



Appendix C. Biological Resources Report



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NUW-16

Mr. Jonathan Frankel
Project Manager
New Urban West, Inc.
16935 West Bernardo Drive, Suite 260
San Diego, CA 92127

Subject: Biological Resources Report for the Marja Acres Project

Dear Mr. Frankel:

This report presents the results of a biological resources technical study completed by HELIX Environmental Planning, Inc. (HELIX) for the Marja Acres Project (proposed project) located within an approximately 24-acre property (project site or site) in the City of Carlsbad, San Diego County, California. New Urban West, Inc. (project applicant) is planning a mixed residential and retail/commercial development at the project site, generally including 299 dwelling units (253 townhomes, 46 age-restricted affordable housing units), 4,000 square feet of restaurant space, and 5,700 square feet of retail space.

This report is intended to summarize the existing biological resources within the site and provide an analysis of the proposed impacts in accordance with the California Environmental Quality Act (CEQA) and applicable federal, state, and local policy, including consistency with the adopted City of Carlsbad Habitat Management Plan (Carlsbad HMP) and certified Carlsbad Local Coastal Plan (LCP).

INTRODUCTION

Project Location

The project site is generally located in the north western portion of the City of Carlsbad in northern San Diego County, California (Figure 1). More specifically, the site occurs south of El Camino Real and east of Kelly Drive at 4901 El Camino Real (Figure 2). The site is depicted within an unsectioned portion of the Agua Hedionda Land grant (Figure 3). The project site is located within the boundaries of the adopted Carlsbad HMP, outside of any HMP designation areas (Figure 4). No HMP designation areas occur immediately adjacent to the site. Proposed Hardline is located offsite further to the north and west, and Existing Hardline is located offsite further to the east and south. The site is located within the Coastal Zone and boundaries of the certified Carlsbad LCP.

Project Description

The Marja Acres community plan has been prepared to meet the requirements of the City of Carlsbad by addressing the goals, policies, and objectives of the General Plan, Zoning Code, as well as the implementation of the State Density Bonus through Section 21.86 of the Carlsbad Municipal Code.

The community plan is intended to achieve a “Village”-like setting by providing a variety of townhome and age-restricted product type, commercial uses and recreational amenities for residents across the age spectrum. The neighborhood provides walking opportunities for the residents by incorporating varying sidewalks and pathways through the residential areas and connecting them to the recreational opportunities, the Urban Farm, the specialty retail, and future restaurant.

The development plan proposes a total number of 299 dwelling units consisting of 237 townhomes within the R-15 General Plan designated area, and 46 age-restricted affordable house units, 16 townhomes, a 4,000-square-foot restaurant pad, and a 5,700-square-foot retail pad area within the GC General Plan designated area. The proposed project has been designed to emphasize superior architecture, views, privacy, walkability, internal connectivity, and recreational amenities (Figure 5).

METHODS

Pre-Survey Investigation

Prior to conducting field surveys, a thorough review of relevant maps, databases, and literature pertaining to biological resources known to occur within the project vicinity was performed. Recent and historical aerial imagery (Google 2016), topographic maps (U.S. Geological Survey 1997), soils maps (U.S. Department of Agriculture [USDA] 2016), and other maps of the project site and vicinity were acquired and reviewed to obtain updated information on the natural environmental setting.

In addition, a query of sensitive species and habitats databases was conducted, including the U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (2016a), USFWS species records (USFWS 2016b), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB; CDFW 2016), and California Native Plant Society (CNPS) Electronic Inventory (CNPS 2016). The USFWS' National Wetlands Inventory (NWI) was also reviewed (USFWS 2016c). Recorded locations of species, habitat types, wetlands, and other resources were mapped and overlaid onto aerial imagery using Geographic Information Systems (GIS).

General Biological Survey

HELIX Biologist Jason Kurnow performed an initial, general biological survey on September 29, 2015, which included 100 percent visual coverage of the project site and immediate vicinity. The total area surveyed for the general biological surveys was approximately 24 acres. The general biological survey included a general inventory of existing conditions and focused primarily on verifying existing vegetation communities or habitat types, preliminarily mapping potential jurisdictional waters and wetlands, assessing suitability for sensitive plant and animal species, and identifying potential sensitive resources.

The general biological survey also included a survey and inspection of potential Environmentally Sensitive Habitat Areas (ESHA) as described in the Carlsbad HMP (Carlsbad 2004). Meandering pedestrian transects were performed throughout the site in order to obtain 100 percent visual coverage. Off-site areas were visually inspected by visual scans. Physical parameters assessed included vegetation and soil conditions, and presence of indicator plant and animal species, slope, aspect, and hydrology.

Subsequent general biological surveys were conducted by HELIX Biologist Benjamin Rosenbaum on October 25, 2016 between 10:00 a.m. and 11:30 a.m., and by Mr. Kurnow on May 26, 2017, between the hours of 8:00 a.m. and 12:00 p.m. Survey data included a comprehensive list of observed plant and animal species (Attachment A). The surveys were conducted on foot and included 100 percent visual coverage of the project site and immediate surrounding properties.

Vegetation was mapped on 1"=200' scale aerial imagery with ½-foot contour data. Plant and animal species observed or otherwise detected during biological surveys at the project site are included in Attachment A. Sensitive species and habitats recorded within five miles of the project site were analyzed for potential to occur (Attachment B). A complete list was compiled, and recorded locations were mapped and overlaid onto aerial imagery using GIS. Plant identifications were made in the field. Directed inspections of habitat were performed to locate target rare plant species known to occur on the site and/or in the region. Animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. Representative photographs of the site were taken and are included in Attachment C.

Preliminary Jurisdictional Delineation

Mr. Kurnow performed a preliminary jurisdictional delineation of the entire project site on September 29, 2015, concurrent with the general biological survey. A follow-up site visit was conducted by HELIX Biologist Karl Osmundson on February 10, 2016, to verify the findings of the preliminary delineation. The preliminary delineation differs from a formal delineation in that it focuses on assessing ordinary high water mark (OHWM) and other hydrology indicators, riparian and wetland vegetation, surface soils, topography, and other data, but does not include excavation of soil pits and establishment of wetland sampling points.

Prior to beginning fieldwork, aerial photographs (1"=100' scale), topographic maps (1"=100' scale), and NWI maps were reviewed to assist in determining the location of potential jurisdictional areas in the project site. The field delineations were conducted to identify and map potential water and wetland resources that could be subject to U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344), Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to CWA Section 401 or State Porter-Cologne Water Quality Control Act, CDFW jurisdiction pursuant to Sections 1600 *et seq.* of the California Fish and Game Code (CFG Code), and coastal wetlands and riparian habitat pursuant to the Carlsbad LCP. Areas generally characterized by depressions, drainage features, and riparian and wetland vegetation were evaluated.

Rare Plant Survey

Mr. Kurnow completed a rare plant survey on May 26, 2017, which included 100 percent coverage and a botanical inventory of the project site. The survey also included an inspection of an off-site reference population of one of the target species, thread-leaved brodiaea (*Brodiaea filifolia*), to confirm that the species was in bloom in the local area and positively identifiable.

Survey Limitations

The lists of species identified are not necessarily comprehensive accounts of all species that occur on the site, as species that are nocturnal, secretive, or seasonally restricted may not have been observed. The 2015 and 2016 surveys were performed during drought years, which are expected to have influenced the vegetation observed during the time of the survey. Nevertheless, conditions were confirmed during the 2017 surveys, which was performed during an optimal rainfall year.

Nomenclature

Nomenclature used in this report follows The Jepson Manual for plants (Hickman 1993), Crother et al. (2012) for reptiles, American Ornithologists' Union (2016) for birds, and Bradley et al. (2014) for mammals.

RESULTS

Existing Conditions

General Land Use

The project site is composed of non-native/ornamental vegetation, disturbed land, and urban/developed land. The surrounding area is made up of commercial and residential development to the north, south, east, and west. An existing San Diego Gas and Electric (SDG&E) utility corridor and segment of Kelly Creek runs north-south to the west of the project site.

Disturbance

The project site is subject to regular disturbance as a result of the existing and historic uses, which include a mix between previous (historic) agriculture and current commercial/retail uses. The disturbed land in the north, west, and southern portion, and urban/developed land in the north and western portion of the project site are all subject to regular human activity. The undeveloped portions of the site have been routinely disced. The developed portions of the site are maintained for commercial/retail use. Non-native/ornamental vegetation is present in small pockets throughout the project site. Existing developments surround the site on all sides, including El Camino Real to the north, which is a major roadway that receives heavy traffic.

Topography and Soils

Elevations within the project site range from approximately 44 feet (13 meters) above mean sea level (AMSL) in the northern portion of the site to 112 feet (34 meters) AMSL in the southern portion of the site (Figure 2). Four soil mapping units, as mapped by USDA (1973), occur within the survey area (Figure 6): Salinas clay loam, 2-9 percent slopes; Diablo clay, 15 to 30 percent slopes, eroded; Las Flores fine sand, 9 to 15 percent slopes, eroded; and Las Flores loamy fine sand, 5 to 9 percent slopes. The surface soils throughout the entire site show evidence of a high degree of disturbance, primarily as a result of historic agricultural uses and ongoing disturbances, which include discing and manipulation of the upper soil horizons.

Vegetation Communities/Habitat Types

Vegetation communities or habitat types are classified in this report according to the Carlsbad HMP (City of Carlsbad 2004), with further guidance from Oberbauer et al. (2008).

The Carlsbad HMP divides vegetation communities into six Habitat Groups (A through F), as shown below within Table 1.

Table 1
CARLSBAD HMP HABITAT GROUPS

Habitat Group	Habitat Type and Description
A	Coastal salt marsh, alkali marsh, freshwater marsh, estuarine, salt pan/mudflats, riparian forest, riparian woodland, riparian scrub, vernal pools, disturbed wetlands, flood channel, freshwater Engelmann oak woodland, coast live oak woodland
B	Beach, southern coastal bluff scrub, maritime succulent scrub, southern maritime chaparral, native grassland
C	Gnatcatcher-occupied coastal sage scrub
D	Unoccupied coastal sage scrub, coastal sage/chaparral mix, chaparral (excluding southern maritime chaparral)
E	Annual (non-native) grassland
F	Disturbed land, eucalyptus, agricultural lands

Four vegetation communities or land use types were mapped within the project site during the September 29, 2015 general biological survey: disturbed habitat (including disced land), non-native/ornamental, and urban/developed land (Figure 7; Table 2). A brief description of each community is provided below.

Table 2
VEGETATION COMMUNITIES

Vegetation Community	Habitat Group	Existing Acreage
Upland		
Disturbed Habitat/Disced Land	F	12.4
Disturbed Habitat	F	0.3
Ornamental/Non-native Vegetation	F	2.1
Urban/Developed	--	5.7
TOTAL		20.5

Disturbed Habitat/Disced Land

For the purposes of this assessment, disturbed habitat/disced land includes areas that have been routinely disced and maintained for various uses on the property. The areas had been subject to agricultural uses decades ago, but no longer support active agriculture. Disturbed habitat/disced land encompasses approximately 12.4 acres of the project site.

Ornamental/Non-native Vegetation

Non-native vegetation is a category describing stands of vegetation heavily dominated by non-native grasses (e.g., oats [*Avena* sp.], foxtail chess [*Bromus madritensis*], pampas grass [*Cortaderia jubata*], and fountain grass [*Pennisetum setaceum*], etc.), bull thistle (*Cirsium vulgare*) and Russian thistle, ice plant (*Mesembryanthemum* spp.), eucalyptus (*Eucalyptus* sp.), and palm (Arecaceae family). Much of the non-native vegetation is exotic and escapees from ornamental landscaping.

Non-native vegetation accounts for 2.1 acres and can be found in patches throughout the site. This community type is a category F of the HMP habitat groups. Dominant species include pampas grass (*Cortaderia* spp.) and eucalyptus with lower densities of castor bean, fountain grass, Russian thistle, fennel (*Foeniculum vulgare*) and garland daisy. An ornamental windrow of planted, western sycamore (*Platanus racemosa*) and Fremont cottonwood (*Populus fremontii*) cultivars were also mapped as ornamental/non-native vegetation in the eastern portion of the site, generally following the southern and eastern perimeters of the existing pottery store.

Disturbed Habitat

Disturbed habitat or disturbed land includes land cleared of vegetation, land containing a preponderance of non-native plant and disturbance-tolerant species, or land showing signs of past or present usage that removes any capability of providing viable habitat. This classification includes ruderal (weedy) areas dominated by species typical of highly disturbed sites. This includes areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association, but continue to retain a soil substrate. Typically, vegetation, if present, is composed of non-native plant species such as non-native ornamentals, non-native grasses,

and ruderal species that take advantage of disturbance. For the purposes of this assessment, these areas do not exhibit sign of regular discing.

Disturbed habitat accounts for 0.3 acre and is found bordering the on-site drainage feature in the most northwestern portion of the site. This community is a category F HMP habitat group of Carlsbad. The primary factor used in mapping this habitat type was evidence of intense land disturbance, presence of bare ground, and non-native ruderal indicator plant species. Non-native forbs dominate this community where it occurs on the site, including castor bean, Russian thistle English plantain (*Plantago lanceolata*), black mustard (*Brassica nigra*), and fennel. Other non-native species found in lower densities include fox chess (*Bromus madritensis*), curly dock (*Rumex crispus*), tree tobacco (*Nicotiana glauca*), and orchard nettle (*Urtica urens*). A few scattered native species were also observed in this area, including arroyo willow (*Salix lasiolepis*) and prickly pear (*Opuntia littoralis*) in small amounts. There is evidence of trash, debris, and a prevalence of non-native species.

Urban/Developed

Approximately 5.7 acres of the project site consists of developed lands, consisting of a paved parking lot, commercial buildings, and residences. Typically, vegetation, if present, is composed of non-native plant species such as non-native ornamentals, non-native grasses, and ruderal species that have been planted. This community is not listed as a HMP habitat group of Carlsbad due to lack of vegetation and previous permanent impacts.

General Fauna

The project site is generally disturbed and does not provide extensive high quality habitat for animal species. Overall animal activity during the general survey was low. Animal species observed or otherwise detected on site included bird species such as Anna's hummingbird (*Calypte anna*), California towhee (*Melospiza crissalis*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaidura macroura*), and northern mockingbird (*Mimus polyglottos*). A complete list of plant and animal species observed or otherwise detected is included as Attachment A.

Sensitive Biological Resources

Sensitive Natural Communities

Sensitive natural communities include land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the CEQA Guidelines. Sensitive natural communities also include Habitat Groups A through E in the Carlsbad HMP.

The project site does not support any sensitive natural communities. The general biological surveys found no portions of the site supported ESHA's, either in the form of sensitive coastal upland habitat (e.g., coastal California gnatcatcher occupied coastal sage scrub) or sensitive coastal wetlands.

Special-Status Plant and Animal Species

Special-Status Plant Species

Special-status plant species are those listed as federally threatened or endangered by the USFWS; State listed as threatened or endangered or considered sensitive by the CDFW; and/or, are CNPS California Rare Plant Rank (CRPR) List 1A, 1B, or 2 species, as recognized in the CNPS's Inventory of Rare and Endangered Vascular Plants of California and consistent with the CEQA Guidelines. Special-status plant species also include those identified in the Carlsbad HMP. Special-status plant species with potential to occur are included in Attachment B.

No special-status plant species were observed during the 2015, 2016, or 2017 surveys. Existing uses and disturbances, proximity to developments, and overall poor quality habitat strongly reduce the potential for sensitive plants to occur. The existing developments have eliminated potential habitat and the historic agricultural uses and regular discing have modified the landscape, soil, hydrology, and vegetation composition of the site, which has substantially reduced the potential for special-status plant species to occur. Two horizontal strips of Diablo clay (15 to 30 percent slopes, eroded) and Salinas clay loam (2 to 9 percent slopes) are mapped over portions of the site; however, these areas were closely inspected during HELIX's surveys and the overlying developments and historic agricultural lands have either removed potential habitat within these areas entirely or substantially altered to the upper soil horizons rendering them unsuitable for clay-associated special-status plants.

Special-Status Animal Species

Special-status animal species are those listed as threatened or endangered, proposed for listing, or candidates for listing by the USFWS and considered sensitive animals by the CDFW. Special-status animal species also include those identified in the Carlsbad HMP. Special-status animal species with potential to occur on the project site are included in Attachment B.

No special-status animals were observed during the 2015, 2016, or 2017 surveys. The potential for special-status animal species to occur within the project site is low due to the developed and disturbed state of the site and surrounding lands, which are primarily developed with residences, commercial buildings, and roadways. No native or naturalized habitat occurs on the site; it has all been long since developed or converted for previous agriculture uses. The site does not support an abundance of trees, shrubs, and other cover and resources that would attract and sustain special-status animal species that occur in the region. The existing uses and regular human activity would likely preclude most special-status animals from moving onto the site. Existing uses and disturbances, proximity to developments, and lack of suitable habitat strongly reduce the potential for special-status animals to occur.

Nesting Birds and Raptors

The project site contains suitable nesting habitat (e.g., trees, shrubs, structures) for several common bird species, including raptors, protected under the Migratory Bird Treaty Act (MBTA) and CFG Code.

Jurisdictional Waters and Wetlands

In the context of this assessment, jurisdictional waters and wetlands include waters of the U.S., including wetlands, regulated by the USACE pursuant to CWA Section 404; waters of the State regulated by the RWQCB pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Control Act; streambed and riparian habitat regulated by the CDFW pursuant to Sections 1600 et seq. of CFG Code; and/or coastal wetland and riparian habitat afforded protection under the Carlsbad LCP.

The potential boundaries of jurisdictional waters and wetlands were preliminarily delineated. An east-west trending, unnamed ephemeral drainage feature occurs in the northwestern portion of the site. The on-site drainage feature has been subject to many years of man-made activities and is currently in a very disturbed state. The drainage feature's origin is largely a result of previous man-made activities involving fill and slope development at the present-day location of the nursery. This fill was pushed up against an adjacent, natural slope, creating an artificial crease in the landscape, which, over time, became more and more eroded, eventually turning into the drainage ditch that it is today. The drainage primarily conveys storm water sheet flowing off the developed parking lot for the existing commercial site. Flows are conveyed from east-west through the drainage before entering a corrugated pipe culvert that runs beneath an existing SDG&E dirt access road eventually out-falling into Kelly Creek, which runs north-south within the SDG&E easement.

In its current state, the drainage has characteristics of a relictual channel, ditch, and round-bottom swale. The contributing watershed has been highly modified over the years, with the most dramatic modification taking place over the last several years. The vast majority of the watershed that historically contributed flow during storm events at Robertson Ranch, across El Camino Real, has been developed and connectivity has been severed. In addition, the City has recently completed improvements to El Camino Real itself, adding curb and gutter and a major storm drain. Flows that historically entered the property from Robertson Ranch and El Camino Real have been intercepted and diverted from the Marja Acres property and into the major storm drain facility constructed within El Camino Real.

Although portions of the drainage support a definable bed and bank and an inconsistent ordinary high water mark, the drainage is ephemeral and no wetlands or riparian habitat exists. Where vegetation is present it is primarily non-native plant species, including several non-native invasives. Further, as mentioned above, the drainage's origin is largely a result of previous man-made activities, which in combination with its function to collect and convey storm water sheeting off the developed parking lot, reducing its overall function and service in the watershed.

Nevertheless, the drainage could qualify as non-wetland waters of the U.S. subject to USACE jurisdiction pursuant to CWA Section 404, non-wetland waters of the State subject to RWQCB jurisdiction pursuant to CWA Section 401, and unvegetated streambed subject to CDFW jurisdiction pursuant to CFG Code Sections 1600 et seq.

The drainage feature is not considered a coastal wetland, coastal riparian habitat, or a coastal stream due to the complete lack of wetland indicators (i.e., lack of hydric soils, hydrophytic vegetation, and wetland hydrology), lack of riparian habitat, man-made nature, and ephemeral flow services primarily by storm water runoff from developed areas. In this way, the drainage is functioning more as a conveyance

ditch with no plant or wildlife habitat value, biophysical wetland function, or benefit to coastal resources. Therefore, the drainage is not a coastal resource regulated under the City's LCP.

Table 3 below summarizes the existing jurisdictional waters and wetlands on the site.

Table 3
JURISDICTIONAL WATERS AND WETLANDS

Jurisdictional Resource	Existing	
	Acres [†]	Linear Feet
Waters of the U.S./State – USACE/RWQCB Jurisdiction		
Non-Wetland Waters/Drainage Ditch	0.02	501
Streambed – CDFW Jurisdiction		
Unvegetated Streambed/Drainage Ditch	0.05	501

[†]Acreage rounded to the nearest hundredth.

Wildlife Corridors and Linkages

Important corridors and linkages have been identified on a local and regional scale throughout the MHCP and Carlsbad HMP planning areas. The planning objectives of most corridors and linkages in coastal San Diego County include establishing a connection between the northern and southern regional populations of the coastal California gnatcatcher, in addition to facilitating movement and connectivity of habitat for large mammals and riparian bird species. As part of the MHCP, the Carlsbad HMP includes an assemblage of HMP Cores, Linkages, and Special Resource Areas (SRAs), with objectives to establish a network of habitat for the conservation of wildlife movement functions, primarily for birds and mammals.

The project site encompasses developed and undeveloped land within the Carlsbad HMP, outside of any HMP Core, Linkages, and SRA areas (Figure 4). The project site is highly disturbed and adjacent to several developments, including El Camino Real to the north. Its function to facilitate wildlife movement in the local and regional area is limited due to existing impediments and lack of live-in and dispersal habitat. Common large mammals (e.g., coyotes) and birds could potentially use portions of the site for dispersal and foraging; however, they are far more likely to use off-site habitat within Kelly Creek further to the west of the site. There is no connectivity of on-site habitat with that which occurs off site within Kelly Creek to the west; therefore, the site does not contribute to wildlife movement functions that may be associated with Kelly Creek.

APPLICABLE REGULATIONS

Based on the findings of this report, activities affecting the biological resources determined to exist or have the potential to exist within the project site could be subject to the federal, state, and local regulations discussed below.

Federal

Federal Endangered Species Act

Administered by the USFWS, the federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species that are identified as being endangered or threatened with extinction. Actions that jeopardize such species and their habitats are considered a “take” under the federal ESA. No federally listed animal species were observed on site.

Sections 7 and 10(a) of the federal ESA regulate actions that could harm or harass endangered or threatened species. Section 10(a) allows issuance of permits for “incidental” take of endangered or threatened species. The term “incidental” applies if the taking of the listed species is secondary to, and not the purpose of, an otherwise lawful activity. A conservation plan demonstrating how the take will be minimized and what steps taken would ensure the listed species’ survival must be submitted for the issuance of Section 10(a) permits. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A biological assessment is required for any major activity if it may affect listed species. The Carlsbad HMP has been formally approved, which provides take authorization under Section 10(a).

Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal MBTA as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, USFWS places restrictions on disturbances allowed near active raptor nests.

Coastal Zone Management Act of 1972

The Coastal Zone Management Act (CZMA) creates a broad program for the management of coastal lands based on land development control. It was enacted to encourage the participation and cooperation of state, local, regional, and federal agencies and governments having programs affecting the coastal zone. The CZMA allows state involvement through the development of Coastal Zone Management Plans (CZMP) for comprehensive management at the state level. The CZMPs define permissible land and water use within the state coastal zone. This coastal zone extends 3 miles seaward and inland as far as necessary to protect the coast. The CZMA also requires federal agencies or licensees to carry out their activities in such a way that they conform to the maximum extent practicable with a state's coastal zone management program. The California Coastal Act is California's coastal zone management program under the CZMA. This program is discussed below.

State

California Endangered Species Act (CESA)

The CESA declares that deserving plant or animal species will be given protection by the state because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the state. The CESA establishes that it is state policy to conserve, protect, restore, and enhance endangered species and their habitats. Under state law, plant and animal species may be formally designated as rare, threatened, or endangered through official listing by the California Fish and Game Commission. Listed species are given greater attention during the land use planning process by local governments, public agencies, and landowners than are species that have not been listed.

The CESA authorizes that “[p]rivate entities may take plant or wildlife species listed as endangered or threatened under FESA and CESA, pursuant to a federal Incidental Take Permit (ITP) issued in accordance with Section 10 of the FESA, if the CDFW certifies that the ITS or ITP is consistent with CESA (Fish and Game Code Section 2080.1(a)).” Section 2081(b) and (c) of the CESA allows CDFW to issue an ITP for a state-listed threatened and endangered species only if specific criteria are met. These criteria can be found in Title 14 CCR, Sections 783.4(a) and (b). No Section 2081(b) permit may authorize the take of “fully protected” species and “specified birds.” If a project is planned in an area where a fully protected species or specified bird occurs, an applicant must design the project to avoid all take; the CDFW cannot provide take authorization under CESA. On private property, endangered plants may also be protected by the Native Plant Protection Act (NPPA) of 1977. Threatened plants are protected by CESA, and rare plants are protected by the NPPA; however, CESA authorizes that “Private entities may take plant species listed as endangered or threatened under the FESA and CESA through a federal ITP issued pursuant to Section 10 of the FESA, if the CDFG [California Department of Fish and Game; currently known as California Department of Fish and Wildlife] certifies that the ITS or ITP is consistent with CESA.” In addition, CEQA requires disclosure of any potential impacts on listed species and alternatives or mitigation that would reduce those impacts. The Carlsbad HMP was prepared pursuant to Section 2081 of the CESA and the City was issued an umbrella Section 2081 ITP from the CDFG authorizing take of multiple state listed species.

California Coastal Act of 1976

The California Coastal Act (CCA) provides for the protection of environmentally sensitive habitat identified by the CDFW from adjacent developments in the coastal zone. The CCA is California's coastal zone management program under the CZMA, discussed above. The CCA establishes the California Coastal Commission (CCC) as having jurisdiction over California's coastal zone. The CCA identifies environmentally sensitive habitat areas as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Compliance with requirements in the CCA is ensured for specific development projects in the coastal zone through issuance of a Coastal Development Permit. In most incorporated areas within the coastal zone, compliance with the Coastal Act is regulated by local government through the implementation of a certified LCP. The local government typically issues Coastal Development Permits (CDPs), unless a project is located within a deferred certification area, such as the Agua Hedionda Lagoon segment of the Carlsbad LCP. The CDPs

are issued by the CCC in deferred certification areas of the certified LCP. The City implements their approved Carlsbad LCP in regulating developments within the coastal zone according to the CRPOZ Ordinance, as discussed below. The CDPs issued by the City are appealable to the CCC only if they are located within an appeals area.

California Fish and Game Code Sections 3503, 3503.5, and 3800

These sections of the California Fish and Game Code prohibit the take or possession of birds, their nests, or eggs. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a take. Such a take would also violate federal law protecting migratory birds. ITPs are required from the CDFW for projects that may result in the incidental take of species listed by the state as endangered, threatened, or candidate species. The wildlife agencies require that impacts to protected species be minimized to the extent possible and mitigated to a level of insignificance.

California Natural Community Conservation Planning Act of 1991

The NCCP Act is designed to conserve habitat-based natural communities at the ecosystem scale while accommodating compatible land uses in coordination with CESA. The CDFW is the principal state agency implementing the NCCP Program. The Act established a process to allow for comprehensive, long-term, regional, multi-species, and habitat-based planning in a manner that satisfies the requirements of the state and FESAs (through a companion regional habitat conservation plan). The NCCP program has provided the framework for innovative efforts by the state, local governments, and private interests, to plan for the protection of regional biodiversity and the ecosystems upon which they depend. NCCPs seek to ensure the long-term conservation of multiple species, while allowing for compatible and appropriate economic activity to proceed. The Carlsbad HMP was prepared as part of the MHCP subregional planning pursuant to the NCCP Act.

Local

Multiple Habitat Conservation Program

The Multiple Habitat Conservation Plan (MHCP) is a comprehensive, multiple jurisdictional planning program designed to develop an ecosystem preserve in northwestern San Diego County. Implementation of the regional preserve system is intended to protect viable populations of key sensitive plant and animal species and their habitats, while accommodating continued economic development and quality of life for residents of the North County region. The MHCP is one of several large multiple jurisdictional habitat planning efforts in San Diego County, each of which constitutes a subregional plan under the NCCP Act of 1991. The MHCP includes seven incorporated cities in northwestern San Diego County: Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. These jurisdictions will implement their respective portions of the MHCP through citywide “subarea” plans, which describe the specific implementing mechanisms each city will institute for the MHCP. The goal of the MHCP is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46 percent) are already in public ownership and contribute toward the habitat preserve

system for the protection of more than 80 rare, threatened or endangered species. The Carlsbad HMP is the only approved and adopted Subarea Plan under the MHCP.

Carlsbad Habitat Management Plan

The City approved the Carlsbad HMP in 2004 and adopted ordinance regulations in Chapter 21.210 of the Carlsbad Municipal Code as a condition of receiving approval from the CCC, an ITP from the USFWS pursuant to Section 10(a)(1)(B) of the FESA, and incidental take authorization from the CDFG (currently known as the CDFW) pursuant to the CESA and Section 2835 of the CFG Code. Since its adoption, the Carlsbad HMP has allowed for citywide permits and authorization for the incidental take of sensitive species in conjunction with private development projects, public projects, and other activities which are consistent with the HMP. The Carlsbad HMP has been successful in contributing toward the conservation of local habitats and recovery of regionally sensitive plant and animal species within Carlsbad. The HMP designates approximately 6,500 acres of the open space lands in Carlsbad for preservation based on its value as habitat for endangered animals and rare, unique or sensitive plant species. The plan identifies how the city Carlsbad can protect and maintain these lands while still allowing additional public and private development consistent with the General Plan and the Growth Management Plan. The purpose and intent of Chapter 21.210 of the Carlsbad Municipal Code in implementing the Carlsbad HMP are summarized below.

Habitat Preservation and Management Requirements

Chapter 21.210 of the Carlsbad Municipal Code requires all development to comply with the Carlsbad HMP as well as the implementing agreement, permit conditions, the MHCP, the NCCP, and 10(a)(1)(B) permit conditions, and the requirements contained in Habitat Preservation and Management Requirements Ordinance. No grading is allowed to occur for projects in Carlsbad until all the processing and permitting requirements of this chapter are fulfilled. The purpose and intent of the Habitat Preservation and Management Requirements Ordinance are to:

- Implement the goals and objectives of the land use and the open space/conservation elements of the Carlsbad General Plan;
- Implement the Carlsbad HMP, the implementing agreement and conditions, the North County MHCP, the California NCCP and 10(a)(1)(B) permit conditions;
- Preserve the diversity of natural habitats in Carlsbad and protect the rare and unique biological resources located within those habitats;
- Assure that all development projects comply with the habitat preservation and conservation standards contained in the Carlsbad HMP;
- Provide a process for permitting limited, incidental impacts to occur to natural habitat areas and the species located therein; and
- Provide a process for allowing minor amendment from the habitat preservation and conservation standards under limited, specified circumstances.

An HMP Permit is required to be obtained from the City for any development project that directly or indirectly impacts natural habitat within the Carlsbad HMP boundaries. Habitat conservation planning is processed as a Consistency Finding and requires concurrence from the USFWS and CDFW.

Zone Level Recommendations

The proposed project is situated within LFMZ 1 (Zone 1) of the Carlsbad HMP planning area. Zone Level Recommendations for Zone 1 as specified in the Carlsbad HMP include avoiding removal of maritime succulent scrub and any patches of coastal scrub in or contiguous with biological core areas, preservation of at least 50 percent of coastal sage scrub with preference for avoidance of any areas that contain coastal California gnatcatchers (*Polioptila californica californica*), and mitigation for native habitats by creation or enhancement of like habitats adjacent to lagoons or by offsite compensation or restoration within biological core and linkage areas.

Coastal Resource Protection Overlay Zone Ordinance

Chapter 21.203 of the Carlsbad Municipal Code requires that projects demonstrate consistency with the approved Carlsbad LCP and obtain a CDP for developments within the coastal zone. The proposed project occurs within the boundaries of the coastal zone within Carlsbad, as identified within the approved Carlsbad LCP. The City of Carlsbad uses its LCP as a planning tool to guide development in the coastal zone, in partnership with the CCC. The LCP contains the ground rules for future development and the protection of coastal resources. The Carlsbad LCP includes two main components: a land use plan and related implementing measures including a zoning map, and zoning ordinance. In particular, the local coastal land use plans include measures specifically intended to protect natural open space resources, scenic resources, agricultural lands, and public access rights. Nearly all development proposals within the coastal zone, from removal of natural vegetation, to the construction of master planned communities, require the approval of a CDP in addition to any other permits or entitlements. The City issues CDPs in all adopted Carlsbad LCP segments within their jurisdictional boundaries with the exception of the Agua Hedionda Lagoon segment of the Carlsbad LCP, which is a deferred certification area. The CDPs in the Agua Hedionda Lagoon segment of the Carlsbad LCP are issued by the CCC. The CDPs issued by the City are appealable to the CCC only if they are located within an appeals area. In conformance with the LCP, the City regulates developments within the coastal zone according to the CRPOZ Ordinance. The CRPOZ requires that project applicants obtain a CDP.

Coastal Zone Standards

Additional conservation standards are to be applied to properties in the coastal zone (City 2003). For the subject property, these include:

Environmentally sensitive areas as defined in Section 30107.5 of the Coastal Act shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed in those areas. "Environmentally sensitive areas" (ESHA) are any areas in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Impacts to sensitive habitat, when permitted, shall include a creation component that achieves the no net loss standard.

SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

This section provides a project-level biological resources impact analysis for the proposed project in support of environmental review. The issues addressed in this section are derived from Appendix G of the CEQA Guidelines and issues specific to the City of Carlsbad. Mitigation, monitoring, and reporting requirements to eliminate or reduce project impacts to a less than significant level are also provided in this section. Figure 8 depicts the project impacts to biological resources.

ISSUE 1: Special-Status Species

Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

ISSUE 1 Impact Analysis

Less than Significant with Mitigation. Special-status plant species are not likely to occur within the project site; none were observed during surveys, including the 2017 rare plant survey, which was conducted during an optimal rainfall year. Therefore, no special-status plant species are expected to be impacted by the project. Existing developments have eliminated potential habitat on the site and the historic agricultural uses have modified the landscape, soil, hydrology, and vegetation composition of the site, which has substantially reduced the potential for special-status plant species to occur. Two horizontal strips of Diablo clay (15 to 30 percent slopes, eroded) and Salinas clay loam (2 to 9 percent slopes) are mapped over portions of the site; however, these areas were closely inspected during HELIX's surveys and the overlying developments and historic agricultural lands have either removed potential habitat within these areas entirely or substantially altered to the upper soil horizons rendering them unsuitable for clay-associated special-status plants. Therefore, special-status plant species are not likely to occur and none would be impacted by the project.

Similarly, the potential for special-status animal species to occur within the project site is low due to the existing and historic uses and overall disturbed and developed state of the site and surrounding lands, which are primarily developed with residences, commercial buildings, and roadways. No native or naturalized habitat occurs on the site; it has all been long since developed or converted for previous agriculture. Further, the site does not support an abundance of trees, shrubs, and other cover and resources that would attract and sustain special-status animal species that occur in the region. The existing uses and regular human activity would also likely preclude most special-status animals from moving onto the site. Therefore, special-status animal species are not likely to occur and none would be impacted by the project.

Nesting Birds

The project site contains some trees, shrubs, and other vegetation that provide marginal nesting habitat for common birds, including sensitive birds and raptors, protected under the MBTA and CFG Code. Construction of the proposed project could result in the removal or trimming of trees and other vegetation during the general bird nesting season (January 15 through September 15) and, therefore, could result in impacts to nesting birds and violation of the MBTA and CFG Code. Direct impacts could occur as a result of removal of vegetation supporting an active nest. Impacts would be considered significant. Implementation of mitigation measure BIO-1 below would reduce potentially significant impacts on nesting birds and raptors to less than significant levels.

ISSUE 1 Mitigation Measures

BIO-1 Nesting Bird and Raptor Avoidance.

If initial grading and vegetation removal activities (i.e., earthwork, clearing, and grubbing) must occur during the general bird breeding season for migratory birds and raptors (January 15 and September 15), the project applicant shall retain a qualified biologist to perform a pre-construction survey of potential nesting habitat to confirm the absence of active nests belonging to migratory birds and raptors afforded protection under the MBTA and CFG Code. The pre-construction survey shall be performed no more than 7 days prior to the commencement of the activities. If the qualified biologist determines that no active migratory bird or raptor nests occur, the activities shall be allowed to proceed without any further requirements. If the qualified biologist determines that an active migratory bird or raptor nest is present, no impacts shall occur until the young have fledged the nest and the nest is confirmed to no longer be active, as determined by the qualified biologist.

ISSUE 2: Sensitive Natural Communities

Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?

ISSUE 2 Impact Analysis

Less than Significant with Mitigation. Project development would be restricted to common upland habitat types that are not sensitive natural communities and do not require mitigation (Table 4; Figure 8). The project site does not support ESHA's, either in the form of sensitive coastal upland habitat (e.g., coastal California gnatcatcher occupied coastal sage scrub) or sensitive coastal wetlands. Therefore, no direct impacts to sensitive natural communities would occur.

Table 4
IMPACTS TO VEGETATION COMMUNITIES

Vegetation Community	Habitat Group	Existing Acres	Impact Acres
Upland			
Disturbed Habitat/Disced Land	F	12.4	12.4
Disturbed Habitat	F	0.3	0.3
Ornamental/Non-Native Vegetation	F	2.1	2.1
Urban/Developed	--	5.7	5.7
TOTAL		20.5	20.5

Potential significant indirect impacts could occur if storm water runoff is not controlled at the construction site and sediment, toxics, and/or other material is inadvertently carried into sensitive habitat within the adjacent off-site Kelly Creek. Further, if the construction work areas are not properly fenced, inadvertent encroachment into adjacent sensitive riparian habitat associated with Kelly Creek could occur. Compliance with existing regulations for water quality, storm water management, and implementation of mitigation measure BIO-2 below would reduce potentially significant impacts on sensitive natural communities to less than significant levels.

ISSUE 2 Mitigation Measures

BIO-2 Construction Fencing.

Temporary construction fencing (with silt barriers) shall be installed at the limits of project impacts (including construction staging areas and access routes) adjacent to sensitive habitat to prevent sensitive habitat impacts and to prevent the spread of silt from the construction zone into adjacent habitats. Fencing may be required at the western end of the project to separate project impacts from the off-site sensitive habitat of Kelly Creek. Fencing shall be installed in a manner that does not impact habitats to be avoided. The applicant shall submit to the City for approval at least 30 days prior to initiating project impacts and the final plans for project construction. These final plans shall include photographs that show the fenced limits of impact and areas to be impacted or avoided.

Employees shall strictly limit their activities, vehicles, equipment, and construction materials to the fenced project footprint. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas within the fenced project impact limits. These designated areas shall be located in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering adjacent open space and shall be shown on the construction plans. Fueling of equipment shall take place within existing disturbed areas greater than 100 feet from Kelly Creek. Contractor equipment shall be checked for leaks prior to operation and repair, as necessary. "No-fueling zones" shall be designated on construction plans.

If work occurs beyond the fenced or demarcated limits of impact, all work shall cease until the problem has been remedied to the satisfaction of the City. Any impacts that occur to environmentally sensitive areas beyond the approved fence shall be mitigated in accordance with ratios specified in the Carlsbad

HMP or as otherwise determined by the City in coordination with the USFWS, USACE, RWQCB, and/or CDFW. Temporary construction fencing shall be removed upon project completion.

ISSUE 3: Wetlands

Would the project have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the federal CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?

ISSUE 3 Impact Analysis

Less than Significant with Mitigation. No federally-protected wetlands as defined by CWA Section 404 occur on the site; none will be impacted by the project.

The site does, however, support a low quality drainage ditch that could qualify as non-wetland waters of the U.S. subject to USACE jurisdiction pursuant to CWA Section 404, non-wetland waters of the State subject to RWQCB jurisdiction pursuant to CWA Section 401, and unvegetated streambed subject to CDFW jurisdiction pursuant to CFG Code Sections 1600 et seq.

The drainage feature is not considered a coastal wetland, coastal riparian habitat, or a coastal stream due to the complete lack of wetland indicators (i.e., lack of hydric soils, hydrophytic vegetation, and wetland hydrology), lack of riparian habitat, man-made nature, and ephemeral flow services primarily by storm water runoff from developed areas.

In this way the drainage is functioning more as a conveyance ditch with no plant or wildlife habitat value, biophysical wetland function, or benefit to coastal resources. Therefore, the drainage is not a coastal resource regulated under the City's LCP.

Table 5 below summarizes the existing and impacted jurisdictional resources.

Table 5
IMPACTS TO JURISDICTIONAL WATERS AND WETLANDS

Jurisdictional Resource	Existing		Impacts	
	Acre [†]	Linear Feet	Acre [†]	Linear Feet
Waters of the U.S./State – USACE/RWQCB Jurisdiction				
Non-Wetland Waters/Drainage Ditch	0.02	501	0.02	501
Streambed – CDFW Jurisdiction				
Unvegetated Streambed/Drainage Ditch	0.05	501	0.05	501

[†]Acreage rounded to the nearest hundredth.

Existing regulations require that the USACE, RWQCB, and CDFW be notified and, if required, permits and approvals be obtained from these agencies prior to the impacts occurring. Mitigation for unavoidable impacts shall occur at a minimum 1:1 ratio through on- and/or off-site establishment/re-establishment, rehabilitation, enhancement, and/or preservation, as provided below. Implementation of mitigation measure BIO-3 would ensure that the appropriate regulatory permits are obtained and mitigation obligations are fulfilled in accordance with existing regulations pertaining to non-wetland waters U.S./State and unvegetated streambed.

ISSUE 3 Mitigation Measures

BIO-3 Regulatory Permitting and Compensatory Mitigation.

Unavoidable impacts to all or portions of the unnamed drainage ditch on the project site shall require the following agency notifications and permits prior to grading:

The project applicant shall prepare and submit notification to the USACE for unavoidable impacts to non-wetland waters of the U.S. Based on the USACE's CWA Section 404 Nationwide Permit (NWP) program, project activities would be covered under NWP 29 – Residential Developments, contingent upon waiver of the 300 linear feet limit for this permit.

The project applicant shall prepare and submit a CWA Section 401 Request for Water Quality Certification to the RWQCB for unavoidable impacts to non-wetland Waters of the State.

The project applicant shall prepare and submit a California Fish and Game Code Section 1602 Notification of Lake or Streambed Alteration to the CDFW for unavoidable impacts to unvegetated jurisdictional streambed.

If required by the USACE, RWQCB, and/or CDFW in regulatory permits, the project applicant shall implement compensatory mitigation at a minimum ratio of 1:1 for the unavoidable loss of jurisdictional waters, which would include one or a combination of the following measures:

The project applicant shall purchase preservation, establishment/re-establishment, rehabilitation, and/or enhancement credits from a mitigation bank approved by the USACE, RWQCB, and/or CDFW; and/or,

The project applicant shall implement permittee-responsible preservation, establishment, re-establishment, rehabilitation and/or enhancement at an on- or off-site location approved by the USACE, RWQCB, and/or CDFW, including preparation and implementation of a conceptual mitigation plan, habitat mitigation monitoring plan, restoration plan, and/or long-term management plan, unless otherwise specified by the USACE, RWQCB, and/or CDFW. A conservation easement, restrictive covenant, or other protection shall be recorded over the mitigation area and the area shall be managed in perpetuity in accordance with the long-term management plan, unless otherwise specified by the USACE, RWQCB, and/or CDFW.

Compliance with existing regulations for water quality and storm water management and implementation of mitigation measures BIO-2 and BIO-3 would reduce potentially significant impacts on jurisdictional waters to less than significant levels. No additional mitigation measures would be required.

ISSUE 4: Wildlife Movement and Nursery Sites

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?

ISSUE 4 Impact Analysis

Less than Significant with Mitigation. The project site encompasses developed and undeveloped land within the Carlsbad HMP, outside of any HMP Core, Linkages, and SRA areas. The site is highly disturbed and adjacent to several developments, including El Camino Real to the north. Its function to facilitate wildlife movement in the local and regional area is limited due to existing impediments and lack of live-in and dispersal habitat. Common large mammals (e.g., coyotes) and birds could potentially use portions of the site for dispersal and foraging; however, they would not use the site as a wildlife corridor, specific travel route, or when traveling to and from nursery sites due to lack of suitable habitat and resources. Wildlife are more likely to use off-site habitat within Kelly Creek, further to the west of the site, from which the project has been setback and therefore will have no direct or indirect impacts. There is no connectivity of on-site habitat with that which occurs off site within Kelly Creek to the west; therefore, the site does not contribute to wildlife movement functions that may be associated with Kelly Creek.

Project construction will be restricted to daytime hours and would not be expected to result in any adverse indirect impacts on off-site habitat adjacent to the site. Construction work limits will be contained within temporary construction fencing in accordance with mitigation measure BIO-2. Project operation has the potential to result in adverse indirect impacts on wildlife potentially using off-site habitat associated with Kelly Creek if lighting is not appropriately shielded and directed downward and away. Mitigation measure BIO-4 would ensure project lighting along the western boundary of the site is controlled and potential impacts are reduced to less than significant.

ISSUE 4 Mitigation Measures

BIO-4 Project Lighting.

All exterior lighting adjacent to off-site habitat associated with Kelly Creek to the west shall be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from habitat to the maximum extent practicable.

With the implementation of mitigation measures BIO-2 and BIO-4 potential impacts on wildlife corridors and nursery sites would be reduced to less than significant levels.

ISSUE 5: Local Policies and Ordinances

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

ISSUE 5 Impact Analysis

No Impact. The project would not conflict with any local policies or ordinances protecting biological resources, as further detailed below.

Consistency with Chapter 21.203 of the Carlsbad Municipal Code (CRPOZ Ordinance)

The project was evaluated for consistency with the certified Carlsbad LCP and adopted ordinance regulations in Chapter 21.203 of the Carlsbad Municipal Code and CRPOZ Ordinance. With respect to biological resources, the site contains no coastal resources of significance or environmentally sensitive areas. The drainage feature on site is not considered a coastal wetland, coastal riparian habitat, or a coastal stream due to the complete lack of wetland indicators (i.e., lack of hydric soils, hydrophytic vegetation, and wetland hydrology), lack of riparian habitat, man-made nature, and ephemeral flow services primarily by storm water runoff from developed areas. In this way the drainage is functioning more as a conveyance ditch with no plant or wildlife habitat value, biophysical wetland function, or benefit to coastal resources. Therefore, the drainage is not a coastal resource regulated under the City's LCP.

As such, no adverse impacts would occur to environmentally sensitive areas, including coastal wetlands and riparian habitat, as defined in Section 30107.5 of the Coastal Act and the Carlsbad LCP. Therefore, the project would not conflict with the biological resources-related requirements of Chapter 21.203 of the Carlsbad Municipal Code and CRPOZ Ordinance.

Consistency with Chapter 21.210 of the Carlsbad Municipal Code (HMP Ordinance)

The project was evaluated for consistency with the Carlsbad HMP and adopted ordinance regulations in Chapter 21.210 of the Carlsbad Municipal Code. Demonstration of consistency with the HMP is required before an HMP permit can be issued. Project consistency with the Carlsbad HMP is addressed in Issue 6 below. As demonstrated, the project would not conflict with the Carlsbad HMP.

ISSUE 5 Mitigation Measures

Mitigation is not required.

ISSUE 6: Adopted Conservation Plans

Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?

ISSUE 6 Impact Analysis

Less than Significant with Mitigation. The project occurs within the boundaries of the adopted Carlsbad HMP, outside of any HMP Core, Linkages, and SRA areas. No HMP designations occur on or immediately adjacent to the site. No suitable habitat for HMP species occurs on site and impacts are restricted to non-sensitive, HMP Group F habitat types and developed land. The project would be consistent with the Carlsbad HMP, as detailed below.

Consistency with Zone Level Recommendations

The proposed project is situated within LFMZ 1 (Zone 1) of the Carlsbad HMP planning area. Zone Level Recommendations for Zone 1 as specified in the Carlsbad HMP include avoiding removal of maritime succulent scrub and any patches of coastal scrub in or contiguous with biological core areas, preservation of at least 50% of coastal sage scrub with preference for avoidance of any areas that contain coastal California gnatcatchers (*Polioptila californica californica*), and mitigation for native habitats by creation or enhancement of like habitats adjacent to lagoons or by off-site compensation or restoration within biological core and linkage areas.

No resources targeted for conservation in LFMZ 1 occur on or immediately adjacent to the project site; therefore, none would be impacted by the project.

Consistency Determination – The project is consistent with Zone Level Recommendations of the HMP. None of the resources targeted for conservation in LFMZ 1 occur on or immediately adjacent to the site. No maritime succulent scrub, coastal scrub, coastal sage scrub, suitable habitat for coastal California gnatcatcher or other resources occur. Therefore, none would be impacted and the project would be consistent with the LFMZ 1 recommendations.

Consistency with HMP Species Requirements

The HMP states that “the primary mitigation for impacts to HMP species under the Plan is the conservation and management of habitat for species in the preserve system” (City of Carlsbad 2004). It also states that incidental take must be minimized and mitigated to the maximum extent practicable. Table 9 of the HMP provides specific minimization and mitigation measures for covered species.

Sensitive plant and wildlife species, including HMP species, are not expected to occur within the project site as suitable habitat is not present.

Consistency Determination – The project is consistent with the goals and objectives for HMP species. No suitable habitat for sensitive plant and wildlife species, including HMP species, occurs on the project site. Impacts are restricted to non-sensitive, HMP Group F habitat and developed land. Therefore, no HMP species would be directly impacted. As addressed in Issue 5, the project is setback from off-site riparian habitat associated with Kelly Creek further to the west; suitable habitat for sensitive plant and animal species within this off-site habitat would be avoided and no direct impacts would occur. Mitigation measure BIO-1 would ensure that no direct or indirect impacts occur to nesting birds, including HMP species. Mitigation measure BIO-2 would ensure that off-site sensitive habitat is not impacted by construction activities and measure BIO-4 would ensure that the adjacent habitat is protected from project lighting. Therefore, implementation of BIO-1, BIO-2, and BIO-4 would ensure consistency with HMP species requirements.

Consistency with HMP Adjacency Standards

No HMP designations occur on or immediately adjacent to the site. Project development will occur well outside of Existing Hardline and Proposed Future Hardline for the HMP. El Camino Real separates the project site and the Existing Hardline for the HMP to the north. Commercial and residential development separates the project from other adjacent Hardline and Future Proposed Preserve areas. The western boundary of the project will abut Kelly Creek; however, adequate setbacks have been implemented and the project will further implement the adjacency standards detailed below.

The project is consistent with the HMP adjacency standards, as follows:

Fire Management

Fire management includes both the recognition that fire is an important component of natural ecosystems in Southern California while insuring public safety for areas adjacent to the HMP preserve. The project does not propose any structures adjacent to native habitat or preserve area that would require fuel modification or brush management. A Fire Management Plan is not anticipated to be required by the City.

Therefore, the project would be consistent with this Adjacency Standard.

Erosion Control

Erosion can become an issue where steep, erodible slopes occur, or where areas lack vegetation. All slopes adjacent to the Kelly Creek corridor will be adequately compacted, vegetated, and maintained to avoid significant erosion onto the drainage. The project will be required to implement the SWPPP during construction, which will implement erosion control measures and prevent inadvertent erosion and sedimentation from the construction site. The project further incorporates a progressive water quality management plan that will ensure all water is controlled, treated, and velocities managed on site before discharging off site.

Therefore, the project would be consistent with this Adjacency Standard.

Landscaping Restrictions

Invasive plant species will not be included in landscaping palettes anywhere on site. Irrigation will be designed so as to minimize runoff from landscaped areas, and pesticide/herbicide application will avoid overspray and drift into preserve areas. The landscaping palette will not include native plants or propagules from distant source populations, nor will it include cultivated species known to hybridize with related native species. No species on the California Invasive Plant Council's "Invasive Plant Inventory" list shall be included.

Therefore, the project would be consistent with this Adjacency Standard.

Fencing, Signs, and Lighting

Permanent fencing shall be provided along areas that occur between proposed developments and off-site sensitive habitat. In addition, signage and stenciling will be implemented as Best Management Practices and notification at storm drain inlets.

Excessive lighting can adversely affect animal species potentially using adjacent habitat. All exterior lighting adjacent to preserved habitat, including lighting required for parking lot developments, shall be limited to low pressure sodium or alternative sources of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from preserved habitat to the maximum extent practicable. Implementation of mitigation measure BIO-4 would ensure project lighting does not adversely affect adjacent habitat.

The project would be consistent with this Adjacency Standard with the incorporation of the required fencing, sign, and lighting specifications.

Predator and Exotic Species Control

Domesticated animals, particularly cats, are known to impact native wildlife in the habitat areas immediately adjacent to development. Project fencing and the maintenance of healthy predator populations (coyote and bobcat) will minimize introduction of domestic animals. In addition, exotic species can escape from landscaped areas and establish within the preserve area. No domesticated animals are anticipated to be introduced by the project due to the fact it is separated from these areas by commercial development, residential development, or roadways.

Therefore, the project would be consistent with this Adjacency Standard.

ISSUE 6 Mitigation Measures

Implementation of mitigation measures BIO-1, BIO-2 and BIO-4 would ensure consistency with the Carlsbad HMP.

CLOSING

We appreciate the opportunity to provide you with this letter report. Please do not hesitate to contact me or Ben Rosenbaum at (619) 462-1515 if you have any questions or require further assistance.

Sincerely,



Karl Osmundson
Principal Biologist/Biology Group Manager

Attachments:

- Figure 1: Regional Location Map
- Figure 2: Project Vicinity Map (Aerial Photograph)
- Figure 3: Project Vicinity Map (USGS Topography)
- Figure 4: HMP Designations
- Figure 5: Site Plan
- Figure 6: Soils
- Figure 7: Vegetation Communities and Sensitive Resources
- Figure 8: Vegetation Communities and Sensitive Resources/Impacts
- Attachment A: Plant and Animal Species Observed or Detected
- Attachment B: Special-Status Species with Potential to Occur
- Attachment C: Representative Site Photos

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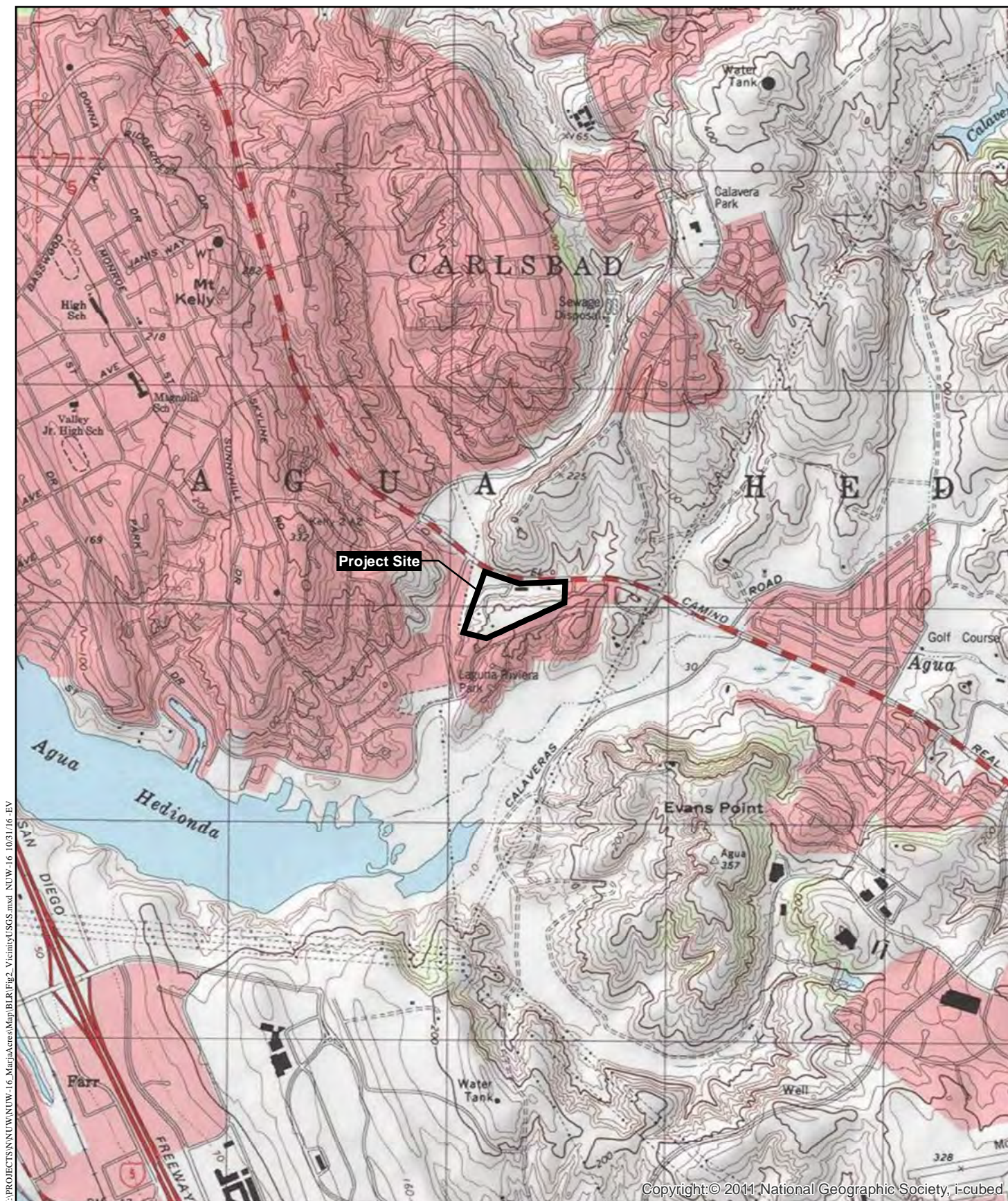
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Regional Location

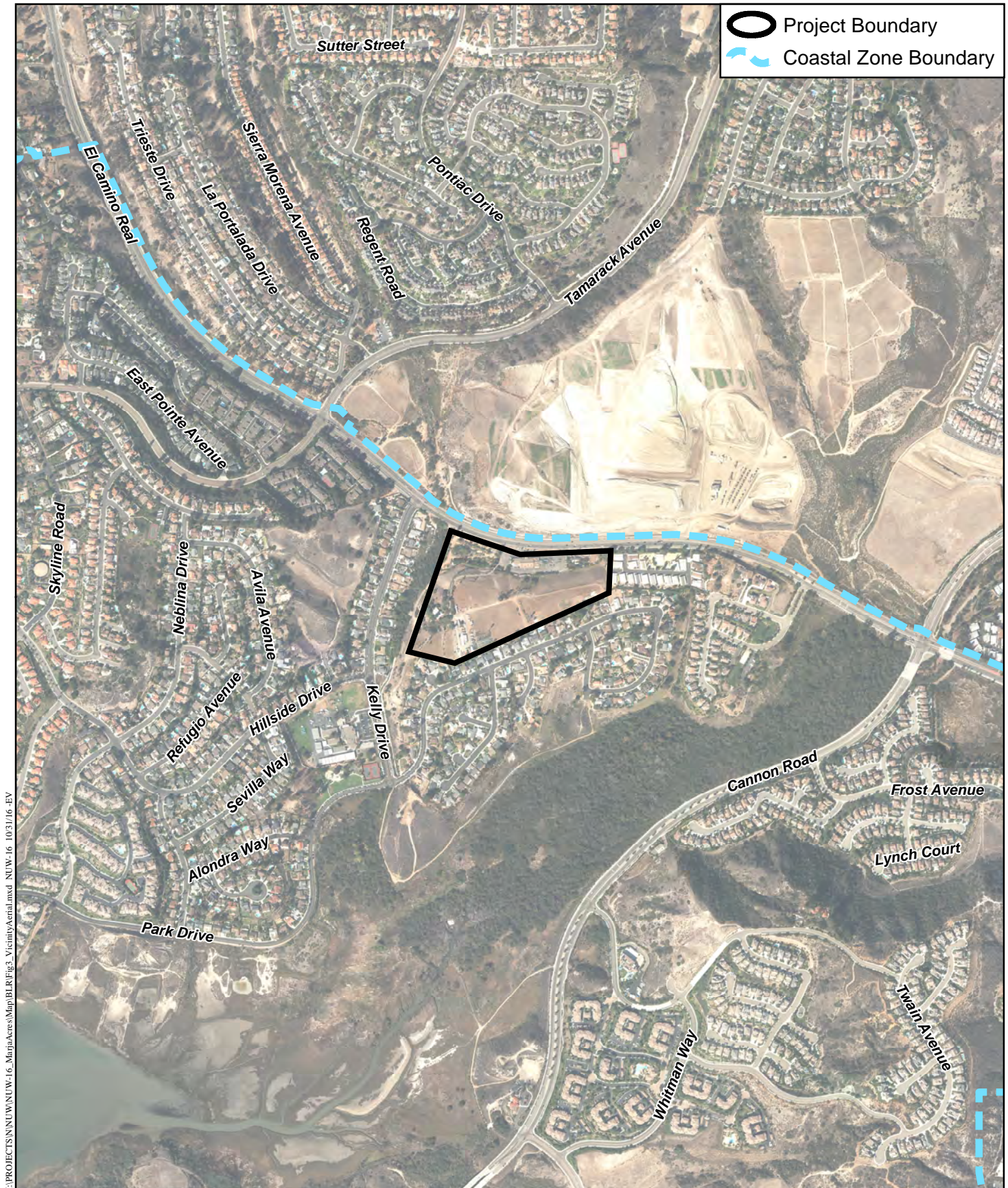
MARJA ACRES PROJECT

Figure 1



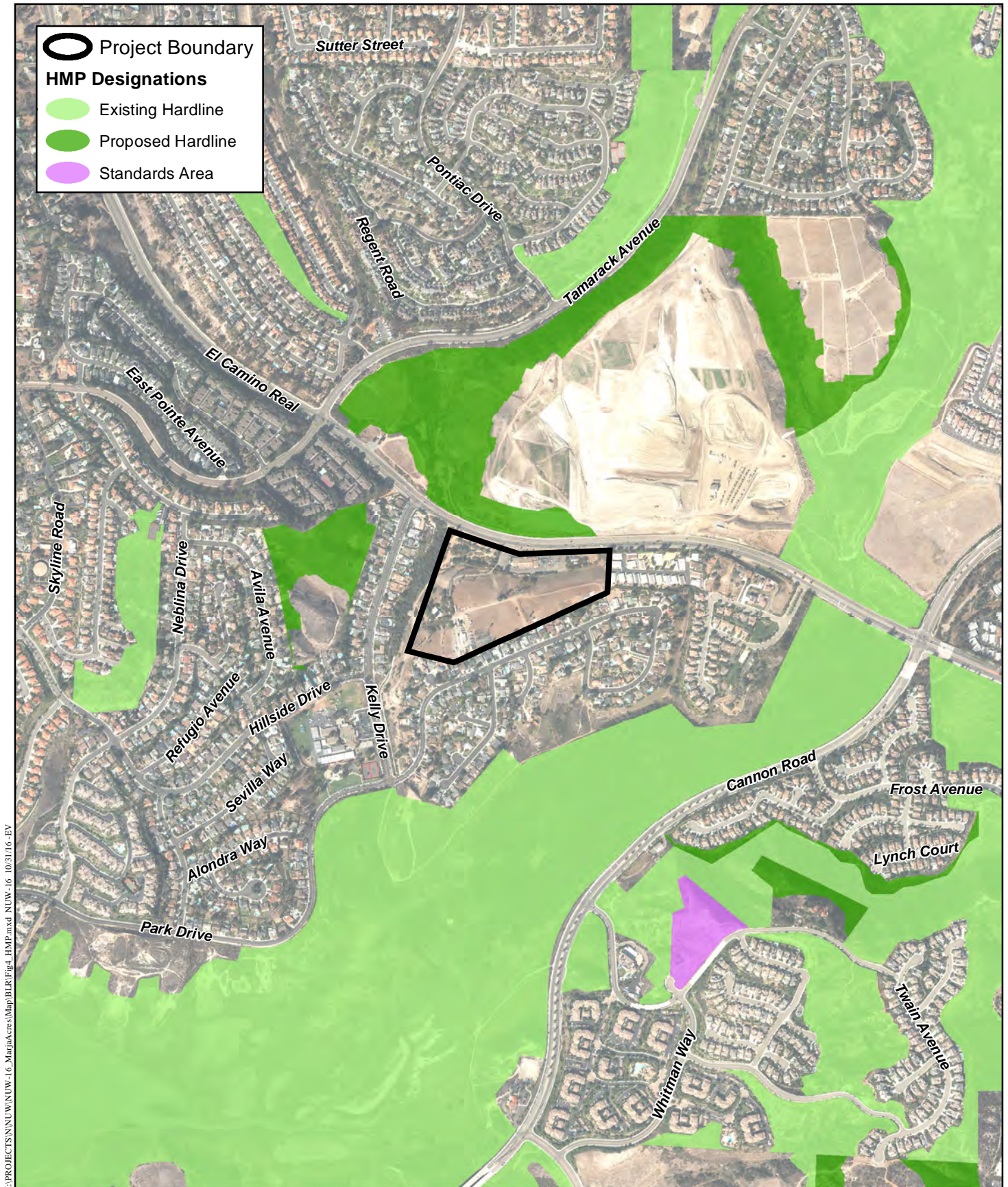
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MARJA ACRES PROJECT



Project Vicinity Aerial

MARJA ACRES PROJECT

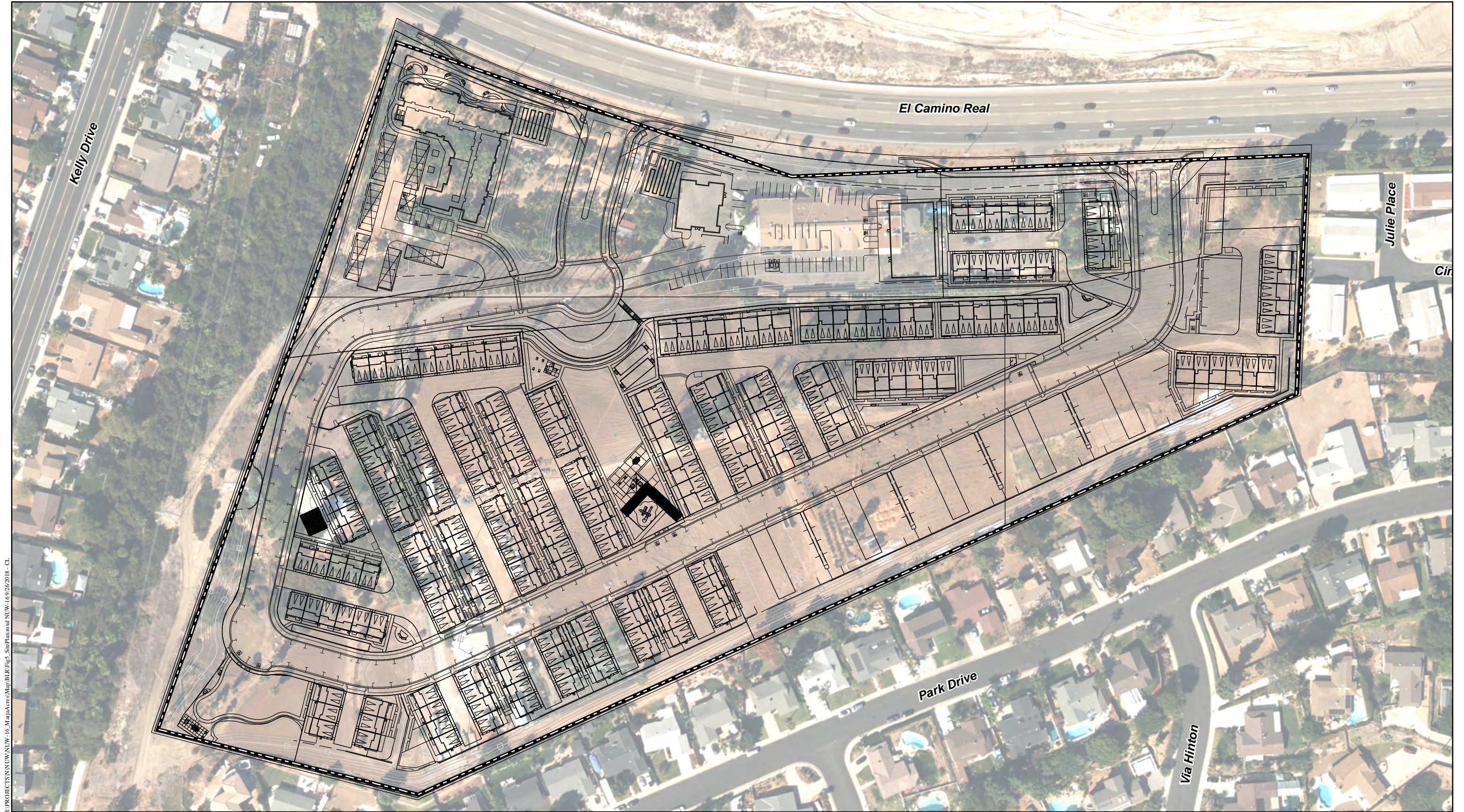


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HMP Designations

MARJA ACRES PROJECT

Figure 4

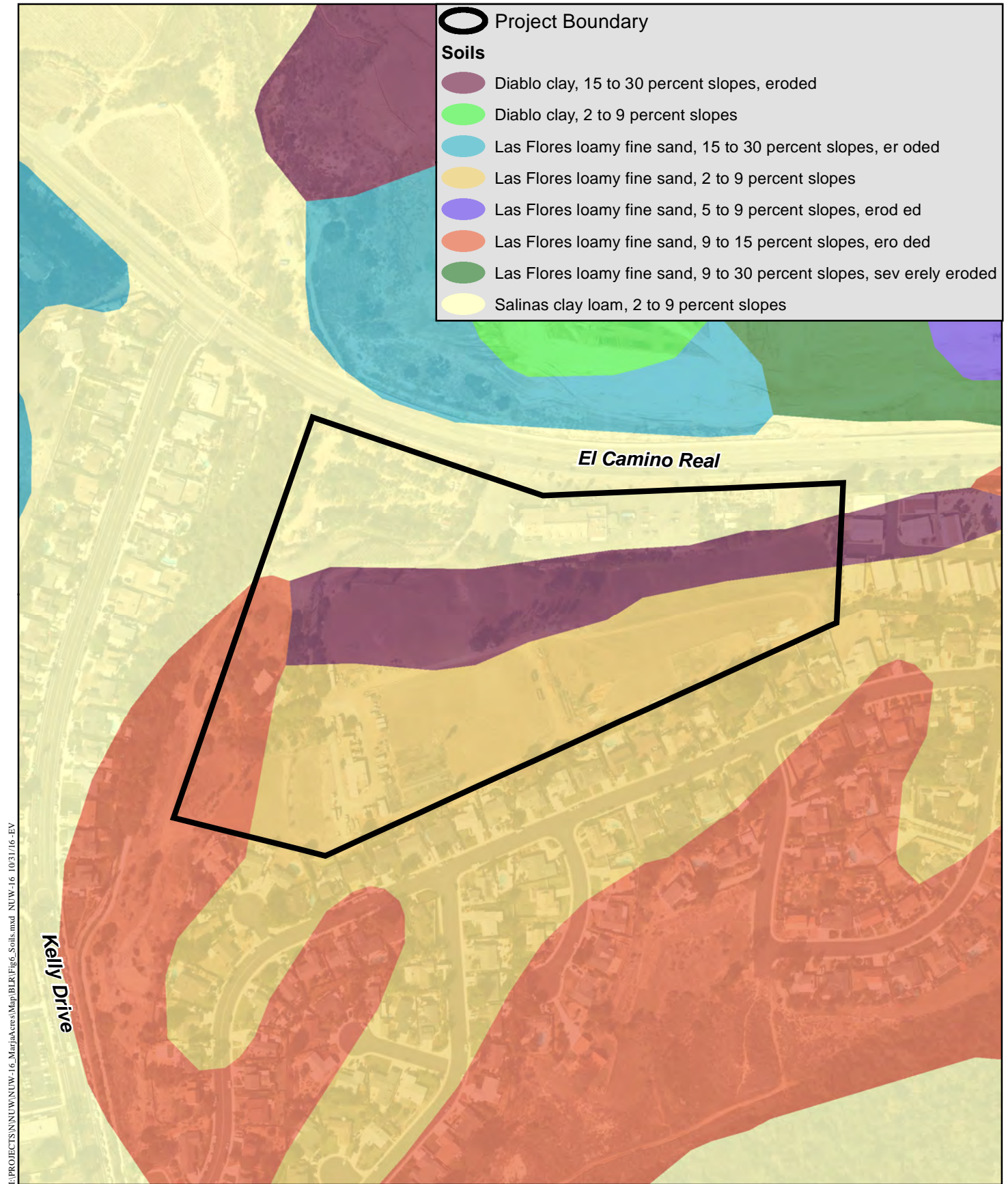


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Site Plan

MARJA ACRES PROJECT

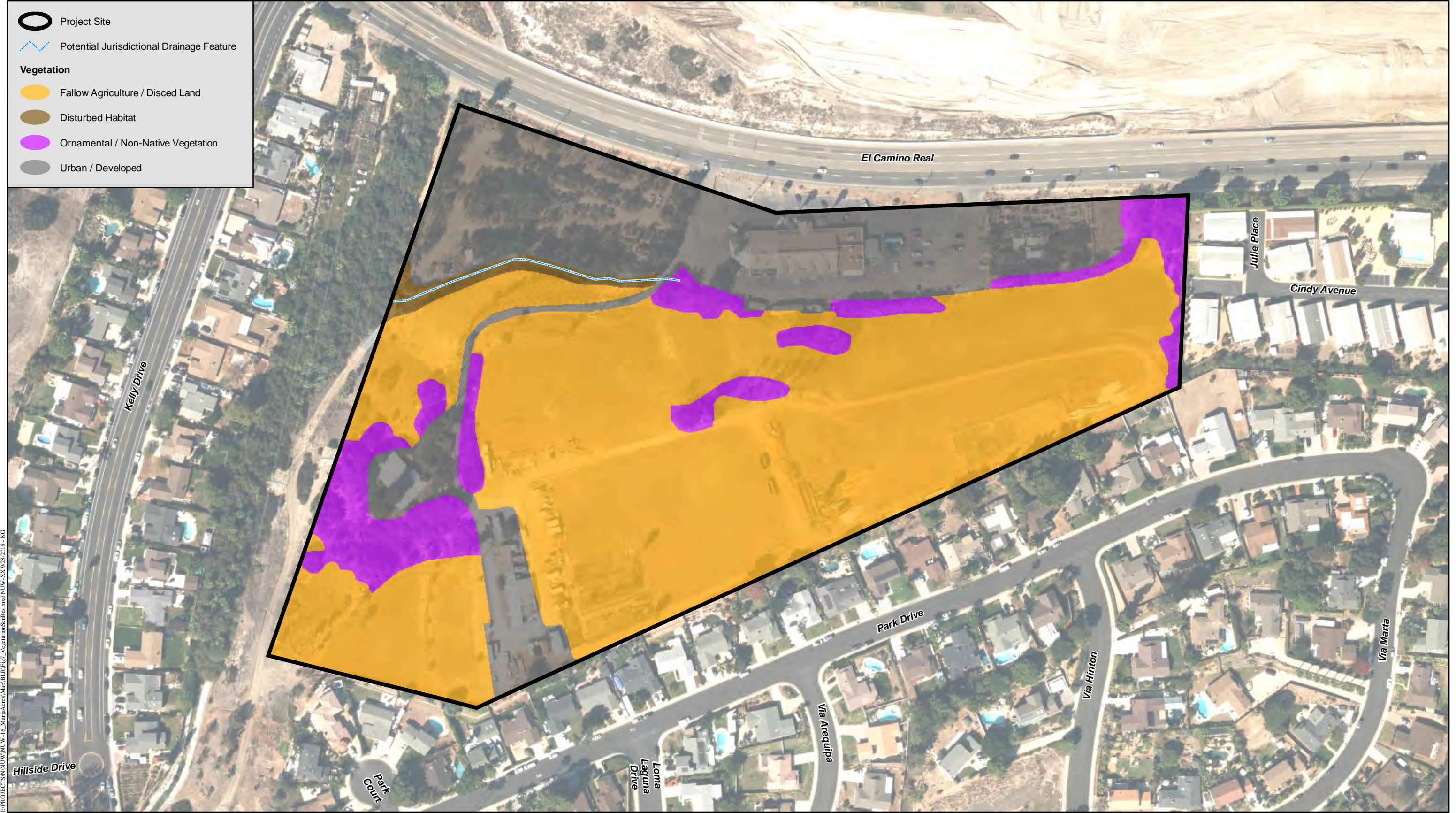
Figure 5



Soils

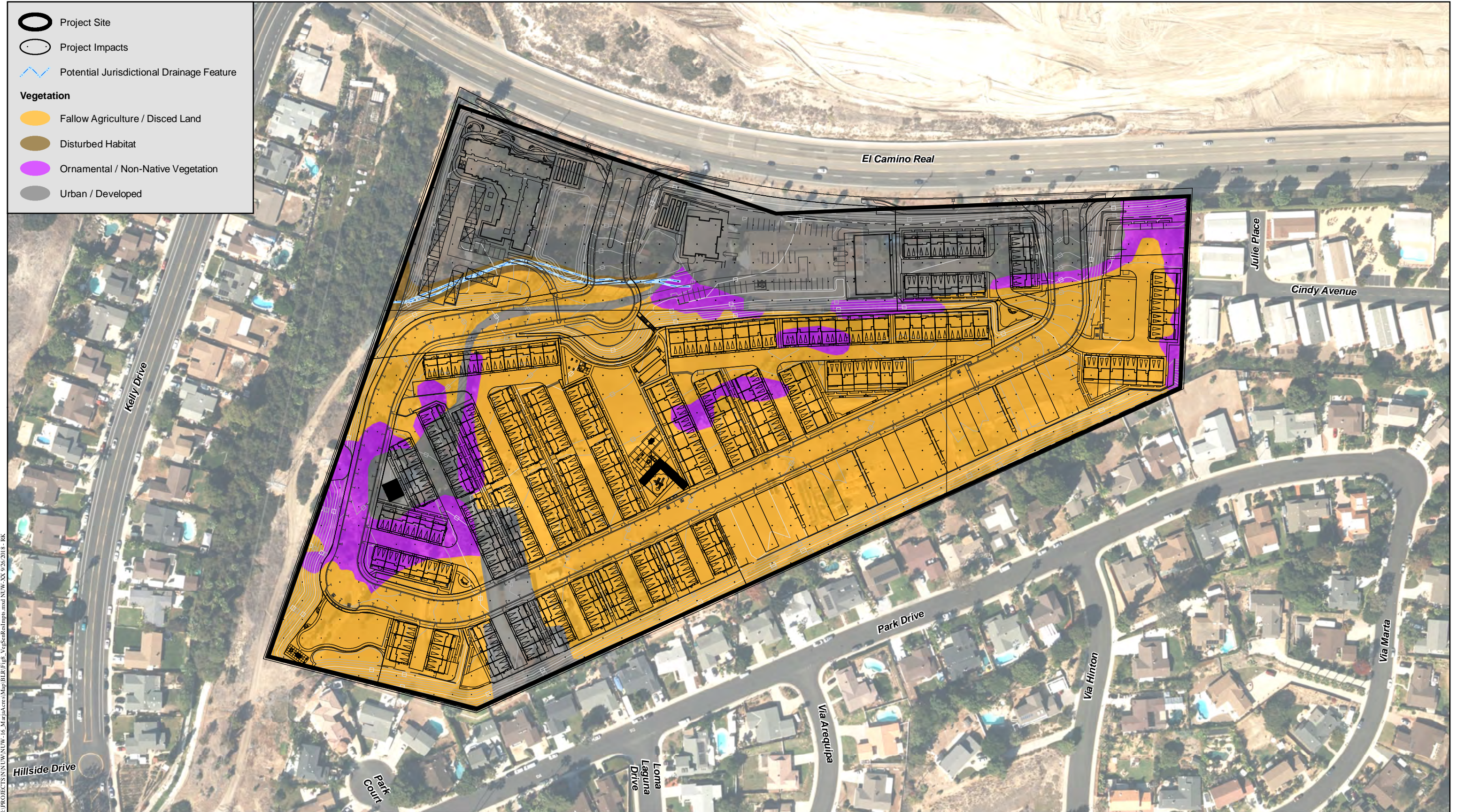
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Figure 6



Vegetation and Sensitive Resources

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Vegetation and Sensitive Resources/Impacts

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Figure 8

Attachment A
Plant and Animal Species Observed or Detected

Family	Scientific Name	Common Name
PLANTS		
Angiosperms – Eudicots		
Adoxaceae	<i>Sambucus nigra</i>	Mexican elderberry
Anacardiaceae	<i>Rhus integrifolia</i>	lemonade berry
	<i>Schinus molle</i> *	Peruvian pepper
	<i>Schinus terebinthifolius</i> *	Brazilian pepper
Apiaceae	<i>Foeniculum vulgare</i> *	fennel
Asteraceae	<i>Artemisia californica</i>	California sagebrush
	<i>Baccharis pilularis</i>	coyote brush
	<i>Baccharis salicifolia</i>	mule fat
	<i>Erigeron canadensis</i>	horseweed
	<i>Glebionis coronaria</i> *	Garland daisy
Brassicaceae	<i>Brassica nigra</i> *	black mustard
	<i>Nasturtium officinale</i>	watercress
Cactaceae	<i>Ferocactus viridescens</i>	barrel cactus
	<i>Opuntia littoralis</i>	prickly pear
Chenopodium	<i>Chenopodium</i> sp.	goosefoot
	<i>Salsola tragus</i> *	Russian thistle
Euphorbiaceae	<i>Ricinus communis</i> *	castor bean
Fabaceae	<i>Acacia longifolia</i> *	golden wattle
Myrtaceae	<i>Eucalyptus</i> sp.*	Eucalyptus
Plantaginaceae	<i>Plantago lanceolata</i> *	English plantain
Platanaceae	<i>Platanus racemosa</i>	Western sycamore
Plumbaginaceae	<i>Limonium</i> sp.*	sea lavender
Polygonaceae	<i>Rumex crispus</i> *	Curly dock
Rutaceae	<i>Citrus latifolia</i>	Persian lime
Salicaceae	<i>Populus fremontii</i>	Fremont's cottonwood
	<i>Salix gooddingii</i>	Goodding's willow
	<i>Salix lasiolepis</i>	arroyo willow
Solanaceae	<i>Datura wrightii</i>	Jimson weed
	<i>Nicotiana glauca</i> *	tobacco tree
Urticaceae	<i>Urtica urens</i> *	orchard nettle
Angiosperms – Monocots		
Arecaceae	<i>Phoenix canariensis</i> *	Canary island date palm
	<i>Washingtonia robusta</i> *	Mexican fan palm
Poaceae	<i>Cortaderia jubata</i> *	pampas grass
	<i>Pennisetum setaceum</i> *	fountain grass

*Non-native species.

Attachment A (cont.)
Plant and Animal Species Observed or Detected

Taxon		Scientific Name	Common Name
Order	Family		
ANIMALS			
Reptiles			
Squamata	Phrynosomatidae	<i>Sceloporus occidentalis longipes</i>	great basin fence lizard
Birds			
Apodiformes	Trochilidae	<i>Calypte anna</i>	Anna’s hummingbird
Columbiformes	Columbidae	<i>Zenaida macroura</i>	mourning dove
Passeriformes	Emberizidae	<i>Melozone crissalis</i>	California towhee
	Fringillidae	<i>Haemorhous mexicanus</i>	house finch
	Mimidae	<i>Mimus polyglottos</i>	Northern mockingbird
Mammals			
Rodentia	Sciuridae	<i>Spermophilus beecheyi</i>	California ground squirrel

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
PLANTS				
<i>Acanthomintha ilicifolia</i>	San Diego thorn-mint	FT/SE CNPS Rank 1B.1 Carlsbad HMP Covered	Annual herb. Occurs in vernal pools, clay depressions on mesas, chaparral slopes, and coastal sage scrub. Elevation range below 1,000 meters. Flowering April–June.	Not Expected. Suitable habitat (vernal pools, clay depressions) not present. Clay soils occur; however, multiple years of agricultural activities, including discing, have left the site unsuitable.
<i>Acmispon prostratus</i>	Nuttall’s acmispon	--/-- CNPS Rank 1B.1	Small annual herb. Occurs on hard sand and dunes on coastal strands. Elevation range 1-10 meters. Flowering March–June.	Not expected. Suitable habitat not present.
<i>Ambrosia pumila</i>	San Diego ambrosia	FE/-- CNPS Rank 1B.1 Carlsbad HMP Covered	Perennial herb. Occurs in disturbed sites. Elevation range 50–600 meters. Flowering April–October.	None. This conspicuous species was not observed during surveys.
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	Del Mar manzanita	FE/-- Carlsbad HMP Covered	Perennial shrub. Occurs in maritime chaparral and closed-cone coniferous forests on sandstone coastal bluffs. Elevation range 10–100 meters. Flowering December–July.	None. Suitable habitat not present. This conspicuous species was not observed during surveys.
<i>Astragalus tener</i> var. <i>titi</i>	Coastal dunes milk-vetch	FE/SE CNPS Rank 1B.1	Annual herb. Occurs on moist, sandy depressions on coastal bluffs or dunes. Elevation range 1–50 meters. Flowering March–May.	Not Expected. Suitable habitat not present.
<i>Atriplex coulteri</i>	Coulter’s saltbush	--/-- CNPS Rank 1B.2	Perennial herb. Occurs in coastal scrub on bluffs, dunes, and playas. Elevation range 10–440 meters. Flowering period March–October	None. Suitable habitat not present. This conspicuous species was not observed during surveys.
<i>Atriplex pacifica</i>	South coast saltscale	--/-- CNPS Rank 1B.2	Perennial herb. Occurs in coastal scrub on bluffs and playas. Elevation range 1–500 meters. Flowering period March–October	None. Suitable habitat not present. This conspicuous species was not observed during surveys.
<i>Baccharis vanessae</i>	Encinitas baccharis	FT/SE CNPS Rank 1B.1 Carlsbad HMP Covered	Shrub. Occurs in chaparral and Torrey-pine understory. Elevation range 60–300 meters. Flowering period August–November.	None. Suitable habitat not present. This conspicuous species was not observed during surveys.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
PLANTS (cont.)				
<i>Bloomeria clevelandii</i>	San Diego goldenstar	--/-- CNPS 1B.1 Carlsbad HMP Covered	Perennial herb. Occurs in coastal scrub and mesa grassland. Elevation range under 100 meters. Flowering period April–May.	Low. Suitable habitat not present. Clay soils present; however, multiple years of agricultural activities, including discing, have left the site unsuitable.
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	FT/SE CNPS Rank 1B.1 Carlsbad HMP Covered	Perennial herb. Occurs in grasslands and clay soils at the edge of vernal pools. Elevation range 25–860 meters. Flowering period March–June.	Low. Suitable habitat, including vernal pools, not present. Clay soils are present; however, multiple years of agricultural activities, including discing, have left the site unsuitable. This species was not observed during surveys.
<i>Brodiaea orcuttii</i>	Orcutt’s brodiaea	--/-- CNPS Rank 1B.1 Carlsbad HMP Covered	Perennial herb. Occurs in grasslands near streams and vernal pools. Elevation range under 1,600 meters. Flowering period March–July.	Low. Suitable habitat, including vernal pools, not present. Clay soils are present; however, multiple years of agricultural activities, including discing, have left the site unsuitable. This species was not observed during surveys.
<i>Ceanothus verrucosus</i>	Wart-stemmed ceanothus	--/-- CNPS 2B.2 Carlsbad HMP Covered	Perennial shrub. Occurs on rocky slopes and chaparral. Elevation under 350 meters. Flowering period January–April.	None. Suitable habitat not present. This conspicuous species was not observed during surveys.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	Smooth tarplant	--/-- CNPS Rank 1B.2	Annual herb. Occurs in valley and foothill grassland, chenopod scrub, meadows, playas, and riparian woodland. Elevation range 0–640 meters. Flowering period April–September.	Low. Marginal habitat present; however, multiple years of agricultural activities, including discing, have left the site unsuitable. This species was not observed during surveys.
<i>Chaenactis glabruiscula</i> var. <i>orcuttiana</i>	Orcutt’s pincushion	--/-- CNPS Rank 1B.1	Small annual herb. Occurs on coastal dunes and bluffs. Elevation range 3–100 meters. Flowering January–August.	None. Restricted to coastal dunes and bluffs which do not occur on site.
<i>Chorizanthe orcuttiana</i>	Orcutt’s spineflower	FE/SE CNPS Rank 1B.1 Carlsbad HMP Covered	Annual herb. Occurs in sandy soil, mesas and hills near the coast, coastal scrub communities. Elevation range 60–200 meters. Flowering period March–May.	Not Expected. Suitable habitat not present.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
PLANTS (cont.)				
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	Summer holly	--/-- CNPS Rank 1B.2 BLM:S Carlsbad HMP Covered	Perennial shrub. Occurs in chaparral. Elevation range 100–550 meters. Flowering period May–June.	None. Suitable habitat not present. This conspicuous species was not observed during surveys.
<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	Del Mar Mesa sand aster	--/-- CNPS Rank 1B.1 Carlsbad HMP Covered	Perennial herb found in coastal bluff scrub, maritime chaparral, and coastal scrub. Elevation 15–150 meters. Flowering May–September	None. Suitable habitat not present.
<i>Cryptantha wigginsii</i>	Wiggins' cryptantha	--/-- CNPS Rank 1B.2	Annual herb found in clay soils within coastal scrub habitat. Elevation range 20–275 meters. Flowering February–June.	Not Expected. Suitable habitat not present. Clay soils present; however, multiple years of agricultural activities, including discing, have left the site unsuitable.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	--/-- CNPS 1B.1 Carlsbad HMP Covered	Perennial herb. Occurs in open, rocky slopes, often serpentine or clay-dominated soil. Elevation range under 450 meters. Flowering period April–June.	None. Suitable habitat not present. Clay soils present; however, multiple years of agricultural activities, including discing, have left the site unsuitable. This species was not observed during surveys.
<i>Iva hayesiana</i>	San Diego marsh-elder	--/-- CNPS Rank 2B.2 Carlsbad HMP Covered	Perennial shrub. Occurs along stream courses. Shrub identifiable all year. Elevation 10–500 meters. Flowering period April–October.	None. Suitable habitat not present. Multiple years of agricultural activities, including discing, have left the site unsuitable. This species was not observed during surveys.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	--/-- CNPS Rank 1B.1	Small annual herb. Occurs in saline environments, vernal pools and alkali sinks. Elevation range 0–3300 ft. Flowering Feb–June.	Not expected. Suitable habitat, such as vernal pools or alkali sinks, not present.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's peppergrass	--/-- CNPS 4.3	Annual herb. Occurs in coastal scrub and chaparral. Elevation range 1–885 meters. Flowering January–July.	Low. Marginal habitat present; however, multiple years of agricultural activities, including discing, have left the site unsuitable. This species was not observed during surveys.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
PLANTS (cont.)				
<i>Leptosyne maritima</i>	Sea dahlia	--/-- CNPS Rank 2B.2	Medium perennial herb. Occurs on bluffs in maritime scrub. Elevation 0–65 ft. Flowering March–May.	None. Suitable habitat not present.
<i>Myosurus minimus</i> <i>ssp. apus</i>	Little mouseltail	--/-- CNPS Rank 3.1 Carlsbad HMP Covered	Annual herb found in valleys, foothill grasslands, and vernal pools. Elevation 20–640 meters. Flowering March–June.	Not Expected. Suitable habitat not present.
<i>Navarretia fossalis</i>	Spreading navarretia	--/-- CNPS Rank 1B.1 Carlsbad HMP Covered	Small herb. Occurs in vernal pools, playas, freshwater marshes, and chenopod scrub. Elevation range 200–3000 ft. Flowering period April–June.	Not Expected. Suitable habitat not present.
<i>Nemacaulis denudata</i> var. <i>denudata</i>	Coast woolly heads	--/-- CNPS Rank 1B.2	Small annual herb. Occurs on coastal sand dunes. Elevation 0–300 ft. Flowering April–September.	Not Expected. Suitable habitat not present.
<i>Orcuttia californica</i>	California Orcutt grass	FE/SE CNPS Rank 1B.1 Carlsbad HMP Covered	Annual herb found in vernal pools. Seriously threatened by agriculture, development, non-native plants, grazing, and vehicles. Elevation range 15–660 meters. Flowering April–August.	Not Expected. Suitable habitat not present.
<i>Orobanche parishii</i> <i>ssp. brachyloba</i>	Short-lobed broomrape	--/-- CNPS Rank 4.2	Perennial herb. Occurs in coastal scrub on bluffs, dunes, and playas. Elevation range 3–305 meters. Flowering period March–October.	None. Suitable habitat not present.
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	Torrey pine	--/-- CNPS Rank 1B.2 Carlsbad HMP Covered	Tree. Range has been reduced to Del Mar (San Diego County) and Santa Rosa Island.	None. This species was not observed during surveys.
<i>Quercus dumosa</i>	Nuttall's scrub oak	--/-- CNPS Rank 1B.1 Carlsbad HMP Covered	Perennial shrub. Closed-cone coniferous forest, chaparral, coastal scrub. Generally on sandy soils near the coast; sometimes on clay loam. Found between 50–3,000 feet in elevation. Blooming period February through August. Perennial evergreen shrub.	None. Suitable habitat not present. This species was not observed during surveys.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
PLANTS (cont.)				
<i>Quercus engelmannii</i>	Engelmann oak	--/-- CNPS Rank 4.2 Carlsbad HMP	Perennial shrub. Occurs in oak woodlands, margins of chaparral, arroyos. Elevation range under 1,300 meters. Flowering period March–June.	None. Suitable habitat not present. This species was not observed during surveys.
<i>Suaeda californica</i>	California seablite	FE/-- CNPS Rank 1B.1	Succulent-leaved perennial shrub of the goosefoot family (Chenopodiaceae) endemic to the coastal zone of California. Elevation 0–15 meters. Flowering July–October.	None. Suitable habitat not present.
ANIMALS				
Invertebrates				
<i>Brachinecta lynchi</i>	vernal pool fairy shrimp	FT/--	Occur primarily in vernal pools, seasonal wetlands that fill with water during fall and winter rains and dry up in spring and summer. Typically the majority of pools in any vernal pool complex are not inhabited by the species at any one time.	None. Suitable habitat (vernal pools) does not occur on the project site.
<i>Brachinecta sandiegoensis</i>	San Diego fairy shrimp	FE/-- Carlsbad HMP	Occurs in seasonally astatic pools, which occur in tectonic swales or earth slump basins and other areas of shallow, standing water often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral.	None. Suitable habitat (vernal pools) does not occur on the project site. Multiple years of agricultural activities, including discing, have left the site unsuitable.
<i>Danaus plexippus</i>	Monarch butterfly	--/--	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds (<i>Asclepias</i> spp.).	Not Expected. Larval host plant, milkweed (<i>Asclepias</i> sp.) was not observed on site. No roost sites present.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
ANIMALS (cont.)				
Invertebrates (cont.)				
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE/--	Sunny openings within chaparral and coastal sage shrublands. Host plants include <i>Plantago erecta</i> , <i>Cordylanthus rigidus</i> , <i>Collinsia</i> spp., <i>Plantago patagonica</i> , <i>Antirrhinum coulterianum</i> , and <i>Castilleja exserta</i> .	None. Larval host plant, dot-seed plantain (<i>Plantago erecta</i>) was not observed on site. Site is outside of species range.
<i>Euphyes vestries harbisoni</i>	Harbison's Dun Skipper	FSC/-- Carlsbad HMP	Larval host plant is the desert yucca (<i>Yucca schidigera</i>).	None. Larval host plant, desert yucca (<i>Yucca schidigera</i>) was not observed on site.
<i>Lycaena hermes</i>	Hermes copper	Carlsbad HMP	Occurs between Miramar Marine Air Station east to Pine Valley. Larval host plant is spiny redberry (<i>Rhamnus crocea</i>).	None. Larval host plant, spiny redberry (<i>Rhamnus crocea</i>) was not observed on site.
<i>Panoquina errans</i>	Saltmarsh skipper butterfly	Carlsbad HMP	Larval host plant is salt grass (<i>Distichlis spicata</i>) within salt marshes.	None. Larval host plant, salt grass (<i>Distichlis spicata</i>) was not observed on site. Suitable habitat does not occur on the project site.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE/SSC Carlsbad HMP	Restricted to deep vernal pools and ponds with chemistry and temperature conditions specific to non-marine and non-riverine waters. All known vernal pool habitat lies within annual grasslands, which may be interspersed with chaparral or coastal sage scrub vegetation.	None. Suitable habitat (vernal pools) does not occur on the project site.
<i>Tryonia imitator</i>	mimic tryonia	--/--	Very small brackish water snail found in brackish salt marshes and herbaceous wetlands.	None. Suitable habitat (salt marsh) does not occur on the project site.
Vertebrates				
Fish				
<i>Eucyclogobius newberryi</i>	tidewater goby	FE/SSC	Annual fish species that is endemic to California. Found primarily in waters of coastal lagoons, estuaries, and marshes.	None. Suitable habitat does not occur on the project site.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
ANIMALS (cont.)				
Vertebrates (cont.)				
Reptiles and Amphibians				
<i>Aspidoscelis hyperythra</i>	Orange-throated whiptail	--/SSC Carlsbad HMP	Coastal scrub, chaparral, and valley and foothill hardwood habitats. Prefers washes and sandy areas with patches of brush and rocks. Perennial plants required to support its primary prey termites.	Not Expected. Suitable habitat does not occur on the project site. Existing developments surrounding the site limit the potential for this species to occur.
<i>Phrynosoma blainvillii</i>	Coast horned lizard	--/SSC	Coastal sage scrub and chaparral in arid and semiarid climate conditions.	Not Expected. Suitable habitat does not occur on the project site. Existing developments surrounding the site limit the potential for this species to occur.
<i>Salvadora hexalepis virgultea</i>	Coast patch-nosed snake	--/SSC	Semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains.	Not Expected. Suitable habitat does not occur on the project site. Existing developments surrounding the site limit the potential for this species to occur.
Birds				
<i>Accipiter cooperii</i>	Cooper's hawk	--/SSC Carlsbad HMP Covered	Found in wooded habitats, forests, and edges of commercial/residential developments.	Low. Suitable woodland habitat does not occur and the site supports only a few trees that provide marginal perch and nesting habitat. This species could forage over the site.
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	--/SSC Carlsbad HMP Covered	Found in coastal sage scrub and sparse mixed chaparral.	Not Expected. Suitable habitat does not occur on the project site. This species could forage over the site.
<i>Athene cunicularia</i>	Burrowing owl	BCC/SSC BLM:S Carlsbad HMP Covered	Found in open habitats with sparse vegetation, including deserts, pastures, and prairies. Live and nest in underground burrows.	Not Expected. Suitable burrows with signs of owl occupancy were not observed. Existing land uses and isolated of the site strongly limit the potential for this species to occur.
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	BCC/SSC	Occurs in coastal sage scrub with large cacti for nesting.	None. Appropriate cacti habitat for nesting does not occur on site.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
ANIMALS (cont.)				
Vertebrates (cont.)				
Birds (cont.)				
<i>Charadris nivosus nivosus</i>	western snowy plover	FT/SSC Carlsbad HMP Covered	Found throughout the southwestern United States from Texas to California and up to Colorado, as well as Washington and Oregon. Eat invertebrates like crustaceans and mollusks, marine worms, along with insects.	None. Suitable habitat for breeding/foraging not present.
<i>Elanus leucurus</i>	white-tailed kite	--/FP	Riparian woodlands and oak or sycamore groves adjacent to grassland.	Low. Suitable woodland habitat does not occur and the site supports only a few trees that provide marginal perch and nesting habitat. This species could forage over the site.
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE/SE Carlsbad HMP Covered	Breeds within thickets of willows or other riparian understory usually along streams, ponds, lakes, or canyons. Migrants may be found among other shrubs in wetter areas.	Not Expected. Suitable habitat does not occur on the project site.
<i>Eremophila alpestris actia</i>	California horned lark	--/WL	Found on sandy beaches and in agricultural fields, grassland, and open areas.	Low. Marginal habitat is present; however, it is likely too disturbed due to years of agricultural discing.
<i>Falco peregrinus anatum</i>	American peregrine falcon	BCC/FP Carlsbad HMP	A transient winter species, occurs near shorebirds and at playas. May forage inland during the non-breeding season.	Not Expected. This species could forage over the site.
<i>Icteria virens</i>	yellow-breasted chat	--/SSC Carlsbad HMP Covered	Prefers mature riparian woodlands.	Not Expected. Suitable habitat does not occur on the project site.
<i>Pandion haliaetus</i>	Osprey	--/SSC Carlsbad HMP Covered	Diet consists of live fish, and generally reside near bodies of water including salt marshes, rivers, ponds, and estuaries.	Not Expected. Suitable habitat does not occur on the project site.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
ANIMALS (cont.)				
Vertebrates (cont.)				
Birds (cont.)				
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	--/SE Carlsbad HMP	Occurs primarily in grassland, saline emergent wetland, and wet meadow habitats. Coastal breeders restricted to saline emergent wetlands and, in northern California, to moist grasslands within the fog belt.	None. Appropriate habitat for does not exist on site to support species.
<i>Passerculus sandwichensis rostratus</i>	large-billed savannah sparrow	Carlsbad HMP Covered	A non-breeding visitor to the California coast between August and March. Can be found near coastal marshes and swamps.	Not Expected. Suitable habitat does not occur on the project site.
<i>Pelecanus occidentalis californicus</i>	California brown pelican	Carlsbad HMP Covered	Found in coastal areas, with nesting occurring on islands.	Not Expected. Suitable habitat does not occur on the project site.
<i>Plegadis chihi</i>	white-faced ibis	--/WL Carlsbad HMP Covered	Occurs in large marshes, with nesting colony hidden in inaccessible reedbed or willow-covered area.	Not Expected. Suitable habitat does not occur on the project site.
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	FT/SSC Carlsbad HMP Covered	Coastal sage scrub below 2500 ft in southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Not Expected. Suitable habitat does not occur on the project site.
<i>Rallus longirostris levipes</i>	light-footed clapper rail	FE/SE Carlsbad HMP Covered	Coastal saline emergent wetlands along southern California. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water.	None. Appropriate shallow water and mudflat environment do not exist on site.
<i>Setophaga petechia</i>	yellow warbler	--/SSC	Found along riparian woodlands.	Very Low. Suitable habitat does not occur on the project site. Habitat is likely too disturbed.
<i>Thalasseus elegans</i>	Elegant tern	--/-- Carlsbad HMP Covered	Nests along the Pacific coast, and migrates as far north as British Columbia during the non-breeding season	Not Expected. Suitable breeding habitat does not occur on the project site.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
ANIMALS (cont.)				
Vertebrates (cont.)				
Birds (cont.)				
<i>Sternula antillarum browni</i>	California least tern	FE/SE Carlsbad HMP Covered	Migratory in California arriving in late April. Breeding colonies are located along marine and estuarine shores. Feed in nearby shallow, estuarine waters.	Not Expected. Suitable breeding habitat does not occur on the project site.
<i>Vireo bellii pusillus</i>	least bell's vireo	FE/SE Carlsbad HMP Covered	Summer resident of Southern California in low riparian areas in the vicinity of water or in dry river bottoms below 2,000 ft. Nests places along the margins of bushes or on twigs projecting into pathways.	Not Expected. Suitable habitat does not occur on the project site.
Mammals				
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	--/SSC	Variety of habitats including coastal scrub, chaparral, and grasslands in San Diego County. Associated with grass-chaparral edges	Not Expected. Appropriate habitat does not exist on site. No sign was observed.
<i>Chaetodipus fallax fallax</i>	San Diego pocket mouse	--/SSC	Occurs in open areas of coastal sage scrub and weedy growth, often on sandy substrates.	Not Expected. Appropriate habitat does not exist on site. No sign was observed.
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	--/SSC	Occurs in a wide variety of habitats from arid thorn scrub to tropical deciduous forest and mixed oak-conifer forest. Species distribution in California is limited primarily to San Diego County.	Not Expected. Suitable habitat does not occur on the project site. Habitat is likely too disturbed.
<i>Lasiurus xanthinus</i>	western yellow bat	--/SSC	Found in wooded areas and desert scrub, particularly in palm trees. Rare visitor to San Diego County (Bats of San Diego County 2012).	Not Expected. Suitable habitat does not occur on the project site. Habitat is likely too disturbed.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	--/SSC	Found primarily in open habitats including coastal sage scrub, chaparral, grasslands, croplands, and open, disturbed areas if there is at least some shrub cover present.	None. Appropriate habitat does not exist on site.

Attachment B (cont.)
Special-status Species with Potential to Occur¹

Species Name	Common Name	Status ²	Habit, Ecology, and Life History	Potential to Occur ³
ANIMALS (cont.)				
Vertebrates (cont.)				
Animals (cont.)				
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	--/SSC	Open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca.	None. Appropriate habitat does not exist on site. No sign was observed.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	--/SSC	Semiarid desert lands. Day-roosts in caves, crevices in cliffs, and under the roof tiles of buildings. Uses a variety of arid habitats in southern California: pine-juniper woodlands, desert scrub, palm oases, desert wash, desert riparian, etc. Prefers rocky areas with high cliffs.	Not Expected. Suitable habitat does not occur on the project site. Habitat is likely too disturbed.

¹Sensitive species reported within 5 miles of the project site.

²Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; R = Rare; FP = Fully Protected; BCC = Bird of Conservation Concern; SSC = State Species of Special Concern.

CRPR = California Rare Plant Rank: 1A – presumed extinct; 1B – rare, threatened, or endangered in California and elsewhere; 2A – rare, threatened, or endangered in California and elsewhere; 2B – rare, threatened, or endangered in California but more common elsewhere; 3 – more information needed; 4 – watch list for species of limited distribution. Extension codes: .1 – seriously endangered; .2 – moderately endangered; .3 – not very endangered.

³Potential to Occur is assessed as follows. **None:** Species is either sessile (*e.g.* plants) or so limited to a particular habitat that it cannot disperse on its own (*e.g.* fairy shrimp), and habitat suitable for its survival does not occur on the project site; **Not Expected:** Species moves freely and might disperse through or across the project site, but suitable habitat for residence or breeding does not occur on the project site; **Low:** Suitable habitat is present on the project site but is of low quality and no sign of the species was observed during surveys, however the species cannot be excluded with certainty; **High:** Suitable habitat occurs on the project site and the species has been recorded recently on or near the project site, but was not observed during surveys for the current project; **Presumed Present:** The species was observed during biological surveys for the current project and is assumed to occupy the project site. **Presumed Absent:** Valid protocol surveys for the species were negative and the species is assumed to not occupy the site.



Photo 1. On-site drainage primarily conveys storm water sheet flowing off the developed parking lot for the existing commercial site from east to west. Photo facing north west.



Photo 2. No wetlands or riparian habitat are apparent within the on-site drainage. Where vegetation is present it is primarily non-native plant species, including several non-native invasives. Photo facing west.

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Photo 3. No wetlands or riparian habitat are apparent within the on-site drainage. Where vegetation is present it is primarily non-native plant species, including several non-native invasives. Photo facing west.



Photo 4. The on-site drainage flows west and enters a corrugated pipe culvert that runs beneath an existing SDG&E dirt access road eventually out-falling into an unnamed tributary drainage to Agua Hedionda Creek that runs north-south within the SDG&E easement. Photo facing west.

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Photo 5. Fallow agriculture/disc'd land on the western end of the project site. Photo facing west.



Photo 6. Active agricultural land in the southern portion of the project site. Photo facing east.

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Photo 7. Fallow agriculture/disc'd land and urban/developed land in the northern portion of the project site. Photo facing north east.



Photo 8. Active agricultural land and fallow agriculture/disc'd land in the center of the project site. Photo facing west.

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Photo 9. Fallow agriculture/disc'd land and ornamental/non-native vegetation in the north eastern portion of the project site. Photo facing north.



Photo 10. Urban/developed area in the northern portion of the project site. Photo facing west.

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