BIOLOGICAL TECHNICAL REPORT

FOR

RIDER AND HARVILL PPT 190039

LOCATED IN MEAD VALLEY, RIVERSIDE COUNTY, CALIFORNIA

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October 7, 2020 (Revised November 24, 2020)

Assessor's Parcel Numbers: 317-170-024 and 317-170-045

INFORMATION SUMMARY

A. Report Date: October 7, 2020 (Revised November 24, 2020)

B. Report Title: Biological Technical Report for Rider and Harvill PPT 190039

C. Project Site

Location: Mead Valley, Riverside County, California. Latitude 33.831685°,

longitude -117.248087° [center reading].

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F. Report Summary: This report describes the current biological conditions for Rider and Harvill PPT 190039 Project and evaluates potential impacts to biological resources occurring as a result of the Project. The Project occurs within the MSHCP Burrowing Owl Survey Area. The Project does not occur within a Criteria Cell and/or Cell Group, Core and/or Linkage Area, Narrow Endemic Plant Species Survey Area (NEPSSA), Criteria Area Plant Species Survey Area (CAPSSA), Mammal Survey Area, and/or Amphibian Survey Area.

Glenn Lukos Associates, Inc. (GLA) conducted general biological and site-specific surveys. Fieldwork conducted for the Project included a jurisdictional determination, a general biological survey, habitat assessments, evaluation of MSHCP riparian/riverine areas and vernal pools, and focused burrowing owl surveys (pursuant to MSHCP policies and guidelines).

The proposed Project would result in impacts to "potential" State jurisdictional waters and upland foraging habitat for special-status species, including MSHCP covered species. State jurisdictional waters are defined as "potential" in this report and described in more detail in Section 4.10. The Project would not result in impacts to MSHCP Riparian/Riverine habitat, as none occurs in association with the Project. The proposed Project would be consistent with all applicable MSHCP policies, specifically pertaining to the Project's relationship to reserve assembly, Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools) and Section 6.3.2 (Additional

Survey Needs and Procedures). Through compliance with the MSHCP, the Plan would fully mitigate for potentially significant impacts under CEQA that would occur as a result of the Project, including potential cumulative impacts.

G. Individuals Conducting Fieldwork: Stephanie Cashin, Trina Ming, April Nakagawa, and David Smith

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APPENDICES

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1.0 INTRODUCTION

1.1 Background and Scope of Work

This document provides the results of general and focused biological surveys conducted for the approximately 16.74-acre Rider and Harvill PPT 190039 Project, (the Project) located in the community of Mead Valley, Riverside County, California. 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 Endangered Species Act (ESA), Clean Water Act (CWA), and the California Fish and Game Code.

The scope of this report includes a discussion of existing conditions for the approximately 16.74-acre Project site, all methods employed regarding the general and focused biological surveys, the documentation of botanical and wildlife resources identified (including special-status species), and an analysis of impacts to biological resources. Methods of the study include a review of relevant literature, field surveys, and a Geographical Information System (GIS)-based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

The field studies focused on a number of primary objectives that would comply with CEQA and MSHCP requirements, including (1) general biological survey and vegetation mapping; (2) habitat assessments for special-status plant species (including species with applicable MSHCP survey requirements); (3) habitat assessments for special-status wildlife species (including species with applicable MSHCP survey requirements); (4) assessment for the presence of wildlife migration and colonial nursery sites; (5) assessments for MSHCP riparian/riverine areas and vernal pools; and (6) assessments for areas subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act (CWA), State Water Quality Control Board (Regional Board) pursuant to Section 401 of the CWA or the Porter-Cologne Water Quality Control Act (the Porter-Cologne Act), and CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600–1616 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 comprises approximately 16.74 acres in the community of Mead Valley, Riverside County, California [Exhibit 1 – Regional Map] and is located within Section 12 of Township 4 South, Range 4 West, of the Perris, California U.S. Geological Survey (USGS) 7.5" quadrangle map (dated 1967 and photorevised in 1979) [Exhibit 2 – Vicinity Map]. The Project site is bordered by undeveloped land to the north, Interstate 215 to the east, Rider Street to the south, and Harvill Avenue to the west.

1.3 Project Description

The proposed Project consists of the development of an approximately 14.77-acre property with a single warehouse building and attendant features. The proposed warehouse building is designed to comprise approximately 334,995 square feet, including 286,995 square feet of warehouse space with dock doors, 24,000 square feet first floor office space, and 24,000 square feet of warehouse mezzanine. Truck, trailer, and passenger vehicle parking areas meeting or exceeding minimum County of Riverside parking requirements would be constructed around the building's perimeter, in addition to drive aisles, landscaping, and lighting. In addition, a bioretention basin is proposed for construction in the southwestern corner of the Project site. Other proposed physical improvements include connections to existing utilities and offsite improvements to the Project site's frontage along Rider Street and Harvill Avenue.

For this report, the term *Project site* is defined as the subject property totaling 14.77 acres. The proposed Project will result in permanent impacts to the entire Project site and an additional 1.97 acres of Offsite Improvements, as described above. Therefore, the proposed Project will result in permanent impacts to a total of 16.74 acres; no temporary onsite or offsite impacts are proposed [Exhibit 3 – Site Plan Map].

1.4 Relationship of the Project Site to the MSHCP

1.4.1 MSHCP Background

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

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

The Covered Species that are not yet adequately conserved have additional requirements in order for these species to ultimately be considered "adequately conserved." A number of these species have survey requirements based on a project's occurrence within a designated MSHCP survey area and/or based on the presence of suitable habitat. These include Narrow Endemic Plant Species (MSHCP *Volume I, Section 6.1.3*), as identified by the Narrow Endemic Plant Species Survey Areas (NEPSSA); Criteria Area Plant Species (MSHCP *Volume I, Section 6.3.2*) identified by the Criteria Area Plant Species Survey Areas (CAPSSA); animals species (burrowing owl, mammals, amphibians) identified by survey areas (MSHCP *Volume I, Section 6.3.2*); and species associated with riparian/riverine areas and vernal pool habitats, i.e., least

Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and three species of listed fairy shrimp (MSHCP *Volume I, Section 6.1.2*). An additional 28 species (MSHCP *Volume I, Table 9.3*) not yet adequately conserved have species-specific objectives in order for the species to become adequately conserved. However, these species do not have project-specific survey requirements.

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

1.4.2 Relationship of the Project Site to the MSHCP

The Project site and Offsite Improvement areas are located with the Gavilan Habitat Management Unit (HMU) of the MSHCP and is located within the MSHCP Burrowing Owl Survey Area [Exhibit 4 – Burrowing Owl Survey Area Map]. The Project site and Offsite Improvement areas are not located within the MSHCP Criteria Area, Narrow Endemic Plant Species Survey Area (NEPSSA), Criteria Area Plant Species Survey Area (CAPSSA), Mammal Survey Area, Amphibian Survey Area, and/or existing or proposed Core or Linkage.

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 the following main components:

- Determination/delineation of aquatic resources (including wetlands and riparian habitat) subject to the jurisdiction of the Corps, Regional Board, and/or CDFW;
- Mapping of MSHCP Riparian/Riverine areas;
- Performance of vegetation mapping for the Project;
- 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; 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 2020), CNPS 8th edition online inventory (CNPS 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. Sitespecific general surveys for the Project site and Offsite Improvement areas were conducted on foot in the proposed development areas for each target plant or animal species identified below. Table 2-1 provides a summary list of survey dates, survey types and personnel.

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

Survey Type	2020 Survey Dates	Biologist(s)
Determination/Delineation of Federal and State Jurisdictional Waters	01/10	AN, TM
Evaluation of MSHCP Riparian/Riverine Areas	01/10	AN, TM
Evaluation of MSHCP Vernal Pools and Fairy Shrimp Habitat	01/10	AN, TM
General Biological Survey and Habitat Assessment	03/05	AN, SC
Focused Burrowing Owl Surveys	03/05, 04/02, 04/16, 04/29	AN, SC, DS

AN = April Nakagawa; TM = Trina Ming; SC = Stephanie Cashin; DS = David Smith

Individual plant 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 Federal and/or State Endangered Species Act (ESA); 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 Federal and/or State ESA; 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);
- Riparian/riverine habitat; and/or
- Wetland/vernal pool habitat.

2.1 <u>Botanical Resources</u>

A site-specific survey program was designed to accurately document the botanical resources associated with the Project site and Offsite Improvement areas, 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 in association with the Project site and Offsite Improvement areas; (3) general field reconnaissance surveys; (4) vegetation mapping; and (5) habitat assessments 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' quadrangle(s): Perris and surrounding quadrangles (CDFW 2020).

2.1.2 Vegetation Mapping

Vegetation was mapped in the field directly onto a 150-scale (1"=150") aerial photograph. However, since the Project site and Offsite Improvement areas consist of disturbed areas dominated by non-native herbaceous species and developed areas, the Project site and Offsite Improvement areas do not conform to a vegetation classification system such as Holland (1986) or A Manual of California Vegetation, Second Edition.

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

A literature search was conducted to obtain a list of special-status plants with the potential to occur in association with the Project site and Offsite Improvement 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 (2020) and the MSHCP (Dudek 2003).

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur in association with the Project site and Offsite Improvement 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 in association with the Project site and Offsite Improvement areas; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Project site and Offsite Improvement areas, if applicable.

The Project site and Offsite Improvement areas are not located within the MSHCP NEPSSA or CAPSSA. As such, focused plant surveys are not required for the Project pursuant to the MSHCP.

2.1.4 Botanical Surveys

GLA biologists Stephanie Cashin and April Nakagawa visited the Project site and Offsite Improvement areas on March 5, 2020 to conduct a general plant survey and habitat assessment for special-status plants. Survey(s) 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 and/or Offsite Improvement areas. 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 Jepson Flora Project (2020) 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 Offsite Improvement 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. A complete list of wildlife species observed within the Project site and Offsite Improvement areas 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 surveys, habitat assessments, and/or focused surveys for special-status animals are included below.

2.2.1 General Surveys

Birds

During general biological and reconnaissance survey(s) within the Project site and Offsite Improvement 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 biological and reconnaissance survey(s) within the Project site and Offsite Improvement areas, mammals were identified incidentally within each habitat type. 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 biological and reconnaissance survey(s) within the Project site and Offsite Improvement 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

A literature search was conducted to obtain a list of special-status wildlife species with the potential to occur in association with the Project site and Offsite Improvement 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, (2) species survey areas as identified by the MSHCP for the Project; and 3) any other special-status animals that are known to occur within the vicinity of the Project, or for which potentially suitable habitat occurs on the Project site and/or Offsite Improvement areas.

2.2.3 Habitat Assessment for Special-Status Animal Species

GLA biologists Stephanie Cashin and April Nakagawa conducted a habitat assessment for special-status animal species on March 5, 2020. 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 in association with the Project site and Offsite Improvement areas.

2.2.4 Focused Surveys for Special-Status Animals Species

Burrowing Owl

Portions of the Project site and Offsite Improvement areas are located within the MSHCP survey area for the burrowing owl (*Athene cunicularia*). GLA biologists Stephanie Cashin, April Nakagawa, and David Smith conducted focused surveys for the burrowing owl within all suitable habitat areas within the Project site and Offsite Improvement 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 March 5, 2020. Focused burrowing owl surveys were conducted on

March 5, April 2, April 16, and April 29, 2020. Pursuant to the survey protocol, the burrowing owl survey visits were conducted between one hour prior to sunrise to two hours after sunrise.

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 five days after a rain event.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Transects were spaced between 22 feet and 65 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. Exhibit 4 identifies the burrowing owl survey areas associated with the Project site and Offsite Improvement areas as well as locations of suitable burrows mapped during the transect surveys and the 500-foot buffer area which was traversed on foot and/or scanned with binoculars as feasible. 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 for the Project

Survey Date	Biologist(s)	Start/End Time	Start/End	Start/End	Cloud Cover
			Temperature	Wind Speed	
			(°F)	(mph)	
03/05/20	AN/SC	0615/0830	46/55	0-3	Mostly clear
04/02/20	DS	0700/0830	52/55	0-2	Cloudy
04/17/20	AN	0630/0830	50/65	2-5	Clear
04/29/20	AN	0615/0830	60/65	1-2	Clear

AN = April Nakagawa; SC = Stephanie Cashin; DS = David Smith

2.3 **Jurisdictional Waters**

The Project site and Offsite Improvement areas were evaluated to identify the presence and limits of jurisdictional waters, including waters of the U.S. and wetlands potentially subject to the jurisdiction of the Corps and Regional Board, waters of the State potentially subject to the jurisdiction of the Regional Board only, and streams (including riparian vegetation) potentially subject to the jurisdiction of CDFW. Prior to beginning the field delineation, a 150-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine the locations of potential areas of Corps, Regional Board, and CDFW 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 Manual¹ (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers

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

Wetland Delineation Manual: Arid West Supplement (Arid West Supplement).² Reference was also made to the 2019 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Board Wetland Definition and Procedures) to identify suspected State wetland habitats.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 States⁴ 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 demonstrating characteristics as described above which are artificially created are not included in these definitions.

II S. Army Corns of Engineer

² 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.

³ State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.

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.

GLA surveyed the Project site and Offsite Improvement areas for potential 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.

3.0 REGULATORY SETTING

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

3.1 Endangered Species Acts

3.1.1 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.

3.1.2 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.

3.1.3 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.

3.1.4 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 U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (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 NEPSSA; Criteria Area Plant Species identified by the 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 Clean Water Act Section 404 permitting, take authorization for federally listed covered species would occur under Section 7 (not Section 10) of FESA and 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

3.2.1 CEQA Guidelines Section 15380

CEQA requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Sections 5.1.1 and 5.2.2 below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, 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.

3.2.2 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
	SC	State Candidate
•	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

CNDDB Global/State Rankings

The CNDDB provides global and State rankings for species and communities based on a system developed by The Nature Conservancy to measure rarity of a species. The ranking provides a shorthand formula about how rare a species/community is and is based on the best information available from multiple sources, including state and federal listings, and other groups that recognize species as sensitive (e.g., Bureau of Land Management, Audubon Society, etc.). State and global rankings are used to prioritize conservation and protection efforts so that the rarest species/communities receive immediate attention. In both cases, the lower ranking (i.e., G1 or S1) indicates extreme rarity. Rare species are given a ranking from 1 to 3. Species with a ranking of 4 or 5 are considered to be common. If the exact global/state ranking is undetermined, a range is generally provided. For example, a global ranking of "G1G3" indicates that a species/community global rarity is between G1 and G3. If the animal being considered is a subspecies of a broader species, a "T" ranking is attached to the global ranking. The following are descriptions of global and State rankings:

Global Rankings

- G1 Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or because of some factor(s) making it especially vulnerable to extinction.
- G2 Imperiled globally because of rarity (6-20 occurrences), or because of some other factor(s) making it very vulnerable to extinction throughout its range.
- G3 Either very rare and local throughout its range (21 to 100 occurrences) or found locally (even abundantly at some of its locations) in a restricted range (e.g., a physiographic region), or because of some other factor(s) making it vulnerable to extinction throughout its range.
- G4 Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5 Common, widespread and abundant.

State Rankings

- S1 Extremely rare; typically 5 or fewer known occurrences in the state; or only a few remaining individuals; may be especially vulnerable to extirpation.
- S2 Very rare; typically between 6 and 20 known occurrences; may be susceptible to becoming extirpated.
- S3 Rare to uncommon; typically 21 to 50 known occurrences; S3 ranked species are not yet susceptible to becoming extirpated in the state but may be if additional populations are destroyed.
- S4 Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5 Common, widespread, and abundant in the state.

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	Thought to be extinct in California based on a lack of observation or
Extirpated in California and	detection for many years.
Either Rare or Extinct	
Elsewhere	
Rank 1B – Plants Rare,	Species, which are generally rare throughout their range that are also
Threatened, or Endangered in	judged to be vulnerable to other threats such as declining habitat.
California and Elsewhere	
Rank 2A – Plants presumed	Species that are presumed extinct in California but more common
Extirpated in California, But	outside of California.
Common Elsewhere	
Rank 2B – Plants Rare,	Species that are rare in California but more common outside of
Threatened or Endangered in	California.
California, But More	
Common Elsewhere	
Rank 3 – Plants About Which	Species that are thought to be rare or in decline but CNPS lacks the
More Information Is Needed	information needed to assign to the appropriate list. In most instances,
(A Review List)	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
D 1 4 DI CYLLIA	unclear.
Rank 4 – Plants of Limited	Species that are currently thought to be limited in distribution or range
Distribution (A Watch List)	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.
T 4	
Extension	Comments
.1 – Seriously endangered in	Species with over 80% of occurrences threatened and/or have a high
California	degree and immediacy of threat.
.2 – Fairly endangered in	Species with 20-80% of occurrences threatened.
California	
.3 – Not very endangered in	Species with <20% of occurrences threatened or with no current
California	threats known.

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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), pursuant to the *Navigable Waters Protection Rule*⁶ (NWPR), as:

- (a) Jurisdictional waters. For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term "waters of the United States" means:
 - (1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
 - (2) Tributaries;
 - (3) Lakes and ponds, and impoundments of jurisdictional waters; and
 - (4) Adjacent wetlands.
- (b) Non-jurisdictional waters. The following are not "waters of the United States":
 - (1) Waters or water features that are not identified in paragraph (a)(1), (2), (3), or (4) of this section;
 - (2) Groundwater, including groundwater drained through subsurface drainage systems;
 - (3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
 - (4) Diffuse stormwater run-off and directional sheet flow over upland;
 - (5) Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;
 - (6) Prior converted cropland;
 - (7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
 - (8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;
 - (9) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
 - (10) Stormwater control features constructed or excavated in upland or in nonjurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;

⁶ U.S. Environmental Protection Agency & Department of Defense. 2020. Federal Register / Vol. 85, No. 77 / Tuesday, April 21, 2020 / Rules and Regulations.

- (11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and
- (12) Waste treatment systems.

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.

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 the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland 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 Wetland Manual and Arid West 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 List⁷,⁸);
- 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 Wetland 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.

3.3.2 Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States ⁹ and waters of the State. Waters of the United States are defined above 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 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.

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:

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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.

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.

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

3.3.3 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 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 manmade 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/or focused surveys for special-status plants and animals, an assessment for MSHCP Riparian/Riverine areas and vernal pools, and a jurisdictional determination/delineation of all potential jurisdictional waters and wetlands.

4.1 **Existing Conditions**

The Project site and Offsite Improvement areas consist of a fallow agricultural field with a small hill in the northwest and a fenced-in developed area in the southeast. The developed portion of the Project site historically contained railroad tracks, several granary tanks, and other associated development. The granary tanks have since been demolished; in its current condition, this portion of the Project site contains remnant hardscaping, railroad tracks, and a large spoils pile. A shallow concrete ditch occurs in the approximate center of the Project site. Overall, the Project site is relatively flat and slopes gently to the east with onsite elevations ranging from approximately 1,516 feet above mean sea level (amsl) at the top of the hill to approximately 1,502 feet asml at the eastern Project site boundary. Offsite Improvement areas occur to the west and southwest of the Project site, as described above in Section 1.3.

The National Cooperative Soil Survey (NCSS) has mapped the following soil types as occurring in association with the Project site and Offsite Improvements: Greenfield sandy loam, 0 to 2

percent slopes and 2 to 8 percent slopes, and Ramona sandy loam, 0 to 2 percent slopes and 2 to 5 percent slopes, eroded.

4.2 <u>Vegetation/Land Use Mapping</u>

The Project site and Offsite Improvement areas support the following vegetation/land use types: disturbed/developed and disturbed/ruderal. Table 4-1 provides a summary of the vegetation/land use types and their corresponding acreages. A Vegetation/Land Use Map is attached as Exhibit 5. Photographs depicting the Project site and Offsite Improvement areas are shown in Exhibit 6 – Site Photographs.

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

Vegetation/Land Use Type	Project Site (Acres)	Offsite Improvements (Acres)	Total Acreage
Disturbed/Developed	4.21	1.20	5.41
Disturbed/Ruderal	10.56	0.77	11.33
Total	14.77	1.97	16.74

4.2.1 Disturbed/Developed

Disturbed/developed lands comprise approximately 5.41 acres, 4.21 acres of which occur in association with the Project site and 1.20 acres of which occur in association with Offsite Improvements. These areas consist of 1) the former granary location, train tracks, remnant hardscaping, and spoils pile, which are primarily unvegetated, and 2) existing portions of Harvill Avenue and Rider Street proposed for improvements.

4.2.2 Disturbed/Ruderal

Disturbed/ruderal lands comprise approximately 11.33 acres, 10.56 acres of which occur in association with the Project site and 0.77 acre of which occurs in association with Offsite Improvements. These lands comprise the majority of the Project and are subject to regular weed abatement and other maintenance activities. Dominant species observed in these areas include big heron's bill (*Erodium botrys*), bristly ox-tongue (*Helminotheca echioides*), Canada horseweed (*Erigeron canadensis*), cheeseweed mallow (*Malva parviflora*), coastal heron's bill (*Erodium cicutarium*), common Mediterranean grass (*Schismus barbatus*), foxtail barley (*Hordeum murinum*), prickly lettuce (*Lactuca serriola*), Russian thistle (*Salsola tragus*), stinknet (*Oncosiphon piluliferum*), and summer mustard (*Hischfeldia incana*). Other notable species include biocolor lupine (*Lupinus bicolor*), California goldfields (*Lasthenia californica*), common sunflower (*Helianthus annuus*), nettle (*Urtica* sp.), ornamental rose (*Rosa* sp.), pineapple weed (*Matricaria discoidea*), rusty-haired popcorn flower (*Plagiobothrys nothofulvus*), silver puffs (*Uropappus lindleyi*), tarragon (*Artemisia dracunculus*), and yellow-berry nightshade (*Solanum* sp.).

4.3 **Special-Status Vegetation Communities**

The CNDDB identifies the following four special-status vegetation communities for the Perris quadrangle and surrounding quadrangle maps: southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern riparian scrub, and southern sycamore alder riparian woodland. No special-status vegetation types occur in association with the Project site and Offsite Improvement areas, including those identified by the CNDDB.

4.4 **Special-Status Plants**

No special-status plants were detected in association with the Project site and Offsite Improvement areas. Table 4-2 provides a list of special-status plants evaluated through general biological surveys and habitat assessments. Species were evaluated based on the following factors: 1) species identified by the CNDDB and CNPS as occurring (either currently or historically) on or in the vicinity of the Project, 2) applicable MSHCP survey areas, and 3) any other special-status plants that are known to occur within the vicinity of the Project site and Offsite Improvement areas, or for which potentially suitable habitat occurs within the Project site and Offsite Improvement areas.

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

Species Name	Status	Habitat Requirements	Occurrence
Buxbaum's sedge Carex buxbaumii	Federal: None State: None CNPS: Rank 4.2	Bogs and fens, Meadows and seeps (mesic) and marshes and swamps.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
California Orcutt grass Orcuttia californica	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(b)	Vernal pools.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
California screw moss Tortula californica	Federal: None State: None CNPS: Rank 1B.2	Sandy soil in chenopod scrub, and valley and foothill grassland.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Chaparral ragwort Senecio aphanactis	Federal: None State: None CNPS: Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Chaparral sand-verbena Abronia villosa var. aurita	Federal: None State: None CNPS: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Coulter's goldfields Lasthenia glabrata ssp. coulteri	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Coulter's matilija poppy Romneya coulteri	Federal: None State: None CNPS: Rank 4.2 MSHCP	Often in burns in chaparral and coastal scrub.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Davidson's saltscale Atriplex serenana var. davidsonii	Federal: None State: None CNPS: Rank 1B.2 MSHCP(d)	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Heart-leaved pitcher sage Lepechinia cardiophylla	Federal: None State: None CNPS: Rank 1B.2 MSHCP(d)	Closed-cone coniferous forest, chaparral, and cismontane woodland.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Intermediate mariposa-lily Calochortus weedii var. intermedius	Federal: None State: None CNPS: Rank 1B.2 MSHCP	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Jaeger's (bush) milk-vetch Astragalus pachypus var. jaegeri	Federal: None State: None CNPS: Rank 1B.1 MSHCP	Sandy or rocky soils in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Little mousetail Myosurus minimus ssp. apus	Federal: None State: None CNPS: Rank 3.1 MSHCP(d)	Valley and foothill grassland, vernal pools (alkaline soils).	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Long-spined spineflower Chorizanthe polygonoides var. longispina	Federal: None State: None CNPS: Rank 1B.2 MSHCP	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Many-stemmed dudleya Dudleya multicaulis	Federal: None State: None CNPS: Rank 1B.2 MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Marsh sandwort Arenaria paludicola	Federal: FE State: SE CNPS: Rank 1B.1	Bogs and fens, freshwater marshes and swamps.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Mud nama Nama stenocarpum	Federal: None State: None CNPS: Rank 2B.2 MSHCP(d)	Marshes and swamps.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Munz's onion Allium munzii	Federal: FE State: ST CNPS: Rank 1B.1 MSHCP(b)	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Nevin's barberry Berberis nevinii	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(d)	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	
Palmer's grapplinghook Harpagonella palmeri	Federal: None State: None CNPS: Rank 4.2 MSHCP	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Paniculate tarplant Deinandra paniculata	Federal: None State: None CNPS: Rank 4.2	Usually in vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grassland, and vernal pools.	Not expected to occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Parish's brittlescale Atriplex parishii	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Chenopod scrub, playas, vernal pools.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Parry's spineflower Chorizanthe parryi var. parryi	Federal: None State: None CNPS: Rank 1B.1 MSHCP	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Payson's jewelflower Caulanthus simulans	Federal: None State: None CNPS: Rank 4.2 MSHCP	Sandy or granitic soils in chaparral and coastal scrub.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Peninsular spineflower Chorizanthe leptotheca	Federal: None State: None CNPS: Rank 4.2 MSHCP	Alluvial fan, granitic. Chaparral, coastal scrub, lower montane coniferous forest.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Plummer's mariposa lily Calochortus plummerae	Federal: None State: None CNPS: Rank 4.2 MSHCP	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Robinson's pepper grass Lepidium virginicum var. robinsonii	Federal: None State: None CNPS: Rank 4.3	Dry openings in chaparral and coastal sage scrub.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Salt marsh bird's-beak Chloropyron maritimum ssp. maritimum	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dune, coastal salt marshes and swamps.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Salt Spring checkerbloom Sidalcea neomexicana	Federal: None State: None CNPS: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
San Bernardino aster Symphyotrichum defoliatum	Federal: None State: None CNPS: Rank 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
San Diego ambrosia Ambrosia pumila	Federal: FE State: None CNPS: Rank 1B.1 MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland,	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
San Diego sagewort Artemisia palmeri	Federal: None State: None CNPS: Rank 4.2	Sandy and mesic soils in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
San Jacinto Valley crownscale Atriplex coronata var. notatior	Federal: FE State: None CNPS: Rank 1B.1 MSHCP(d)	Alkaline soils in chenopod scrub, valley and foothill grassland, vernal pools.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Slender-horned spineflower Dodecahema leptoceras	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(b)	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Does not occur on the Project site due to a lack of suitable habitat.
Small-flowered microseris Microseris douglasii ssp. platycarpha	Federal: None State: None CNPS: Rank 4.2 MSHCP	Cismontane woodland, coastal sage scrub, valley and foothill grassland, vernal pools. Occurring on clay soils.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Small-flowered morning-glory Convolvulus simulans	Federal: None State: None CNPS: Rank 4.2 MSHCP	Chaparral (openings), coastal sage scrub, valley and foothill grassland. Occurring on clay soils and serpentinite seeps.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Smooth tarplant Centromadia pungens ssp. laevis	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Snake cholla Cylindropuntia californica var. californica	Federal: None State: None CNPS: Rank 1B.1	Chaparral, coastal sage scrub.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
South coast saltscale Atriplex pacifica	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Southern California black walnut Juglans californica	Federal: None State: None CNPS: Rank 4.2 MSHCP	Chaparral, cismontane woodland, coastal sage scrub, alluvial surfaces.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Spreading navarretia Navarretia fossalis	Federal: FT State: None CNPS: Rank 1B.1 MSHCP(b)	Vernal pools, playas, chenopod scrub, marshes and swamps (assorted shallow freshwater).	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Thread-leaved brodiaea Brodiaea filifolia	Federal: FT State: SE CNPS: Rank 1B.1 MSHCP(d)	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Vernal barley Hordeum intercedens	Federal: None State: None CNPS: Rank 3.2 MSHCP	Coastal dunes, coastal sage scrub, valley and foothill grassland (saline flats and depressions), vernal pools.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Woven-spored lichen Texosporium sancti-jacobi	Federal: None State: None CNPS: Rank 3	On soil, small mammal pellets, dead twigs, and on <i>Selaginella</i> spp. Chaparral (openings).	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Wright's trichocoronis Trichocoronis wrightii var. wrightii	Federal: None State: None CNPS: Rank 2B.1 MSHCP(b)	Alkaline soils in meadows and seeps, marshes and swamps, riparian scrub, vernal pools.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Yucaipa onion Allium marvinii	Federal: None State: None CNPS: Rank 1B.2 MSHCP(b)	Chaparral (clay, openings).	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

STATUS

Federal State

 $\begin{array}{ll} FE-Federally\ Endangered & SE-State\ Endangered \\ FT-Federally\ Threatened & ST-State\ Threatened \end{array}$

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).

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

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 **Special-Status Animals**

No special-status animals were detected in association with the Project site and Offsite Improvement areas. Table 4-3 provides a list of special-status animals evaluated 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 and Offsite Improvement areas, 2) applicable MSHCP survey areas, and 3) any other special-status animals that are known to occur within the vicinity of the Project site and Offsite Improvement areas for which potentially suitable habitat occurs onsite.

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

Species Name	Status	Habitat Requirements	Occurrence
Invertebrates		1	
Crotch bumble bee Bombus crotchii	Federal: None State: SCE	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert.	Not expected to occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Quino checkerspot butterfly Euphydryas editha quino	Federal: FE State: None MSHCP	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include <i>Plantago erecta</i> and <i>Castilleja exserta</i> . Adults occur on sparsely vegetated rounded hilltops and ridgelines, and are known to disperse through disturbed habitats to reach suitable nectar plants.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Riverside fairy shrimp Streptocephalus woottoni	Federal: FE State: None MSHCP(a)	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Vernal pool fairy shrimp Branchinecta lynchi	Federal: FT State: None MSHCP(a)	Seasonal vernal pools.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Amphibians		·	
Western spadefoot Spea hammondii	Federal: None State: SSC MSHCP	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Reptiles	-		
California glossy snake Arizona elegans occidentalis	Federal: None State: SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Coastal whiptail Aspidoscelis tigris stejnegeri (multiscutatus)	Federal: None State: SSC MSHCP	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Coast horned lizard Phrynosoma blainvillii	Federal: None State: SSC MSHCP	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Not expected to occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Coast patch-nosed snake Salvadora hexalepis virgultea	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Red-diamond rattlesnake Crotalus ruber	Federal: None State: SSC MSHCP	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Not expected to occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
San Diego banded gecko Coleonyx variegatus abbotti	Federal: None State: SSC MSHCP	Primarily a desert species, but also occurs in cismontane chaparral, desert scrub, and open sand dunes.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Southern California legless lizard Anniella stebbinsi	Federal: None State: SSC	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.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Western pond turtle Emys marmorata	Federal: None State: SSC 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 on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Bald eagle (nesting & wintering) Haliaeetus leucocephalus	Federal: BGEPA State: SE, CFP 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.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Burrowing owl (burrow sites & some wintering sites) Athene cunicularia	Federal: None State: SSC 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.	Burrowing owl was confirmed absent from the Project site and Offsite Improvement areas during the 2020 focused breeding season surveys. Refer below for additional information.
California black rail Laterallus jamaicensis coturniculus	Federal: None State: ST, CFP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Coastal cactus wren (San Diego & Orange County only) Campylorhynchus brunneicapillus sandiegensis	Federal: None State: SSC MSHCP	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Coastal California gnatcatcher Polioptila californica californica	Federal: FT State: SSC MSHCP	Low elevation coastal sage scrub and coastal bluff scrub.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Golden eagle (nesting & wintering) Aquila chrysaetos	Federal: BGEPA State: CFP MSHCP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Not expected to occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Least Bell's vireo (nesting) Vireo bellii pusillus	Federal: FE State: SE MSHCP(a)	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Loggerhead shrike (nesting) Lanius ludovicianus	Federal: None State: SSC 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.	Low potential to occur on the Project site and Offsite Improvement areas for foraging only. Does not occur on the Project site or Offsite Improvement areas for nesting due to a lack of suitable habitat.
Long-eared owl (nesting) Asio otus	Federal: None State: SSC	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 on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Northern harrier (nesting) Circus cyaneus	Federal: None State: SSC MSHCP	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Low potential to occur on the Project site or Offsite Improvement areas for foraging only. Does not occur on the Project site or Offsite Improvement areas for nesting due to a lack of suitable habitat.
Southwestern willow flycatcher (nesting) Empidonax traillii extimus	Federal: FE State: SE MSHCP(a)	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Tricolored blackbird (nesting colony) Agelaius tricolor	Federal: None State: SCE, SSC MSHCP	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Western snowy plover (nesting) Charadrius alexandrinus nivosus	Federal: FT State: SSC	Sandy or gravelly beaches along the coast, estuarine salt ponds, alkali lakes, and at the Salton Sea.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Western yellow-billed cuckoo (nesting) Coccyzus americanus occidentalis	Federal: FT State: SE MSHCP(a)	Dense, wide riparian woodlands with well-developed understories.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
White-tailed kite (nesting) Elanus leucurus	Federal: None State: CFP MSHCP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Low potential to occur on the Project site or Offsite Improvement areas for foraging only. Does not occur on the Project site or Offsite Improvement areas for nesting due to a lack of suitable habitat.
Yellow warbler (nesting) Setophaga petechia	Federal: None State: SSC 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.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Yellow-breasted chat (nesting) Icteria virens	Federal: None State: SSC MSHCP	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Yellow-headed blackbird (nesting) Xanthocephalus xanthocephalus	Federal: None State: SSC	Breed and roost in freshwater wetlands with dense, emergent vegetation such as cattails. Often forage in fields, typically wintering in large, open agricultural areas.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Mammals			
American badger Taxidea taxus	Federal: None State: SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Confirmed absent from the Project site and Offsite Improvement areas during the 2020 field efforts.

Species Name	Status	Habitat Requirements	Occurrence
Dulzura pocket mouse Chaetodipus califronicus femoralis	Federal: None State: SSC	Coastal scrub, grassland, and chaparral, especially at grass-chaparral edges.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Los Angeles pocket mouse Perognathus longimembris brevinasus	Federal: None State: SSC MSHCP(c)	Fine, sandy soils in coastal sage scrub and grasslands.	Not expected to occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Northwestern San Diego pocket mouse Chaetodipus fallax fallax	Federal: None State: SSC MSHCP	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Not expected to occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Pocketed free-tailed bat Nyctinomops femorosaccus	Federal: None State: SSC	Rocky areas with high cliffs in pine- juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
San Bernardino kangaroo rat Dipodomys merriami parvus	Federal: FE State: SC 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.	Not expected to occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
San Diego black-tailed jackrabbit Lepus californicus bennettii	Federal: None State: SSC MSHCP	Occupies a variety of habitats but is most common among shortgrass habitats. Also occurs in sage scrub but needs open habitats.	Not expected to occur on the Project site due to a lack of suitable habitat.
San Diego desert woodrat Neotoma lepida intermedia	Federal: None State: SSC MSHCP	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Southern grasshopper mouse Onychomys torridus ramona	Federal: None State: SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Stephens' kangaroo rat Dipodomys stephensi	Federal: FE State: ST MSHCP	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Not expected to occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.
Western mastiff bat Eumops perotis californicus	Federal: None State: SSC	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.	Does not occur on the Project site due to a lack of suitable habitat. Does not occur on the Project site or Offsite Improvement areas due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Western yellow bat	Federal: None	Found in valley foothill riparian,	Does not occur on the
Lasiurus xanthinus	State: SSC	desert riparian, desert wash, and palm	Project site or Offsite
		oasis habitats. Roosts in trees,	Improvement areas
		particularly palms. Forages over	due to a lack of
		water and among trees.	suitable habitat.

STATUS

Federal State

 $\begin{array}{ll} FE-Federally\ Endangered & SE-State\ Endangered \\ FT-Federally\ Threatened & ST-State\ Threatened \end{array}$

BGEPA- Bald and Golden Eagle
Protection Act
SC - State Candidate for Listing
SCE - State Candidate 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.

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 Confirmed Absent Through Focused Surveys at the Project Site and Offsite Improvement Areas

Burrowing Owl

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). Burrowing owls require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows in order to provide roosting and nesting cover.

The Project site and Offsite Improvement areas occur within the MSHCP Burrowing Owl Survey Area and contain suitable habitat including disturbed/ruderal lands with gently sloping

topography and potentially suitable burrows. Therefore, GLA conducted focused breeding season surveys for the burrowing owl in 2020.

Burrowing owl were confirmed absent from the Project site and Offsite Improvement areas during the 2020 surveys. No burrowing owls were observed utilizing the Project site or Offsite Improvement areas, and no diagnostic sign such as pellets, prey remains, whitewash, feathers, bones, or decoration was detected in association with burrows at the Project site or Offsite Improvement areas. Additionally, no burrowing owls or diagnostic sign were observed in association with the 500-foot visual buffer. Therefore, the burrowing owl was confirmed absent from the Project site and Offsite Improvement areas during the 2020 focused breeding season surveys. Representative photographs of potentially suitable burrows detected during the surveys are included in Exhibit 6.

4.6 Raptor Use

The Project site and Offsite Improvement areas provide suitable foraging 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 redtailed 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.

Appendix B (faunal compendium) provides a list of the raptors detected over the course of the field studies. The Project site and Offsite Improvement areas lack potential nesting habitat (e.g., mature trees and shrubs) for raptor species but are expected to provide foraging habitat in the form of insects, spiders, lizards, snakes, small mammals, and other birds as discussed above.

4.7 **Nesting Birds**

The Project site and Offsite Improvement areas contain shrub 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

Birds anticipated to nest in association with the Project site and Offsite Improvement areas would be those that are common to disturbed areas and include species such as killdeer (*Charadrius vociferus*) and mourning dove (*Zenaida macroura*).

4.8 <u>Wildlife Linkages/ Corridors and Nursery Sites</u>

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

Corridors are similar to linkages but provide specific opportunities for individual animals to disperse or migrate between areas, generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different than that in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired.

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.

While some minor local wildlife movement is expected to occur within the Project site and Offsite Improvement Areas, the relatively small size and highly disturbed nature of the property preclude it from providing migratory wildlife corridors and/or wildlife nursery sites.

4.9 Critical Habitat

The Project site and Offsite Improvement areas do not occur within any lands mapped as Critical Habitat by the USFWS.

4.10 <u>Jurisdictional Waters</u>

GLA regulatory specialists evaluated a constructed feature (herein referred to as "Feature A") located in the approximate center of the Project site, as depicted on Exhibit 7A – Potential Regional Board Jurisdictional Delineation Map and Exhibit 7B – Potential CDFW Jurisdictional Delineation Map. Feature A is a concrete-lined ditch with vertical concrete side walls. No signs of flow were observed in association with Feature A and no apparent drainage connection occurs

¹³Sections 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.

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at Feature A's terminus. Vegetation within Feature A consists of upland disturbed/ruderal species as described in Section 4.2.1, primarily big heron's bill, coastal heron's bill, common Mediterranean grass, foxtail barley, and Russian thistle.

Feature A is not expected to be regulated by the Corps pursuant to Section 404 of the CWA, the Regional Board pursuant to Section 401 of the CWA or the Porter-Cologne Act, and/or CDFW pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code. No other potentially jurisdictional features occur in association with the Project site and Offsite Improvement areas. However, the following discussion is included in this report in the event that Feature A would be considered a regulated feature pursuant to the above regulations.

4.10.1 Corps Jurisdiction

No Corps jurisdiction is associated with the Project site and Offsite Improvement areas. Feature A was constructed wholly in uplands and is not a realigned drainage course or an impoundment of an existing watercourse, thus meeting the (b)(5) exclusion criteria pursuant to the *Navigable Waters Protection Rule*; additionally, any flow associated with Feature A would meet the (b)(3) exclusion criteria as Feature A would only conveys flows in direct response to precipitation events. Additional information is included in the Project's Jurisdictional Determination Report, which is included as Appendix C.

4.10.2 Regional Water Quality Control Board Jurisdiction

Potential Regional Board jurisdiction associated with the Project consists of Feature A and does not consist of any State wetlands [Exhibit 7A]. Feature A comprises approximately 0.062 acre (260 linear feet); 0.058 acre (243 linear feet) occurs in association with the Project site and 0.004 acre (17 linear feet) occurs in association with the Offsite Improvement areas. Potential Regional Board jurisdiction was determined based on the ten-foot width of the concrete-lined constructed channel, as no flow sign or hydrophytic vegetation was observed. Assuming Feature A is jurisdictional to the Regional Board, it would be considered an ephemeral feature determined to be non-federal waters requiring separate analysis under the Porter-Cologne Act. See Appendix C for additional information.

4.10.3 CDFW Jurisdiction

Potential CDFW jurisdiction associated with the Project consists of Feature A and does not support any riparian vegetation [Exhibit 7B]. Feature A comprises approximately 0.062 acre (260 linear feet); 0.058 acre (243 linear feet) occurs in association with the Project site and 0.004 acre (17 linear feet) occurs in association with Offsite Improvements. Potential CDFW jurisdiction was determined based on the ten-foot width of the concrete-lined constructed channel, as no other sign of a watercourse or hydrophytic vegetation was observed. See Appendix C for additional information.

4.11 MSHCP Riparian/Riverine Areas and Vernal Pools

Vegetation communities associated with riparian systems and vernal pools are depleted natural vegetation communities because, similar to coastal sage scrub, they have declined throughout Southern California during past decades. In addition, they support a large variety of specialstatus wildlife species. Most species associated with Riparian/Riverine areas 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) and vernal pools because they support MSHCP covered species. 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. As noted above in Section 2.4, 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 freshwater flow during all or a portion of the year. Portions of the Project site and Offsite Improvement areas have been previously developed and demolished as part of past authorized earthmoving activities; additionally, the undeveloped portions of the Project site and Offsite Improvement areas are routinely mowed/disked. The Project site and Offsite Improvement areas do not contain any features, including Feature A, that would be considered Riparian/Riverine pursuant to the MSHCP. Feature A consists of a man-made concrete feature which exhibits a general lack of flow and lack of riparian or wetland/vernal pool habitat. The Project site and Offsite Improvement areas do not contain riparian habitat as described above including habitat for least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo. Furthermore, the Project site and Offsite Improvement areas do not contain any areas expected to receive freshwater flow or support the transport of water during rainfall events, including any natural streams. In the event that Feature A was to impound sheet flow originating westerly from Harvill Avenue, flows would be expected to overtop Feature A at its onsite terminus due to the lack of a definable outlet. Overtopping flows would then be presumed to sheet flow across and infiltrate the disturbed/ruderal areas within the southeastern portion of the Project site due to the lack of any definable bed, bank, channel, or water line east of Feature A's onsite terminus. Note that these areas did not exhibit a substantially different plant palette from other disturbed/ruderal areas within the Project site and Offsite Improvement areas during the field studies, with the exception of tarragon, which was only observed in association with the presumed infiltration area, and a locally dense patch of common sunflower and wild oats (Avena fatua). Therefore, pursuant to the definition as provided in Section 2.4 of the MSHCP, Feature A would not be regulated as a Riparian/Riverine area and would not be subject to MSHCP Riparian/Riverine policies under Section 6.1.2 of the Plan. Refer to Exhibit 6 for photographs that depict the presumed infiltration area.

The Project site and Offsite Improvement areas do not contain vernal pools as defined by the MSHCP or other ponding habitat with the potential to support listed fairy shrimp. As noted above in Section 2.4, 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. Vernal pools are associated with depressions where an underlying restrictive layer prevents rainwater from

draining downward into the subsoils. Rain fills the pools in the winter and early spring and remains in the depressions until the water gradually evaporates away; the pools become completely dry as early as the spring, though ponding can persist in some pools into the summer. The restrictive layer of vernal pools is typically the result of a soil texture (the amount of sand, silt, and clay particles) that contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (lacking oxygen or air) develop. The Project site and Offsite Improvement areas lack suitable topography such as localized depressions to support prolonged inundation necessary for vernal pool conditions to develop. No standing water or other evidence of ponding including mud cracks or road ruts were recorded during the field evaluation. In addition, the Project site and Offsite Improvement areas are mapped as containing sandy loam soils which are generally not associated with vernal pools or other ponding features, as they do not generally do not form an impermeable layer that results in ponding water as described above. Observations of the soils at the Project site and Offsite Improvement areas showed a lack of clay soil components. In addition, no plants were observed at the Project site or Offsite Improvement areas that are associated with vernal pools and similar habitats that experience prolonged inundation. Furthermore, the Project site and Offsite Improvement areas do not contain habitat for listed fairy shrimp including natural depression features such as vernal pools and non-vernal pool seasonal ponds, or artificially created features such as stock ponds, water quality basins, or any other human-created features with the potential to exhibit prolonged inundation.

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 2018 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.

5.2 Special-Status Species

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 or U.S. Fish and Wildlife Service."

5.2.1 Special-Status Plants

The proposed Project will not result in impacts to special-status plants.

5.2.2 Special-Status Animals

The proposed Project will result in the loss of habitat with varying degrees of potential to support foraging by the following special-status species: loggerhead shrike (SSC), northern harrier

(SSC), and white-tailed kite (CFP). Given the relatively small size and highly disturbed nature of the Project site and Offsite Improvement areas, any potential impacts to the above-referenced species would be less than significant because these species are all considered covered species pursuant to the MSHCP; therefore, the MSHCP addresses the loss of foraging habitat for these species.

5.3 Sensitive Vegetation Communities

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

The proposed Project would permanently impact approximately 16.74 acres of disturbed lands [Exhibit 8 – Vegetation/Land Use Impact Map]. Permanent impacts include approximately 5.41 acres of disturbed/developed (4.21 acres of which occur in association with the Project site and 1.20 acres of which occur in association with Offsite Improvement areas); and 11.33 acres of disturbed/ruderal (10.56 acres of which occur in association with the Project site and 0.77 acre of which occur in association with Offsite Improvement areas). Table 5-1 provides a summary of impacts to vegetation/land use types.

Vegetation/Land Use Type	Project Site (Acres)	Offsite Improvements (Acres)	Total Acreage
Disturbed/Developed	4.21	1.20	5.41
Disturbed/Ruderal	10.56	0.77	11.33
Total	14.77	1.97	16.74

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

No sensitive vegetation communities occur on the Project site or in Offsite Improvement areas; therefore, the proposed Project will not result in impacts to sensitive vegetation communities.

5.4 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."

The Project site and Offsite Improvement areas do not contain any State or federally protected wetlands; therefore, no impacts to State or federally protected wetlands would occur as a result of the proposed Project.

5.5 <u>Wildlife Movement and Native Wildlife Nursery Sites</u>

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

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

The Project site and Offsite Improvement areas lack migratory wildlife corridors and/or wildlife nursery sites and do not occur within any MSHCP Cores or Linkages. The proposed Project would not interfere with or impact (1) the movement of native resident or migratory fish or wildlife species, (2) established native resident or migratory wildlife corridors, or (3) the use of native wildlife nursery sites.

Any impacts to local wildlife movement occurring as a result of the proposed Project would be minor and would not rise to the level of significant pursuant to CEQA. The Project has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to August 31). Impacts to nesting birds are prohibited by the California Fish and Game Code.

Although impacts to migratory birds are prohibited by California Fish and Game Code, impacts to migratory birds by the proposed Project would not be a significant impact under CEQA. The migratory birds with potential to nest on the Project site and/or Offsite Improvement areas would be those that are extremely common to the region and highly adapted to human landscapes (e.g., killdeer, mourning dove). The number of individuals potentially affected by the Project would not significantly affect regional, let alone, local populations of such species because the species are so abundant and common in the area. A measure is identified in Section 6.0 of this report to avoid impacts to nesting birds.

5.6 Local Policies or Ordinances

Appendix G(e) of the State CEQA guidelines asks if a project is likely to "conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance."

The Project will not conflict with any local policies or ordinances protecting biological resources.

5.7 Habitat Conservation Plans

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

5.8 Jurisdictional Waters

The proposed Project will permanently impact Feature A and its associated 0.062 acre of potential Regional Board jurisdiction (none of which consists of State wetlands) [Exhibit 9A –

Potential Regional Board Jurisdiction Impact Map] and potential CDFW jurisdiction (none of which supports riparian habitat) [Exhibit 9B – Potential CDFW Jurisdiction Impact Map].

In the event that the regulatory agencies determine that Feature A is not a jurisdictional feature and regulatory permits are not required, then no further action will be taken. In the event that the regulatory agencies determine that Feature A is considered a regulated feature, the Project proponent will be pursuing regulatory permits from the Regional Board pursuant to Section 13260 of the CWC and CDFW pursuant to Division 2, Chapter 6, Section 1600–1616 of the California Fish and Game Code.

Impacts to Feature A occurring as a result of the proposed Project would be less than significant under CEQA due to the heavily disturbed nature of the Project site and Offsite Improvement areas, the low quality of the constructed shallow and concrete-lined feature, and the lack of wetlands and riparian habitat. Regardless, discussion of potential mitigation for impacts to Feature A will be provided pursuant to regulatory permitting, should it be deemed necessary, as described above. Refer to Section 6.0 below.

5.9 Indirect Impacts to Biological Resources

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to native open space. Note that the Project site and Offsite Improvement areas do not occur in proximity to the MSHCP Conservation Area; therefore, the MSHCP Urban/Wildlands Interface Guidelines (*Volume I, Section 6.1.4* of the MSHCP) do not apply to the Project.

5.10 Cumulative Impacts to Biological Resources

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

Given the small size and highly disturbed nature of the Project site and Offsite Improvement areas, the Project is not expected result in cumulative impacts that would rise to a level of significance under CEQA. Additionally, any potentially significant cumulative impacts occurring as a result of the proposed Project will be considered fully mitigated through participation in the MSHCP.

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

Portions of the Project site and Offsite Improvement areas contain 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 occur prior to site grading. As such, the following measure is recommended to avoid direct impacts to burrowing owls and to ensure consistency with the MSHCP.

• **Pre-Construction Survey.** A 30-day pre-construction survey for burrowing owls is required prior to future ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, 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 and/or Offsite Improvement areas prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Regional Conservation Authority (RCA) and the Wildlife Agencies and will need to coordinate in the future with the RCA and the Wildlife Agencies; this includes 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 owls have not colonized the site since it was last disturbed. If burrowing owls are found, the same coordination described above will be necessary.

Nesting Birds

Portions of the Project site and Offsite Improvement areas 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 take of 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 February 1 through August 31. 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

The Project site and Offsite Improvement areas do not contain any features, including Feature A, that are expected to be considered jurisdictional to the Corps, Regional Board, and/or CDFW. Therefore, the proposed Project is not expected to require regulatory permits. In the event that regulatory permits are not required for the proposed Project, then no further action will be taken.

Discussion of mitigation for impacts to Feature A is provided in the event that regulatory permitting should become necessary, as described above. The Project will permanently impact 0.062 acre of potential non-wetland waters of the State and potential CDFW jurisdiction, none of which supports riparian habitat. The following measure identifies mitigation proposed for impacts to potential jurisdictional waters, should mitigation be required:

• The Project Proponent shall compensate for permanent impacts to 0.062 acre of Regional Board and CDFW jurisdiction at a 2:1 mitigation-to-impact ratio through the purchase of 0.124 acre of rehabilitation, re-establishment, and/or establishment mitigation credits at an approved mitigation bank or in-lieu fee program within the San Jacinto River and/or Santa Ana River Watershed, such as the Riverpark Mitigation Bank. If enhancement or preservation credits are pursued due to the lack of availability of rehabilitation, re-establishment, and/or establishment mitigation credits, the ratio may be higher as determined on a case by case basis by the Regional Board and/or CDFW. The mitigation receipt from this fee payment will be provided to the Lead Agency prior to initiation of jurisdictional impacts.

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 site and Offsite Improvement areas do not occur within the MSHCP Criteria Area. Therefore, the proposed Project will not be subject to the HANS and/or JPR processes.

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

The proposed Project will not result in impacts to MSHCP Riparian/Riverine resources as none occur in association with the Project site and Offsite Improvement Areas. No vernal pools occur on the Project site or in Offsite Improvement areas; therefore, no impact to vernal pools or vernal pool species including listed fairy shrimp will occur as a result of the proposed Project.

7.3 Protection of Narrow Endemic Plants

Volume I, Section 6.1.3 of the MSHCP requires that within identified 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. However, the Project does not occur

within NEPSSA; therefore, the Project is not subject to any additional NEPSSA requirements pursuant to the MSHCP.

7.4 Guidelines Pertaining to the Urban/Wildland Interface

The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. As the MSHCP Conservation Area is assembled, development is expected to occur adjacent to the Conservation Area. Future development in proximity to the MSHCP Conservation Area may result in edge effects with the potential to adversely affect biological resources within the Conservation Area. The Project site is not in proximity to the MSHCP Conservation Area and therefore the Urban/Wildland Interface Guidelines do not apply to the Project.

7.5 Additional Survey Needs and Procedures

Focused burrowing owl surveys were conducted for the Project and no burrowing owl was detected; refer to Section 6.1 regarding additional information pertaining to burrowing owl procedures. As the Project does not occur within Amphibian and/or Mammal Survey Areas, no amphibian and/or mammal surveys are required. As the Project does not occur within the CAPSSA, no Criteria Area Plant Species surveys are required.

7.6 <u>Conclusion of MSHCP Consistency</u>

As outlined above, the proposed Project will be consistent with the biological requirements of the MSHCP; specifically pertaining to the Project's relationship to reserve assembly, *Section 6.1.2* (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), *Section 6.1.3* (Protection of Narrow Endemic Plant Species), *Section 6.1.4* (Guidelines Pertaining to the Urban/Wildlands Interface), and *Section 6.3.2* (Additional Survey Needs and Procedures).

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9.0 CERTIFICATION

april Nakagawa

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: October 7, 2020

(Revised November 24, 2020)

p:0849-58c.biotech

Exhibit 1

Regional Map

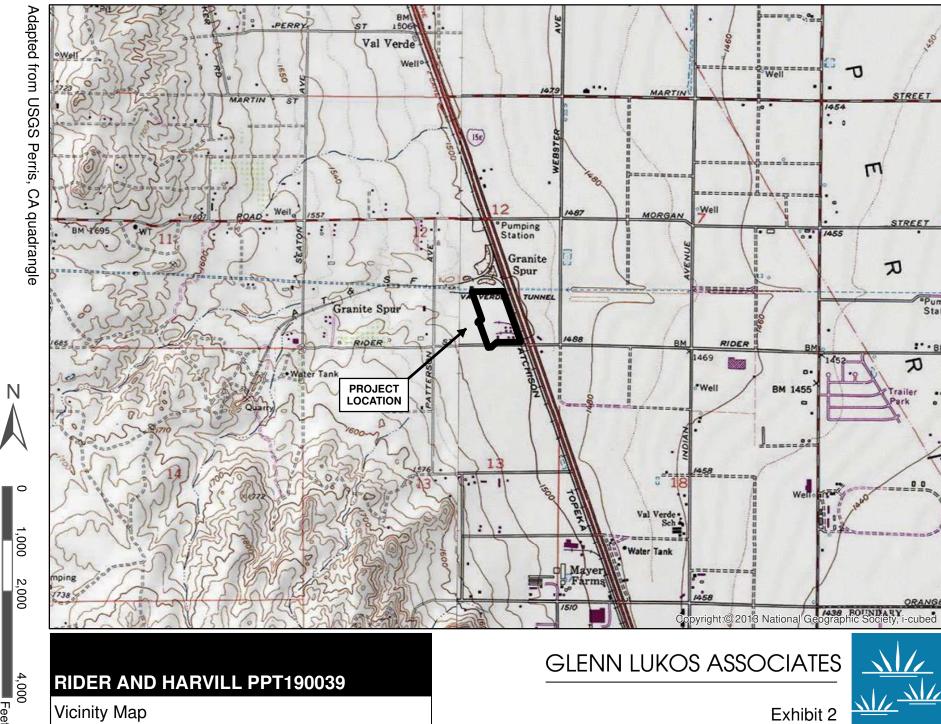
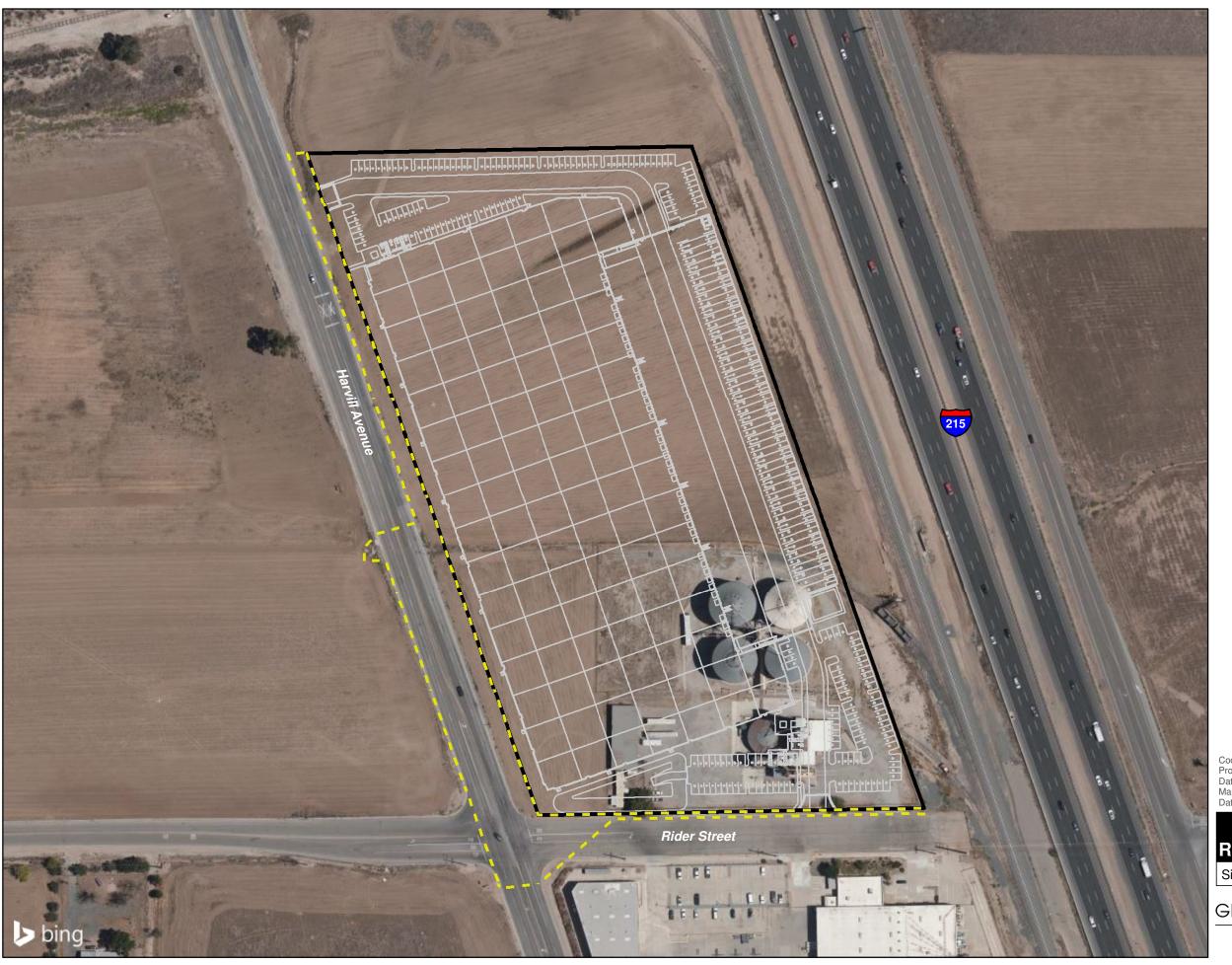
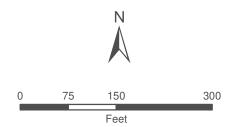


Exhibit 2







1 inch = 150 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: B. Gale, GLA Date Prepared: November 18, 2020

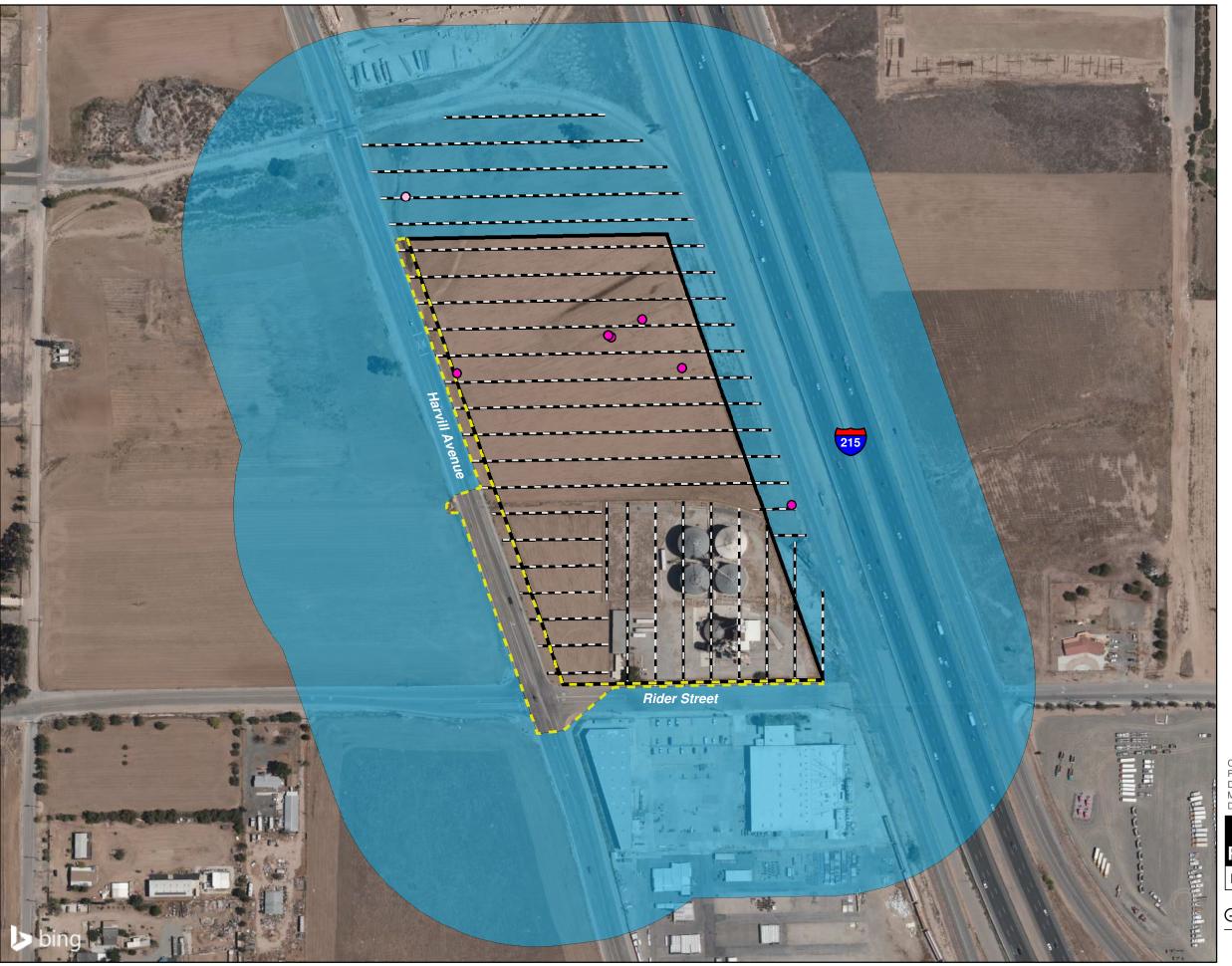


Site Plan Map

GLENN LUKOS ASSOCIATES



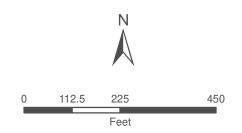






---- Transect

- Potentially Suitable Burrow
- Potentially Suitable Burrow Complex



1 inch = 225 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: B. Gale, GLA
Date Prepared: November 16, 2020

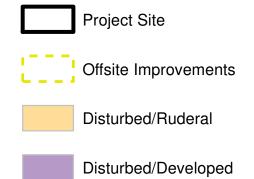
RIDER AND HARVILL PPT190039

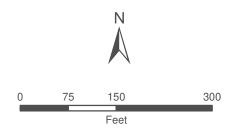
Burrowing Owl Survey Area Map

GLENN LUKOS ASSOCIATES









1 inch = 150 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: B. Gale, GLA Date Prepared: September 2, 2020

RIDER AND HARVILL PPT190039

Vegetation/Land Use Map

GLENN LUKOS ASSOCIATES



SVegetationGIS\849-58 Vegetat

Site Photographs





Photograph 1: View facing approximately northeast depicting disturbed/ruderal conditions. Disturbed/developed conditions and Harvill Avenue are visible to the left (latitude 33.830632°, longitude -117.248650°).



Photograph 3: View facing approximately north depicting disturbed/ruderal conditions. The onsite hill is visible to the right. Note the predominance of weedy, disturbancetolerant, herbaceous plant species (latitude 33.832096°, longitude -117.248784°).



Photograph 2: View facing approximately west depicting disturbed/developed conditions. Note the generally unvegetated substrate and spoils pile. Rider Street is visible to the left (latitude 33.830612°, longitude -117.246850°).



Photograph 4: View facing approximately southwest depicting Feature A and associated disturbed/ruderal conditions. Harvill Avenue is visible in the background (latitude 33.831807°, longitude -117.248428°).

Exhibit 6 - Page 2



Photograph 5: View facing approximately south depicting a potentially suitable burrow detected within the Project site during the 2020 focused burrowing owl surveys (latitude 33.832408°, longitude -117.247822°).



Photograph 7: View facing approximately southwest depicting the presumed sheet flow area downstream of Feature A and associated disturbed/ruderal conditions. Note 1) the absence of any flow indicators, and 2) the predominance of the same weedy, disturbance-tolerant, herbaceous plant species as other disturbed/ruderal areas onsite (latitude 33.832209°, longitude -117.247188°).



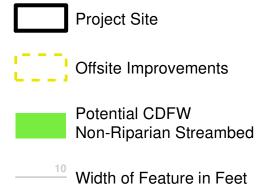
Photograph 6: View facing approximately northeast depicting a potentially suitable burrow to the left of a sandbag-enforced pipe detected within the 500-foot visual buffer during the 2020 focused burrowing owl surveys (latitude 33.831600°, longitude -117.246905°).

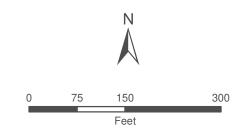


Photograph 8: View facing approximately east depicting disturbed/ruderal conditions associated with the presumed sheet flow area downstream of Feature A. Note 1) the absence of any flow indicators, and 2) the predominance of the same weedy, disturbance-tolerant, herbaceous plant species as other disturbed/ruderals areas onsite (latitude 33.831707°, longitude -117.247749°).









1 inch = 150 feet

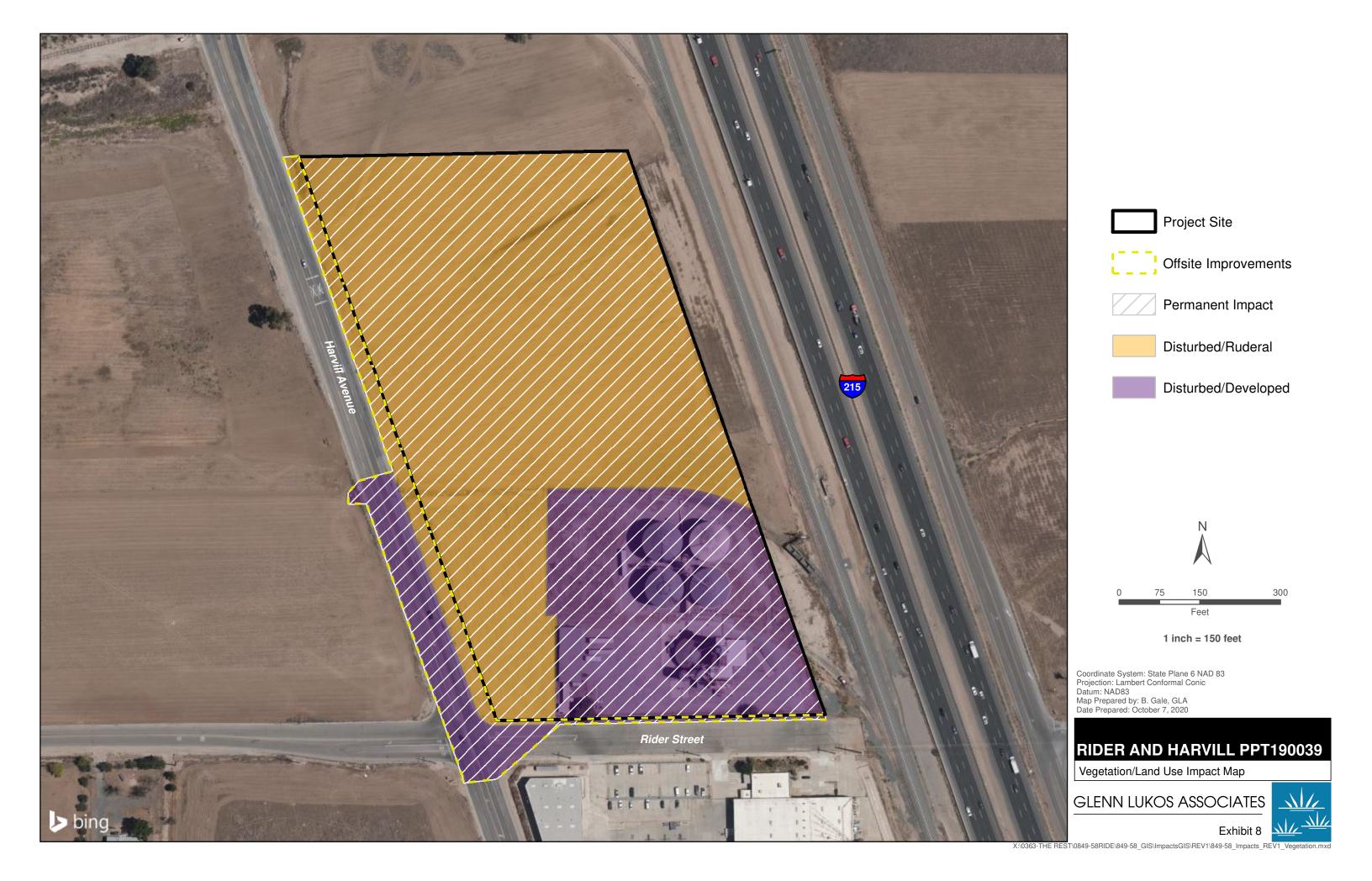
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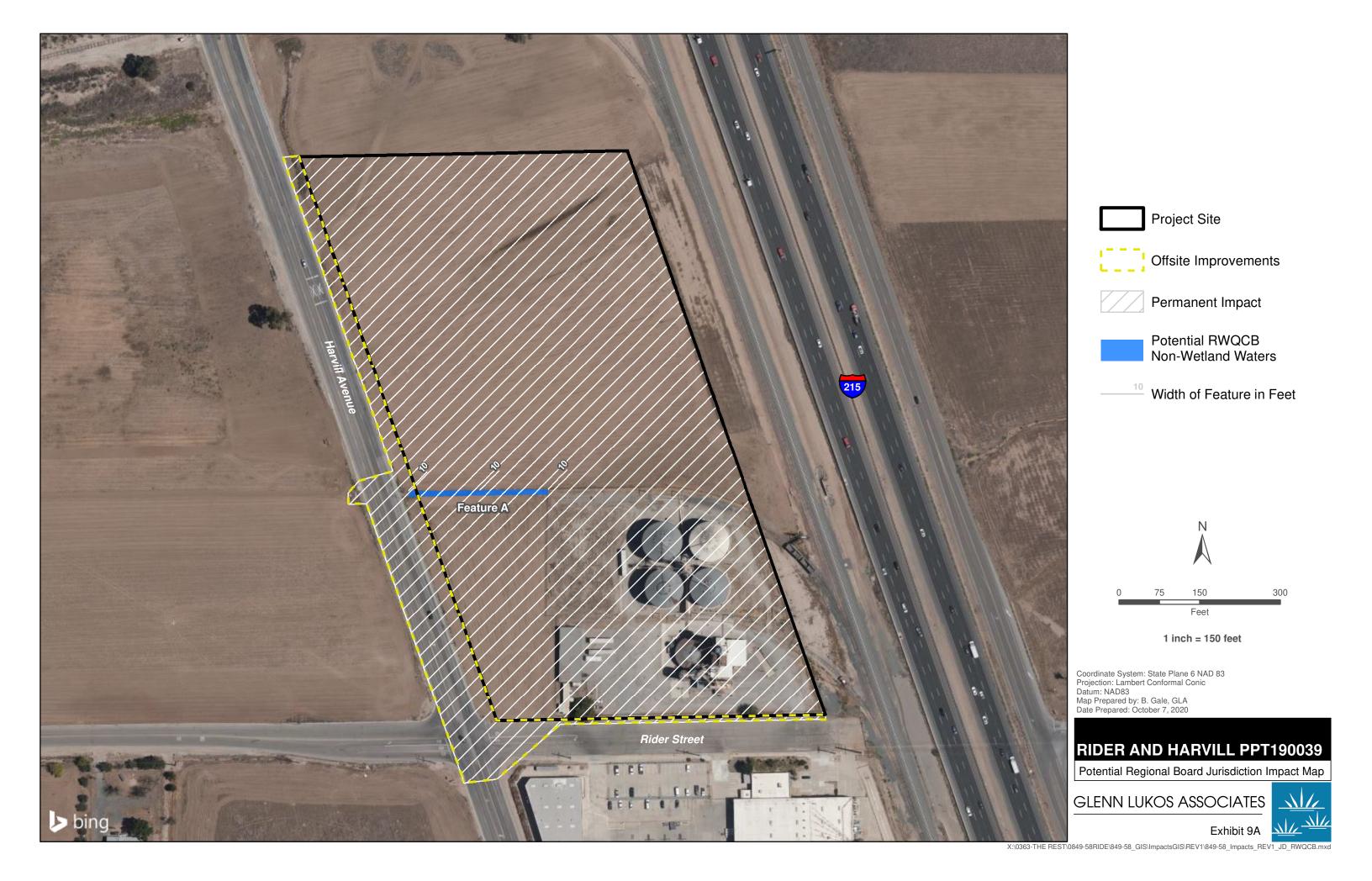
RIDER AND HARVILL PPT190039

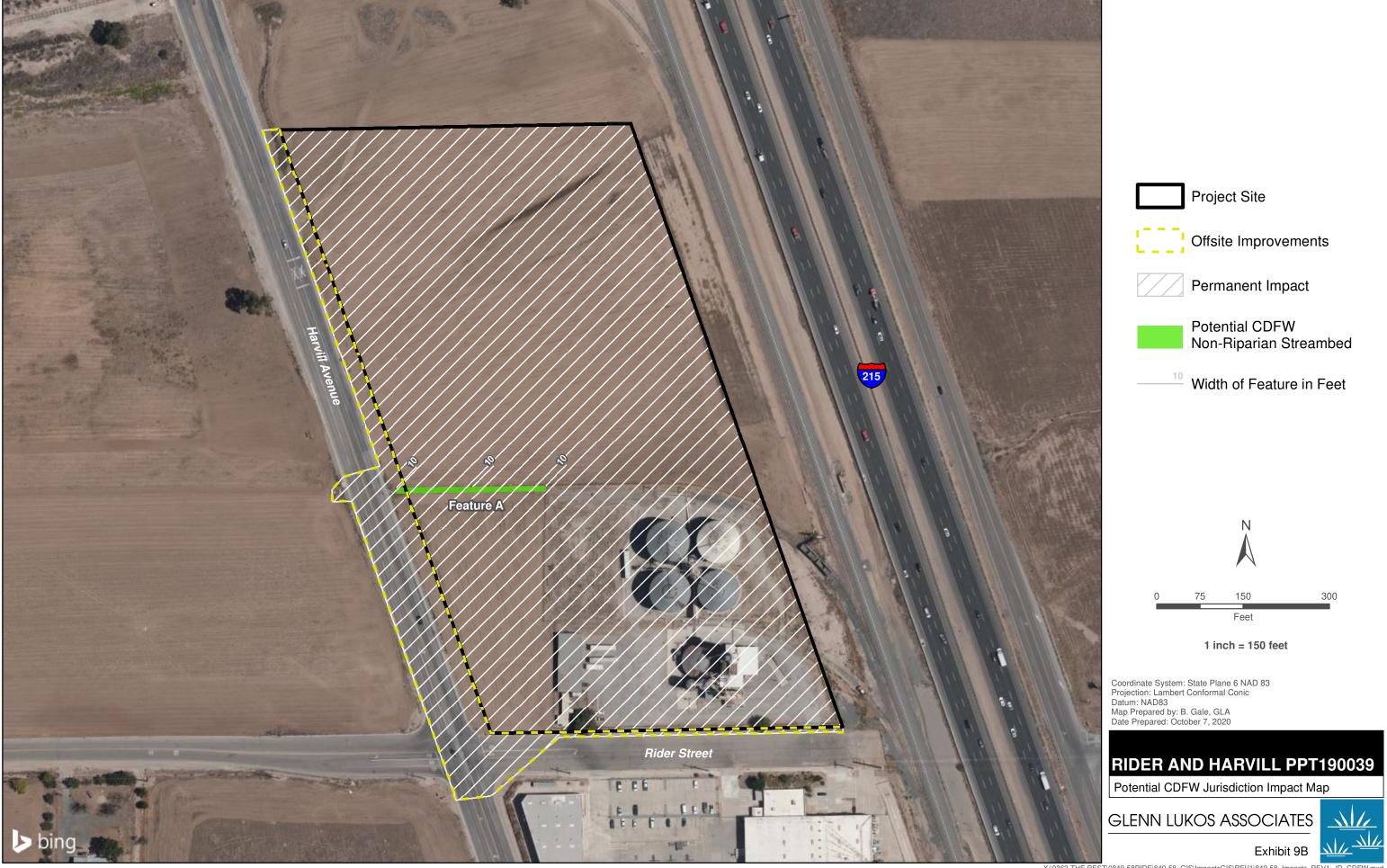
Potential CDFW Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES









APPENDIX A

FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows The Jepson Manual (Baldwin et al 2012). Common plant names are taken from Baldwin et al (2012), CNPS (2020), Calflora (2020), Munz (1974), and Roberts et al (2004) and Roberts (2008). + denotes special status

Scientific Name	Common Name	Native/ Invasive	Growth Form	
Family Asteraceae	Aster Family			
Ambrosia acanthicarpa	Annual burrweed	Native	Annual herb	
Artemisia dracunculus	Tarragon	native	Perennial herb	
Centaurea melitensis	Tocalote	Invasive	Annual herb	
Dittrichia graveolens	Stinkwort	invasive	Annual herb	
Erigeron canadensis	Canada horseweed	Native	Annual herb	
	Hairy leaved sunflower, common			
Helianthus annuus	sunflower	native	Annual herb	
Helminthotheca echioides	Bristly ox-tongue	invasive	Annual, Perennial herb	
Heterotheca grandiflora	Telegraph weed	Native	Annual, Perennial herb	
Heterotheca sessiliflora	Golden aster	Native	Annual, Perennial herb	
Lactuca serriola	Prickly lettuce	Invasive	Annual herb	
Lasthenia californica	Goldfields	native	Annual herb	
Logfia filaginoides	California cottonrose	Native	Annual herb	
Matricaria discoidea	Pineapple weed	Native	Annual herb	
Oncosiphon piluliferum	Stinknet	invasive	Annual herb	
Pseudognaphalium luteoalbum	Jersey cudweed	Non-native	Annual herb	
Senecio vulgaris	Common groundsel	Non-native	Annual herb	
Sonchus asper	Spiny sowthistle	Invasive	Annual herb	
Sonchus oleraceus	Sow thistle	Non-native	Annual herb	
Uropappus lindleyi	Silver puffs	native	Annual herb	
Family Boraginaceae	Borage Family			
Amsinckia intermedia	Common fiddleneck	Native	Annual herb	
Plagiobothrys nothofulvus	Rusty haired popcorn flower	native	Annual herb	
1 tagtobotti ys notnojatvas	Rusty haired popeoin flower	Hative	Aimuai nero	
Family Brassicaceae	Mustard Family			
Brassica nigra	Black mustard	invasive	Annual herb	
Brassica tournefortii	Saharan mustard	invasive	Annual herb	
Hirschfeldia incana	Summer mustard	invasive	Perennial herb	
Sisymbrium irio	London rocket	invasive	Annual herb	

Family Chenopodiaceae	Goosefoot Family		
Salsola tragus	Russian thistle	Invasive	Annual herb
Family Euphorbiaceae	Spurge Family		
Croton setiger	Turkey-mullein, doveweed	Native	Annual herb
Family Fabaceae	Pea Family		
Lupinus bicolor	Lupine	Native	Annual, Perennial herb
Family Geraniaceae	Geranium Family		
Erodium botrys	Big heron bill	non-native	Annual herb
Erodium cicutarium	Coastal heron's bill	invasive	Annual herb
Family Malvaceae	Mallow Family		
Malva parviflora	Cheeseweed	non-native	Annual herb
Family Myrtaceae	Myrtle Family		
Eucalyptus camaldulensis	Red gum	invasive	Tree
Family Poaceae	Grass Family		
Avena fatua	Wildoats	invasive	Annual grass
Bromus hordeaceus	Soft chess	invasive	Annual grass
Bromus madritensis	Foxtail chess, foxtail brome	non-native	Annual grass
Festuca perennis	Italian rye grass	invasive	Annual, Perennial grass
Hordeum murinum	Foxtail barley	invasive	Annual grass
Schismus barbatus	common mediterranean grass	invasive	Annual grass
Family Rosaceae	Rose Family		
Rosa sp.	Ornamental rose	non-native	Tree
Family Solanaceae	Nightshade Family		
Solanum virginianum	Yellow-berry nightshade	non-native	Perennial herb
Family Urticaceae	Nettle Family		
Urtica dioica	Stinging nettle	native	Perennial herb

APPENDIX B

FAUNAL COMPENDIUM

The faunal compendium lists species that were either observed within or adjacent to the Project site. Taxonomy and common names are taken from Pelham (2008)¹ for butterflies, AOU (1998 et seq.)² for birds, Crother (2012)³ for amphibian, turtle, and reptile taxonomy, and Wilson and Reeder (2005)⁴ for mammals. * denotes non-native species.

INVERTEBRATES

PIERIDAE

* Pieris rapae Pontia protodice

NYMPHALIDAE

Vanessa cardui

Whites and Sulphurs

cabbage white checkered white

Brush-Footed Butterflies

painted lady

REPTILES

PHRYNOSOMATIDAE

Uta stansburiana Sceloporus occidentalis **Phrynosomatid Lizards**

common side-blotched lizard western fence lizard

BIRDS

ACCIPITRIDAE

Accipiter cooperii Buteo jamaicensis

FALCONIDAE

Falco sparverius

CHARADRIIDAE

Charadrius vociferus

Hawks and Old World Vultures

Cooper's hawk red-tailed hawk

Caracaras and Falcons

American kestrel

Plovers and Relatives

killdeer

¹ Jonathan Pelham. 2008. Catalogue of the Butterflies of the United States and Canada. Journal of Research on the Lepidoptera 40: xiv + 658 pp. ²American Ornithologists' Union 1998. The A.O.U. Checklist of North American Birds, seventh edition. American Ornithologists' Union,

Washington D.C.; and 2000, 2002, 2003, and 2004 supplements.

³ Crother, B. I., ed. 2012. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding, 7th Edition. SSAR Herpetological Circular 39:1-92. Shoreview, MN: Society for the Study of Amphibians and Reptiles, Committee On Standard English And Scientific Names.

⁴ Wilson, D. E., and D. M. Reeder, eds. 2005. Mammal Species of the World: A Taxonomic and Geographic Reference, 3rd Edition. Baltimore, MD: Johns Hopkins University Press. Available online at http://www.bucknell.edu/msw3/browse.asp. No separate corrigenda or updates since initial publication.

COLUMBIDAE

- * Columba livia Patagioenas fasciata
- * Streptopelia decaocto Zenaida macroura

APODIDAE

Aeronautes saxatilis

TROCHILIDAE

Calypte anna

TYRANNIDAE

Sayornis nigricans Sayornis saya Tyrannus verticalis Tyrannus vociferans

CORVIDAE

Corvus brachyrhynchos Corvus corax

ALAUDIDAE

Eremophila alpestris

AEGITHALIDAE

Psaltriparus minimus

TROGLODYTIDAE

Thryomanes bewickii

MIMIDAE

Mimus polyglottos

STURNIDAE

* Sturnus vulgaris

PARULIDAE

Setophaga coronata

PASSERELLIDAE

Zonotrichia leucophrys

ICTERIDAE

Icterus cucullatus Sturnella neglecta

Pigeons and Doves

rock pigeon band-tailed pigeon Eurasian collared-dove mourning dove

Swifts

white-throated swift

Hummingbirds

Anna's hummingbird

Tyrant Flycatchers

black phoebe Say's phoebe western kingbird Cassin's kingbird

Crows and Jays

American crow common raven

Larks

horned lark

Long-Tailed Tits and Bushtits

bushtit

Wrens

Bewick's wren

Mockingbirds and Thrashers

northern mockingbird

Starlings

European starling

Wood Warblers and Relatives

yellow-rumped warbler

New World Sparrows

white-crowned sparrow

Blackbirds

hooded oriole western meadowlark

FRINGILLIDAE

Haemorhous mexicanus Spinus psaltria

PASSERIDAE

* Passer domesticus

PASSERELLIDAE

Passerculus sandwichensis

MAMMALS

LEPORIDAE

Sylvilagus audubonii

GEOMYIDAE

Thomomys bottae

SCIURIDAE

Otospermophilus beecheyi

Finches and Allies

house finch lesser goldfinch

Old World Sparrows

house sparrow

New World Sparrows

savannah sparrow

Rabbits and Hares

desert (Audubon's) cottontail

Pocket Gophers

Botta's pocket gopher

Squirrels, Chipmunks, and Marmots

California ground squirrel



April 14, 2020

Tracy Zinn T&B Planning, Inc. 17542 East 17th Street, Suite 100 Tustin, California 92780

Jurisdictional Determination of Rider and Harvill PPT 190039, an Approximately SUBJECT:

15-Acre Property Located in Mead Valley, Riverside County, California

Dear Ms. Zinn:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW) jurisdiction for the above-referenced property.¹

The Rider and Harvill PPT 190039 Project (Project) in Mead Valley, Riverside County [Exhibit 1 – Regional Map], comprises approximately 15 acres and does not contain any blue-line drainages (as depicted on the U.S. Geological Survey (USGS) topographic map Perris, California [dated 1967 and photorevised in 1979]) [Exhibit 2 – Vicinity Map]. The Project site is bordered by undeveloped land and industrial uses to the north, Interstate 215 to the east, Rider Street to the south, and Harvill Avenue to the west.

On January 10, 2020, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the Project site to determine whether the site contained features potentially subject to (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), (2) Regional Board jurisdiction pursuant to Section 401 of the CWA and Section 13260 of the California Water Code (CWC), and (3) CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code. Enclosed is a 150-scale map [Exhibit 3 – Aerial Map] that depicts the Project site, including the Project boundary. A soil map is including as Exhibit 4 – Soils Map. Photographs to document the topography, vegetative communities, and general site conditions are provided as Exhibit 5 – Site Photographs. Historical aerial photographs are provided as Exhibits 6 - 8.

¹ This report presents our best effort at estimating the subject jurisdictional boundaries using the most up-to-date regulations and written policy and guidance from the regulatory agencies. Only the regulatory agencies can make a final determination of jurisdictional boundaries.

No Corps, Regional Board, or CDFW jurisdiction is associated with the Project site.

I. METHODOLOGY

Prior to beginning the field determination, a color aerial photograph, a topographic base map of the property, the previously cited USGS topographic map, and a soils map were examined to determine the locations of potential areas of Corps, Regional Board, and CDFW jurisdiction. Suspected jurisdictional areas were field checked for evidence of stream activity and/or wetland vegetation, soils and hydrology. Where applicable, reference was made to the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (OWHM Manual)² to identify the presence of Corps jurisdiction. The potential for wetland habitats on the site was evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual³ (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement, Version 2.0 (Arid West Supplement).⁴ While in the field the areas evaluated for Corps, Regional Board and CDFW jurisdiction were recorded with a sub-meter Trimble GPS device in conjunction with a color aerial photograph using visible landmarks.

The National Resources Conservation Service (NRCS) has mapped the following soil types as occurring in the general vicinity of the Project site [Exhibit 4]:

Greenfield sandy loam, 0 to 2 percent slopes and Greenfield sandy loam, 2 to 8 percent slopes

The Greenfield series consists of deep, well drained soils that formed in moderately coarse and coarse textured alluvium derived from granitic and mixed rock sources. Greenfield soils occur on alluvial fans and terraces and have slopes of 0 to 30 percent. Soils in the Greenfield series generally range from slightly acid to mildly alkaline.

Ramona sandy loam, 0 to 2 percent slopes and Ramona sandy loam, 2 to 5 percent slopes, eroded

The Ramona series is a member of the fine-loamy, mixed, thermic family of Typic Haploxeralfs. Ramona soils are nearly level to moderately steep.

² U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.

³ Environmental Laboratory. 1987. <u>Corps of Engineers Wetlands Delineation Manual</u>, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

⁴ U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

The Ramona series consists of nearly level to moderately steep well drained soils that formed in alluvium derived mostly from granitic and related rock sources. Soils in the Ramona series generally range from neutral to medium acid.

II. JURISDICTION

A. Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, 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.

 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 Clean Water Act.

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 <u>abutted</u> a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

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

Therefore, we believe that the court's opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act (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 Clean Water Act 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 sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPMs) 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 Corps and EPA 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 Corps and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- 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 the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland 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 Wetland Manual and Arid West 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 List⁵,⁶);
- 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

⁵ 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.

⁶ 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.

indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

• Whereas the Wetland 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.

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 States⁷ 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 (Porter-Cologne) 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.

⁷ 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.

1. <u>State Wetland Definition</u>

The Water Boards define an area as wetland⁸ 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; 9 and
- 3. Artificial wetlands 10 that meet any of the following criteria:
 - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
 - b. Specifically identified in a water quality control plan as a wetland or other water of the state;
 - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
 - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):
 - i. Industrial or municipal wastewater treatment or disposal,
 - ii. Settling of sediment,
 - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
 - iv. Treatment of surface waters,

⁸ State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. [For Inclusion in the Water Quality Control Plans for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California].

⁹ "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.

¹⁰ Artificial wetlands are wetlands that result from human activity.

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. 11

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.

C. California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 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 manmade 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

¹¹ 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.

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.

III. RESULTS

A single constructed feature (herein referred to as "Feature A") occurs in the approximate center of the Project site and is depicted on Exhibit 3. Feature A consists of a ten-foot-wide by 243-foot-long by one-foot-deep concrete-lined ditch with vertical concrete side walls. Feature A originates at the western project boundary at a concrete culvert that runs under Harvill Avenue and terminates within the property boundary. No signs of flow were observed within Feature A and no storm drain or other drainage connection occurs at its terminus.

Vegetation within the feature consists entirely of upland non-native weedy species including broad leaf filaree (*Erodium botrys*, FACU), red stem filaree (*Erodium cicutarium*, NI), Russian thistle (*Salsola tragus*, FACU), and various non-native upland annual grasses. These upland species are supported by a shallow layer of sediment that has filled in the ditch over time.

There are no upstream drainage features west of Harvill Avenue that discharge into the culvert. A review of historical aerial photographs from 1967 [Exhibit 6 – 1967 Historical Aerial Map] and 1978 [Exhibit 7 – 1978 Historical Aerial Map] shows the absence of any drainage feature at the location of the culvert and shows the absence of a drainage at or near the location of the constructed concrete feature. Thus, Feature A does not represent a realigned drainage course or an impoundment of an existing watercourse.

Sometime between 1978 and 1994, as depicted in the historical aerial photograph from 1994 [Exhibit 8 – 1994 Historical Aerial Map] Feature A was constructed and is visible within the Project site. Across Harvill Avenue to the west, the 1994 aerial depicts the property as a disturbed site, which is a similar condition as the earlier historical aerials and the current condition. Presumably, the culvert and concrete channel within the Project site were constructed to prevent the accumulation of sheet flows from the adjacent property west of Harvill Avenue from potentially flooding the Project site during heavy rain events. If not for the presence of the culvert and shallow concrete vertical side walls, Feature A would blend into the Project site as part of the upland ruderal habitat.

A. Corps Jurisdiction¹²

There is no Corps jurisdiction associated with the Project site. Feature A was constructed wholly in uplands and is not a realigned drainage course or an impoundment of an existing watercourse. Thus, Feature A is not a jurisdictional water that would be subject to Corps jurisdiction pursuant to Section 404 of the CWA.

B. Regional Water Quality Control Board Jurisdiction

No Regional Board jurisdiction is associated with the Project site. As described above, no signs of flow were observed within Feature A and no storm drain or other drainage connection occurs at its terminus. Feature A does not represent a realigned drainage course or an impoundment of an existing watercourse. This concrete-lined feature currently functions as part of the surrounding upland vegetation community.

1. <u>Santa Ana Regional Basin Plan</u>

Section 3 of the Santa Ana Region Basin Plan¹³ (Basin Plan) defines a beneficial use as *one of* the various ways that water can be used for the benefit of people and/or wildlife. Examples include drinking, swimming, industrial and agricultural water supply, and the support of fresh and saline aquatic habitats.

The Project site is located within the Perris-North Management Zone of the Basin Plan. The following beneficial uses are associated with the Perris-North Management Zone and are outlined as follows:

- 1. Municipal and Domestic Supply (MUN) waters are used for community, military, municipal or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
- 2. Agricultural Supply (AGR) waters are used for farming, horticulture or ranching. These uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.

¹² On January 23, 2020, the U.S. Environmental Protection Agency (EPA) and the Corps finalized the *Navigable Waters Protection Rule* to redefine "Waters of the United States" and thereby establish federal regulatory authority under the Clean Water Act. The *Navigable Waters Protection Rule* is expected to be published in the Federal Register in the second quarter of 2020 and will become effective 60 days after publication in the Federal Register. Implementation of the *Navigable Waters Protection Rule* may result in a change to the delineated areas of Corps jurisdiction as outlined in this report.

¹³ California Regional Water Quality Control Board Santa Ana Region. 2019. Water Quality Control Plan Santa Ana River Basin (8).

- 3. Industrial Service Supply (IND) waters are used for industrial activities that do not depend primarily on water quality. These uses may include, but are not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection and oil well repressurization.
- 4. Industrial Process Supply (PROC) waters are used for industrial activities that depend primarily on water quality. These uses may include, but are not limited to, process water supply and all uses of water related to product manufacture or food preparation.

In its current condition, Feature A is vegetated with non-native ruderal vegetation and, consistent with the lack of an upstream drainage course, does not convey flow or discharge capable of maintaining an OHWM or other measurable lateral surface flow that would contribute to Municipal, Agricultural, or Industrial uses. Therefore, Feature A does not contribute to any of the identified beneficial uses pursuant to the Basin Plan. Furthermore, its concrete-lined nature, the predominance of non-native ruderal vegetation, and the general lack of flow indicate that Feature A is functionally equivalent to the adjacent uplands in terms of aquatic functions and values. Thus, Feature A would not be subject to regulation by the Regional Board pursuant to Section 401 of the CWA or to the Waste Discharge Requirements of Porter-Cologne.

C. CDFW Jurisdiction

No CDFW jurisdiction is associated with the Project site. As described above, Feature A is not a realigned drainage course and there is no evidence of historical flows that may have existed at this location. The feature does not convey or impound sufficient water in its current condition to support wetland or riparian habitat or aquatic wildlife, including avifauna; therefore, Feature A does not provide suitable habitat for fish and/or other wildlife. Feature A exhibits conditions consistent with the surrounding uplands, providing only marginal foraging habitat for upland terrestrial species due to the low vegetative diversity and the constructed nature of the feature. Thus, Feature A would not be subject to the Notification requirements of Section 1602 of the California Fish and Game Code.

If you have any questions about this letter report, please contact April Nakagawa at (949) 340-2593 or Trina Ming at (949) 340-6762.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

April Nakagawa

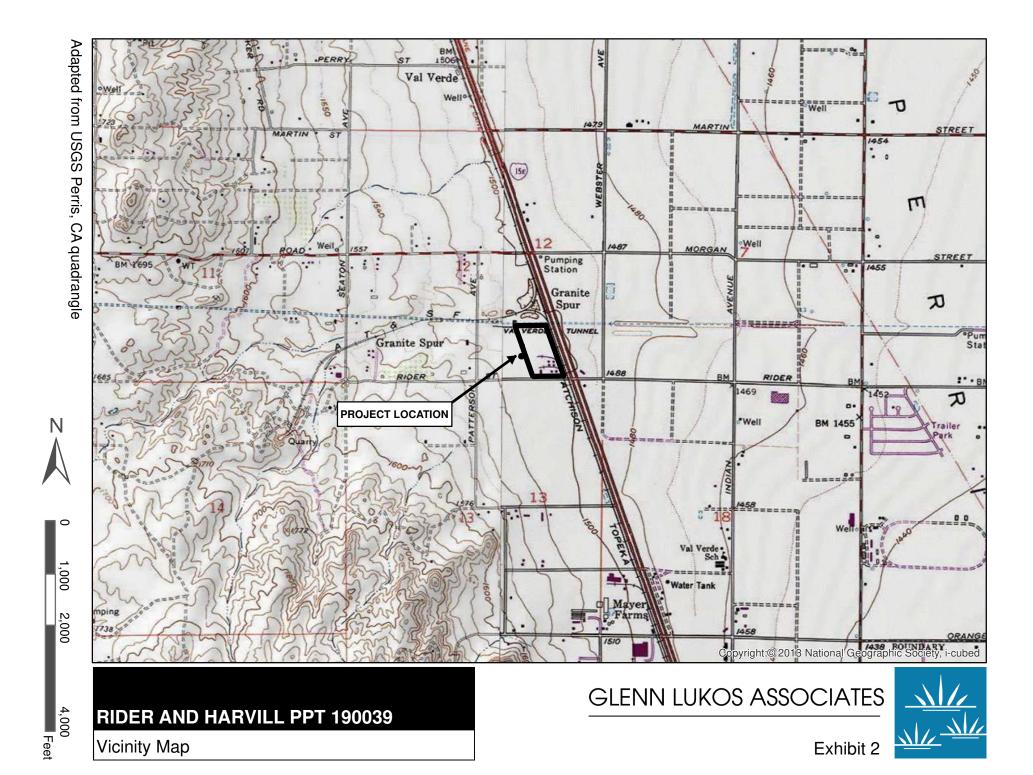
Biologist/Regulatory Specialist

april Nakegawa

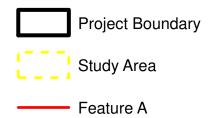
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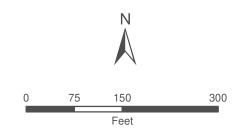
Trina Ming

Habitat Restoration Specialist









1 inch = 150 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: B. Gale, GLA Date Prepared: April 6, 2020

RIDER AND HARVILL PPT190039

Aerial Map

GLENN LUKOS ASSOCIATES



Exhibit 3

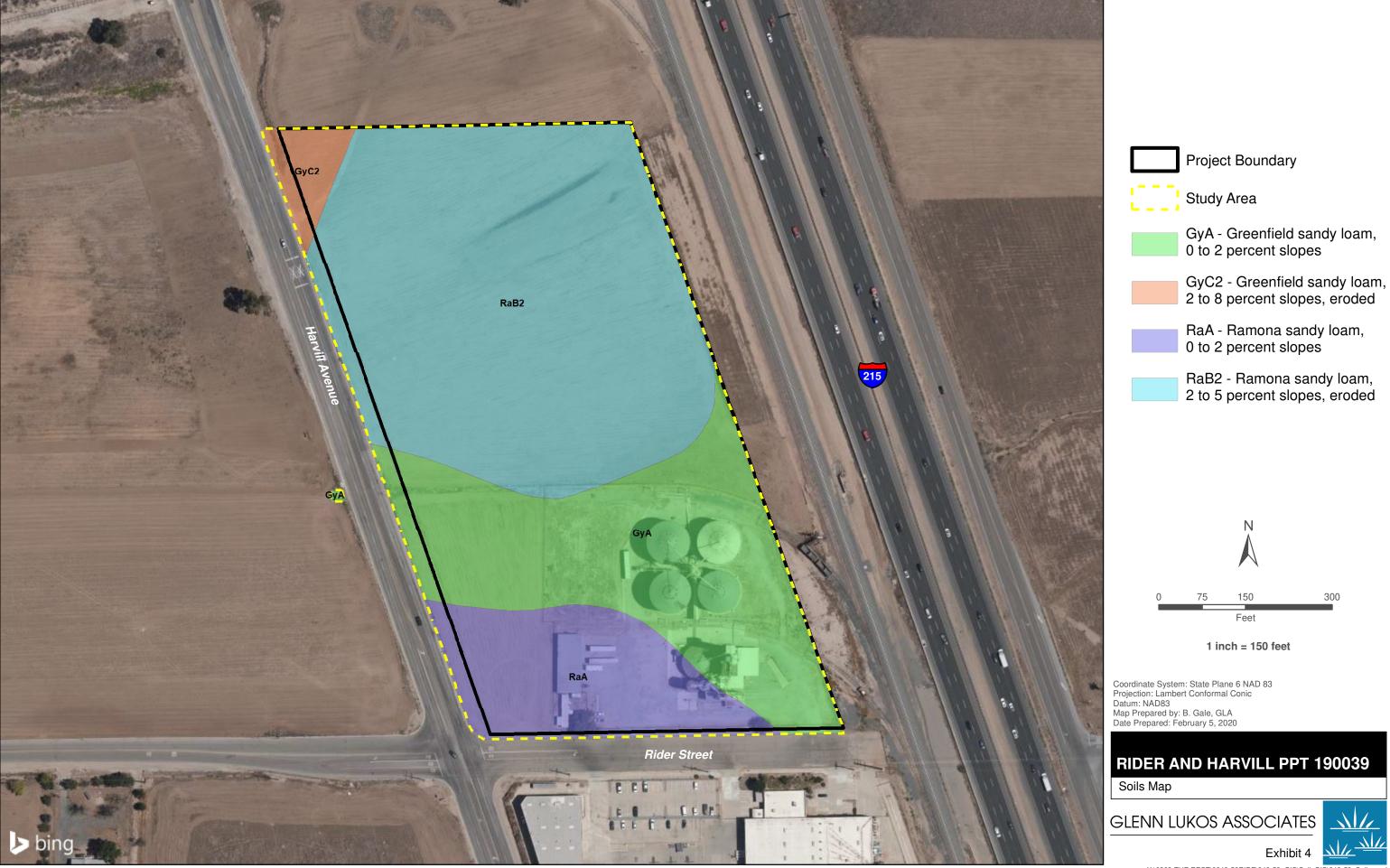


Exhibit 5 - Page 1

Site Photographs



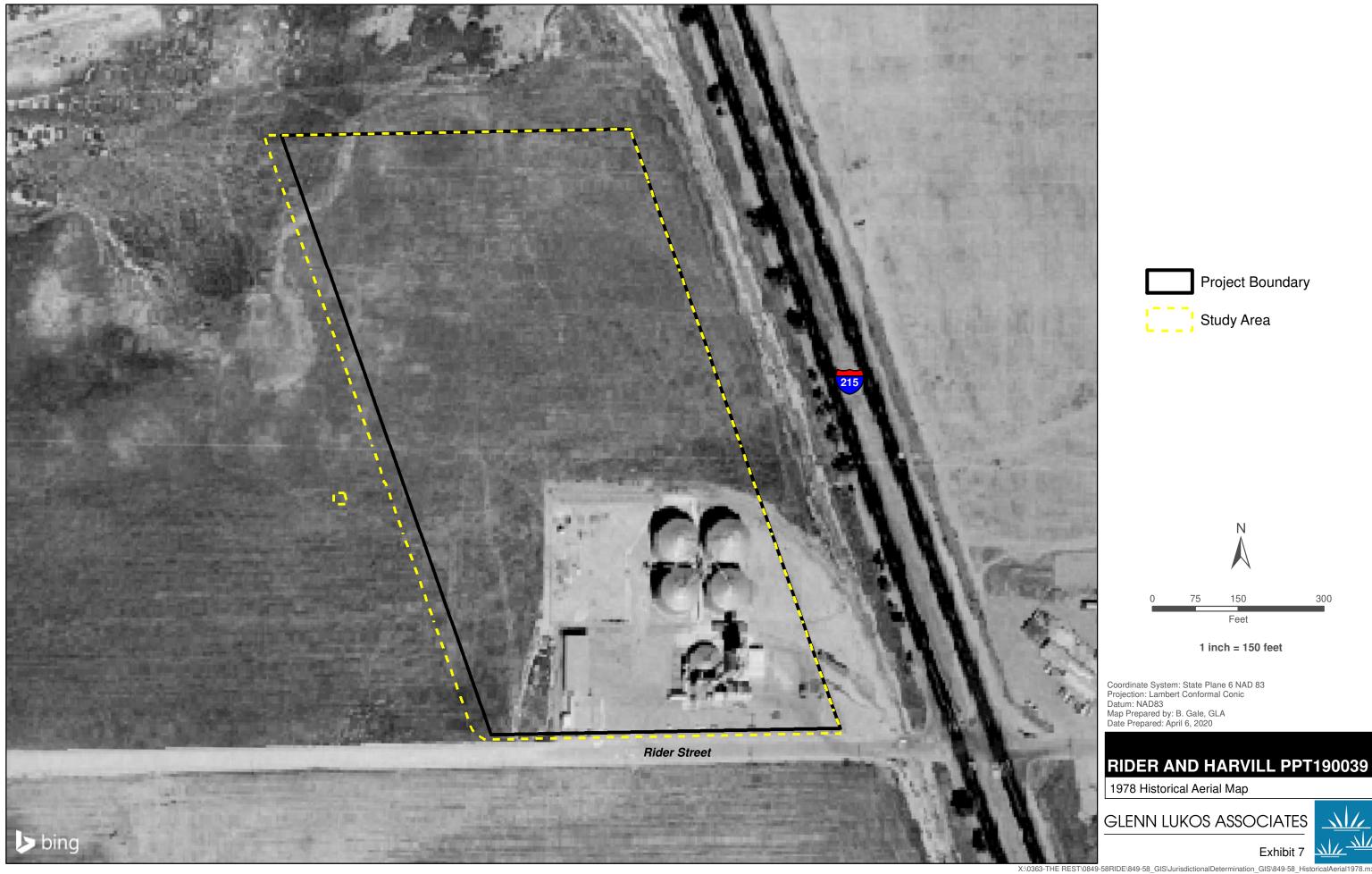
Photograph 1: View facing approximately north depicting ruderal upland conditions typical of the Project site. Harvill Avenue is visible to the left.



Photograph 2: View of Feature A facing east depicting ruderal upland conditions typical of the Project site.

AND HARVILL PPT 190039





300

