Datura wrightii*), prickly lettuce (*Lactuca serriola*), and doveweed (*Croton setiger*). Due to the presence of wetland hydrology and alkaline soils, this area meets the criteria for hydric vegetation.

Based on the presence of a restrictive layer preventing penetration of the upper 12 inches, a soil profile was not obtainable. However, the area is mapped as containing silty clay and silty clay strongly saline-alkali soils and meets the indicators for wetland hydrology; therefore, hydric soils are assumed present.

Drainage A

Corps jurisdiction associated with Drainage A totals 0.06 acre, none of which consists of wetland waters of the U.S. A total of 640 linear feet of stream is present.

Drainage A is direct ephemeral tributary to the San Jacinto River. This feature enters the off-site portion of the Project in the south at Pico Road and flows along the south side of Nuevo Road from east to west for approximately 640 feet before discharging into the eastern bank of the San Jacinto River. The drainage exhibits an OHWM ranging from three to five feet wide as evidenced by the presence of water marks, a defined bed and bank, and debris wracks. This feature is an earthen channel with ephemeral characteristics for the majority of its length but does receive irrigation run-off and nuisance flow from the neighboring greenhouse to the south and agriculture fields in the general Project vicinity. Furthermore, EMWD has several pump stations along the south of Nuevo, which may leak or discharge surface or ground water flows into Drainage A. Based on the presence of nuisance flow in the downstream extent of this

feature and its direct connection to the river, this feature is subject to Corps jurisdiction pursuant to Section 404 of the CWA.

Vegetation associated with this feature is comprised primarily of non-native upland species, including summer mustard, foxtail barley, and annual brome grasses. Additional species near the confluence with the San Jacinto River include two-three arroyo willow trees and a single tamarisk.

No soils pits were excavated in Drainage A due to a predominance of upland vegetation and ephemeral nature of the drainage.

Drainage B

Corps jurisdiction associated with Drainage B totals 0.29 acre, none of which consists of wetland water of the U.S. A total of 1,482 linear feet of drainage is present.

Drainage B is an ephemeral stream originating in the western portion of the Project site. Drainage B flows from west to east for approximately 1,482 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage B pass into a tributary to the San Jacinto River. The majority of Drainage B has been disturbed and disked away as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits an OHWM ranging from three to 10 feet wide as evidenced by changes in soil characteristics and is unvegetated.

Adjacent upland vegetation is comprised primarily of sparsely distributed Riversidean sage scrub including California buckwheat (*Eriogonum fasciculatum,* UPL), but also includes Rancher's fireweed (*Amsinckia menziesii*), skunk brush (*Rhus trilobata*), summer mustard, giant wild-rye (*Leymus condensatus*), and non-native grasses and herbs.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage C

Corps jurisdiction associated with Drainage C totals 0.16 acre, none of which consists of wetland waters of the U.S. A total of 1,626 linear feet of drainage is present.
Drainage C is an ephemeral drainage originating in the western portion of the Project site. Drainage C flows from west to east for approximately 1,626 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage C pass into a tributary to the San Jacinto River. The majority of Drainage C has been disturbed and disked away and as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits an OHWM ranging from two to 10 feet wide as evidenced by changes in soil characteristics.

Adjacent upland vegetation is comprised primarily of ruderal vegetation that is routinely disked for weed abatement, as was the case during the field study. For areas where vegetation was still

discernable, dominant plant species observed include stinknet (*Oncosiphon piluliferum*), puncture vine (*Tribulus terrestris*), London rocket (*Sisymbrium irio*), red-stemmed filaree (*Erodium cicutarium*), cheeseweed (*Malva parviflora*), fiddleneck, ripgut grass, red brome, tocalote, Russian thistle, and doveweed. Sparsely distributed Riversidean sage scrub species occurring adjacent to the head waters include California buckwheat, California sagebrush (*Artemisia californica*), and brittlebush (*Encelia farinosa*).

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage D

Corps jurisdiction associated with Drainage D totals 0.01 acre, none of which consists of wetland waters of the U.S., and a total of 70 linear feet of drainage is present.

Drainage D is a disturbed earthen feature located in the northern portion of the site that conveys brief ephemeral flow during high storm events. This feature originates at an outfall pipe that conveys run-off from the Ramona Expressway and extends in a southeasterly direction for approximately 70 linear feet, at which point, flow sign is no longer discernible. During wet years, this feature ultimately drains to the San Jacinto River. Drainage D exhibits an OHWM averaging four (4) feet wide as evidenced by changes in soil characteristics and defined channel banks. This feature was completely dry during our field investigation and is generally unvegetated. Upland vegetation adjacent to this feature includes Russian thistle and disturbed buckwheat scrub.

Areas south of this feature have been disturbed as part of ongoing dry farming activities. During the September 2020 site visit, GLA biologists observed a watermelon (*Citrullus lanatus*) agriculture field being actively managed on the Project site. Agriculture practices have been noted on the Project site historically and are subject to varying crop types and acreages.
No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage E

Corps jurisdiction associated with Drainage E totals 0.03 acre, none of which consists of wetland waters of the U.S. A total of 477 linear feet of drainage is present.
Drainage E is an ephemeral feature entering the Project via a dirt access road adjacent to Ramona Expressway. Drainage E flows southeasterly for approximately 477 feet, at which point, flow sign is no longer discernible. The majority of this feature been disturbed as part of ongoing dry farming activities on site was completely dry during our field investigation. During wet years, this feature ultimately drains to the San Jacinto River. Drainage E exhibits an OHWM ranging from one to six feet wide and lacks riparian vegetation. This feature contains ruderal species such as Russian thistle, summer mustard, and disturbed buckwheat scrub.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage F

Corps jurisdiction associated with Drainage F totals 0.27 acre, none of which consists of wetland waters of the U.S. A total of 2,625 linear feet of stream is present.

Drainage F is comprised of a series of two ephemeral features that enter the northwestern portion of the Project site and extend in a general westerly direction from for a collective 2,625 linear feet before crossing a dirt road and exiting the Project site at its eastern boundary. This feature conveys run-off from the Ramona Expressway and ultimately drains into the San Jacinto River off-site. The drainage exhibits an OHWM ranging from two to six feet wide as evidenced by the presence of a defined bed and bank, debris wracks, and changes in soil characteristics.

The majority of this feature is unvegetated with a well-drained, sandy loam substrate and was completely dry during our field investigation. This feature contains ruderal species such as Russian thistle, black mustard, and disturbed buckwheat scrub.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Regional Water Quality Control Board

Regional Board jurisdiction at the Project site totals 23.311 acres, of which 22.45 acres consist of State wetlands and 0.861 acre consists of non-wetland waters. A total of 9,142 linear feet of stream is present. This includes 1,394 linear feet of wetland stream and 7,748 linear feet of ephemeral, non-wetland stream. Of the total 23.311 acres, approximately 23.27 acres comprise Corps jurisdiction/waters of the U.S. and the remaining 0.041 acre represents Regional Board jurisdiction/waters of the State only.

Regional Board jurisdiction includes 12 features, referenced herein as the San Jacinto River, Disturbed Alkali Playa, Ditch A, Drainages A-H, and Ditch 1. The San Jacinto River, Disturbed Alkali Playa, and Drainages A-F are considered waters of the U.S. and are subject to Corps jurisdiction under Section 404 of the CWA. Since these features are considered waters of the U.S., they are also subject to Regional Board jurisdiction under Section 401 of the CWA.

Ditch A and Ditch 1 are roadside ditches that were excavated wholly in and drains only upland areas and Drainages G and H are erosional features that lack an OHWM and are characterized by infrequent duration flow . As a result, these features do not meet the criteria for regulation under Sections 404 or 401 of the CWA. However, since these features convey surface flow with the potential to support beneficial uses, they are considered to be waters of the State that would be regulated by the Regional Board pursuant to Section 13260 of the California Water Code (CWC)/the Porter-Cologne Act.

There are also several topographic features in the uplands that do not convey flows or support any beneficial uses identified in the Regional Board Basin Plan. These features do not exhibit an OHWM and do not support a defined bed, bank, and/or channel with the potential to support

aquatic resources. These features are not considered waters of the State and would not be regulated pursuant to Section 13260 of the CWC.

Graphics depicting the limits of Regional Board jurisdiction are provided as Exhibits 3B and 3D, and site photographs are provided as Exhibit 4. Table 1 below summarizes Regional Board jurisdiction at the Project site, followed by a description of each feature.

Table 4-6: Regional Board Jurisdiction

Drainage Name	Regional Board Non-Wetland Waters (Acres)	Regional Board State Wetland Waters (Acres)	Total Regional Board Jurisdiction (Acres)	Total Length (Linear Feet)
Waters of the U.S.				
San Jacinto River	0	1.15	1.15	1,394
Disturbed Alkali Playa	0	21.30	21.30	N/A
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625
Sub-Total	**0.82**	**22.45**	**23.27**	**8,314**
Waters of the State Only				
Ditch A	0.02	0	0.02	214
Drainage G	0.01	0	0.01	300
Drainage H	0.001	0	0.001	29
Ditch 1	0.01	0	0.01	285
Sub-Total	**0.041**	**0**	**0.041**	**828**
TOTAL*	**0.861**	**22.45**	**23.311**	**9,142**

*Total may not equal sum of individual parts due to rounding error

Waters of the U.S.

San Jacinto River

Regional Board jurisdiction associated with the San Jacinto River totals 1.15 acres, all of which is State wetland. A total of 1,394 linear feet of streambed is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

The San Jacinto River is an ephemeral-to-intermittent stream entering the Project in the southern portion of the site along its eastern boundary. The San Jacinto River flows from northeast to southwest across the Project for approximately 1,394 feet before exiting the Project site beneath

Nuevo Road. The drainage exhibits an OHWM approximately 75 feet wide as evidenced by the presence of water marks, sediment deposits, and debris.

Vegetation within and along the banks of the San Jacinto River is primarily dominated with riparian species including black willow, tamarisk, and mulefat, with herbaceous species including common spikerush and toothed dock. Non-native species such as foxtail barley, summer mustard, Jimsonweed, and doveweed are also dominant along the banks of the river.

Based on the presence of a restrictive layer preventing penetration of the upper 12 inches, a soil profile was not obtainable. However, the area is mapped as containing Riverwash and saline-alkali silty clay soils and meets the indicators for wetland hydrology. In addition, areas within and adjacent to the channel support a prevalence of riparian/wetland vegetation; therefore, hydric soils are assumed present.

Disturbed Alkali Playa

Regional Board jurisdiction associated with Disturbed Alkali Playa totals approximately 21.30 acres, all of which is State wetland. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

This feature is within the historical floodplain of the San Jacinto River and exhibits sign of temporary inundation during the wet season as evidenced by the presence of surface soil cracks during the dry season and impenetrable clay soils. This feature contains high concentrations of alkali salts and is currently mapped by the NCSS as containing (Wn) - *Willows silty clay, deep, strongly saline alkali* soils.

While decades of agriculture practices and disturbances throughout the site have modified onsite conditions, site topography continues to convey storm flows in a general west to east direction, depending on rainfall amounts, through the site towards the San Jacinto River. Since this playa is both adjacent to, and hydrologically connected to, the San Jacinto River, it is subject to both Corps and Regional Board jurisdiction pursuant to Sections 404 and 401 of the CWA.

The playa contains a mosaic of patchy FAC or wetter alkali-adapted species, including silverscale saltbush, alkali weed, bush seepweed, heliotrope, alkali mallow, smooth tarplant, and San Jacinto Valley crownscale. Additional non-native species occur in this area as well including foxtail barley, summer mustard, Jimsonweed, and doveweed. Due to the presence of wetland hydrology and alkaline soils, this area meets the criteria for hydric vegetation.
Based on the presence of a restrictive layer preventing penetration of the upper 12 inches, a soil profile was not obtainable. However, the area is mapped as containing silty clay and silty clay strongly saline-alkali soils and meets the indicators for wetland hydrology; therefore, hydric soils are assumed present.

Drainage A

Regional Board jurisdiction associated with Drainage A totals 0.06 acre, none of which consists of State wetlands. A total of 640 linear feet of streambed is present. This feature is considered a

water of the U.S. that is subject to both Corps and Regional Board jurisdiction under Sections 404 and 401 of the CWA.

Drainage A is a direct ephemeral tributary to the San Jacinto River. This feature enters the off-site portion of the Project in the south at Pico Road and flows along the south side of Nuevo Road from east to west for approximately 640 feet before discharging into the eastern bank of the San Jacinto River. The drainage exhibits an OHWM ranging from three to five feet wide as evidenced by the presence of water marks, a defined bed and bank, and debris wracks. This feature is an earthen channel with ephemeral characteristics for the majority of its length but does receive irrigation run-off and nuisance flow from the neighboring greenhouse to the south and agriculture fields in the general Project vicinity. Furthermore, EMWD has several pump stations along the south of Nuevo, which may leak or discharge surface or ground water flows into Drainage A. Based on the presence of nuisance flow in the downstream extent of this feature and its direct connection to the river, this feature is subject to both Corps and Regional Board jurisdictions pursuant to Sections 404 and 401 of the CWA.

Vegetation associated with this feature is comprised primarily of non-native upland species, including summer mustard, foxtail barley, and annual brome grasses. Additional species near the confluence with the San Jacinto River include two-three arroyo willow trees and a single tamarisk.

No soils pits were excavated in Drainage A due to a predominance of upland vegetation and ephemeral nature of the drainage.

Drainage B

Regional Board jurisdiction associated with Drainage B totals 0.29 acre, none of which is State wetland. A total of 1,482 linear feet of drainage is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage B is an ephemeral stream originating in the western portion of the Project site. Drainage B flows from west to east for approximately 1,482 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage B pass into a tributary to the San Jacinto River. The majority of Drainage B has been disturbed and disked away as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits slight flow sign ranging from three to 10 feet wide.

Adjacent upland vegetation is comprised primarily of sparsely distributed Riversidean sage scrub including California buckwheat, but also includes Rancher's fireweed, skunk brush, summer mustard, giant wild-rye, and non-native grasses and herbs.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage C

Regional Board jurisdiction associated with Drainage C totals 0.16 acre, none of which is State wetland. A total of 1,626 linear feet of drainage is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage C is an ephemeral drainage originating in the western portion of the Project site. Drainage C flows from west to east for approximately 1,626 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage C pass into a tributary to the San Jacinto River. A majority of Drainage C has been disturbed and disked away and as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits slight flow sign ranging from two to 10 feet wide and lacks vegetation.

Adjacent upland vegetation is comprised primarily of ruderal vegetation that is routinely disked for weed abatement, as was the case during the field study. For areas where vegetation was still discernable, dominant plant species observed include stinknet, puncture vine , London rocket, red-stemmed filaree, cheeseweed, fiddleneck, ripgut grass, red brome, tocalote, Russian thistle, and doveweed. Sparsely distributed Riversidean sage scrub species occurring adjacent to the head waters include California buckwheat, California sagebrush, and brittlebush.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage D

Regional Board jurisdiction associated with Drainage D totals 0.01 acre, none of which is State wetland, and a total of 70 linear feet of drainage is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage D is a disturbed earthen feature located in the northern portion of the site that conveys brief ephemeral flow during high storm events. This feature originates at an outfall pipe that conveys run-off from the Ramona Expressway and extends in a southeasterly direction for approximately 70 linear feet, at which point, flow sign is no longer discernible. This feature exhibits slight flow sign averaging four (4) feet wide was completely dry during our field investigation. Upland vegetation adjacent to this feature includes Russian thistle and disturbed buckwheat scrub.

Areas south of this feature have been disturbed as part of ongoing dry farming activities. During the September 2020 site visit, GLA biologists observed a watermelon agriculture field being actively managed on the Project site. Agriculture practices have been noted on the Project site historically and are subject to varying crop types and acreages.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage E

Regional Board jurisdiction associated with Drainage E totals 0.03 acre, none of which is State wetland. A total of 477 linear feet of drainage is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage E is an ephemeral feature entering the Project via a dirt access road adjacent to Ramona Expressway. Drainage E flows southeasterly for approximately 477 feet, at which point, flow sign is no longer discernible. A majority of this feature been disturbed as part of ongoing dry farming activities on site was completely dry during our field investigation. Drainage E exhibits flow sign ranging from one to six feet wide and lacks riparian vegetation. This feature contains ruderal species such as Russian thistle, summer mustard, and disturbed buckwheat scrub.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage F

Regional Board jurisdiction associated with Drainage F totals 0.27 acre, none of which is State wetland. A total of 2,625 linear feet of stream is present. This feature is considered a water of the U.S. that is subject to both Corps and Regional Board jurisdictions under Sections 404 and 401 of the CWA.

Drainage F is comprised of a series of two ephemeral features that enter the northwestern portion of the Project site and extend in a general westerly direction from for a collective 2,625 linear feet before crossing a dirt road and exiting the Project site at its eastern boundary. This feature conveys run-off from the Ramona Expressway and ultimately drains into the San Jacinto River off-site. The drainage exhibits an OHWM ranging from two to six feet wide as evidenced by the presence of a defined bed and bank, debris wracks, and changes in soil characteristics.
A majority of this feature is unvegetated with a well-drained, sandy loam substrate and was completely dry during our field investigation. This feature contains ruderal species such as Russian thistle, black mustard, and disturbed buckwheat scrub.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Waters of the State Only

Ditch A

Regional Board jurisdiction associated with Ditch A totals 0.02 acre and 214 linear feet, none of which is State wetland. This feature is considered a water of the State that is subject to Section 13260 of the California Water Code (CWC)/the Porter-Cologne Act.

Ditch A enters the off-site portion of the Project site at Nuevo Rd. along the east side of Pico Road and runs south for approximately 214 linear feet before exiting the off-site Project area. This feature is an ephemeral earthen roadside ditch approximately five (5) feet wide and ultimately discharges onto the EMWD property, located off-site. Ditch A receives irrigation and road run-off from the surrounding areas and was completely dry during our field investigation. Vegetation adjacent to this feature is comprised primarily of non-native grasses and herbs similar to those described above.

Drainage G

Regional Board jurisdiction associated with Drainage G totals 0.01 acre and 300 linear feet, none of which is State wetland. This feature is considered a water of the State that is subject to Section 13260 of the CWC/the Porter-Cologne Act.

Drainage G is an earthen ephemeral drainage that starts at an outfall pipe located in the off-site northwestern portion of the Project area. This features begins north of the EMWD water tank located on top of a hill and runs along the southern side of a gravel access road for approx. 300 ft downslope before disappearing into the gravel road that separates EMWD from an existing school site. This feature averages two feet wide as evidenced by the presence of bed and bank and does not connect to any downstream feature. Drainage G was completely dry during our field investigation.

Upland vegetation is comprised primarily of disturbed Riversidean sage scrub including California buckwheat and coyote brush (*Baccharis pilularis*), but also includes Rancher's fireweed, skunk brush, summer mustard, and non-native grasses and herbs.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Drainage H

Regional Board jurisdiction associated with Drainage H totals 0.001 acre and 29 linear feet, none of which is State wetland. This feature is considered a water of the State that is subject to Section 13260 of the CWC/the Porter-Cologne Act.

Drainage H is partially earthen ephemeral standard two-foot wide v-ditch located in the northwestern off-site portion of the Project area. This feature exists on the north side of an EMWD gravel access road and extends down slope for approximately 29 linear feet before leaving the off-site portion of the Project area. This feature ultimately dissipates into flat uplands and does not connect to any downstream feature and was completely dry during our field investigation.

Vegetation associated with this feature includes disturbed Riversidean sage scrub including California buckwheat, coyote brush, and non-native grasses and herbs.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

Ditch 1

Regional Board jurisdiction associated with Ditch 1 totals 0.01 acre and 285 linear feet, none of which is State wetland. This feature is considered a water of the State that is subject to Section 13260 of the California Water Code (CWC)/the Porter-Cologne Act.

Ditch 1 enters the southerly off-site portion of the Project site through a two-foot wide corrugated metal pipe at the intersection of Dunlap Drive and Nuevo Road. The ditch extends across the site for 285 linear feet adjacent to the eastern road edge of Dunlap Drive before flowing
offsite and entering the underground storm drain system.

The roadside ditch is approximately two feet wide and 285 feet within the Project area. The roadside ditch is ephemeral and generally unvegetated, although the upper bank of the ditch contains disturbed/ruderal vegetation such as brome grass (*Bromus* sp.), mustard (*Brassica nigra*), and stinknet.

No soil pits were excavated due to a lack of wetland hydrology and a lack of riparian/wetland vegetation.

California Fish and Wildlife Jurisdiction

CDFW jurisdiction at the Project site totals approximately 26.151 acres and includes all areas within Corps and/or Regional Board jurisdiction. Of this total, 22.95 acres consist of riparian stream, and 3.201 acres consist of non-riparian stream. A total of 9,142 linear feet of stream is present. This includes 2,034 linear feet of riparian stream and 7,108 linear feet of ephemeral, non-riparian stream.

The Project site contains 12 drainage features, referenced herein as the San Jacinto River, Disturbed Alkali Playa, Ditch A, Drainages A-H, and Ditch 1. Drainages A through H, Ditch A, and Ditch 1 are ephemeral drainage features that accept urban flow and storm water runoff from the surrounding areas. The San Jacinto River is an ephemeral-to-intermittent stream and is hydrologically connected to the Disturbed Alkali Playa, located just west of the river. These features exhibit flow sign with the presence of a bed and bank and/or contain riparian habitat that is associated with the San Jacinto River. As such, these features are subject to CDFW jurisdiction under Section 1602 of the Fish and Game Code.

There are also several topographic features in the uplands that do not exhibit a defined bed, bank, and/or channel with the potential to support aquatic resources. These features are not rivers, streams, or lakes and as such, are not subject to CDFW jurisdiction under Section 1602 of the Fish and Game Code.

Graphics depicting the limits of CDFW jurisdiction are provided as Exhibits 3C and 3E, and site photographs are provided as Exhibit 4. Table 1 below summarizes CDFW jurisdiction at the Project site, followed by a description of each feature.

Table 4-7: CDFW Jurisdiction

Drainage Name	Total CDFW Non-Riparian Stream (Acres)	Total CDFW Riparian Stream (Acres)	Total CDFW Jurisdiction (Acres)	Total Length (Linear Feet)
San Jacinto River	2.14	1.51	3.65	1,394
Disturbed Alkali Playa	0	21.30	21.30	N/A
Drainage A	0.07	0.14	0.21	640
Ditch A	0.02	0	0.02	214
Drainage B	0.37	0	0.37	1,482
Drainage C	0.22	0	0.22	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.31	0	0.31	2,625
Drainage G	0.02	0	0.02	300
Drainage H	0.001	0	0.001	29
Ditch 1	0.01	0	0.01	285
Total	**3.201**	**22.95**	**26.151**	**9,142**

San Jacinto River

CDFW jurisdiction associated with the San Jacinto River totals 3.65 acres, of which, 1.51 acres consist of riparian stream, and 2.14 acres consist of non-riparian stream. A total of 1,394 linear feet of stream is present. .

The San Jacinto River is an ephemeral-to-intermittent stream entering the Project in the southern portion of the site along its eastern boundary. The San Jacinto River flows from northeast to southwest across the Project for approximately 1,394 feet before exiting the Project site beneath Nuevo Road.

Vegetation within and along the banks of the San Jacinto River is primarily dominated with riparian species including black willow, tamarisk, and mulefat, with herbaceous species including common spikerush and toothed dock. Non-native species such as summer mustard, foxtail barley, and annual brome grasses are also dominant along the banks of the river.

Disturbed Alkali Playa

CDFW jurisdiction associated with Disturbed Alkali Playa totals approximately 21.30 acres, all of which is riparian.

This feature is within the historical floodplain of the San Jacinto River and exhibits sign of temporary inundation during the wet season as evidenced by the presence of surface soil cracks during the dry season and impenetrable clay soils. This feature contains high concentrations of alkali salts and is currently mapped by the NCSS as containing (Wn) - *Willows silty clay, deep, strongly saline alkali* soils.

While decades of agriculture practices and disturbances throughout the site have modified onsite conditions, site topography continues to convey storm flows in a general west to east direction, depending on rainfall amounts, through the site towards the San Jacinto River. Since this playa is both adjacent to, and hydrologically connected to, the San Jacinto River, it is subject to CDFW jurisdiction pursuant to Section 1602 of the Fish and Game Code.

The playa contains a mosaic of patchy alkali-adapted species, including silverscale saltbush, alkali weed, bush seepweed, heliotrope, alkali mallow, smooth tarplant, and San Jacinto Valley crownscale. Additional non-native species occur in this area as well including foxtail barley, summer mustard, Jimsonweed, prickly lettuce, and doveweed.

Drainage A

CDFW jurisdiction associated with Drainage A totals 0.21 acre, of which, 0.14 acres is riparian and 0.07 is non-riparian. A total of 640 linear feet of stream is present.

Drainage A is direct ephemeral tributary to the San Jacinto River. This feature enters the off-site portion of the Project in the south at Pico Road and flows along the south side of Nuevo Road from east to west for approximately 640 feet before discharging into the eastern bank of the San Jacinto River. Flow sign averages five feet wide as evidenced by the presence of water marks, changes in soil characteristics, and a defined bed and bank. This feature is an earthen channel with ephemeral characteristics for the majority of its length but does receive irrigation run-off and nuisance flow from the neighboring greenhouse to the south and agriculture fields in the general Project vicinity. Furthermore, EMWD has several pump stations along the south of Nuevo, which may leak or discharge surface or ground water flows into Drainage A.

Vegetation associated with this feature is comprised primarily of non-native upland species, including summer mustard, foxtail barley, and annual brome grasses. Additional species near the confluence with the San Jacinto River include two-three arroyo willow trees and a single tamarisk.

Ditch A

CDFW jurisdiction associated with Ditch A totals 0.02 acre, none of which is riparian. A total of 214 linear feet of drainage is present.

Ditch A enters the off-site portion of the Project site at Nuevo Rd. along the east side of Pico Rd. and runs south for approximately 214 linear feet before exiting the off-site Project area. This feature is an ephemeral earthen roadside ditch approximately five (5) feet wide and ultimately discharges onto the EMWD property, located off-site. Ditch A receives irrigation and road run-

off from the surrounding areas and was completely dry during our field investigation. Vegetation adjacent to this feature is comprised primarily of non-native grasses and herbs.

Drainage B

CDFW jurisdiction associated with Drainage B totals 0.37 acre, none of which is riparian. A total of 1,482 linear feet of drainage is present.

Drainage B is an ephemeral stream originating in the western portion of the Project site. Drainage B flows from west to east for approximately 1,482 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage B pass into a tributary to the San Jacinto River. A majority of Drainage B has been disturbed and disked away as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits slight flow sign ranging from three to 20 feet wide.

Adjacent upland vegetation is comprised primarily of sparsely distributed Riversidean sage scrub including California buckwheat, but also includes Rancher's fireweed, skunk brush, summer mustard, giant wild-rye, and non-native grasses and herbs.

Drainage C

CDFW jurisdiction associated with Drainage C totals 0.22 acre, none of which is riparian. A total of 1,626 linear feet of drainage is present.

Drainage C is an ephemeral drainage originating in the western portion of the Project site. Drainage C flows from west to east for approximately 1,626 feet before exiting the Project site at its eastern boundary. Eventually, flows from Drainage C pass into a tributary to the San Jacinto River. A majority of Drainage C has been disturbed and disked away and as part of ongoing dry farming activities on site and was completely dry during our field investigation. The drainage exhibits slight flow sign ranging from two to 20 feet wide and lacks vegetation.

Adjacent upland vegetation is comprised primarily of ruderal vegetation that is routinely disked for weed abatement, as was the case during the field study. For areas where vegetation was still discernable, dominant plant species observed include stinknet, puncture vine, London rocket, red-stemmed filaree, cheeseweed, fiddleneck, ripgut grass, red brome, tocalote, Russian thistle, and doveweed. Sparsely distributed Riversidean sage scrub species occurring adjacent to the head waters include California buckwheat, California sagebrush, and brittlebush.

Drainage D

CDFW jurisdiction associated with Drainage D totals 0.01 acre, none of which is riparian, and a total of 70 linear feet of drainage is present.

Drainage D is a disturbed earthen feature located in the northern portion of the site that conveys brief ephemeral flow during high storm events. This feature originates at an outfall pipe that conveys run-off from the Ramona Expressway and extends in a southeasterly direction for

approximately 70 linear feet, at which point, flow sign is no longer discernible. This feature exhibits slight flow sign averaging four feet wide was completely dry during our field investigation. Upland vegetation adjacent to this feature includes Russian thistle and disturbed buckwheat scrub.

Areas south of this feature have been disturbed as part of ongoing dry farming activities. During the September 2020 site visit, GLA biologists observed a watermelon agriculture field being actively managed on the Project site. Agriculture practices have been noted on the Project site historically and are subject to varying crop types and acreages.

Drainage E

CDFW jurisdiction associated with Drainage E totals 0.03 acre, none of which is riparian. A total of 477 linear feet of drainage is present.

Drainage E is an ephemeral feature entering the Project via a dirt access road adjacent to Ramona Expressway. Drainage E flows southeasterly for approximately 477 feet, at which point, flow sign is no longer discernible. A majority of this feature been disturbed as part of ongoing dry farming activities on site was completely dry during our field investigation. Drainage E exhibits flow sign ranging from one to six feet wide and lacks riparian vegetation. This feature contains ruderal species such as Russian thistle, black mustard, and disturbed buckwheat scrub.

Drainage F

CDFW jurisdiction associated with Drainage F totals 0.31 acre, none of which is riparian. A total of 2,625 linear feet of stream is present.

Drainage F is comprised of a series of two ephemeral features that enter the northwestern portion of the Project site and extend in a general westerly direction from for a collective 2,625 linear feet before crossing a dirt road and exiting the Project site at its eastern boundary. This feature conveys run-off from the Ramona Expressway and ultimately drains into the San Jacinto River off-site. The drainage exhibits flow sign ranging from two to 10 feet wide as evidenced by the presence of a defined bed and bank, debris wracks, and changes in soil characteristics. A majority of this feature is unvegetated with a well-drained, sandy loam substrate and was completely dry during our field investigation. This feature contains ruderal species such as Russian thistle, black mustard, and disturbed buckwheat scrub.

Drainage G

CDFW jurisdiction associated with Drainage G totals 0.01 acre, none of which is riparian. A total of 300 linear feet of drainage is present.

Drainage G is an earthen ephemeral drainage that starts at an outfall pipe located in the off-site northwestern portion of the Project area. This features begins north of the EMWD water tank located on top of a hill and runs along the southern side of a gravel access road for approx. 300 ft downslope before disappearing into the gravel road that separates EMWD from an existing school site. This feature exhibits flow sign ranging from two to four feet wide as evidenced by

top of bank and does not connect to any downstream feature. Drainage G was completely dry during our field investigation.

Upland vegetation is comprised primarily of disturbed Riversidean sage scrub including California buckwheat and coyote brush, but also includes Rancher's fireweed, skunk brush, summer mustard, and non-native grasses and herbs.

Drainage H

CDFW jurisdiction associated with Drainage H totals 0.001 acre, none of which is riparian. Approximately 29 linear feet of drainage is present.

Drainage H is partially earthen ephemeral standard two-foot wide v-ditch located in the northwestern off-site portion of the Project area. This feature exists on the north side of an EMWD gravel access road and extends down slope for approximately 29 linear feet before leaving the off-site portion of the Project area. This feature ultimately dissipates into flat uplands and does not connect to any downstream feature and was completely dry during our field investigation.

Vegetation associated with this feature includes disturbed Riversidean sage scrub including California buckwheat, coyote brush, and non-native grasses and herbs.

Ditch 1

CDFW jurisdiction associated with Ditch 1 totals 0.01 acre and 285 linear feet, none of which is riparian.

Ditch 1 enters the southerly off-site portion of the Project site through a two-foot wide corrugated metal pipe at the intersection of Dunlap Drive and Nuevo Road. The ditch extends across the site for 285 linear feet adjacent to the eastern road edge of Dunlap Drive before flowing offsite and entering the underground storm drain system.

The roadside ditch is approximately two feet wide and 285 feet within the Project area. The roadside ditch is ephemeral and generally unvegetated, although the upper bank of the ditch contains disturbed/ruderal vegetation such as brome grass, mustard, and stinknet.

4.10 MSHCP Riparian/Riverine Areas and Vernal Pools

Vegetation communities associated with riparian systems are considered special-status natural vegetation communities because, similar to coastal sage scrub, they have declined throughout southern California during past decades. In addition, they can support a large variety of special-status wildlife species. Most special-status species directly associated with MSHCP riparian/riverine resources are covered species under the MSHCP (under Section 6.1.2 of the Plan). The MSHCP has specific policies and procedures regarding the evaluation and conservation of riparian/riverine resources (including riparian vegetation) because it supports MSHCP covered species. Specifically, the MSHCP states that "riparian/riverine areas are natural

lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." Thus, the MSHCP classification of riparian/riverine includes both riparian (depleted natural vegetation communities) as well as ephemeral drainages that are natural in origin but may lack riparian vegetation. For this analysis, all features that qualify as state streambeds are considered MSHCP riparian/riverine resources.

Project Site

For this analysis, all features that qualify as CDFW jurisdiction are considered MSHCP riparian/riverine resources. MSHCP riparian/riverine resources at the Project site totals approximately 26.141 acres. Of this total, 22.95 acres consist of riparian stream, and 3.191 acres consist of non-riparian [riverine] stream. A total of 8,857 linear feet of stream is present. This includes 1,476 linear feet of riparian stream and 7,381 linear feet of ephemeral, non-riparian stream.

The majority of the Project site consists of ruderal, agricultural, and non-native grasslands that are subjected to seasonal grading, disking, and modifications that leave the site disturbed. Although no vernal pools were observed within the Project site, the San Jacinto River and terraces that are subject to flooding, exhibit topography that may support vernal pools. Similarly, the adjacent uplands also exhibit topography that would support vernal pools. As stated above, areas within the disturbed alkali playas associated with the San Jacinto floodplain that exhibit topography and vernal pool soil characteristics, will be avoided by Project impacts as they are located within the Open Space/Conserved Lands under specific Land Use Plan. A graphic depicting the limits of MSHCP riparian/riverine areas is attached as Exhibit 11 D and site photographs are provided as Exhibit 12.

Northerly and Southerly Off Site Road Improvement and Use Areas

For this analysis, all features that qualify as CDFW jurisdiction are considered MSHCP riparian/riverine resources. MSHCP riparian/riverine jurisdiction within the (Northerly and Southerly Off Site Road Improvement and Use Areas totals approximately 0.01 acre, none of which consists of riparian stream. A total of 285 linear feet of ephemeral ditch is present.

<u>Ditch 1</u>

MSHCP riparian/riverine jurisdiction associated with Ditch 1 totals approximately 0.01 acre, none of which consists of riparian stream. A total of 285 linear feet of ephemeral ditch is present. Ditch 1 enters the off site area through a two-foot wide corrugated metal pipe at the intersection of Dunlap Drive and Nuevo Road. The ditch extends for 285 linear feet adjacent to the eastern road edge of Dunlap Drive. After flowing southerly for 285 linear feet, the ditch leaves the site and enters the storm drain system and is no longer visible.

The roadside ditch is approximately two feet wide and 285 feet in length. The roadside ditch is ephemeral and generally unvegetated, although the upper bank of the ditch contains

disturbed/ruderal vegetation such as brome grass (*Bromus* sp.), mustard (*Brassica nigra*), and stinknet (*Oncosiphon pilulifer*).

5.0 IMPACT ANALYSIS

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

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

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

5.1 California Environmental Quality Act (CEQA)

5.1.1 Thresholds of Significance

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

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

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

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

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

5.1.2 Criteria for Determining Significance Pursuant to CEQA

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

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Appendix G(a) of the CEQA guidelines asks if a project is likely to "have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (now CA Department of Fish and Wildlife) or U.S. Fish and Wildlife Service."

5.2. Impacts to Special-Status Plants

Project Site

As stated above, four special-status plant species were observed within the Project site within the disturbed alkali playa areas, including: Coulter's goldfields, San Jacinto Valley crownscale, smooth tarplant, and spreading navarretia. However, no impacts to these species is expected as the Project has been specifically designed to avoid and conserve these areas through project avoidance and/or conservation of where these special-status plants have potential to occur. These areas are also expected to be dedicated to the RCA for long-term management. Therefore, under CEQA, no significant impacts to special-status plant species is expected.

Sections 6.1.3 and 6.3.2 of the MSHCP require that projects avoid 90% of areas providing long-term conservation value for applicable species when NEPSSA and/or CAPSSA species are detected. If avoidance is infeasible, then mitigation must be provided and a Determination of Biologically Equivalent or Superior Preservation (DBESP) is required. Where potentially significant, impacts to special-status plants are reduced to below a level of significance through compliance with the biological requirements of the MSHCP. As stated above, the Project occurs within a NEPSSA and CAPSSA. Four special-status plant species: Coulter's goldfields, San Jacinto Valley crownscale, smooth tarplant, and spreading navarretia, were observed within the Project site during the 2019 focused-plant surveys. However, Project impacts will avoid impacts to the disturbed alkali playas where the four special-status plant species have been observed. These areas are also expected to be dedicated to the RCA for long-term management. Therefore, the Project will meet the MSHCP requirement for avoidance of the NEPSSA and CAPSSA species by avoiding these populations within the Project site (Exhibit 10).

Northerly and Southerly Off Site Road Improvement and Use Areas

The (Northerly and Southerly Off Site Road Improvement and Use Areas does not support sensitive plant species, including NEPSSA or CAPSSA species; therefore, no temporary or permanent impact to special-status plants will occur in this area.

5.3 Impacts to Special-Status Animals Observed within the Project Site and/or Northerly and Southerly Off Site Road Improvement and Use Areas

Project Site

The proposed Project will result in the loss of habitat that supports special-status species, including the following: ferruginous hawk, northern harrier, white-tailed kite, loggerhead shrike, LAPM, northwestern San Diego pocket mouse, San Diego desert woodrat, Stephens' kangaroo rat, and San Diego black-tailed jackrabbit.

Impacts to Birds

Of the four special-status (non-listed) bird species known to occur within the Project site, the northern harrier and loggerhead shrike have a low to moderate potential to nest within areas that will be directly impacted by the Project. Impacts to these species may be significant under CEQA, however each of these species is covered under the MSHCP conservation goals and therefore, Project impacts to suitable nesting habitat are addressed through consistency with the MSHCP, as outlined below in Section 6.0, Recommended Avoidance Measures. Furthermore, as outlined below, the Project will avoid vegetation removal during the nesting bird season to the most feasible extent. With implementation and coverage of the Project under the MSHCP conservation goals and the avoidance of the bird breeding season, the Project would not have a significant impact on special-status bird species that may nest on-site. A specific measure to avoid potential impacts to nesting birds is included in Section 6.0, below.

Impacts to Small Mammals

Five special-status small mammal species are known to occur within the Project site. The Project would directly impact approximately 500 acres of small mammal habitat. Impacts to these species may be significant under CEQA, however each of these species are covered under the MSHCP conservation goals and therefore, these impacts are addressed through consistency with the MSHCP, as outlined under Section 6.0 below. Impacts to small mammal suitable habitat, including the LAPM and SKR, would be offset through participation in the SKR HCP and consistent with the MSHCP as outlined under Section 6.0. Furthermore, as stated above, the Project is within the MSHCP Mammal Survey Area for LAPM; however it was previously determined by the County of Riverside Environmental Programs Division (County EPD) that there would be no significant impact to the LAPM as the Project site does not contain long-term conservation value for this species and the conservation area supporting the LAPM was offered to the RCA for long-term conservation of the species, but the RCA was not interested in conserving this area for the long-term conservation of the LAPM. With implementation and

coverage of the Project under the MSHCP conservation goals, the Project would not have a significant impact on special-status small mammal species.

Northerly and Southerly Off Site Road Improvement and Use Areas

The Northerly and Southerly Off Site Road Improvement and Use Areas will not result in the loss of habitat supporting special-status wildlife species as a majority of the off site area contains paved roadways.

5.4 Impacts to Special-Status Wildlife Species Not Observed but with a Potential to Occur at the Project Site and/or the Northerly and Southerly Off Site Road Improvement and Use Areas

Project Site

The Project has the potential to impact special-status species that were unable to be confirmed as occurring on the Project site. Special-status species that have the potential to occur in a foraging roll only include: the golden eagle, tricolor blackbird, pocketed free-tailed bat, and western mastiff bat. The proposed Project will result in the loss of approximately 500 acres of foraging habitat for these species that may be significant under CEQA, however adequate coverage of conserved lands through the conservation goals of the Plan would reduce the Project's impact to foraging habitat to less than a significant level. Therefore, these impacts are addressed through consistency with the MSHCP, as outlined in Section 7.0.

Special-status species that were unable to be confirmed as occurring on the Project site but have the potential to occur within live-in habitat include: coastal California gnatcatcher, California glossy snake, coast horned lizard, costal whiptail, and red-diamond rattlesnake.

The Project would impact 10.37 acres of Riversidean sage scrub, which would potentially support live-in habitat for the coastal California gnatcatcher. Continued loss of Riversidean sage scrub at a regional level, could be significant under CEQA prior to mitigation. However, through the conservation goals of the MSHCP, Riversidean sage scrub live-in habitat is adequately conserved/preserved, therefore; Project impacts to coastal California gnatcatcher would be less than significant.

The Project would impact potential live-in habitat for special-status reptiles: the California glossy snake, coast horned lizard, costal whiptail, and red-diamond rattlesnake. Continued loss of rock outcrops, non-native grasslands, and riparian areas at a regional level, could be significant under CEQA prior to mitigation. However, each of these reptile species are adequately covered under the MSHCP and through the conservation goals of the plan, live-in habitat for these species is adequately preserved, therefore; Project impacts to the California glossy snake, coast horned lizard, costal whiptail, and red-diamond rattlesnake would be less than significant.

Northerly and Southerly Off Site Road Improvement and Use Areas

The Project will not impact special-status species due to a lack of suitable habitat present; therefore, the disturbance to approximately 96.69 acres of off site land which generally consists of existing paved roadways, would not be significant under CEQA. Additionally, adequate coverage of conserved lands through the conservation goals of the Plan would further reduce the Project's impact to foraging habitat to less than a significant level. These impacts are addressed through consistency with the MSHCP, as outlined in Section 7.0.

5.5 Sensitive Vegetation Communities

Project Site

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

As discussed above, the proposed Project will permanently impact 0.29 acre of Southern Riparian Scrub (Classified as G3-Vunerable by the CNDDB) during construction. The loss of riparian habitat must be mitigated pursuant to *Volume I, Section 6.1.2* of the MSHCP. Impacts to Southern Riparian Scrub would be potentially significant; however, this impact would be reduced to a less than significant level with the mitigation described below in Section 6.0 of this report and through participation in the MSHCP. None of the other vegetation communities to be impacted by the Project are considered as sensitive communities under CEQA. Table 5-1 provides a summary of impacts to vegetation/land use types.

Table 5-1. Summary of Vegetation/Land Use Impacts; Project Site

Vegetation/Land Use Type	Onsite Impacts (acres)	Offsite Impacts (acres)	Total Impacts (acres)	Avoided Areas (acres)
Agriculture	155.52	-	155.52	21.29
Disturbed Alkali Playa	-	-	-	21.30
Disturbed/Developed	10.72	6.11	16.83	3.58
Non-Native Grassland	0	0.01	0.01	1.39
Ornamental	0	0.97	0.97	0
Riversidean Sage Scrub	8.33	2.04	10.37	16.17
Ruderal	310.32	17.80	328.12	32.62
Southern Riparian Scrub	0	0.29	0.29	1.20
Total	**484.89**	**27.22**	**512.11**	**97.55**

Northerly and Southerly Off Site Road Improvement and Use Areas

Appendix G(b) of the CEQA guidelines asks if a project is likely to "have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in

local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service."

The Northerly and Southerly Off Site Road Improvement and Use Areas does not support suitable habitat for special-status vegetation communities as all 96.69 acres of this area contain disturbed/developed habitats. Table 5-2 provides a summary of impacts to vegetation/land use types.

Table 5-2. Summary of Vegetation/Land Use Impacts; Northerly and Southerly Off Site Road Improvement and Use Areas

Vegetation/Land Use Type	Onsite Impacts (acres)	Offsite Impacts (acres)	Total Impacts (acres)	Avoided Areas (acres)
Disturbed/Developed	0	96.69	96.69	0
Total	**0**	**96.69**	**96.69**	**0**

5.6 Wetlands

Appendix G(c) of the State CEQA guidelines asks if a project is likely to "have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means."

Project Site

As stated above, 22.45 acres of wetlands occur within the Project site within the disturbed alkali playa (21.30 acres) and the San Jacinto River (1.15 acres). The Project will avoid all impacts to the disturbed alkali playa, which will be dedicated as conservation land to the RCA for long-term management. Development related to utility installation and roadway improvements along the southern boundary of the Project would impact 0.16 acre of wetlands within the San Jacinto River and associated floodplain. Permanent impacts to state and federal wetlands will require compensatory mitigation. The Project proponent will seek wetland mitigation from an agency approved bank or in-lieu fee program at a minimum 1:1 ratio. As such, impacts to wetlands will be less than significant with mitigation, as described below in Section 6.0 of this report.

Northerly and Southerly Off Site Road Improvement and Use Areas

There are no wetlands present within the Northerly and Southerly Off Site Road Improvement and Use Areas.

5.7 Wildlife Movement and Native Wildlife Nursery Sites

Appendix G(d) of the State CEQA guidelines asks if a project is likely to "interfere substantially with the movement of any native resident or migratory fish or wildlife species or with

established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites."

Project Site

As stated above, the Project site is located within the proposed extension of Existing Core 4 within MSHCP Cell Groups C, D, E, F, and G. The proposed extension of Existing Core 4 is composed of the middle reach of the San Jacinto River and is contiguous with Core Area in Lake Perris Recreation Area to the north of the Project site. The San Jacinto River channel, to the south and east of the Project site, would potentially provide a movement corridor for medium to small mammals between the adjacent open space associated with the Lake Perris reserve to the north and open space to the southwest of the Project site. However, the Project has been specifically designed to conserve areas within each Criteria Cell, including the majority of the San Jacinto River and the adjacent areas. Furthermore, the proposed Project's off-site improvements to the Nuevo Road Bridge over the San Jacinto River is a covered activity under the MSHCP (Section 2.3.7.4). Temporary disturbances to wildlife movement may occur during construction; however, these disturbances would be limited to day-time hours during construction activities and would not interfere significantly with wildlife movement on a landscape level. The Project's consistency with the MSHCP would reduce impacts to wildlife movement to a level of less than significant under CEQA. Additionally, no native wildlife nursery sites were observed within the Project area and therefore, no significant impacts to wildlife nursery sites would occur.

Northerly and Southerly Off Site Road Improvement and Use Areas

A majority of the Northerly and Southerly Off Site Road Improvement and Use Areas is located within existing roadway right-of-way for General Plan Roads covered under the MSHCP. These roadways include Nuevo Road, Dunlap Drive, San Jacinto Avenue, and Redlands Avenue. Portions of the Northerly and Southerly Off Site Road Improvement and Use Areas are located within the Mead Valley Area Plan of the MSHCP and are included within the MSHCP Criteria Area. Specifically, the site falls within portions of Criteria Cells: 2969 and 3069 in Cell Group G [Exhibit 5C – MSHCP Map]. Although within these criteria cells, the Northerly and Southerly Off Site Road Improvement and Use Areas consists of existing paved roadways or areas immediately adjacent to these roadways containing compacted soil.

This activity is considered a covered activity under the MSHCP (Section 2.3.7.4). Temporary disturbances to wildlife movement may occur during construction; however, these disturbances would be limited to day-time hours during construction activities and would not interfere significantly with wildlife movement on a landscape level. The Project's consistency with the MSHCP would reduce impacts to wildlife movement to a level of less than significant under CEQA. Additionally, no native wildlife nursery sites were observed within the Project area and therefore, no significant impacts to wildlife nursery sites would occur.

5.8 Local Policies or Ordinances

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

The proposed Project and the Northerly and Southerly Off Site Road Improvement and Use Areas will not conflict with any local policies or ordnances.

5.9 Habitat Conservation Plans

Appendix G(f) of the State CEQA guidelines asks if a project is likely to "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan." As discussed throughout this report, the Project and Northerly and Southerly Off Site Road Improvement and Use Areas are within the Western Riverside County MSHCP Plan Area. Section 7.0 of this report analyzes compliance of the Project with the Reserve Assembly and species/habitat requirements of the MSHCP. Impacts to species/habitats in the context of MSHCP requirements are summarized therein. Through compliance with the applicable requirements, the Project will not conflict with the provisions of the MSHCP.

5.10 Impacts to Critical Habitat

Project Site

As stated above, USFWS Designated Critical Habitat for spreading navarretia (*Navarretia fossalis*) occurs in the eastern and southeastern portions of the Project boundary within the floodplain of the San Jacinto River. As stated above, spreading navarretia was observed within the Project site within the disturbed alkali playas, however these areas will be conserved and will not be impacted by the Project (see Exhibit 10). Spreading navarretia was not observed within the San Jacinto River channel or banks. However, under the proposed Project, 8.13 acres of impacts to areas mapped by the USFWS as designated critical habitat for spreading navarretia will occur during off-site roadway improvements associated with the Nuevo Road Bridge. Coordination with the USFWS regarding impacts to designated critical habitat for spreading navarretia will occur through the streamlined Section 7 process through the MSHCP.

Northerly and Southerly Off Site Road Improvement and Use Areas

The Northerly and Southerly Off Site Road Improvement and Use Areas do not support Critical Habitat areas, nor would it impact such areas.

5.11 Jurisdictional Waters

Project Site

Impacts to Corps Jurisdiction

Under the proposed Project, a total of 0.97 acre of Corps jurisdiction would be permanently impacted (0.15 acre wetland waters and 0.82 non-wetland waters). Table 5-3 below summarizes the impacts to each Corps jurisdictional feature. Refer to Section 6.0, Recommended Avoidance Measures for measures to offset these impacts.

Table 5-3. Summary of Corps Jurisdictional Impacts, Project Site

Drainage Name	Corps Impacts Non-Wetland Waters (Acres)	Corps Impacts Wetland Waters (Acres)	Total Corps Impacts (Acres)	Total Corps Impacts (Linear Feet)
San Jacinto River	0	0.15	0.15	242
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625
Total	**0.82**	**0.15**	**0.97**	**7,162**

Impacts to Regional Board Jurisdiction

Under the proposed Project, a total of 0.991 acre of State waters under Regional Board jurisdiction would be permanently impacted (0.15 acre wetland waters and 0.841 non-wetland waters). A few ephemeral features that occur on the Project site are not included within Corps jurisdiction but would be subject to the Regional Water Board jurisdiction as State Waters. Table 5-4 below summarizes the impacts to each Regional Board jurisdictional feature which also breaks down impacts to Waters of the U.S. and the State. Refer to Section 6.0, Recommended Mitigation/Avoidance Measures for measures to offset these impacts.

Table 5-4. Summary of Regional Board Jurisdictional Impacts, Project Site

Drainage Name	Regional Board Impacts Non-Wetland Waters (Acres)	Regional Board Impacts State Wetland Waters (Acres)	Total Regional Board Impacts (Acres)	Total Regional Board Impacts (Linear Feet)
Waters of the U.S.				
San Jacinto River	0	0.15	0.15	242
Drainage A	0.06	0	0.06	640
Drainage B	0.29	0	0.29	1,482
Drainage C	0.16	0	0.16	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.27	0	0.27	2,625

Sub-Total	**0.82**	**0.15**	**0.97**	**7,162**
Waters of the State				
Ditch A	0.01	0	0.01	126
Drainage G	0.01	0	0.01	300
Drainage H	0.001	0	0.001	29
Sub-Total	**0.021**	**0**	**0.021**	**455**
Total	**0.841**	**0.15**	**0.991**	**7,617**

Impacts to CDFW Jurisdiction

Under the proposed Project, a total of 1.701 acres of CDFW jurisdiction would be permanently impacted (1.411 acres non-riparian streambed and 0.29 acre riparian streambed). Table 5-5 below summarizes the impacts to each CDFW jurisdictional feature. Refer to Section 6.0, Recommended Avoidance Measures for measures to offset these impacts.

Table 5-5. Summary of CDFW Jurisdictional Impacts, Project Site

Drainage Name	CDFW Impacts Non-Riparian Stream (Acres)	CDFW Impacts Riparian Stream (Acres)	Total CDFW Impacts (Acres)	Total CDFW Impacts (Linear Feet)
San Jacinto River	0.37	0.15	0.52	242
Drainage A	0.07	0.14	0.21	640
Ditch A	0.01	0	0.01	126
Drainage B	0.37	0	0.37	1,482
Drainage C	0.22	0	0.22	1,626
Drainage D	0.01	0	0.01	70
Drainage E	0.03	0	0.03	477
Drainage F	0.31	0	0.31	2,625
Drainage G	0.02	0	0.02	300
Drainage H	0.001	0	0.001	29
Total	**1.411**	**0.29**	**1.701**	**7,617**

Impacts to MSHCP Riparian/Riverine Areas

The Project's impacts to MSHCP riparian/riverine areas are identical to impacts to CDFW as stated above. Under the proposed Project, a total of 1.701 acres of MSHCP Riparian/Riverine areas (1.411 acres riverine and 0.29 acre riparian). The riparian areas within the Project site do not contain suitable habitat for riparian-associated birds including least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. However, these drainages still support hydrological and biological functions and values including water transport, flood attenuation, groundwater recharge, and providing habitat for downstream aquatic resources.

Pursuant to Volume I, Section 6.1.2 of the MSHCP, projects must consider alternatives providing for 100% percent avoidance of riparian/riverine areas. If avoidance is infeasible, then the unavoidable impacts must be mitigated and a DBESP is required, which will be prepared at a later date and submitted for approval to the RCA and Wildlife Agencies prior to impact to MSHCP riparian/riverine resources. Consistency with the MSHCP would reduce impacts to a level of less than significant under CEQA. Refer to Section 6.4 for addressing the removal of 1.701 acres of MSHCP riparian/riverine resources.

Northerly and Southerly Off Site Road Improvement and Use Areas

Impacts to Corps Jurisdiction

The Northerly and Southerly Off Site Road Improvement and Use Areas does not support Corps jurisdiction; therefore, there will be no impact to Corps jurisdiction associated with this off site area.

Impacts to Regional Board Jurisdiction

Impacts to the Northerly and Southerly Off Site Road Improvement and Use Areas will result in permanent impact to 0.01 acre and 285 linear feet of a roadside ditch along the eastern edge of Dunlap Drive. Table 5-6 below summarizes the impacts to Regional Board jurisdiction. Refer to Section 6.0, Recommended Mitigation/Avoidance Measures for measures to offset these impacts.

Table 5-6. Summary of Regional Board Jurisdictional Impacts, Northerly and Southerly Off Site Road Improvement and Use Areas

Drainage Name	Regional Board Impacts Non-Wetland Waters (Acres)	Regional Board Impacts State Wetland Waters (Acres)	Total Regional Board Impacts (Acres)	Total Regional Board Impacts (Linear Feet)
Waters of the State				
Ditch 1	0.01	0	0.01	285
Total	**0.01**	**0**	**0.01**	**285**

Impacts to CDFW Jurisdiction

Impacts to the Northerly and Southerly Off Site Road Improvement and Use Areas will result in permanent impact to 0.01 acre and 285 linear feet of a roadside ditch along the eastern edge of Dunlap Drive. Table 5-7 below summarizes the impacts to CDFW jurisdiction. Refer to Section 6.0, Recommended Mitigation/Avoidance Measures for measures to offset these impacts.

Table 5-7. Summary of CDFW Jurisdictional Impacts, Northerly and Southerly Off Site Road Improvement and Use Areas

Drainage Name	CDFW Impacts Non-Riparian Stream (Acres)	CDFW Impacts Riparian Stream (Acres)	Total CDFW Impacts (Acres)	Total CDFW Impacts (Linear Feet)
Ditch 1	0.01	0	0.01	285
Total	**0.01**	**0**	**0.01**	**285**

Impacts to MSHCP Riparian/Riverine Areas

The Northerly and Southerly Off Site Road Improvement and Use Area's impacts to MSHCP riparian/riverine areas are identical to impacts to CDFW as stated above. A total of 0.01 acres

of MSHCP Riverine areas will be impacted. This riverine habitat area does not contain suitable habitat for riparian-associated birds including least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. However, this feature still supports hydrological and biological functions and values including water transport, flood attenuation, groundwater recharge, and providing habitat for downstream aquatic resources.

Pursuant to Volume I, Section 6.1.2 of the MSHCP, projects must consider alternatives providing for 100% percent avoidance of riparian/riverine areas. If avoidance is infeasible, then the unavoidable impacts must be mitigated and a DBESP is required. Consistency with the MSHCP would reduce impacts to a level of less than significant under CEQA. Refer to Section 6.4 for addressing the removal of 0.01 acre of MSHCP Riverine resources.

5.12 Indirect Impacts to Biological Resources

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to adjacent native open space. Potential indirect effects associated with development include water quality impacts associated with drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities.

The Project and Northerly and Southerly Off Site Road Improvement and Use Areas are not expected to result in significant indirect impacts to special-status biological resources, with the implementation of measures pursuant to the MSHCP Urban/Wildlands Interface Guidelines (*Volume I, Section 6.1.4* of the MSHCP). These guidelines are intended to address indirect effects associated with locating projects (particularly development) in proximity to the MSHCP Conservation Area. To minimize potential edge effects, the guidelines are to be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area. The Project and Southerly Of Site Area will implement measure consistent with the MSHCP guidelines to address the following:

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

5.12.1 Drainage

Proposed Projects in proximity to the MSHCP Conservation Area shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing

conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.

The contractor will develop a Stormwater Pollution Prevention Plan (SWPPP) to runoff and water quality during construction. However, following the completion of activities, the Project area will not contain any developed or paved areas, other than those areas that are already paved, and will not in any way result in increased drainage to the Santa Ana River, or affect the water quality of the river. As such, no measures would be required post-construction.

5.12.2 Toxics

Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, habitat or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. Measures such as those employed to address drainage issues shall be implemented. The proposed developer will implement a SWPPP that will address runoff during construction.

5.12.3 Lighting

Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. If night lighting is required during construction, shielding shall be incorporated to ensure ambient lighting in the MSHCP Conservation Area is not increased.

5.12.4 Noise

Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards.

5.12.5 Invasive Species

Projects adjacent to the MSHCP Conservation Area shall avoid the use of invasive plant species in landscaping, including invasive, non-native plant species listed in Volume I, *Table 6-2* of the MSHCP.

5.12.6 Barriers

Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms.

5.12.7 Grading/Land Development

The MSHCP states that manufactured slopes associated with development shall not extend into the MSHCP Conservation Area.

6.0 MITIGATION/AVOIDANCE MEASURES

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

6.1 Burrowing Owl

The Project Area contains suitable habitat for burrowing owls; however, burrowing owls were not detected onsite during focused surveys. MSHCP Objective 6 for burrowing owls requires that pre-construction surveys prior to site grading. As such, the following measure is recommended to avoid direct impacts to burrowing owls and to ensure consistency with the MSHCP.

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

6.2 Nesting Birds

The Project Area contain vegetation with the potential to support native nesting birds. As discussed above, the California Fish and Game Code prohibits mortality of native birds, including eggs. The following measure is recommended to avoid mortality to nesting birds.

Potential impacts to native birds was not considered a biologically significant impact under CEQA however, to comply with state law, the following is recommended:

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

6.3 Jurisdictional Waters

As noted above, the Project will impact a total of 0.97 acre of Corps Waters of the U.S., 0.991 acre of Regional Board Waters of the State and 1.701 acre of CDFW jurisdiction.

The following measure identifies mitigation proposed for impacts to jurisdictional waters. Impacts to jurisdictional waters shall be mitigated at a minimum 3:1 ratio, subject to approval of the Regional Board and CDFW, and include the following:

- The purchase of 2.551 acres of rehabilitation credits at the Riverpark Mitigation Bank (for Corps, Regional Board, and CDFW impacts); and
- The purchase of 2.552 acres of re-establishment credits at the Riverpark Mitigation Bank (for Corps, Regional Board, and CDFW impacts).

6.4 MSHCP Riparian/Riverine Areas

As noted above, the Project will impact 1.701 acre of MSHCP riparian/riverine resources within the Project Site (1.411 acres riverine and 0.29 acre riparian). The following measures will address these impacts. The proposed impacts to riverine resources by the Project triggers the requirement under the MSHCP that a DBESP be prepared and approved by the RCA and Wildlife Agencies. The DBESP will detail the type of resource proposed for impact, why avoidance was not feasible, and the compensation provided to ensure biologically equivalent or superior preservation. The riparian/riverine features proposed for impact will be compensated at a minimum 3:1 ratio. The Wildlife Agencies are provided the DBESP for review by the Permittee and they have 60 days to review the DBESP and provide comments. If no comments are provided by the Wildlife Agencies within 60 days, the DBESP is considered approved. If comments are received, the comments need to be addressed until the Permittee has determined that the Project is in compliance with the requirements of the MSHCP.

Compensatory mitigation for the loss of riparian/riverine resources will include the following:

- The purchase of 2.551 acres of rehabilitation credits at the Riverpark Mitigation Bank; and
- The purchase of 2.552 acres of re-establishment credits at the Riverpark Mitigation Bank.

7.0 MSHCP CONSISTENCY ANALYSIS

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

7.1 Project Relationship to Reserve Assembly

The Project development footprint, minus its off-site improvements, was previously determined to be consistent with the MSHCP as part of JPR 06-08-18-01, dated September 15, 2006. This JPR required the conservation of 80 acres of land along the San Jacinto River as part of the project. A HANS determination letter, HANS 269, was also approved for the Project, dated September 18, 2006. This letter determined that the RCA concurred with the partial site conservation documented in the JPR. It is expected that amendments to the HANS and/or JPR may be needed to cover off-site roadway and/or utility improvements. A copy of the HANS determination letter is attached as Exhibit 13 and a copy of the JPR approval letter is attached as Exhibit 14. The proposed activities (roadway and utility improvements) within the Northerly and Southerly Off Site Road Improvement and Use Areas are identified as Covered Activities in MSHCP *Section 7.3.5*. The Project and the Northerly and Southerly Off Site Road Improvement and Use Areas are located in Criteria Cells and are therefore subject to the HANS process; however, since the Project is a Covered Activity and has been designed to avoid development of sensitive areas, conservation towards Reserve Assembly is not expected to be required. It should also be noted that a HANS determination, HANS 269, was already completed in September 2006 for the on-site portion of the Project. If necessary, a HANS amendment will only be required for the off-site improvement areas only as the on-site development footprint limits have not changed.

The County as the MSHCP Permittee is responsible for making that determination through coordination with the RCA as part of the JPR process. It should be noted that JPR was already completed for the on-site portion of the Project. The JPR, JPR 06-08-18-01 was completed on September 15, 2006, and required 80 acres of conservation land along the San Jacinto River. The off-site portions of the Project will need to complete the JPR process through the RCA in order for the off-site portion of the Project to be deemed consistent with the MSHCP. This may require an amendment to the JPR. A copy of the HANS determination letter is attached as Exhibit 13 and a copy of the JPR letter is attached as Exhibit 14.

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

As stated above, the Project will impact 1.703 acres of MSCHP riparian/riverine habitat. No vernal pools were observed onsite, however, several special-status plant species (Coulter's goldfields, San Jacinto Valley crownscale, smooth tarplant, and spreading navarretia) associated with vernal pools and alkali playas were observed within the Project site but not the Northerly and Southerly Off Site Road Improvement and Use Areas. As noted above, the Disturbed Alkali

Playas are outside of the proposed direct impacts and will be avoided and conserved by the Project proponent. Furthermore, prior to construction these areas will be delineated with fencing and/or rope to demarcate the limits of disturbance and avoidance of these areas during construction. To offset 1.703 acres of permanent impacts to MSHCP riparian/riverine areas, the Project will purchase wetland/riparian habitat establishment and/or rehabilitation credits from an approved mitigation bank, such as the Riverpark Mitigation Bank, at a minimum 3:1 ratio (See Section 6.4 above). In addition, the Project will prepare and submit a DBESP analysis to the RCA and the Wildlife Agencies (CDFW and USFWS) for review and approval prior to the initiation of impact. Final compensation for the loss of 1.703 acres of MSHCP riparian/riverine areas will be determined through the DBESP process (See Section 6.5 above).

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 Site and Northerly and Southerly Off Site Road Improvement and Use Areas are located within the MSHCP NEPSSA designated Survey Area 3 and/or 10 which targets the following species: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California orcutt grass (*Orcuttia californica*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), Hammitt's clay cress (*Sibarpsis hammittii*), and San Miguel savory (*Clinopodium chandleri*).. The Project Site was found to support spreading navarretia as discussed in Section 4.1; however, the areas in which these species were observed would be avoided by the proposed Project; thus, achieving the MSHCP requirement to avoid 90 percent of any population of these species located within the Project site. In addition, the Project site was found to support suitable habitat for San Diego ambrosia, California Orcutt grass, and Wright's trichocoronis. These species were confirmed absent through focused plant surveys. As such, the proposed Project would be consistent with *Volume I, Section 6.1.3* of the MSHCP. No sensitive plants were identified within the Northerly and Southerly Off Site Road Improvement and Use Areas.

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 5.0 of this report, the Project and Northerly and Southerly Off Site Road Improvement and Use Areas will implement applicable measures as it relates to temporary construction impacts to minimize adverse indirect impacts on special-status resources within Conserved Lands. The proposed Project will be consistent with *Section 6.1.4* of the MSHCP.

7.5 Additional Survey Needs and Procedures

Pursuant to Volume I, Section 6.3.2 of the MSHCP, focused surveys were completed for Criteria Area Plants. The Plan requires that projects avoid 90% of areas providing long-term conservation value for applicable species when NEPSSA and/or CAPSSA species are detected. If avoidance is infeasible, then mitigation must be provided and a DBESP is required. Where potentially significant, impacts to special-status plants are reduced to below a level of significance through compliance with the biological requirements of the MSHCP. The areas in the Project site where these species occur will be avoided and conserved. No sensitive plants were identified within the Northerly and Southerly Off Site Road Improvement and Use Areas.

As noted above, MSHCP Objective 6 for burrowing owls requires that pre-construction surveys prior to site grading. As such, the following measure is recommended to avoid direct impacts to burrowing owls and to ensure consistency with the MSHCP:

- A qualified biologist will conduct a pre-construction survey for burrowing owls within 30 days of initial ground-disturbing activities (e.g. vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the Project proponent will immediately inform the Wildlife Agencies and the RCA and will need to coordinate further with RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

Pursuant to Volume I, Section 6.3.2 of the MSHCP, focused surveys were completed for the LAPM within the Project Site. A total of 14 LAPM were detected during focused surveys; however, County EPD previously determined that the Project would not provide long-term conservation value for this species. As a result, impact to the LAPM would not be considered a significant impact pursuant to CEQA. Additionally, a habitat assessment was conducted for the LAPM within the Northerly and Southerly Off Site Road Improvement and Use Areas and it was determined that no suitable habitat for this species was present.

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 and Southerly Off Site'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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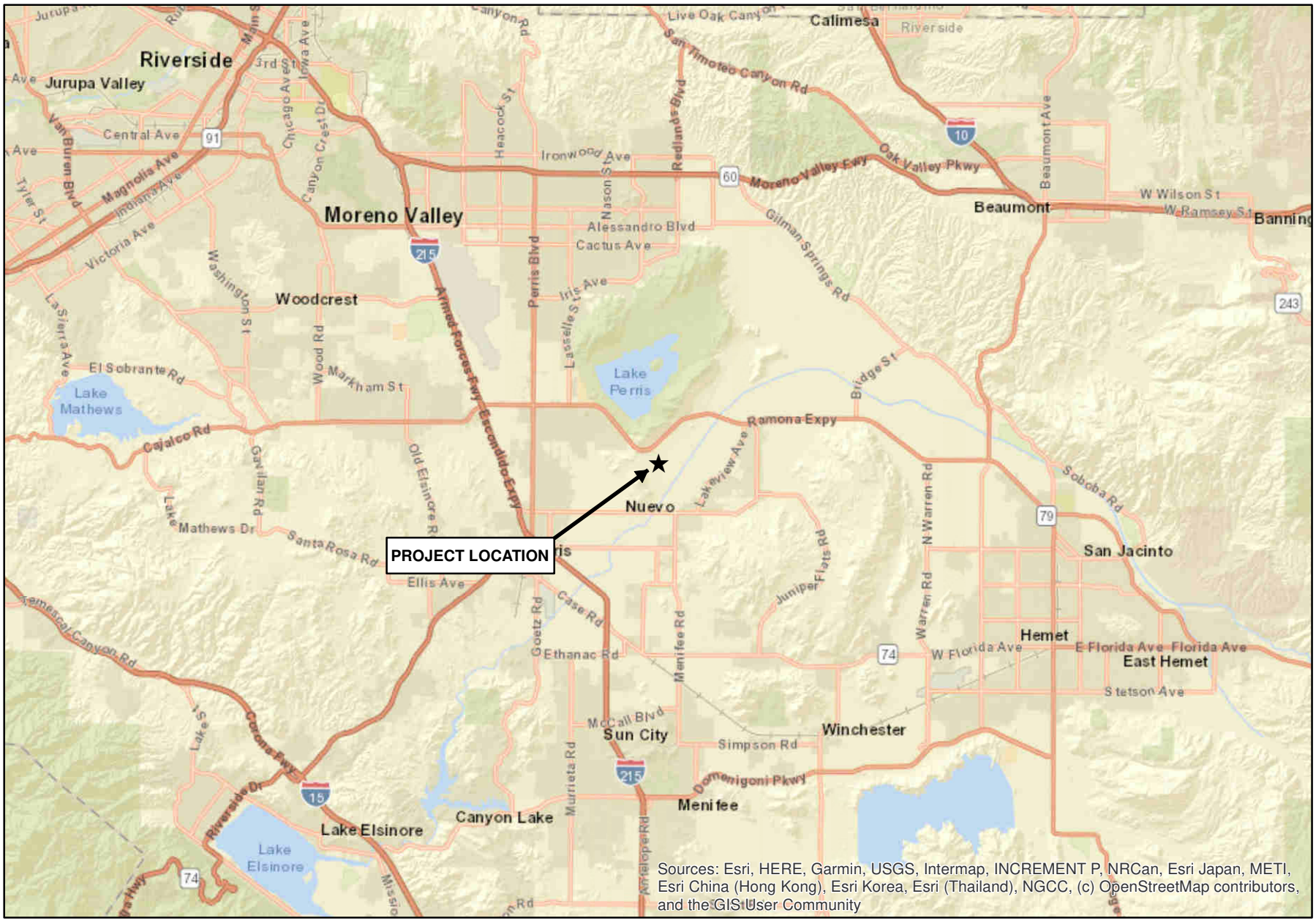
Zeiner, D. C., W., F. Laudenslayer, Jr., K. E. Mayer, M. White. Editors. 1990. California's Wildlife. Volume 2. Birds. State of California, Department of Fish and Game. Sacramento, California. 731 pp.

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: 02/24/2022

p: 0188-27.i_including off sites.rpt



Source: ESRI World Street Map

N

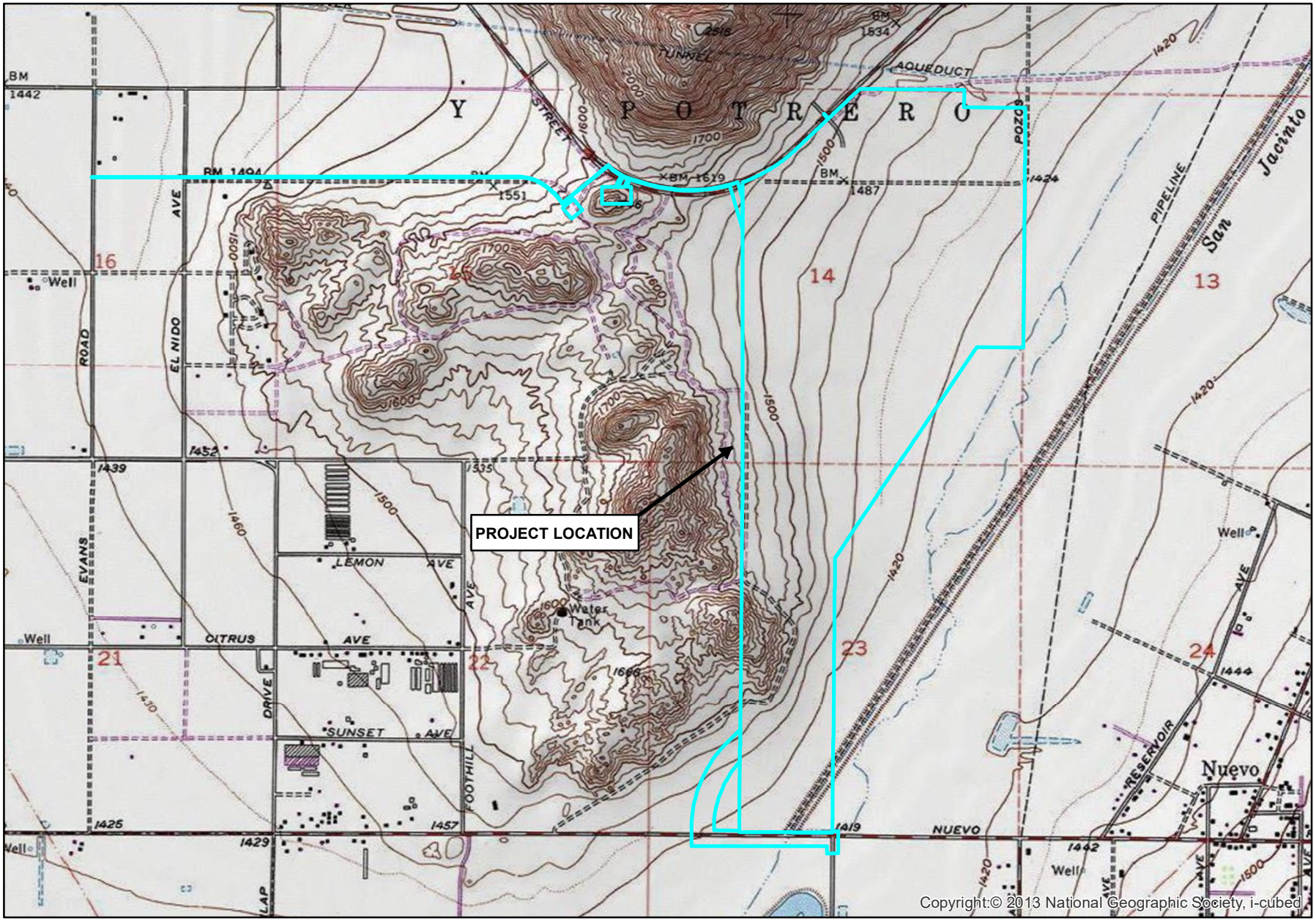
0 2 4 8 Miles

STONERIDGE COMMERCE CENTER

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS Perris, CA quadrangle

N

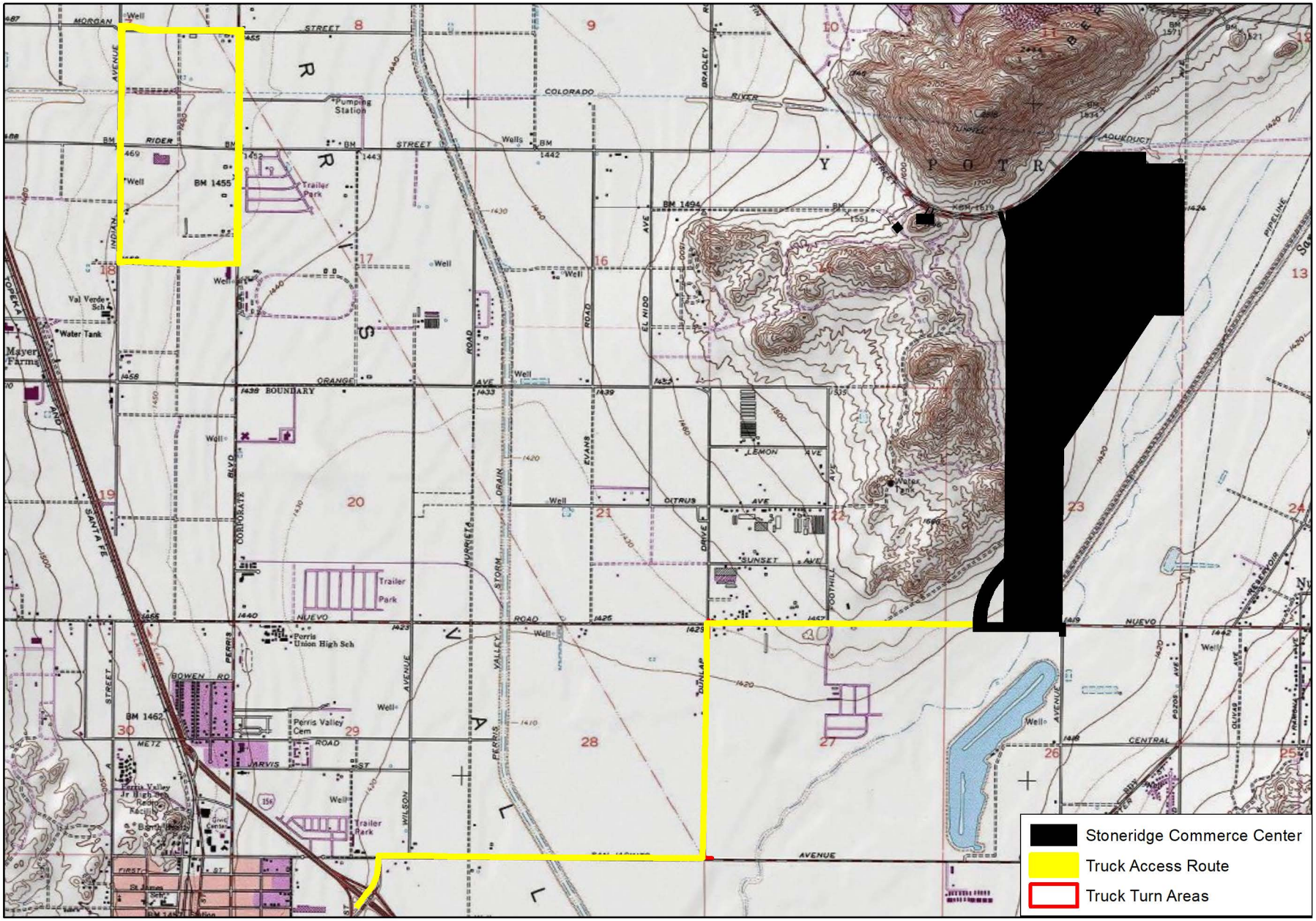
0 1,000 2,000 4,000 Feet

STONERIDGE COMMERCE CENTER

Vicinity Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 2A



STONERIDGE COMMERCE CENTER

Vicinity Map, Northerly and Southerly Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 2B

Onsite Project Site Boundary

Offsite Project Site Boundary

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

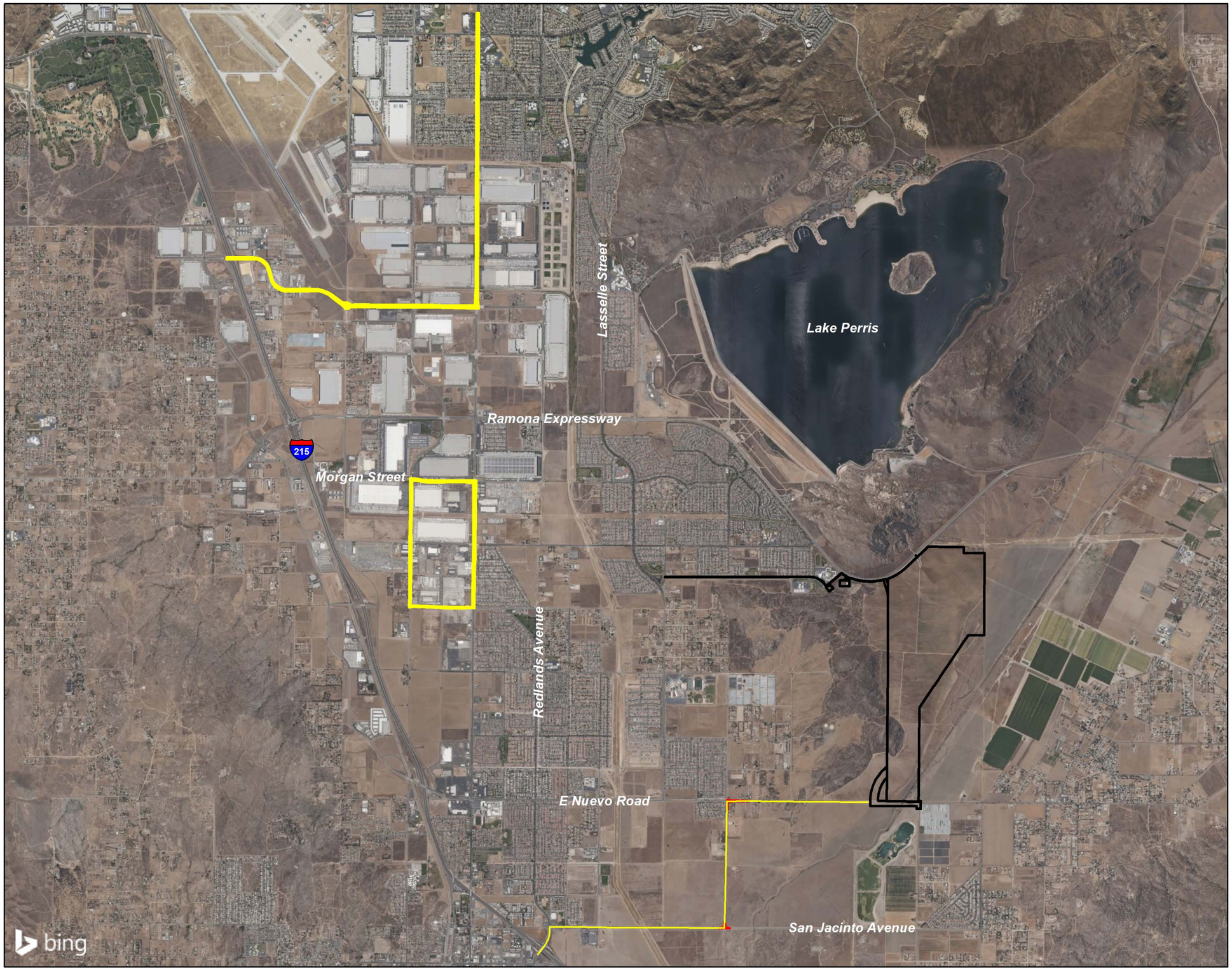
STONERIDGE COMMERCE CENTER

Aerial Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 3A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\188-27_AerialMap.mxd



Stoneridge Project Site
Truck Access Route
Truck Turn Areas

N

0 2,000 4,000 8,000
Feet

1 inch = 4,000 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

STONERIDGE COMMERCE CENTER

Aerial Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 3B

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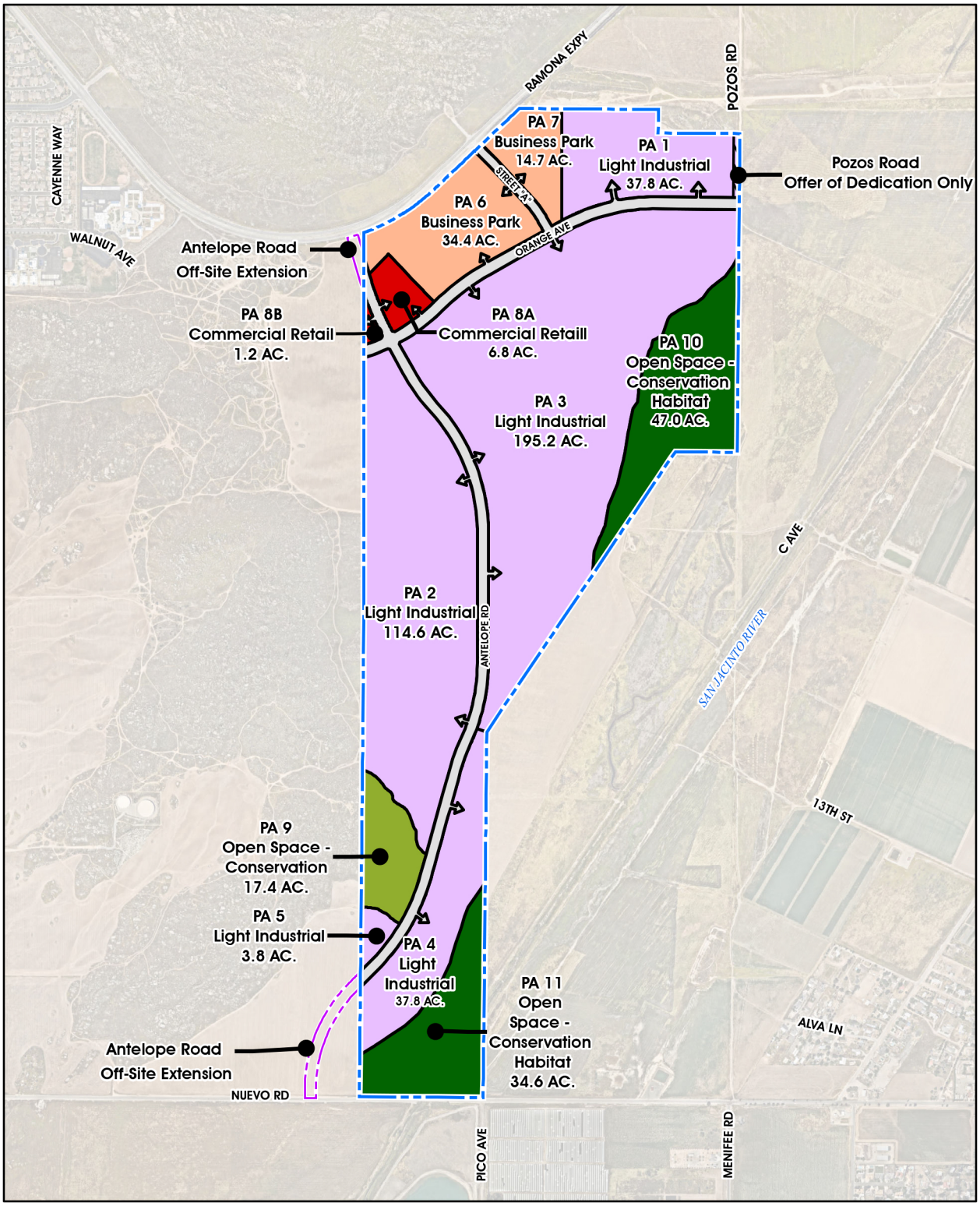
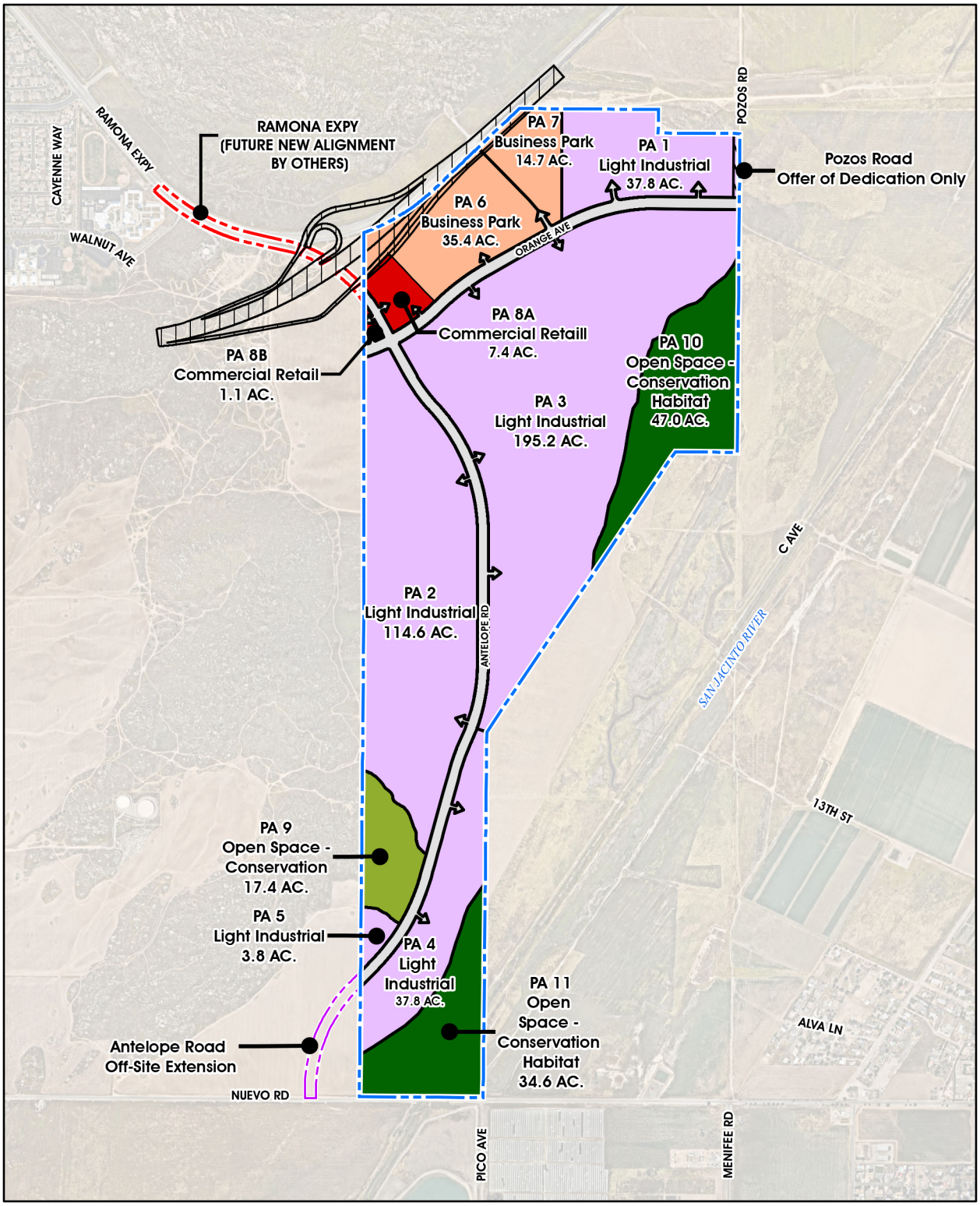


Source(s): ESRI, Nearmap Imagery (2020), RCTLMA (2020)

Exhibit 4A

0 400 800 1,600 Feet

Primary Land Use Plan



Source(s): ESRI, Nearmap Imagery (2020), RCTLMA (2020)

Exhibit 4B

0 400 800 1,600 Feet

Alternative Land Use Plan

Onsite Project Site Boundary

Offsite Project Site Boundary

MSHCP Criteria Cell

MSHCP Cell Group

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

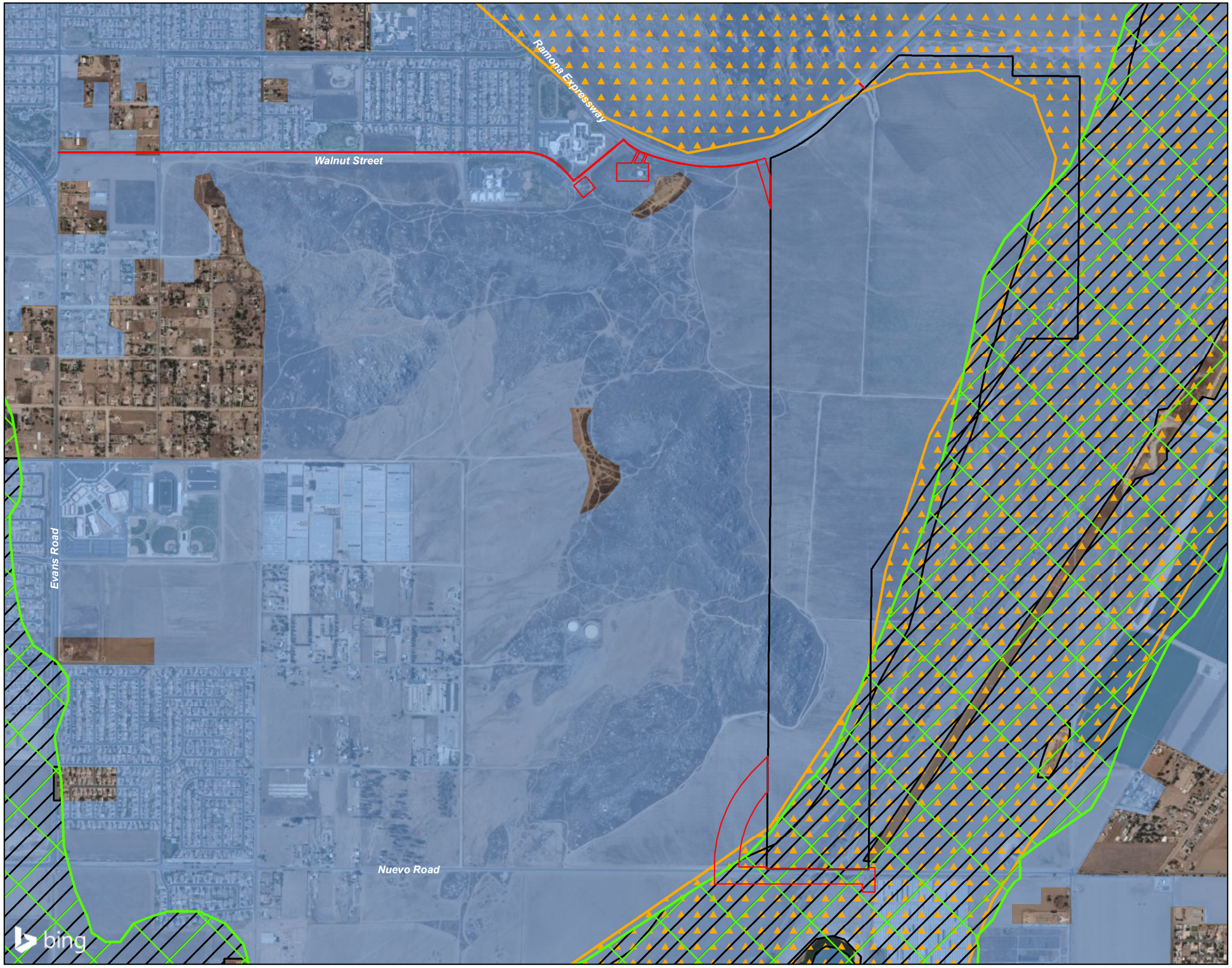
STONERIDGE COMMERCE CENTER

MSHCP Overlay Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 5A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\MSHCP GIS\188-27_MSHCP_5A.mxd



Onsite Project Site Boundary
Offsite Project Site Boundary
Burrowing Owl Survey Area
Criteria Area Species Survey Area
Mammal Survey Area
Narrow Endemic Plant Species Survey Area

N

0 625 1,250 2,500
Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

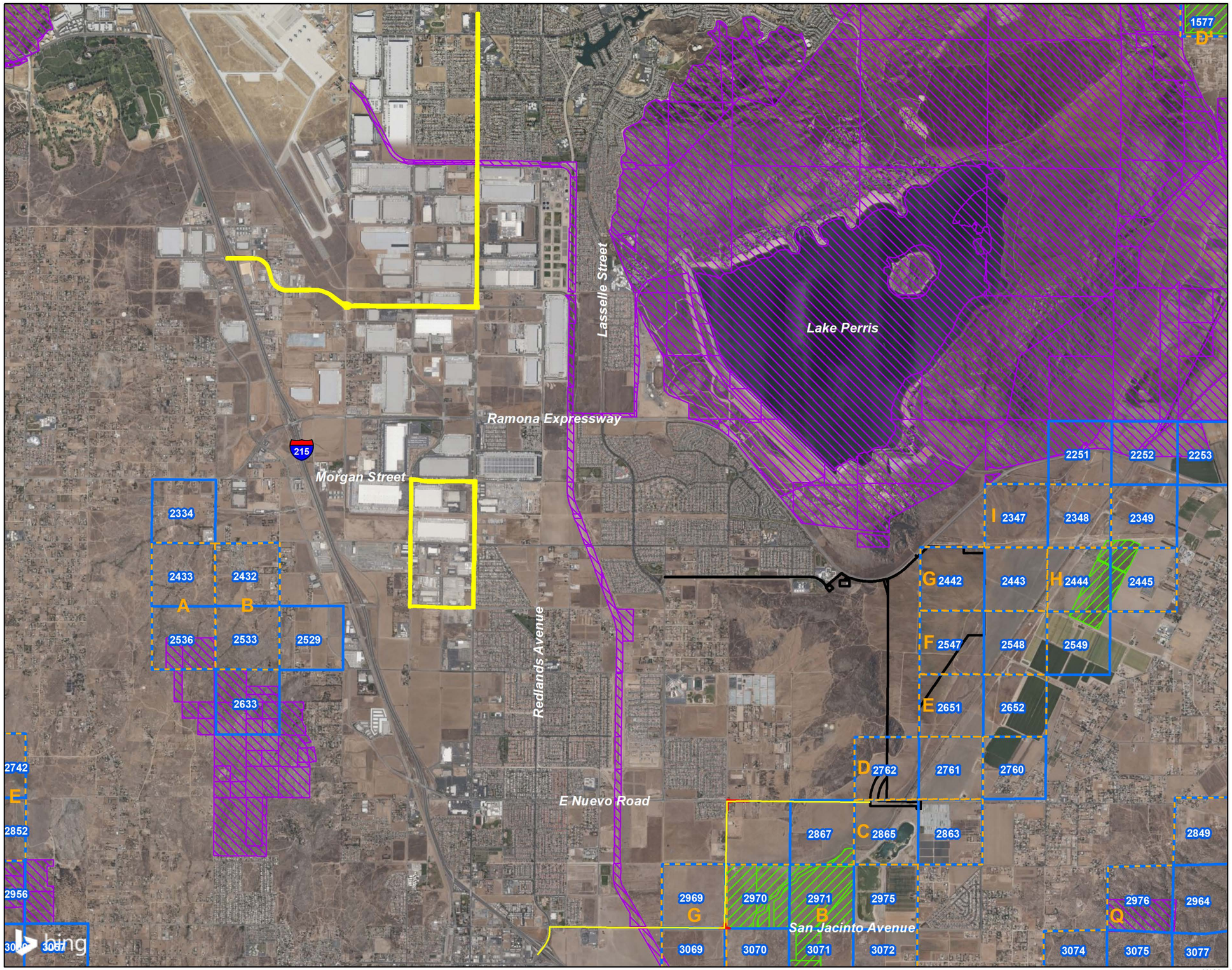
STONERIDGE COMMERCE CENTER

MSHCP Survey Area Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 5B

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\MSHCP GIS\188-27_MSHCP_5B.mxd



- Stoneridge Project Site
- Truck Access Route
- Truck Turn Areas
- MSHCP Cell Group
- MSHCP Criteria Cell
- MSHCP Conserved Lands
- Public Quasi Public Conserved Lands

N

0 2,000 4,000 8,000

Feet

1 inch = 4,000 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

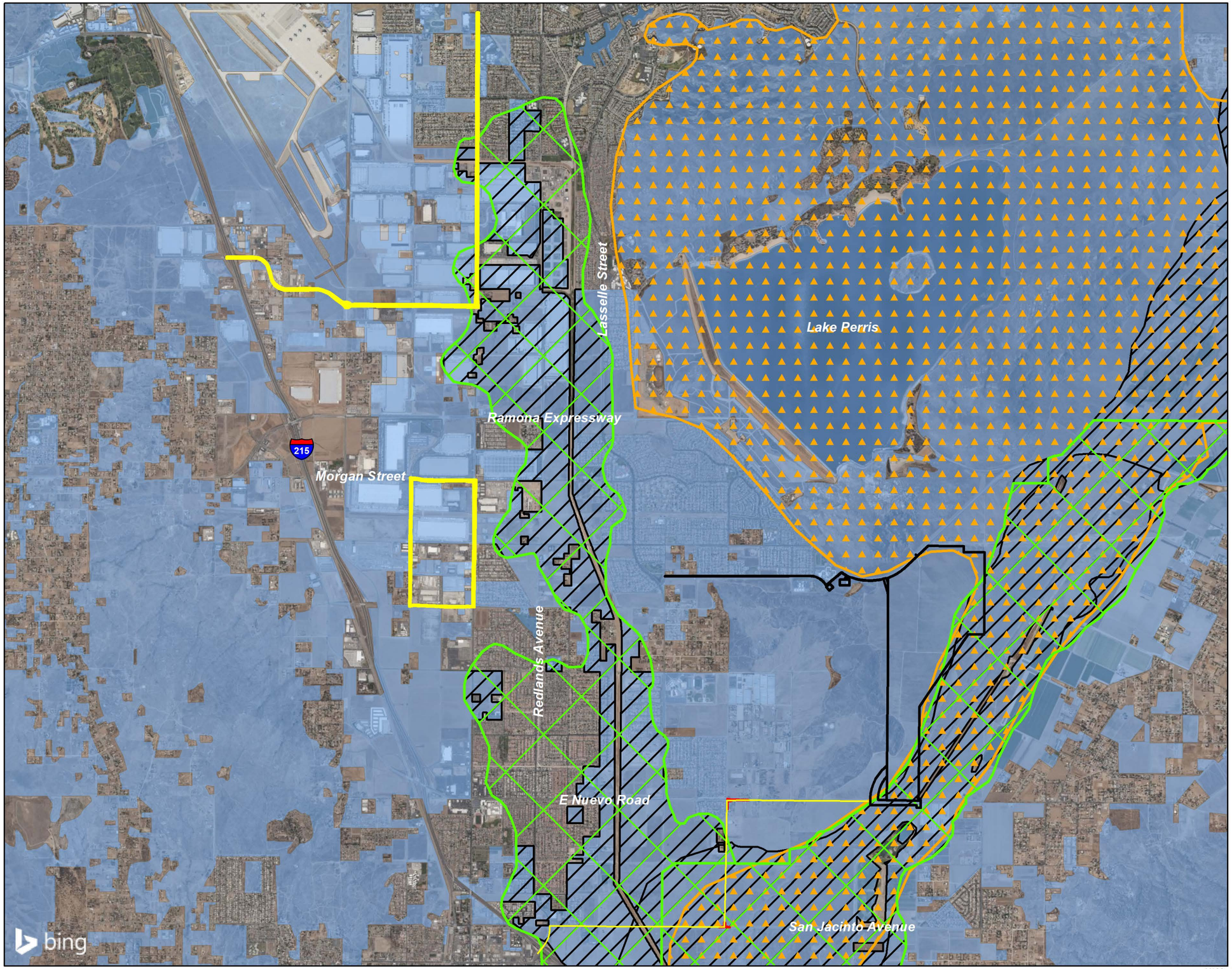
STONERIDGE COMMERCE CENTER

MSHCP Overlay Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 5C

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\OffsiteGIS\188-27_Offsites_MSHCPOverlay.mxd



Stoneridge Project Site
Truck Access Route
Truck Turn Areas
Criteria Area Species Survey Area
Mammal Survey Area
Narrow Endemic Plant Species Survey Area
Burrowing Owl Survey Area

N

0 2,000 4,000 8,000
Feet

1 inch = 4,000 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

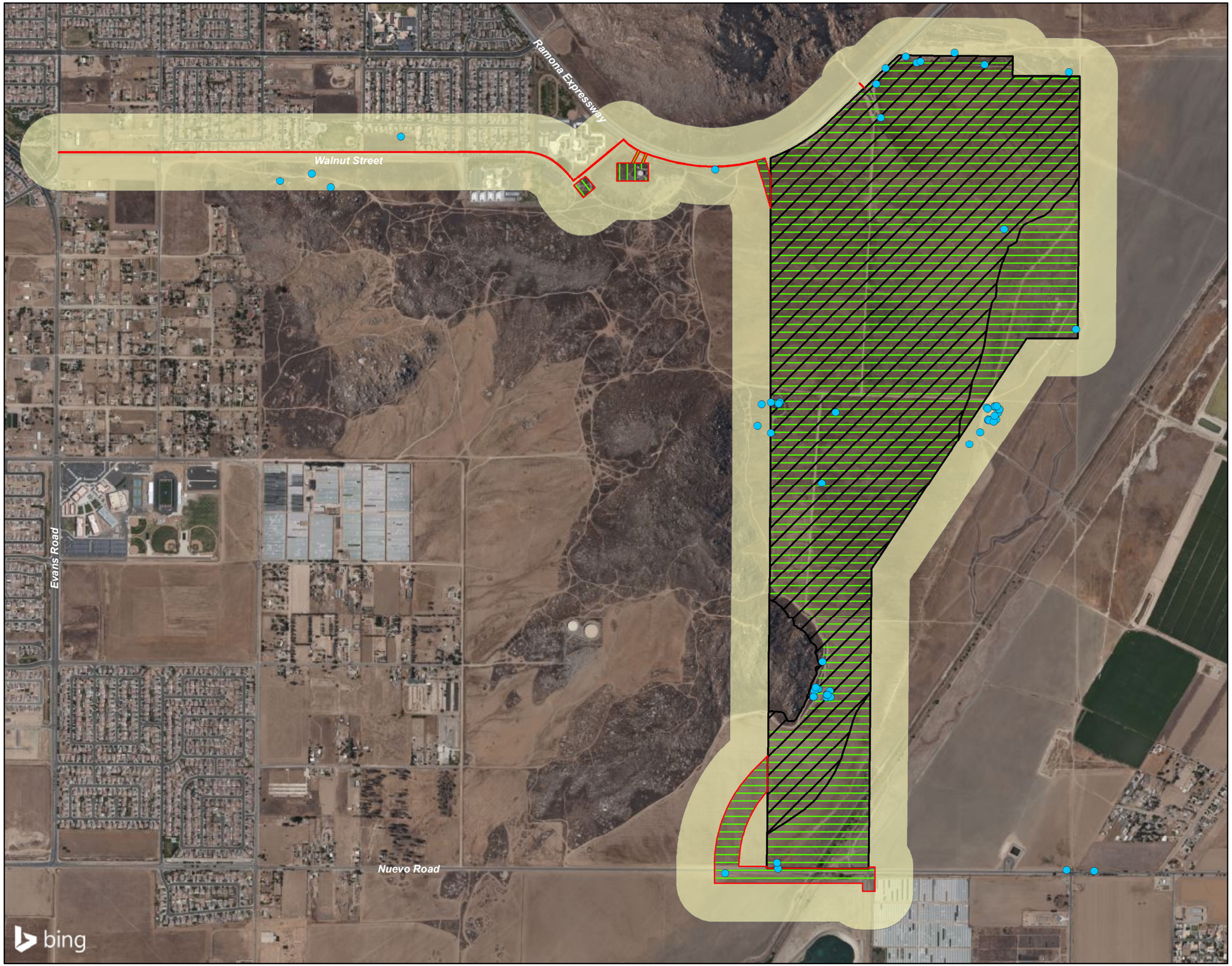
STONERIDGE COMMERCE CENTER

MSHCP Survey Area Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 5D

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\OffsiteGIS\188-27_Offsites_MSHCPSurvey.mxd



Onsite Project Site Boundary

Offsite Project Site Boundary/
Offsite Development Footprint

Onsite Project Footprint

500-foot Visual Survey Buffer

Transect

Small Mammal Burrow

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

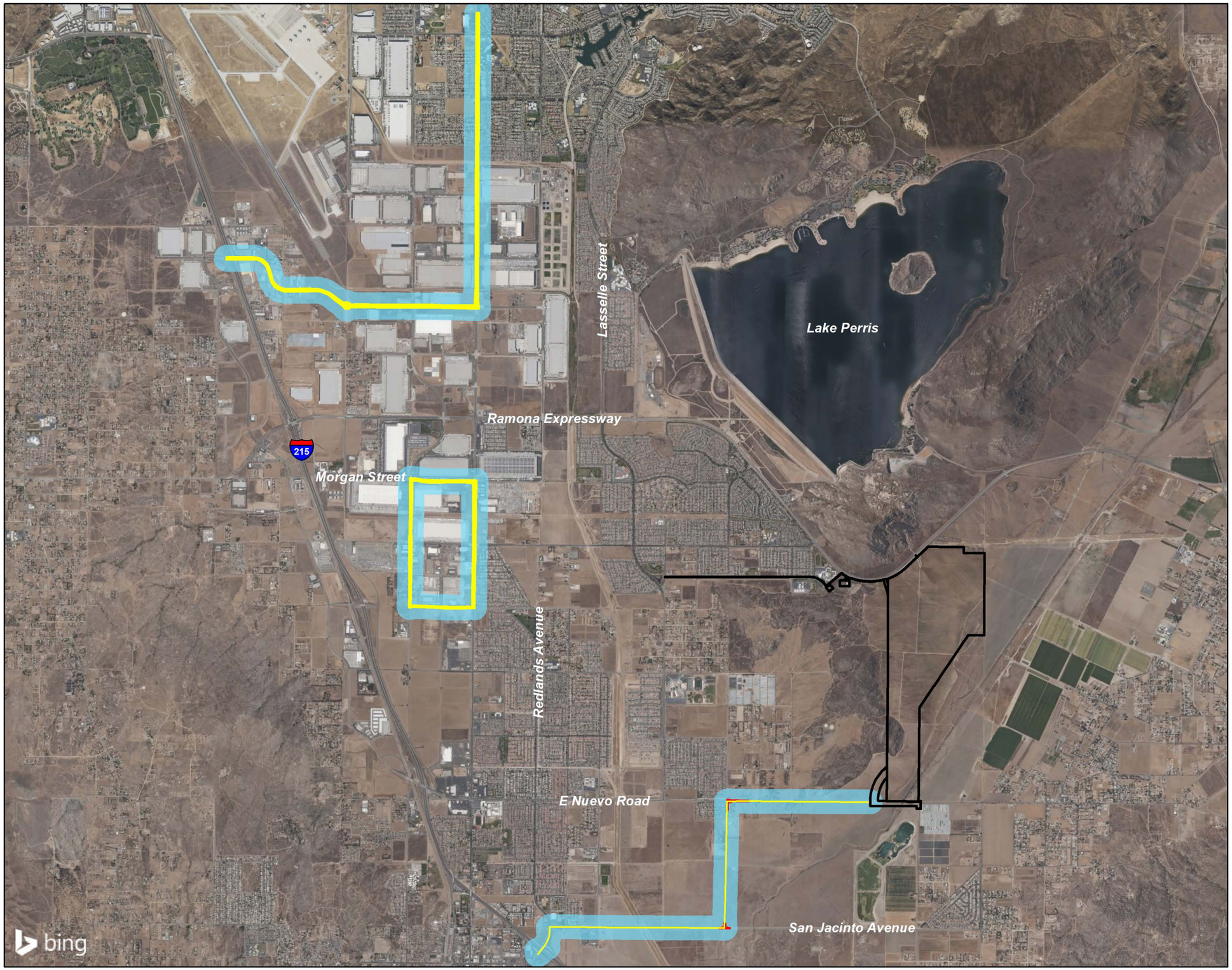
STONERIDGE COMMERCE CENTER

Burrowing Owl Survey Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 6A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\BUOW_GIS\188-27 BUOWLayout.mxd



Stoneridge Project Site
Truck Access Route
Truck Turn Areas
500-foot Visual Survey Buffer

N

0 2,000 4,000 8,000
Feet

1 inch = 4,000 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

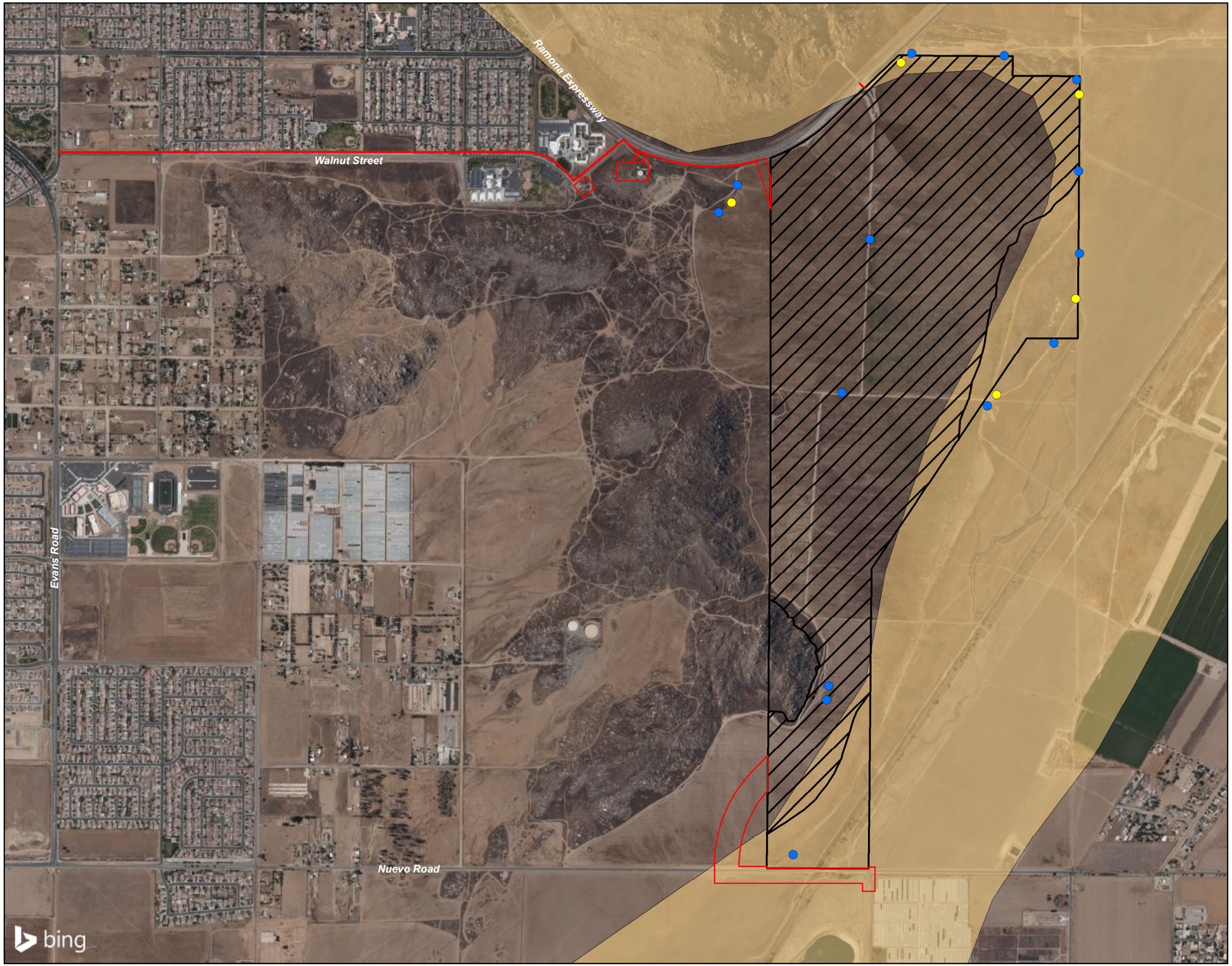
STONERIDGE COMMERCE CENTER

Burrowing Owl Survey Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 6B

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\OffsiteGIS\188-27_Offsites_BUOW.mxd



Onsite Project Site Boundary

Offsite Project Site Boundary/
Offsite Development Footprint

Onsite Project Footprint

MSHCP Mammal Survey Area

LA Pocket Mouse

Stephen's Kangaroo Rat

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

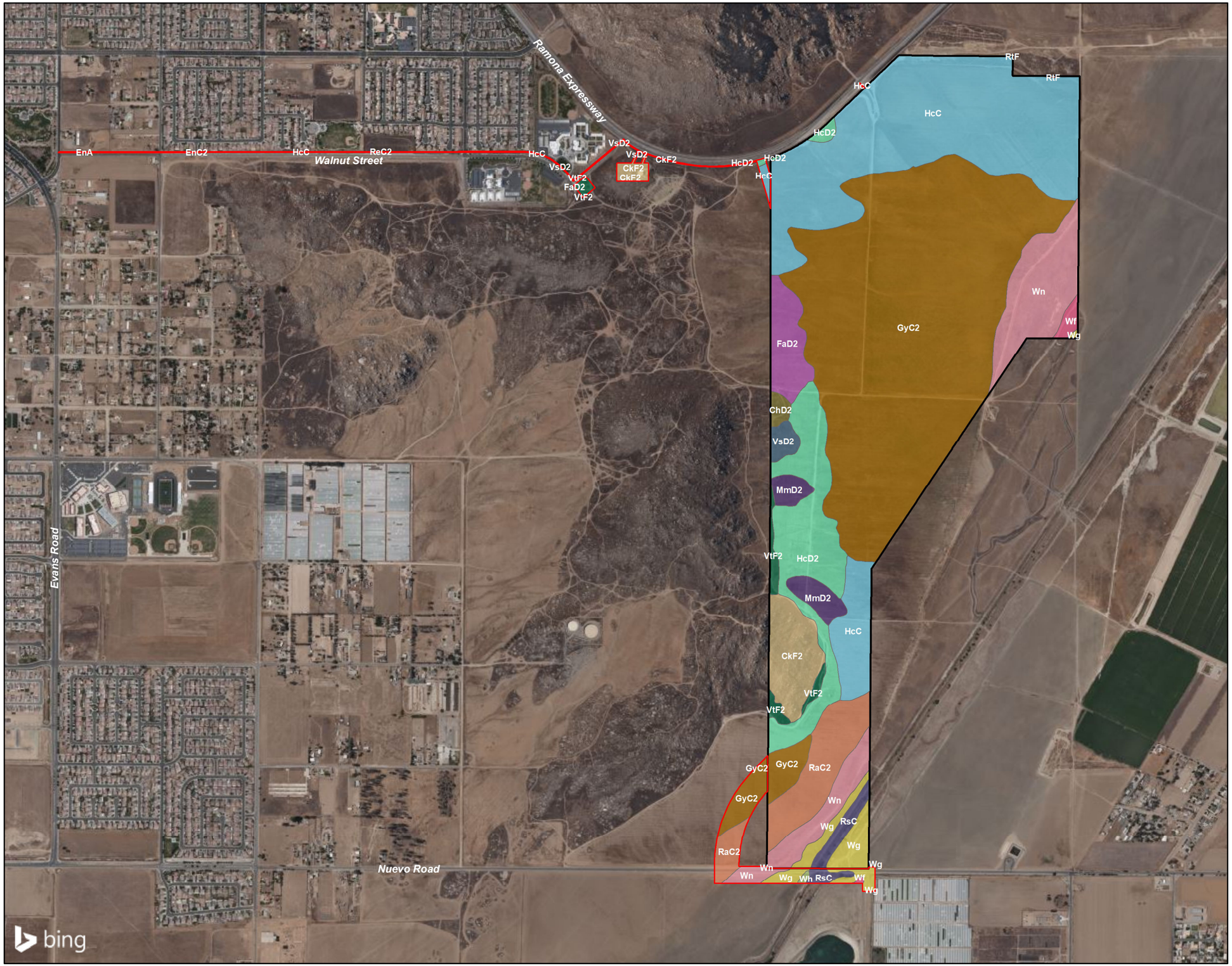
STONERIDGE COMMERCE CENTER

Small Mammal Survey Results Map

GLENN LUKOS ASSOCIATES

Exhibit 7

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\MammalsGIS\188-27_SmallMammals.mxd



- Onsite Project Site Boundary
- Offsite Project Site Boundary
- ChD2 - Cieneba sandy loam, 8 to 15 percent slopes, eroded
- CkF2 - Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded
- Dw - Domino silt loam, strongly saline-alkali
- EnA - Exeter sandy loam, 0 to 2 percent slopes
- EnC2 - Exeter sandy loam, 2 to 8 percent slopes, eroded
- EpA - Exeter sandy loam, deep, 0 to 2 percent slopes
- FaD2 - Fallbrook sandy loam, 8 to 15 percent slopes, eroded
- FfC2 - Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded
- GyC2 - Greenfield sandy loam, 2 to 8 percent slopes, eroded
- HcC - Hanford coarse sandy loam, 2 to 8 percent slopes
- HcD2 - Hanford coarse sandy loam, 8 to 15 percent slopes, eroded
- MmD2 - Monserate sandy loam, 8 to 15 percent slopes, eroded
- PaC2 - Pachappa fine sandy loam, 2 to 8 percent slopes, eroded
- RaC2 - Ramona sandy loam, 5 to 8 percent slopes, eroded
- ReC2 - Ramona very fine sandy loam, 0 to 8 percent slopes, eroded
- RsC - Riverwash
- RsC - Riverwash
- VsD2 - Vista coarse sandy loam, 8 to 15 percent slopes, eroded
- VtF2 - Vista rocky coarse sandy loam, 2 to 35 percent slopes, eroded
- Wf - Willows silty clay
- Wg - Willows silty clay, saline-alkali
- Wh - Willows silty clay, strongly saline-alkali
- Wn - Willows silty clay, deep, strongly saline-alkali

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

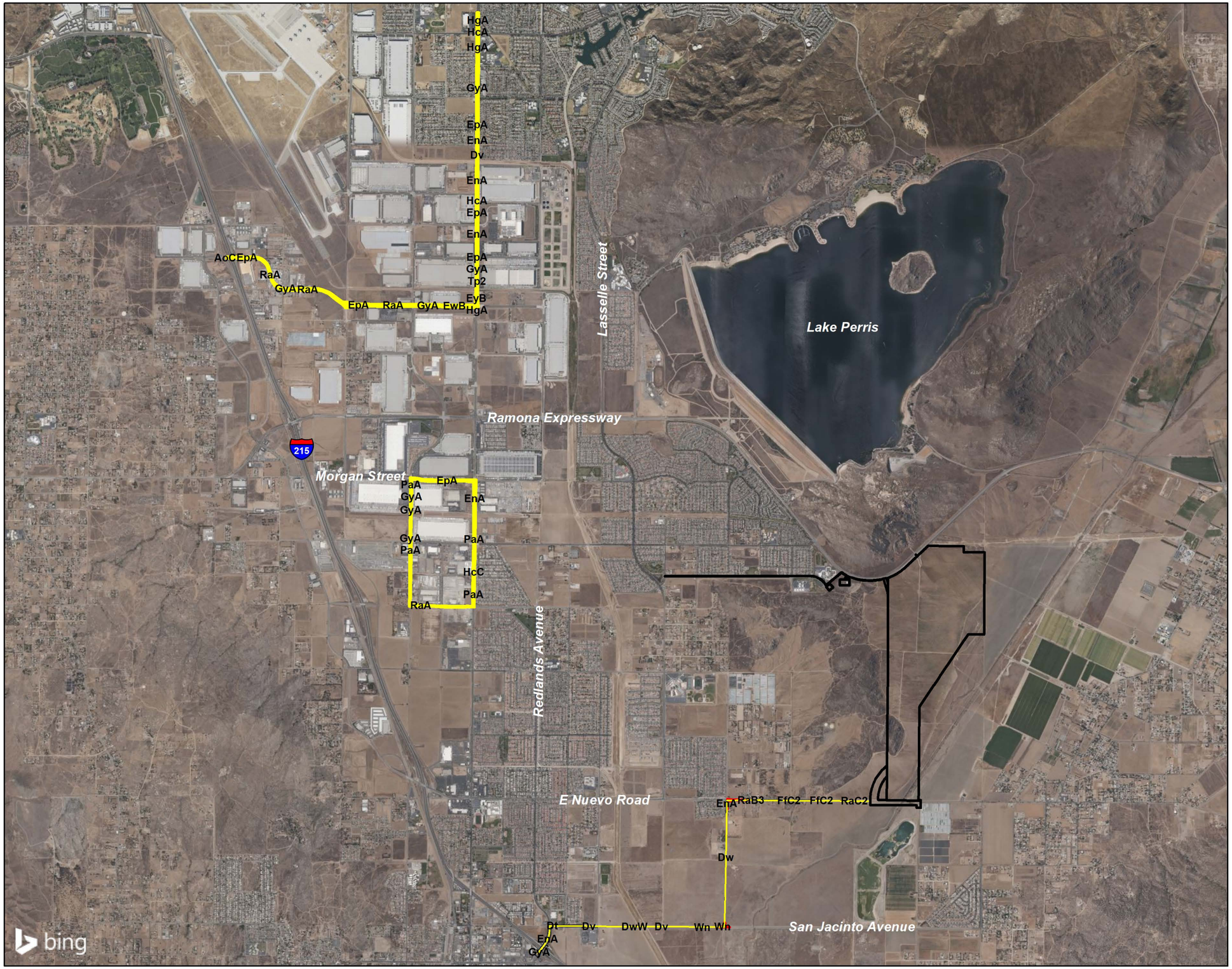
STONERIDGE COMMERCE CENTER

Soils Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 8A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\SoilsGIS\188-27_Soils.mxd



- Stoneridge Project Site
- Truck Access Route
- Truck Turn Areas
- AoC - Arlington fine sandy loam, deep, 2 to 8 percent slopes
- CkD2 - Cieneba rocky sandy loam, 8 to 15 percent slopes, eroded
- Dt - Domino fine sandy loam, saline-alkali
- Dv - Domino silt loam, saline-alkali
- Dw - Domino silt loam, strongly saline-alkali
- EnA - Exeter sandy loam, 0 to 2 percent slopes
- EpA - Exeter sandy loam, deep, 0 to 2 percent slopes
- EpC2 - Exeter sandy loam, deep, 2 to 8 percent slopes, eroded
- EwB - Exeter very fine sandy loam, 0 to 5 percent slopes
- EyB - Exeter very fine sandy loam, deep, 0 to 5 percent slopes
- FfC2 - Fallbrook fine sandy loam, 2 to 8 percent slopes, eroded
- GyA - Greenfield sandy loam, 0 to 2 percent slopes
- GyC2 - Greenfield sandy loam, 2 to 8 percent slopes, eroded
- HcA - Hanford coarse sandy loam, 0 to 2 percent slopes
- HcC - Hanford coarse sandy loam, 2 to 8 percent slopes
- HgA - Hanford fine sandy loam, 0 to 2 percent slopes
- PaA - Pachappa fine sandy loam, 0 to 2 percent slopes
- PaC2 - Pachappa fine sandy loam, 2 to 8 percent slopes, eroded
- RaA - Ramona sandy loam, 0 to 2 percent slopes
- RaB3 - Ramona sandy loam, 0 to 5 percent slopes, severely eroded
- RaC2 - Ramona sandy loam, 5 to 8 percent slopes, eroded
- ReC2 - Ramona very fine sandy loam, 0 to 8 percent slopes, eroded
- Tp2 - Traver loamy fine sand, eroded
- VtF2 - Vista rocky coarse sandy loam, 2 to 35 percent slopes, eroded
- W - Water
- Wn - Willows silty clay, deep, strongly saline-alkali

N

0 2,000 4,000 8,000

Feet

1 inch = 4,000 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

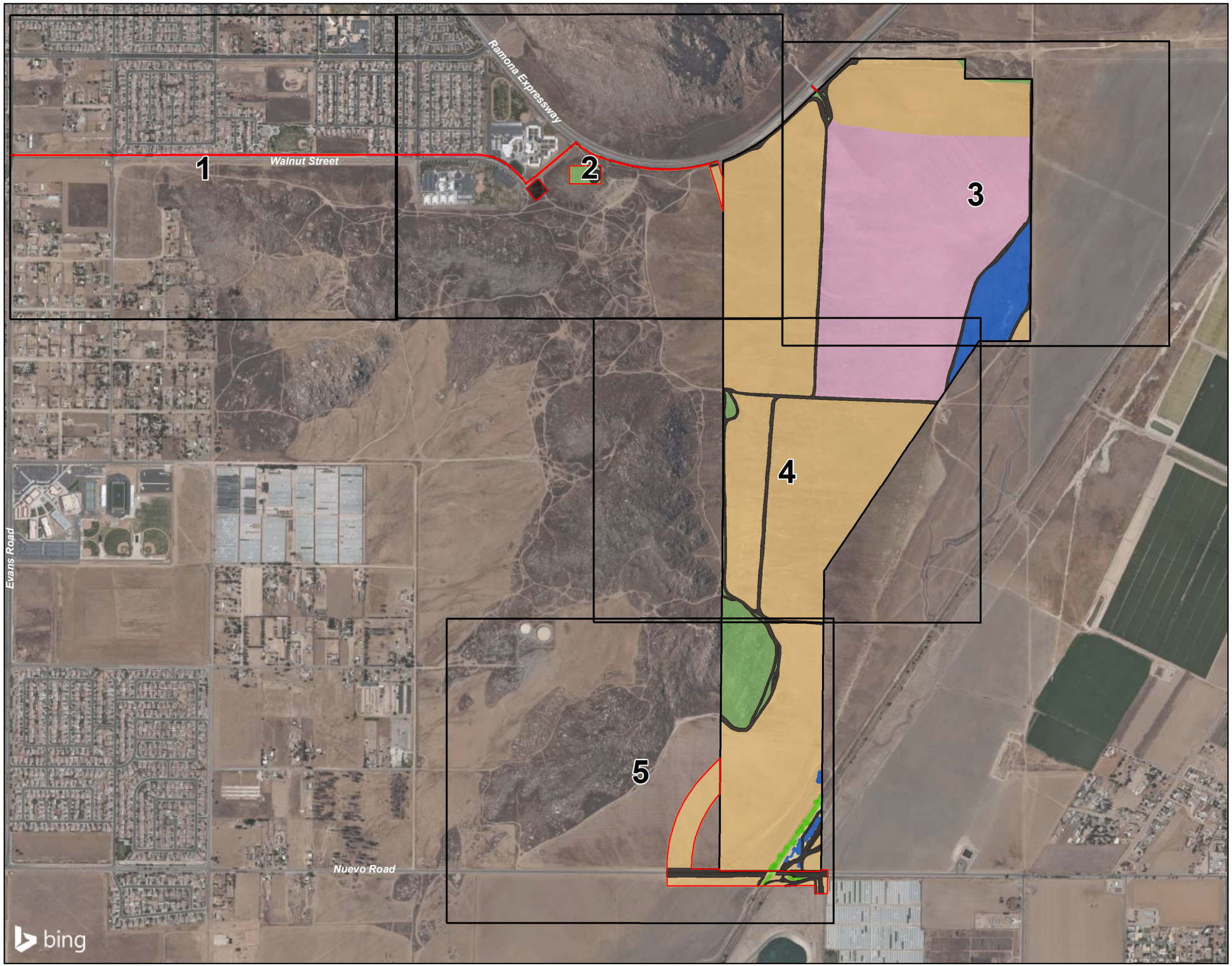
STONERIDGE COMMERCE CENTER

Soils Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 8B

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\OffsiteGIS\188-27_Offsites_Soils.mxd



- Onsite Project Site Boundary
- Offsite Project Site Boundary/ Offsite Development Footprint
- Agriculture
- Disturbed Alkali Playa
- Disturbed/Developed
- Non-Native Grassland
- Ornamental
- Riversidean Sage Scrub
- Ruderal
- Southern Riparian Scrub

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Map - Project Site Key Map

GLENN LUKOS ASSOCIATES

Exhibit 9A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\VegetationGIS\188-27_VegetationLayoutKEY.mxd

Onsite Project Site Boundary

Offsite Project Site Boundary/
Offsite Development Footprint

Agriculture

Disturbed Alkali Playa

Disturbed/Developed

Non-Native Grassland

Ornamental

Riversidean Sage Scrub

Ruderal

Southern Riparian Scrub

N

0 200 400 800

Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Map - Project Site Sheet - 1 of 5

GLENN LUKOS ASSOCIATES

Exhibit 9A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\VegetationGIS\188-27_VegetationLayout.mxd

Onsite Project Site Boundary

Offsite Project Site Boundary/
Offsite Development Footprint

Agriculture

Disturbed Alkali Playa

Disturbed/Developed

Non-Native Grassland

Ornamental

Riversidean Sage Scrub

Ruderal

Southern Riparian Scrub

N

0 200 400 800

Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Map - Project Site Sheet - 2 of 5

GLENN LUKOS ASSOCIATES

Exhibit 9A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\VegetationGIS\188-27_VegetationLayout.mxd

Onsite Project Site Boundary

Offsite Project Site Boundary/
Offsite Development Footprint

Agriculture

Disturbed Alkali Playa

Disturbed/Developed

Non-Native Grassland

Ornamental

Riversidean Sage Scrub

Ruderal

Southern Riparian Scrub

N

0 200 400 800

Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Map - Project Site Sheet - 3 of 5

GLENN LUKOS ASSOCIATES

Exhibit 9A

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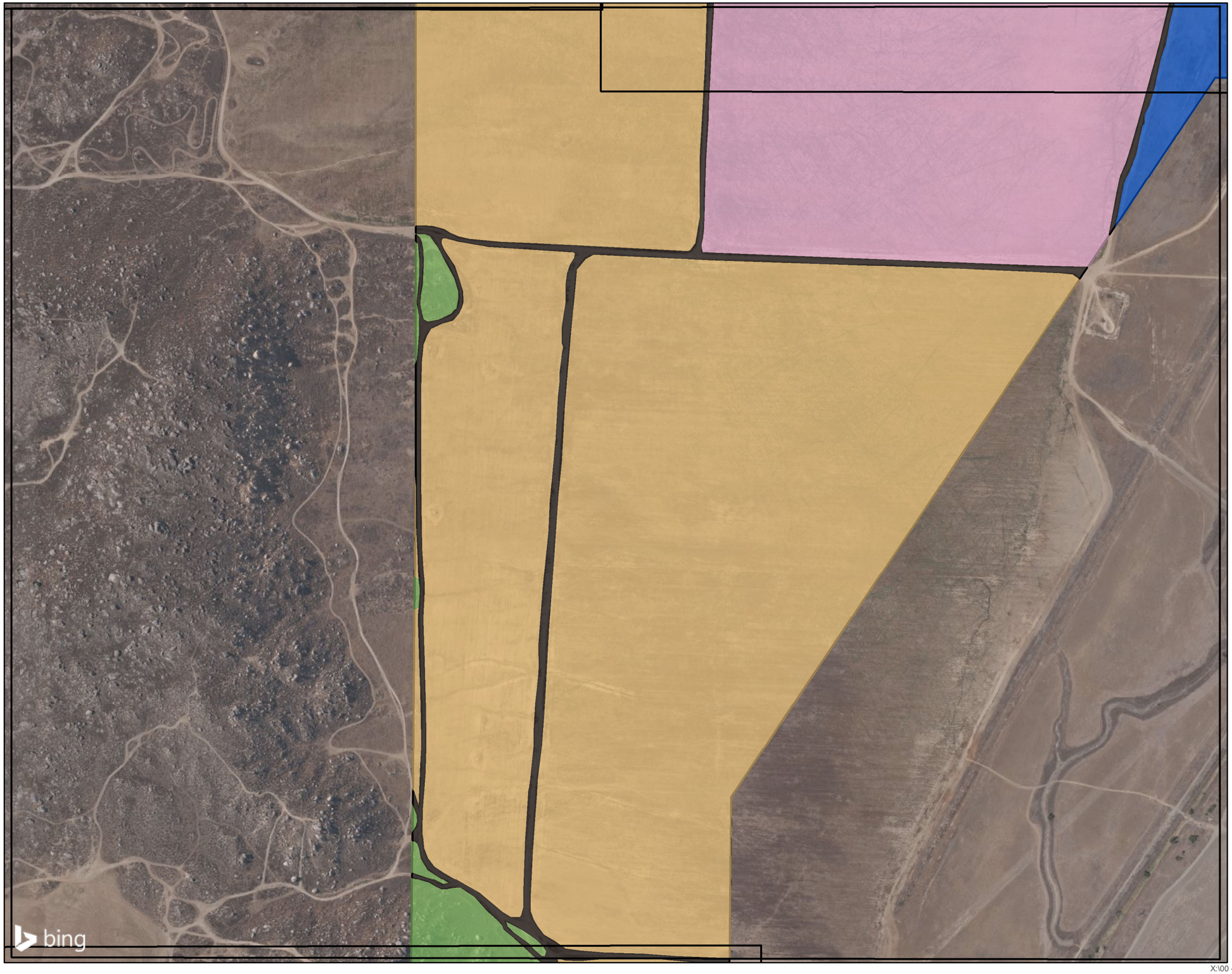


- Onsite Project Site Boundary
- Offsite Project Site Boundary/ Offsite Development Footprint
- Agriculture
- Disturbed Alkali Playa
- Disturbed/Developed
- Non-Native Grassland
- Ornamental
- Riversidean Sage Scrub
- Ruderal
- Southern Riparian Scrub

N

0 200 400 800

Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Map - Project Site Sheet - 4 of 5

GLENN LUKOS ASSOCIATES

Exhibit 9A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\VegetationGIS\188-27_VegetationLayout.mxd

- Onsite Project Site Boundary
- Offsite Project Site Boundary/ Offsite Development Footprint
- Agriculture
- Disturbed Alkali Playa
- Disturbed/Developed
- Non-Native Grassland
- Ornamental
- Riversidean Sage Scrub
- Ruderal
- Southern Riparian Scrub

N

0 200 400 800
Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Map - Project Site Sheet - 5 of 5

GLENN LUKOS ASSOCIATES

Exhibit 9A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\VegetationGIS\188-27_VegetationLayout.mxd

Onsite Project Site Boundary

Offsite Project Site Boundary/
Offsite Development Footprint

Agriculture

Disturbed Alkali Playa

Disturbed/Developed

Non-Native Grassland

Ornamental

Riversidean Sage Scrub

Ruderal

Southern Riparian Scrub

N

0 200 400 800

Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

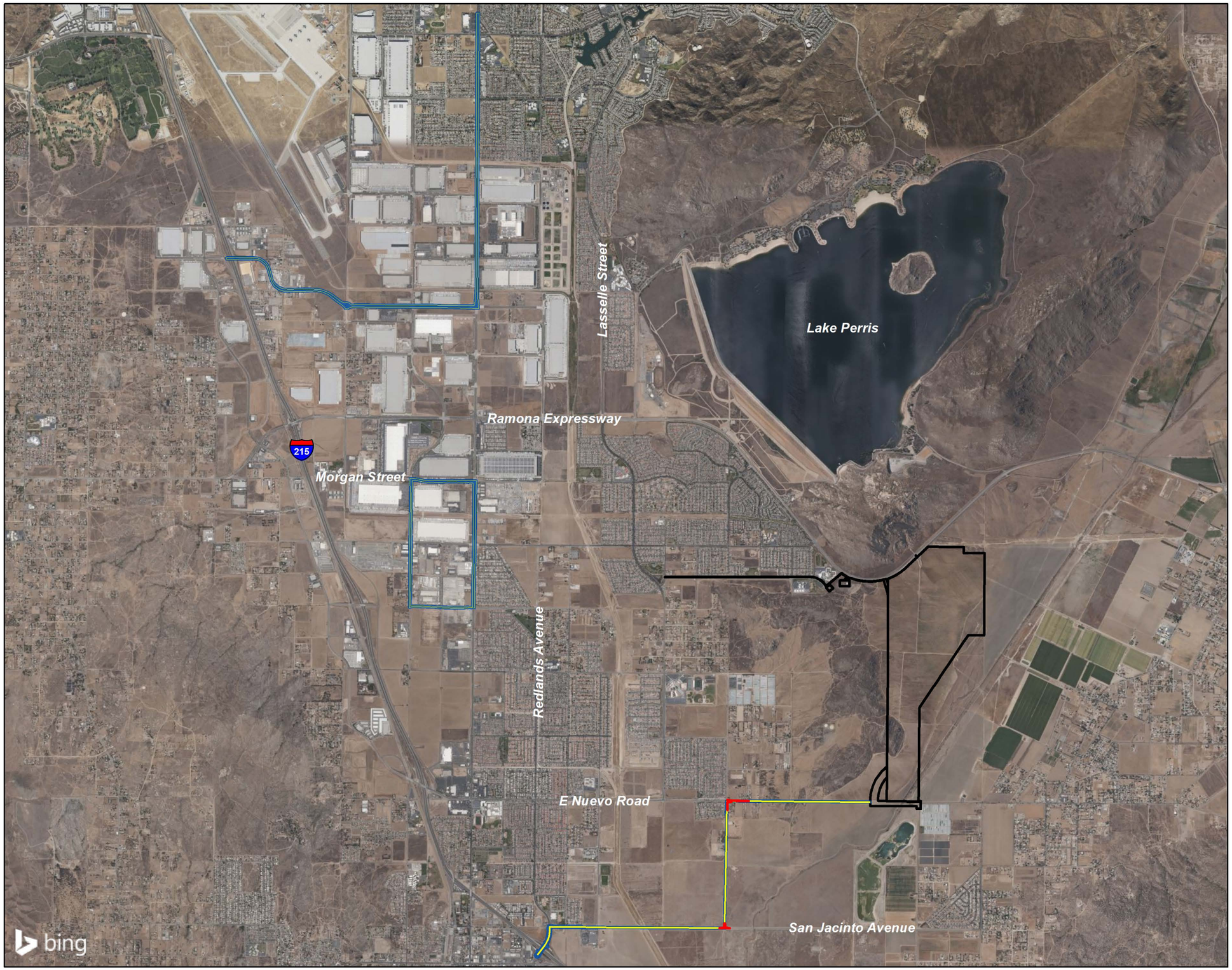
STONERIDGE COMMERCE CENTER

Vegetation Map - Project Site Sheet 5

GLENN LUKOS ASSOCIATES

Exhibit 9A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\VegetationGIS\188-27_VegetationLayout.mxd



Stoneridge Project Site
Truck Access Route
Truck Turn Areas
Disturbed/Developed

N

0 2,000 4,000 8,000
Feet

1 inch = 4,000 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

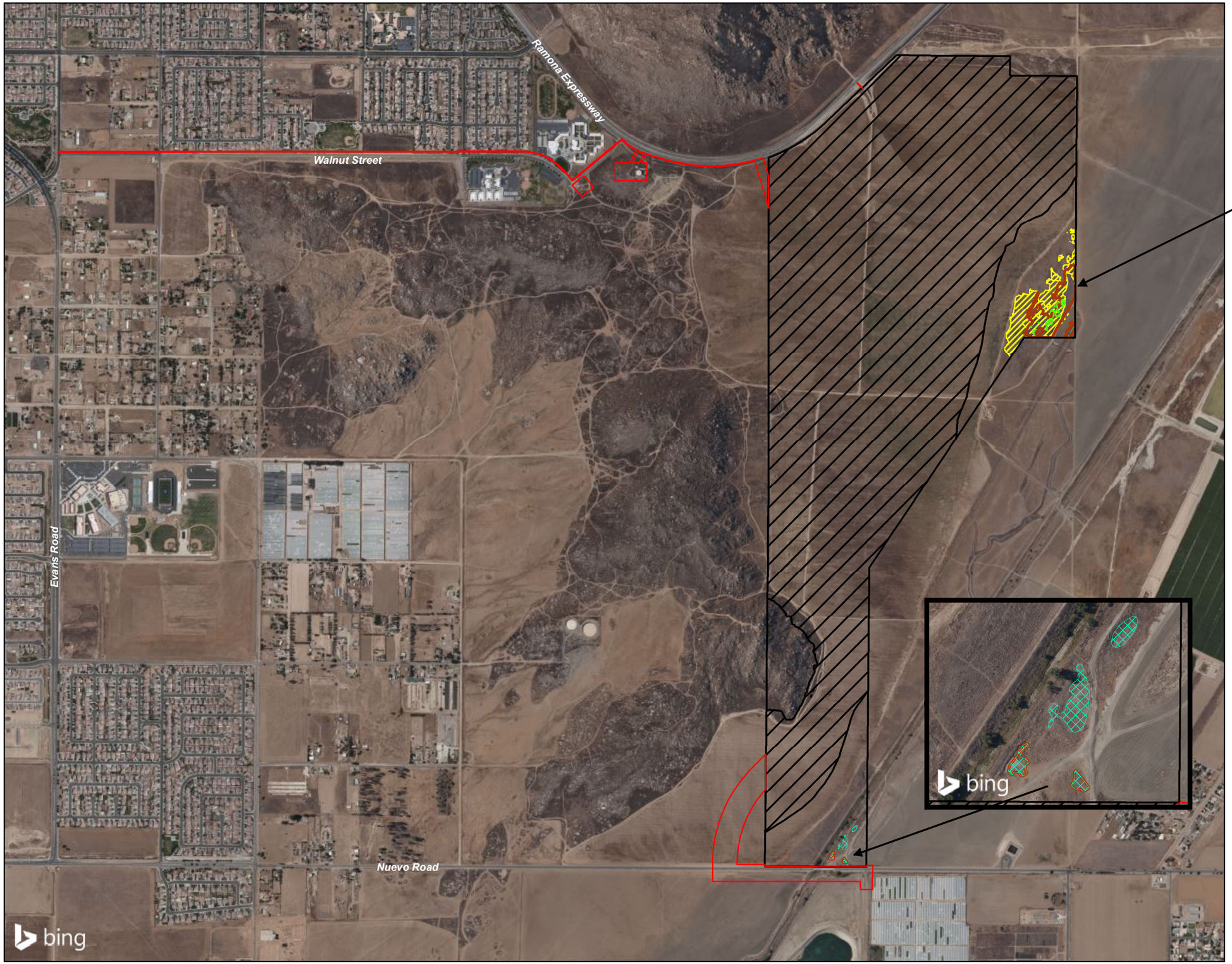
STONERIDGE COMMERCE CENTER

Vegetation Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 9B

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\OffsiteGIS\188-27_Offsites_Veg.mxd



Onsite Project Site Boundary
Offsite Project Site Boundary/Offsite Development Footprint
Onsite Project Footprint
Coulter's Goldfields
San Jacinto Valley Crownscale
Spreading Navarretia
Smooth Tarplant

N

0 625 1,250 2,500
Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Rare Plants Map

GLENN LUKOS ASSOCIATES

Exhibit 10

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\RarePlantsGIS\188-27_RarePlantsLayout.mxd

Onsite Project Site Boundary

Offsite Project Site Boundary

Non-Wetland Waters of the U. S.

Wetland Waters of the U. S.

3 Width of OHWM in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: October 5, 2021

STONERIDGE COMMERCE CENTER

Corps Jurisdictional Delineation Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 11A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\DelineationGIS\REV1\188-27_CorpsLayout_REV1.mxd

Onsite Project Site Boundary

Offsite Project Site Boundary

Non-Wetland Waters of the U.S./State

Non-Wetland Waters of the State

Wetland Waters of the U.S./State

3 Width of OHWM in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: October 5, 2021

STONERIDGE COMMERCE CENTER

RWQCB Jurisdictional Delineation Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 11B

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\DelineationGIS\REV1\188-27_RWQCBLayout_REV1.mxd

Onsite Project Site Boundary

Offsite Project Site Boundary

CDFW Non-Riparian Streambed

CDFW Riparian

Width of Non-Riparian Streambed in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

CDFW Jurisdictional Delineation Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 11C

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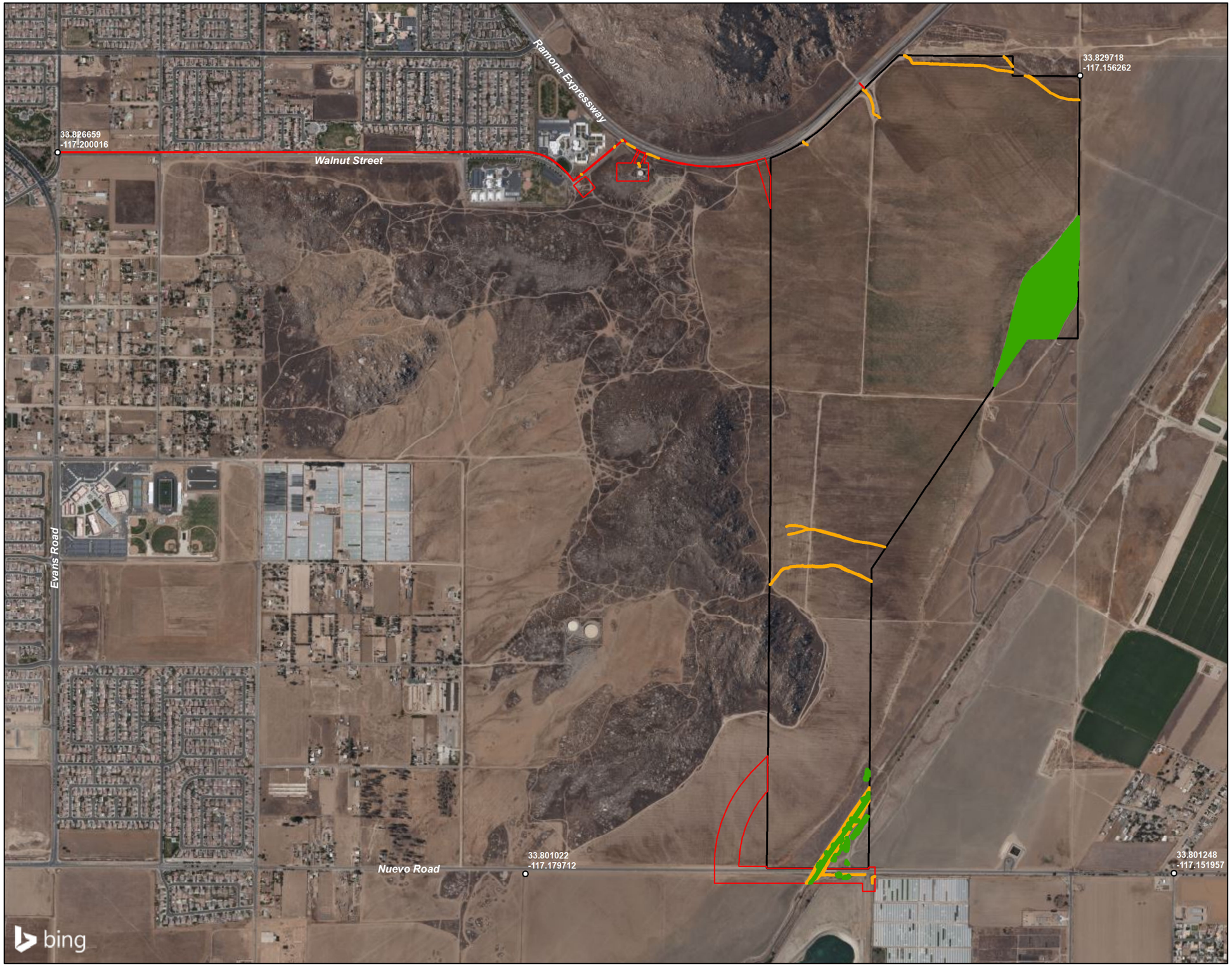

Onsite Project Site Boundary

Offsite Project Site Boundary

MSHCP Riverine

MSHCP Riparian

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

MSHCP Riparian/Riverine Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 11D

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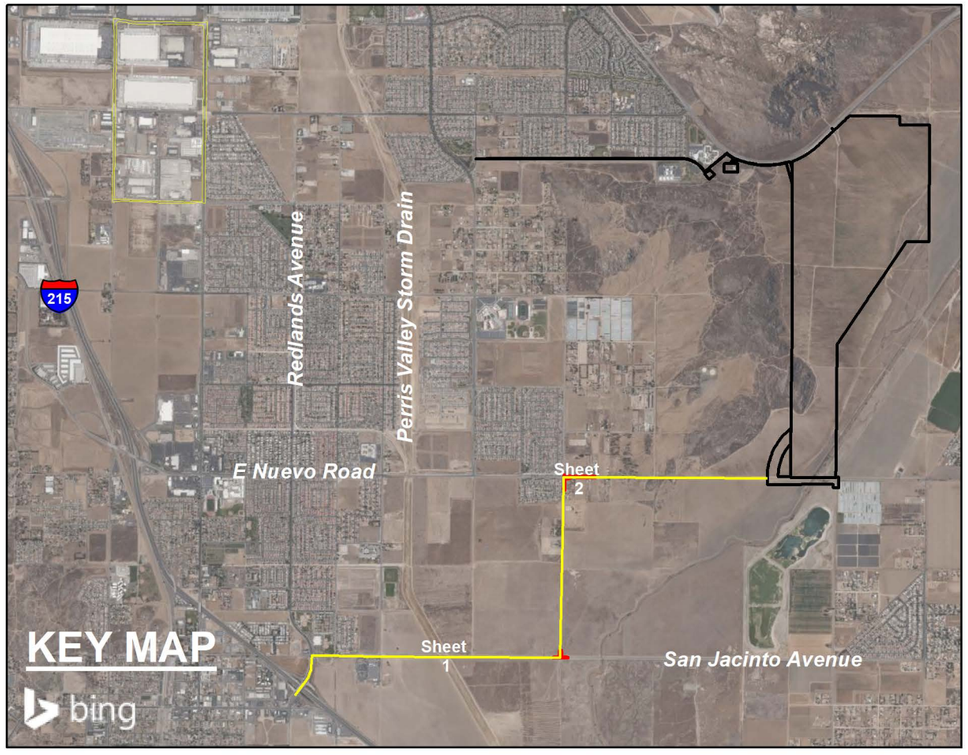

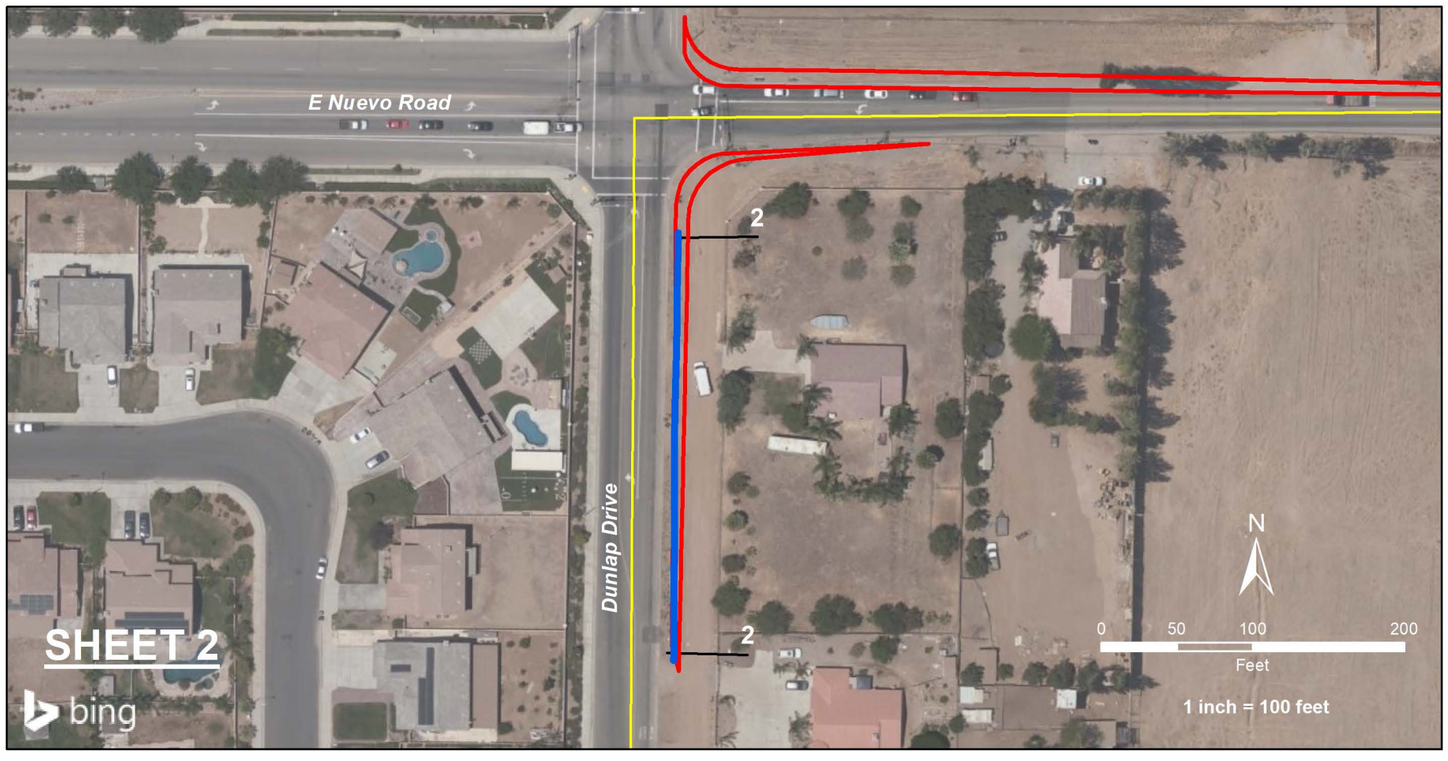

Stoneridge Project Site

Truck Access Route

Truck Turn Areas

RWQCB Non-Wetland Waters of the State

Width of Feature in Feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

STONERIDGE COMMERCE CENTER

RWQCB Jurisdictional Delineation Map, Northerly and Southerly Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 11E

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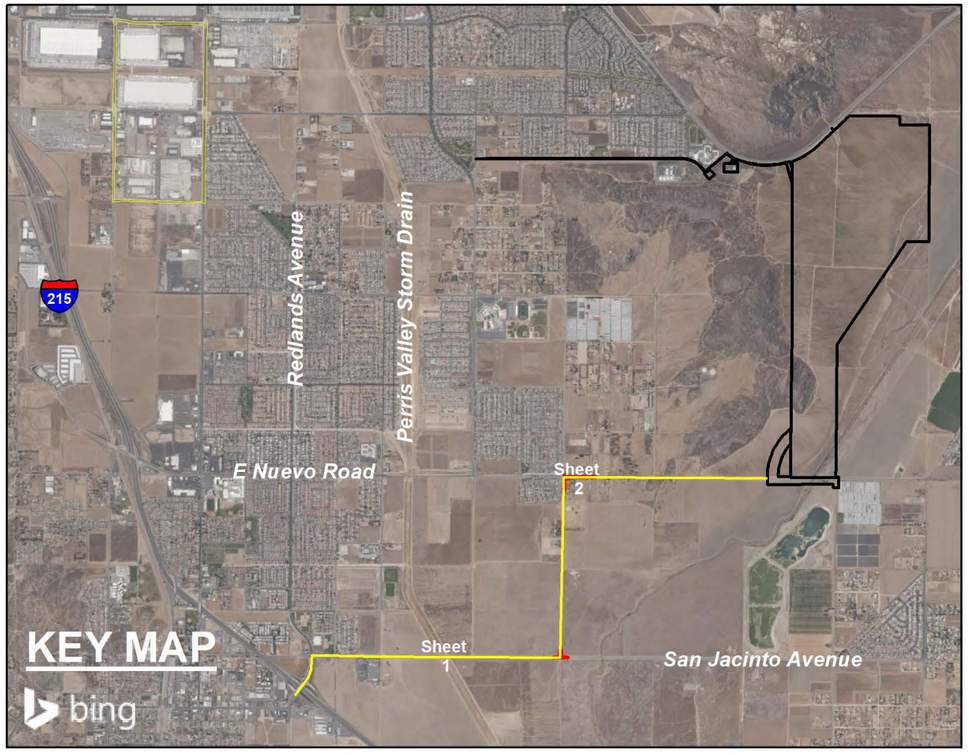

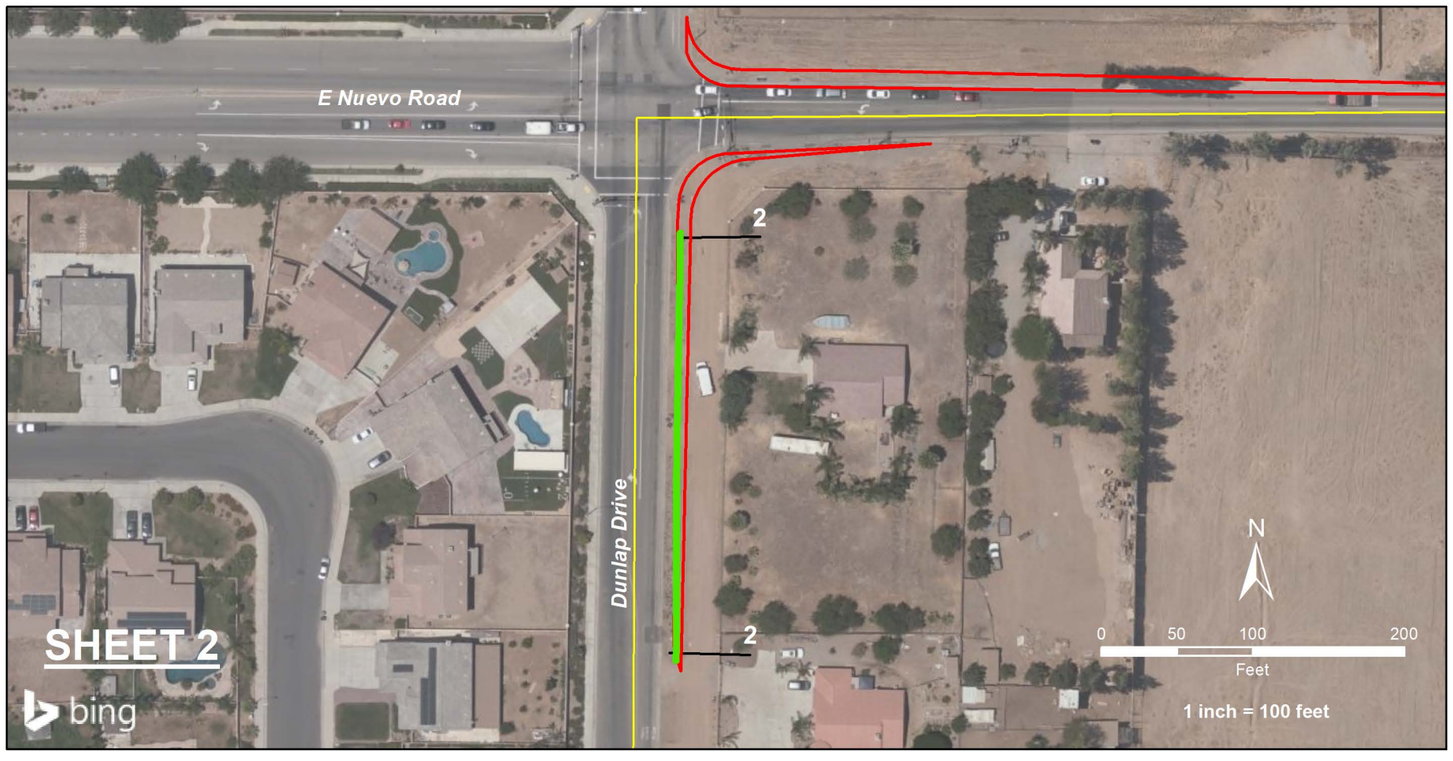

Stoneridge Project Site

Truck Access Route

Truck Turn Areas

CDFW Non-Riparian Stream

Width of Feature in Feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

STONERIDGE COMMERCE CENTER

CDFW Jurisdictional Delineation Map, Northerly and Southerly Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 11F

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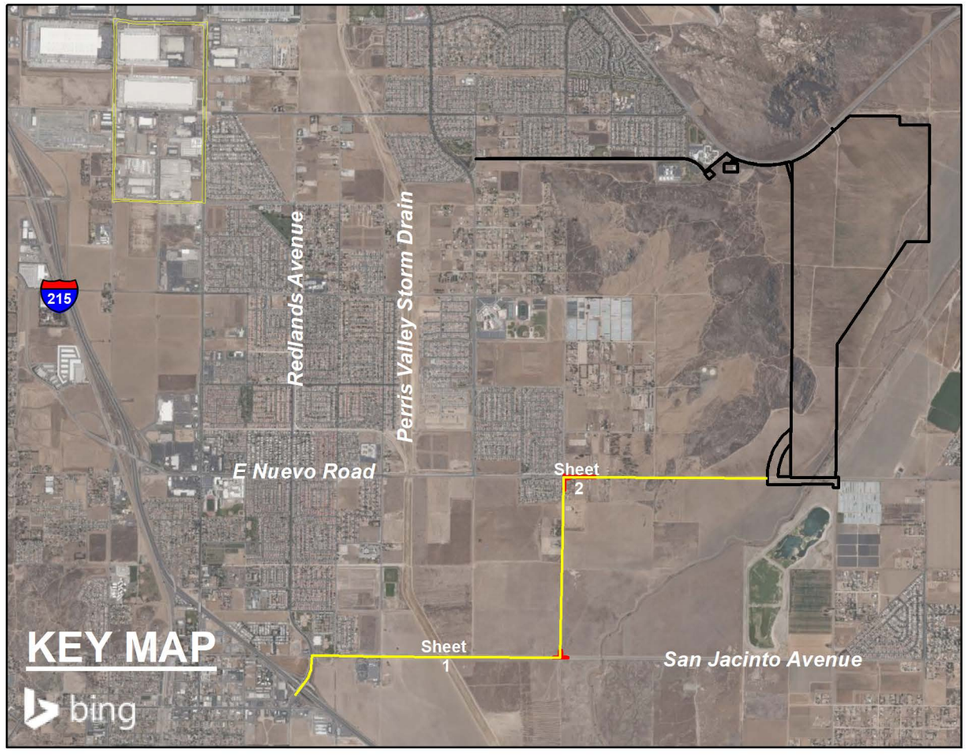
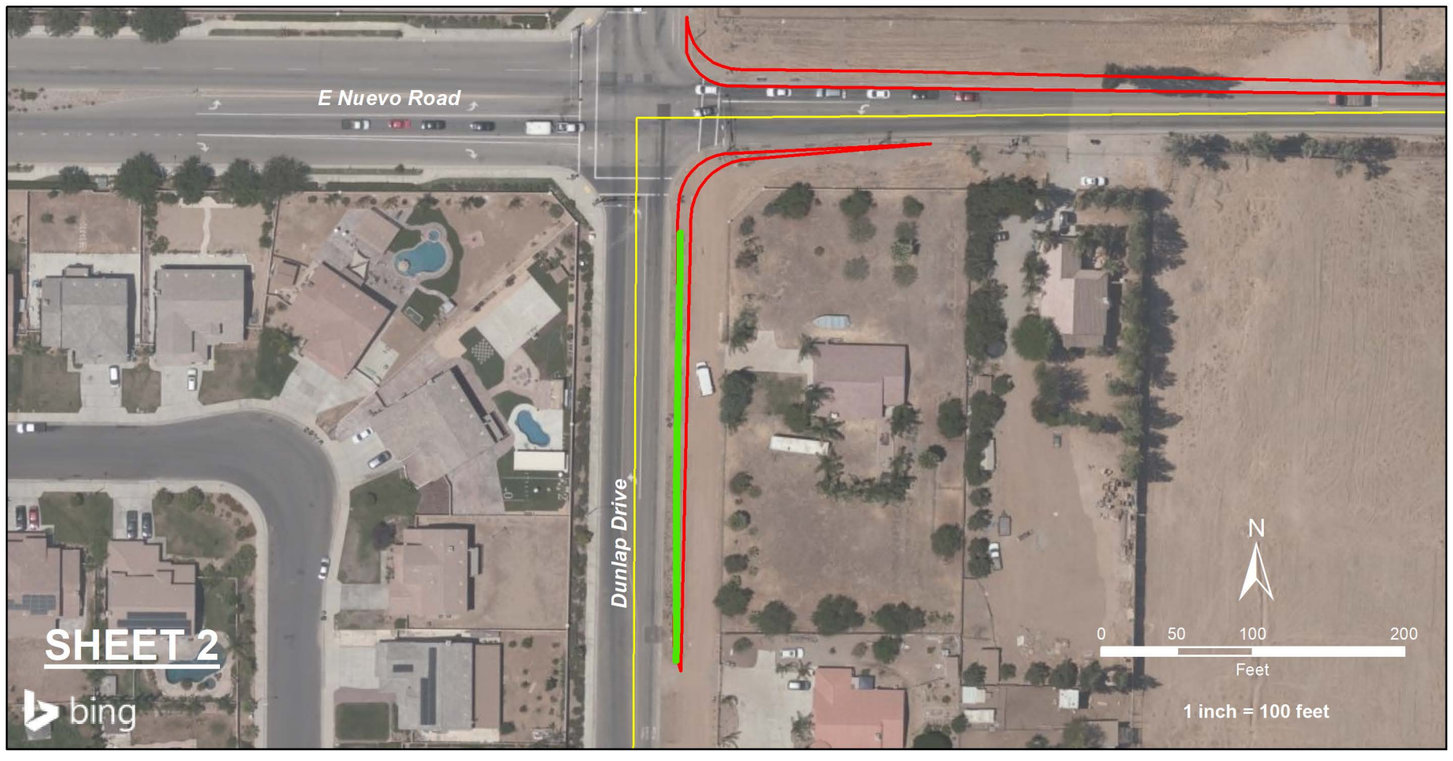




Stoneridge Project Site

Truck Access Route

Truck Turn Areas

MSHCP Riverine

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

STONERIDGE COMMERCE CENTER

MSHCP Riparian/Riverine Map, Northerly and Southerly Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 11G

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\OffsiteGIS\188-27_Offsites_RipRiv.mxd

Photograph 1: 03/2019. Representative view of the northern portion of the Project site. This photo was taken from the west of the Project boundary looking east.

Photograph 2: 03/2019. Representative view of the Project site prior to vegetation management (discing). This photo was taken from the western portion of the site looking northeast.

Photograph 3: 09/2020. Representative view of the Project site after discing operations. This photo was taken from the same area as Photo 2 above.

Photograph 4: 09/2020. Representative view of the Project site after discing operations. This photo was taken from the western portion of the site looking east.

Photograph 5: 09/2020. Representative view of the active agriculture (watermelon) in the northern half of the Project site. This photo is taken from the central portion of the site looking east.

Photograph 6: 09/2020. Representative view of the disturbed alkali playa. This area is within the conservation area of the Project's land use plan and will not be impacted by the Project. This photo was taken from the eastern portion of the site looking southwest.

Photograph 7: 05/2020. Representative view of the Project's southern boundary along Nuevo Road. This photo is looking west.

Photograph 8: Representative photo of a California ground squirrel burrow observed during the focused burrowing owl surveys.

EPD

COUNTY OF RIVERSIDE
TRANSPORTATION AND LAND MANAGEMENT AGENCY

Environmental Programs Department

Carolyn Syms Luna
Director

September 18, 2006

Fiesta Development, Inc.
470 East Harrison Street
Corona, CA. 92879
Attention: Debi Myers

Dear Ms. Myers:

Re: JPR 06-08-18-01 Determination Letter – Partial Conservation
HANS No. 269
Case No. TR32372, PM31446
Assessor's Parcel Numbers: 307070003 through 005, 307080005, 307080006, 307080008, 307090001, 307090004, 307090005, 307100003, 307100004, 307100005, 307110003, 307110007, 307110008, 307220001, 307230018 and 307230021

This letter is to inform you that the HANS determination for the subject property was forwarded to the Regional Conservation Authority (RCA) for Joint Project Review (JPR) pursuant to Section 6.6.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). As stated on the attached "RCA JPR Review", the RCA has concurred with the County that partial conservation is described for this property (exhibit attached).

You may proceed with the planning process for the remainder of the property. Please note that this determination does not preclude compliance with any conditions incorporated into your final project approval.

If you have questions concerning the attached comments, please contact the EPD at (951) 955-6892.

Sincerely,

ENVIRONMENTAL PROGRAMS DEPARTMENT

Ken Baez
Senior Planner

KGB

xc: Karin Watts-Bazan, Deputy County Counsel
Greg Neal, EPD
Monica Thill, EPD
Sarah Lozano, RCA
Adam Rush, Planning Department

RCA Joint Project Review (JPR)

JPR #: 06 08 18 01
Date: 9/15/06

Project Information

Permittee: **Riverside County**
Case Information: **HANS 269**
Site Acreage: **638 acres**
Portion of Site Proposed for MSHCP Conservation Area: **80 acres (between two areas of 55 and 25 acres)**

Criteria Consistency Review

Consistency Conclusion: The project is consistent with both the Criteria and Other Plan requirements.

Data:

Applicable Core/Linkage: Proposed Extension of Existing Core 4
Area Plan: Lakeview / Nuevo

APNs	Sub-Unit	Cell Groups	Cells
307070003 307070004 307070005 307080005 307080006 307080008 307090001 307090004 307090005 307100003 307100004 307100005 307110003 307110007 307110008 307220001 307230018 307230021	SU1 - San Jacinto River, Middle Reach	C, D E, F, & G	2442, 2547, 2651, 2761, 2762, & 2865

Comments:

a. Proposed Extension of Existing Core 4 is composed of the middle reach of the San Jacinto River and is contiguous with Core Area in Lake Perris Recreation Area. It provides Habitat for a number of Narrow Endemic Plant Species and movement for species connecting to Lake Perris and areas downstream of the San Jacinto River in Canyon Lake. Planning Species for which Habitat is provided within this proposed Extension of Existing Core include San Jacinto Valley crownscale, thread-leaved brodiaea, arroyo toad, and Los Angeles pocket mouse.

b. Conservation within Cell Group C will contribute to Proposed Extension of Existing Core 4. Conservation within this Cell Group will focus on assembly of a mosaic of habitat types, including grassland, playas/vernal pool and water habitat, and agricultural land associated with the San Jacinto River. Areas conserved within this Cell Group will be connected to water habitat and agricultural land proposed for conservation in Cell Group B to the south and southwest and to playas/vernal pool habitat and agricultural land proposed for conservation in Cell 2867 to the west and in Cell Group D to the north. Conservation within this Cell Group will range from 55%-65% of the Cell Group focusing in the western portion of the Cell Group.

c. Conservation within Cell Group D will contribute to Proposed Extension of Existing Core 4. Conservation within this Cell Group will focus on assembly of playas/vernal pool, riparian scrub, woodland and forest habitat, and agricultural land adjacent to the San Jacinto River. Areas conserved within this Cell Group will be connected to playas/vernal pool habitat and agricultural land proposed for conservation in Cell Group C to the south, to playas/vernal pool habitat proposed for conservation in Cell Group E to the north, and to playas/vernal pool, riparian scrub, woodland and forest habitat, and agricultural land proposed for conservation in Cell 2760 to the east. Conservation within this Cell Group will range from 50%-60% of the Cell Group focusing in the eastern portion of the Cell Group.

d. Conservation within Cell Group E will contribute to assembly of Proposed Extension of Existing Core 4. Conservation within this Cell Group will focus on playas/vernal pool habitat and agricultural land adjacent to the San Jacinto River. Areas conserved within this Cell Group will be connected to playas/vernal pool habitat and agricultural land proposed for conservation in Cell Group D to the southwest, in Cell Group F to the north, and in Cell 2760 to the south. Conservation within this Cell Group will range from 70%-80% of the Cell Group focusing in the western portion of the Cell Group.

e. Conservation within Cell Group F will contribute to assembly of Proposed Extension of Existing Core 4. Conservation within this Cell Group will focus on playas/vernal pool habitat and agricultural land adjacent to the San Jacinto River. Areas conserved within this Cell Group will be connected to playas/vernal pool habitat and agricultural land proposed for conservation in Cell Group E to the south and in Cell Group G to the north and to agricultural land proposed for conservation in Cell 2549 to the east. Conservation within this Cell Group will range from 60%-70% of the Cell Group focusing in the eastern portion of the Cell Group.

f. Conservation within Cell Group G will contribute to assembly of Proposed Extension of Existing Core 4. Conservation within this Cell Group will focus on playas/vernal pool habitat adjacent to the San Jacinto River. Areas conserved within this Cell Group will be connected to playas/vernal pool habitat proposed for conservation in Cell Groups F to the south, I to the north, and H to the east. Conservation within this Cell Group will range from 50%-60% of the Cell Group focusing in the eastern portion of the Cell Group.

g. The applicant is proposing to develop the site with a mixed-use residential and commercial master planned development. The Applicant is proposing to contribute over 79 acres of riparian and vernal pool habitat along the San Jacinto River for conservation under the MSHCP. The configuration and size of the proposed conservation area is consistent with the Reserve Assembly objectives for this area,

as it contributes appropriately located and configured habitat areas to the Proposed Extension of Existing Core 4. Therefore, it is not anticipated that implementation of the project with the proposed dedication would conflict with Reserve Assembly in this area.

Other Plan Requirements

Data:

Section 6.1.2 – Riparian/Riverine/Vernal Pool Mapping Provided:

Yes. Information was provided.

Section 6.1.3 – Narrow Endemic Plant Species Surveys Provided:

Yes. The project site is located within Narrow Endemic Plant Species Survey Area 3.

Section 6.3.2 – Additional Species Surveys Provided:

Yes. The project site is located within Criteria Area species survey area 3, as well as the burrowing owl and Los Angeles pocket mouse survey areas.

Section 6.1.4 – Guidelines Pertaining to Urban/Wildland Interface:

Yes. Project design features are included in the application materials.

Comments:

a. The southeastern corner of the project site includes a portion of the San Jacinto River. Additionally, vernal pool habitat exists in two places on the property along the San Jacinto River: one in the southeastern corner of the property and one in the southeastern corner of the northeastern half of the property. These areas will not be impacted by development, as they are proposed for inclusion in the MSHCP conservation area. There are no other riparian/riverine areas, vernal pools, or fairy shrimp habitat on the property. The remaining areas of the property consist of roads, agricultural fields, riversidean sage scrub, and non-native grassland (C.J. Fotheringham and Shay E. Lawrey reports, July 2006, and email September 1, 2006). The project demonstrates compliance with Section 6.1.2 of the MSHCP.

b. The project site is located within Narrow Endemic Plant Species Survey Area 3, which includes Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, and Wright's trichocoronis. Focused surveys were conducted in March, April, May, and June 2006, for these plants. Spreading navarretia was found to be on the site within the vernal pool habitat that is proposed

for conservation. None of the other Narrow Endemic Plant Species Survey Area 3 plants were found on the site. The project demonstrates compliance with Section 6.1.3 of the MSHCP.

c. The project site is located within the burrowing owl and Los Angeles pocket mouse survey areas, as well as Criteria Area Species Survey Area 3, which includes San Jacinto Valley crownscale, Parish's brittlescale, Davidson's saltscale, thread-leaved brodiaea, smooth tarplant, round-leaved filaree, Coulter's goldfields, little mousetail, and mud nama. Focused surveys were conducted in March, April, May, and June 2006, for the Criteria Area plants. Three of these plants were found on the site within the vernal pool or alkali playa habitat: Davidson's saltscale, smooth tarplant, and Coulter's goldfields. The plants are within the area proposed for conservation and would not be impacted by the proposed development. The other Criteria Area plants were not found on the site. Burrowing owl surveys were conducted on the site on April 2, 3, 4, 8, 15, and 21, 2006, and revealed no "burrowing owls, sign of burrowing owls, or burrows of appropriate size" on the site (Tom Dodson and Associates report, July 2006). Small mammal trapping surveys were conducted between April 1 and 10, 2006, on the site and revealed three Los Angeles pocket mice found on the westerly parcels 307070004 and 005; however, these parcels are not included in the Los Angeles pocket mouse survey area. No Los Angeles pocket mice were found on the site within the Los Angeles pocket mouse survey area (as shown on Figure 9 of the Tom Dodson and Associates report, July 2006). The project demonstrates compliance with Section 6.3.2 of the MSHCP.

d. To preserve the integrity of area dedicated as MSHCP Conservation Areas, which is proposed to occur adjacent to development, the guidelines contained in Section 6.1.4 related to controlling adverse effects for development adjacent to the MSHCP Conservation Area should be considered by the Permittee in their actions relative to the project. Specifically, the Permittee should include as project conditions of approval the following measures:

   i. Incorporate measures to control the quantity and quality of runoff from the site entering the MSHCP Conservation Area. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. The greatest risk is to riparian habitats north of the project site.

   ii. Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts, such as manure, which are potentially toxic or may adversely affect wildlife species, habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. The greatest risk is from landscaping fertilization overspray and runoff.

   iii. Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased. In this instance, focused habitat occurs in close proximity to the west, south, and southeast; shielding should focus on these areas.

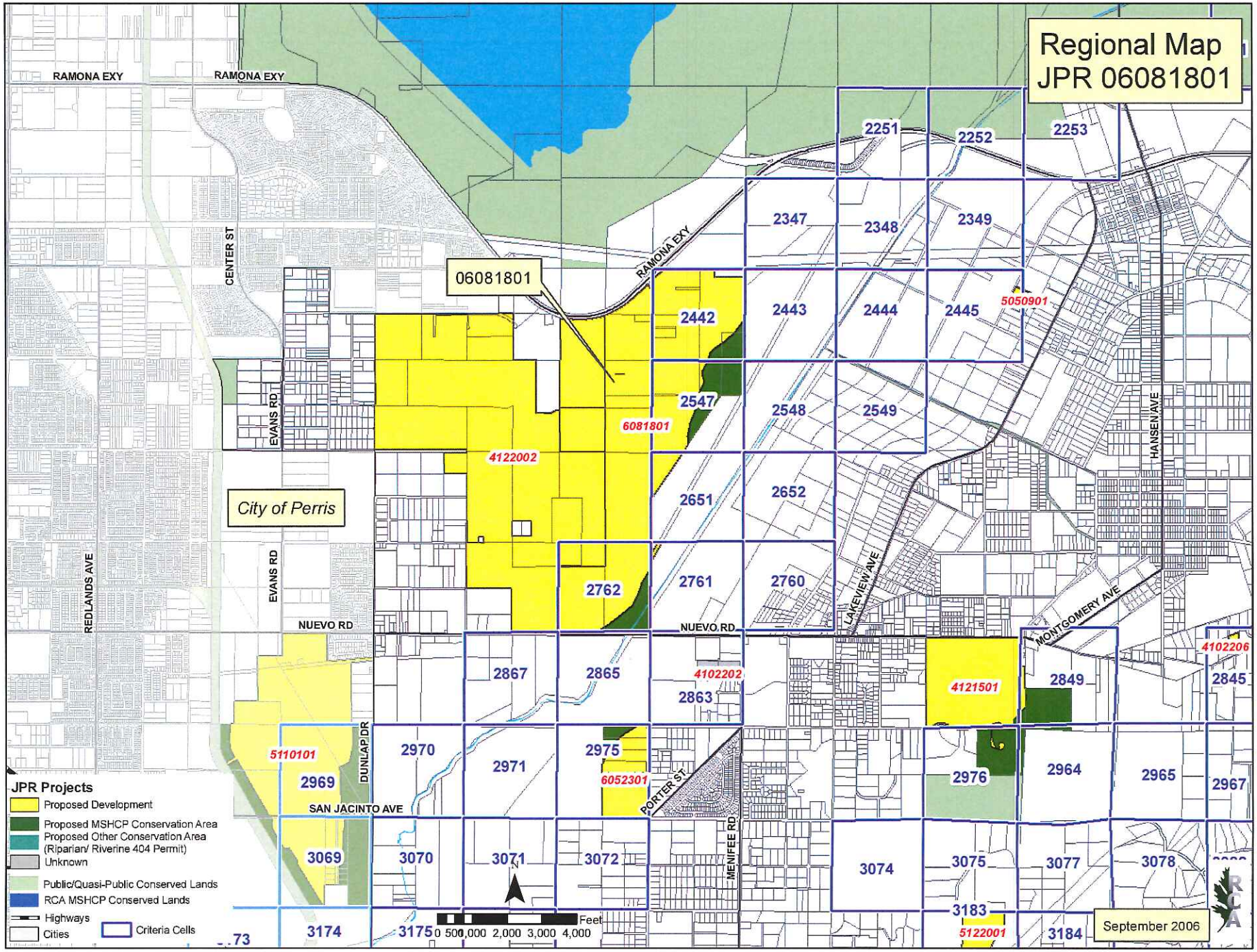
   iv. Proposed noise-generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards.

v. Consider the invasive, non-native plant species listed in *Table 6-2* of the MSHCP in approving landscape plans to avoid the use of invasive species for the portions of the project that are adjacent to the MSHCP Conservation Area. Considerations in reviewing the applicability of this list shall include proximity of planting areas to the MSHCP Conservation Areas, species considered in the planting plans, resources being protected within the MSHCP Conservation Area and their relative sensitivity to invasion, and barriers to plant and seed dispersal, such as walls, topography, and other features.

vi. Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate, in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping into the MSHCP Conservation Areas. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or appropriate mechanisms.

vii. Manufactured slopes associated with the proposed site development shall not extend into the MSHCP Conservation Area.

EAL


Regional Map
JPR 06081801
RAMONA EXY
RAMONA EXY
CENTER ST
06081801
RAMONA EXY
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City of Perris
EVANS RD
REDLANDS AVE
NUEVO RD
NUEVO RD
LAKEVIEW AVE
MONTGOMERY AVE
HANSEN AVE
DUNLAP DR
SAN JACINTO AVE
PORTER ST
MENIFEE RD
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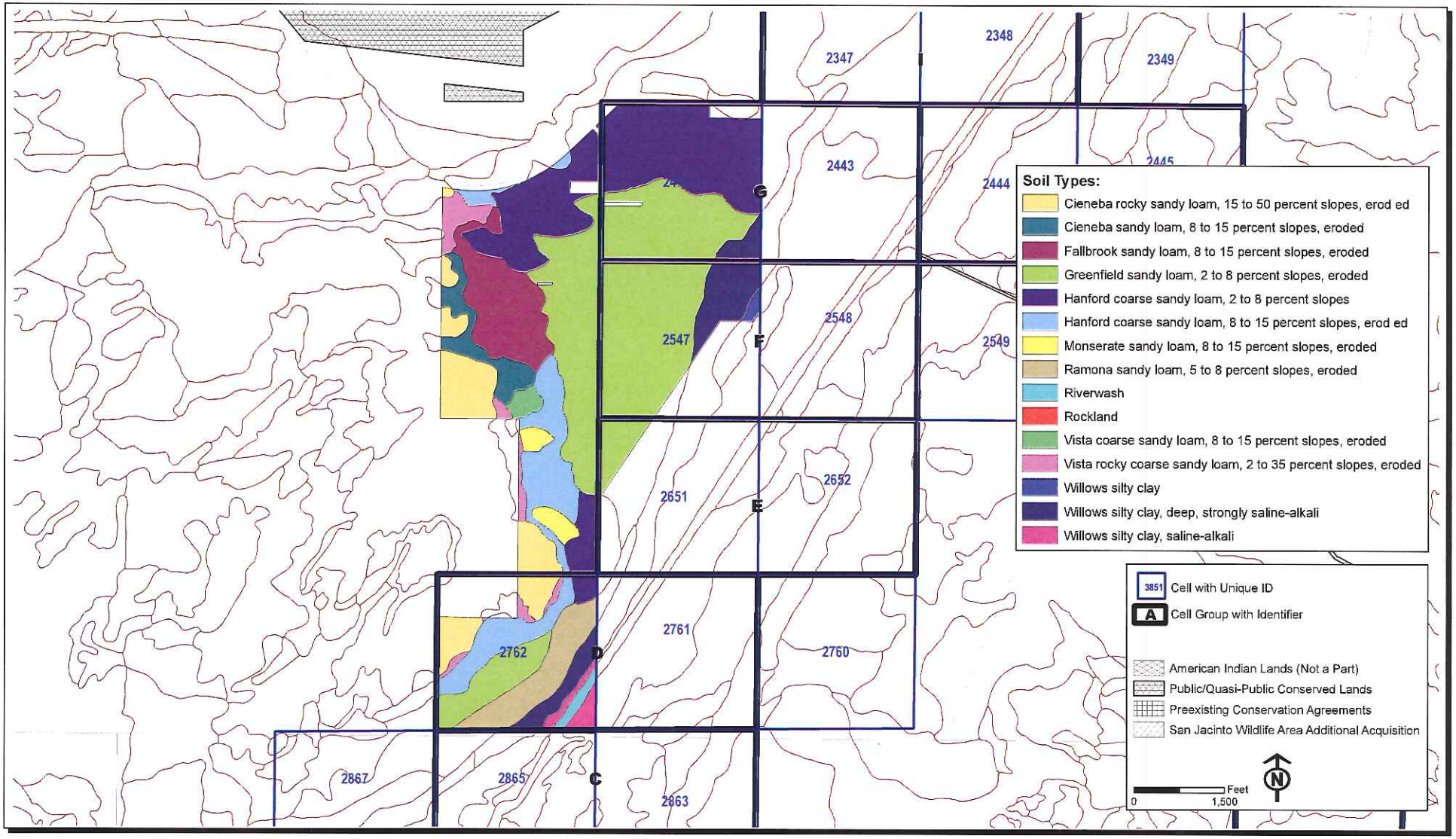
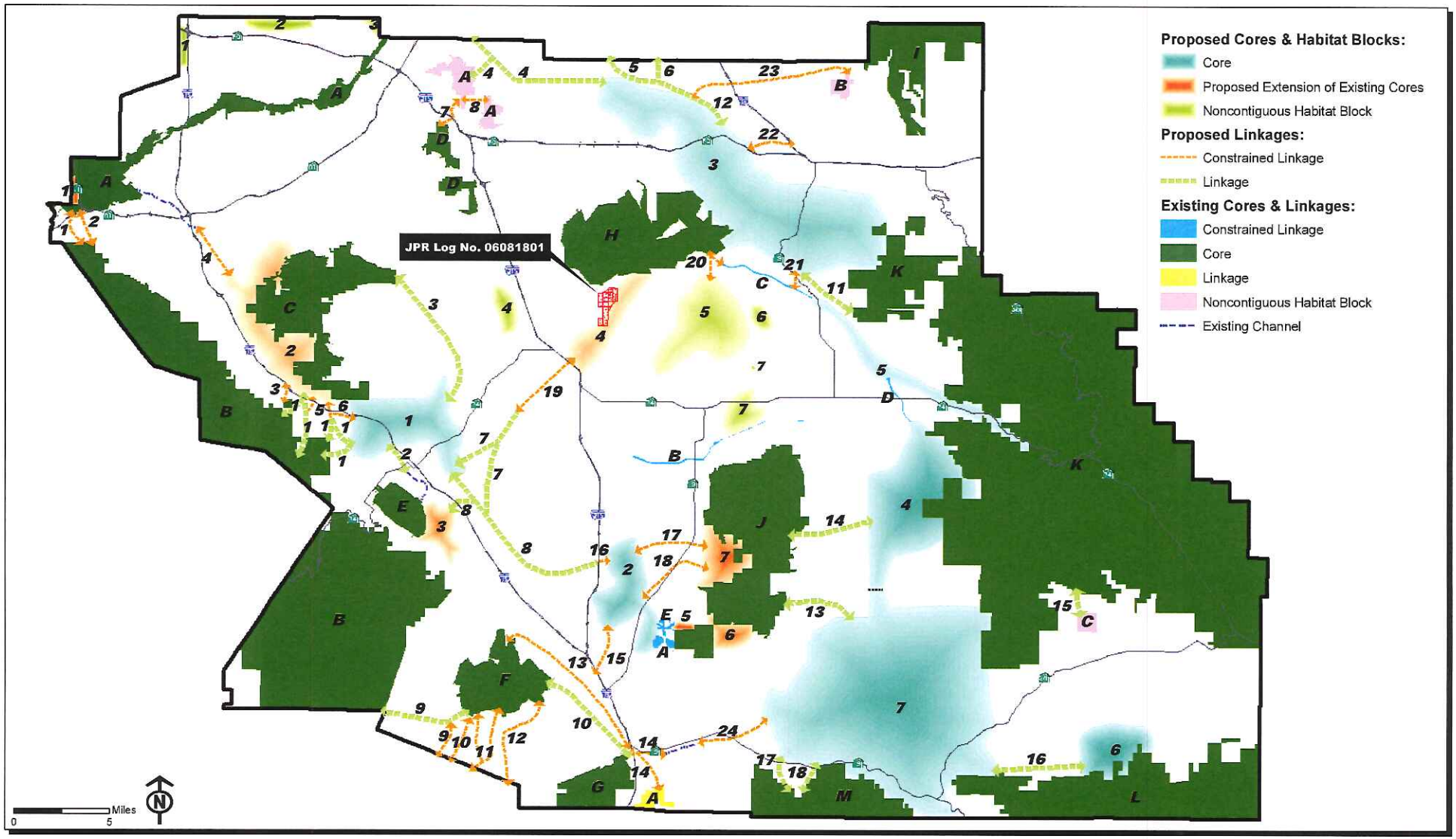
3175
JPR Projects
Proposed Development
Proposed MSHCP Conservation Area
Proposed Other Conservation Area (Riparian/ Riverine 404 Permit)
Unknown
Public/Quasi-Public Conserved Lands
RCA MSHCP Conserved Lands
Highways
Cities
Criteria Cells
0 500 1,000 2,000 3,000 4,000
Feet
N
September 2006



JPR Log No. 06081801

Criteria Area Cells with MSHCP Soils and Project Location

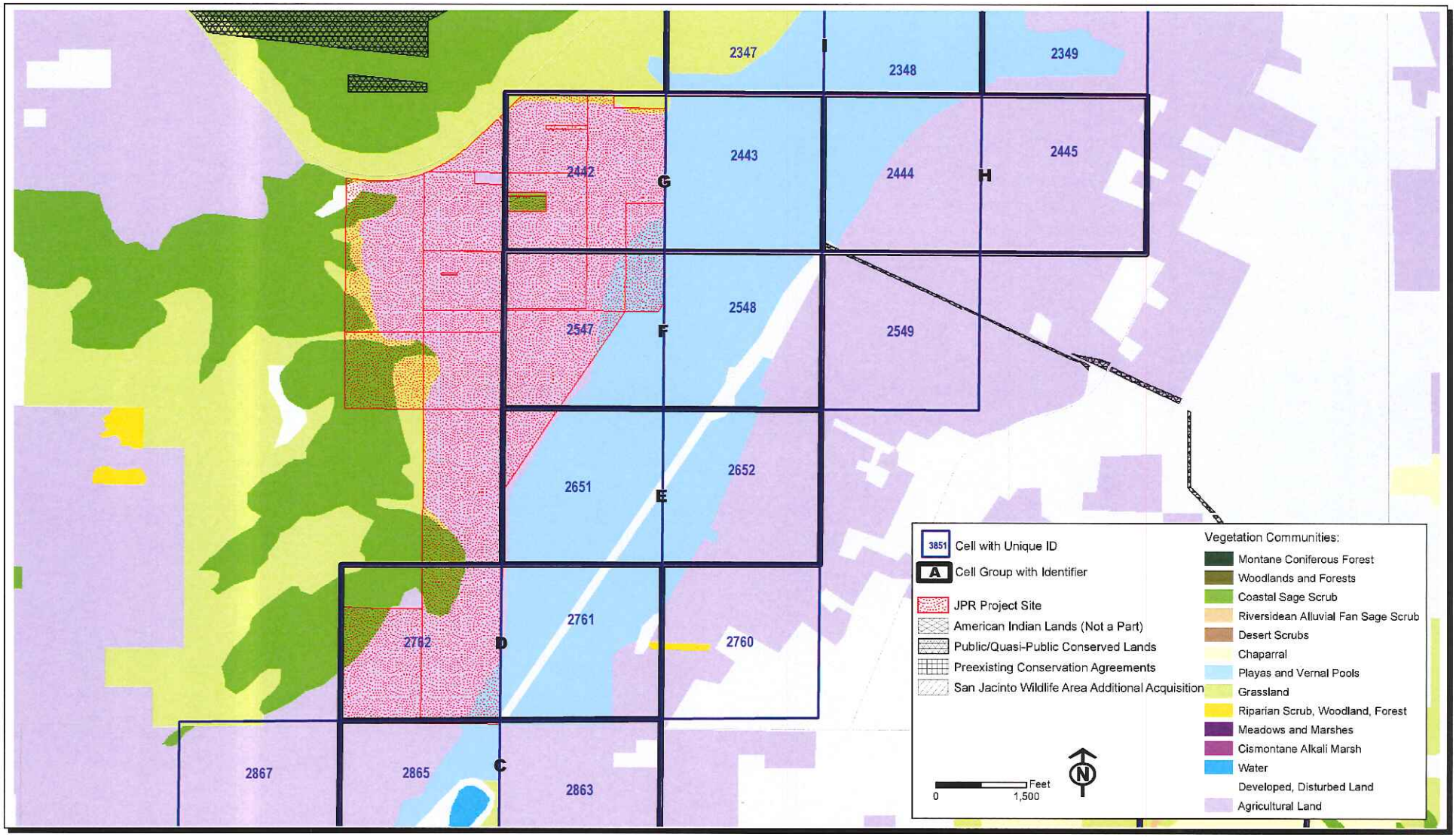
EXHIBIT C



JPR Log No. 06081801

Vicinity Map with MSHCP Schematic Cores and Linkages

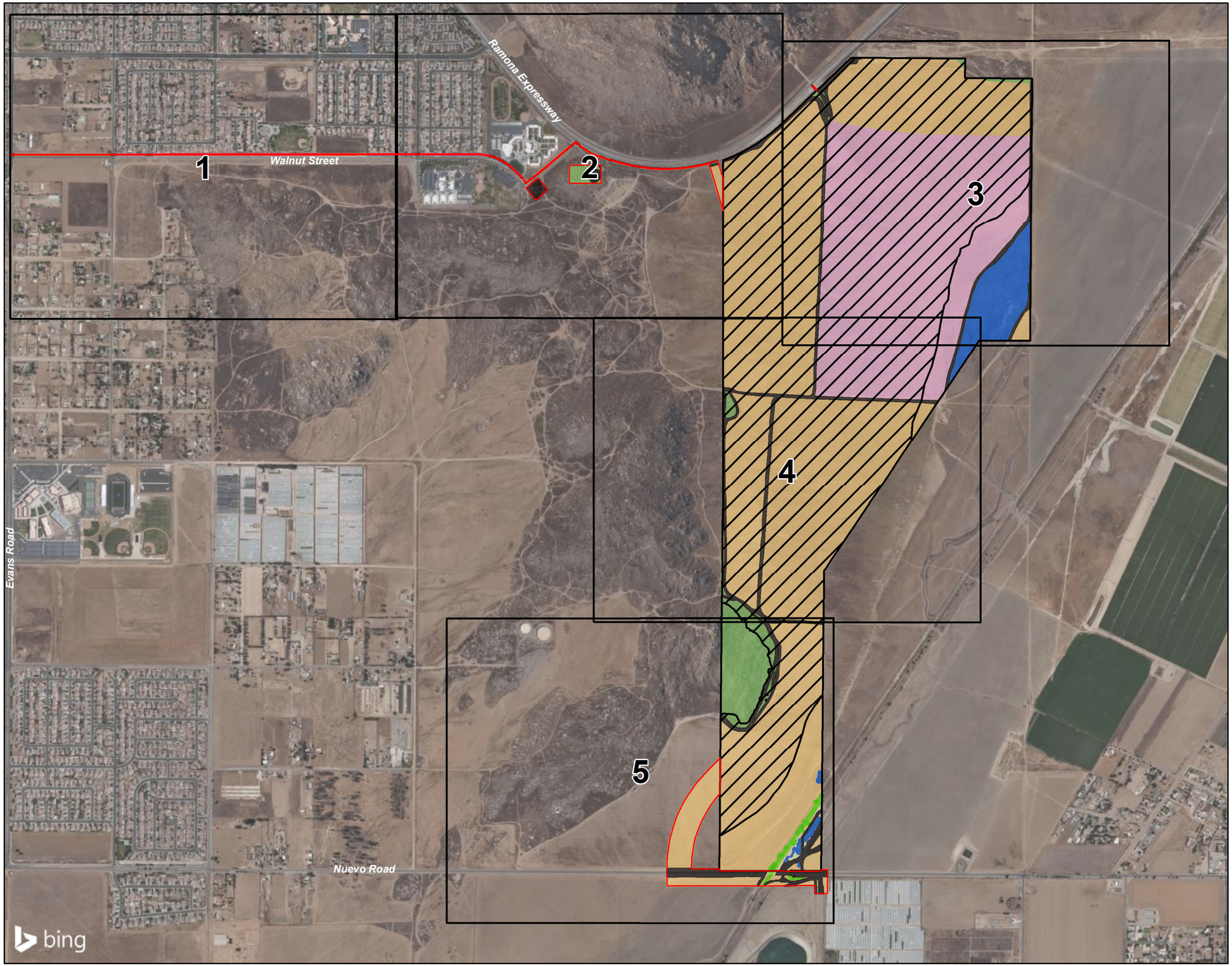
EXHIBIT A



JPR Log No. 06081801

Criteria Area Cells with MSHCP Vegetation and Project Location

EXHIBIT B



- Onsite Project Site Boundary
- Offsite Project Site Boundary/ Offsite Development Footprint
- Onsite Project Footprint
- Agriculture
- Disturbed Alkali Playa
- Disturbed/Developed
- Non-Native Grassland
- Ornamental
- Riversidean Sage Scrub
- Ruderal
- Southern Riparian Scrub

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Impact Map - Project Site Key Map

GLENN LUKOS ASSOCIATES

Exhibit 15A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\ImpactsGIS\188-27_VegetationImpactsLayoutKEY.mxd

Onsite Project Site Boundary

Offsite Project Site Boundary/
Offsite Development Footprint

Onsite Project Footprint

Agriculture

Disturbed Alkali Playa

Disturbed/Developed

Non-Native Grassland

Ornamental

Riversidean Sage Scrub

Ruderal

Southern Riparian Scrub

N

0 200 400 800

Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Impact Map - Project Site Sheet -1 of 5

GLENN LUKOS ASSOCIATES

Exhibit 15A

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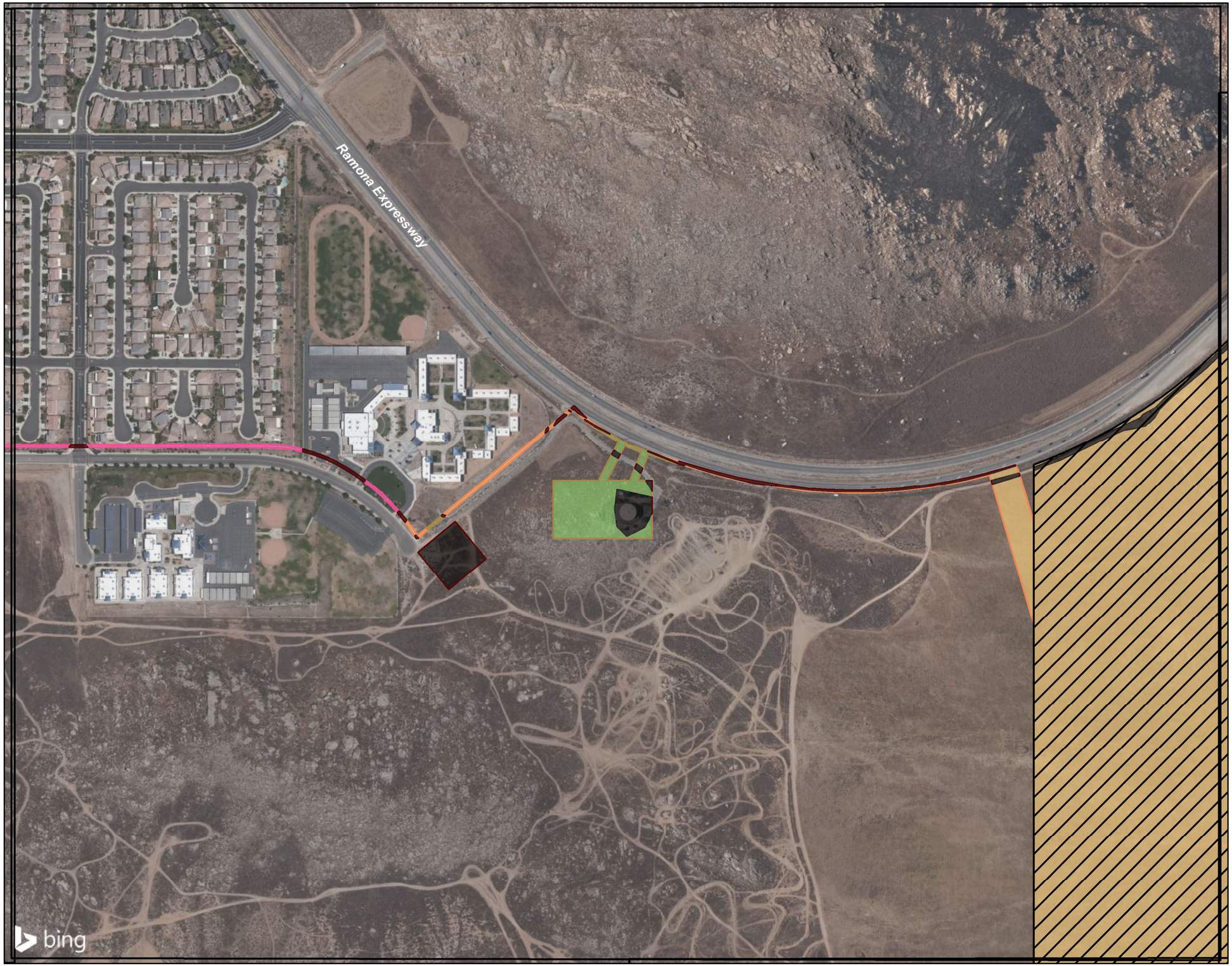

- Onsite Project Site Boundary
- Offsite Project Site Boundary/ Offsite Development Footprint
- Onsite Project Footprint
- Agriculture
- Disturbed Alkali Playa
- Disturbed/Developed
- Non-Native Grassland
- Ornamental
- Riversidean Sage Scrub
- Ruderal
- Southern Riparian Scrub

N

0 200 400 800

Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Impact Map - Project Site Sheet -2 of 5

GLENN LUKOS ASSOCIATES

Exhibit 15A

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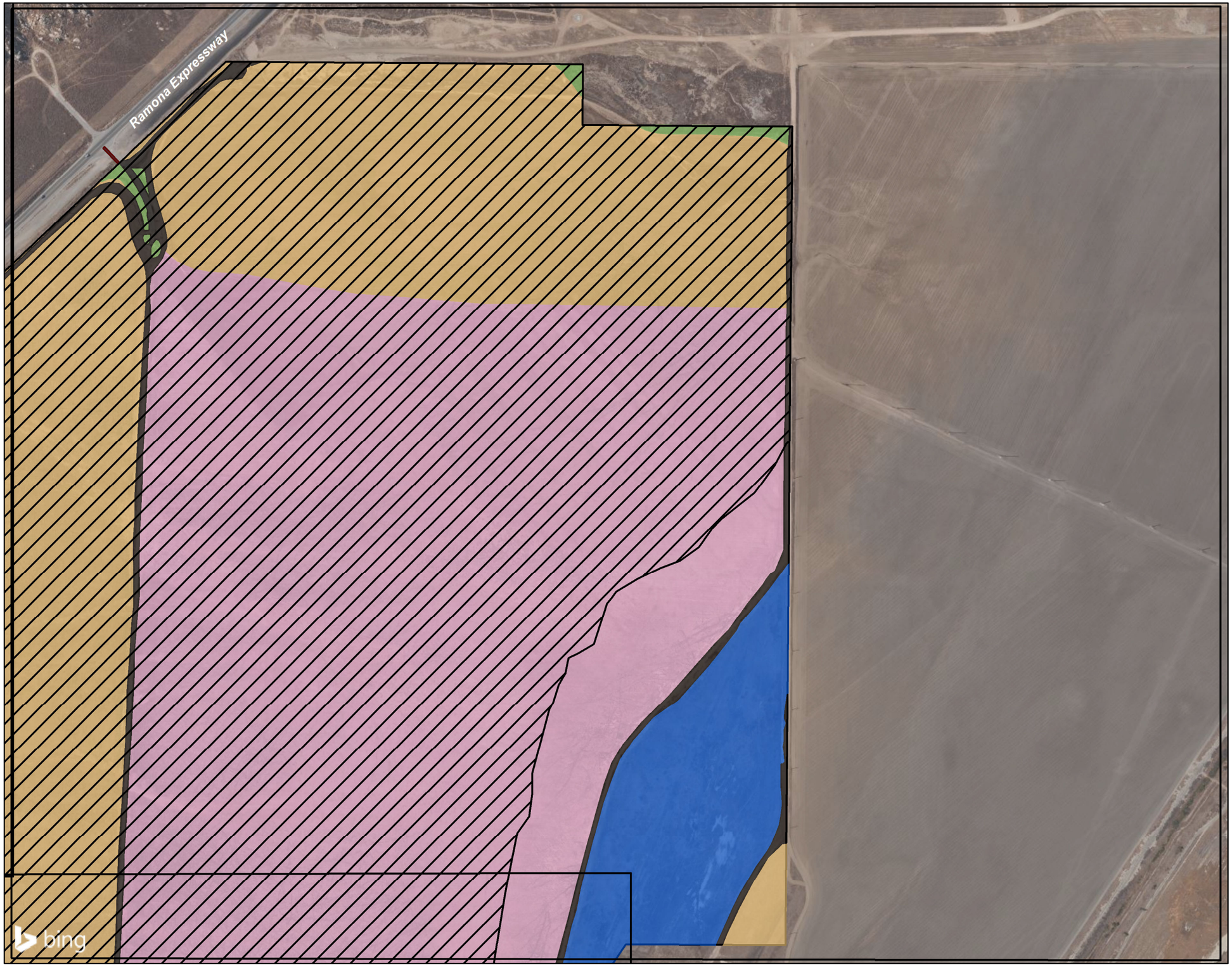

- Onsite Project Site Boundary
- Offsite Project Site Boundary/ Offsite Development Footprint
- Onsite Project Footprint
- Agriculture
- Disturbed Alkali Playa
- Disturbed/Developed
- Non-Native Grassland
- Ornamental
- Riversidean Sage Scrub
- Ruderal
- Southern Riparian Scrub

N

0 200 400 800

Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Impact Map - Project Site Sheet -3 of 5

GLENN LUKOS ASSOCIATES

Exhibit 15A

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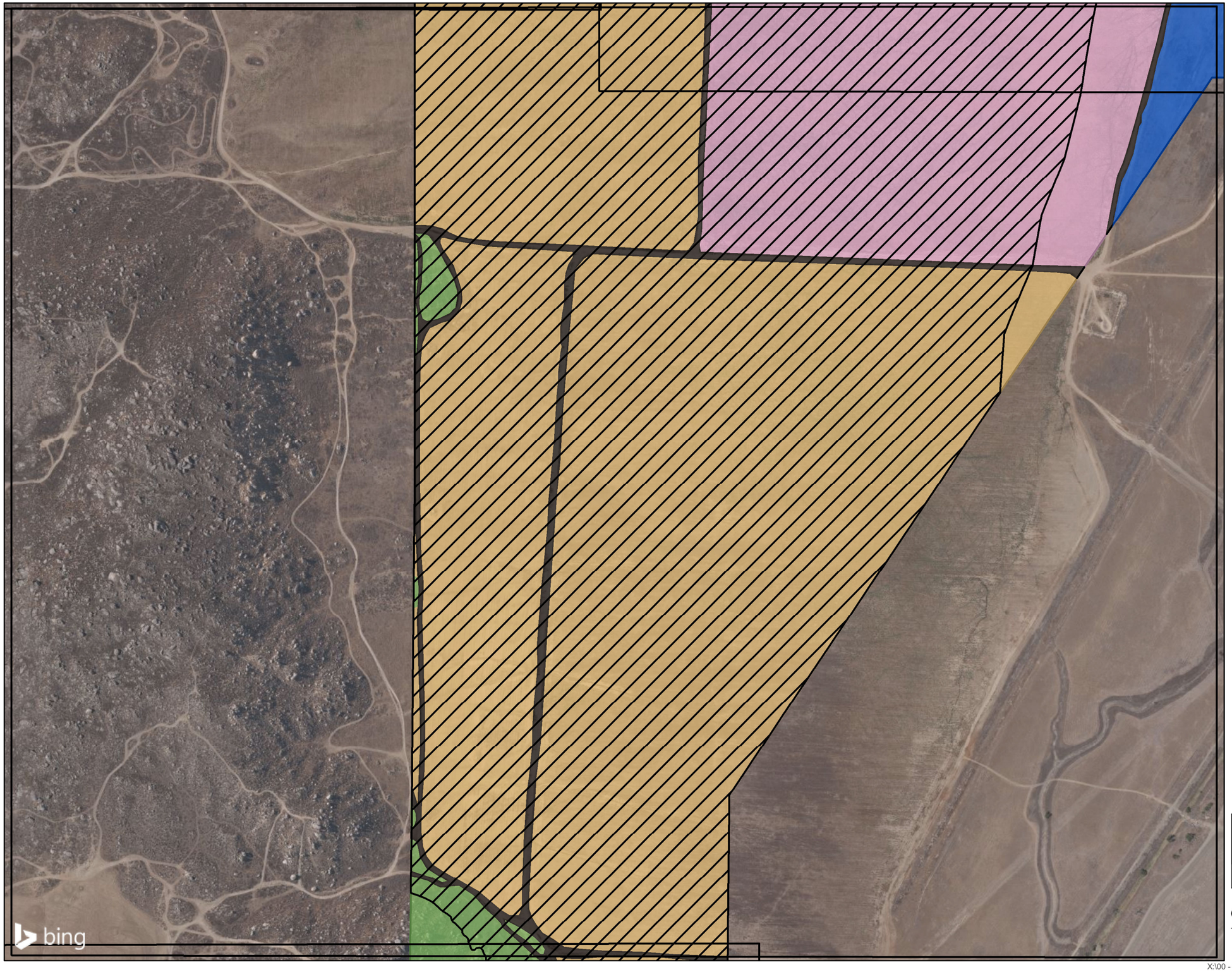

Onsite Project Site Boundary
Offsite Project Site Boundary/
Offsite Development Footprint
Onsite Project Footprint
Agriculture
Disturbed Alkali Playa
Disturbed/Developed
Non-Native Grassland
Ornamental
Riversidean Sage Scrub
Ruderal
Southern Riparian Scrub

N

0 200 400 800
Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Impact Map - Project Site Sheet -4 of 5

GLENN LUKOS ASSOCIATES

Exhibit 15A

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\VegetationGIS\188-27_VegetationLayout.mxd

- Onsite Project Site Boundary
- Offsite Project Site Boundary/ Offsite Development Footprint
- Onsite Project Footprint
- Agriculture
- Disturbed Alkali Playa
- Disturbed/Developed
- Non-Native Grassland
- Ornamental
- Riversidean Sage Scrub
- Ruderal
- Southern Riparian Scrub

N

0 200 400 800

Feet

1 inch = 400 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

Vegetation Impact Map - Project Site Sheet -5 of 5

GLENN LUKOS ASSOCIATES

Exhibit 15A

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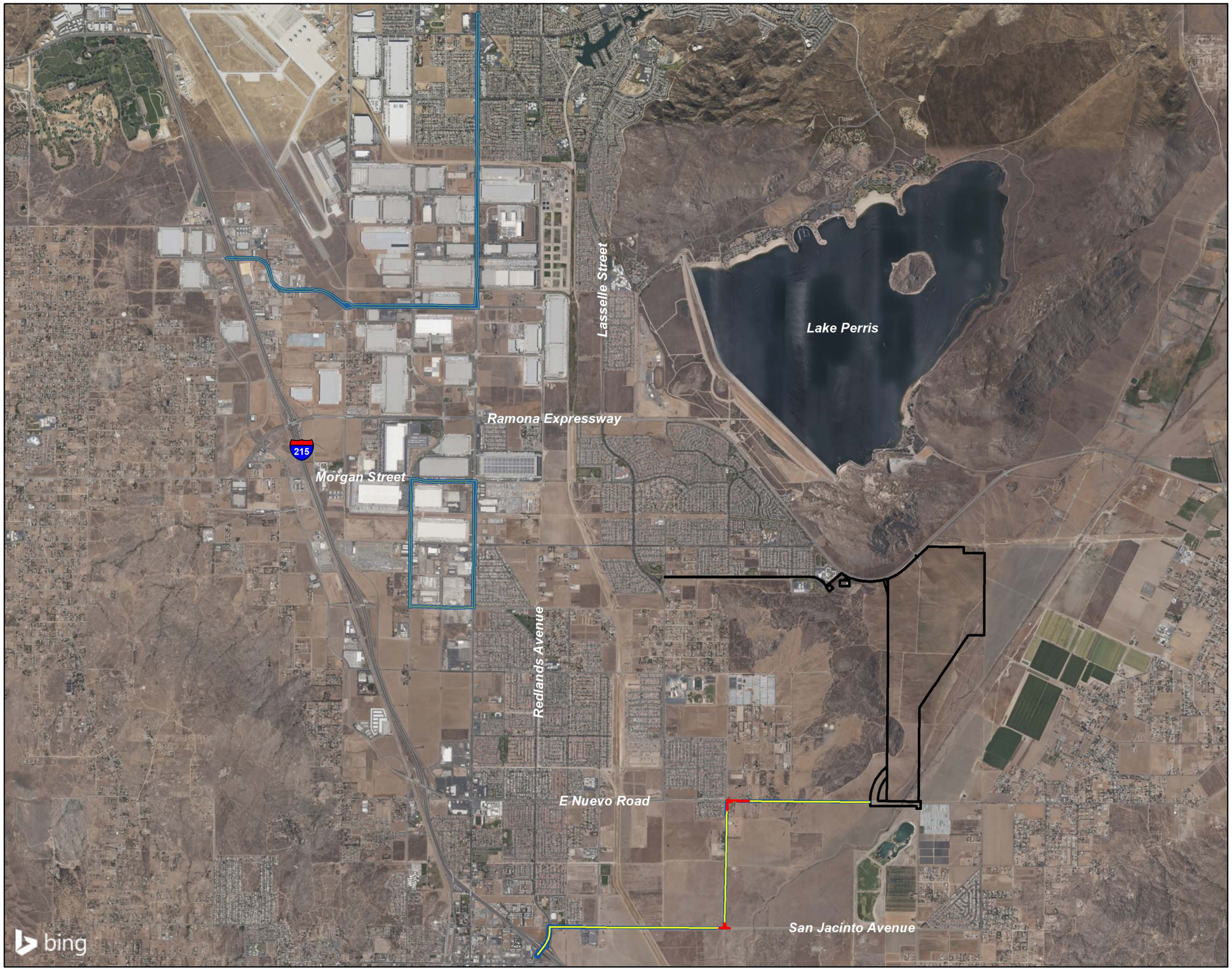

Stoneridge Project Site
Truck Access Route
Truck Turn Areas
Disturbed/Developed

N

0 2,000 4,000 8,000
Feet

1 inch = 4,000 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

STONERIDGE COMMERCE CENTER

Vegetation Impact Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 15B

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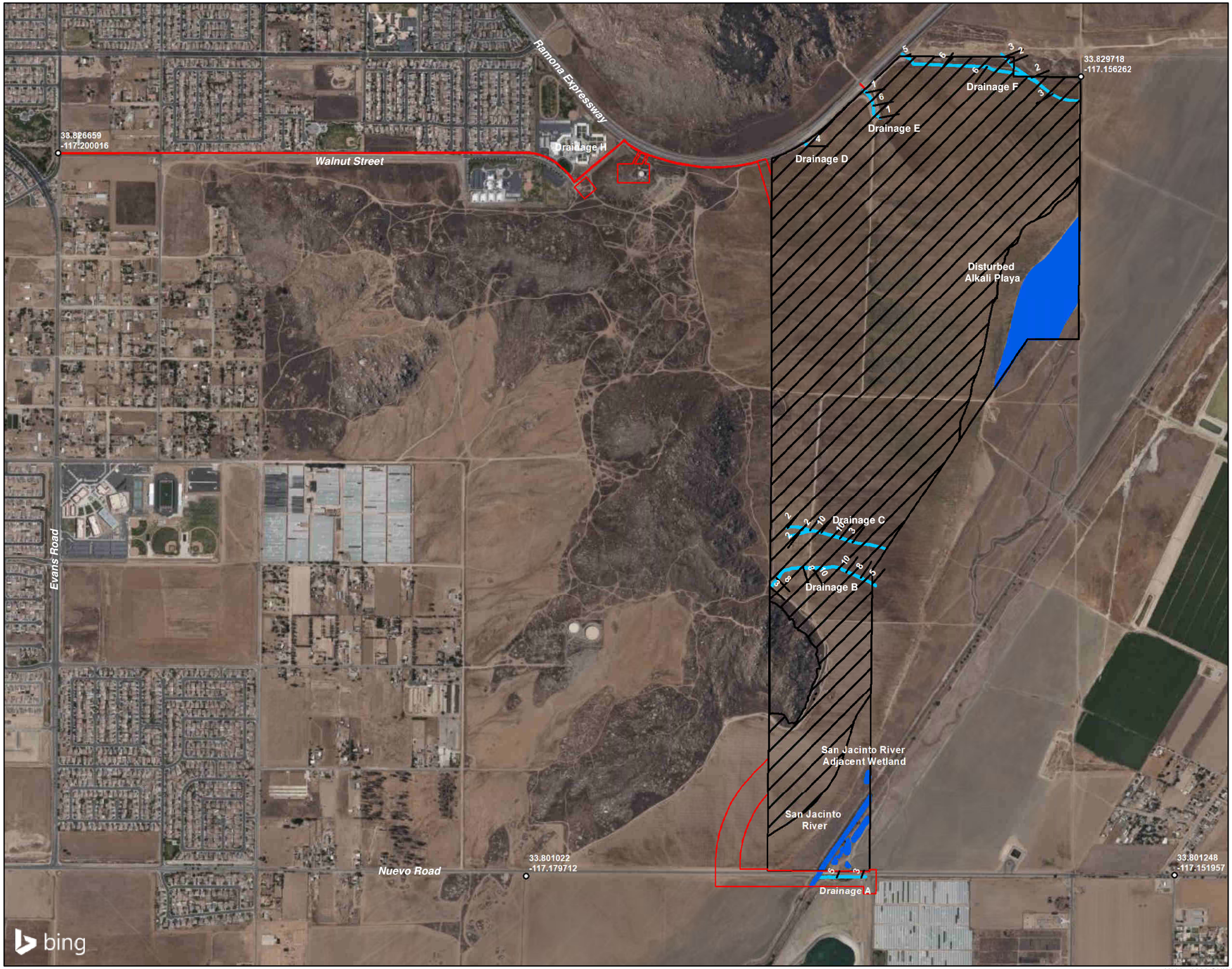

Onsite Project Site Boundary

Offsite Project Site Boundary

Onsite Project Footprint

Non-Wetland Waters of the U. S.

Wetland Waters of the U. S.

3 Width of OHWM in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: October 5, 2021

STONERIDGE COMMERCE CENTER

Corps Impact Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 16A

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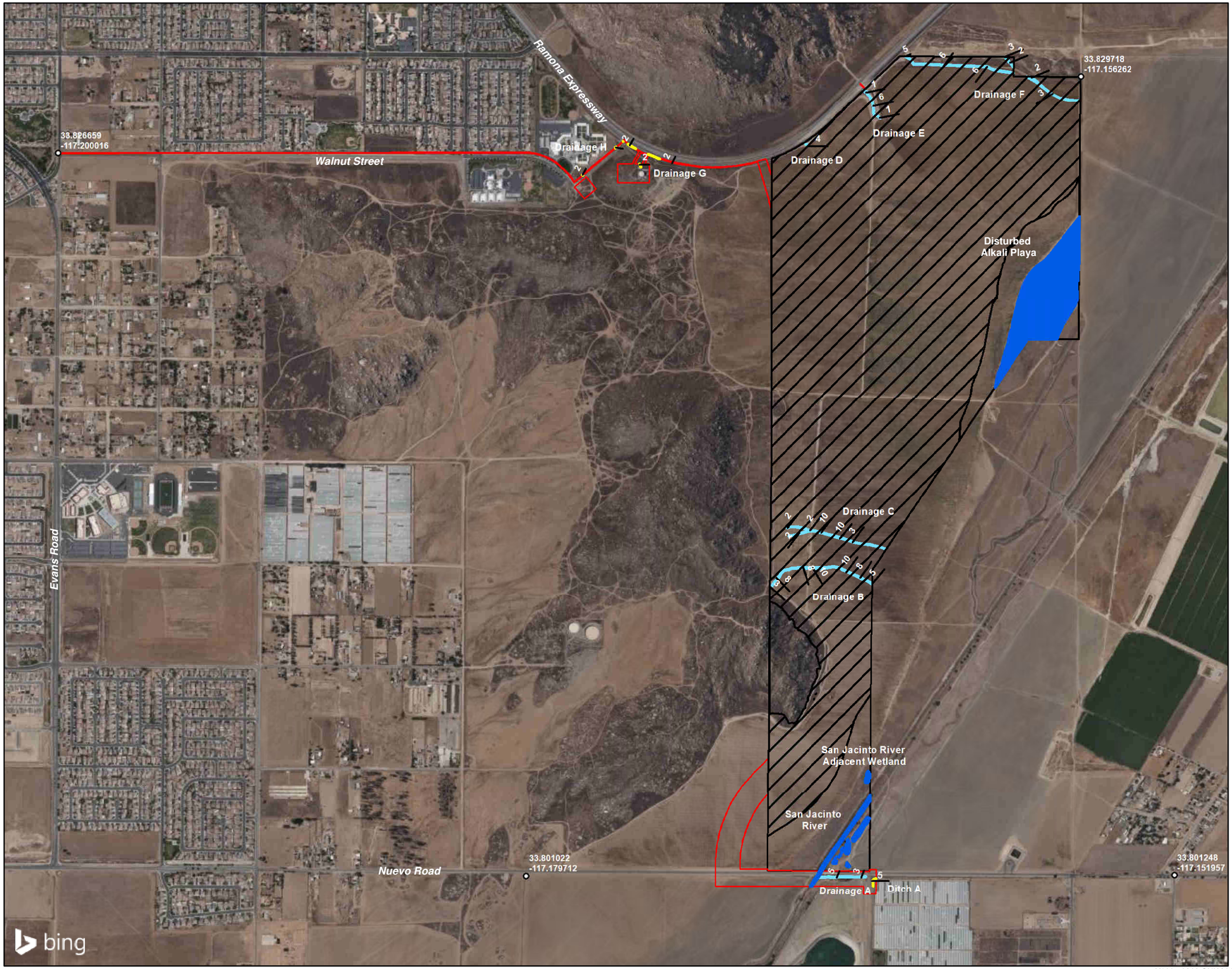


Onsite Project Site Boundary

Offsite Project Site Boundary

Onsite Project Footprint

Non-Wetland Waters of the U.S./State

Non-Wetland Waters of the State

Wetland Waters of the U.S./State

3 Width of OHWM in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: October 5, 2021

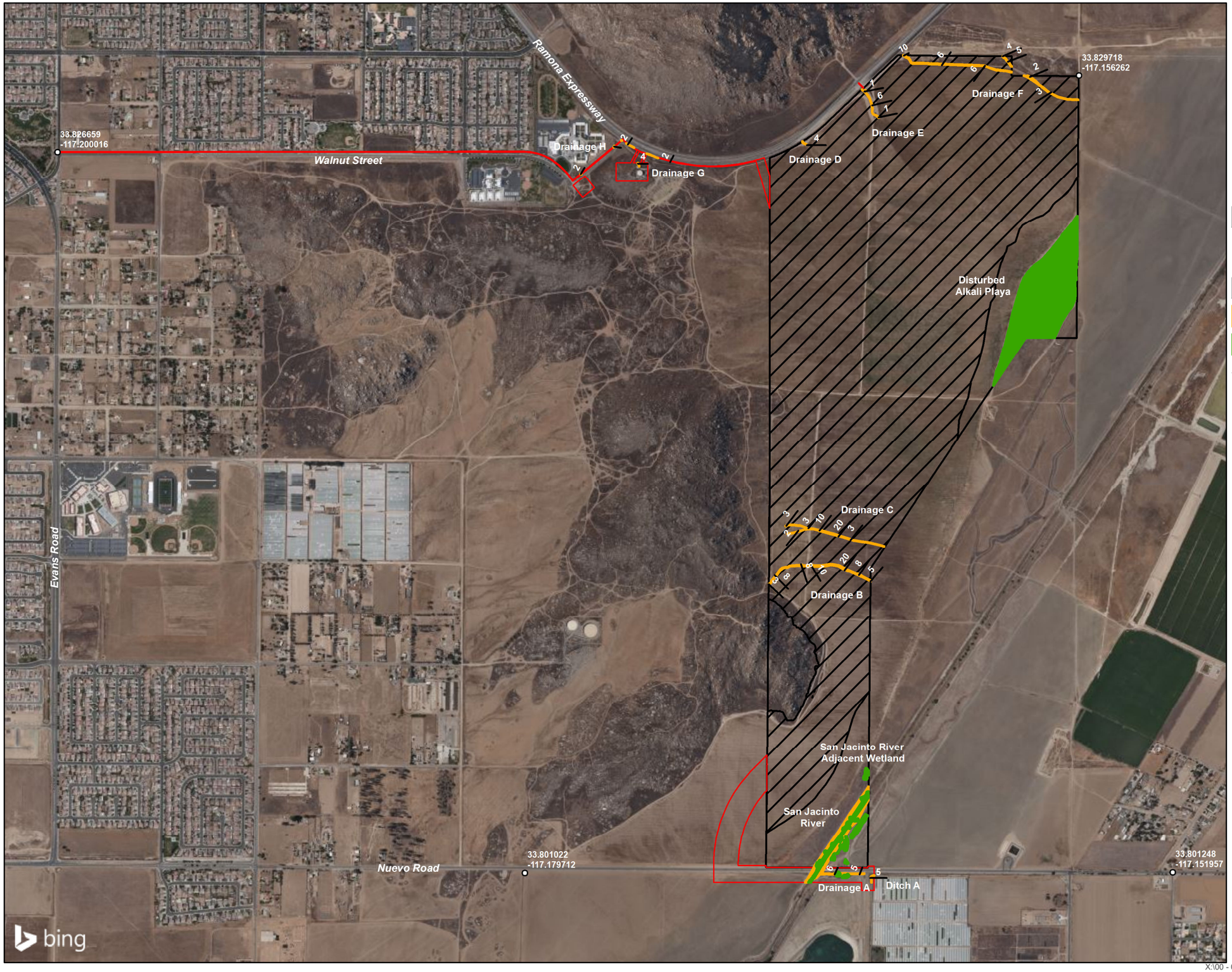
STONERIDGE COMMERCE CENTER

RWQCB Impact Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 16B

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\ImpactsGIS\REV1\188-27_RWQCBImpactsREV1Layout.mxd



Onsite Project Site Boundary

Offsite Project Site Boundary/
Offsite Development Footprint

Onsite Project Footprint

CDFW Non-Riparian Streambed

CDFW Riparian

Width of Non-Riparian Streambed in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTER

CDFW Impact Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 16C

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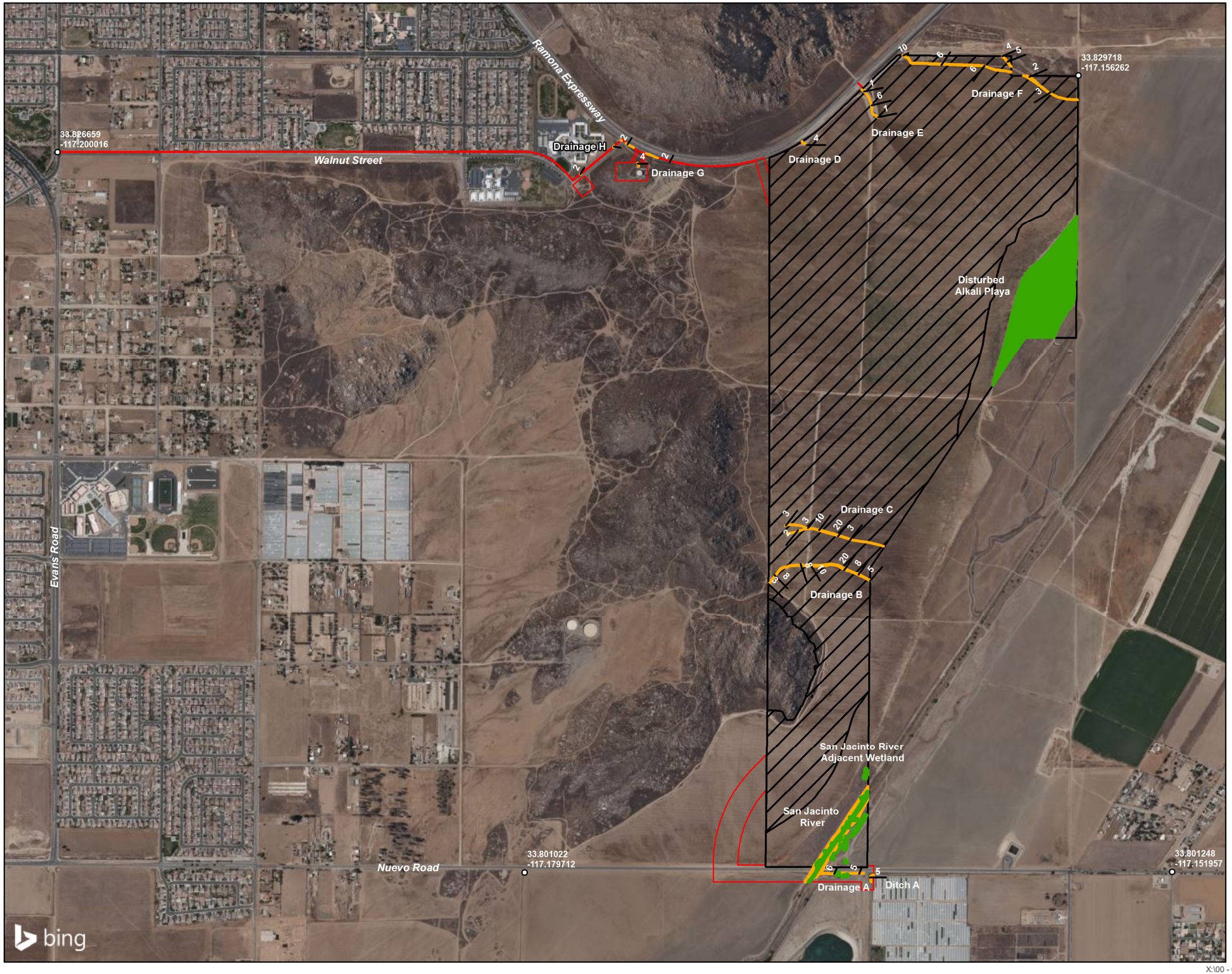

Onsite Project Site Boundary

Offsite Project Site Boundary /Offsite Development Footprint

Onsite Project Footprint

MSHCP Riverine

MSCHP Riparian

3 Width of Non-Riparian Streambed in Feet

N

0 625 1,250 2,500

Feet

1 inch = 1,250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 23, 2021

STONERIDGE COMMERCE CENTE

MSHCP Riparian/Riverine Impact Map - Project Site

GLENN LUKOS ASSOCIATES

Exhibit 16D

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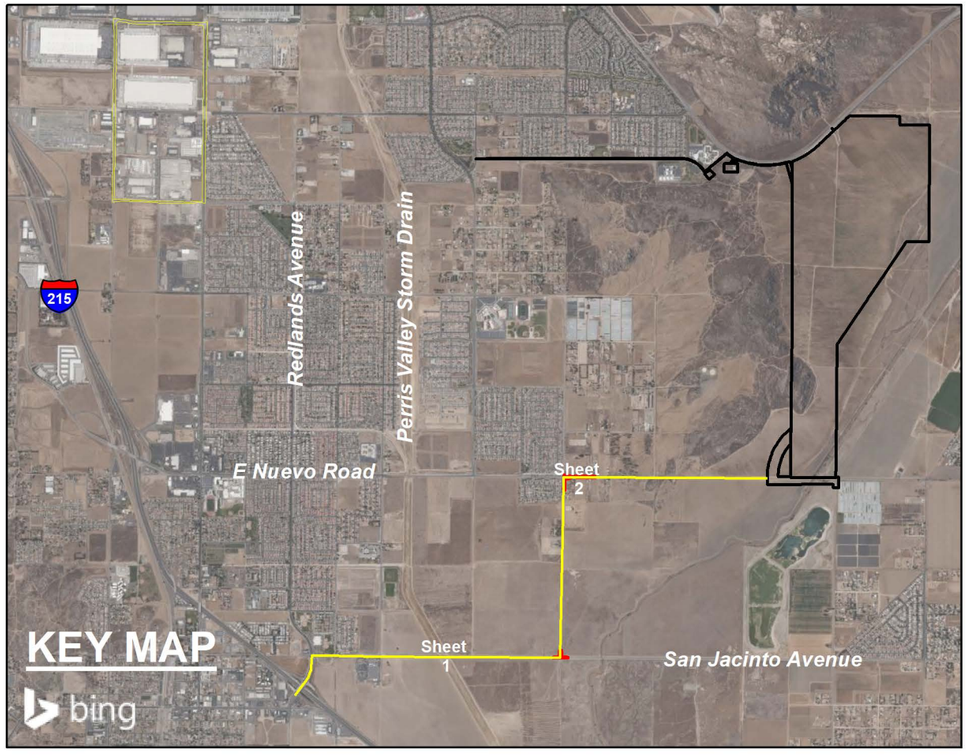
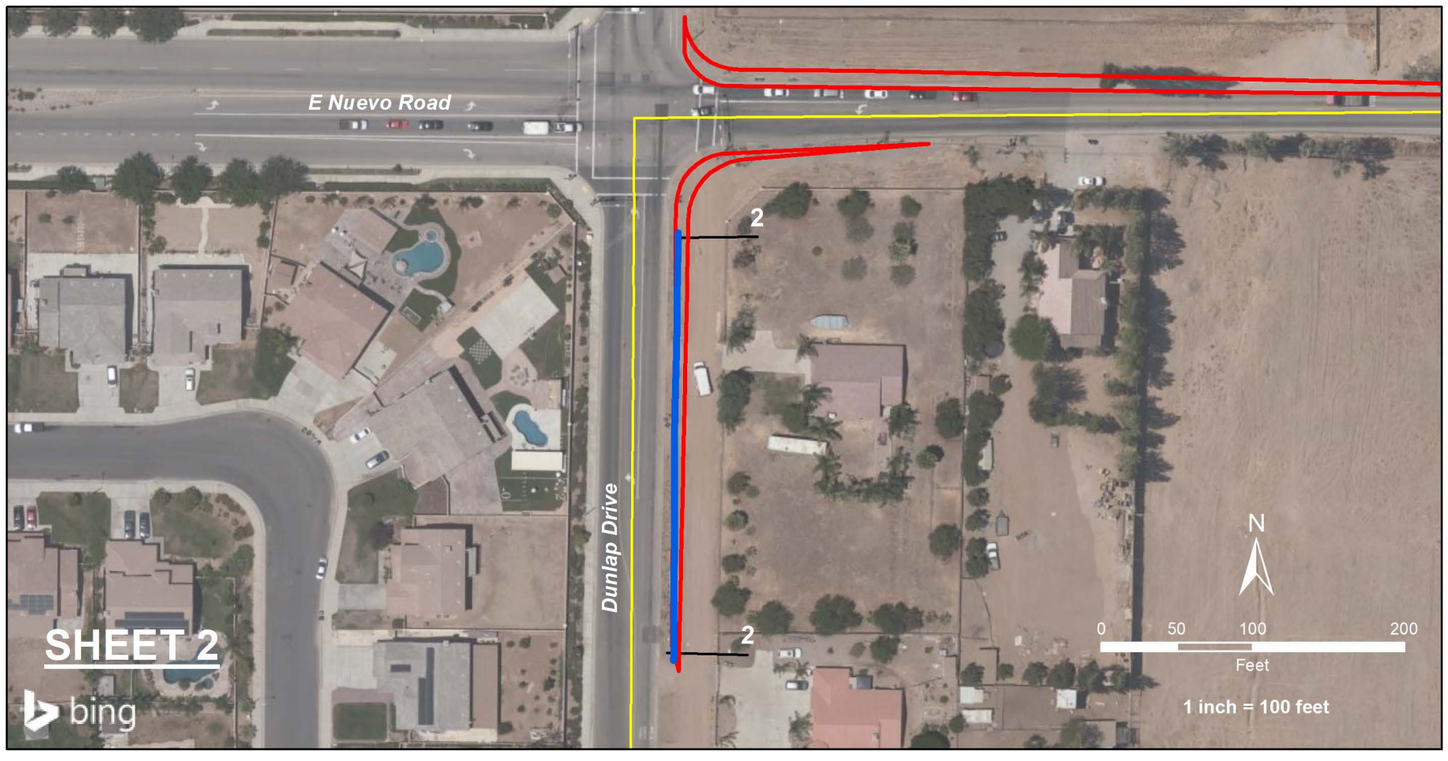




- Stoneridge Project Site
- Truck Access Route
- Truck Turn Areas
- RWQCB Non-Wetland Waters of the State
- Width of Feature in Feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

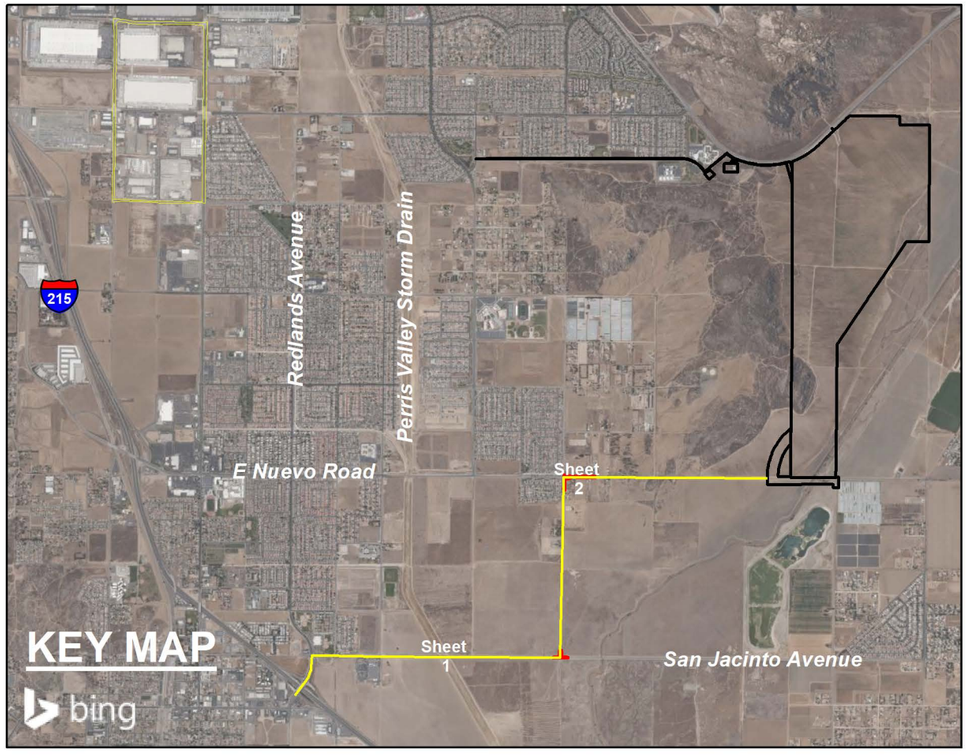
STONERIDGE COMMERCE CENTER

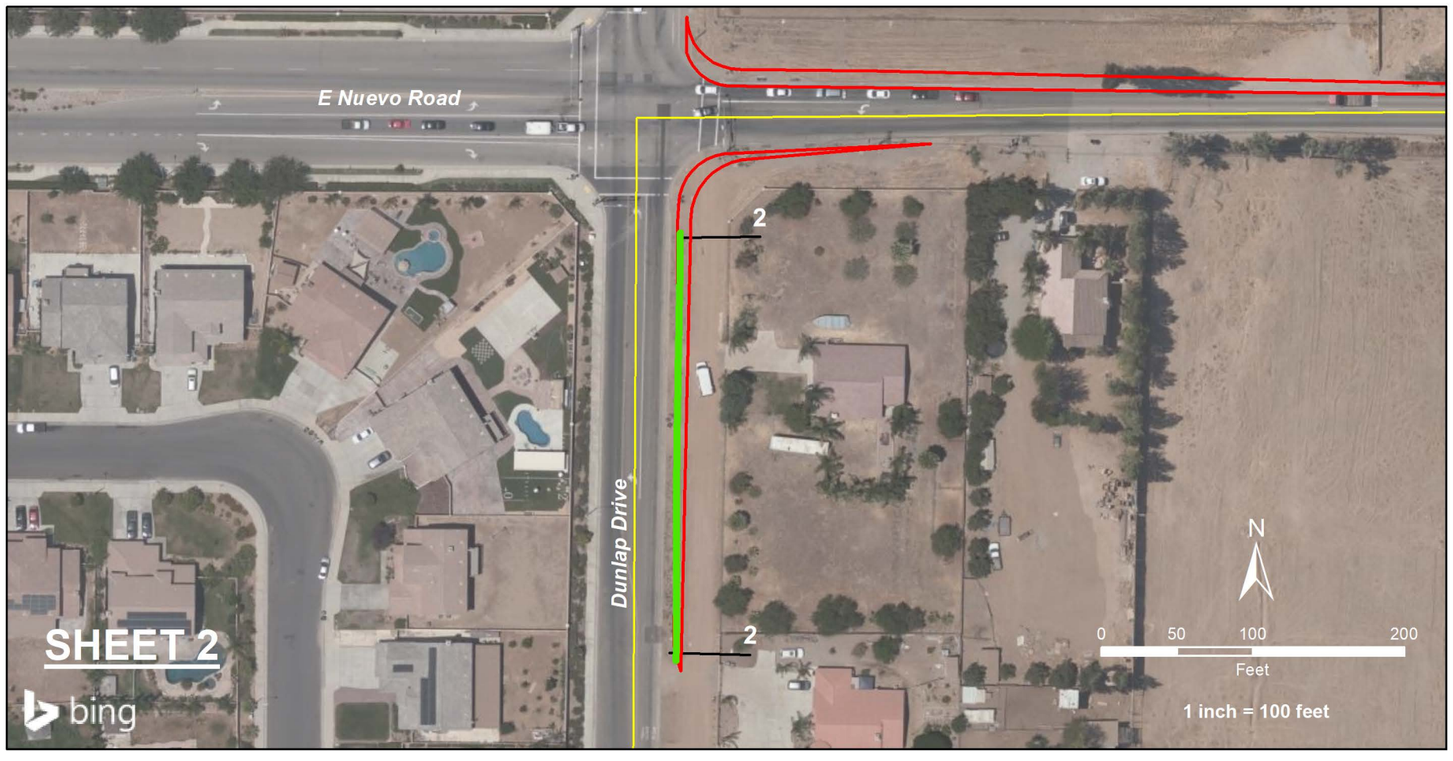
RWQCB Impact Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 16E

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\OffsiteGIS\188-27_Offsites_RWQCBImpacts.mxd





Stoneridge Project Site

Truck Access Route

Truck Turn Areas

CDFW Non-Riparian Stream

Width of Feature in Feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

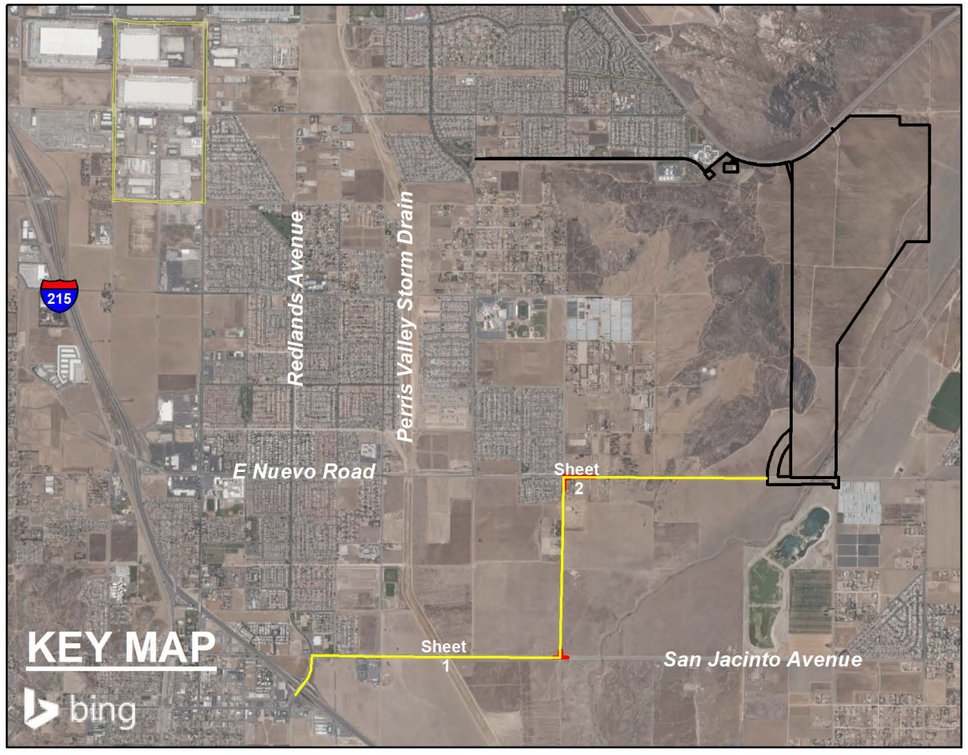
STONERIDGE COMMERCE CENTER

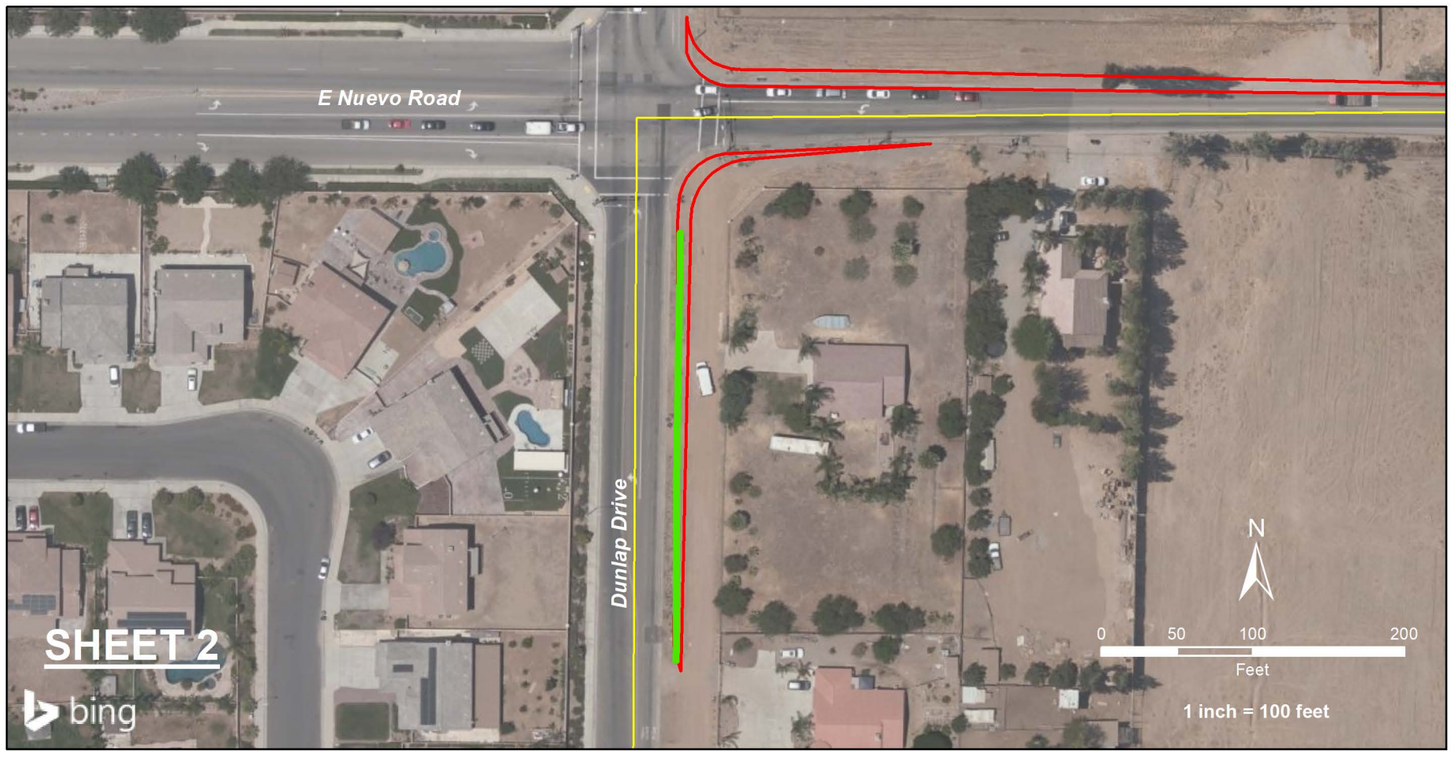
CDFW Impact Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 16F

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\OffsiteGIS\188-27_Offsites_CDFWImpacts.mxd





Stoneridge Project Site

Truck Access Route

Truck Turn Areas

MSHCP Riverine

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kartunen, GLA
Date Prepared: February 3, 2022

STONERIDGE COMMERCE CENTER

MSHCP Impact Map, Northerly and Southerly
Off Site Road Improvement and Use Areas

GLENN LUKOS ASSOCIATES

Exhibit 16G

X:\00 - 0362 ONLY\0188-27STON\188-27_GIS\OffsiteGIS\188-27_Offsites_RipRivImpacts.mxd

APPENDIX A
FLORAL COMPENDIUM

The floral compendium lists species identified on the project site. Taxonomy follows the Jepson Manual (Baldwin et al 2012) and, for sensitive species, the California Native Plant Society's Rare Plant Inventory (Tibor 2001). Common plant names are taken from Hickman (1993), Munz (1974), and Roberts et al (2004). An asterisk (*) denotes a non-native species. A cross (†) denotes special-status species

Scientific Name	Common Name
TRACHEOPHYTA	**FERNS**
Marsiliaceae	**Water Clover Family**
Marsilea vestita	Hairy waterclover
Pteridaceae	**Brake Fern Family**
Myriopteris newberryi	Newberry's lip fern
ANGIOSPERMOPHYTA	**FLOWERING PLANTS**
MONOCOTYLEDONS	**MONOCOTS**
Cyperaceae	**Sedge Family**
Cyperus involucratus	Umbrella plant
Eleocharis palustris	Common spikerush
Juncaeae	**Rush Family**
Juncus bufonius	Common toad rush
Poaceae	**Grass Family**
**Avena fatua*	Wild oats
**Bromus madritensis* ssp. *rubens*	red brome
Elymus condensatus	Giant wild rye
**Hordeum murinum*	Foxtail barley
Hordeum vulgare	Common barley
Lamarckia aurea	Goldentop
Phalaris minor	Mediterranean canarygrass
**Schismus barbatus*	common Mediterranean grass

Themidaceae	**Brodiaea Family**
Dichelostemma capitatum	Blue dicks

EUDICOTYLEDONS

EUDICOTS

Anacardiaceae	**Sumac Family**
Rhus aromatica	Fragrant sumac
Asteraceae	**Sunflower Family**
Ambrosia acanthicarpa	Annual burrweed
Artemisia californica	Coastal sage brush
Artemisia dracunculus	Tarragon
Baccharis salicifolia	Mule fat
**Centaurea melitensis*	Tocalote
†*Centromadia pungens* ssp. *laevis*	Smooth tarplant
Corethrogyne filaginifolia	Common sandaster
Deinandra fasciculata	Clustered tarweed
Deinandra kelloggii	Kellogg's tarweed
Encelia farinosa	Brittlebush
Ericameria palmeri	Palmer goldenweed
Erigeron canadensis	Canada horseweed
Eriophyllum confertiflorum	Yellow yarrow
Helianthus annuus	common sunflower
Heterotheca grandiflora	Telegraph weed
**Hypochaeris glabra*	Smooth cat’s ear
**Lactuca serriola*	Prickly lettuce
Lasthenia californica	Goldfields
†*Lasthenia glabrata* ssp. *coulteri*	Coulter's goldfields
Logfia filaginoides	California cottonrose
**Oncosiphon piluliferum*	Stinknet
Pseudognaphalium biolettii	Two-color rabbit-tobacco
Psilocarphus brevissimus	Woolly marbles
Senecio vulgaris	Common groundsel
Stephanomeria exigua	Small wirelettuce
Uropappus lindleyi	Silver puffs
Boraginaceae	**Borage Family**
Amsinckia intermedia	Common fiddleneck
Amsinckia menziesii	Fiddleneck
Cryptantha intermedia	Common cryptanth
Emmenanthe penduliflora	Whispering bells
Heliotropium curassavicum	heliotrope
Nemophila menziesii	Baby blue eyes

Pectocarya linearis	Sagebrush combseed
Phacelia minor	Wild canterbury bells
Plagiobothrys collinus	Cooper's popcornflower
Plagiobothrys leptocladus	Alkali plagiobothrys
Brassicaceae	**Mustard Family**
**Brassica tournefortii*	Saharan mustard
**Descurainia sophia*	Herb sophia
**Hirschfeldia incana*	Summer mustard
Lepidium nitidum	Shining pepper grass
**Sisymbrium irio*	London rocket
Cactaceae	**Cactus Family**
Cylindropuntia californica	California cholla
Caryophyllaceae	**Pink Family**
Spergularia bocconi	Boccone's sand spurry
Chenopodiaceae	**Goosefoot Family**
Atriplex argentea	Silverscale saltbush
†*Atriplex coronata* var. *notatior*	San Jacinto Valley crownscale
**Bassia hyssopifolia*	Five horn bassia
**Kochia scoparia*	Summer cypress
**Salsola tragus*	Russian thistle
Suaeda nigra	Bush seepweed
Convolvulaceae	**Morning Glory Family**
Calystegia macrostegia	Island morning glory
Cressa truxillensis	Alkali weed
Crassulaceae	**Stonecrop Family**
Crassula connata	Sand pygmy weed
Cucurbitaceae	**Cucumber Family**
Marah macrocarpa	wild cucumber
Euphorbiaceae	**Spurge Family**
Croton setiger	doveweed
Fabaceae	**Pea Family**
Lupinus bicolor	Lupine
Geraniaceae	**Geranium Family**

**Erodium cicutarium*	Coastal heron's bill
Lamiaceae	**Mint Family**
Salvia apiana	White sage
Salvia columbariae	Chia sage
Malvaceae	**Mallow Family**
Malva parviflora	Cheeseweed
Malvella leprosa	Alkali mallow
Montiaceae	**Spring Beauty Family**
Calandrinia menziesii	Red maids
Nyctaginaceae	**Four o'clock Family**
Mirabilis laevis	Desert wishbone bush
Onagraceae	**Evening Primrose Family**
Camissoniopsis bistorta	California sun cup
Paeoniaceae	**Peony Family**
Paeonia californica	California peony
Phyrmaceae	**Monkeyflower Family**
Diplacus aurantiacus	Sticky monkeyflower
Plantaginaceae	**Plantain Family**
Keckiella antirrhinoides	Chaparral beard tongue
Polemoniaceae	**Phlox Family**
†*Navarretia fossalis*	Spreading navarretia
Polygonaceae	**Buckwheat Family**
Eriogonum fasciculatum var. *polifolium*	California buckwheat
Eriogonum gracile var. *gracile*	Slender buckwheat
Persicaria lapathifolia	Common knotweed
Polygonum aviculare	Prostrate knotweed
**Rumex crispus*	Curly dock
Rumex dentatus	Toothed dock
Rubiaceae	**Madder Family**
Galium angustifolium	Narrow leaved bedstraw
Salicaeae	**Willow Family**

Salix gooddingii	Gooding's black willow
Solanaceae	**Nightshade Family**
Datura wrightii	Jimsonweed
Lycium andersonii	Anderson thornbush
Solanum xanti	Nightshade
Tamaricaceae	**Tamarix Family**
**Tamarix ramosissima*	Tamarisk
Zygophyllaceae	**Caltrop Family**
**Tribulus terrestris*	Puncture vine

APPENDIX B
FAUNAL COMPENDIUM

The faunal compendium lists species identified on the Study Area. Scientific nomenclature and common names for vertebrate species referred to in this report follow Collins (2009) for amphibians and reptiles, Bradley, et al. (2014) for mammals, and AOU Checklist (1998) for birds. An (*) denotes non-native species. A (†) denotes special-status species.

TERRESTRIAL INVERTEBRATES

ACIDIDAE – GRASSHOPPERS
Melanoplus devastator
devastating grasshopper
Lerpus intermedius
blue-winged grasshopper

APIDAE - BEES
**Apis mellifera*
western honey bee

ARANEIDAE – ORB WEAVER SPIDERS
Neoscona sp.
orb-weaver spider species

CARABIDAE – GROUND BEETLES
Calosoma sp.
Calosoma beetle species

CICADELLIDAE – LEAFHOPPERS
Empoasca sp.
leafhopper species

COENAGRIONIDAE – DAMSELFLIES
Argia vivida
vivid dancer

GRYLLIDAE – TRUE CRICKETS
**Gryllodes sigillatus*
tropical house cricket

FORMICIDAE - ANTS
Messor sp.
harvester ant species

ICHNEUMONIDAE -ICHNEUMON WASPS
Ichneumon sp.
ichneumon wasp species

MANTIDAE – PRAYING MANTIDS

Stagmomantis californica
California mantis

MYRMELEONITDAE – ANTLIONS

Brachynemurus sp.
antlion species

PENTATOMIDAE – STINK BUGS

**Nezara viridula*
southern green stink bug

PIERIDAE - WHITES AND SULPHURS

**Pieris rapae*
cabbage white

Pontia protodice
checkered white

POMPILIDAE - SPIDER WASPS

Pepsis sp.
spider wasp species

TENEBRIONIDAE – DARKLING BEETLES

Eleodes acuticauda
head-standing darkling beetle

TERRESTRIAL VERTEBRATES

REPTILES

PHRYNOSOMATIDAE - PHRYNOSOMATID LIZARDS

Sceloporus occidentalis
Great Basin fence lizard

Sceloporus orcutti
granite spiny lizard

BIRDS

ACCIPITRIDAE – HAWKS AND OLD WORLD VULTURES

†*Accipiter cooperii*
Cooper's hawk

Buteo jamaicensis
red-tailed hawk

†*Buteo regalis*
ferruginous hawk

†*Circus cyaneus*
northern harrier

†*Elanus leucurus*
white-tailed kite

ALAUDIDAE – LARKS

†*Eremophila alpestris actia*

California horned lark

APODIDAE – SWIFTS

Aeronautes saxatilis

white-throated swift

ARDEIDAE - HERONS AND BITTERNS

Ardea alba

great egret

CARDINALIDAE - CARDINALS AND ALLIES

Passerina caerulea

blue grosbeak

CATHARTIDAE - NEW WORLD VULTURES

Cathartes aura

turkey vulture

COLUMBIDAE - PIGEONS AND DOVES

**Columba livia*

rock pigeon

**Streptopelia decaocto*

Eurasian collared-dove

Zenaida macroura

mourning dove

CORVIDAE - JAYS AND CROWS

Corvus brachyrhynchos

American crow

Corvus corax

common raven

CUCULIDAE - CUCKOOS

Geococcyx californianus

greater roadrunner

EMBERIZIDAE – SPARROWS, BUNTINGS, WARBLERS, AND RELATIVES

Melozone crissalis

California towhee

Melospiza melodia

song sparrow

Passerculus sandwichensis

savannah sparrow

Zonotrichia leucophrys

white-crowned sparrow

FALCONIDAE - FALCONS

Falco sparverius

American kestrel

FRINGILLIDAE - FINCHES

Carpodacus mexicanus
house finch

Carduelis psaltria
lesser goldfinch

HIRUNDINIDAE – SWALLOWS

Hirundo rustica
barn swallow

ICTERIDAE - BLACKBIRDS AND ORIOLES

Agelaius phoeniceus
red-winged blackbird

Sturnella neglecta
western meadowlark

LANIIDAE – SHRIKES

†*Lanius ludovicianus*
loggerhead shrike

MIMIDAE - THRASHERS

Mimus polyglottos
northern mockingbird

POLIOPTILIDAE - GNATCATCHERS

Polioptila caerulea
blue-gray gnatcatcher

PTILIOGONATIDAE - SILKY-FLYCATCHERS

Phainopepla nitens
phainopepla

STRIGIDAE - TRUE OWLS

Bubo virginianus
great horned owl

STURNIDAE - STARLINGS

**Sturnus vulgaris*
European starling

TROCHILIDAE - HUMMINGBIRDS

Calypte anna
Anna's hummingbird

TROGLODYTIDAE – WRENS

Catherpes mexicanus
canyon wren

Salpinctes obsoletus

rock wren

TYRANNIDAE - TYRANT FLYCATCHERS

Sayornis saya
Say's phoebe
Tyrranis verticalis
western kingbird
Tyrranis vociferans
Cassin's kingbird

MAMMALS

CANIDAE - FOXES, WOLVES, AND ALLIES

**Canis familiaris*
domestic dog
Canis latrans
Coyote

CRICETIDAE - CRICETINE MICE AND RATS

† *Neotoma bryanti*
San Diego desert woodrat
Peromyscus boylii
brush mouse
Peromyscus maniculatus
deer mouse
Reithrodontomys megalotis
western harvest mouse

EQUIDAE - HORSES

**Equus caballus*
feral horse

GEOMYIDAE - POCKET GOPHERS

Thomomys bottae
Botta's pocket gopher

HETEROMYIDAE - POCKET MICE AND KANGAROO RATS

†*Chaetodippus fallax pallidus*
Northwestern San Diego pocket mouse
†*Dipodomys stephensi*
Stephens' kangaroo rat
†*Perognathus longimembris brevinasus*
Los Angeles pocket mouse

LEPORIDAE - RABBITS AND HARES

Sylvilagus audubonii
desert (Audubon's) cottontail
†*Lepus californicus sandiogensis*
San Diego black-tailed jackrabbit

PROCYONIDAE - RACCOONS AND ALLIES

Procyon lotor

raccoon

SCIURIIDAE - SQUIRRELS

Otospermophilus beecheyi

California ground squirrel

Presence/Absence Trapping Studies

For the Los Angeles Pocket Mouse

Stone Ridge Project

Riverside County, California

Prepared by:

ENVIRA
P. O. Box 2612
Ramona, CA 92065
Phone 619-885-0236
E-mail phvergne@aol.com

Trapping Surveys Conducted
June 27 to July 5, 2020

Final Report Date:
November 14, 2020

Prepared For :
Glenn Lukos Associates, Inc.
1940 E. Deere Ave., Suite 250 Santa Ana, California 92705

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.

This report was prepared in accordance with professional requirements and recommended protocols for small mammal trapping studies.

Philippe Vergne *Philippe Jean Vergne* November 14, 2020

Table of Contents

List of Tables

List of Exhibits

List of Appendices

Executive Summary

Philippe Vergne of ENVIRA was contracted by Glenn Lukos and Associates to conduct a protocol trapping survey for the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)-(LAPM) on an estimated 582.9±-acre (65 acres of potential LAPM within survey area) property located in the Nuevo area of Riverside County, California (Exhibit 1). The assessment was required to confirm the presence of LAPM, and other potential sensitive small mammal species in drainages and upland habitat located on the property.

For decades, substantial portions of the project site have been subject to agricultural use resulting in intensive ground/soil disturbance. Representative activities include irrigated alfalfa farming, barley and oat dry-land farming, nurseries, potato farming, disking for weed abatement and fire suppression, and sheep grazing. The site is mostly flat with elevations ranging from 1,400 to 1,600 feet above mean sea level (amsl), with a majority of the site at 1,450 feet amsl or lower. Existing and past farming activities have resulted in the removal of native vegetation and alterations to floodplain topography.

Fourteen (14) individuals of the LAPM were captured during the current surveys. The LAPM were distributed on the North and Eastern portion of the property not currently under agriculture, and along dirt roads and power easements. The LAPM does not currently occur within the highly impacted agricultural fields on site. It should be noted that since per permit traps were pulled on the lines with LAPM and SKR capture after the first night of capture that the number of animals present is probably higher than that tallied.

Densities within the occupied habitat are consistent with documented densities for this species of less than 2 animals per hectare.

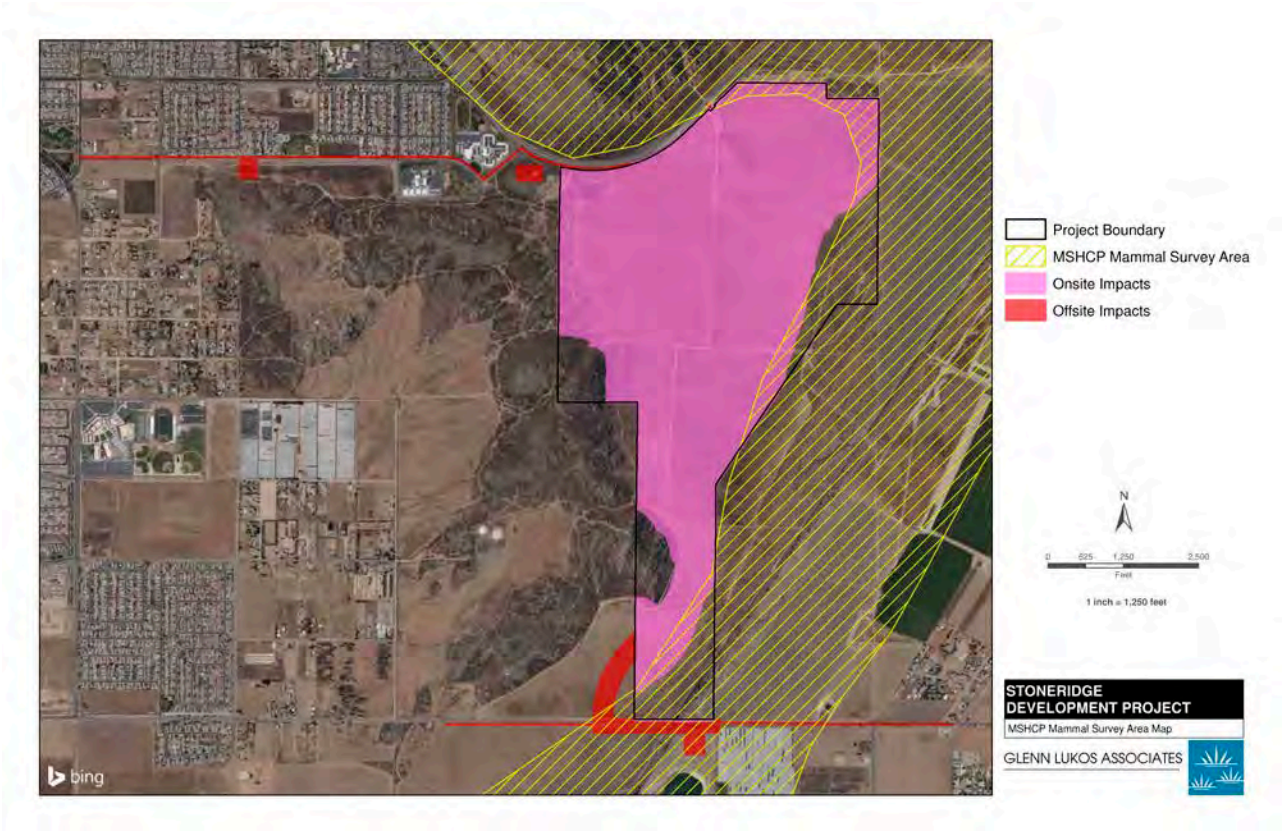
The MSHCP species account for LAPM depicts portions of the property as a potential core habitat area. Based on current and past surveys and data base records the LAPM on site occurs sporadically in the area in trace densities.

Introduction

Philippe Vergne of ENVIRA was contracted by Glenn Lukos and Associates to conduct a protocol trapping survey for the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)-(LAPM) on an estimated 582.9±-acre (65 acres of potential LAPM habitat impacted within survey area) property located in the Nuevo area of Riverside County, California (Exhibit 1). The assessment was required to confirm the presence of LAPM, and other potential sensitive small mammal species in drainages and upland habitat located on the property.

For decades, substantial portions of the project site have been subject to agricultural use resulting in intensive ground/soil disturbance. Representative activities include barley and oat dry-land farming, potato farming, watermelon crops, disking for weed abatement and fire suppression, and sheep grazing. The site is mostly flat with elevations ranging from 1,400 to 1,600 feet above mean sea level (amsl), with a majority of the site at 1,450 feet amsl or lower. Existing and past farming activities have resulted in the removal of native vegetation and alterations to floodplain topography.

Exhibit 1. Project Boundary and LAPM Survey Areas



Methods

Research

ENVIRA reviewed available information on the known sensitive resources in the area. The literature review included a review of standard field guides and texts on sensitive and non-sensitive biological resources, as well as the following sources:

Western Riverside County MSHCP

Focused Surveys for the Los Angeles pocket Mouse in Area

We also reviewed other available technical information on the biological resources in proximity of the site and discussed recent findings with researchers in the field.

Nomenclature for this report, were appropriate, follows Baldwin *et al.* (2012) for plants and the MSHCP (Dudek 2003) for vegetation community classifications, with additional vegetation community information taken from Holland (1986). Animal nomenclature follows Emmel and Emmel (1973) for butterflies, Center for North American Herpetology (Collins and Taggart 2012) for reptiles and amphibians, American Ornithologists' Union (2014) for birds, and Baker *et al.* (2003) for mammals. Sensitive plant and animal status is taken from the CDFW's CNDDB (2016a through d and 2011).

Habitat Evaluation Surveys

Field surveys and focused trapping for LAPM were performed by Mr. Philippe Vergne of ENVIRA who holds a USFWS 10(a) 1(b) permit to trap and handle Stephens' and San Bernardino Kangaroo rats, Pacific Pocket mouse, and to conduct field studies on sensitive small mammals in Southern California (TE-831207-4); a California Department of Fish and Wildlife (CDFW) Memorandum of Understanding for above mentioned species and the Mohave Ground Squirrel, the LAPM, Palms Springs pocket mouse, Palm Springs round-tailed ground squirrel, white-eared pocket mouse, Jacumba pocket mouse, northwestern San Diego pocket mouse, and Dulzura pocket mouse; and a CDFW Scientific Collector Permit.

Mr. Vergne also conducted a general biological assessment of the plant and wildlife species on site. In addition, he noted site characteristics such as soils, topography, the condition of the plant communities, and evidence of human use of the site.

Trapping Surveys

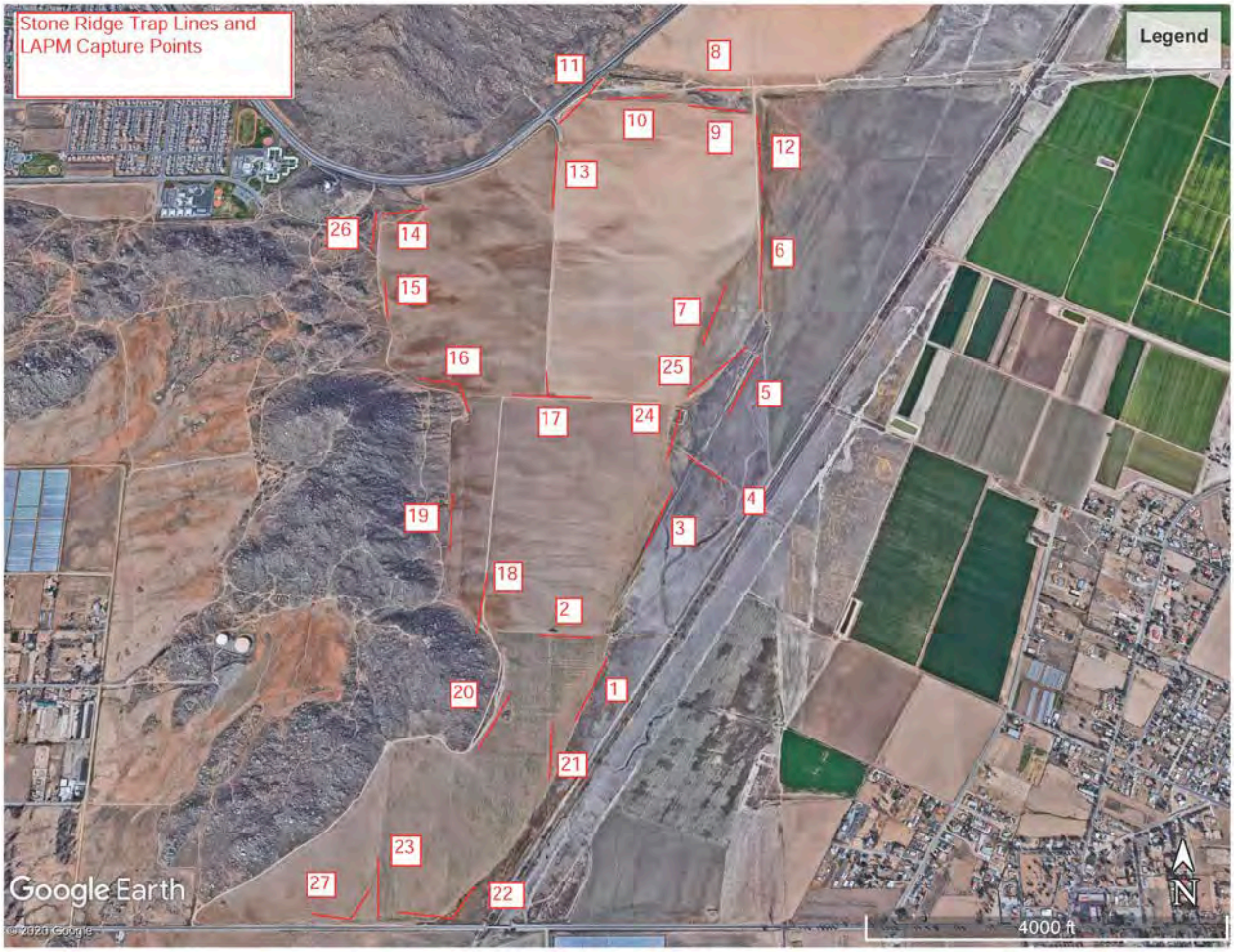
Trapping was conducted according to protocols established for small mammal species surveys. The protocol calls for five consecutive nights of trapping, conducted when the animal is active above ground at night. Although initially two trapping sessions were deemed necessary to cover the project site by moving traps on each line with LAPM capture to another location, the entire project area was surveyed in eight days. The focused trapping survey was conducted from June 27 to July 5 of 2020.

Trapping Lines of 20 traps were set at trapping Areas 1 through 27 (Exhibit 2). Traps were placed in suitable habitat areas on the project, concentrating on locating traps in areas containing sandy soils, small mammal sign and open vegetation. Distance between traps varied according to sign from 5 to 12 meters apart.

Each trap was baited with a mixture of bird seed and rolled oats placed at the back of the traps. The traps were left in place, set at dusk each night and inspected once during the night and at dawn each morning. All animals were identified and released at the point of capture. LAPM were passively marked with magic marker. The traps on each line with an LAPM capture were moved post capture to another trapping area within the project boundary.

Notes and photographs were taken on the habitat conditions where the traps were placed. The weather conditions at the time of the trapping studies were also noted.

Exhibit 2. Stone Ridge LAPM Trap Lines 2020 Survey



Results Research

From historical research in the area and within the proposed project footprint, several endangered and special concern species were identified as occurring on site or in the vicinity of the project. They are the Stephen's kangaroo rat-SKR, the LAPM, the San Diego pocket mouse-CHFA, and the San Diego desert woodrat-NEBR.

The LAPM was captured on portions of the property during trapping surveys conducted in 2002, 2005 and 2006 as part of a larger project that encompassed the LAPM survey area portions of which were within the Stone Ridge Site, and a relocation trapping conducted for SCE on the easement located on the northeastern border of the property.

For the animal species potentially present, including the SKR and LAPM, specific survey protocols are required to establish presence or absence. These specific survey protocols are required for areas where impacts may occur to the sensitive species or their occupied habitat. The remaining species are usually identified through casual observation while trapping for targeted species.

Potential Sensitive Biological Resources

Stephens' Kangaroo Rat

The Stephens' kangaroo rat (*Dipodomys stephensi*)-SKR prefers open areas with sparse perennial cover. This species occurs in areas of loose soil where the soil depth is at least 0.5 meter (Price and Endo 1989). SKR will also inhabit disturbed areas such as fallow fields by using the burrows of other rodents, including the Pocket Gopher and the California Ground Squirrel (O'Farrell 1989).

Like all kangaroo rats, SKR is primarily a seedeater, feeding on the seeds of both annual and shrub species. It also feeds on green vegetation and insects when these are available. Being a primarily dry biome species, kangaroo rats obtain nearly all of their water from the food they eat, and can subsist indefinitely on water extracted from dry seeds. They forage in open ground and underneath shrubs. Burrows are dug in loose soil.

From past and current trapping surveys SKR presence is documented within the project boundaries.

Los Angeles Pocket Mouse

The LAPM is one of two pocket mice found in this area of San Bernardino County. Both the LAPM and the San Diego pocket mouse occupy similar habitats, but the San Diego pocket mouse has a wider range extending south into San Diego County. The habitat of the LAPM is described as being confined to lower elevation grasslands and coastal sage scrub habitats, in areas with soils composed of fine sands (Williams, 1986). The present known distribution of this species extends from Rancho Cucamonga east to Morongo and south to the San Diego County border.

The LAPM forages in open ground and underneath shrubs. Pocket mice in general dig burrows in loose soil, although this has not been completely documented for this subspecies.

The LAPM is a CSC. CSC designation of species is based on a series of publications prepared by the California Department of Fish and Game (Now CDFW) on declining species of mammals, birds, fishes, amphibians and reptiles. The documents were intended to focus attention on declining wildlife in California, species that are not currently listed but may merit listing under the California Endangered Species Act (CESA). Some of the species identified in these documents have been subsequently listed or are provided protection under provisions in CESA. Others have remained on the CSC list, and have not been elevated to a greater status of protection. The reasons are many, including a lack of understanding on

the specific numbers of individuals and populations, the habitats occupied by the species, and the threats to those habitats.

The MSHCP outlines four conservation objectives for this species. These objectives include the conservation of at least 2000 acres of suitable LAPM habitat within each of seven Core units for a total 14,000 acres and an additional 10,000 acres of suitable habitat outside of the seven Core areas.

From past and current trapping surveys LAPM presence is documented within the project boundaries.

Northwestern San Diego Pocket Mouse

The northwestern San Diego pocket mouse (*Chaetodippus fallax pallidus*) - CHFA occurs in open, sandy areas in the valleys and foothills of southwestern California.

The range of this species extends from Orange County to San Diego County and includes Riverside and San Bernardino Counties. This mouse is a CSC, whose historic range has been reduced by urban development and agriculture.

From past and current trapping surveys CHFA presence is documented within the project boundaries.

San Diego Desert Woodrat

The San Diego desert woodrat (*Neotoma bryanti AKA lepida*) is a relatively wide-ranging species extending along the coast of California from south of San Francisco through to the border with Baja California. This species also occurs in the Central Valley and the deserts of southern California and extends along the desert side of the Sierra Nevada into southeastern Oregon.

The coastal species of desert woodrat, the San Diego desert woodrat, prefers scrub habitats such as coastal sage scrub, chaparral and alluvial fan sage scrub. It is more common in areas with rock piles and coarse sandy to rocky soils throughout coastal southern California. The coastal subspecies is a CSC; its historic range has been impacted by the conversion of scrub habitats into residential, commercial and industrial use.

This species has been documented as occurring immediately to the west and north of the proposed project area. One individual was captured on site during current survey.

Weather Conditions

Weather conditions did not vary much during the course of the trapping survey. Night temperatures were in the mid-fifties. Morning temperatures were in the mid- sixties, in degrees Fahrenheit. Skies were clear. Table 1 summarizes the daily weather conditions.

Day	Night Temp F.	Morning Temp F.	Cloud Cover %	Wind MPH
1	56	54	0 Clear	0
2	55	54	0 Clear	0
3	57	55	0 Clear	0-2
4	54	54	0 Clear	0-2
5	57	56	0 Clear	0
6	58	58	0 Clear	0
7	55	54	0 Clear	0
8	57	55	0 Clear	0

Topography and Soils

The topography on the property is mostly flat with a slight slope to the southwest.

In general, surface soils on site are mostly Ramona, Greenfield, Monserrat and Hanford sandy loam, and pockets of sand in the small washes and along roads and base of the wester rock-outcrops (Soil Conservation Service 1980).

Limited scouring and alluvial processes still occur on site from the sheet flow and within the San Jacinto floodplain drainage.

Surrounding Land Uses

The San Jacinto drainage occurs to the east and beyond that agricultural fields. Open space occurs to the west, and Ramona Expressway borders the northern boundary.

Plant Communities

Most of the property has been under agriculture for years and has been recently disked and planted. Areas of disturbed annual grasslands, open sage scrub occur to the north, disturbed annual grasslands and The southern third is dominated by California Sagebrush (*Artemisia californica*), Brittlebush (*Encelia farinosa*), White Sage (*Salvia apiana*), and California Buckwheat (*Eriogonum fasciculatum*), and the understory is heavily dominated by nonnative grasses such as Red Brome (*Bromus madritensis* ssp. *rubens*), and forbs.

A detailed list of plant species observed is provided in Appendix A.

Disturbances

Dirt roads, limited illegal trash dumping, fences, man-made berms, and power and water utility lines occur on site.

Wildlife

Wildlife activity was low and mostly confined to the areas bordering the agricultural fields.

Bird species were the most commonly seen. Reptiles were observed mainly in the open scrub and rocky habitats within the scrub. No amphibians were observed on the property although suitable habitat occurs on site.

Wildlife observations were based on calls, songs, scat, tracks, burrows and direct observation of animals. A list of wildlife species observed is found in Appendix B.

Trapping Results

Fourteen individuals of the LAPM were captured during the surveys as shown in Exhibit 3. Most of the LAPM were captured in disturbed areas at the edge of roads or berms around the agricultural fields. The distribution as in the past appears limited and spotty probably due to current and past site use.

Seven species were captured, including the LAPM, the SKR, the Deer Mouse (*Peromyscus maniculatus*)-PEMA, the Brush Mouse (*Peromyscus boylii*)-PEBO, the Western Harvest Mouse (*Reithrodontomys megalotis*)-REME, the Northwestern San Diego Pocket Mouse (*Chaetodipus fallax pallidus AKA fallax*)-CHFA, and the San Diego Desert Woodrat (*Neotoma bryanti*)-NEBR as given in Table 2 Stone Ridge Trapping Results.

Exhibit 3. LAPM and SKR Capture Points

Table 2. Trapping Results Stone Ridge

Trap Line	Trap Days	LAPM	SKR	PEMA	CHFA	PEBO	REME	NEBR
1	100			2		2		
2	100			3				
3	100			4		1		
4	100			7	1			
5	100			3	1	1		
6	20	1	1 (SAM)		2			
7	100			4				
8	60	1		2			1	
9	100				2	1	2	
10	100			3	2	2		
11	20	1	1 (AM)	1	1			
12	20	2	1 (AF)		1			
13	20	1		1	1			
14	20	2	1 (AM)		1		1	
15	100			4				
16	100			2	3	1		
17	20	1						
18	100			3				
19	100			1	3	1		
20	20	2			1			
21	100	0	0	0	0	0	0	
22	40	1		3	1		1	1
23	100			2				
24	20	1	1 (AM)	1	1			
25	60	1		2	1	2	1	
26	100			2	3			
27	100			3	2	1		
TOTAL	**2000**	**14**	**5**	**53**	**27**	**12**	**6**	**1**

Conclusion

A total of 7 small mammal species were captured during the trapping surveys.

Fourteen (14) individuals of the LAPM were captured during the current surveys. The LAPM were distributed mostly on the North and Eastern portion of the property not currently under agriculture, and along dirt roads and power easements. The LAPM does not currently occur within the highly impacted agricultural fields on site. It should be noted that since per permit traps were pulled on the lines with

LAPM and SKR capture after the first night of capture that the number of animals present is probably higher than that tallied.

The MSHCP species account for LAPM depicts portions of the property as a potential core habitat area. Based on current and past surveys and data base records the LAPM on site and within immediately adjacent areas to the east occurs sporadically in the area in trace densities.

One of the competitive species with LAPM, as far as food source, is the harvest mouse (Brown and Lieberman 1973). Since both the LAPM and harvest mouse were captured (20 individuals) it is fair to assume that for the present the occupied portions of the property supports a trace and dispersed number of individuals. The trace densities are consistent with documented low animal densities of 0.7 to 1.7 per hectare (Chew and Butterworth 1964).

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Appendix A - Plant Species Observed

Flora

* denotes nonnative plant species
† denotes special-status species

ANGIOSPERMAE: DICOTYLEDONES	**DICOT FLOWERING PLANTS**
Asteraceae	**Sunflower family**
Ambrosia psilostachya	Western ragweed
Encelia farinosa	Desert brittlebush
Boraginaceae	**Borage family**
Amsinckia menziesii	Fiddleneck
Brassicaceae	**Mustard family**
**Hirschfeldia incana*	Short-podded mustard
Euphorbiaceae	**Spurge family**
Croton californica	Croton
Eremocarpus setigerus	Doveweed
Fabaceae	**Pea family**
**Erodium cicutarium*	Red-stemmed filaree
Polygonaceae	**Buckwheat family**
Eriogonum fasciculatum var. *foliolosum*	Interior California buckwheat
**Rumex crispus*	Curly dock
Salicaceae	**Willow family**
Salix lasiolepis	Arroyo willow
Solanaceae	**Nightshade family**
**Nicotiana glauca*	Indian tobacco
ANGIOSPERMAE: MONOCOTYLEDONAE	**MONOCOT FLOWERING PLANTS**
Poaceae	**Grass family**
**Bromus madriensis*	Red brome
**Schismus barbatus*	Mediterranean grass

Taxonomy and nomenclature follow Hickman 1993 and Munz 1974.

Appendix B – Animal Species Observed

† denotes special-status species

FAUNA

REPTILIA	**REPTILES**
Iguanidae	**Iguanas and their allies**
Uta stansburiana	Side-blotched lizard
AVES	**BIRDS**
Cathartidae	**Vultures**
Cathartes aura	Turkey vulture
Falconidae	**Caracaras and falcons**
Falco sparverius	American kestrel
Columbidae	**Pigeons and doves**
Zenaida macroura	Mourning dove
Tytonidae	**Barn owl**
Tyto alba	Barn owl
Alaudidae	**Larks**
Eremophila alpestris	Horned lark
Corvidae	**Crows and ravens**
Corvus brachyrhynchos	American crow
Emberizidae	**Warblers, sparrows, blackbirds and relatives**
Sturnella neglecta	Western meadowlark
Fringillidae	**Finches**
Carpodacus neomexicanus	House finch
MAMMALIA	**MAMMALS**
Leporidae	**Rabbits and hares**
Sylvilagus audubonii	Audubon’s cottontail
Lepus californicus	Black-tailed jackrabbit
Sciuridae	**Squirrels, chipmunks and marmots**
Spermophilus beecheyi	California ground squirrel
Geomyidae	**Pocket gophers**
Thomomys bottae	Botta’s pocket gopher

Heteromyidae	**Pocket mice and kangaroo rats**
†*Dipodomys stephensi*	Stephens' kangaroo rat
†*Perognathus longimembris brevinasus*	Los Angeles pocket mouse
†*Chaetodippus fallax pallidus*	Northwestern San Diego pocket mouse
Cricetidae	**Cricetine mice and rats**
Peromyscus boylii	Brush mouse
Peromyscus maniculatus	Deer mouse
Reithrodontomys megalotis	Western harvest mouse
†*Neotoma bryanti*	San Diego Desert woodrat
Canidae	**Foxes, wolves and relatives**
Canis latrans	Coyote

Nomenclature follows Garth & Tilden 1986, Hall 1981, Laudenslayer et al. 1991, and Stebbins 1966.

Appendix C – Site Photographs

Adult Male LAPM

Looking North Across Eastern Portion of Site

Looking at Drainage Area

Looking South from Potato Fields

ENVIRA

Aquaculture Fisheries Environmental

P.O. Box 2612, Ramona, California, USA 92065

Phone 619-885-0236 E-mail PHVERGNE@AOL.COM

Martin Rasnick August 1, 2021

Glen Lukos and Associates

Subject: Los Angeles Pocket Mouse Evaluation for Stone Ridge Proposed Truck Turn Areas

Looked at the aerials with additional needs for the proposed Stone Ridge project. The small changes for safe Truck Turn Areas all occur adjacent to active and paved existing streets. The edge of these areas are hard packed, currently subject to egress and ingress from occurring traffic activities.

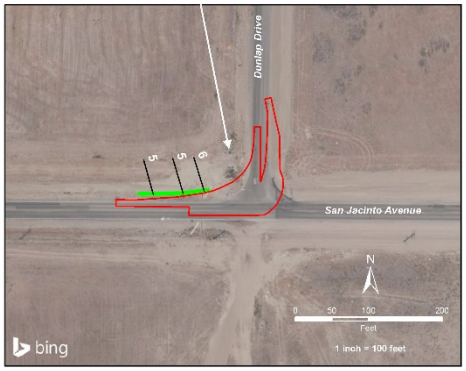
In our professional opinion, these areas are not suitable for Los Angeles Pocket mouse nor Stephens' kangaroo rat. Implementation of the changes needed in those areas will have no impact on the above mentioned species.

Sincerely,

Philippe Vergne

Philippe Vergne

Principal



Truck Turn

RWQCB Non-Wetland Waters of the State/ CDFW non-Riparian Stream

5 Width of Feature in Feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: K. Kortuncu, GLA
Date Prepared: July 27, 2021

STONERIDGE COMMERCE CENTER

Alternative Truck Access Route Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit X