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An Employee-Owned Company

February 21, 2025

Mr. Paul Mayer
Pemcor Properties, Inc.
P.O. Box 903
Rancho Santa Fe, CA 90067

Reference: Biological Resources Letter Report for the Zeiders Road Project, Menifee, California (RECON Number 10420)

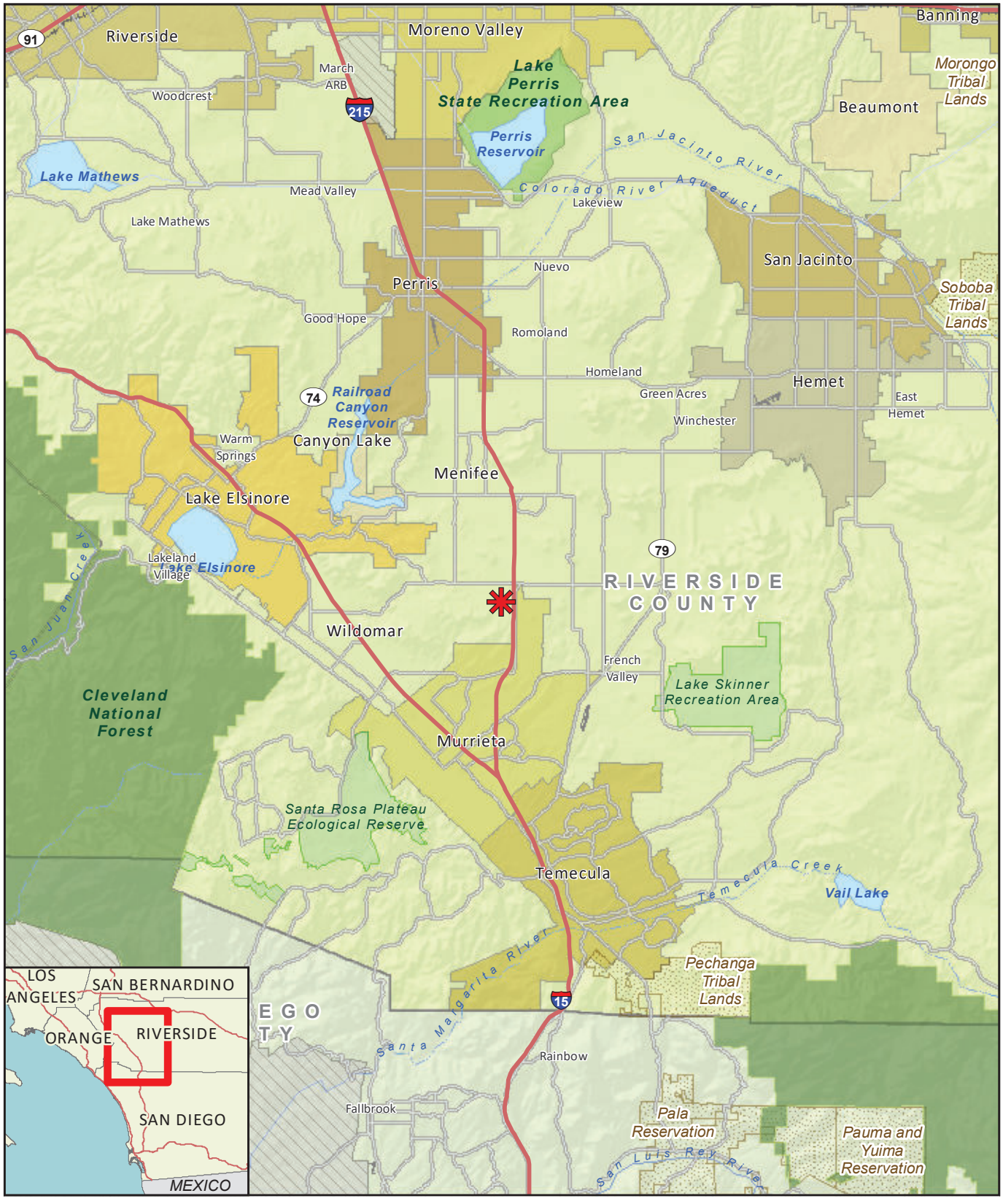
Dear Mr. Mayer:

This report summarizes the biological resources survey methods and results, assessment of potential impacts to biological resources, and required mitigation measures for the Zeiders Road Project (project).

1.0 PROJECT LOCATION AND DESCRIPTION

The project is located west of Interstate 215 in the southern portion of the city of Menifee, California (Figure 1). The project is within Section 22, Township 06 South, Range 03 West of the U.S. Geological Survey (USGS) 7.5-minute topographic map, Romoland quadrangle (Figure 2; USGS 1979). More specifically, the project is in Assessor's Parcel Number 384-150-001 and in between Zeiders Road and Howard Road (Figure 3). The project is located within a Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Narrow Endemic Plant Species Survey Area (NEPSSA) and a burrowing owl (*Athene cunicularia*) survey area identified in the MSHCP (Western Riverside County Regional Conservation Authority [WRCRCA] 2003). The project is not located inside or immediately adjacent to any Criteria Area, Criteria Cell, Public/Quasi-Public Conserved Lands, or Conservation Area identified for conservation potential by the MSHCP (WRCRCA 2003; Figure 4).

Pemcor Properties, Inc. has proposed development of a multi-building commercial complex, located at 33521 Zeiders Road. The complex design consists of 11 one-story buildings with mezzanines totaling approximately 330,000 square feet (approximately 300,000-square-foot total building footprint) on 19.51 acres. The project also includes 2.05 acres of off-site road improvements. The proposed commercial/industrial uses include primarily light manufacturing and manufacturing, assembly, ancillary storage, and distribution and showroom. As part of the preliminary grading design, bioretention basins and underground detention vaults were incorporated in the project. Landscaping meeting the City's landscape and water efficiency requirements is also proposed throughout the site. Construction is expected to take approximately 18 months to complete.



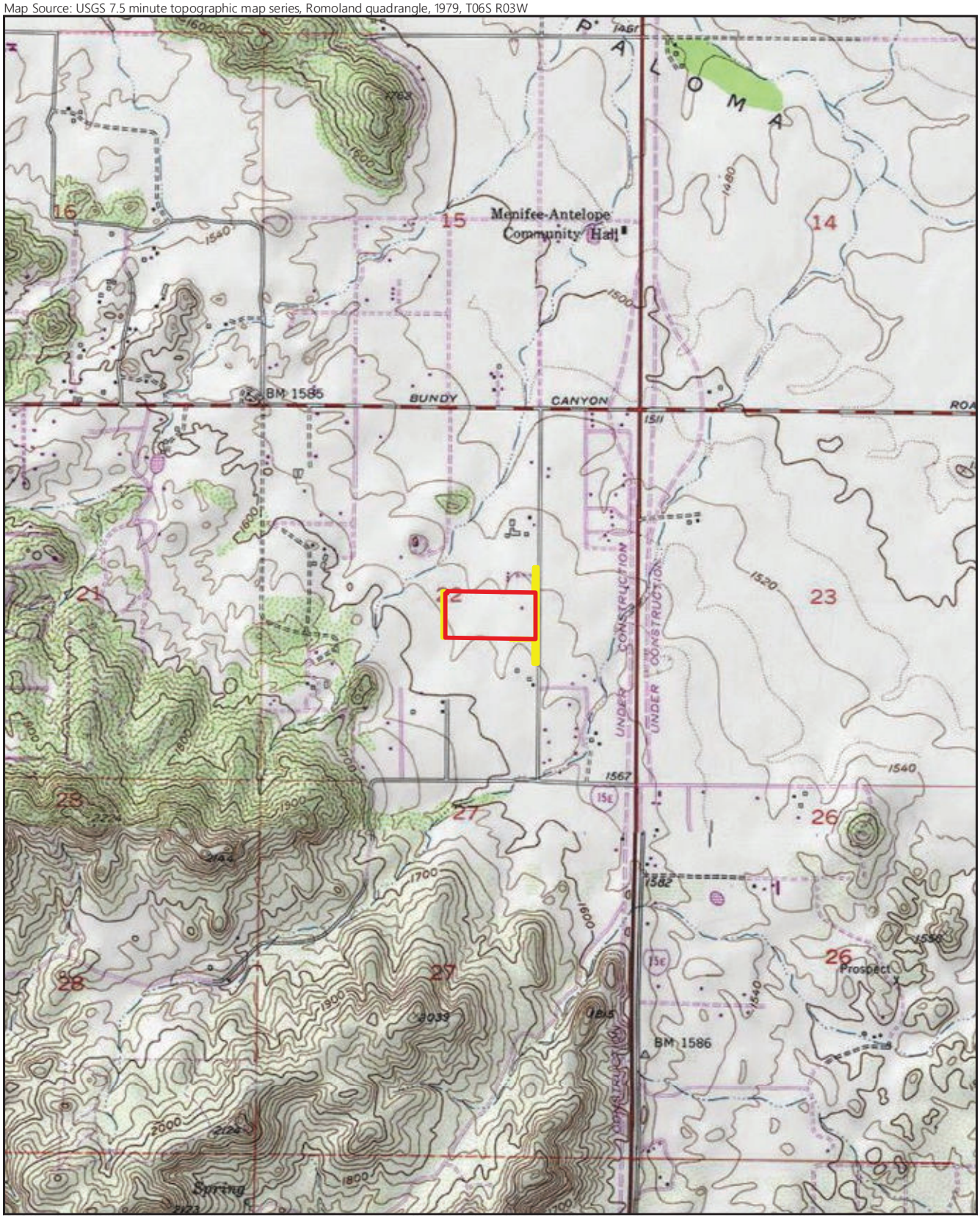
Project Location

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FIGURE 1
Regional Location

Map Source: USGS 7.5 minute topographic map series, Romoland quadrangle, 1979, T06S R03W

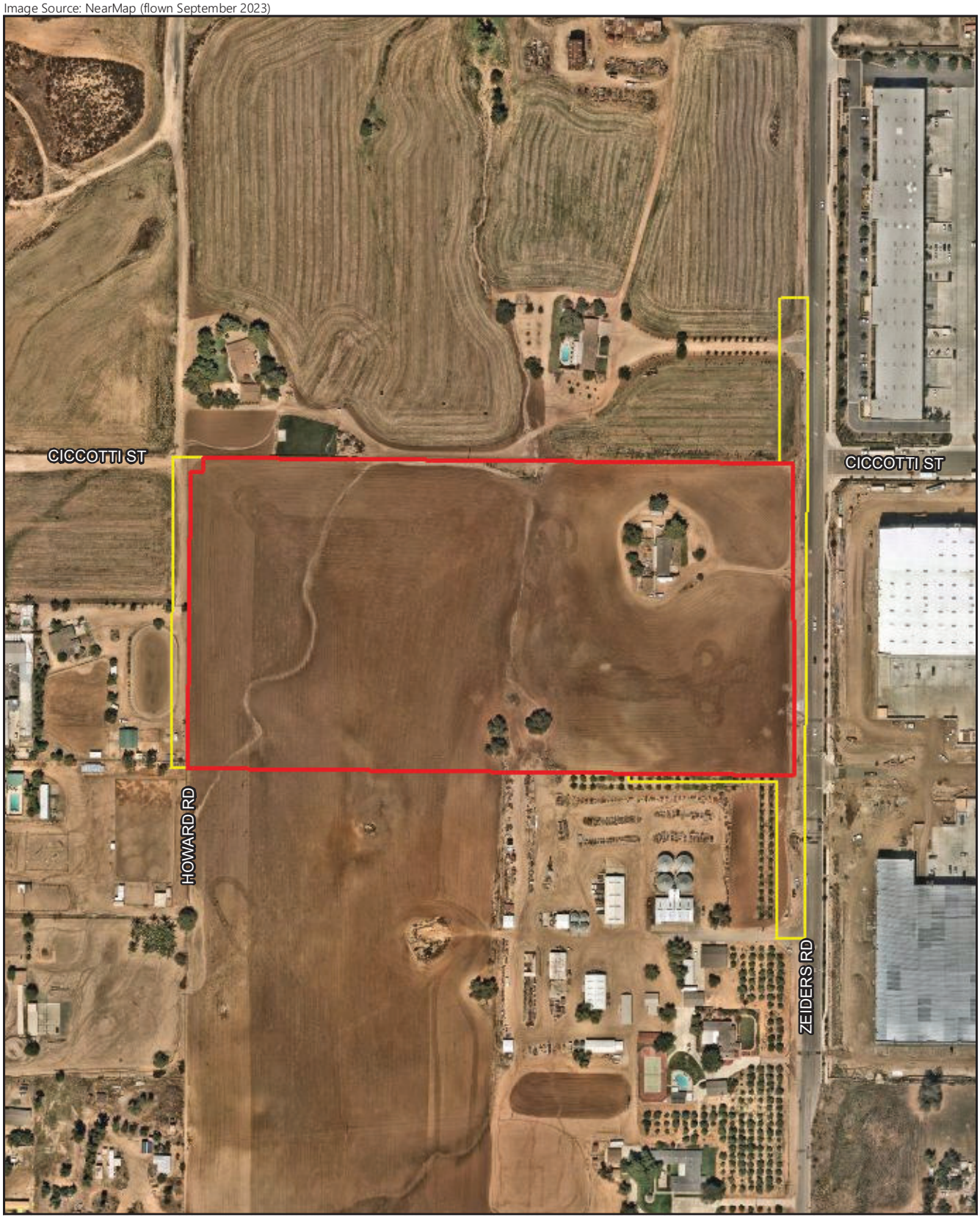


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FIGURE 2
Project Location on USGS Map

Image Source: NearMap (flown September 2023)

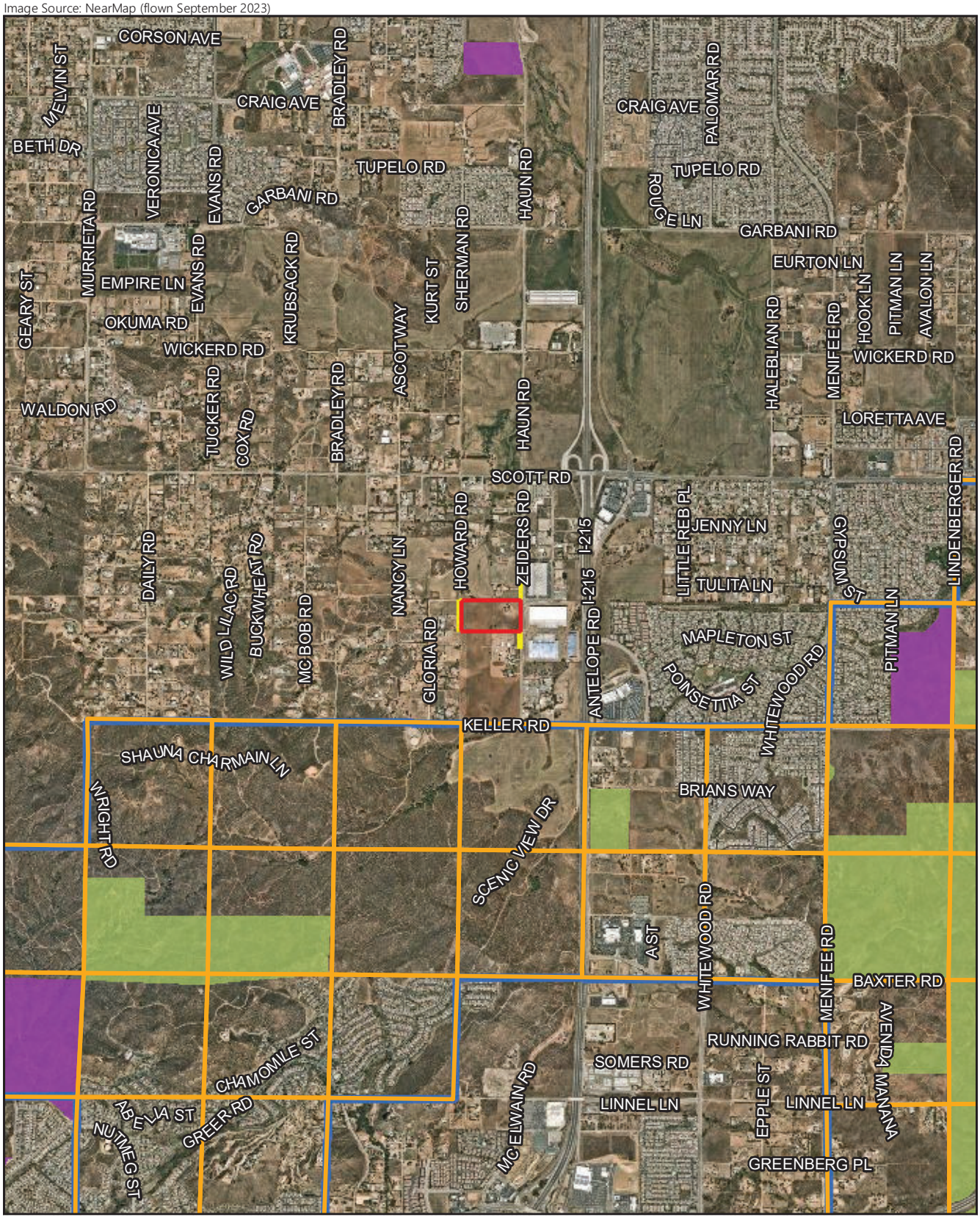


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FIGURE 3
Project Location on Aerial Photograph

Image Source: NearMap (flown September 2023)



Project Boundary
Off-site Improvements
Criteria Areas
Criteria Cells
Conserved Lands
Public/Quasi-Public Lands

0 Feet 3,000

FIGURE 4
Project in Relation to MSHCP Preserve Areas

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2.0 METHODS

A general biological survey and MSHCP consistency assessment was conducted by RECON Environmental, Inc. (RECON) biologist Beth Procsal on September 22, 2023, to document existing conditions within the project site. The survey area included the entire 19.51-acre project site and the 2.05-acre off-site improvement areas (see Figure 3). The survey area was walked using meandering transects to provide complete visual coverage of the project site, and vegetation communities/land cover types were mapped on high resolution aerial imagery using ESRI Collector. Wildlife species were observed directly or detected from calls or observations. All plant species observed during the survey were also noted, and plants that could not be identified in the field were identified later using taxonomic keys. The survey also included an evaluation of habitat suitability for special-status species based on the literature and database review, as well as MSHCP resources including riparian/riverine areas, riparian birds, vernal pools, fairy shrimp, and covered species.

A routine waters/wetland delineation, following the guidelines set forth by the U.S. Army Corps of Engineers (USACE; 1987 and 2008), was performed by RECON biologist Chelsea Polevy on September 22, 2023, to gather field data at locations where aquatic resources occur in the project site. The survey area was examined to determine the presence and extent of any aquatic resources and an evaluation of the potential for federal and state jurisdictional areas was made. Research conducted prior to conducting the field work included reviewing the aerial photograph, USGS topographic maps, U.S. Department of Agriculture (USDA) soil maps of the site, and the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) (USFWS 2023a) to aid in the determination of potential jurisdictional waters on-site. The Aquatic Resource Delineation Letter Report, analysis, and requisite data forms are included in Attachment 1.

Due to the presence of the project within the MSHCP burrowing owl survey area, the project site was then surveyed by RECON on September 22, 2023, in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (WRCRA 2006). The survey consisted of a Step I Habitat Assessment and Step II, Part A Focused Burrow Survey to determine the presence or absence of suitable habitat and burrows within the survey area and surrounding 150-meter buffer. Transects spaced no more than 100 feet apart were walked through all suitable habitat identified within the project site. Habitat within private property off-site within the 150-meter buffer was evaluated visually from the edge of the survey area as access to private properties was not granted. Further details are provided in the Burrowing Owl Habitat Assessment Results report in Attachment 2.

Floral nomenclature for common plants follows the Jepson Online Herbarium (Jepson Flora Project 2023), for ornamental plants Brenzel (2001), and for sensitive plants California Native Plant Society (CNPS; 2023). Vegetation community classifications follow the MSHCP (WRCRCA 2003), which is based on Holland's 1986 Preliminary Descriptions of the Terrestrial Natural Communities of California. Zoological nomenclature for birds is in accordance with the American Ornithological Society Checklist (Chesser et al. 2023); for mammals with Bradley et al. (2014); and for reptiles with Crother (2017). Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for the species (Jennings and Hayes 1994; Unitt 2004; CNPS 2023; Reiser 2001) and species occurrence records from the WRCRCA MSHCP Information Map (WRCRCA 2023), California Natural Diversity Database (CNDDB; California Department of Fish and Wildlife [CDFW] 2023a), and the All Species Occurrences Database (USFWS 2023b).

3.0 SURVEY RESULTS

3.1 Vegetation Communities

The survey area contains two vegetation communities/land cover types: field croplands and residential/urban/exotic (Figure 5; Table 1). The field croplands land cover type is composed of recently disked agricultural fields within the project site and off-site improvement areas and surrounds a private residence on-site totaling 19.31 acres. Scattered ruderal species were observed and include Sahara mustard (*Brassica tournefortii*), nettle-leaf goosefoot (*Chenopodium murale*), and short-pod mustard (*Hirschfeldia incana*) (Photographs 1 and 2). The field croplands include vehicle trails that generally run around the outer limits of the project site, Peruvian pepper trees (*Schinus molle*; riparian features), and two unvegetated, ephemeral drainages (riverine features) that intersect the property (Photographs 3-6). Water flows through the ephemeral drainages from south to north and exits the project site by way of a culvert along the northern perimeter of the property (Photograph 7). The residential/urban/exotic land consists of a private residence and any associated paved and dirt roads, including Zeiders Road and Howard Road (Photograph 8). Peruvian pepper tree and Russian olive (*Elaeagnus angustifolia*) trees occur around the home. The residential/urban/exotic land totals 2.25 acres within the survey area. A complete list of plant species observed during the biological surveys for the project is provided in Attachment 3.

Table 1
Existing Vegetation Communities and Land Cover Types within Survey Area
(acres)

Vegetation Communities	Project Site	Off-Site Improvements	Survey Area Total
Field Croplands	18.62	0.69	19.31
Residential/Urban/Exotic	0.89	1.36	2.25
TOTAL	**19.51**	**2.05**	**21.56**

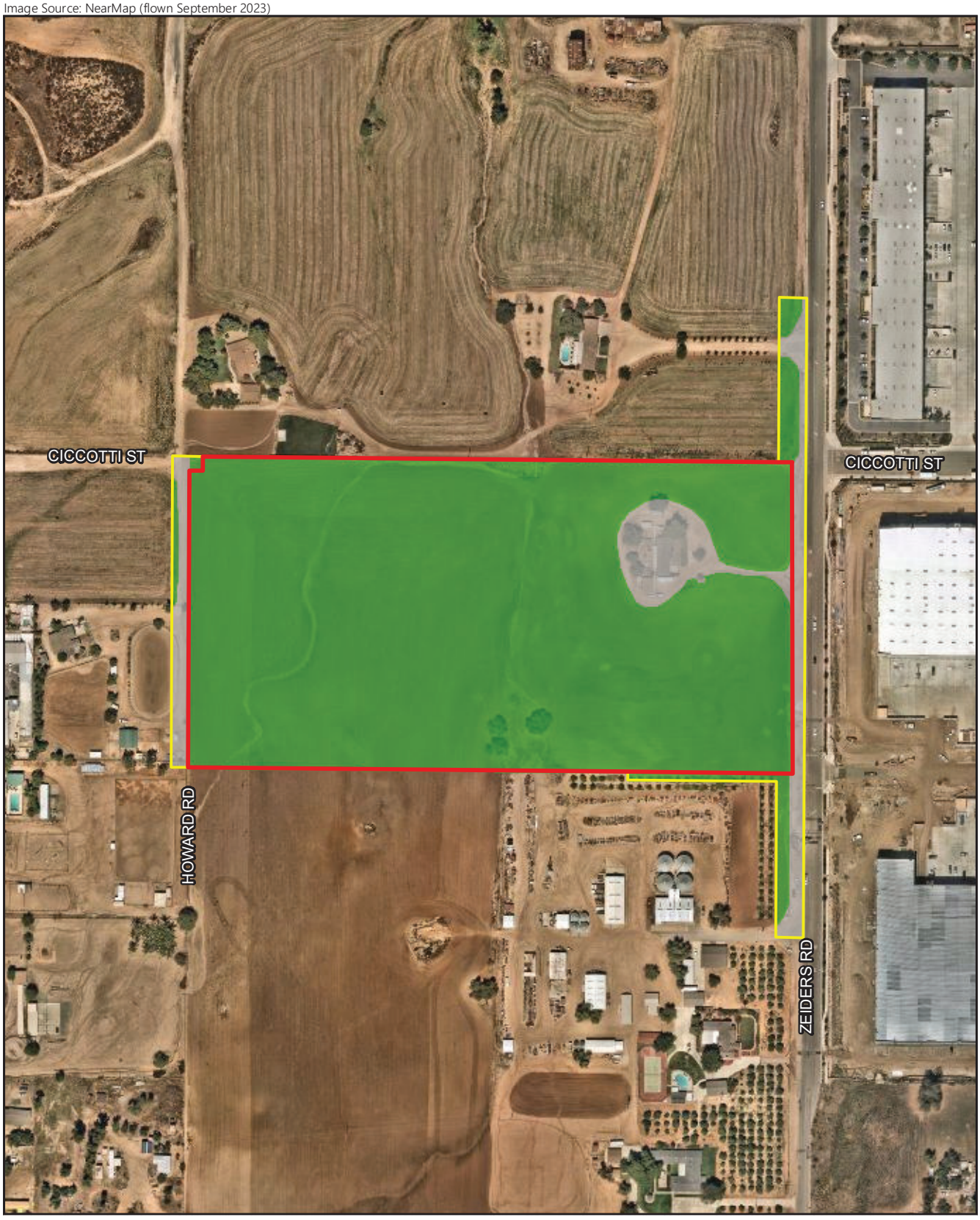
3.2 Wildlife

Wildlife species detected on-site during biological surveys conducted for the project include those typical of rural and agricultural habitats such as Eurasian collared-dove (*Streptopelia decaocto*) and California horned lark (*Eremophila alpestris actia*). A complete list of wildlife species observed during the biological surveys for the project is provided in Attachment 4.

4.0 SENSITIVE RESOURCES

For purposes of this report, species will be considered sensitive if they are (1) covered species under the MSHCP; (2) listed or proposed to be listed by state or federal agencies as threatened or endangered; (3) on California Rare Plant Rank (CRPR) 1B (considered endangered throughout its range), CRPR 2 (considered endangered in California but more common elsewhere), CRPR 3 (more information about the plant's distribution and rarity needed), and CRPR 4 (plants of limited distribution) of the California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California (2023); or (4) considered rare, endangered, or threatened by the CNDDB (CDFW 2023b, 2023c, 2023d, 2023e). Vegetation community/land cover type sensitivity follows the MSHCP (WRCRCA 2003).

Image Source: NearMap (flown September 2023)



Project Boundary

Off-site Improvements

Vegetation Communities

Field Croplands

Residential/Urban/Exotic

0 Feet 300

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FIGURE 5
Existing Biological Resources



PHOTOGRAPH 1
View of Field Croplands, Facing South.
Photo Date: 9/22/23



PHOTOGRAPH 2
View of Field Croplands, Facing Northeast.
Photo Date: 9/22/23

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PHOTOGRAPH 3
View of the Western Ephemeral Drainage,
Facing West. Photo Date: 9/22/23



PHOTOGRAPH 4
View of the Western Ephemeral Drainage,
Facing North. Photo Date: 9/22/23



PHOTOGRAPH 5
View of the Eastern Ephemeral Drainage, Facing North. Photo Date: 9/22/23



PHOTOGRAPH 6
View of the Eastern Ephemeral Drainage, Facing South.
Photo Date: 9/22/23



PHOTOGRAPH 7
View of Culvert Along the Northern Project Site Boundary, Facing North.
Photo Date: 9/22/23



PHOTOGRAPH 8
View of Residential/Urban/Exotic land cover type, Facing Northeast.
Photo Date: 9/22/23

4.1 Sensitive Plants and Habitats

No sensitive plant or MSHCP Narrow Endemic plant species were observed during biological surveys conducted for the project. In addition, no sensitive plant species are expected to occur due to the highly disturbed and developed nature of the survey area. Additional sensitive plant species known to occur within two miles of the project site, based on a database review, are presented with an evaluation of their potential for occurrence in Attachment 5.

Section 6.1.2 of the MSHCP defines Riparian Areas, in part, as land "which depend upon soil moisture from a nearby fresh water source" (WRCRCA 2003). Three Peruvian pepper trees are present on-site in the vicinity of the ephemeral drainage in the southern portion of the survey area. These trees may depend upon soil moisture from the ephemeral drainage and, therefore, may be considered sensitive riparian habitat.

4.2 Sensitive Wildlife

MSHCP Covered Species

Two MSHCP-covered wildlife species, turkey vulture (*Cathartes aura*) and California horned lark, were observed during biological surveys conducted for the project. Additional sensitive wildlife species are evaluated for their potential for occurrence in Attachment 6.

Burrowing Owl

As the project site is within a burrowing owl survey area, the survey area was evaluated for potential to support burrowing owl. Field croplands offer soft soils suitable for burrowing and thus, suitable habitat for burrowing owl. Two inactive burrows were observed on-site within two clumps of dense vegetation where disking did not occur; however, they were small (less than 4 inches) and the entrances of these burrows were covered with vegetation. Additionally, no burrowing owl sign (whitewash, pellets, or feathers) was observed. Although suitable habitat occurs within the survey area, due to the frequent disking the potential to support this species is low.

Migratory and Nesting Birds

Migratory and nesting birds were observed during biological surveys and have a moderate potential to nest within trees within the project area.

Stephens' Kangaroo Rat Fee Area

In 1996, USFWS approved the Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County (SKR HCP) and granted an incidental take permit covering approximately 500,000 acres with an estimated 30,000 acres of occupied habitat within 11 member jurisdictions, the County of Riverside and the cities of Perris, Temecula, Murrieta, Lake Elsinore, Menifee, Corona, Riverside, Moreno Valley, Wildomar, and Hemet (Riverside County Habitat Conservation Agency [RCHCA] 1996). The SKR HCP authorizes the incidental take of half of the occupied habitat remaining in the SKR HCP plan area while using development fees to implement the plan, purchase private property, and create a reserve system. The SKR HCP and corresponding permits are in effect for areas covered by the MSHCP; however, the SKR HCP and the MSHCP remain separate. The SKR HCP fee areas are subject to mandatory conservation measures as outlined in the SKR HCP (RCHCA 1996) and as subsequently modified. The project site is not part of an SKR HCP core reserve but does occur within the SKR HCP fee area (RCHCA 1996; Figure 6). As the survey area is situated outside of a SKR HCP core reserve, focused surveys are not required.

Image Source: NearMap (flown September 2023)

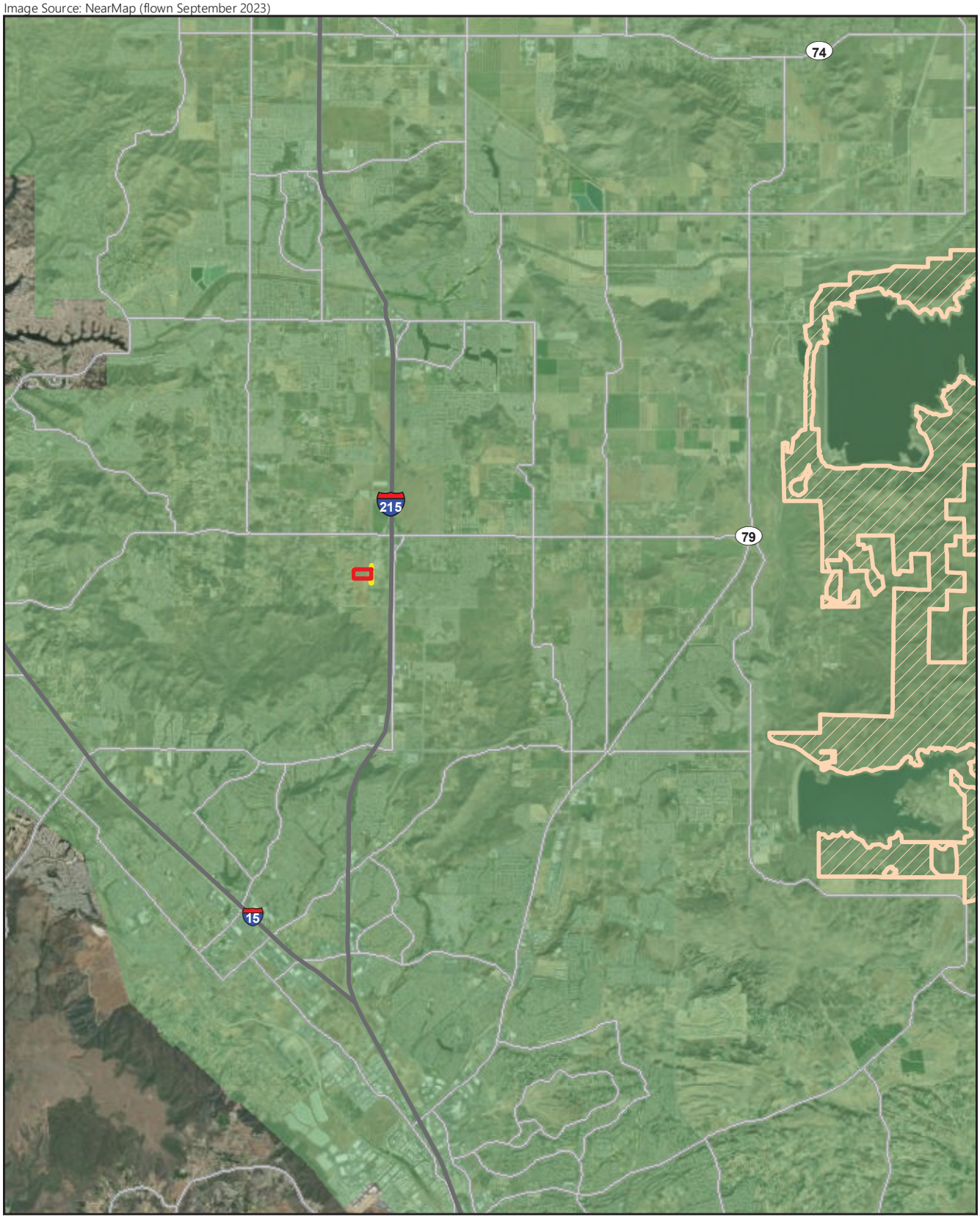


FIGURE 6
Project site in relation to Stephen's Kangaroo Rat Fee Area and Core Reserve Areas

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4.3 Jurisdictional Waters

Potentially jurisdictional riparian habitat was observed within the survey area (Figure 7). The three pepper trees in the vicinity of the ephemeral drainage in the southern portion of the survey area may have ecological connections to the drainage. As such, the outer extent of the dripline of the trees may be considered riparian under the jurisdiction of CDFW and subject to the MSHCP.

Two potentially jurisdictional non-wetland waters, ranging in width from 4 feet to 17 feet, were observed within the survey area (see Figure 7). These unvegetated, ephemeral drainages converge in the northern portion of the survey area before traveling off-site via a culvert along the northern site boundary, traveling north where it eventually flows into the San Jacinto River (see Attachment 1). The ephemeral drainages have been disturbed by the disking that occurs on-site (see Photographs 3-6); however, the drainages show evidence of water flow and it is anticipated without disking that these drainages would fully reform in their original locations upon the next rainy season. The ephemeral drainages are anticipated to be considered to be waters of the state by CDFW and Regional Water Quality Control Board (RWQCB) and riverine resources subject to the MSHCP. The ephemeral drainages are not anticipated to be considered waters of the U.S. by USACE based on the Revised Definition of "Waters of the U.S."; Conforming, which eliminates the applicability of the significant nexus standard for "non-relatively permanent waters" (USACE and U.S. Environmental Protection Agency [U.S. EPA] 2023).

5.0 IMPACTS

5.1 Vegetation Communities

The project would result in permanent impacts to 19.31 acres of field croplands and 2.25 acres of residential/urban/exotic (Figure 8; Table 2). Although these land cover types are not native habitats and thereby, impacts are not significant, compliance with the MSHCP requires payment of the appropriate Local Development Mitigation Fee (LDMF) for impacts to 21.56 acres within the survey area.

Table 2
Impacts to Land Cover Types within Survey Area
(acres)

Vegetation Communities	Existing	On-Site Impacts	Off-Site Impacts	Total Project Area Impacts
Field Croplands	19.31	18.62	0.69	19.31
Residential/Urban/Exotic	2.25	0.89	1.36	2.25
TOTAL	**21.56**	**19.51**	**2.05**	**21.56**

5.2 Sensitive Wildlife

Burrowing Owl

The project has the potential to result in direct impacts to burrowing owl as a result of vegetation removal, grading, and construction within the project impact footprint. Direct impacts to this species would be considered significant and require mitigation as outlined in the MSHCP.

Image Source: NearMap (flown September 2023)

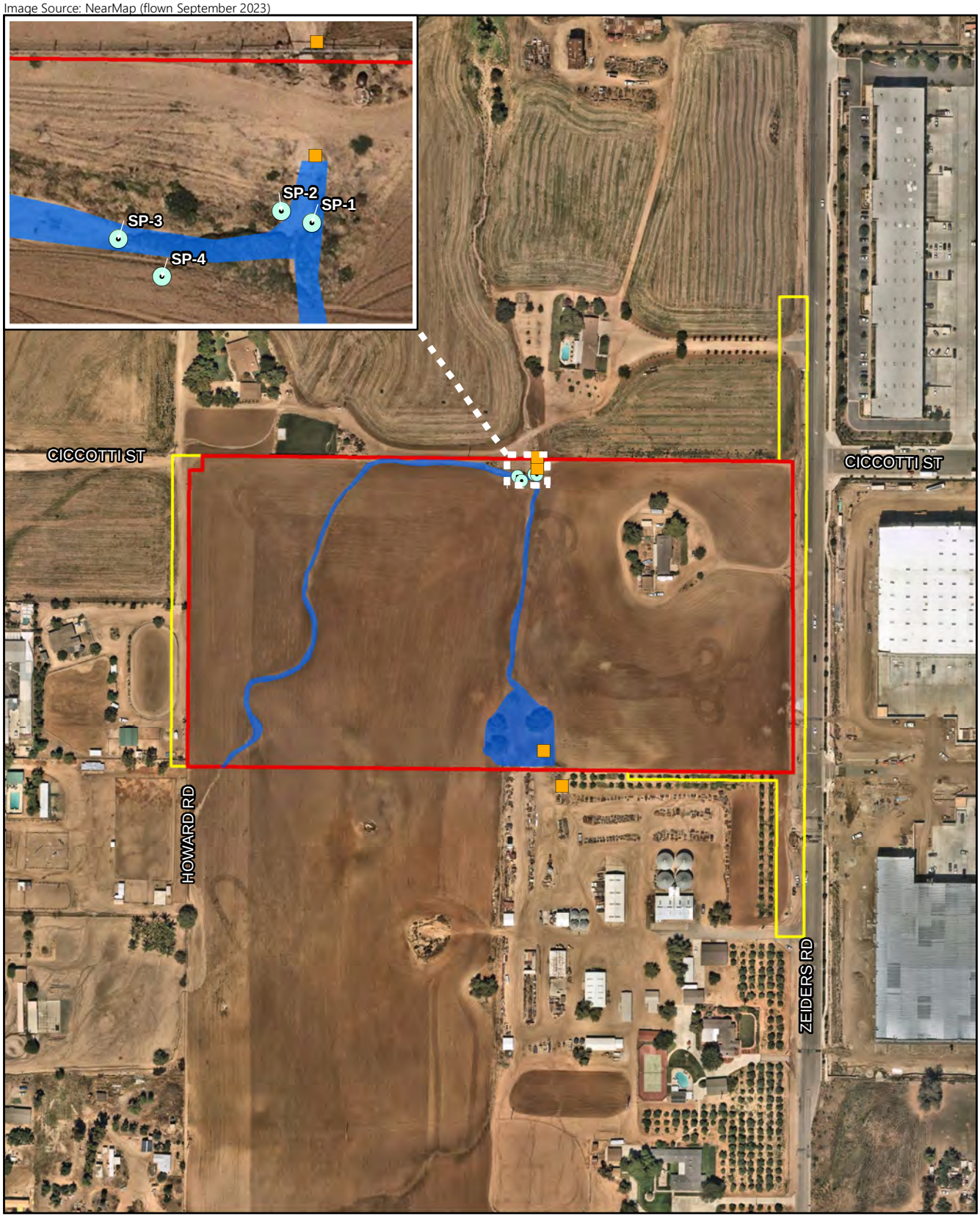


FIGURE 7
Potential Jurisdictional Resources

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Image Source: NearMap (flown September 2023)

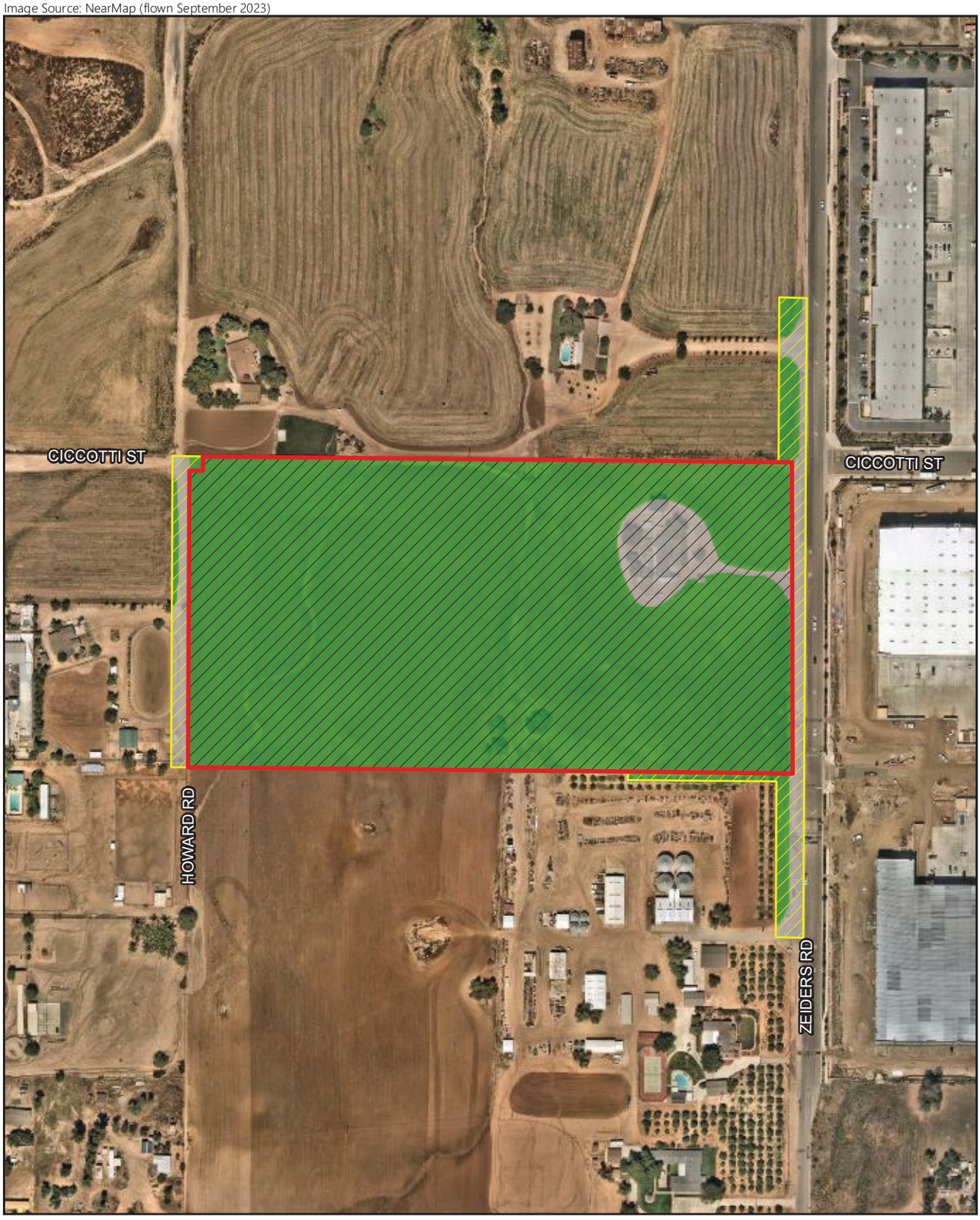


FIGURE 8
Impacts to Biological Resources

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Nesting and Migratory Birds

Direct impacts to nesting and migratory birds, including horned lark, could potentially result should vegetation removal or grading within the project impact footprint occur during the general avian breeding season (February 1 to September 15). These nesting and migratory bird species are protected by the federal Migratory Bird treaty Act and California Fish and Game Code Section 3503.5, and direct impacts to nesting birds would be significant.

Stephens' Kangaroo Rat Fee Area

The project would result in a total of 21.56 acres of impacts to field croplands and residential/urban/exotic within the Stephens' Kangaroo Rat Fee Area. Impacts within the Stephens' Kangaroo Rat Fee Area would require mitigation (RCHCA 1996).

5.3 Jurisdictional Waters

Jurisdictional features within the project footprint include 0.40 acre of pepper trees (riparian habitat) that is considered potentially jurisdictional under CDFW and considered sensitive under the MSHCP (Figure 9; Table 3). In addition, although 0.30 acre of ephemeral drainages (riverine features) have already been disturbed through farming activities, they are still considered potentially jurisdictional features by the RWQCB and CDFW and considered sensitive under the MSHCP (see Figure 9 and Table 3). Impacts to jurisdictional waters due to project activities would be significant and would require mitigation.

Table 3
Proposed Impacts to Potential Jurisdictional Waters
(acres)

			Ephemeral Drainages		Pepper Trees	
Agency	Existing Wetlands	Impacts to Wetlands	Existing Non-Wetland Waters/Streambed	Impacts to Non-Wetland Waters/Streambed	Existing Riparian	Impacts to Riparian
USACE	0.00	0.00	0.00	0.00	0.00	0.00
CDFW/RWQCB	0.00	0.00	0.30	0.30	0.40	0.40
MSHCP	0.00	0.00	0.30	0.30	0.40	0.40

Image Source: NearMap (flown September 2023)

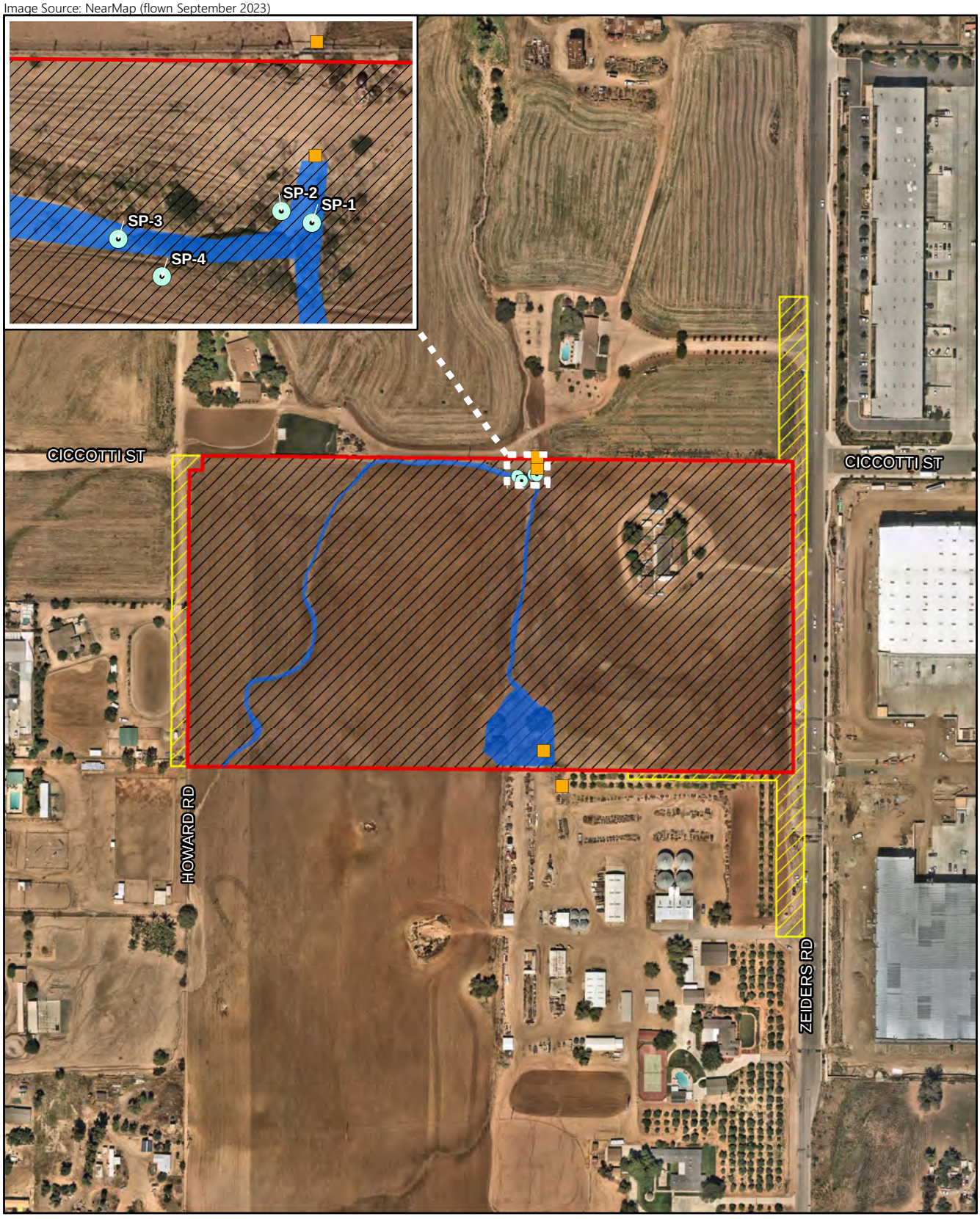


FIGURE 9

Impacts to Potential Jurisdictional Resources

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6.0 MITIGATION

6.1 Vegetation Communities

As discussed above, project impacts to 21.56 acres within the survey area would require mitigation fees as required by the MSHCP. The LDMF will be required to be paid no later than at the issuance of a building permit (WRCRCA 2021). The project would not impact any sensitive vegetation communities or plant species; therefore, no mitigation would be required.

6.2 Sensitive Wildlife Species

Burrowing Owl

A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, grading, tree removal, site watering, equipment staging) 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 boundary prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the WRCRCA and the Wildlife Agencies and will need to coordinate further with the WRCRCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure that burrowing owls have not colonized the site since it was last disturbed.

Migratory and Nesting Birds

For construction projects located outside of the Criteria Area, habitat clearing, grubbing, grading, and associated construction actions will be timed to avoid the avian breeding season of January 15 to August 31. Furthermore, take under the MSHCP does not provide take of nesting birds nor supersede other state or federal requirements that restrict take of nesting birds.

To ensure avoidance of nesting birds, a pre-construction nest survey will be conducted for nesting birds if vegetation clearing is conducted during the bird nesting season. For vegetation clearing conducted from January 15 through August 31, a nesting bird survey shall be conducted by a qualified biologist occur no more than seven days prior to vegetation removal. Additionally, raptors (birds of prey) are known to begin nest building in January or February. If vegetation clearing is to occur between January 1 and February 15, a nesting raptor survey will be conducted within the survey area.

If active bird nests are confirmed to be present during the pre-construction survey, a buffer zone will be established by a qualified biologist until it has verified by the biologist that the young have fledged or the nest has otherwise become inactive.

6.3 Stephens' Kangaroo HCP Rat Fee Area

Prior to the issuance of a Development Permit, the applicant shall pay an impact and mitigation fee of $500 per gross acre for impacts to 21.56 acres within the Stephens' Kangaroo Rat Fee Area. This mitigation fee is intended to include all impacts located within the parcel to be developed and the area disturbed by related off-site improvements.

6.4 Jurisdictional Waters

Impacts to the non-wetland waters under RWQCB would require a permit under Section 401 Clean Water Act, and impacts to streambed and riparian under CDFW would require a Section 1600 Streambed Alteration Agreement. In the application process, these agencies will make a determination on jurisdiction over the ephemeral drainages and pepper trees. In compliance with the no-net-loss policy, impacts to non-wetland waters and riparian would likely require mitigation at a minimum 1:1 ratio, respectively. The mitigation ratios would be determined by the Agencies.

Mitigation for impacts to jurisdictional waters and MSHCP Riparian/Riverine areas can be achieved either through permittee responsible mitigation within or near the San Jacinto watershed (e.g., through coordination with the WRCRCA, Rivers and Lands Conservancy, and/or the San Jacinto Basin Resources Conservation District). Site selection coordination and mitigation plan development is in progress. As further discussed in Section 7.1, impacts to riparian and riverine features are considered significant under the MSHCP and requires the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) which discusses the mitigation for these impacts.

7.0 MSHCP CONSISTENCY

This section demonstrates the compliance of the project with respect to biological aspects of the MSHCP. More specifically, the project was evaluated with respect to 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) of Volume I of the MSHCP. Additional information about other species, construction guidelines, and best management practices (BMPs) is available below.

7.1 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2)

Riparian/Riverine and Riparian Birds

According to the MSHCP Section 6.1.2, a DBESP is required when project alternatives that would avoid sensitive riparian/riverine resources are not feasible. As stated above, 0.70 acre of riparian/riverine features mapped as pepper trees and ephemeral drainages occur on-site. The pepper trees, although considered riparian vegetation, do not constitute as habitat that would support the five bird species cited under Section 6.1.2 of the MSHCP which include: bald eagle (*Haliaeetus leucocephalus*), peregrine falcon (*Falco peregrinus*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), or western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). Due the project's lack of suitable riparian woodlands with dense canopies and understories for foraging and nesting, along with other habitat conditions, sensitive riparian birds are not expected to occur on-site. These species are further evaluated for their potential for occurrence in Attachment 6.

The goal of the DBESP is to demonstrate that, with implementation of the proposed project design features and mitigation measures, the proposed project would result in an alternative that is biologically equivalent or superior to complete avoidance of impacts to riparian/riverine resources on-site and to ensure replacement of any lost functions and values of habitat as it relates to covered species. In summary, the riparian/riverine areas within the survey area (three pepper trees and two ephemeral drainages) are surrounded by residential development utilizing disking activities. Additionally, no sensitive riparian/riverine wildlife species or other sensitive plant or wildlife species were detected on-site. A DBESP for this project has been prepared pursuant to the MSHCP (see the Determination of Biologically Equivalent or Superior Preservation prepared for the project [Attachment 7]).

Vernal Pools and Fairy Shrimp

The presence of vernal pools as defined by the MSHCP was evaluated during the biological survey conducted by RECON in 2023. No vernal pools or depressions characteristic of vernal habitat and no evidence of ponding areas such as cracked soils, tire ruts, or wetland or vernal pool plant species were observed within or immediately adjacent to the project site. Thus, no potential fairy shrimp habitat was observed, and fairy shrimp are not expected to occur within the project site. Therefore, no project-specific impacts to vernal pools and fairy shrimp are anticipated and no mitigation would be required. Thus, the project is consistent with the Protection of Vernal Pools as defined in MSHCP Section 6.1.2, and no further surveys or mitigation would be required.

7.2 Protection of Narrow Endemic Plant Species (Section 6.1.3)

The survey area is located within a MSHCP NEPSSA. A habitat suitability assessment for the following six species was conducted according to the habitat suitability assessment procedure described in Volume I, Section 6.1.3 of the MSHCP. A description of each species and the results of the habitat suitability assessment are described below.

- Munz's onion (*Allium munzii*). This perennial bulbiferous herb is known to occur within mesic exposures or seasonally moist microsites in grassy openings in coastal sage scrub, chaparral, juniper woodland, valley and foothill grasslands in clay soils or pyroxenite outcrops. The blooming period for this species is May to July. Within the MHSCP Plan Area, this species is associated with clay and cobbly clay soils which include the following series: Altamont, Auld, Bosanko, Claypit, and Porterville. This species does not currently occur on-site and is not expected to occur as the survey area lacks suitable mesic coastal sage scrub, chaparral, juniper woodland, and grassland habitat in clay soils or pyroxenite outcrops. Additionally, the survey area is not mapped within Altamont, Auld, Bosanko, Claypit, and Porterville soils (USDA 1971).

- San Diego ambrosia (*Ambrosia pumila*). This perennial rhizomatous herb is known to occur in sparse non-native grassland or ruderal habitat in association with river terraces, vernal pools, and alkali playas. A blooming period for this species is not listed in the MHSCP; however, Jepson eFlora lists the blooming period as Apr-Jul (Jepson 2023). Within the MSHCP Plan Area, this species is only known from three locations in the Riverside Lowlands Bioregion: in the vicinity of Alberhill, Nichols Road, and Skunk Hollow. This species was not detected on-site during biological surveys and is not expected to occur on-site as the field cropland on-site is not associated with river terraces, vernal pools, or alkali playas. Additionally, this species is a perennial herb that would likely have been apparent at the time the habitat assessment was conducted.

- Many-stemmed dudleya (*Dudleya multicaulis*). This perennial herb is associated with clay soils in barren, rocky places and ridgelines and thinly vegetated openings in chaparral, coastal sage scrub, and grasslands underlain by clay soils. The blooming period for this species is March to June. Within the MSHCP Plan Area, this species is associated with clay and cobbly clay soils of the following series: Altamont, Auld, Bosanko, Claypit, and Porterville. This species was not detected on-site and is not expected to occur due to lack of suitable clay or cobbly clay soils. Additionally, the survey area is not mapped within Altamont, Auld, Bosanko, Claypit, and Porterville soils (USDA 1971).

- Spreading navarretia (*Navarretia fossalis*). This species is known to occur within vernal pools and areas historically supporting vernal pools, with saline-alkaline soils. The blooming period for this species is May to June. Within the MSHCP Plan Area, this species is primarily restricted to the alkali floodplains of the San Jacinto River, Mystic Lake, and Salt Creek in association with Willows, Domino and Traver soils. This species was not detected on-site and is not expected to occur due to lack of suitable vernal pool or historic vernal

pool habitat with saline-alkaline soils to support this species. Additionally, the survey area is not mapped within Willows, Domino, and Traver soils (USDA 1971).

- California Orcutt grass (*Orcuttia californica*). This annual herb is known to occur in vernal pool habitat with alkaline soils or southern basaltic claypan. The blooming period for this species is April to June. Within the MSHCP Plan Area, this species is restricted to the southern basaltic claypan vernal pools at the Santa Rosa Plateau and alkaline vernal pools at Skunk Hollow and at Salt Creek west of Hemet. This species was not observed and is not expected to occur on-site as the survey area lacks vernal pools with claypan or alkaline soils and is not located within the vicinity of these known locations.

- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). This annual herb is primarily restricted to the alkali floodplains of the San Jacinto River in association with Willows, Domino, and Traver soils. The blooming period for this species is May to September. Within the MSHCP Plan Area, this species occurs in alkali playa, alkali annual grassland, and alkali vernal pool habitats. This species was not observed on-site and is not expected to occur as the survey area lacks alkali floodplains and is not located within the vicinity of the San Jacinto River. Additionally, the survey area is not mapped within Willows, Domino, and Traver soils (USDA 1971).

Due to the lack of suitable habitat and soils for these NEPSSA plants, site-specific surveys for NEPSSA species were not conducted. As no impacts are anticipated, no mitigation is required. Thus, the project is consistent with requirements for the Protection of Narrow Endemic Plant Species in Section 6.1.3 of the MSHCP.

7.3 Guidelines Pertaining to the Urban/Wildland Interface (Section 6.1.4)

The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with development located in proximity to a MSHCP Conservation Area. The survey area is not located inside or immediately adjacent to any Criteria Area, Criteria Cell, Public/Quasi-Public Conserved Lands, or Conservation Area identified for conservation potential by the MSHCP; therefore, these guidelines do not apply.

7.4 Additional Survey Needs and Procedures (Section 6.3.2)

Burrowing Owl

The survey area is located within the MSHCP survey area for burrowing owl. As described above, a Step I Habitat Assessment and Step II, Part A Focused Burrow Survey were conducted in September 2023 pursuant to the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (see Attachment 2; WRCRCA 2003). Surveying of the buffer was done at the property limits as no access to other private properties was granted. Suitable habitat was identified within the project site and surrounding 150-meter buffer during the Step I Habitat Assessment within the field croplands. At the time of the habitat assessment, this habitat consisted generally of freshly disked land and in reviewing historic aerials, these lands are constantly disked. Similar disking conditions were present within the 150-meter buffer, and these lands appear to be frequently disked as well based on historic aerials (NETR Online 2023). No suitable burrowing owl individuals, or signs of burrowing owl activity were detected within the project boundary or surrounding 150-meter buffer during the Step II, Part A Focused Burrow Survey; thus, Step II, Part B Focused Burrowing Owl Surveys were not conducted.

Due to the presence of suitable habitat and to ensure no burrowing owls have entered the site to avoid direct take of burrowing owls, a pre-construction survey is required within 30 days prior to ground disturbance. The survey will include all areas where suitable habitat is present within the project boundary. Additionally, if burrowing owls have

colonized the project boundary prior to the initiation of construction, the project proponent shall immediately inform the Wildlife Agencies and the WRCRCA. Approval of a Burrowing Owl Protection and Relocation Plan by the Wildlife Agencies prior to initiating ground disturbance would be required. Translocation of any owls present on-site would be required to occur within the non-breeding season. With implementation of the 30-day preconstruction survey and the Burrowing Owl Protection and Relocation Plan, if warranted, impacts to burrowing owl, including possible take of active nests, would be avoided. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure that burrowing owl have not colonized the site since it was last disturbed. With the implementation of the pre-construction survey, the proposed project would be consistent with MSHCP Volume I, Section 6.3.2.

Criteria Area Plant Species

The project site does not fall within the MSHCP Criteria Area Species Survey Area; thus, site-specific surveys for Criteria Area plant species are not required as per Volume I, Section 6.3.2 of the MSHCP. Therefore, the project is consistent with the requirements for Criteria Area plants species contained in the Additional Survey Needs and Procedures in Section 6.3.2 of the MSHCP, and no additional surveys or mitigation is required.

Amphibians

The project site does not fall within the MSHCP survey area for amphibian species; thus, site-specific surveys for amphibians are not required as per Volume I, Section 6.3.2 of the MSHCP. Therefore, the project is consistent with the requirements for amphibians contained in the Additional Survey Needs and Procedures in Section 6.3.2 of the MSHCP, and no additional surveys or mitigation is required.

Mammals

The project site does not fall within the MSHCP survey area for mammal species; thus, site-specific surveys for mammals are not required as per Volume I, Section 6.3.2 of the MSHCP. Therefore, the project is consistent with the requirements for mammals contained in the Additional Survey Needs and Procedures in Section 6.3.2 of the MSHCP and no additional surveys or mitigation is required.

7.5 Information on Other Species

Delhi Sands Flower-Loving Fly (*Rhaphiomidas terminatus abdominalis*)

The project site does not fall within the MSHCP mapped survey area for this species and no Delhi soils occur within the project site (U.S. Department of Agriculture 1971); thus, site-specific surveys for Delhi Sands flower-loving fly are not required. Therefore, the project is consistent with the species-specific objectives for Delhi Sands flower-loving fly contained in the MSHCP and no additional surveys or mitigation is required.

Species Not Adequately Conserved

Eighteen species, planned for full coverage under the MSHCP, are not currently considered adequately conserved until the conservation and management requirements indicated in Table 9-3 of MSHCP Section 9 are met. These species are evaluated in the potential for sensitive plant and wildlife species for occurrence in Attachments 5 and 6.

8.0 BEST MANAGEMENT PRACTICES

The project also commits to implementing the following standard BMPs as required in MSHCP Volume I, Appendix C, as applicable:

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.
2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, and CDFG [CDFW], RWQCB, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.

11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.

12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.

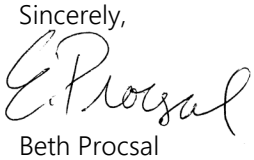
13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).

14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

If you have any questions or require further information, please contact me at bprocsal@reconenvironmental.com or (619) 308-9333 extension 111.

Sincerely,



Beth Procsal
Senior Project Manager/Biologist

EAP:sh:jg

Attachments

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ATTACHMENTS

ATTACHMENT 1

Aquatic Resource Delineation Report for the
Zeiders Road Project

Aquatic Resource Delineation Report for the Zeiders Road Project Riverside County, California

Prepared for
Pemcor Properties Inc.
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Attn: Mr. Paul Mayer

Prepared by
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RECON Number 10420
February 21, 2025

Chelsea Polevy, Associate Biologist

TABLE OF CONTENTS

Acronyms and Abbreviations iii
1.0 Site Description and Landscape Setting 1
2.0 Site Alterations, Current and Past Land Use 1
2.1 Soils 2
2.2 Hydrology 2
2.3 Vegetation 2
3.0 Precipitation Data and Analysis 3
3.1 Climate and Growing Season 3
3.2 Antecedent Precipitation Tool Summary 3
3.3 Wetland Hydrology and Analysis 4
4.0 Investigation Methods 4
4.1 Wetland Parameters 4
4.2 Pre-field Review 5
4.3 On-site Wetland Investigation 5
4.4 On-site Ordinary High Water Mark Investigation 6
5.0 Description of Aquatic Resources 6
5.1 Wetlands 7
5.2 Non-wetland Waters 7
5.3 Riparian 7
6.0 Deviation from National Wetland Inventory 8
7.0 Mapping Method 8
8.0 Results and Conclusions 8
9.0 Disclaimer Statement 8
10.0 Potential Jurisdictional Resources 8
10.1 Potential USACE Waters of the U.S. 8
10.2 Potential RWQCB Waters of the State 9
10.3 Potential CDFW Jurisdictional Resources 9

TABLES

1: Vegetation Communities/Land Cover Types 2
2: List of Aquatic Resources 7

TABLE OF CONTENTS (cont.)

ATTACHMENTS

1: Maps
    1: Regional Location
    2: Project Location on USGS Map
    3: Project Location on Aerial Photograph
    4: Project Location on Soils Map
    5: Vegetation Communities within the Review Area
    6: National Wetlands Inventory
    7: Aquatic Resources Delineated within the Review Area
    8: Potential USACE Waters of the U.S. and CDFW Streambed within the Review Area
2: Antecedent Precipitation Tool Results
3: Wetland Determination Data Forms
4: Ground Level Color Photographs
5: Ordinary High Water Mark Data Sheets
6: References Cited

Acronyms and Abbreviations

APT	Antecedent Precipitation Tool
CDFW	California Department of Fish and Wildlife
FACU	Facultative-Upland
GPS	global positioning system
NI	No Indicator
NRCS	Natural Resource Conservation Service
NWI	National Wetland Inventory
OHWM	Ordinary High Water Mark
project	Zeiders Road Project
RECON	RECON Environmental, Inc.
RWQCB	Regional Water Quality Control Board
TNW	Traditional Navigable Water
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

1.0 Site Description and Landscape Setting

The Zeiders Road Project (project) is located in the southern portion of the city of Menifee in Riverside County, California. The project is located east of Interstate 215, between Zeiders Road and Howard Road (Assessor's Parcel Number 384-150-001; Figures 1, 2, and 3). All figures provided with this report are compiled as Attachment 1. The Review Area is within Section 22, Township 06 South, Range 03 West of the U.S. Geological Survey (USGS) 7.5-minute topographic map, Romoland quadrangle (USGS 1979; see Figure 2). For the purposes of this report, the Review Area is equivalent to the entire 19.51-acre project site and 2.05 acres of off-site improvement areas, totaling 21.56 acres (see Figure 3).

The Project Proponent would like to accompany the U.S. Army Corps of Engineers (USACE) on all site visits, and requests that the USACE must contact the Project Proponent prior to visiting the site. The contact information for the Project Proponent is:

Property Owner:	Ms. Betty Bouris
Applicant:	Pemcor Properties Inc.
Primary Contact:	Mr. Paul Mayer
Telephone:	(858) 888-2488
E-mail:	pm@pemcor.net

2.0 Site Alterations, Current and Past Land Use

The Review Area includes the rectangular-shaped project parcel along with off-site road improvements along Zeiders Road to the east and Howard Way to the west (see Figure 3). The area consists of an agricultural field and a private residence located in the northeastern portion of the property adjacent to Zeiders Road.

Topography within the Review Area is generally flat, with elevations ranging from 1,560 feet above mean sea level to 1,580 feet above mean sea level. Two drainage channels travel generally south to north through the Review Area, with one drainage located in the western portion of the Review Area and one located in the central portion of the Review Area. The Review Area is disked regularly for agricultural purposes and a review of aerial photography (Google Earth 2023; Nationwide Environmental Title Research Online 2023) indicates that disking occurred as early as 1985. The frequency of disking on-site was also discussed with the current property owner, Betty Bouris. In email communications with Ms. Bouris, it was shared that since 1950, their family had been farming wheat on-site and the property owners before them most likely farmed the land since 1888 (Betty Bouris, email communication to Paul Mayer, September 27, 2023). In February 2022, a water pipe servicing an orange grove on the southern-adjacent property broke and water spilled onto an area of low topography in the southeastern portion of the Review Area as displayed on historic aerial imagery (Google Earth 2023). The pipe was repaired and no further action was taken.

2.1 Soils

Information on the soil types sampled in the Review Area (Figure 4) is summarized from the Soil Survey for the Western Riverside Area (U.S. Department of Agriculture [USDA] 1971) and the Hydric Soils of California list obtained from the USDA Natural Resource Conservation Service (NRCS; 2023).

Four soil series—Cajalco fine sandy loam, 8 to 15 percent slopes, eroded; Las Posas loam, 2 to 8 percent slopes; Las Posas loam, 5 to 8 percent slopes, eroded; and Wyman loam, 2 to 8 percent slopes, eroded—were mapped within the Review Area (USDA 1971; see Figure 4). None of these are listed as hydric on the NRCS hydric soils list (NRCS 2023).

2.2 Hydrology

One drainage channel enters the southwestern corner of the Review Area and runs generally south to north/northeast through the western portion of the Review Area and a second drainage enters the southern portion of the Review Area via a culvert connected to the southern adjacent parcel and runs south to north through the central portion of the Review Area. These two drainage channels appear to collect natural precipitation and agricultural runoff from surrounding fields and rural residential development. The flows from these drainages converge in the northern portion of the Review Area before traveling off-site via a culvert under a dirt road along the northern site boundary, traveling north and then east where the flow eventually drains into the San Jacinto River. The San Jacinto River travels east and empties into Lake Elsinore, a designated Traditional Navigable Waterway (TNW).

2.3 Vegetation

Two vegetation communities/land cover types were mapped within the Review Area: field croplands and residential/urban/exotic. Figure 5 provides locations of each vegetation community/land cover type within the Review Area and Table 1 lists the vegetation communities/land cover types and their acreages within the Review Area. Vegetation community classifications follow the Multiple Species Habitat Conservation Plan (MSHCP; Western Riverside County Regional Conservation Agency 2003), which is based on Holland's 1986 Preliminary Descriptions of the Terrestrial Natural Communities of California.

Table 1
Vegetation Communities/Land Cover Types
(acres)

Community or Type	Area within Review Area (acres)
Field Croplands	19.31
Residential/Urban/Exotic	2.25
TOTAL	**21.56**

Field Croplands

Field croplands exist throughout the majority of the Review Area and are composed of recently disked agricultural fields surrounding a private residence. Scattered ruderal species were observed and include Sahara mustard (*Brassica tournefortii*), nettle-leaf goosefoot (*Chenopodium murale*), and short-pod mustard (*Hirschfeldia incana*). The field croplands include vehicle trails that generally run around the outer limits of the Review Area, Peruvian pepper trees (*Schinus molle*), and two natural-bottom ephemeral drainages that travel through the western and central portions of the Review Area. The drainages are primarily unvegetated and consist of sandy soils.

Residential/Urban/Exotic

Residential/urban/exotic land consists of a private residence in the northeastern corner of the Review Area, Zeiders Road along the eastern boundary of the Review Area, and Howard Way along the western boundary of the Review Area. Peruvian pepper and Russian olive (*Elaeagnus angustifolia*) trees occur around the home.

3.0 Precipitation Data and Analysis

Climate data, including precipitation totals, for the nearest recording station to the Review Area was gathered from the NRCS National Water and Climate Center databases. The climate data obtained are discussed below.

3.1 Climate and Growing Season

The project is located within an inland valley of southern California, in an area generally characterized by moderate temperature fluctuations throughout the year, with hot and dry summers and cooler and wetter winters. The majority of precipitation typically falls between December and March as somewhat frequent low- to moderate-intensity rainfall. The growing season typically lasts into early summer after winter and spring rainfall and ends in mid to late summer when little to no precipitation occurs and as temperatures increase. Rainfall amounts can vary substantially from year to year, with the potential for periods of extended drought.

3.2 Antecedent Precipitation Tool Summary

The Antecedent Precipitation Tool (APT) was used to analyze the 30-day rolling total and the 30-year normal range of precipitation data for the nearest recording weather stations to the project. The data presented in the APT results graphics (Attachment 2) indicate that, despite being in the dry season, wetter than normal conditions occurred at the time of the September 22, 2023 aquatic resource delineation.

3.3 Wetland Hydrology and Analysis

Hydrology within the Review Area consists of drainages that receive water input from storm water and agricultural runoff from on-site and off-site agricultural and residential development. Under these conditions, both drainages appear to support an ephemeral flow regime, conveying flow only in direct response to rain events. This inferred ephemeral flow regime is supported by the fact that the drainages do not support wetland vegetation and no evidence of flowing water was observed during the aquatic resource delineation.

According to the results of the APT, one substantial rain event occurred within the 30-day period prior to the delineation. The event was the result of landfall of tropical storm Hilary that produced approximately 1.5 inches of rain in the vicinity of the project approximately one month prior to the survey. As a result, conditions were considered "wetter than normal" for this time of year; however, the majority of the runoff from that event had ceased by the time the delineation was conducted. These conditions were considered when analyzing the hydrology of the on-site features as discussed in Sections 4.0 and 5.0 below.

4.0 Investigation Methods

An aquatic resource delineation, following the guidelines set forth by USACE (1987 and 2008), was performed by RECON Environmental, Inc. (RECON) biologist Chelsea Polevy on September 22, 2023, within the Review Area to gather field data at locations where aquatic resources occur. Once on-site, the potential federal and state jurisdictional areas were examined to determine the presence and extent of any aquatic resources.

4.1 Wetland Parameters

4.1.1 Hydrophytic Vegetation

Vegetation at each sample location was examined, and data for each vegetation stratum (i.e., tree, shrub, herb, and vine) was recorded on the datasheet provided in the 2008 Arid West Regional Supplement (USACE 2008). The percent absolute cover of each species present was visually estimated and recorded.

The wetland indicator status of each plant species recorded was determined by using the National Wetland Plant List (USACE 2020). Dominant species with an indicator status of NI (No Indicator) or not listed in the 2020 National Wetland Plant List were evaluated as either wetland or upland indicator species based on local professional knowledge of where the species are most often observed in habitats that are characteristic in southern California.

The dominance test was then evaluated to determine which plant species qualified as hydrophytic vegetation at each site. In situations where a site failed the dominance test but contained positive indicators of hydric soils and/or wetland hydrology, the prevalence index was used. The presence or

absence of morphological adaptations was noted; however, none of the sampled areas required an analysis of morphological adaptations to determine if the vegetation was hydrophytic.

4.1.2 Hydric Soils

Sample points were selected within potential wetland areas and where the apparent boundary between wetland and upland was inferred based on changes in the composition of vegetation and topography (see Figure 5). A total of four soil pits were dug to a depth of at least 18 inches (except where restrictive layers were encountered) to determine soil color, evidence of soil saturation, depth to groundwater, and indicators of a reduced soil environment (i.e., mottling, gleying, and hydrogen sulfide odor). A Munsell Soil-Color Book (2009) was used to determine soil colors, and the 2008 Arid West Regional Supplement (USACE 2008) and the Field Indicators of Hydric Soils in the United States guide (USDA 2017) was used to determine the presence of hydric soil indicators.

4.1.3 Wetland Hydrology

Hydrologic information for the site was obtained by reviewing USGS topographic maps and recent topographic survey data and by directly observing hydrology indicators in the field. All portions of any potentially occurring wetlands or non-wetland waters within the Review Area were inspected for signs of hydrology as defined in the 2008 Arid West Regional Supplement (USACE 2008).

4.2 Pre-field Review

Prior to conducting the delineation, aerial photographs, USGS topographic maps of the site, including the 7.5-minute Romoland quadrangle (USGS 1979; see Figure 2), USDA soil maps of the site, and the U.S. Fish and Wildlife Service National Wetland Inventory (NWI) (U.S. Fish and Wildlife Service 2023; Figure 6) were examined to aid in the determination of potential aquatic resources on-site.

4.3 On-site Wetland Investigation

Once on-site, the Review Area was examined to determine the presence of any indicators of wetlands, including wetland vegetation, hydric soils, and hydrology. Field data, including hand drawn maps and recorded global positioning system (GPS) points and lines, were later digitized/downloaded into ArcGIS. Mapped potential jurisdictional waters created using these data were analyzed in ArcGIS to provide acreages or target potential jurisdictional and vegetation boundaries. USACE wetland determination data forms are included as Attachment 3 and photographs of the Review Areas are provided in Attachment 4. Descriptions of the vegetation sampled are provided below.

The Review Area supports very little vegetation as it is significantly disturbed by ongoing disking activities. Some vegetation occurs in the area mapped as field croplands surrounding the ephemeral drainages at their confluence at the culvert along the northern site boundary (Photograph 1). This area supports a predominance of native and non-native upland plant species, including western Jimson weed (*Datura wrightii*; NI), smilo grass (*Piptatherum miliaceum* ssp. *miliaceum*; NI), short-pod

mustard (NI), and Sahara mustard (NI). A small percentage of stinknet (*Oncosiphon piluliferum*; Facultative-upland [FACU]) is present.

Three Peruvian pepper trees are present in the vicinity of the ephemeral drainage in the southern portion of the Review Area. Pepper trees are considered FACU species per the National Wetland Plant List (USACE 2020); however, these trees may depend upon soil moisture from the nearby ephemeral drainage and, therefore, may be considered hydrophytic.

The remaining areas mapped as field croplands, ephemeral drainages, and residential/urban/exotic also do not support hydrophytic plant species. These areas are primarily unvegetated, with small clusters of upland shrubs and grasses present in the southern portion of the Review Area where disking did not occur. An additional site visit was performed on May 28, 2024, in the southeastern corner of the Review Area to review the location of a drainage mapped as part of the hydrology study (Pasco Laret Suiter & Associates, Inc. 2024).

4.4 On-site Ordinary High Water Mark Investigation

The lateral extent of the ordinary high water mark (OHWM) was delineated along the on-site drainage channels using the observed hydrology indicators in accordance with *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008). The OHWM data forms are included as Attachment 5. Indicators observed and used to determine the extent of the OHWM include change in average sediment texture, change in vegetation type and density, break in bank slope, shelving, and ancillary indicators such as bent vegetation and drainage patterns (Photographs 2 and 3; see Attachment 5: OHWM sheet #1 and OHWM sheet #2). The distribution and abundance of observed indicators varied within each drainage; indicators were inconsistent along the southern bank of the western drainage (see Photograph 3) and downstream of OHWM Transects 1 and 2 as the land is disked regularly for agricultural purposes (Photographs 4 and 5). No defined bed and bank or OHWM were identified in the southeastern corner of the Review Area (Photograph 6).

5.0 Description of Aquatic Resources

The aquatic resources delineated include the ephemeral drainage channels mapped as non-wetland waters in the western and central portions of the Review Area and the outer extent of the dripline of the three Peruvian pepper trees mapped as riparian in the southern portion of the Review Area. These non-wetland water and riparian resources total 0.70 acre (1,810 linear feet) within the Review Area. A summary of the aquatic resources and location of these resources in relation to the Review Area boundaries are provided in Table 2 and on Figure 7, respectively. The potential for these features to be considered waters under the jurisdiction of the resource agencies is discussed in Section 10.0 below.

Table 2 List of Aquatic Resources									
Waters ID	Cowardin Code	HGM Code	Area (acres)	Linear Feet	Waters Type	Latitude (dd WGS84)	Longitude (dd WGS84)	Local Waterway	Dominant Vegetation
Western drainage	R6	Riverine	0.19	1,172	Non-wetland	33.633518	-117.179119	Riverine	N/A
Central drainage	R6	Riverine	0.11	638	Non-wetland	33.633419	-117.177615	Riverine	N/A
Riparian	RP	Riparian	0.40	--	Non-wetland	33.632705	-117.177615	Riverine	*Schinus molle*
Total	--	--	**0.70**	**1,810**	--	--	--	--	--
R6 = Ephemeral, Riverine; RP = Riparian; N/A = not applicable									

5.1 Wetlands

No wetland areas occur within the Review Area. As described above, no portions of the Review Area met the three wetland parameters.

5.2 Non-wetland Waters

As described above, non-wetland waters were delineated within the unvegetated portions of the western and central drainage channels, totaling 0.30 acre and 1,810 linear feet (see Figure 7 and Table 2). The extent of the mapped non-wetland waters was delineated at the OHWM, which coincides with a change in average sediment texture, change in vegetation type and density, break in bank slope, and other OHWM indicators mentioned in Section 4.4 above. Both drainages appear to support an ephemeral flow regime.

As stated above, RECON visited the project site on May 28, 2024 to investigate the potential jurisdictional feature in the southeastern corner of the Review Area that was included in the hydrology study. Based on RECON's survey effort, it was confirmed that this feature would not be considered jurisdictional under the USACE, the Regional Water Quality Control Board (RWQCB), and/or California Department of Fish and Wildlife (CDFW). This area has no defined bed and bank or OHWM and appears to be a minor stormwater sheet flow area. Also, this southeastern area does not support hydrophytic plant species.

5.3 Riparian

Areas mapped as riparian total 0.40 acre and include the dripline of the three pepper trees in the vicinity of the ephemeral drainage in the southern portion of the Review Area. Because these trees occur adjacent to a drainage feature, they may have ecological connections to this drainage based on a pre-application discussion on February 12, 2025. However, the riparian areas lack the hydrology and hydric soil indicators required to meet the USACE definition of a wetland.

6.0 Deviation from National Wetland Inventory

The results of this analysis do not vary from those classified in the NWI (see Figure 6). The NWI mapping does not include any aquatic resources within the Review Area.

7.0 Mapping Method

The maps of the delineated aquatic resources within the Review Area are based on the above analysis (see Figure 7). The boundary of the aquatic resources was obtained from a combination of global positioning system (GPS) data collected in the field, aerial photography, and recent topographic survey data. Geographic information system mapping software (ArcMap) was used to produce the graphical maps contained in this report.

8.0 Results and Conclusions

Non-wetland waters and riparian were delineated within the Review Area and include all areas mapped as ephemeral drainages and the dripline of the pepper trees in the vicinity of the ephemeral drainage in the southern portion of the Review Area. These features total 0.70 acre (1,810 linear feet).

9.0 Disclaimer Statement

This report describes the results of an aquatic resource delineation conducted within the approximately 21.56-acre Review Area. It was prepared in accordance with the Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (USACE 2017). The aquatic resource delineation is used to identify and map the potential extent of the federal jurisdictional waters of the U.S. The purpose of this study was to identify and map the limits of any aquatic resources on the property to provide necessary background information for analysis by USACE, RWQCB, and CDFW in making a jurisdictional determination. Those agencies will review the content of this report and ultimately make a determination of their jurisdiction for any waters of the U.S. and/or waters of the State that may be present in the Review Area. References used in the preparation of this report are included below in Attachment 6. A discussion about the potential jurisdictional limits of the USACE, RWQCB, and CDFW is included in Section 10 below.

10.0 Potential Jurisdictional Resources

This section provides a discussion of the potential for on-site aquatic resources to be considered waters under the jurisdiction of three agencies: USACE, RWQCB, and CDFW.

10.1 Potential USACE Waters of the U.S.

Under the Clean Water Act Section 404, the USACE is authorized to regulate waters of the U.S. The currently accepted regulations defining waters of the U.S. follow the September 8, 2023 publishment

of the final rule: *Revised Definition of "Waters of the U.S.", Conforming*. Within the Review Area, the western and central drainage channels appear to support ephemeral flow regimes and would be considered "non-relatively permanent waters." Although these channels have connectivity to Lake Elsinore, the lack of a continuous flow, at least intermittent flow, would likely preclude them from being considered waters of the U.S.

10.2 Potential RWQCB Waters of the State

The RWQCB is the regional agency responsible for protecting water quality in California. The jurisdiction of this agency includes all waters of the State and all waters of the U.S. as mandated by Section 401 in the Clean Water Act and the California Porter-Cologne Water Quality Control Act. The California Water Code defines "waters of the State" broadly to include "any surface water or groundwater, including saline waters, within the boundaries of the state." Under the new State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, revised on April 6, 2021 by the State Water Resources Control Board, state wetlands are defined as, "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." This new procedure and wetland definition also clarifies that waters of the State include any historic definition of waters of the U.S., which may include those features newly excluded from the new waters of the U.S. definition.

The drainage channels in the western and central portions of the Review Area convey surface waters and may have been historically considered waters of the U.S. prior to the new rule. As such, they would likely be considered non-wetland waters of the State under RWQCB jurisdiction. The areas of potential RWQCB waters of the State total 0.30 acre and 1,810 linear feet (Figure 8).

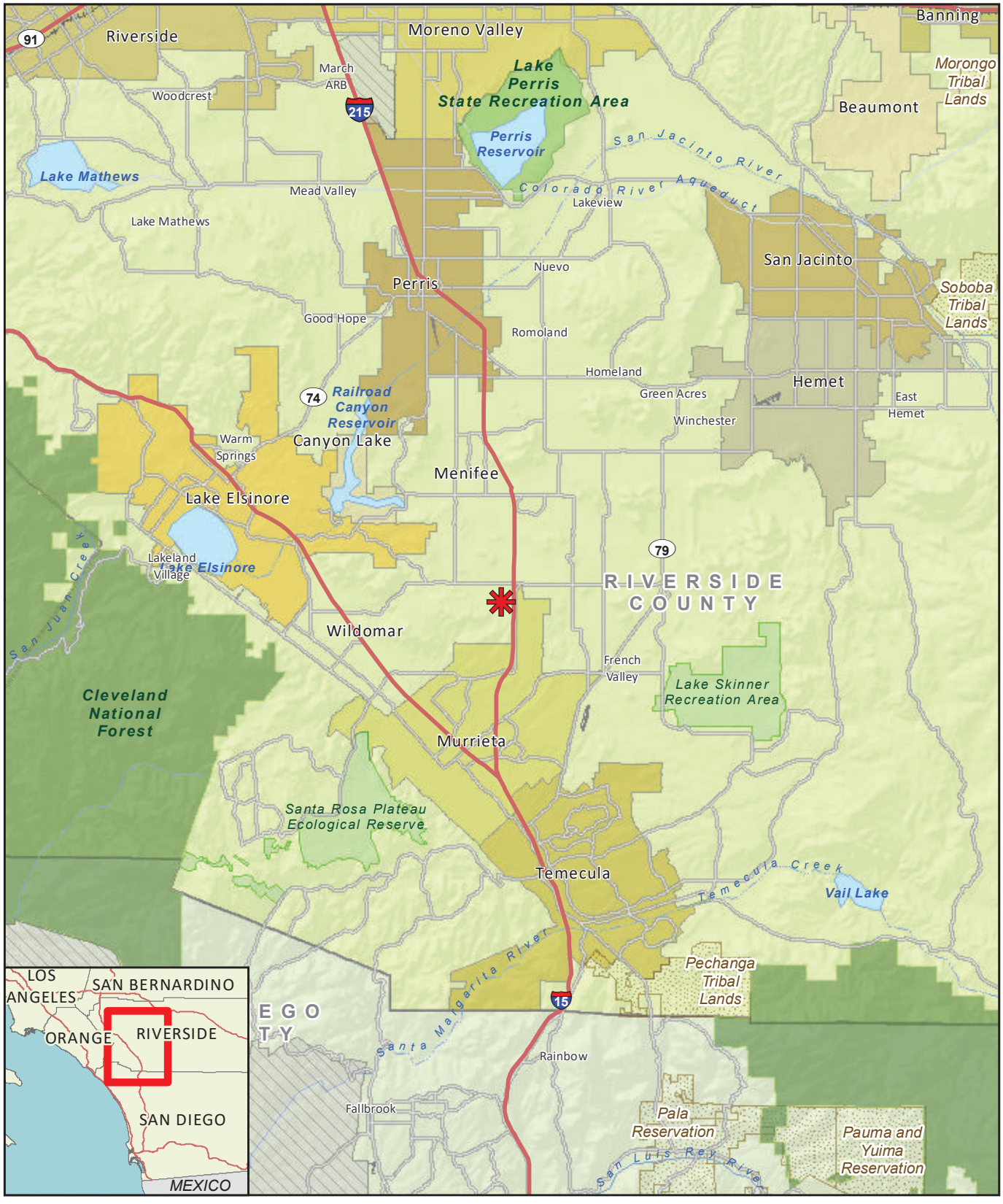
10.3 Potential CDFW Jurisdictional Resources

Under Sections 1600–1607 of the California Fish and Game Code, the CDFW regulates activities that would divert or obstruct the natural flow or would substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. The CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional areas are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. Within the Review Area, areas likely under the jurisdiction of CDFW include those non-wetland waters of the State described above. These areas would likely be considered CDFW streambed. In addition, the dripline of the three pepper trees in the vicinity of the ephemeral drainage in the southern portion of the Review Area would likely be considered CDFW riparian. The areas of potential CDFW streambed and riparian total 0.70 acre and 1,810 linear feet (see Figure 8).

ATTACHMENTS

ATTACHMENT 1

Maps



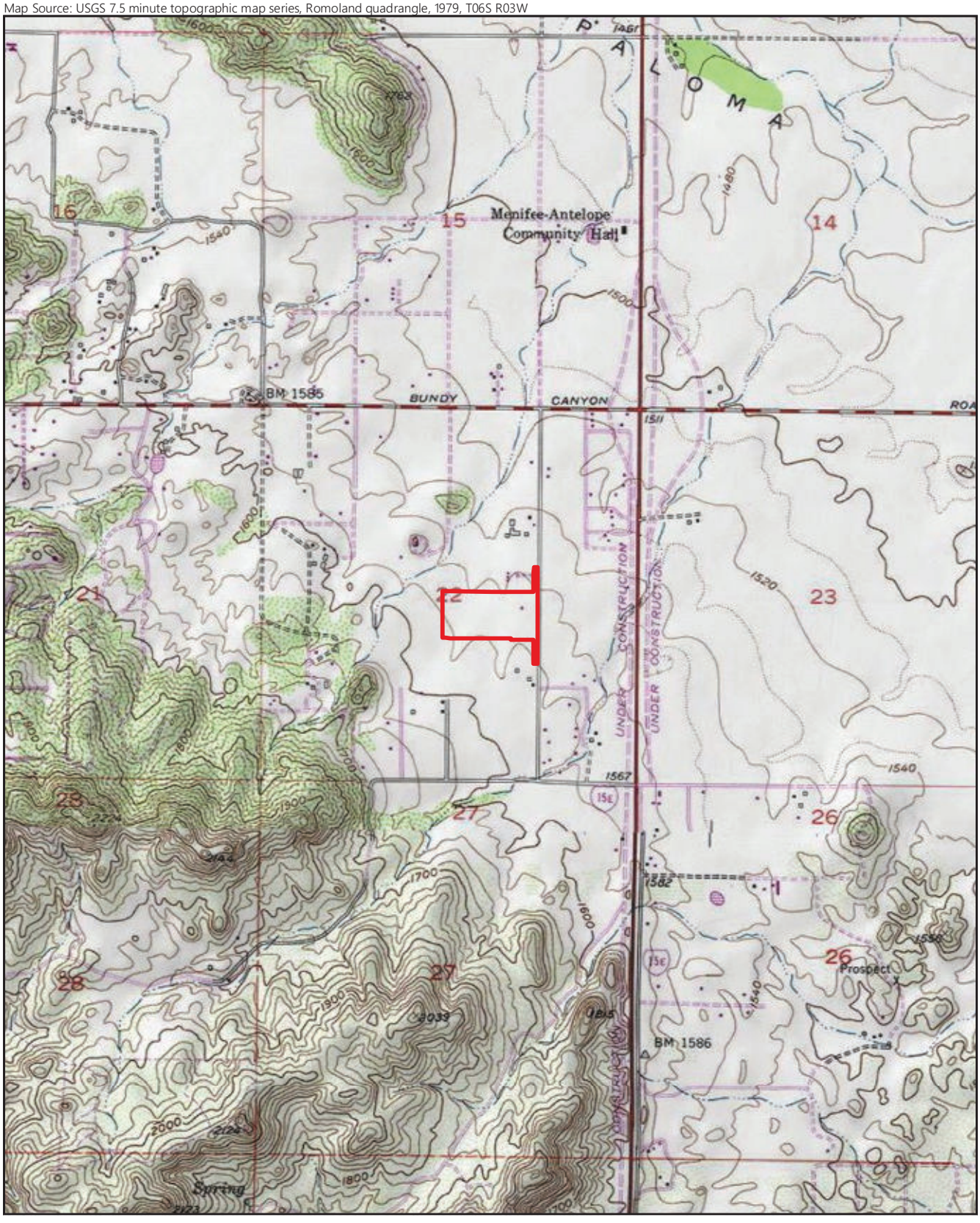
Project Location

RECON

M:\JOBS6\10420\common_gis\MXD\fig1.mxd 9/28/2023 fmm

FIGURE 1
Regional Location

Map Source: USGS 7.5 minute topographic map series, Romoland quadrangle, 1979, T06S R03W



0 Feet 2,000

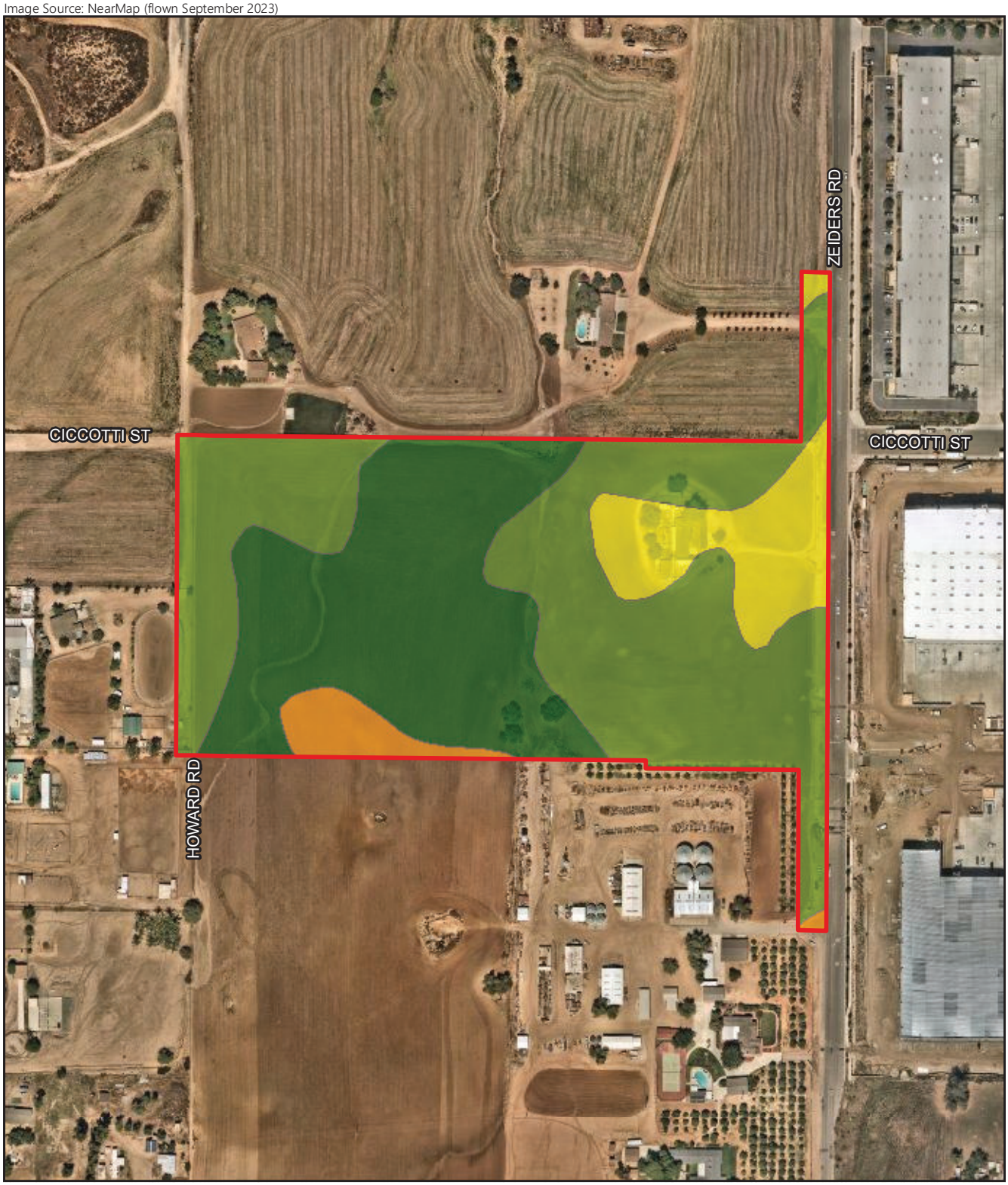
Review Area

RECON

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FIGURE 2
Project Location on USGS Map

Image Source: NearMap (flown September 2023)

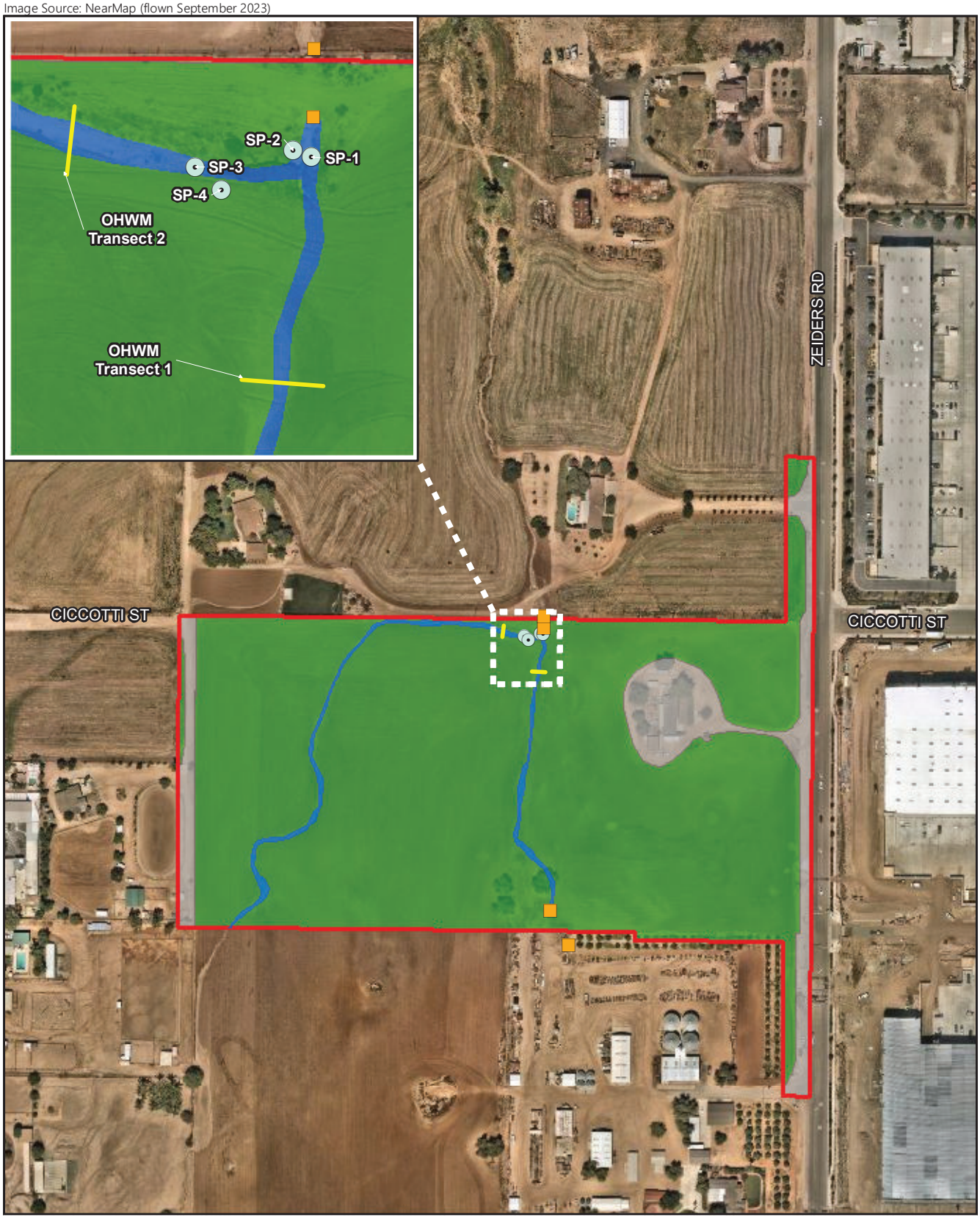


RECON

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FIGURE 4
Project Location on Soils Map

Image Source: NearMap (flown September 2023)

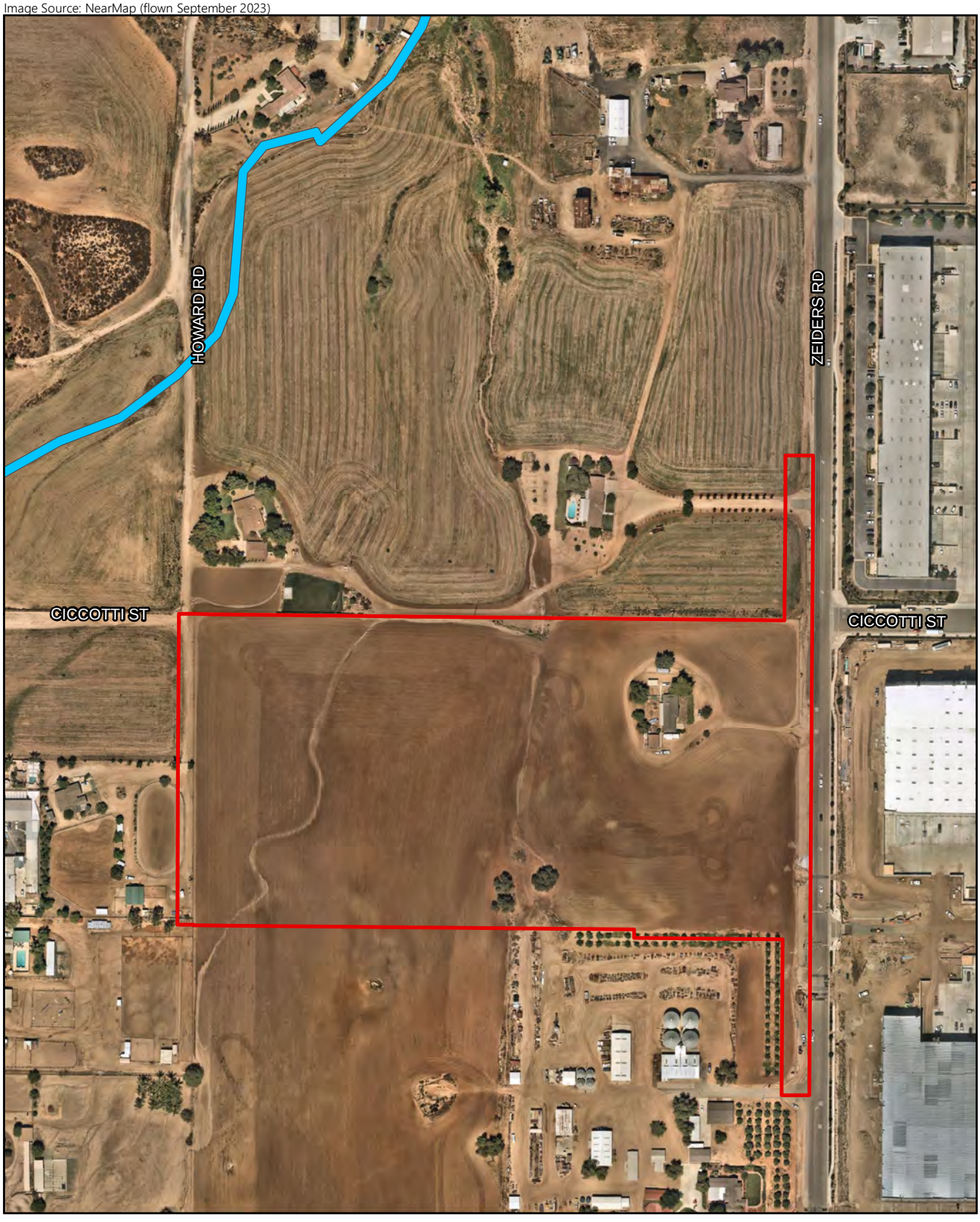


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FIGURE 5
Vegetation Communities within the Review Area

Image Source: NearMap (flown September 2023)

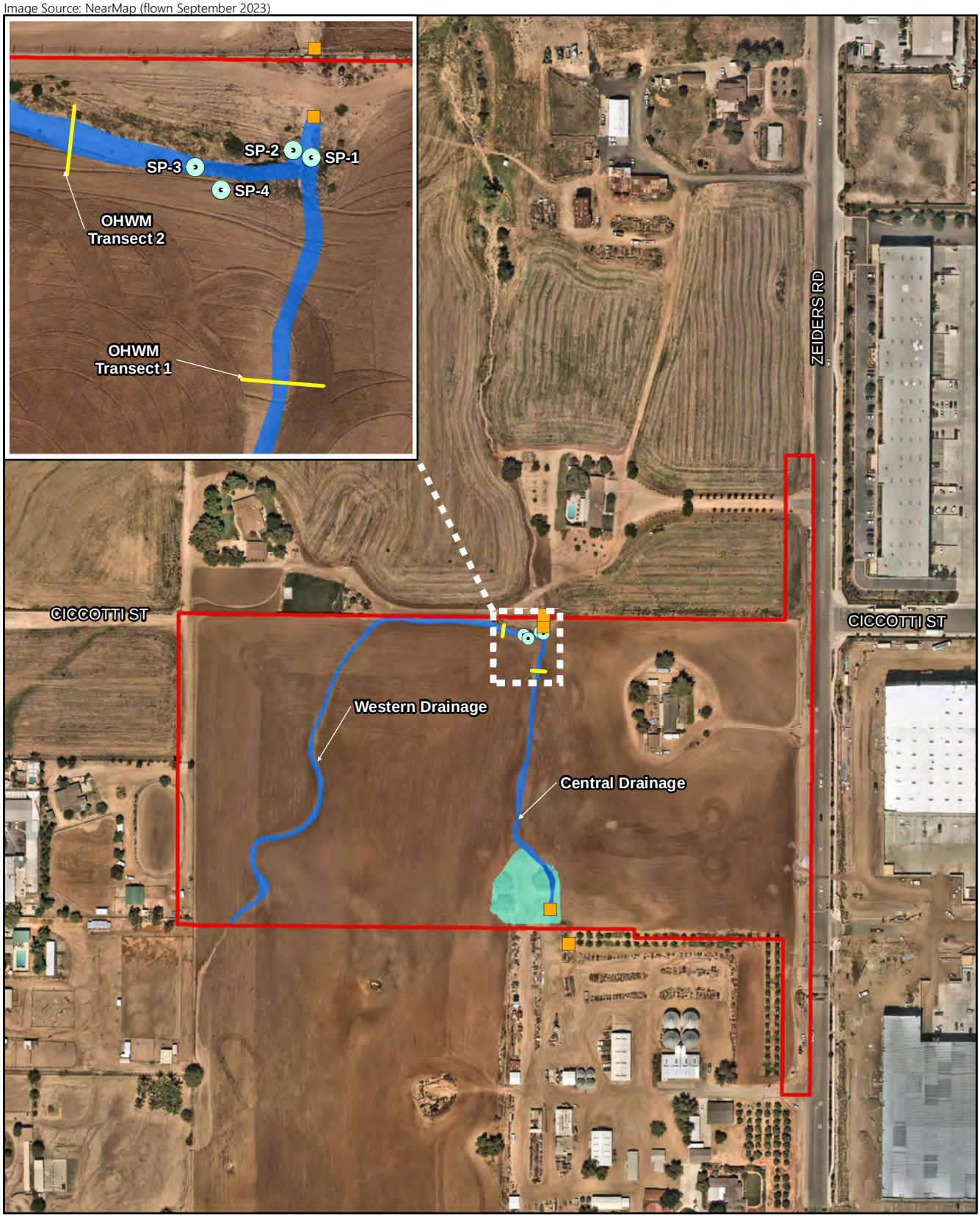


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FIGURE 6
National Wetlands Inventory

Image Source: NearMap (flown September 2023)



Review Area
OHWM Transect
Sample Point
Aquatic Resources
Culvert
Riparian
Non-Wetland Waters

0 Feet 300

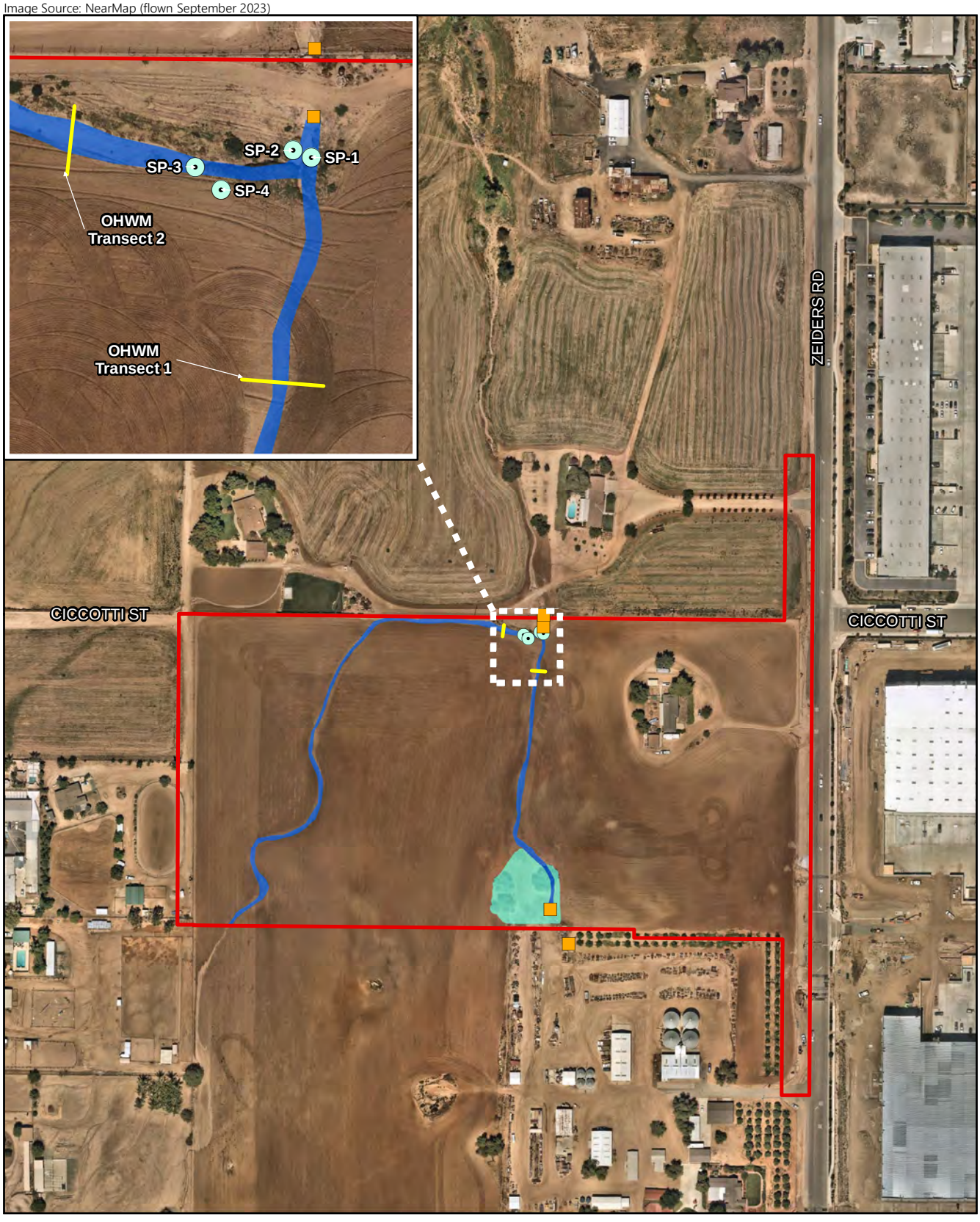
FIGURE 7

Aquatic Resources Delineated within the Review Area

RECON

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Image Source: NearMap (flown September 2023)



Review Area
Sample Point
Culvert
OHWM Transect
CDFW Riparian
RWQCB Non-wetland Waters of the State/CDFW Streambed

0 Feet 300

FIGURE 8

Potential RWQCB Waters of the State and CDFW Streambed/Riparian within the Review Area

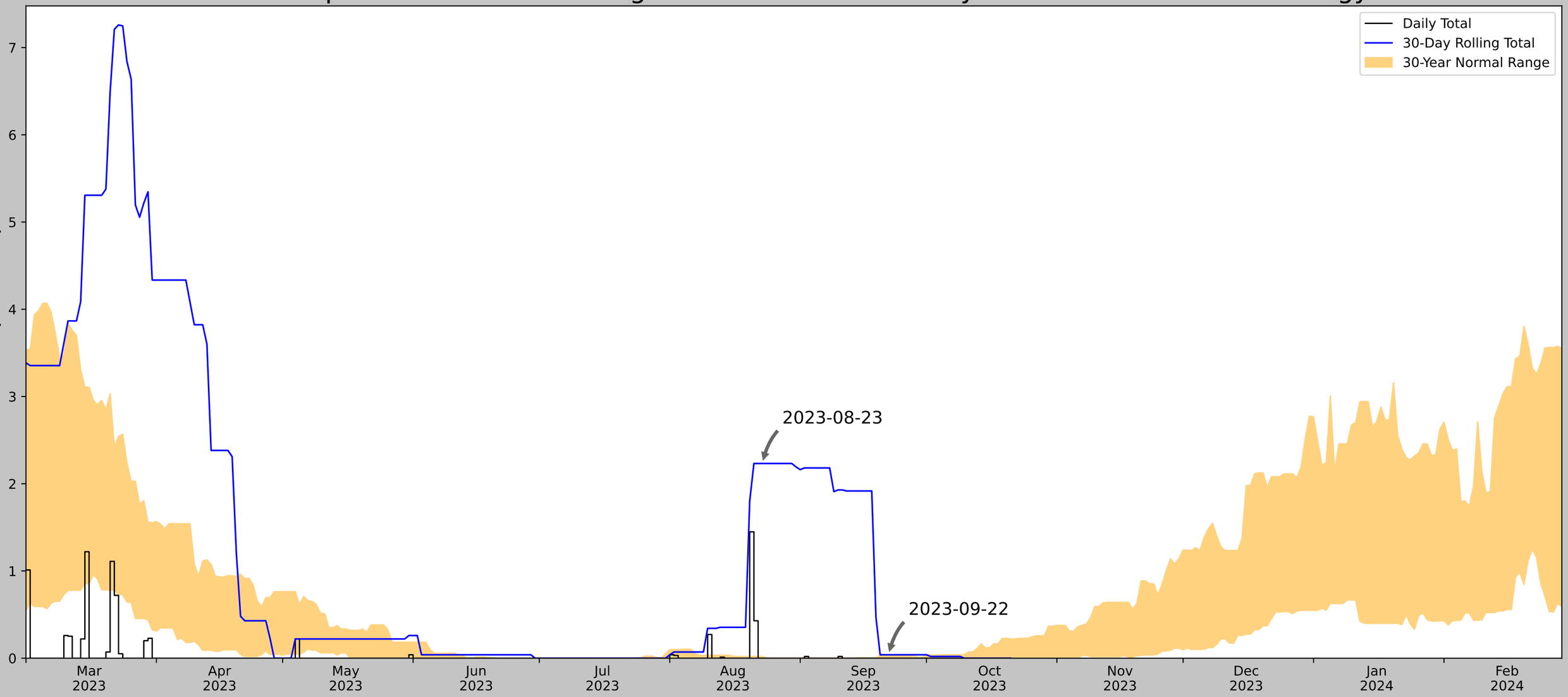
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ATTACHMENT 2

Antecedent Precipitation Tool Results

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	33.633381, -117.177781
Observation Date	2023-09-22
Elevation (ft)	1566.876
Drought Index (PDSI)	Moderate wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-09-22	0.0	0.037402	0.03937	Wet	3	3	9
2023-08-23	0.0	0.019685	2.232284	Wet	3	2	6
2023-07-24	0.0	0.003543	0.0	Normal	2	1	2
Result							Wetter than Normal - 17

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
ELSINORE	33.6861, -117.3458	1268.045	10.326	298.831	7.733	10808	90
CORONA 12.5 SE	33.7346, -117.4315	1301.837	5.957	33.792	2.882	2	0
CORONA 12.8 SE	33.7307, -117.4276	1403.871	5.621	135.826	3.293	2	0
SUN CITY	33.7156, -117.19	1419.948	9.185	151.903	5.528	121	0
FALLBROOK 5 NE	33.4392, -117.1903	1140.092	19.266	127.953	11.135	9	0
RIVERSIDE CITRUS EXP	33.9669, -117.3614	985.892	19.422	282.153	14.22	381	0
REDLANDS	34.0369, -117.1947	1410.105	25.742	142.06	15.241	30	0

ATTACHMENT 3

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Zeiders Road | City/County: Menifee, Riverside County | Sampling Date: 09/22/2023
Applicant/Owner: Pemcor Properties Inc. | State: CA | Sampling Point: 1
Investigator(s): Chelsea Polevy | Section, Township, Range: Section 22, Township 06 South, Range 03 West, Romoland quac
Landform (hillslope, terrace, etc): In channel | Local relief (concave, convex, none): none | Slope (%): 1-2
Subregion (LRR): C | Lat: 33.634196 | Long: -117.177501 | Datum: WGS84
Soil Map Unit Name: Wyman loam, 2 to 8 percent slopes, eroded | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X		
Hydric Soil Present?	Yes ____	No X	**Is the Sampled Area**	
Wetland Hydrology Present?	Yes ____	No X	**within a Wetland?**	Yes ____ No X

Remarks:
Sample point occurs within unvegetated, earthen-bottom channel. Vegetation, soil, and hydrology are significantly disturbed and normal circumstances are not present because the channel is disked regularly for agricultural purposes.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 100 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 0 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0.0

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:
No vegetation present within earthen-bottom channel.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100		0			Sand	No redox features observed.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Zeiders Road | City/County: Menifee, Riverside County | Sampling Date: 09/22/2023
Applicant/Owner: Pemcor Properties Inc. | State: CA | Sampling Point: 2
Investigator(s): Chelsea Polevy | Section, Township, Range: Section 22, Township 06 South, Range 03 West, Romoland quac
Landform (hillslope, terrace, etc): Upland terrace | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): C | Lat: 33.634202 | Long: -117.177522 | Datum: WGS84
Soil Map Unit Name: Wyman loam, 2 to 8 percent slopes, eroded | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	
Hydric Soil Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point collected on upland terrace adjacent to unvegetated, earthen-bottom channel. Sample point occurs as paired to Sample Point 1. Vegetation, soil, and hydrology are significantly disturbed and normal circumstances are not present because the channel is disked regularly for agricultural purposes.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 10-ft)			
1. *Datura* / Jimsonweed	30	Yes	NI
2. *Bromus* / Brome	10	Yes	NI
3. *Hirschfeldia incana* / Mustard	10	Yes	NI
4. *Brassica tournefortii* / Mustard	10	Yes	NI
5. *Bromus diandrus* / Ripgut brome, Ripgut grass	2	No	NI
6. *Brassica* / Mustard	1	No	NI
7. *Oncosiphon piluliferum* / Stinknet	1	No	FACU
8. *Raphanus sativus* / Jointed charlock, Radish	1	No	NI
	65	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 35 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	1	x 4 =	4
UPL species	64	x 5 =	320
Column Totals:	65 (A)		324 (B)

Prevalence Index = B/A = 4.98

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:
Vegetation does not meet hydrophytic vegetation standard.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/3	100		0			Sandy Loam	No redox features observed.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Zeiders Road | City/County: Menifee, Riverside County | Sampling Date: 09/22/2023
Applicant/Owner: Pemcor Properties Inc. | State: CA | Sampling Point: 3
Investigator(s): Chelsea Polevy | Section, Township, Range: Section 22, Township 06 South, Range 03 West, Romoland quac
Landform (hillslope, terrace, etc): In channel | Local relief (concave, convex, none): none | Slope (%): 0-1
Subregion (LRR): C | Lat: 33.634185 | Long: -117.177636 | Datum: WGS84
Soil Map Unit Name: Wyman loam, 2 to 8 percent slopes, eroded | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X		
Hydric Soil Present?	Yes ____	No X	**Is the Sampled Area**	
Wetland Hydrology Present?	Yes ____	No X	**within a Wetland?**	Yes ____ No X

Remarks:
Sample point occurs within unvegetated, earthen-bottom channel. Vegetation, soil, and hydrology are significantly disturbed and normal circumstances are not present because the channel is disked regularly for agricultural purposes.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 100 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 0 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0.0

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:
No vegetation present within earthen-bottom channel.

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-3	7.5YR 4/2	100		0			Fine Sand	No redox features observed.
3-16	7.5YR 4/3	100		0			Sand	No redox features observed.
16-18	7.5YR 3/2	100		0			Sandy Loam	No redox features observed.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Zeiders Road | City/County: Menifee, Riverside County | Sampling Date: 09/22/2023
Applicant/Owner: Pemcor Properties Inc. | State: CA | Sampling Point: 4
Investigator(s): Chelsea Polevy | Section, Township, Range: Section 22, Township 06 South, Range 03 West, Romoland quac
Landform (hillslope, terrace, etc): Upland terrrace | Local relief (concave, convex, none): none | Slope (%): 0
Subregion (LRR): C | Lat: 33.634163 | Long: -117.177605 | Datum: WGS84
Soil Map Unit Name: Wyman loam, 2 to 8 percent slopes, eroded | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X		
Hydric Soil Present?	Yes ____	No X	**Is the Sampled Area**	
Wetland Hydrology Present?	Yes ____	No X	**within a Wetland?**	Yes ____ No X

Remarks:
Sample point collected on upland terrace adjacent to unvegetated, earthen-bottom channel. Sample point occurs as paired to Sample Point 3. Vegetation, soil, and hydrology are significantly disturbed and normal circumstances are not present because the land is disked regularly for agricultural purposes.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 10-ft)			
1. *Datura* / Jimsonweed	20	Yes	NI
2. *Piptatherum miliaceum* / Smilograss	20	Yes	NI
3. *Hirschfeldia incana* / Mustard	5	No	NI
4. *Brassica tournefortii* / Mustard	2	No	NI
5. *Chenopodium* / Goosefoot	1	No	NI
6. *Raphanus sativus* / Jointed charlock, Radish	1	No	NI
7.			
8.			
	49	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 51 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	49	x 5 =	245
Column Totals:	49 (A)		245 (B)

Prevalence Index = B/A = 5.0

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:
Vegetation does not meet hydrophytic vegetation standard.

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/3	100		0			Sandy Loam	No redox features observed.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Shovel refusal (compacted soils)

Depth (inches): 12

Hydric Soil Present? Yes ___ No X

Remarks:

No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

ATTACHMENT 4

Ground Level Color Photographs



PHOTOGRAPH 1

View of Drainage Channels at their Confluence Along Northern Boundary of Review Area, Facing North. Upland Vegetation Species Present Along Banks of Drainage Channel.



PHOTOGRAPH 2

View of Central Drainage Channel, Facing South/Southwest. OHWM Indicators Include Change in Sediment, Change in Vegetation, Break in Bank Slope, and Drainage Patterns.



PHOTOGRAPH 3

View of Western Drainage Channel, Facing West. OHWM Indicators Include Change in Sediment, Change in Vegetation, Shelving, and Drainage Patterns. No Consistent Bed and Bank and No Vegetation on South Side of Drainage due to Recent Agricultural Disking.



PHOTOGRAPH 4

View of Central Drainage Channel, Facing South. Indicators Inconsistent Upstream of OHWM Transect 1 due to Recent Agricultural Disking.



PHOTOGRAPH 5
View of Western Drainage Channel, Facing North/northeast. OHWM Indicators Inconsistent Upstream of OHWM Transect 2 due to Recent Agricultural Disking.



PHOTOGRAPH 6
View of Southeastern Corner of Review Area with No Defined Bed and Bank, OHWM, or Hydrophytic Plant Species, Facing Northeast.

ATTACHMENT 5

Ordinary High Water Mark Data Sheets

U.S. Army Corps of Engineers (USACE)

RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

OMB Control No. 0710-

Approval Expires:

Project ID #: OHWM Transect 1	Site Name: Zeiders Road	Date and Time: 09/22/2023, 11:00 AM
Location (lat/long): 33.633975, -117.177541	Investigator(s): Chelsea Polevy	

Step 1 Site overview from remote and online resources

Check boxes for online resources used to evaluate site:

- ☐ gage data
- ☐ LiDAR
- ☐ geologic maps
- ☒ climatic data
- ☒ satellite imagery
- ☒ land use maps
- ☒ aerial photos
- ☒ topographic maps
- ☐ Other:

Describe land use and flow conditions from online resources. Were there any recent extreme events (floods or drought)?

Unvegetated, earthen-bottom channel traveling south to north through center of Review Area.

Step 2 Site conditions during field assessment

First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc.

Channel enters southern end of Review Area via culvert inlet and converges with a second on-site channel before exiting Review Area via culvert outfall under unnamed dirt road. Channel is tilled regularly for agricultural purposes and likely re-emerges during rain events. Appears to convey an ephemeral flow regime.

Step 3 **Check the boxes next to the indicators used to identify the location of the OHWM.**

OHWM is at a transition point, therefore some indicators that are used to determine location may be just below and above the OHWM. From the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below `b', at `x', or just above `a' the OHWM.

OHWM. Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log.

Geomorphic Indicators

- ☐ **Break in slope:** a
  - ☒ *on the bank:* x
  - ☐ *undercut bank:*
  - ☐ *valley bottom:*
  - ☐ *Other:* _____
- ☒ **Shelving:** b
  - ☐ *shelf at top of bank:*
  - ☐ *natural levee:*
  - ☐ *man-made berms or levees:*
  - ☐ *other bems:* _____
- ☐ **Channel bar:**
  - ☐ *shelving (berms) on bar:*
  - ☐ *unvegetated:*
  - ☐ *vegetation transition (go to veg. indicators):*
  - ☐ *sediment transition (go to sed. Indicators)*
  - ☐ *upper limit of deposition on bar:*
- ☐ **Instream bedforms and other bedload transport evidence:**
  - ☐ *deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.)*
  - ☐ *bedforms (e.g., poofs, riffles, steps, etc.):*
  - ☐ *erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.)*
- ☐ **Secondary channels:**

Sediment Indicators

- ☒ **Soil development:** x
- ☒ **Changes in character of soil:** x
- ☐ **Mudcracks:**
- ☒ **Changes in particle-sized distribution:** x
  - ☒ *transition from* coarse sand *to* coarse silt
  - ☐ *upper limit of sand-sized particles*
  - ☐ *silt deposits*

Vegetation Indicators

- ☒ **Change in vegetation type and/or density:** a

  Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). ***Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain.***

  - ☒ *vegetation absent to:* forbs
  - ☐ *moss to:*
  - ☐ *forbs to:*
  - ☐ *graminoids to:*
  - ☐ *woody shrubs to:*
  - ☐ *deciduous trees to:*
  - ☐ *coniferous trees to:*
- ☒ **Vegetation matted down and/or bent:** x
- ☐ **Exposed roots below intact soil layer:**

Ancillary indicators

- ☐ **Wracking/presence of organic litter:**
- ☐ **Presence of large wood:**
- ☐ **Leaf litter disturbed or washed away:**
- ☐ **Water staining:**
- ☐ **Weathered clasts or bedrock**

Other observed indicators?

Describe:

Drainage patterns below the OHWM along channel bottom.

Step 4 Is additional information needed to support this determination?

☐ Yes ☒ No

If yes, describe and attach information to datasheet:

Project ID # OHWM Transect 1

Step 5 Describe rationale for location of OHWM

The OHWM occurs along the base of the channel slope where a change in vegetation type/density and change in sediment character/particle size occurrs. Channel has a bed and bank structure. Vegetation appears bent at the OHWM and drainage patterns consisting of visible flow patterns on the soil surface occur below the OHWM along the channel bottom. OHWM indicators inconsistent upstream of OHWM Transect 1 due to recent agricultural disking throughout the Review Area.

Additional observations or notes

Attach a photo log of the site. Use the table below, or attach separately.

Photo log attached? ☒ Yes ☐ No If no, explain why not: _____

List photographs and include descriptions in the table below.

Number photographs in the order that they are taken. Attach photographs and include annotations of features.

Photo Number	Photograph Description
1	View of Change in Vegetation, Change in Sediment, and Break in Slope at OHWM Transect 1 Within Central Drainage Channel, Facing South/southwest (Upstream).
2	View of Change in Sediment and Drainage Patterns Consisting of Visible Flow Patterns Upstream of OHWM Transect 1 Within Central Drainage Channel, Facing South (Upstream). Indicators Inconsistent due to Recent Agricultural Disking.



PHOTOGRAPH 1

View of Change in Vegetation, Change in Sediment, and Break in Slope at OHWM Transect 1 Within Central Drainage Channel, Facing South/southwest (Upstream)



PHOTOGRAPH 2
View of Change in Sediment and Drainage Patterns Consisting of Visible Flow Patterns Upstream of OHWM Transect 1 Within Central Drainage Channel, Facing South (Upstream). Indicators Inconsistent due to Recent Agricultural Disking

U.S. Army Corps of Engineers (USACE)

RAPID ORDINARY HIGH WATER MARK (OHWM) FIELD IDENTIFICATION DATA SHEET

The proponent agency is Headquarters USACE CECW-CO-R.

OMB Control No. 0710-

Approval Expires:

Project ID #: OHWM Transect 2	Site Name: Zeiders Road	Date and Time: 09/22/2023, 10:00 AM
Location (lat/long): 33.634210, -117.177782	Investigator(s): Chelsea Polevy	

Step 1 Site overview from remote and online resources

Check boxes for online resources used to evaluate site:

- ☐ gage data
- ☐ LiDAR
- ☐ geologic maps
- ☒ climatic data
- ☒ satellite imagery
- ☒ land use maps
- ☒ aerial photos
- ☒ topographic maps
- ☐ Other:

Describe land use and flow conditions from online resources. Were there any recent extreme events (floods or drought)?

Unvegetated, earthen-bottom channel traveling generally south to north/northeast along western edge of Review Area.

Step 2 Site conditions during field assessment

First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or man-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls etc.

Channel enters southern end of Review Area and converges with a second on-site channel before exiting Review Area via culvert outfall under unnamed dirt road. Channel banks are altered from road grading on north side and agricultural tilling on south side. Appears to convey an ephemeral flow regime.

Step 3 **Check the boxes next to the indicators used to identify the location of the OHWM.**

OHWM is at a transition point, therefore some indicators that are used to determine location may be just below and above the OHWM. From the drop-down menu next to each indicator, select the appropriate location of the indicator by selecting either just below `b', at `x', or just above `a' the OHWM.

OHWM. Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and to attach a photo log.

Geomorphic Indicators

- ☐ **Break in slope:** a
  - ☒ *on the bank:* x
  - ☐ *undercut bank:*
  - ☐ *valley bottom:*
  - ☐ *Other:* North side only (south side recently disked)
- ☒ **Shelving:** b
  - ☐ *shelf at top of bank:*
  - ☐ *natural levee:*
  - ☐ *man-made berms or levees:*
  - ☐ *other bems:*
- ☐ **Channel bar:**
  - ☐ *shelving (berms) on bar:*
  - ☐ *unvegetated:*
  - ☐ *vegetation transition (go to veg. indicators):*
  - ☐ *sediment transition (go to sed. Indicators)*
  - ☐ *upper limit of deposition on bar:*
- ☐ **Instream bedforms and other bedload transport evidence:**
  - ☐ *deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.)*
  - ☐ *bedforms (e.g., poofs, riffles, steps, etc.):*
  - ☐ *erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.)*
- ☐ **Secondary channels:**

Sediment Indicators

- ☒ **Soil development:** x
- ☒ **Changes in character of soil:** x
- ☐ **Mudcracks:**
- ☒ **Changes in particle-sized distribution:** x
  - ☒ *transition from* fine sand to fine silt
  - ☐ *upper limit of sand-sized particles*
  - ☐ *silt deposits*

Vegetation Indicators

- ☒ **Change in vegetation type and/or density:** a

Check the appropriate boxes and select the general vegetation change (e.g., graminoids to woody shrubs). ***Describe the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain.***

- ☒ *vegetation absent to:* forbs
- ☐ *moss to:*
- ☐ *forbs to:*
- ☐ *graminoids to:*
- ☐ *woody shrubs to:*
- ☐ *deciduous trees to:*
- ☐ *coniferous trees to:*
- ☐ **Vegetation matted down and/or bent:**
- ☐ **Exposed roots below intact soil layer:**

Ancillary indicators

- ☐ **Wracking/presence of organic litter:**
- ☐ **Presence of large wood:**
- ☐ **Leaf litter disturbed or washed away:**
- ☐ **Water staining:**
- ☐ **Weathered clasts or bedrock**

Other observed indicators?

Describe:

Drainage patterns below the OHWM along channel bottom.

Step 4 Is additional information needed to support this determination?

☐ Yes ☒ No

If yes, describe and attach information to datasheet:

Project ID # OHWM Transect 2

Step 5 Describe rationale for location of OHWM

The OHWM occurs along the base of the channel slope where a change in sediment character/particle size and drianage patterns consisting of visible flow paterns on the soil surface occur. A change in vegetation type/density occurs along the northern channel bank and the channel has a consistent bed and bank structure on the north side. No vegetation is present and no consistent bed and bank occur on the south side of the channel due to recent agricultural disking. In addition, OHWM indicators are inconsistent upstream of OHWM Transect 2 due to recent agricultural disking throughout the Review Area.

Additional observations or notes

Attach a photo log of the site. Use the table below, or attach separately.

Photo log attached? ☒ Yes ☐ No If no, explain why not: _____

List photographs and include descriptions in the table below.

Number photographs in the order that they are taken. Attach photographs and include annotations of features.

Photo Number	Photograph Description
1	View of Change in Sediment, Change in Vegetation (North Side), Bed and Bank (North Side), and Drainage Patterns Consisting of Visible Flow Patterns at OHWM Transect 2 Within Western Drainage Channel, Facing West (Upstream).
2	View of Change in Sediment Upstream of OHWM Transect 2 Within Western Drainage Channel, Facing Southwest (Upstream). Indicators Inconsistent due to Recent Agricultural Disking.
3	View of Change in Sediment, Change in Vegetation, and Break in Slope Downstream of OHWM Transect 2 Within Western Drainage Channel, Facing East (Downstream).



PHOTOGRAPH 1

View of Change in Sediment, Change in Vegetation (North Side), Bed and Bank (North Side), and Drainage Patterns Consisting of Visible Flow Patterns at OHWM Transect 2 Within Western Drainage Channel, Facing West (Upstream).



PHOTOGRAPH 2

View of Change in Sediment Upstream of OHWM Transect 2 Within Western Drainage Channel, Facing Southwest (Upstream). Indicators Inconsistent due to Recent Agricultural Disking.



PHOTOGRAPH 3

View of Change in Sediment, Change in Vegetation, and Break in Slope Downstream of OHWM Transect 2 Within Western Drainage Channel, Facing East (Downstream).

ATTACHMENT 6

References Cited

References Cited

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ATTACHMENT 2

Burrowing Owl Habitat Assessment Survey Results for the Zeiders Road Project

RECON

An Employee-Owned Company

November 14, 2023

Mr. Paul Mayer
Pemcor Properties Inc.
P.O. Box 903
Rancho Santa Fe, CA

Reference: Burrowing Owl Habitat Assessment Results for the Zeiders Road Project (RECON Number 10420)

Dear Mr. Mayer:

This letter summarizes the results of the September 22, 2023, habitat assessment for the burrowing owl (*Athene cunicularia*) for the Zeiders Road Project (project). The 21.56-acre project survey area site is in the city of Menifee, within the U.S. Geological Survey (USGS) 7.5-minute Romoland quadrangle, Section 22, Township 06 South, Range 03 West (USGS 1979; Figures 1-3).

RECON Environmental, Inc. (RECON) biologists conducted the survey in accordance with the guidelines developed by the Western Riverside County Regional Conservation Authority ([WRCRCA] 2006). No burrowing owl individuals were observed during the habitat assessment; however, two unsuitable burrows are present on the project site (Photographs 1 and 2). A discussion of the results of the survey conducted is provided below.

SURVEY METHODS

RECON biologists Beth Procsal and Chelsea Polevy conducted a habitat assessment within the project site. The burrowing owl survey area (BUOW survey area) included a 150-meter buffer surrounding the project site (Figure 4). The entire survey area was evaluated for suitable habitat and a majority of it was characterized as areas of bare ground and loose soils with potential to support burrows and/or burrow surrogates. Transects, spaced no more than 100 feet apart, were then walked through, all suitable habitat was identified within the survey area; however, no trespassing occurred, and surveillance of the buffer was done from the edge of the project site. Survey dates, times, and weather conditions are provided in Table 1.

Table 1
Survey Information

Date	Survey Type	Surveyors	Beginning Conditions	Ending Conditions
9/22/2023	Step I- Burrowing Owl Habitat Assessment & Step II, Part A Focused Burrow Survey	B. Procsal; C. Polevy	9:30 a.m.; 68°F; 0-1 mph; 30% cc	1:20 p.m.; 76°F; 0-2 mph; 40% cc

°F = degrees Fahrenheit; mph = miles per hour; % = percent; cc = cloud cover.

SURVEY RESULTS

Step I Habitat Assessment Results

The project site consists of field croplands and residential/urban/exotic. Within the 150-meter buffer, the project site is immediately surrounded by residential and commercial development, and field croplands to the north, south, east, and west. The survey area is further surrounded by a mosaic of rural development.

The field croplands, occupying 19.31 acres, offers soft soils suitable for burrowing; therefore, suitable habitat for burrowing owl. This land cover type is dominated by bare ground and scattered non-native forbs and grasses comprised primarily of Sahara mustard (*Brassica tournefortii*), nettle-leaf goosefoot (*Chenopodium murale*), and short-pod mustard (*Hirschfeldia incana*). Field cropland generally consist of disked farmland and in reviewing historic aerials the project site is disked frequently. Ephemeral drainages occur within the field croplands and have also been disked and evidence of the sandy bottoms was apparent during the habitat assessment. The residential/urban/exotic land cover type occupies 2.25 acre and consists of the residence on-site and paved areas. Photograph 3 shows an overview of the survey area.

Focused Burrow Survey (Step II, Part A) Results

Two inactive burrows were observed within the field croplands within two clumps of dense vegetation where disking did not occur (see Figure 3 and Photographs 1 and 2); however, they were less than 11 centimeters thereby, making these unsuitable burrows for burrowing owl (California Department of Fish and Wildlife 2012). The entrances of these inactive burrows were also covered with vegetation and no burrowing owl sign, including whitewash, pellets, or feathers, was observed.

Pre-Construction Survey Requirement

A pre-construction survey will be required within 30 days prior to ground disturbance to ensure no burrowing owls have entered the site and to avoid direct take of burrowing owls, if present. The survey will include all areas where suitable habitat is present within the survey area (WRCRCA 2006).

If you have any questions concerning the contents of this letter, please contact me at (619) 308-9333 extension 111 or bprocsal@reconenvironmental.com.

Sincerely,



Beth Procsal
Senior Biologist

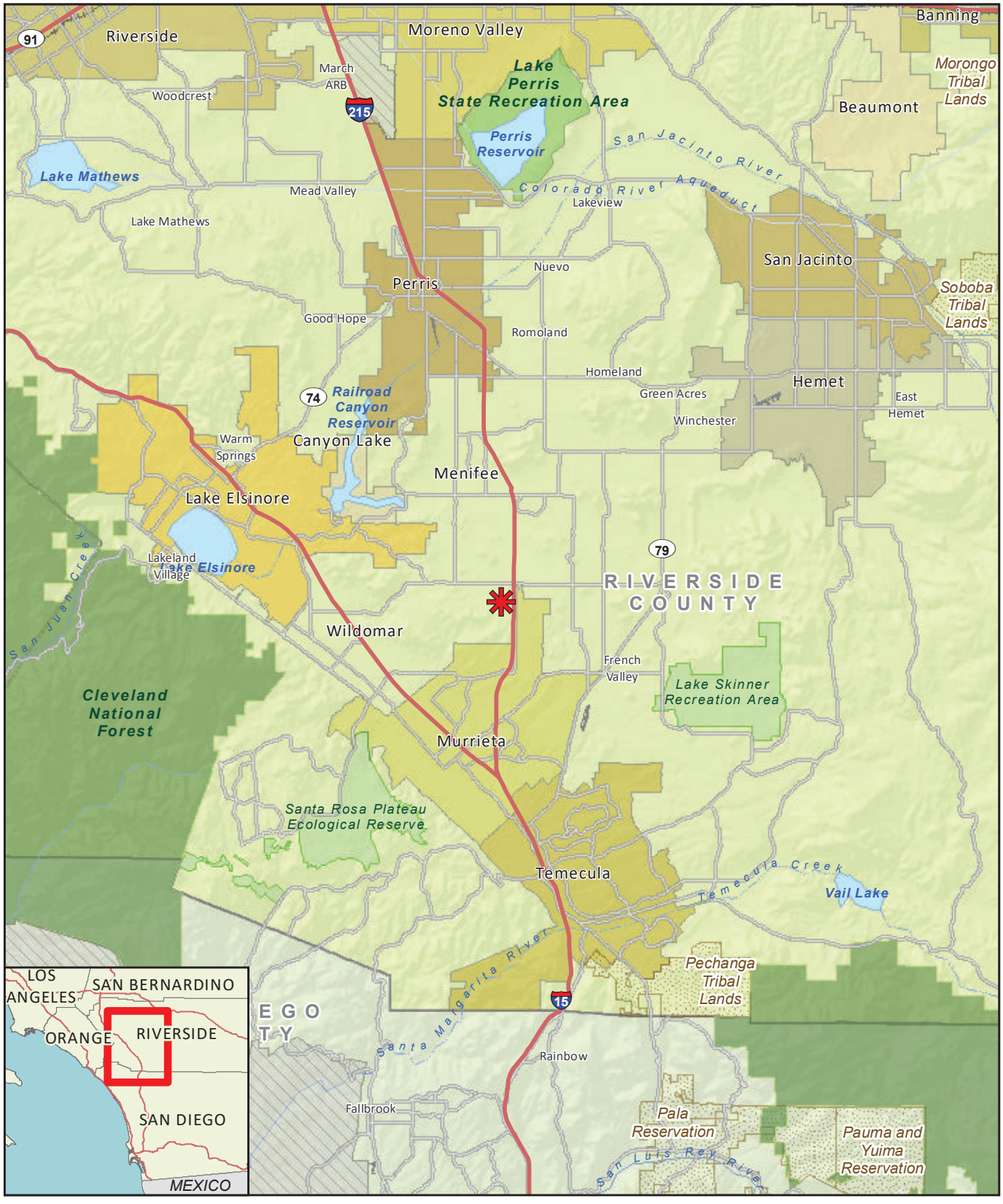
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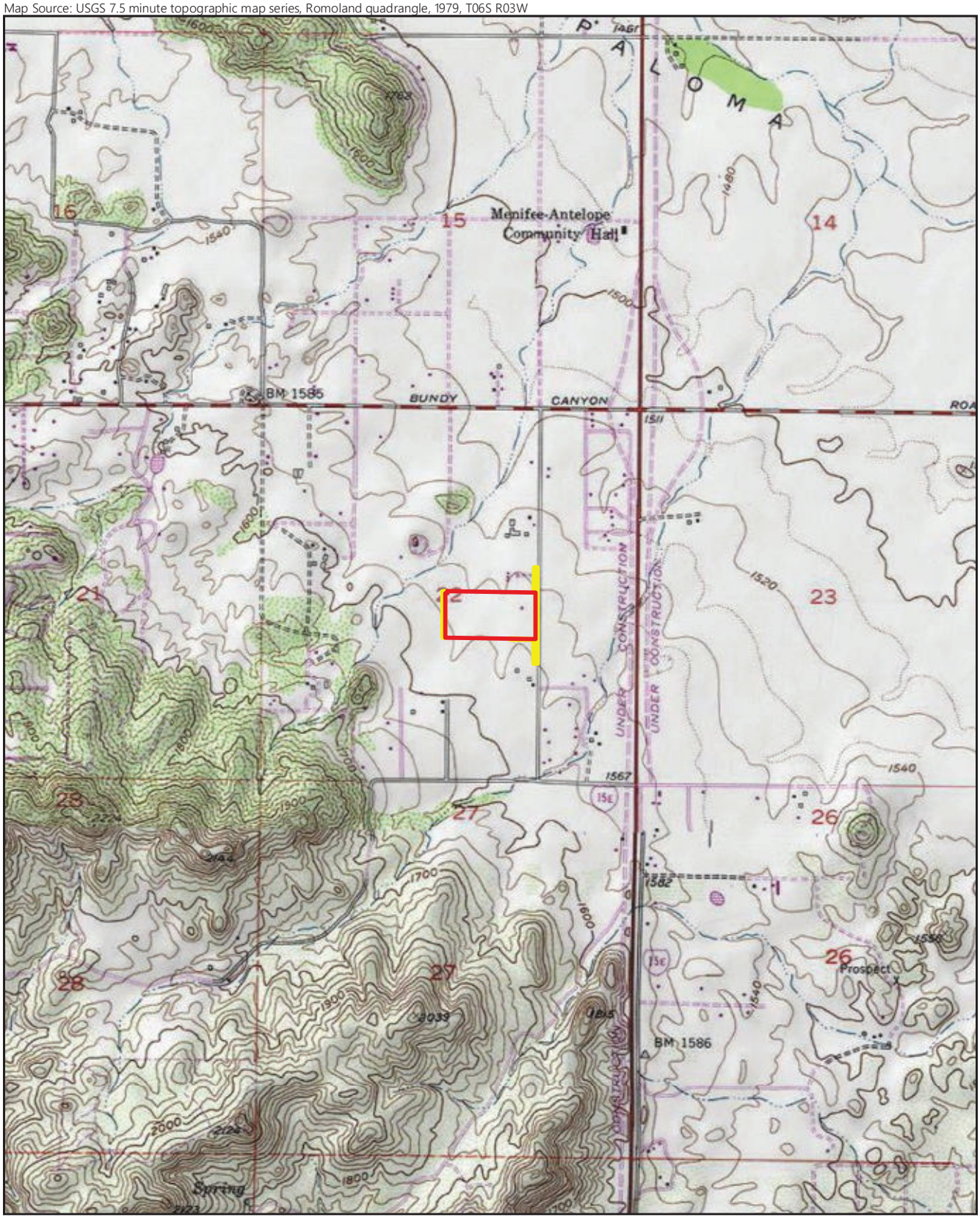
Project Location

RECON

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FIGURE 1
Regional Location

Map Source: USGS 7.5 minute topographic map series, Romoland quadrangle, 1979, T06S R03W

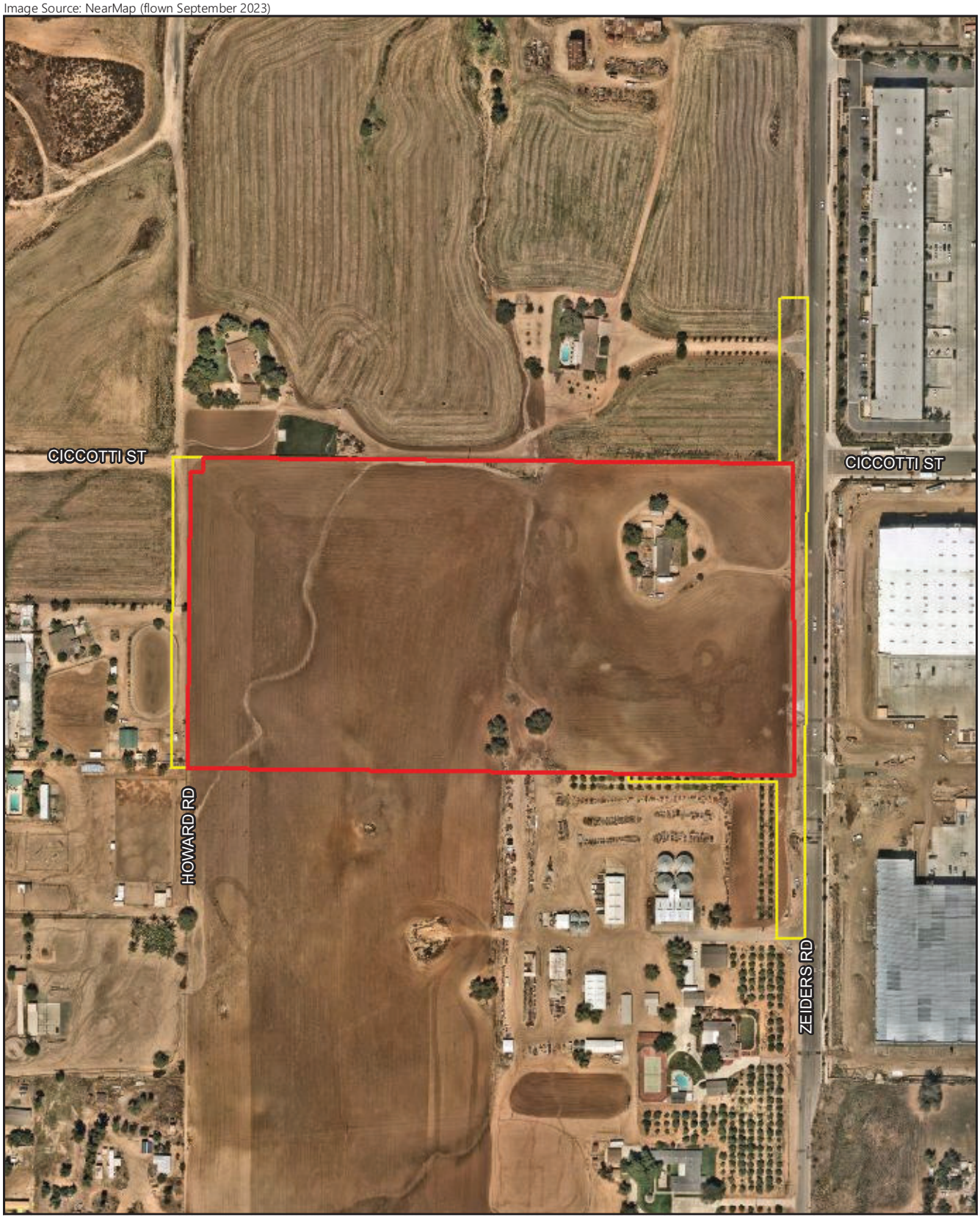


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FIGURE 2
Project Location on USGS Map

Image Source: NearMap (flown September 2023)

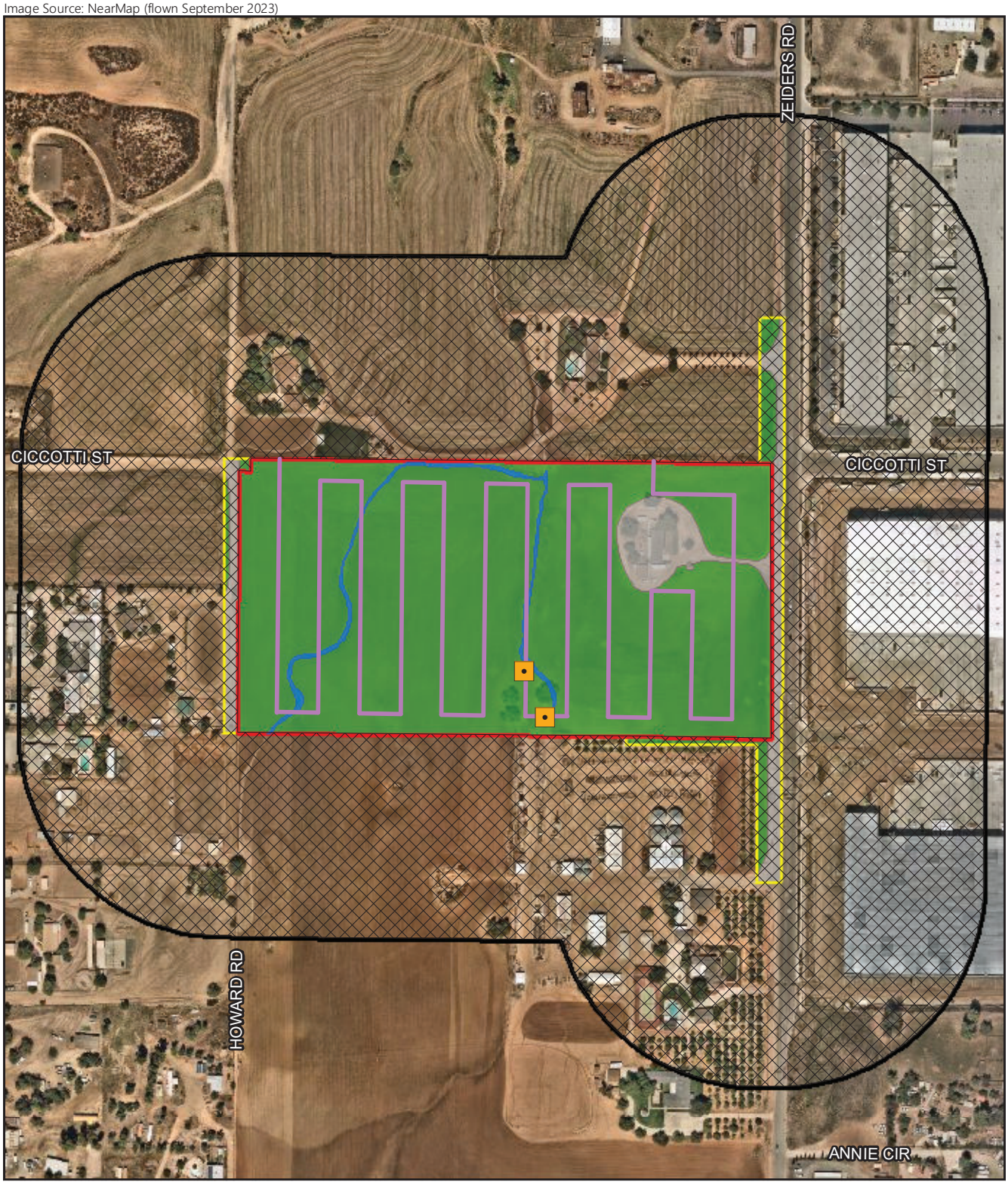


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FIGURE 3
Project Location on Aerial Photograph

Image Source: NearMap (flown September 2023)



0 Feet 350

- Project Boundary
- Off-site Improvements
- Private Property
- BUOW Survey Area
- Unsuitable Burrow, No Sign
- Transects
- Ephemeral Drainage

Vegetation Communities

- Field Croplands
- Residential/Urban/Exotic

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FIGURE 4

Burrowing Owl Habitat Assessments Results



PHOTOGRAPH 1
View of Inactive Burrow with Vegetation Debris Removed from the Entrance, Facing South.
Photo Date: 9/22/23



PHOTOGRAPH 2
View of Mound with Inactive Burrow, Facing East.
Photo Date: 9/22/23



PHOTOGRAPH 3
Overview of the Project Survey Area with Field Croplands in the Foreground with the Eastern Ephemeral Drainage and Residential/Urban/Exotic land in the Background.
Photo Date: 9/22/23

ATTACHMENT 3

Plant Species Observed

Attachment 3 Plant Species Observed				
Major Plant Group	Family	Scientific Name / Common Name	Occupied Habitat	Origin
Angiosperms: Monocots	Arecaceae / Palm Family	*Washingtonia robusta* / Mexican fan palm	Field Croplands	I
	Poaceae (Gramineae) / Grass Family	*Cynodon dactylon* / Bermuda grass	Field Croplands	I
	Poaceae (Gramineae) / Grass Family	*Stipa miliacea* var. *miliacea* [=*Piptatherum miliaceum* ssp. *miliaceum* and *Oryzopsis miliacea*] / smilo grass	Field Croplands	I
Angiosperms: Eudicots	Anacardiaceae / Sumac or Cashew Family	*Schinus molle* / Peruvian pepper tree	Field Croplands, Residential/Urban/Exotic	I
	Asteraceae / Sunflower Family	*Ambrosia acanthicarpa* / annual bur-sage	Field Croplands	N
	Asteraceae / Sunflower Family	*Helianthus petiolaris* / prairie sunflower	Field Croplands	N
	Asteraceae / Sunflower Family	*Oncosiphon piluliferum* / stinknet, globe chamomile	Field Croplands	I
	Brassicaceae (Cruciferae) / Mustard Family	*Brassica tournefortii* / Sahara mustard	Field Croplands	I
	Brassicaceae (Cruciferae) / Mustard Family	*Hirschfeldia incana* / short-pod mustard	Field Croplands	I
	Brassicaceae (Cruciferae) / Mustard Family	*Raphanus sativus* / radish	Field Croplands	I
	Chenopodiaceae / Goosefoot Family	*Chenopodium murale* / nettle-leaf goosefoot	Field Croplands	I
	Chenopodiaceae / Goosefoot Family	*Dysphania* pumilio / Tasmanian gooseft	Field Croplands	I
	Chenopodiaceae / Goosefoot Family	*Salsola tragus* / Russian thistle, tumbleweed	Field Croplands	I
	Elaeagnaceae / Oleaster Family	*Elaeagnus angustifolia* / oleaster, Russian olive	Residential/Urban/Exotic	I
	Euphorbiaceae / Spurge Family	*Croton setiger* [=*Eremocarpus setiger*] / turkey-mullein, dove weed	Field Croplands	N
	Geraniaceae / Geranium Family	*Erodium cicutarium* / redstem filaree	Field Croplands	I
	Lamiaceae / Mint Family	*Trichostema lanceolatum* / vinegar weed	Field Croplands	N
	Malvaceae / Mallow Family	*Malva parviflora* / cheeseweed, little mallow	Field Croplands	I
	Polygonaceae / Buckwheat Family	*Eriogonum fasciculatum* / California buckwheat	Field Croplands	N
	Polygonaceae / Buckwheat Family	*Eriogonum gracile* / slender buckwheat	Field Croplands	N
	Polygonaceae / Buckwheat Family	*Polygonum aviculare* ssp. *depressum* [=*Polygonum arenastrum*] / common knotweed, doorweed	Field Croplands	I
	Portulacaceae / Purslane Family	*Portulaca oleracea* / purslane	Field Croplands	I
	Solanaceae / Nightshade Family	*Datura wrightii* / western Jimson weed	Field Croplands	N
	Solanaceae / Nightshade Family	*Nicotiana glauca* / tree tobacco	Field Croplands	I
	Zygophyllaceae / Caltrop Family	*Tribulus terrestris* / puncture vine	Field Croplands	I

NOTE: Scientific and common names were primarily derived from Jepson eFlora (Jepson Flora Project 2023). Additional common names were obtained from the *Sunset Western Garden Book* (Brenzel 2001) for ornamental/horticultural plants. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2023a.

ORIGIN
N =Native to locality; I = Introduced species from outside locality.

ATTACHMENT 4

Wildlife Species Observed

Attachment 4 Wildlife Species Observed					
Major Wildlife Group	Family	Scientific / Common Name	Origin	Occupied Habitat	Evidence of Occurrence
Birds	Cathartidae / New World Vultures	*Cathartes aura* / turkey vulture	N	Fly over	O
	Columbidae / Pigeons & Doves	*Streptopelia decaocto* / Eurasian collared-dove	I	Residential/Urban/Exotic	O, V
	Tyrannidae / Tyrant Flycatchers	*Sayornis saya* / Say's phoebe	N	Field Croplands	O, V
	Alaudidae / Larks	*Eremophila alpestris actia* / California horned lark	N	Field Croplands	V
Mammals	Sciuridae / Squirrels & Chipmunks	*Otopermophilus* [=*Spermophilus*] *beecheyi* / California ground squirrel	N	Residential/Urban/Exotic	O
	Geomyidae / Pocket Gophers	*Thomomys bottae* / Botta's pocket gopher	N	Field Croplands	B

NOTE: Zoological nomenclature for invertebrates is in accordance with Crother et. al (2017) for reptiles and amphibians ; for birds with Chesser et al. 2022; for mammals with Bradley et al. (2014). Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for species follows Jennings and Hayes 1994 and Unitt 2004. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2023a.

ORIGIN
N =Native to locality.

EVIDENCE OF OCCURRENCE
B = Burrow
O = Observed
V = Vocalization

ATTACHMENT 5

Sensitive Plant Species with the Potential to Occur within the Project Boundary

Attachment 5 Sensitive Plant Species Observed or with the Potential to Occur									
Major Plant Group	Family	Scientific Name / Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Angiosperms: Monocots	Alliaceae / Onion Family	*Allium munzii* / Munz's onion	FE	ST	1B.1	NE, MSHCP, 6.1.3	Perennial herb (bulbiferous); chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland; blooms March-May; elevation between 975 and 3,500 feet.	U	This species was not observed and not expected to occur due to the lack of chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland habitats. This species has been known to exist within two miles of the project site (CDFW 2023d).
Angiosperms: Monocots	Liliaceae / Lily Family	*Lilium humboldtii* ssp. *ocellatum* / ocellated Humboldt lily			4.2	Not Adequately Covered[1]	Perennial herb (bulbiferous); chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, riparian woodland; blooms March–August; elevation less than 6,000 feet. California endemic. Known from San Diego, Riverside, Orange, Los Angeles, Santa Barbara, San Bernardino, and Ventura counties as well as Anacarpa Island, Santa Cruz Island, and Santa Rosa Island.	U	This species was not observed and not expected to occur due to the lack of chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, riparian woodland habitats.
Angiosperms: Monocots	Liliaceae / Lily Family	*Lilium parryi* / lemon lily			1B.2	Not Adequately Covered[1]	Perennial herb (bulbiferous); lower and upper montane coniferous forest, meadows and seeps, riparian scrub; blooms July–August; elevation 4,000–9,000 feet.	U	This species was not observed and not expected to occur due to the lack of lower and upper montane coniferous forest, meadows and seeps, riparian scrub habitats.

Attachment 5 Sensitive Plant Species Observed or with the Potential to Occur									
Major Plant Group	Family	Scientific Name / Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Angiosperms: Monocots	Poaceae (Gramineae) / Grass Family	*Muhlenbergia californica* / California muhly			4.3	Not Adequately Covered[2]	Perennial herb (rhizomatous); chaparral, coastal scrub, lower montane coniferous forest, meadows and seeps; mesic, seeps and streambanks; blooms June-September; elevation between 350 and 6,550 feet.	U	This species was not observed and not expected to occur due to the lack of chaparral, coastal scrub, lower montane coniferous forest, meadows and seeps; mesic, seeps and streambank habitats.
Angiosperms: Monocots	Poaceae (Gramineae) / Grass Family	*Orcuttia californica* / California Orcutt grass	FE	SE	1B.1	NE, MSHCP, 6.1.3	Annual herb; vernal pools; blooms April–August; elevation 50–2,200 feet.	U	This species was not observed and not expected to occur due to the lack of vernal pool habitat. This species has been known to exist within two miles of the project site (CDFW 2023d).
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Ambrosia pumila* / San Diego ambrosia	FE		1B.1	NE, MSHCP, 6.1.3	Perennial herb (rhizomatous); chaparral, coastal sage scrub, valley and foothill grasslands, creek beds, vernal pools, often in disturbed areas; blooms April–October; elevation less than 1,400 feet. Many occurrences extirpated in San Diego County.	U	This species was not observed and not expected to occur due to the lack of chaparral, coastal sage scrub, valley and foothill grasslands, creek beds, vernal pools habitats. Although this species may occur in disturbed areas, it is a perennial herb that would have been apparent at the time of the survey. This species has been known to exist within two miles of the project site (CDFW 2023d).

Attachment 5 Sensitive Plant Species Observed or with the Potential to Occur									
Major Plant Group	Family	Scientific Name / Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Centromadia pungens* ssp. *laevis* [=*Hemizonia pungens* ssp. *laevis*] / smooth tarplant			1B.1	MSHCP, 6.3.2	Annual herb; chenopod scrub, meadow and seeps, playas, riparian woodland, valley and foothill grasslands; alkaline soils; blooms April–September; elevation less than 2,100 feet. California endemic. Known from San Diego, Riverside, and San Bernardino counties.	U	This species was not observed and not expected to occur due to the lack of chenopod scrub, meadow and seeps, playas, riparian woodland, valley and foothill grasslands habitats and alkaline soils. This species has been known to exist within two miles of the project site (CDFW 2023c).
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Deinandra mohavensis* [=*Hemizonia mohavensis*] / Mojave tarplant		SE	1B.3	Not Adequately Covered[2]	Annual herb; chaparral, riparian scrub; blooms May-January; elevation 2,100–5,300 feet. California endemic. Known from San Diego, Riverside, San Bernardino (presumed extirpated), Inyo, Kern, and Tulare counties.	U	This species was not observed and not expected to occur due to the lack of chaparral and riparian scrub habitats.
Angiosperms: Eudicots	Asteraceae / Sunflower Family	*Trichocoronis wrightii* var. *wrightii* / Wright's trichocoronis			2B.1	NE, MSHCP, 6.1.3	Annual herb; meadows and seeps, marshes and swamps, riparian forest, vernal pools; alkaline; blooms May-September; elevation between 15 and 1,425 feet.	U	This species was not observed and not expected to occur due to the lack of meadows and seeps, marshes and swamps, riparian forest, vernal pools habitats. This species has been known to exist within two miles of the project site (CDFW 2023c).

Attachment 5 Sensitive Plant Species Observed or with the Potential to Occur									
Major Plant Group	Family	Scientific Name / Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Angiosperms: Eudicots	Boraginaceae / Borage Family	*Harpagonella palmeri* / Palmer's grapplinghook			4.2	MSHCP	Annual herb; chaparral, coastal sage scrub, valley and foothill grasslands; clay soils; blooms March–May; elevation less than 3,200 feet. Inconspicuous and easily overlooked.	U	This species was not observed and not expected to occur due to the lack of chaparral, coastal sage scrub, valley and foothill grasslands habitats and clay soils. This species has been known to exist within two miles of the project site (CDFW 2023c).
Angiosperms: Eudicots	Brassicaceae (Cruciferae) / Mustard Family	*Lepidium virginicum* var. *robinsonii* / Robinson's peppergrass			4.3		Annual herb; coastal sage scrub, chaparral; blooms January–July; elevation less than 2,900 feet.	U	This species was not observed and not expected to occur due to the lack of coastal sage scrub and chaparral habitats. This species has been known to exist within two miles of the project site (CDFW 2023c).
Angiosperms: Eudicots	Crassulaceae / Stonecrop Family	*Dudleya multicaulis* / many-stemmed dudleya			1B.2	NE, MSHCP, 6.1.3	Perennial herb; chaparral, coastal sage scrub, grassland, mostly clay soils; blooms April–July; elevation 2,600 feet.	U	This species was not observed and not expected to occur due to the lack of chaparral, coastal sage scrub, grassland habitats and clay soils. This species has been known to exist within two miles of the project site (CDFW 2023c).
Angiosperms: Eudicots	Crassulaceae / Stonecrop Family	*Dudleya viscida* / sticky dudleya, sticky-leaved dudleya**			1B.2	Not Adequately Covered[1]	Coastal sage scrub, mesic, north-facing slopes in shade; gabbroic rock; blooms May–June; elevation less than 1,800	U	This species was not observed and not expected to occur due to the lack of coastal sage

Attachment 5 Sensitive Plant Species Observed or with the Potential to Occur									
Major Plant Group	Family	Scientific Name / Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
							feet. California endemic. Known from San Diego, Riverside, and Orange counties.		scrub habitat with mesic, north-facing slopes in shade; gabbroic rock conditions.
Angiosperms: Eudicots	Phrymaceae [=Scrophulariaceae] / Hopseed Family	*Diplacus clevelandii* [=*Mimulus clevelandii*] / Cleveland's bush monkeyflower			4.2	Not Adequately Covered[1]	Perennial herb (rhizomatous); disturbed areas and openings in chaparral and lower montane coniferous forest; blooms May–July; elevation 1,500–6,600 feet.	U	This species was not observed and not expected to occur due to the lack of disturbed areas and openings in chaparral and lower montane coniferous forest habitats.
Angiosperms: Eudicots	Polemoniaceae / Phlox Family	*Navarretia fossalis* / spreading navarretia	FT		1B.1	NE, MSHCP, 6.1.3	Annual herb; vernal pools, marshes and swamps, chenopod scrub; blooms April–June; elevation 100–4,300 feet.	U	This species was not observed and not expected to occur due to the lack of vernal pools, marshes and swamps, chenopod scrub habitats. This species has been known to exist within two miles of the project site (CDFW 2023d).
Angiosperms: Eudicots	Polygonaceae / Buckwheat Family	*Chorizanthe parryi* var. *parryi* / Parry's spineflower, Parry's spine flower**			1B.1	MSHCP	Annual herb; chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; openings, rocky (sometimes), sandy (sometimes); blooms April-June; elevation between 900 and 4,000 feet.	U	This species was not observed and not expected to occur due to the lack of chaparral, cismontane woodland, coastal scrub, valley and foothill grassland habitats. This species has been known to exist within two miles of the project site (CDFW 2023c).

Attachment 5 Sensitive Plant Species Observed or with the Potential to Occur									
Major Plant Group	Family	Scientific Name / Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Angiosperms: Eudicots	Polygonaceae / Buckwheat Family	*Chorizanthe polygonoides* var. *longispina* / long-spined spineflower, long-spined spine flower**			1B.2	MSHCP	Annual herb; clay soils; openings in chaparral, coastal sage scrub, near vernal pools and montane meadows, April–July; elevation 100–5,000 feet.	U	This species was not observed and not expected to occur due to the lack of openings in chaparral, coastal sage scrub, near vernal pools and montane meadows habitats and clay soils. This species has been known to exist within two miles of the project site (CDFW 2023c).
Angiosperms: Eudicots	Polygonaceae / Buckwheat Family	*Oxytheca caryophylloides* / chickweed oxytheca			4.3	Not Adequately Covered[2]	Annual herb; lower montane coniferous forest (sandy); blooms July-September(October); elevation between 3,650 and 8,550 feet.	U	This species was not observed and not expected to occur due to the lack of lower montane coniferous forest habitats.
Angiosperms: Eudicots	Rosaceae / Rose Family	*Potentilla rimicola* / cliff cinquefoil			2B.3	Not Adequately Covered[2]	Perennial herb; subalpine coniferous forest, upper montane coniferous forest; granitic, rocky; blooms July-September; elevetion between 7,875 and 9,185 feet.	U	This species was not observed and not expected to occur due to the lack of subalpine coniferous forest, upper montane coniferous forest; granitic, rocky habitats.
Angiosperms: Eudicots	Rubiaceae / Madder Family	*Galium californicum* ssp. *primum* / Alvin Meadow bedstraw, California bedstraw**			1B.2	Not Adequately Covered[1]	Perennial herb; chaparral, lower montane coniferous forest; granitic, sandy; blooms May-July; elevation between 4,450 and 5,600 feet.	U	This species was not observed and not expected to occur due to the lack of chaparral, lower montane coniferous forest; granitic, sandy habitats.

Attachment 5 Sensitive Plant Species Observed or with the Potential to Occur									
Major Plant Group	Family	Scientific Name / Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Angiosperms: Eudicots	Saxifragaceae / Saxifrage Family	*Heuchera hirsutissima* / shaggy-haired alumroot			1B.3	Not Adequately Covered[1]	Perennial herb (rhizomatous); subalpine coniferous forest, upper montane coniferous forest; granitic, rocky; blooms (May)June-July; elevation between 4,985 and 11,485 feet.	U	This species was not observed and not expected to occur due to the lack of subalpine coniferous forest, upper montane coniferous forest; granitic, rocky habitats.

NOTE: Scientific and common names were primarily derived from Jepson eFlora (Jepson Flora Project 2023). Additional common names were obtained from the *Sunset Western Garden Book* (Brenzel 2001) for ornamental/horticultural plants. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2023a.

STATUS CODES

Federal Status

FE = Listed as endangered by the federal government

FT = Listed as threatened by the federal government

State Status

SE = Listed as endangered by the state of California

ST = Listed as threatened by the state of California

California Native Plant Society (CNPS): California Rare Plant Ranks (CRPR)

1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.

2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.

4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

0.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).

0.2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat).

0.3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known).

Western Riverside

[1] = Not adequately covered until an MOU from the Forest Service is obtained

[2] = Not adequately covered until management objectives for preservation have been met

MSHCP = Western Riverside County Multiple Species Habitat Conservation Plan covered species.

6.1.3 = Species subject to survey requirements and avoidance measures in Section 6.1.3, Protection of Narrow Endemic Plant Species.

6.3.2 = Species subject to survey requirements and avoidance measures in Section 6.3.2, Additional Survey Needs and Procedures of the MSHCP.

NE = Plant species that are highly restricted by their habitat affinities, edaphic requirements or other ecological factors, and for which specific conservation measures have been identified in Section 6.1.3 of the MSHCP.

POTENTIAL TO OCCUR ON-SITE

U = Unexpected

ATTACHMENT 6

Sensitive Wildlife Species with the Potential to Occur within the Project Boundary

Attachment 6 Sensitive Wildlife Species Observed or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Invertebrates	Streptocephalidae / Fairy Shrimp	*Streptocephalus woottoni* / Riverside fairy shrimp	FE		MSHCP, 6.1.2	Vernal pools.	U	This species was not observed and not anticipated to occur on site due to the lack of vernal pool habitat. This species is known to occur within one mile of the project site (CDFW 2023).
Invertebrates	Nymphalidae / Brush-footed Butterflies	*Euphydryas editha quino* / Quino checkerspot	FE		MSHCP	Open, dry areas in foothills, mesas, lake margins. Larval host plant *Plantago erecta.* Adult emergence mid-January through April.	U	This species was not observed and not anticipated to occur on site due to the lack of mesa top, open foothills habitat. Additionally, the project site lacks the larval host plant for Quino checkerspot butterfly. This species is known to occur within one mile of the project site (CDFW 2023).
Amphibians	Pelobatidae / Spadefoot Toads	*Spea hammondii* / western spadefoot		SSC	MSHCP	Vernal pools, floodplains, and alkali flats within areas of open vegetation.	U	This species was not observed and not anticipated to occur on site due to the lack of vernal pool and wet habitats. This species is known to occur within one mile of the project site (CDFW 2023).
Reptiles	Phrynosomatidae / Spiny Lizards	*Phrynosoma blainvillii [= P. coronatum coastal population], Phrynosoma coronatum blainvillei* / Blainville's horned lizard, coast horned lizard, San Diego horned lizard		SSC	MSHCP	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage.	U	This species was not observed and not anticipated to occur on site due to the lack of chaparral and coastal sage scrub habitats. Additionally, the no harvester ants were observed. This species is known to occur within one mile of the project site (CDFW 2023).

Attachment 6 Sensitive Wildlife Species Observed or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Reptiles	Phrynosomatidae / Spiny Lizards	*Sceloporus graciosus vandenburgianus* / southern sagebrush lizard			Not Adequately Covered[1]	Lives in shrublands such as chaparral, manzanita and ceanothus, as well as open pine and Douglas Fir forests, mainly in the mountains. Prefers open areas with scattered low bushes and lots of sun.	U	This species was not observed and not expected to occur due to the lack of chaparral, manzanita and ceanothus, as well as open pine and Douglas Fir forests, mountain habitats.
Reptiles	Teiidae / Whiptail Lizards	*Aspidoscelis hyperythra beldingi* [=*Cnemidophorus hyperythrus*] / Belding's orange-throated whiptail		WL	MSHCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	U	This species was not observed and not anticipated to occur on site due to the lack of chaparral and coastal sage scrub habitats. This species is known to occur within one mile of the project site (CDFW 2023).
Reptiles	Boidae / Boas	*Charina umbratica* [=*Charina bottae umbratica*] / southern rubber boa		ST	Not Adequately Covered[1]	Moist coniferous forest, woodland. Known from the San Bernardino and Jacinto Mountains.	U	This species was not observed and not expected to occur due to the lack of Moist coniferous forest, woodland habitats.
Reptiles	Colubridae / Colubrid Snakes	*Lampropeltis zonata pulchra* / San Diego mountain kingsnake			Not Adequately Covered[1]	Found in diverse habitats including coniferous forest, oak-pine woodlands, riparian woodland, chaparral, manzanita, and coastal sage scrub. Wooded areas near a stream with rock outcrops, talus or rotting logs that are exposed to the sun.	U	This species was not observed and not expected to occur due to the lack of coniferous forest, oak-pine woodlands, riparian woodland, chaparral, manzanita, and coastal sage scrub habitats.

Attachment 6 Sensitive Wildlife Species Observed or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Birds	Accipitridae / Hawks, Kites, & Eagles	*Haliaeetus leucocephalus* / bald eagle	BEPA, (Fed. Delisted)	CE, CFP	MSHCP	Rivers, lakes. Rare winter visitor, rare fall migrant. Feed mainly on fish.	U	This species was not observed and is not expected to occur due to lack of suitable nesting and foraging habitat. Bald eagles build their nests within 2 kilometers of water and both Skinner Reservoir and Diamond Valley Lake are over 10 kilometers from the project site. Additionally, the pepper trees on-site do not provide the proper open structure for bald eagle nests. No foraging habitat is present on-site.
Birds	Falconidae / Falcons	*Peregrinus anatum* / peregrine falcon	(Fed. Delisted)	(State Delisted), CFP	MSHCP	Open coastal areas, mud flats. Rare inland. Rare fall and winter resident, casual in late spring and early summer. Local breeding populations extirpated.	U	This species was not observed and is not expected to occur due to lack of suitable cliffs for nesting.
Birds	Cuculidae / Cuckoos & Roadrunners	*Coccyzus americanus occidentalis* / western yellow-billed cuckoo	FT	SE	MSHCP, 6.1.2	Riparian woodlands. Summer resident. Very localized breeding.	U	This species was not observed and is not expected to occur due to lack of suitable riparian woodlands with dense canopies and understories for foraging and nesting. This species requires mature, large stands of riparian woodland or mesquite thickets for nesting. Additionally, this species is extremely sensitive to human activity in riparian areas and nesting within the project site and adjacent to other development would be highly unlikely.

Attachment 6 Sensitive Wildlife Species Observed or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Birds	Strigidae / Typical Owls	*Athene cunicularia* / burrowing owl		SSC	MSHCP, 6.3.2	Grassland, agricultural land, coastal dunes. Require rodent burrows. Declining resident.	U	Although two inactive burrows were observed on-site within two clumps of dense vegetation, they were small (<4 inches) and the entrances of these burrows were covered with vegetation, and no burrowing owl sign was observed. However, other fossorial mammals are present on-site, and the project site is in a MSHCP burrowing owl survey area. Due to the frequent disking of the project site, the potential for this species nest on site is low.
Birds	Strigidae / Typical Owls	*Strix occidentalis occidentalis* / California spotted owl		SSC	Not Adequately Covered[1]	Dense coniferous woodland. Localized resident.	U	This species was not observed and not expected to occur due to the lack of dense coniferous woodland habitat.
Birds	Picidae / Woodpeckers & Sapsuckers	*Sphyrapicus thyroideus* / Williamson's sapsucker			Not Adequately Covered[1]	Montane coniferous forest, oak woodlands & forest	U	This species was not observed and not expected to occur due to the lack of montane coniferous forest, oak woodlands & forest habitats.

Attachment 6 Sensitive Wildlife Species Observed or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Birds	Tyrannidae / Tyrant Flycatchers	*Empidonax traillii extimus* / southwestern willow flycatcher	FE	SE	MSHCP, 6.1.2	Nesting restricted to willow thickets. Also occupies other woodlands. Rare spring and fall migrant, rare summer resident. Extremely localized breeding.	U	This species was not observed and is not expected to occur due to lack of suitable riparian woodlands with dense canopies and understories for foraging and nesting. This species requires mature, multi-tiered riparian woodland habitat with a high percentage of canopy cover where surface water is present. Additionally, this species is extremely sensitive to human activity in riparian areas and nesting within the project site and adjacent to other development would be highly unlikely.
Birds	Vireonidae / Vireos	*Vireo bellii pusillus* / least Bell's vireo	FE	SE	MSHCP, 6.1.2	Willow riparian woodlands. Summer resident.	U	This species was not observed and is not expected to occur due to lack of suitable riparian woodlands with dense canopies and understories for foraging and nesting. This species was recorded 1.5 miles to the southeast of the project site in 2015 (CDFW 2023).
Birds	Polioptilidae / Gnatcatchers	*Polioptila californica californica* / coastal California gnatcatcher	FT	SSC	MSHCP	Coastal sage scrub, maritime succulent scrub. Resident.	U	This species was not observed and not anticipated to occur on site due to the lack of coastal sage scrub and maritime succulent scrub habitats. This species is known to occur within one mile of the project site (CDFW 2023).

Attachment 6 Sensitive Wildlife Species Observed or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Birds	Passerellidae / New World Passerines	*Aimophila ruficeps canescens* / southern California rufous-crowned sparrow		WL	MSHCP	Coastal sage scrub, chaparral, grassland. Resident.	U	This species was not observed and not anticipated to occur on site due to the lack of coastal sage scrub, chaparral, and grassland habitats. This species is known to occur within one mile of the project site (CDFW 2023).
Birds	Passerellidae / New World Passerines	*Ammodramus savannarum* / grasshopper sparrow		SSC	Not Adequately Covered[2]	Tall grass areas. Localized summer resident, rare in winter.	U	This species was not observed and not expected to occur due to the lack of tall grassland habitat.
Birds	Passerellidae / New World Passerines	*Artemisiospiza* [=*Amphispiza*] *belli belli* / Bell's sage sparrow		WL	MSHCP	Chaparral, coastal sage scrub. Localized resident.	U	This species was not observed and not anticipated to occur on site due to the lack of chaparral and coastal sage scrub habitats. This species is known to occur within one mile of the project site (CDFW 2023).
Birds	Passerellidae / New World Passerines	*Melospiza lincolnii* / Lincoln's sparrow			Not Adequately Covered[2]	Primary: meadows & marshes, montane riparian; Secondary: chaparral, coastal sage scrub, grassland, freshwater marsh, Peninsular juniper woodland, riparian scrub, woodland and forest, oak woodland and forest, and Riversidean alluvial fan sage scrub.	U	This species was not observed and not expected to occur due to the lack of meadow. marsh, montane riparian; chaparral, coastal sage scrub, grassland, freshwater marsh, Peninsular juniper woodland, riparian scrub, woodland and forest, oak woodland and forest, and Riversidean alluvial fan sage scrub habitats.
NOTE: Zoological nomenclature for invertebrates is in accordance with Crother et. al (2017) for reptiles and amphibians ; for birds with Chesser et al. 2022; for mammals with Bradley et al. (2014). Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for species follows Jennings and Hayes 1994 and Unitt 2004. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2023a.								

Attachment 6 Sensitive Wildlife Species Observed or with the Potential to Occur								
Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Western Riverside	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential

STATUS CODES

Federal Status

FE = Listed as endangered by the federal government
FT = Listed as threatened by the federal government
BEPA = Bald and Golden Eagle Protection Act

State Status

CFP = California fully protected species
SE = Listed as endangered by the state of California
ST = Listed as threatened by the state of California
SSC = California Department of Fish and Wildlife species of special concern
WL = California Department of Fish and Wildlife watch list species

Western Riverside

[1] = Not adequately covered until an MOU from the Forest Service is obtained
[2] = Not adequately covered until management objectives for preservation have been met
MSHCP = Western Riverside County Multiple Species Habitat Conservation Prlan covered species
6.1.2 = Species subject to survey requirements and avoidance and minimization measures in Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools of the MSHCP
6.3.2 = Species subject to survey requirements and avoidance measures in Section 6.3.2, Additional Survey Needs and Procedures of the MSHCP

POTENTIAL TO OCCUR ON-SITE

U = Unexpected

ATTACHMENT 7

Determination of Biologically Equivalent or Superior Preservation

Determination of Biologically Equivalent or Superior Preservation Report

Zeiders Road Project

Prepared for:

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February 21, 2025

CONTENTS

1.0 EXECUTIVE SUMMARY 1
2.0 INTRODUCTION 1
2.1 Project Area 1
2.2 Project Description 7
2.3 Existing Conditions 7
3.0 RIPARIAN/RIVERINE MITIGATION (SECTION 6.1.2) 9
3.1 Methods 9
3.2 Results/Impacts 11
3.3 Mitigation and Equivalency 12
4.0 NARROW ENDEMIC PLANT SPECIES MITIGATION (SECTION 6.1.3) 13
4.1 Methods 13
4.2 Results/Impacts and Mitigation 15
5.0 GUIDELINES PERTAINING TO THE URBAN/WILDLAND INTERFACE (SECTION 6.1.4) 15
6.0 ADDITIONAL SURVEY NEEDS (SECTION 6.3.2) 15
6.1 Criteria Area Species Survey Area - Plants 15
6.2 Criteria Area Species Survey Area - Burrowing Owl 16
6.3 Criteria Area Species Survey Area - Mammals 17
6.4 Criteria Area Species Survey Area - Amphibians 17
7.0 DELHI SANDS FLOWER-LOVING FLY 17
8.0 REFERENCES 18

FIGURES

1: Regional Location 2
2: Project Location on USGS Map 3
3: Project Location on Aerial Photograph 4
4: Project in Relation to MSHCP Preserve Areas 5
5: Existing Biological Resources 6
6: Potential Jurisdictional Waters 8

TABLE

1: Survey Information 16

1.0 EXECUTIVE SUMMARY

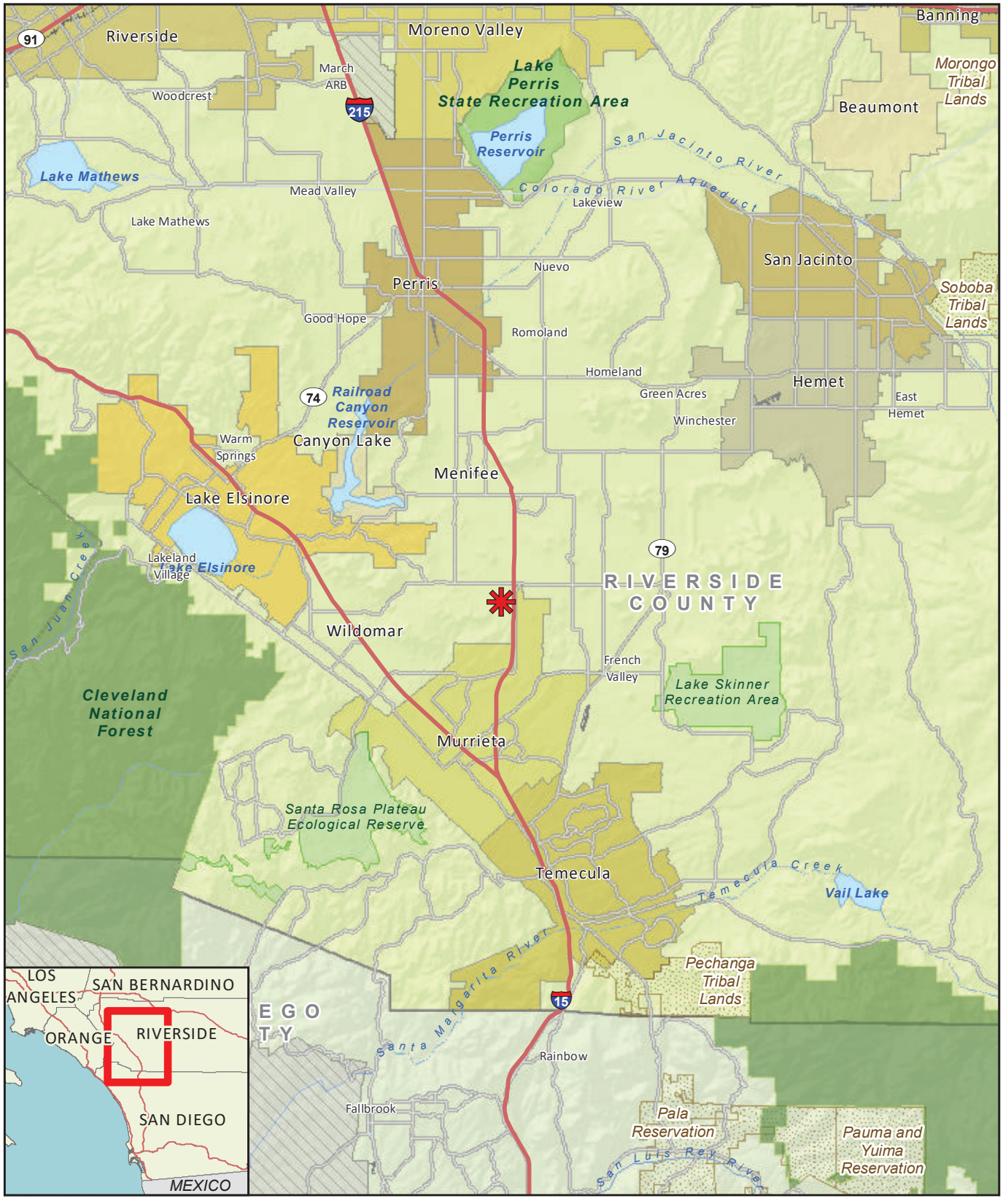
The 21.56-acre Zeiders Road Project (project) consists of a 19.51-acre project site and 2.05-acre off-site improvement areas located in the city of Menifee, California. The project is not located inside or immediately adjacent to any Criteria Area, Criteria Cell, Public/Quasi-Public Conserved Lands, or Conservation Area identified for conservation potential by the Multiple Species Habitat Conservation Plan (MSHCP; Western Riverside County Regional Conservation Authority [WRCRCA] 2003). The project site includes 0.70 acre of "MSHCP" Section 6.1.2 riparian/riverine resources which are proposed to be permanently impacted as part of the project. No temporary impacts to MSHCP Section 6.1.2 riparian/riverine resources will result from project implementation.

A Determination of Biologically Equivalent or Superior Preservation (DBESP) is required when project alternatives that would avoid sensitive riparian/riverine areas are not feasible. The goal of the DBESP is to demonstrate that, with implementation of the proposed project design features and mitigation measures, the proposed project would result in an alternative that is biologically equivalent or superior to complete avoidance of impacts to riparian/riverine areas on-site. As detailed below, the proposed project is in compliance with the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools requirements identified for riverine areas pursuant to Section 6.1.2 of the MSHCP (WRCRCA 2003).

2.0 INTRODUCTION

2.1 PROJECT AREA

The project is located west of Interstate 215 in the southern portion of the city of Menifee, California (Figure 1). The project is in the city of Menifee, within Section 22, Township 06 South, Range 03 West of the U.S. Geological Survey (USGS) 7.5-minute topographic map, Romoland quadrangle (Figure 2; USGS 1979). More specifically, the project is located in Assessor's Parcel Number 384-150-001 and in between Zeiders Road and Howard Road (Figure 3). The central latitude and longitude point is 33.633094, -117.177810. The project is located within a MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA), and a burrowing owl (*Athene cunicularia*) survey area identified in the MSHCP (WRCRCA 2003). The project is not located inside or immediately adjacent to any Criteria Area, Criteria Cell, Public/Quasi-Public Conserved Lands, or Conservation Area identified for conservation potential by the MSHCP (WRCRCA 2003; Figure 4). The 21.56-acre survey area consists of two land cover types: field croplands and residential/urban/exotic (Figure 5).



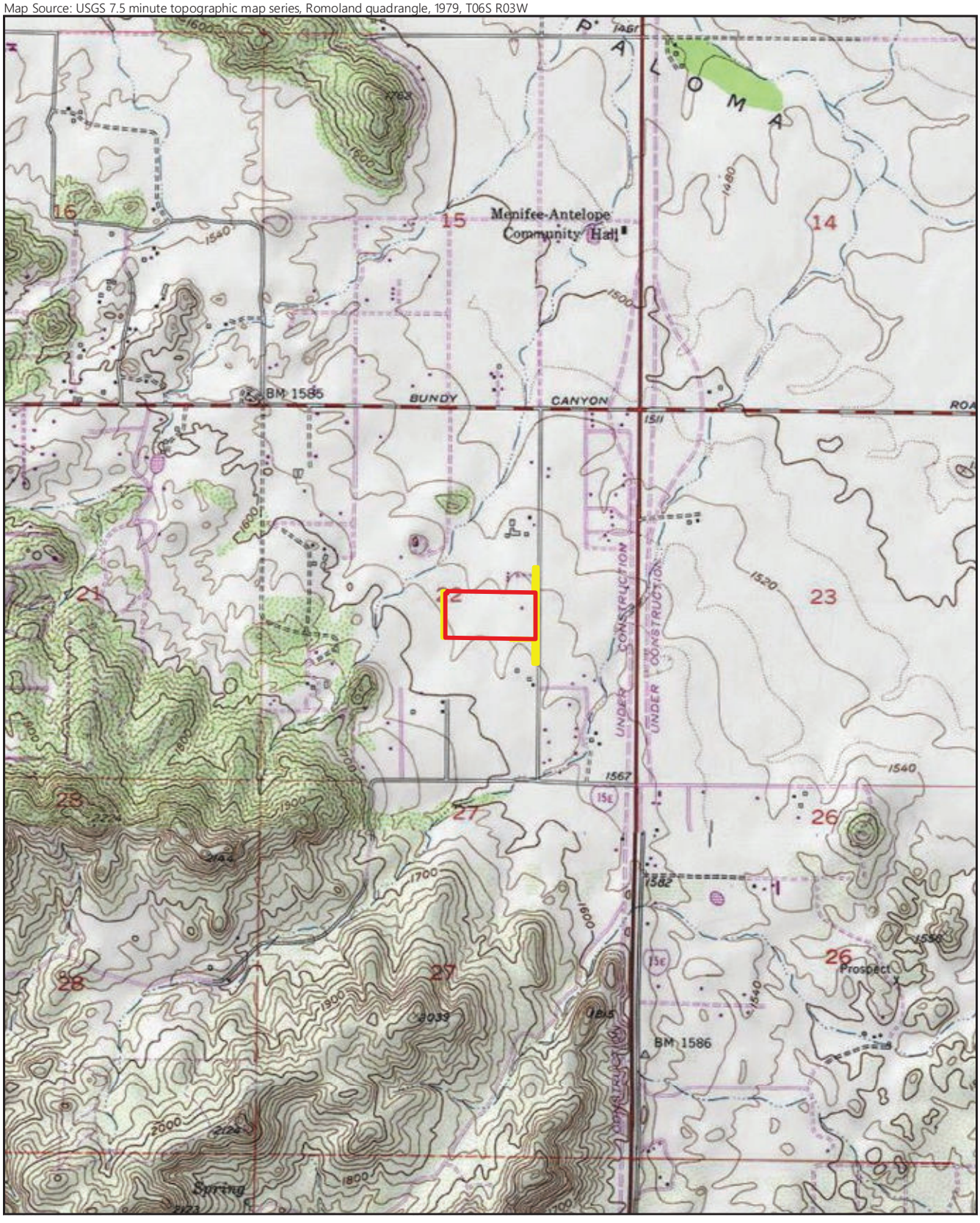
Project Location

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FIGURE 1
Regional Location

Map Source: USGS 7.5 minute topographic map series, Romoland quadrangle, 1979, T06S R03W

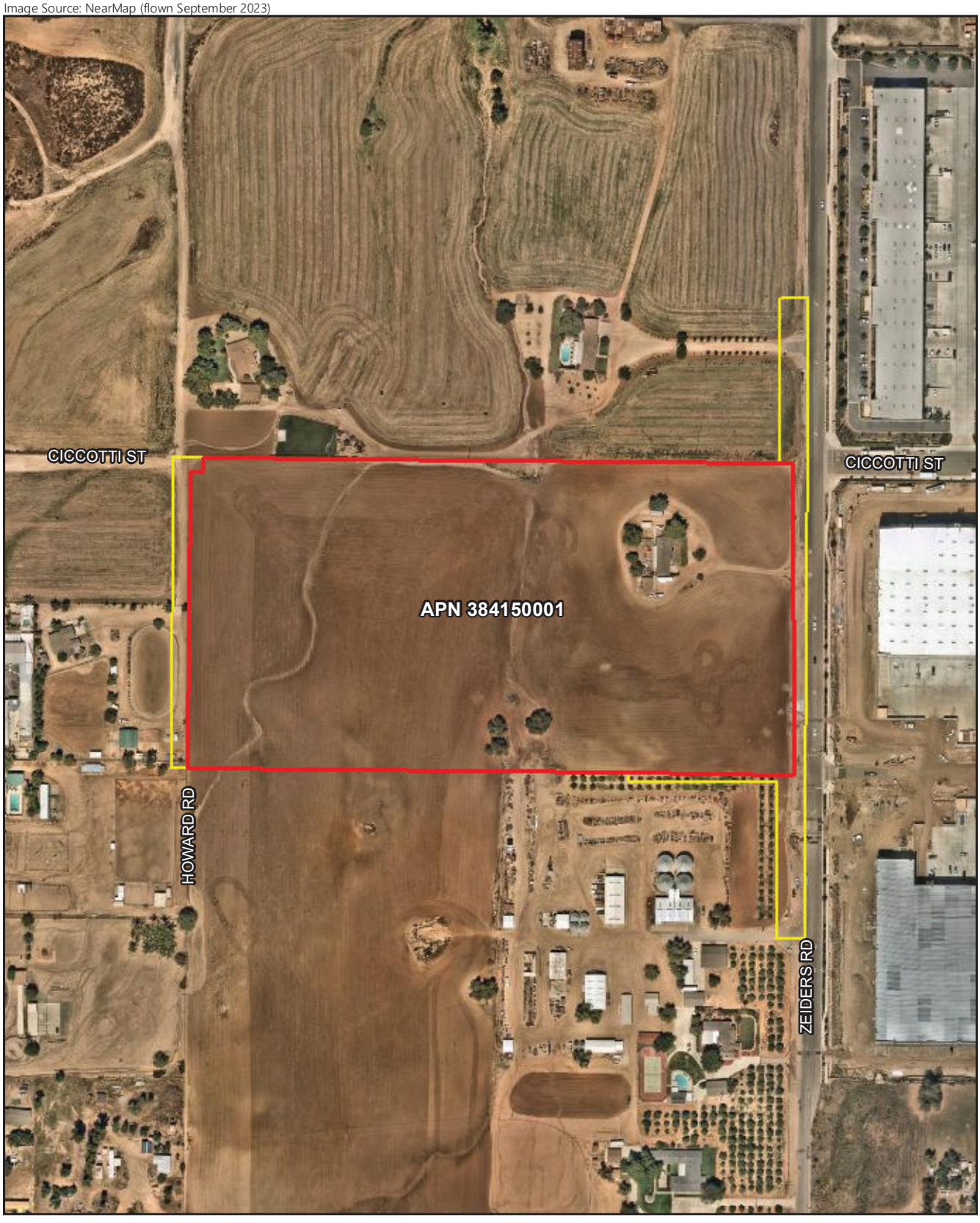


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FIGURE 2
Project Location on USGS Map

Image Source: NearMap (flown September 2023)



Project Boundary

Off-site Improvements

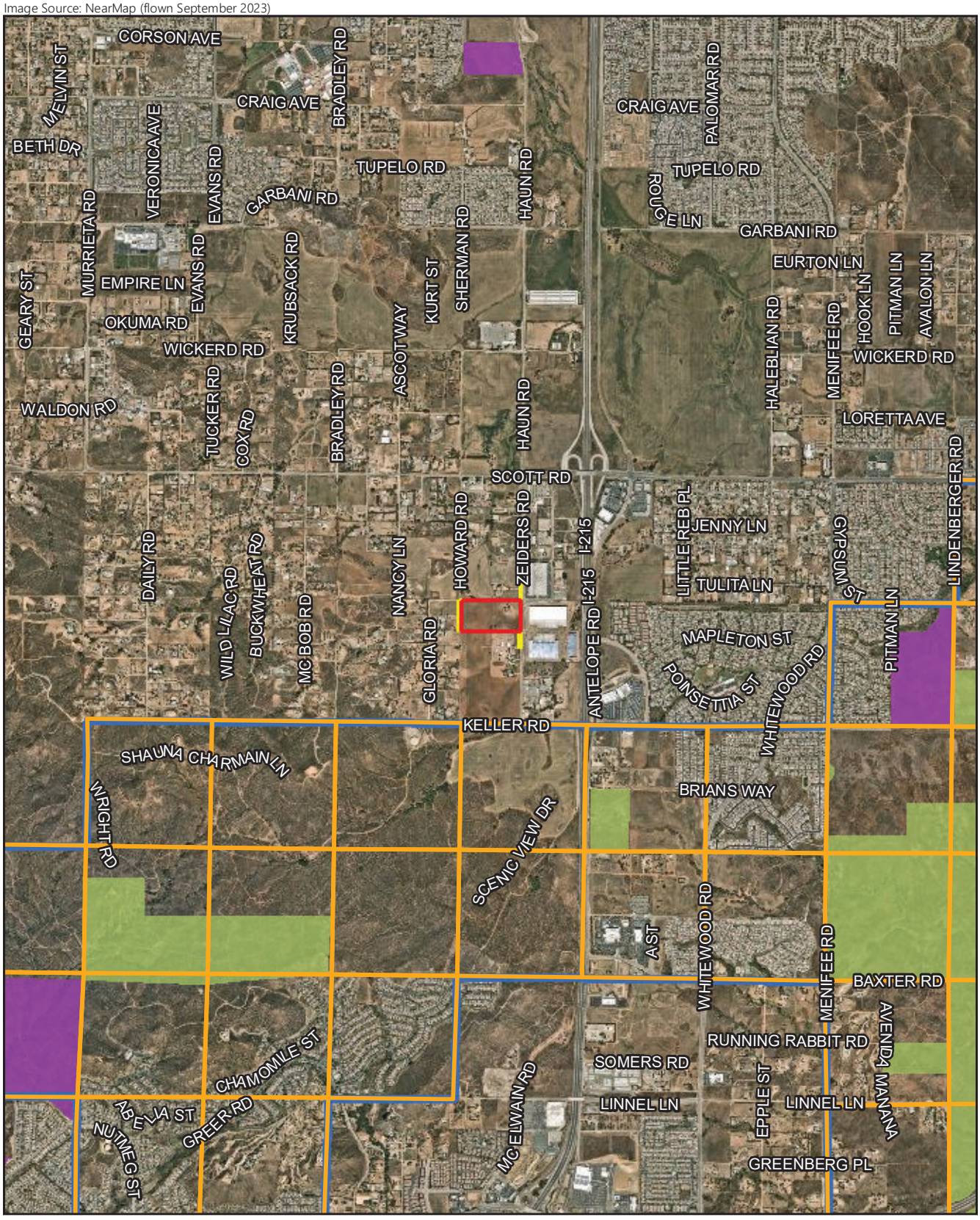
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FIGURE 3

Project Location on Aerial Photograph

Image Source: NearMap (flown September 2023)



Project Boundary
Off-site Improvements
Criteria Areas
Criteria Cells
Conserved Lands
Public/Quasi-Public Lands

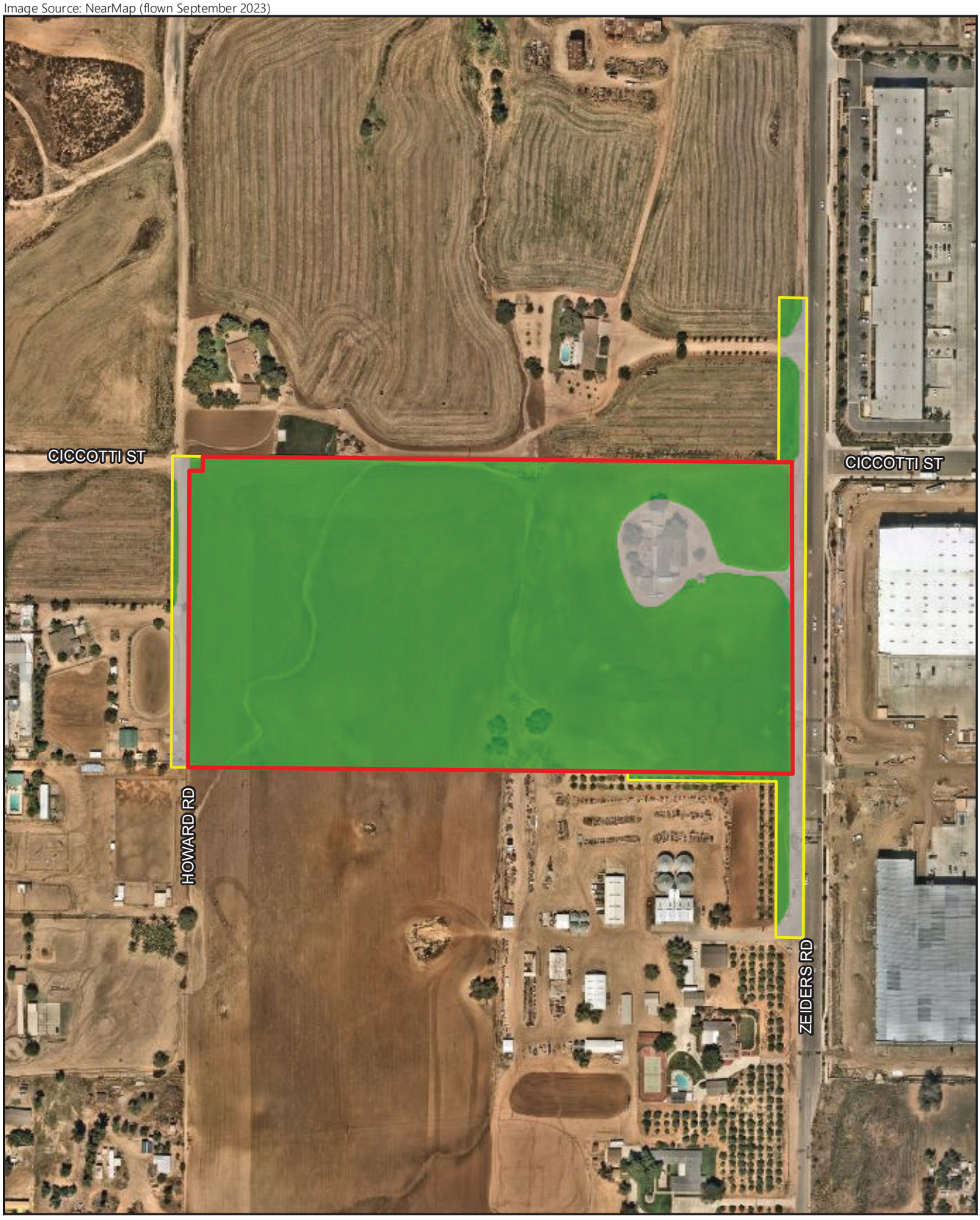
0 Feet 3,000

FIGURE 4
Project in Relation to MSHCP Preserve Areas

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Image Source: NearMap (flown September 2023)



Project Boundary

Off-site Improvements

Vegetation Communities

Field Croplands

Residential/Urban/Exotic

0 Feet 300

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FIGURE 5
Existing Biological Resources

2.2 PROJECT DESCRIPTION

Pemcor Properties, Inc. has proposed the development of a multi-building commercial complex, located at 33521 Zeiders Road that will contain over 700,000 square feet of industrial/warehouse buildings on completion. The complex design consists of 11 one-story buildings on 19.51 acres and will include light manufacturing and manufacturing, assembly, ancillary storage and distribution and showroom. As part of the preliminary grading design, bioretention basins and underground detention vaults were incorporated in the project. The project also includes 2.05 acres of off-site road improvements (see Figure 3). All fuel modification zones are within the project limits of disturbance.

The proposed access for the project will be off Zeiders Road. In order for the site to be developed, it must be graded to a consistent pad height for truck and vehicular access. To access the rear of the property, two drive aisles are proposed, which will encroach into the drainages and riparian habitat. This grading will require the removal of the drainage features and riparian habitat, which is unavoidable in order to develop the project.

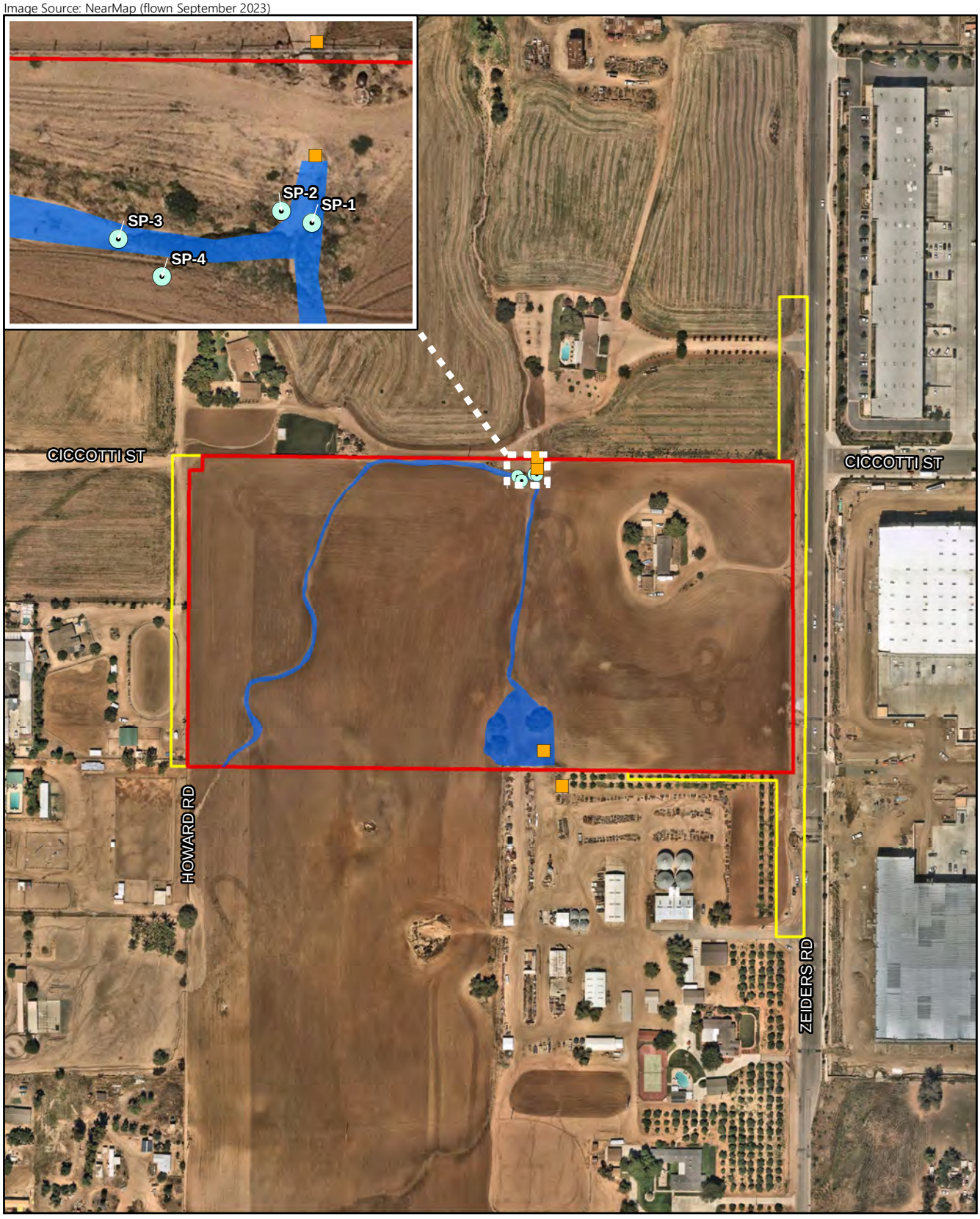
2.3 EXISTING CONDITIONS

Two potentially jurisdictional non-wetland waters (riverine features mapped as ephemeral drainages), ranging in width from 4 feet to 17 feet, were observed within the survey area (Figure 6). These two unvegetated drainage channels appear to collect runoff from surrounding agricultural and residential development. The drainages converge in the northern portion of the survey area before traveling off-site via a culvert under a dirt road along the northern site boundary, traveling north and then east where it eventually drains into the San Jacinto River. Both drainages consisted of sandy soils.

The ephemeral drainages have been significantly disturbed by the disking that occurs on-site; however, the disking activities are an allowable use for farming.

Potentially jurisdictional riparian vegetation was observed within the survey area (see Figure 6). Section 6.1.2 of the MSHCP defines Riparian Areas, in part, as land "which depend upon soil moisture from a nearby fresh water source" (WRCRCA 2003). Three Peruvian pepper trees (*Schinus molle*) are present on-site in the vicinity of the ephemeral drainage in the southern portion of the survey area. These trees may depend on soil moisture from the drainage and, as such, the outer extent of the dripline of these trees may be considered riparian based on a pre-application discussion on February 12, 2025.

Image Source: NearMap (flown September 2023)



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FIGURE 6
Potential Jurisdictional Waters

3.0 RIPARIAN/RIVERINE MITIGATION (SECTION 6.1.2)

3.1 METHODS

3.1.1 Riparian/Riverine and Riparian Birds

A routine aquatic resource delineation, following the guidelines set forth by USACE (1987 and 2008), was performed by RECON Environmental, Inc. (RECON) biologist Chelsea Polevy on September 22, 2023, to gather field data at locations where aquatic resources occur in the project site. The site was examined to determine the presence and extent of any aquatic resources (riparian/riverine) and as part of the delineation an evaluation of the potential for federal and state jurisdictional waters was made. Research conducted prior to conducting the field work included reviewing the aerial photograph, USGS topographic maps and U.S. Department of Agriculture (USDA) soil maps of the site, and the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (USFWS 2023) to aid in the determination of potential jurisdictional waters (riparian/riverine features) on-site. Further details are provided in the Aquatic Resource Delineation Letter Report (RECON 2025).

Per Section 6.1.2 of the MSHCP, Riparian/Riverine Areas are defined as "lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to, or which depend upon soil moisture from a nearby fresh water source; or areas with freshwater flow during all or a portion of the year" (WRCRCA 2003). In addition, riverine areas (i.e., streams) include areas that "do not contain riparian vegetation, but that have water flow for all or a portion of the year and contain biological functions and values that contribute to downstream habitat values for covered species in the MSHCP Conservation Area."

The project site was also evaluated for suitable habitat to support bald eagle (*Haliaeetus leucocephalus*), peregrine falcon (*Falco peregrinus*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), or western yellow-billed cuckoo (*Coccyzus americanus*). The three pepper trees in the vicinity of the drainage channel in the southern portion of the survey area, although considered riparian vegetation, do not constitute as habitat that would support riparian birds. Bald eagles build their nests within two kilometers of water and both Skinner Reservoir and Diamond Valley Lake are over 10 kilometers from the project site. Additionally, the three pepper trees do not provide the proper open structure for bald eagle nests. Least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo all require riparian woodland with dense canopies and understories for foraging and nesting, which is not present on-site. Furthermore, southwestern willow flycatcher requires mature, multi-tiered riparian woodland habitat with a high percentage of canopy cover where surface water is present. Western yellow-billed

cuckoo requires mature, large, stands of riparian woodland or mesquite (*Prosopis glandulosa* var. *torreyana*) thickets for nesting. Peregrine falcons mainly nest in cliffs, which are also not present on-site. Additionally, both southwestern willow flycatcher and western yellow-billed cuckoo are extremely sensitive to human activity in riparian areas; nesting within the project site and adjacent to other development would be highly unlikely.

Based on species occurrence records from the California Natural Diversity Database, least Bell's vireo was recorded 1.5 miles to the southeast of the project site in 2015 (California Department of Fish and Wildlife [CDFW] 2023). No other observations of bald eagle, peregrine falcon, southwestern willow flycatcher, or western yellow-billed cuckoo have been recorded within the project site or within four miles of the project site. As such, due the project site's lack of suitable riparian woodlands and cliffs for nesting and water for foraging, as well as the lack of species occurrence records in the vicinity of the project site, these species are not expected to occur and no additional protocol surveys were conducted.

3.1.2 Vernal Pools and Fairy Shrimp

The presence of vernal pools as defined by the MSHCP was evaluated during the biological survey conducted by RECON in September 2023. Biologists surveyed the project site for depressions characteristic of vernal habitat and evidence of ponding areas such as cracked soils, tire ruts, or wetland or vernal pool plant species.

Per Section 6.1.2 of the MSHCP, vernal pools are defined 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 wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records" (WRCRCA 2003).

Since the site has been disked, historic photos as far back as 1938 were examined to determine if vernal pools were present on-site in the past (Nationwide Environmental Title Research Online 2023). Additionally, images from 1985 to current were reviewed on Google

Earth. The frequency of disking on-site was also discussed with the current property owner, Ms. Betty Bouris.

Soil profiles present on the project site, which included Cajalco fine sandy loam, 8 to 15 percent slopes, eroded, Las Posas loam, 2 to 8 percent slopes, Las Posas loam, 5 to 8 percent slopes, eroded, and Wyman loam, 2 to 8 percent slopes, eroded, were also evaluated for drain ability. Soils associated with vernal pools include ones that drain poorly and consist of clay or clay subsoils.

3.2 RESULTS/IMPACTS

Riparian habitat totaling 0.40 acre was observed on-site during the routine aquatic resource delineation. Impacts to this riparian habitat would be significant. However, no impacts to sensitive riparian wildlife, such as bald eagle, peregrine falcon, least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo, will occur from project implementation due to the project's lack of suitable riparian woodlands as detailed in Section 3.1.1 of this report.

Two riverine features (ephemeral drainages), totaling 0.30 acre, were observed on-site during the routine aquatic resource delineation. Impacts to these ephemeral drainages would be significant.

No vernal pools or basins with evidence of ponding areas, as described above, or with vernal pool indictor plant species were observed within or immediately adjacent to the project site. Although there has been disking on-site, review of the historic aerials shows no evidence of vernal pools existing on-site after 1938. In email communications with Ms. Bouris, it was shared that since 1950, their family had been farming wheat on-site and the property owners before them were most likely farming the land since 1888 (Betty Bouris, email communication to Paul Mayer, September 27, 2023).

The three soil series on-site consist of well-drained soils and ones that are typically associated with farming of irrigated crops, truck crops, and alfalfa, dryland grain and pastures (USDA 1971). While the Wyman loam and Cajalco soil series may contain some clay films in the B horizon (12–32 inches), they are still considered to be well-drained soils (USDA 1971), which are not suitable conditions for vernal pool habitat. Review of the Vernal Pools of Southern California Recovery Plan (USFWS 1998) for soils within the Riverside County showed soils that were documented to support vernal pools include Las Posas clay loam, Wyman clay loam, and Willows soil (a deep alkaline clay), which do not occur on-site. Additionally, without the appropriate soils on-site, no vernal pools are expected to re-form in the absence of disking.

Subsequently, no potential fairy shrimp habitat was observed, and fairy shrimp are not expected to occur within the project site. Therefore, no project-specific impacts to vernal pools and fairy shrimp are anticipated and no mitigation would be required.

3.3 MITIGATION AND EQUIVALENCY

3.3.1 Direct Effects

The project is consistent with the Protection of Vernal Pools as defined in MSHCP Section 6.1.2; therefore, no further surveys or mitigation would be required. However, impacts to the riparian habitat and two riverine features that were mapped within the project site boundary will require mitigation.

A pre-application meeting is required with the WRCRCA and Wildlife Agencies (CDFW and USFWS) and U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board, and the City of Menifee to discuss the impacts to riparian/riverine features and regulated waters issues. The mitigation options for riparian/riverine impacts will be discussed in detail and options that would be acceptable will be clarified with the agencies listed above.

The project proposes to offset the permanent loss of 0.70 acre of riparian/riverine features through the implementation of permittee-responsible re-establishment, rehabilitation, and/or enhancement mitigation plan within or near the San Jacinto Watershed (e.g., through coordination with WRCRCA, Rivers and Lands Conservancy, and/or the San Jacinto Basin Resources Conservation District. Site selection coordination and mitigation plan development is in progress). Additional information and a detailed justification regarding the proposed type, location, and amount of mitigation will be included in the applicant's forthcoming regulatory permitting applications, including the Notification of Streambed Alteration to CDFW.

In compliance with the no-net-loss policy, impacts to riparian and non-wetland waters would likely require mitigation at a minimum 1:1 ratio. Mitigation ratios will be determined during the permitting process.

Prior to grading permit issuance, no impacts shall occur to on-site pepper trees or drainages until appropriate permits have been obtained from the Regional Water Quality Control Board (Section 401 Water Quality Certificate or Waste Discharge Requirements) and CDFW (Section 1602 Streambed Alteration Agreement).

Although the proposed project would not avoid impacts to these pepper trees and ephemeral drainages, with the implementation of the mitigation, the project would be biologically superior to the existing conditions and consistent with the requirements for the

Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools Requirements in Section 6.1.2 of the MSHCP. The current conditions of these jurisdictional features are poor as the drainages are heavily disturbed from regular disking activities and the riparian vegetation is characterized by a single invasive species (i.e., Peruvian pepper trees). The proposed mitigation will provide compensation for these disturbed features with high-quality riverine features.

3.3.2 Indirect Effects

Indirect effects from noise from project implementation are not a concern as there is no habitat suitable for riparian wildlife on-site. However, indirect impacts to drainages outside of but adjacent to the project site from fugitive water and dust would be avoided through the implementation of standard best management practices including dust control through the use of a water truck, erosion control devices (straw wattles, gravel bags, etc.), and silt fencing around the construction boundary.

Hydrology in the area should not change as a result of project implementation as the on-site runoff would be collected in underground pipes, treated, and discharged along the north property line in approximately the same locations as the surface channels drain today.

4.0 NARROW ENDEMIC PLANT SPECIES MITIGATION (SECTION 6.1.3)

4.1 METHODS

The survey area is located within a MSHCP NEPSSA with a requirement for evaluating the following six species: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). A habitat suitability assessment was conducted for these species within the project site boundary on September 22, 2023, according to the habitat suitability assessment procedure described in Volume I, Section 6.1.3 of the MSHCP. A description of each species and the results of the habitat suitability assessment are described below:

- Munz's onion (*Allium munzii*). This perennial bulbiferous herb is known to occur within mesic exposures or seasonally moist microsites in grassy openings in coastal sage scrub, chaparral, juniper woodland, valley and foothill grasslands in clay soils or pyroxenite outcrops. The blooming period for this species is May to July. Within the MHSCP Plan Area, this species is associated with clay and cobbly clay soils which include the following series: Altamont, Auld, Bosanko, Claypit, and Porterville. This species does not currently occur on-site and is not expected to occur as the survey area lacks suitable mesic coastal sage scrub, chaparral, juniper woodland, and

grassland habitat in clay soils or pyroxenite outcrops. Additionally, the survey area is not mapped within Altamont, Auld, Bosanko, Claypit, and Porterville soils (USDA 1971).

- San Diego ambrosia (*Ambrosia pumila*). This perennial rhizomatous herb is known to occur in sparse non-native grassland or ruderal habitat in association with river terraces, vernal pools, and alkali playas. A blooming period for this species is not listed in the MHSCP; however, Jepson eFlora lists the blooming period as April through July (Jepson Flora Project 2023). Within the MSHCP Plan Area, this species is only known from three locations in the Riverside Lowlands Bioregion: in the vicinity of Alberhill, Nichols Road, and Skunk Hollow. This species was not detected on-site during biological surveys and is not expected to occur on-site as the field cropland on-site is not associated with river terraces, vernal pools, or alkali playas. Additionally, this species is a perennial herb that would likely have been apparent at the time the habitat assessment was conducted.

- Many-stemmed dudleya (*Dudleya multicaulis*). This perennial herb is associated with clay soils in barren, rocky places and ridgelines and thinly vegetated openings in chaparral, coastal sage scrub, and grasslands underlain by clay soils. The blooming period for this species is from March to June. Within the MSHCP Plan Area, this species is associated with clay and cobbly clay soils of the following series: Altamont, Auld, Bosanko, Claypit, and Porterville. This species was not detected on-site and is not expected to occur due to lack of suitable clay or cobbly clay soils. Additionally, the survey area is not mapped within Altamont, Auld, Bosanko, Claypit, and Porterville soils (USDA 1971).

- Spreading navarretia (*Navarretia fossalis*). This species is known to occur within vernal pools and areas historically supporting vernal pools, with saline-alkaline soils. The blooming period for this species is May to June. Within the MSHCP Plan Area, this species is primarily restricted to the alkali floodplains of the San Jacinto River, Mystic Lake, and Salt Creek in association with Willows, Domino, and Traver soils. This species was not detected on-site and is not expected to occur due to lack of suitable vernal pool or historic vernal pool habitat with saline-alkaline soils to support this species. Additionally, the survey area is not mapped within Willows, Domino, and Traver soils (USDA 1971).

- California Orcutt grass (*Orcuttia californica*). This annual herb is known to occur in vernal pool habitat with alkaline soils or southern basaltic claypan. The blooming period for this species is April to June. Within the MSHCP Plan Area, this species is restricted to the southern basaltic claypan vernal pools at the Santa Rosa Plateau and

alkaline vernal pools at Skunk Hollow and at Salt Creek west of Hemet. This species was not observed and is not expected to occur on-site as the survey area lacks vernal pools with claypan or alkaline soils and is not located within the vicinity of these known locations.

- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). This annual herb is primarily restricted to the alkali floodplains of the San Jacinto River in association with willows, Domino, and Traver soils. The blooming period for this species is May to September. Within the MSHCP Plan Area, this species occurs in alkali playa, alkali annual grassland, and alkali vernal pool habitats. This species was not observed on-site and is not expected to occur as the survey area lacks alkali floodplains and is not located within the vicinity of the San Jacinto River. Additionally, the survey area is not mapped within Willows, Domino, and Traver soils (USDA 1971).

4.2 RESULTS/IMPACTS AND MITIGATION

Due to the lack of suitable habitat and soil types for these NEPSSA plants, site-specific surveys for NEPSSA species were not conducted. As no impacts are anticipated, no mitigation is required. Thus, the project is consistent with requirements for the Additional Surveys Needs and Procedures in Section 6.1.3 of the MSHCP.

5.0 GUIDELINES PERTAINING TO THE URBAN/WILDLAND INTERFACE (SECTION 6.1.4)

As discussed in Section 4.1.3 of this report, the project is not located within or adjacent to a MSHCP Criteria Area, Criteria Cell, or Conservation Area. Therefore, mitigation measures for indirect effects, as addressed in the Urban/Wildland Interface Guidelines, are not required and the project would be in compliance with Section 6.1.4 of the MSHCP.

6.0 ADDITIONAL SURVEY NEEDS (SECTION 6.3.2)

6.1 Criteria Area Species Survey Area - Plants

The project site does not fall within the MSHCP Criteria Area Species Survey Area; thus, site-specific surveys for Criteria Area plant species are not required as per Volume I, Section 6.3.2 of the MSHCP. Therefore, the project is consistent with the requirements for Criteria Area plants species contained in the Additional Survey Needs and Procedures in Section 6.3.2 of the MSHCP, and no additional surveys or mitigation is required.

6.2 CRITERIA AREA SPECIES SURVEY AREA - BURROWING OWL

The survey area and the 150-meter buffer (cumulatively called the burrowing owl survey area) are located within the burrowing owl survey area identified in the MSHCP (WRCRCA 2003).

6.2.1 Methods

RECON biologists Beth Procsal and Chelsea Polevy conducted a Step I Burrowing Owl habitat assessment within the project site in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (WRCRA 2006). The burrowing owl survey area (BUOW survey area) included a 150-meter buffer surrounding the project site. The entire survey area was evaluated for suitable habitat and a majority of it was characterized as areas of bare ground and loose soils with potential to support burrows and/or burrow surrogates. Transects, spaced no more than 100 feet apart, were then walked through, all suitable habitat was identified within the project boundary, no trespassing occurred, and surveillance of the buffer was done from the project site. Survey dates, times, and weather conditions are provided in Table 1. Further details are provided in the Burrowing Owl Habitat Assessment Results report (RECON 2023).

Table 1
Survey Information

Date	Survey Type	Surveyors	Beginning Conditions	Ending Conditions
9/22/2023	Step I- Burrowing Owl Habitat Assessment & Step II, Part A Focused Burrow Survey	B. Procsal; C. Polevy	9:30 a.m.; 68°F; 0-1 mph; 30% cc	1:20 p.m.; 76°F; 0-2 mph; 40% cc

°F = degrees Fahrenheit; mph = miles per hour; % = percent; cc = cloud cover.

6.2.2 Results/Impacts

Suitable habitat was identified within the project site and surrounding 500-foot buffer during the Step I Habitat Assessment and Step II Part A Focused Burrow Survey. The suitable habitat primarily consists of the field croplands, which are composed of agricultural fields with scattered ruderal species. At the time of the habitat assessment, this habitat generally consisted of freshly disked land. Two burrows were detected within mounds of land that were not disked, although no sign, such as whitewash, pellets, or feathers, of burrowing owl use was noted. Additionally, these burrows were small (less than 11 centimeters) which are insufficient in size to support burrowing owls, and the entrances of these burrows were covered with vegetation.

6.2.3 Mitigation and Equivalency

6.2.3.1 Direct Effects

With the presence of other burrows and fossorial mammals on-site and the project site within the burrowing owl survey area, a pre-construction burrowing owl survey would be conducted within 30 days prior to construction work within the areas mapped as field croplands in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (WRCRCA 2006).

If burrowing owls are detected within the project site prior to the initiation of construction, the applicant should immediately inform WRCRCA and the Wildlife Agencies and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by WRCRCA and the Wildlife Agencies prior to initiating ground disturbance.

6.3 CRITERIA AREA SPECIES SURVEY AREA - MAMMALS

The project site does not fall within the MSHCP survey area for mammal species; thus, site-specific surveys for mammals are not required as per Volume I, Section 6.3.2 of the MSHCP. Therefore, the project is consistent with the requirements for mammals contained in the Additional Survey Needs and Procedures in Section 6.3.2 of the MSHCP and no additional surveys or mitigation are required.

6.4 CRITERIA AREA SPECIES SURVEY AREA - AMPHIBIANS

The project site does not fall within the MSHCP survey area for amphibian species; thus, site-specific surveys for amphibians are not required as per Volume I, Section 6.3.2 of the MSHCP. Therefore, the project is consistent with the requirements for amphibians contained in the Additional Survey Needs and Procedures in Section 6.3.2 of the MSHCP, and no additional surveys or mitigation is required.

7.0 DELHI SANDS FLOWER-LOVING FLY

The project site does not fall within the MSHCP mapped survey area for the Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) and no Delhi soils occur within the project site (USDA 1971); thus, site-specific surveys for this species are not required. Therefore, the project is consistent with the species-specific objectives for Delhi Sands flower-loving fly contained in the MSHCP and no additional surveys or mitigation is required.

8.0 REFERENCES

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