RESOURCE PROTECTION PLAN
for the
Newland Sierra Project
San Diego County, California

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1 INTRODUCTION

1.1 Project Location

The project Site is directly west of I-15, north of SR-78, and south of SR-76, and falls predominantly within the larger North County Metropolitan Subregional Plan (North County Metro) area (Figures 1 and 2). The North County Metro area is composed of non-contiguous unincorporated areas interspersed among the cities of Escondido, San Diego, San Marcos, Vista, and Oceanside, with the most easterly portion adjacent to the unincorporated community of Valley Center. Within the vicinity of the project Site, the North County Metro area includes the communities of Hidden Meadows and Twin Oaks. Most of the project Site is located in the community of Twin Oaks, with a portion located in the Bonsall Community Plan area.

Located within the inland area of North San Diego County, the project Site is close to several North County cities. The cities of Escondido and San Marcos are approximately 1 mile south of the project Site, the city of Vista is approximately 3 miles west of the project Site, the city of Oceanside is approximately 5 miles northwest of the project Site, and the city of Carlsbad is approximately 7 miles southwest of the project Site. The project Site is bound by I-15 on the east, Deer Springs Road on the south, and Twin Oaks Valley Road on the west, with a small portion of the northwestern edge of the Site traversed by Twin Oaks Valley Road. Gopher Canyon Road is approximately 1.5 miles north of the Site's northern boundary and approximately 2.5 miles north of the development area.

The proposed project lies in the San Marcos U.S. Geological Survey (USGS) 7.5-minute quadrangle, Township 11 West, Range 2 and 3 West, and Sections 11, 12, 13, 14, 15, 18, 19, 23, 24, 25, 30, 35, and 36. The latitude and longitude of the approximate center of the site is 33°12′47″ N and -117°09′07″ W (Figure 2).

1.2 Environmental Setting

The following is summarized from the Biological Resources Technical Report for the proposed project (Appendix H of the EIR). The project Site is located within the northern portion of the Merriam Mountains, a narrow chain of low mountains generally running north–south with a variety of east–west trending ridgelines and scattered peaks. These mountains originate near the northern end of the urban parts of the City of Escondido and are bordered by Gopher Canyon Road to the north, I-15 to the east, and Twin Oaks Valley Road to the west. The Merriam Mountains are approximately 8.5 miles long, and the project Site is situated on approximately 3 miles of the northern portion of the Merriam Mountains. It is in a dry climate with monthly average temperatures near the community of Vista ranging from approximately 44°–83°F. This

community generally receives an average annual rainfall of less than 13.10 inches per year (Western Regional Climate Center 2014).

The undeveloped site contains natural features of scenic and biological value including rugged topography and rock outcroppings. Much of the vegetation covering the existing site is mature and well-developed. Elevation of the site ranges widely, from approximately 660 feet above mean sea level (AMSL) along Twin Oaks Valley Road traversing the northwestern portion of the site to 1,750 feet AMSL directly northeast of Twin Oaks Crest Drive. The perimeter of the project Site has an overall gentle sloping topography. Within the project Site, the topography is more varied. Overall, there are approximately five locations where elevation is above 1,500 feet AMSL (one in the southern and four in the north–central areas of the project Site). Topography generally increases toward the center of the site, forming a number of ridgelines and some prominent rock outcrops. In some locations the gentle sloping perimeter gradually rises to higher elevations, and in other areas the slopes are more acute.

Eighteen soils types in 10 soil series occur on site, including 78 acres of Los Posas soils. Las Posas soils often support endemic plants that have either evolved to do well on these nutrient-poor soils or can outcompete other plants and thrive on such soils. The Las Posas soils series is the only soil type mapped on site that is known to support mafic conditions, and these soils are thought to occur in the northwestern and southeastern corners of the project Site. In the northwest, the soil occurs to west of and immediately adjacent to Twin Oaks Valley Road. In the southeast, this soil was thought to occur in two small locations directly adjacent to and north of Mesa Rock Road along I-15. However, no mafic soil indicators, or mafic endemic plant species, were observed at the two southeastern locations. Therefore, this area is not considered to support mafic conditions or soils. To date, only one special-status plant species typically associated with mafic conditions, Ramona horkelia (*Horkelia truncata*), has been identified on site, but it was not mapped in Las Posas soils.

The proposed project is located within the unincorporated portion of the County of San Diego within the North County Metropolitan Subregional Plan area. The North County Metropolitan Subregional Plan area is comprised of many non-contiguous "island" areas interspersed among the cities of Escondido, San Diego, San Marcos, Vista, and Oceanside with the most easterly portion adjacent to Valley Center. The North County Metropolitan Subregional Plan area includes the communities of Hidden Meadows and Twin Oaks Valley.

1.3 Scenic and Landform Resources

Detailed information regarding scenic and landform resources on the project site is included in the Visual Resource Technical Report included as Appendix E to the EIR. Scenic and landform resources on site consist of rock outcroppings, major peaks and ridgelines, major valleys and mature oak trees . Distinctive landscape components include Deer Springs Ridge, mature oak

trees in the southeastern portion of the site, Twin Peaks, Lusardi Mountain, Merriam Valley, Merriam Mountain, and the rock outcroppings that form the Crown of Rocks.

The project Site contains 1,086 acres of Steep Slope Lands as defined by the RPO. Of these lands, 148 acres is located within the project development footprint. Steep slopes are shown in Figure 7.

1.4 Cultural Resources

Detailed information regarding cultural resources on the project Site is included in the Cultural Resources Technical Report, Appendix I to the Newland Sierra EIR. A Phase I inventory and Phase II significance evaluations for the project were completed by Gallegos and Associates personnel in 2006–2007. Dudek completed supplemental reconnaissance surveys, as needed, from 2013–2017. The objectives of the cultural resources study were to survey the entire project area of potential effects, including the project Site and off-site improvement areas, to determine significance under County of San Diego and CEQA criteria for cultural resources.

A records search was completed at the South Coastal Information Center for the project Site and a surrounding 1-mile radius, identifying nine previously recorded cultural resources (CA-SDI-4370, CA-SDI-4371, CA-SDI-4558, CA-SDI-5639, CA-SDI-5640, CA-SDI-5951, CA-SDI-9253, CA-SDI-9822, CA-SDI-10747H), one isolate (SDM-W-3880C), and one 1901 historic map depicting a structure. A pedestrian survey of the project Site and 1-mile radius resulted in the re-location of five previously recorded sites (CA-SDI-4558, CA-SDI-5951, CA-SDI-9253, CA-SDI-9822, CA-SDI-10747H), and the recordation of two newly discovered archaeological sites (CA-SDI-17264 and CA-SDI-17265) and one new isolate (P-37-025968). Sites CA-SDI-4558, CA-SDI-5951, and CA-SDI-9822 have all been identified as significant under CEQA and the County of San Diego Resource Protection Ordinance criteria. As sites CA-SDI-4558, CA-SDI-5951, and CA-SDI-9822 are identified as RPO-significant sites, the only mitigation measure is avoidance, except for essential public projects.

1.5 Resource Protection Ordinance and Resource Protection Plan (RPP) Purpose and Function

The County of San Diego Board of Supervisors have found that the unique topography, ecosystems, and natural characteristics in San Diego County (County) are fragile, irreplaceable resources that are vital to the general welfare of all residents; that special controls on development must be established for the County's wetlands, floodplains, steep slopes, sensitive biological habitats, and prehistoric and historic sites; and that present methods adopted by the County must be strengthened to guarantee the preservation of these sensitive lands. The Resource Protection Ordinance (RPO) protects sensitive lands and prevents their degradation and

loss by requiring a Resource Protection Study for certain discretionary projects. This Resource Protection Plan is intended to preserve the ability of affected property owners to make reasonable use of their land subject to the conditions established by the County RPO. It is the intent of the RPO to increase the preservation and protection of the County's unique topography, natural beauty, diversity, and natural resources and a high quality of life for current and future residents of San Diego County. Nothing in this Resource Protection Plan is intended to be construed to reduce any requirements to protect environmentally sensitive lands contained in any other County plans, ordinances, policies, or regulations. It is not the intent of this Resource Protection Plan to prohibit development on environmentally sensitive lands, but only to limit the amount of disturbance consistent with the encroachment allowances.

County Staff and the Wildlife Agencies agree that the proposed Newland Sierra Project (project) is not feasible to implement if the County RPO is strictly applied to areas outside of the designated biological open space. This document serves as a proposal to amend the County RPO to allow an exemption for the project. The primary purpose of the Resource Protection Plan (RPP) is to serve as the functional equivalent of the County Resource Protection Ordinance (RPO) for the Newland Sierra Project. The Newland Sierra RPP is a comprehensive planning document that addresses the preservation, enhancement, and management of sensitive natural and cultural resources within the 1,983-acre Newland Sierra Specific Plan Area. The RPP is designed specifically for the Newland Sierra project, a master planned community providing for clustered development and preservation and management of large blocks of interconnected habitat. The RPP provides assurances and funding for long-term resource protection, management, restoration, and enhancement of the proposed Newland Sierra biological open space.

1.6 Planning Context

The RPP is being prepared and reviewed as part of the overall entitlement process for the Newland Sierra project. The RPP has been prepared in accordance with the County's RMP requirements with the exception of final details regarding revegetation and monitoring such as specific data collection methods. The RPP will be implemented by a RMP associated with approval of the final map(s).The relationship of the RPP to various related planning documents is discussed below.

1.6.1 Relationship to Merriam Mountains General Plan Amendment/ Specific Plan

The RPP is an integral element of the Conservation and Open Space Element of the Newland Sierra Specific Plan. It is consistent with and implements the policy objectives of the Specific Plan with respect to open space and conservation of natural and cultural resources.

1.6.2 Relationship to the County Resource Protection Ordinance (RPO)

The RPP serves as the functional equivalent of RPO for the Newland Sierra project in that it avoids and protects significant resources that are found on the site. Resources addressed by RPO and analyzed in the Newland Sierra Environmental Impact Report (EIR) include wetlands, floodplains, steep slopes, sensitive biological habitats, and prehistoric and historic sites. Protection of these resources in conjunction with the Newland Sierra project are provided for and described in this Newland Sierra RPP.

The RPP provides for protection and enhancement of resources qualitatively equivalent and functionally superior to that which would occur under RPO; the RPP provides for interconnected resources to be managed together in a consolidated plan such as might not occur with more piecemeal application of RPO. In addition, the RPP provides funding and assurances for long-term resource protection, management and enhancement, as well as opportunities for public use and enjoyment, which would not occur under RPO.

The project proposes an amendment to RPO, adding an exemption to Section 86.605 – Exemptions to read as follows: "Any project located within the approximately 1,985-acre property known as "Newland Sierra Specific Plan" if determined to be consistent with a comprehensive RPP which has been adopted by the Board of Supervisors as the functional equivalent of RPO."

1.6.3 Relationship to Newland Sierra EIR

The RPP addresses landform resources, biological resources (sensitive habitats and wetlands), and cultural resources also being addressed in the Newland Sierra EIR. In some cases, measures incorporated in the RPP provide the basis for mitigation measures in the Newland Sierra EIR. The RPP is proposed to be adopted by the County of San Diego in conjunction with entitlement approvals for the Newland Sierra project along with certification of the Newland Sierra EIR. The RPP has been prepared in accordance with the County's RMP requirements. The RPP will be implemented by a RMP associated with approval of the final map(s). Together, these approvals will assure that the policies, programs and measures included in the RPP are carried out.

1.6.4 Relationship to State and Federal Programs and Priorities

No features of the RPP would replace required state and federal programs and permitting requirements. The RPP does, however, address wetland, sensitive habitat, and species resources that are the subject of state and federal regulations and permit requirements and provides for protection and enhancement of resources generally consistent with those programs. The RPP also incorporates a biological resource preserve consistent with that requested by the Wildlife Agencies (U.S. Fish and Wildlife Service and California Department of Fish and Wildlife) and

the County as part of the coordinated planning process for the County's draft North County MSCP. The RPP has been formulated as a work in concert with state and federal regulatory programs and will support resource agency permitting throughout the project implementation.

2 PROJECT DESCRIPTION

The project is a proposed planned community of residential, commercial, educational, park, and open space uses on 1,985 acres with associated improvements to infrastructure and public facilities within the unincorporated area of North San Diego County. The project has been designed in accordance with the County General Plan Community Development Model. The majority of the project Site is within the community of Twin Oaks, which is part of the larger North County Metropolitan Subregional Plan area, and a portion is within the Bonsall Community Plan area. The project would include a residential component consisting of 2,135 single-family and multi-family dwelling units, which equates to an overall density of 1.08 dwelling units per acre over the entire 1,985 acres. The County General Plan Community Development Model guided the design and development pattern of the seven interrelated neighborhoods (also referred to as "planning areas"), with the highest densities and greatest diversity of land uses located in the project's Town Center neighborhood and the lowest densities located in the project's Summit neighborhood. The Town Center includes a maximum of 81,000 square feet of neighborhood-serving commercial uses, 95 multi-family housing units, a 6-acre school site, and park uses. The Community's remaining six neighborhoods include the balance of the project's housing units along with Community open space, parks, scenic overlooks, bike lanes, community gardens and vineyards, and walkable trails and pathways.

Of the 1,985 acres, the proposed project would include 406.6 acres of development with 369.9 acres of fuel management zones and 1,209.1 acres of on-site biological open space, (Figure 3). In addition, the proposed project would include off-site mitigation requirements on Deer Springs Road, Twin Oaks Valley Road, Mesa Rock Road, Sarver Lane, and Camino Mayor. Development of the seven planning areas and off-site road improvements was designed to avoid much of the RPO resources, including the most sensitive biological, cultural, and topographical resources, to the maximum extent possible.

The project design was influenced by prominent landforms, watershed patterns, boulder outcroppings, and important biological resources known to occur within the Site. The proposed project was designed to be consistent with accepted preserve design principles for wildlife movement and connectivity (County of San Diego 2008); the project includes a large block of open space on the northern and northwestern portions of the Site, with off-site regional linkages to the west toward the San Marcos Mountains and to the north along Gopher Canyon toward the San Luis Rey River.

The proposed open space includes steep slopes and biological and cultural resources. The proposed open space design consists of two large continuous blocks of key biological resources (approximately 1,024 acres combined) situated within the northern half and along the eastern boundary of the project Site. Also included is a large third block of open space (185 acres) in the

center of the proposed development that connects the abovementioned blocks of open space to open space located east and south of the project Site. All three blocks combined create a preserve of approximately 1,209.1 acres (Figure 3).

The majority of the proposed open space would be located within the northern half of the project Site (Figure 3). This would form a contiguous block of habitat that is roughly 10,600 feet by 4,300 feet (870.2 acres, Block 1). The northern half of the Site has the greatest potential to support wildlife due to the east–west connection with the San Marcos Mountains (PSBS 2003). In addition, the northern half of the project Site is positioned to take maximum advantage of interconnected blocks of habitat. The northern portion of the proposed open space design provides a diverse representation of the natural and environmental conditions that occur within the larger project region. Draft pre-approved mitigation area (PAMA)-designated lands off-site to the west and north could greatly increase the size of this block of habitat if they are added to the preserve. Open space would also be designated along the eastern boundary of the project Site adjacent to I-15; this area serves as important habitat for coastal California gnatcatcher (*Polioptila californica californica*) and many other wildlife species. This forms a contiguous on-site block of habitat that is roughly 7,000 feet by 1,000 feet (153.9 acres, Block 2). Additional lands to the east and south further flesh out this extended block of habitat. Block 3 is located in the south-central portion of the Site. Segments of proposed development occur to the east, west, and north, and natural habitat and avocado groves occur to the south. This block of habitat is approximately 7,000 feet by 1,200 feet (185 acres) and serves as live-in habitat for smaller species and some birds and movement habitat for larger wildlife species. The area links the northern and eastern blocks to undeveloped lands south and east of the proposed project through three corridors (Figure 4).

The proposed open space design includes a diverse array of environmental features, including ridgetops, hill tops, and rocky outcrops, which allow for a variety of potential nest, roost, and other resources for raptors, bats, and granite associated reptiles such as granite spiny lizard (*Sceloporus orcuttii*) and granite night lizard (*Xantusia henshawi*). Although the majority of this area primarily consists of dense chaparral, this open space also incorporates a diverse representation of the vegetation communities that occur on Site and in the vicinity, including riparian forest and scrub, coastal sage scrub, non-native grassland, and oak woodland. The two largest riparian areas located within the project Site would be included in the open space: the South Fork of Gopher Canyon and the South Fork of Moosa Canyon. The South Fork of Gopher Canyon, which is located along Twin Oaks Valley Road, holds water part of the year. The topography in this area of the open space is highly diverse and includes elevations from approximately 700 feet above mean sea level to 1,750 feet above mean sea level.

The site is currently subject to illegal/unauthorized activity, including hiking, biking, off-road vehicle activity, parties, trash dumping, homeless activities, and camping. With the development

and associated open space preserve, all of these activities except the biking and hiking would cease and the hiking/biking would be managed and kept to select trails. The other trails would be closed and new trail creation (which currently occurs) would stop. Therefore, the proposed development is expected to lead to a decrease in human activity on the project Site.

A portion of Twin Oaks Valley Road currently crosses the northwestern section of the project Site. Twin Oaks Valley Road serves as a major roadway used by the public and would serve as secondary access to the development through the extension of Camino Mayor. The project intends to provide access to Twin Oaks Valley Road off of Camino Mayor. As designated public roadways, these road segments would not be included within designated open space.

Although fuel management zones would not be counted as mitigation or open space, they do contribute to wildlife movement and live-in habitat for many species, particularly when the surrounding habitat is very dense and when the areas are thinned 50% or less. These areas add an additional 63 acres to Block 1, 52 acres to Block 2, and 100 acres to Block 3.

Overall, the entire open space area contains a diversity of environmental characteristics present in the vicinity, including representative populations of special-status plant and animal species observed on Site; existing dirt trails and canyon bottoms currently used by wildlife for movement across the Site; and the north–south-trending tributary to Gopher Canyon along Twin Oaks Valley Road, which provides linkage opportunities to the San Marcos Mountains.

The proposed project incorporates a Resource Management Plan (RMP) (Appendix H of the EIR) that includes details for preservation, conveyance, management, and funding of the proposed Biological Open Space. Features incorporated in the project to preserve and manage cultural resources are also included in the Newland Sierra RMP.

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3 ENVIRONMENTALY SENSITIVE LANDS ANALYSIS

Environmentally sensitive lands within the project Site, as defined by the County RPO, include sensitive habitat lands, County wetlands, steep slopes, floodplains, and prehistoric and historic sites (County of San Diego 2010).

3.1 Sensitive Habitat Lands

Sensitive Habitat Lands are defined per RPO Section 86.602(n) as follows (County of San Diego 2011):

> Land that supports unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines (14 Cal. Admin. Code Section 15000 et seq.), including the area that is necessary to support a viable population of any of the above species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning wildlife corridor.

The following section describes the three categories of sensitive lands as defined by the RPO (unique vegetation communities, habitat for rare and/or endangered species and wildlife corridors) and their potential to occur within the project Site.

3.1.1 Methodology

To determine the potential for sensitive habitat lands to occur within the project Site, special-status biological resources present or potentially present on Site were identified through an extensive literature search using the following sources: U.S. Fish and Wildlife Service (USFWS) (USFWS 2014), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2014), California Native Plant Society's (CNPS) *Online Inventory of Rare and Endangered Vascular Plants* (2014), San Diego Plant Atlas (SDNHM 2014a), San Diego Bird Atlas (SDNHM 2014b). Plant species proposed for coverage under the *Draft North County Multiple Species Conservation Program* (County of San Diego 2009) were also reviewed. General information regarding wildlife species present in the region was obtained from Unitt (2004) for birds, Bond (1977) for mammals, Stebbins (2003) for reptiles and amphibians, and Emmel and Emmel (1973) for butterflies. The *Soil Survey, San Diego Area, California Part 1* (Bowman 1973) was overlaid with the project Site to identify potentially occurring sensitive plants based on known soil associations. Native plant community classifications used in this report follow *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986) as modified by the County and noted in *Draft Vegetation Communities of San Diego County* (Oberbauer et al. 2008). The literature review also

included review of *Merriam Mountains Project Biological Technical Report: Summary of Studies and Impact Analysis* (PSBS 2007) and *Biological Resources Technical Memorandum for the Merriam Mountains Specific Plan and the General Plan Amendment/Circulation Element, San Diego County, California* (Dudek 2009).

In addition to an extensive literature review, previous surveys conducted within the project Site were reviewed. Surveys for the project Site have occurred at various times between 2000 and 2017. The most current biological surveys, conducted by Dudek in 2013 through 2017, consisted of updated vegetation mapping (including off-site impact areas), rare plant surveys, a jurisdictional delineation (including some of the off-site impact areas), nesting raptor survey, reptile habitat assessment, wildlife crossing and culvert review, and focused surveys for burrowing owl (*Athene cunicularia*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), coastal California gnatcatcher, and Harbison's dun skipper (*Euphyes vestris harbisoni*). In addition, after substantial rains in January 2017, a habitat assessment for fairy shrimp was conducted. Sampling of puddles for fairy shrimp species was conducted in winter 2017.

3.1.2 Unique Vegetation Communities

The County RPO includes the following definition for unique vegetation communities (County of San Diego 2011):

> "Unique vegetation community" refers to associations of plant species which are rare or substantially depleted. These may contain rare or endangered species, but other species may be included because they are unusual or limited due to a number of factors, for example: (a) they are only found in the San Diego region; (b) they are a local representative of a species or association of species not generally found in San Diego County; or (c) they are outstanding examples of the community type as identified by the California Department of Fish and Game listing of community associations.

The proposed project Site does not contain any unique vegetation communities as defined by the RPO. Figures 5A–5D depicts all of the vegetation communities within the project Site. All of the vegetation types found within the project Site are found elsewhere in San Diego County and considered relatively common and widespread, although some, including Diegan coastal sage scrub, coast live oak woodland, and riparian vegetation communities are declining in Southern California and are considered important wildlife habitats.

3.1.3 Habitats for Rare and/or Endangered Species

Endangered, rare, or threatened plant or wildlife species, as defined in the CEQA Guidelines, Section 15380(b) (14 CCR 15000 et seq.), and more specifically include endangered or threatened species recognized in the context of the context of the California Endangered Species Act (CESA) and the federal Endangered Species Act (FESA).

3.1.3.1 Rare and/or Endangered Wildlife Species

Several focused surveys were conducted within the project Site to determine the presence of rare and/or endangered species. The following special status wildlife species were observed within the project Site: Cooper's hawk (*Accipiter cooperii*; Watch List/Group 1), sharp-shinned hawk (*Accipiter striatus*; Watch List/Group 1), red-shouldered hawk (*Buteo lineatus*; Group 1), turkey vulture (*Cathartes aura*; Group 1), coastal California gnatcatcher (Federally Threatened/Species of Special Concern (SSC)/Group 1) western spadefoot (*Spea* [=*Scaphiopus*] *hammondi*; SSC/Group 2), Belding's orange-throated whiptail (*Aspidoscelis [Cnemidophorus] hyperythra beldingi*; WL/Group 2), red diamondback rattlesnake (*Crotalus ruber*; SSC/Group 2), Blainville's horned lizard (*Phrynosoma blainvillei*; SSC/Group 2), coast patch-nosed snake (*Salvadora hexalepis virgultea*; SSC/Group 2), coastal whiptail (*Aspidoscelis tigris stejnegeri*; SSC/Group 2), San Diego ringneck snake (*Diadophis punctatus similis*; Group 2), Nuttall's woodpecker (*Picoides nuttallii*; Bird of Conservation Concern (BCC)), western bluebird (*Sialia Mexicana*; Group 2), common barn owl (*Tyto alba*; Group 2), yellow warbler (*Setophaga petechial*; BCC/SSC/Group 2), San Diego desert woodrat (*Neotoma lepida intermedia*; SSC/Group 2), mule deer (*Odocoileus hemionus*; Group 2), and monarch butterfly (*Danaus plexippus*; Group 2). A comprehensive biological resources map of the Site is provided in Figures 5A–5D. Of those species, only one is federally or state-listed: coastal California gnatcatcher.

Occupied California Gnatcatcher Habitat. Focused surveys for California gnatcatcher on the project Site have resulted in the detection of two pairs and various individuals. The originally detected pair was located within the planned development footprint near the terminus of the cul-de-sac on Mesa Rock Road (PSBS 2007). During the 2013 surveys, no California gnatcatcher were detected within previous locations, but were instead located adjacent to I-15 within a mix of sage scrub communities, north of the 2007 observation and planned development. Individuals have variously been anecdotally detected within other patches of sage scrub on Site. Calls of this species were also detected by an experienced and permitted biologist within the matrix of southern mixed chaparral and disturbed habitat in the western section of the abandoned landing strip (Figure 5A). Occurrences for this species are recorded in the southeastern portion of the Site in 2002–2003 (CDFW 2014; USFWS 2014), with numerous occurrences documented throughout the vicinity in surrounding sites. The closest occurrence outside of the Site is located

approximately 0.5–1.0 mile northeast of project boundary in 1996 and 2007 (CDFW 2014; USFWS 2014). The proposed project Site supports foraging and nesting opportunities within the coastal scrub habitats on Site (i.e., Diegan coastal sage scrub, coastal sage scrub – Baccharis, and flat-topped buckwheat). It also provides for movement opportunities within and through the Site.

Occupied coastal California gnatcatcher habitat (48 acres of coastal sage scrub in the southeastern corner of the project Site) meets the RPO definition of Sensitive Habitat Lands because of the presence of a pair of federally threatened coastal California gnatcatchers, which are "rare or endangered species or sub-species of animals" as defined by Section 15380 of the State CEQA Guidelines. The pair of coastal California gnatcatcher along I-15 may be part of a larger population of gnatcatchers along the I-15 corridor from SR-76 to SR-78.

3.1.3.2 Rare and/or Endangered Plant Species

Focused rare plant surveys for the proposed project resulted in the detection of the following special-status plant species: summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*; California Rare Plant Rank (CRPR) 1B.2/List A), Ramona horkelia (*Horkelia truncata*; CRPR 1B.3/List A), chaparral rein orchid (*Piperia cooperi*; CRPR 4.2/List D), white rabbit-tobacco (*Pseudognaphalium leucocephalum*; CRPR 2.3), Engelmann oak (*Quercus engelmannii*; CRPR 4.2/List D), Munz's sage (*Salvia munzii*; CRPR 2.3/List B), ashy spike-moss (*Selaginella cinerascens*; CRPR 4.1/List D), Orcutt's brodiaea (*Brodiaea orcuttii*; CRPR 1B.1/List A). Due to their CRPR, Orcutt's brodiaea, summer holy and Ramona horkelia would be considered RPO resources. The proposed project would result in impacts to both Ramona horkelia and summer holy. All 50 Orcutt's brodiaea would remain within the open space. Approximately 196 individuals of summer holly would be directly impacted by the proposed project (14 percent of the on-site individuals) while approximately 62 individuals of Ramona horkelia would be directly impacted by the proposed project (100 percent of the on-site individuals).

3.1.4 Wildlife Corridors

Wildlife corridors are defined as areas that connect suitable wildlife habitat in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features, such as canyon drainages, ridgelines, or areas with vegetation cover, provide corridors for wildlife travel. Wildlife corridors are important because they provide access to mates, food, and water; allow the dispersal of wildlife from high-density areas; and facilitate the exchange of genetic traits between populations (Beier and Loe 1992). Wildlife corridors are considered sensitive by resource and conservation agencies. For the most part, the area in and around the project Site is very similar with regard to undeveloped landscapes with limited human disturbance, similar topographic relief, and similar vegetation communities.

The project Site is surrounded by undeveloped portions of the Merriam Mountains and adjacent to and east of another large undeveloped land form, the San Marcos Mountains (Figure 4). The northern and southern Merriam Mountains, along with the adjacent San Marcos Mountains, represent the largest substantial-sized, essentially native blocks of habitat located west of I-15 in central San Diego County. The Site is currently undeveloped and is intersected by a number of dirt roads and trails that provide connectivity to surrounding undeveloped landscapes. Based on the existing conditions of the Site, wildlife can generally move through the project Site relatively unencumbered, and there are no specified wildlife corridors within the project Site. The project Site is considered part of a regional corridor based on regional planning, topography, connectivity to adjacent regional open space, and resources on Site, and would remain as such even after development. Therefore, the project Site meets the RPO definition of Sensitive Habitat Lands since it serves as a functioning wildlife corridor.

3.2 RPO Consistency Analysis

Based on the project description in Section 2 (see Figure 3), encroachment into Sensitive Habitat Lands as defined in Section 3.1 is summarized below.

Occupied California Gnatcatcher Habitat. Because the species has been detected on site, USFWS will consider any sage scrub habitat to be occupied by coastal California gnatcatcher. Overall, the project would impact 56.4 acres both on Site and off Site of coastal sage scrub. The presence of coastal sage scrub habitat occupied by the threatened coastal California gnatcatcher at the Mesa Rock Road cul-de-sac constitutes RPO Sensitive Habitat Lands, as does any remaining habitat on site. Impacting this occupied habitat by the project would be considered "take" of habitat and would require formal consultation with USFWS.

The proposed biological open space for the proposed project includes three large, interconnected, biological open space blocks within the project Site as well as a large off-site biological open space parcel. The proposed on-site open space design consists of two large continuous blocks of key biological resources situated within the northern half and along the eastern boundary of the project Site, and a large third block of open space in the center of the proposed development that would connect the abovementioned blocks of open space to open space located east and south of the project Site. These connected blocks of habitat create an on-site preserve of approximately 1,209.1 acres, which has been designated as a proposed hardline area in the draft North County Plan of the County of San Diego Multiple Species Conservation Program. Additionally, the project would preserve and manage a 213-acre off-site mitigation parcel, which has been identified as a conservation priority and is designated as a pre-approved mitigation area (PAMA) in the draft North County Plan.

Approximately 24% of the on-site biological open space is classified as Very High or High habitat value as indicated by the draft North County Plan Habitat Evaluation Map (2008), and another 63% of the on-site biological open space is classified as Moderate habitat value. The remainder of the on-site biological open space is classified as Low habitat value or developed land. Nearly the entire off-site mitigation parcel is classified as Very High habitat value by the draft North County Plan Habitat Evaluation Map.

Sensitive Plant Species. Although the proposed project would result in impacts to two plant species that constitute Sensitive Habitat Lands under RPO (see Section 3.1.3.2), mitigation in the form of conservation of existing populations and transplantation of individuals would ensure that the project is consistent with Sensitive Habitat Lands for sensitive plants populations. Preservation of 1,160 individuals of summer holly within the preserve would provide a mitigation ratio of approximately 6:1, which exceeds the maximum 3:1 required ratio for list A plant species. All individuals of Ramona horkelia will be mitigated through transplantation of the existing plants into the preserve per the conceptual revegetation plan prepared for the proposed project.

Wildlife Movement Corridors. As described previously, the project Site currently functions as a regional corridor and, therefore, meets the criteria of a functioning wildlife movement corridor as defined by the RPO.

Implementation of the proposed project is not expected to result in long-term or permanent direct impacts to habitat connectivity and wildlife corridors for large mammals. For the most part, the area in and around the project Site is very similar with regard to undeveloped landscapes with limited human disturbance, similar topographic relief, and similar vegetation communities. The project Site is considered part of a regional corridor based on regional planning, topography, connectivity to adjacent regional open space, resources on Site, and would remain as such, even after development.

Although large sections of this landscape would be developed, the project includes proposed open space that would form a centroid of habitat connectivity to the north, south, east, and west, thereby retaining connectivity of undeveloped landscapes throughout and surrounding proposed development. In addition, the proposed open space design includes a diverse array of environmental features including ridgetops, hill tops, and rocky outcrops.

Wildlife movement within the proposed open space design would occur within three large blocks of open space and four corridors located between development (Figure 4). Although small mammals may regularly use the dense chaparral occurring on Site, larger mammals such as mule deer, mountain lion, and coyote are expected to use dirt trails and any riparian corridors occurring throughout the open space as their primary means of travel. Similarly,

small wildlife species (e.g., lizards and small mammals) would continue to use the dense chaparral and dirt trails within the proposed open space.

The project Site is currently undeveloped with a network of trails and connectivity to surrounding undeveloped landscapes. Although wildlife movement would be restricted within developed areas, the proposed open space design would allow for habitat connectivity and wildlife movement within on-site open space and surrounding preserves. The culverts, fences, and bridges mapped along I-15 and Deer Springs Road demonstrate that wildlife can move in some areas in an east–west direction, as well as north–south. Because the open space is designed to preserve open space in the east, south, and north, smaller wildlife species would be able to continue using this area.

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4 RESOURCE PROTECTION ORDINANCE WETLANDS

4.1 Methods

The County's RPO (County of San Diego 2007) identifies environmental resources present within the County, including wetlands, and provides measures to preserve these resources. The RPO defines wetlands as lands that have one or more of the following attributes: (1) lands that periodically support a predominance of hydrophytes (plants whose habitat is water or very wet places); (2) lands in which the substratum is predominantly undrained hydric soil; or (3) lands where an ephemeral or perennial stream is present and whose substratum is predominately non-soil, and where such lands contribute substantially to the biological functions or values of wetlands in the drainage system. County-regulated wetlands were identified where a predominance of hydrophytic vegetation was associated with a stream channel or where an area supported at least one of the three wetlands indicators (i.e., hydrology, hydric soils, or hydrophytic vegetation).

4.2 Existing Conditions

On-site RPO wetlands and other jurisdictional resources are shown in Figures 6A–6D and quantified in Table 1. Prominent, generally east-west trending ridgelines divide the site into five separate drainage basins tributary to Moosa Canyon, Gopher Canyon, and San Marcos Creek. Two well-developed riparian areas exist on site, one west of I-15 draining into the South Fork of Moosa Canyon and one in the south fork of Gopher Canyon, between the Merriam Mountains and the San Marcos Mountains. Other RPO wetlands occur sporadically within the project Site and are associated with ephemeral or intermittent stream channels. The individual RPO wetlands, discussed in detail below, are relatively small and together total only 8.22 acres (0.4% of the Site). The majority of the RPO wetlands are located within biological open space (6.1 acres; 74% of RPO wetlands); 2.0 acres (23% of RPO wetlands) are protected by Limited Building Zone Easements (LBZ), and a Biological Open Space Easement; and only 0.2 acre (3% of RPO wetlands) are located within proposed development areas. In addition, the combined LBZ easements and FMZ buffer the effects from adjacent development by providing a 250-foot area between development and the open space. There are RPO wetlands in the off-site areas and are summarized in Table 2. Currently, the proposed project Site is undeveloped, and wildlife can move freely throughout most of the Site. Due to the smaller sizes of the drainages and associated habitats, none of these are considered unique for wildlife movement in general. The RPO wetlands occur in areas where slopes do not exceed 25% and where soils are not highly erosive making the buffer generally a stable environment. The overall function and value of wetlands on Site would be low to moderate due to the incised channels, and small riparian vegetation areas.

Table 1
On-Site RPO Wetlands and Other Jurisdictional Resources

Vegetation Community	Jurisdiction Determination (Acres)			Total (Acres)
	ACOE/RWQCB/CDFW/ County RPO Wetlands	*CDFW/ County RPO Wetlands*	*CDFW-Only*	
Coast live oak woodland	—	—	4.82	4.82
Freshwater marsh	0.07	—	—	0.07
Mulefat scrub	—	0.19	—	0.19
Southern coast live oak riparian forest	—	5.16	—	5.16
Southern willow scrub	0.16	2.33	—	2.49
Southern willow scrub/tamarisk	—	0.30	—	0.30
Total	**0.23**	**7.99**	**4.82**	**13.04**
Non-wetland waters (ephemeral and intermittent)[1]	*5.33*	—	—	*5.33*

[1] The non-wetland waters are under the jurisdiction of ACOE/RWQCB/CDFW only and are not considered RPO wetlands. They are an overlay and not counted toward total acreage.

Table 2
Off-Site RPO Wetlands and Other Jurisdictional Resources (acres)

Vegetation Community	Jurisdiction Determination		
	ACOE/RWQCB/CDFW/County	*CDFW/County*	*CDFW-Only*
Deer Springs Road[1]			
Mulefat scrub	0.03		—
Southern willow scrub	0.10		—
Disturbed wetland[2]	0.14		
Southern coast live oak riparian forest	—	1.36.	—
Non-wetland waters (ephemeral and intermittent)[2]	*0.09*	—	—
Camino Mayor			
Southern willow scrub	—	0.05	—
Non-wetland waters (ephemeral and intermittent)[2]	0.06	—	—
Sarver Lane			
Coast live oak woodland (including disturbed)	—	—	0.95
Non-wetland waters (ephemeral and intermittent)[2]	0.05	—	—
Sewer Improvements[3]			
Southern willow scrub	3.32	—	—
Arundo-dominated riparian	0.26	—	—
Mar Vista[3]			
Coast live oak woodland	<0.01	—	—
I-15 Interchange[3]			
Coast live oak woodland	0.14	—	—
Total RPO Wetlands and Other Jurisdictional Resources	**4.19**	**1.41**	**0.95**
Total RPO Wetlands	**5.26**		
RPO wetland buffer[4]	**8.6**		

[1] Deer Springs Road Options A and B are identical in their impacts to jurisdictional resources, including RPO buffers.
[2] The disturbed wetland and non-wetland waters are under the jurisdiction of ACOE/RWQCB/CDFW only.
[3] A formal delineation was not conducted for the offsite sewer improvements, nor the Mar Vista and I-15 Interchange improvements. For purposes of this analysis, all riparian habitat is assumed to be under the jurisdiction of all three resource agencies and the County.
[4] RPO wetland buffers are under County jurisdiction and are an overlay and not counted toward the total acreage.

4.3 Resource Protection Ordinance Consistency Analysis

For purposes of this analysis, RPO wetlands are defined as those meeting the definition of a wetland in the County RPO, and other jurisdictional waters and wetlands are those that do not meet the County RPO definition. Using the proposed project described in Section 2, potential encroachment into RPO wetlands and other jurisdictional waters was assessed. The majority of the RPO wetlands are located within biological open space (6.1 acres; 74% of RPO wetlands); 1.9 acres (23% of RPO wetlands) are within proposed FMZs; and 0.2 acre (3% of RPO wetlands) are located within proposed development areas. RPO wetlands associated with off-site road and sewer improvements total 5.26 acres (see Table 2 above). Of the 5.26 acres, 1.49 acres would be permanently impacted by off-site improvements (Table 3). All impacts associated with off-site improvements would occur as linear impacts and would not result in removal of large blocks of RPO wetlands. Therefore, edge effects of the proposed project would effect a small proportion of the wetlands in the project area. Given the stable riparian environment (i.e. soils are not highly erosive) and the low intensity edge effects provided by the combined LBZ and FMZ 250-foot buffer between development and the open space, a 75-foot wetland buffer was applied to the RPO wetlands on- and off-site. Table 4 lists the acreage of encroachment into RPO wetlands, and the project's proposed mitigation.

Table 3
On-Site and Off-Site Encroachment into RPO Wetlands (acres)

Vegetation/ Land Cover	Existing (Acres)	Permanent Impacts (Acres)	Mitigation Ratio	Required Mitigation (Acres)	Area Preserved On Site (Acres)	Mitigation Required (Acres)
On-Site RPO Wetlands						
Freshwater marsh	0.07	—	—	0	0.07	—
Mulefat scrub	0.19	0.09	3:1	0.27	0.10	0.17
Southern coast live oak riparian forest	5.16	1.91	3:1	5.73	3.25	2.48
Southern willow scrub	2.49	0.13	3:1	0.39	2.36	—
Southern willow scrub/tamarisk	0.30	—	—	0	0.30	—
Total RPO Wetlands	**8.22**	**2.13**	**3:1**	**6.39**	**6.08**	—
RPO Buffer	30.2	8.7	N/A	N/A	21.5	—
Total On-Site RPO Wetlands and Buffer	**39.04**	**10.83**	**N/A**	**6.39**	**27.58**	—

Table 3
On-Site and Off-Site Encroachment into RPO Wetlands (acres)

Vegetation/ Land Cover	Existing (Acres)	Permanent Impacts (Acres)	Mitigation Ratio	Required Mitigation (Acres)	Area Preserved On Site (Acres)	Mitigation Required (Acres)
Off-Site RPO Wetlands – Deer Springs Road either Option A or B						
Mulefat scrub	0.03	0.03	3:1	0.09	N/A	**0.09**
Southern willow scrub	0.10	0.06	3:1	0.18	N/A	**0.18**
Southern coast live oak riparian forest	1.36	0.83	3:1	2.49	N/A	**2.49**
Total RPO Wetlands	1.49	0.92	3:1	2.76	N/A	**2.76**
RPO Buffer	3.7	2.75	N/A	N/A	N/A	—
Total Off-Site RPO Wetlands and Buffer	**5.19**	**3.67**	**N/A**	**—**	**N/A**	
Additional Off-site Areas						
Southern willow scrub	3.37	0.41	3:1	1.23	N/A	**1.23**
Arundo-dominated riparian	0.26	0.14	3:1	0.42	N/A	**0.42**
Coast live oak woodland	0.14	0.02	3:1	0.06	N/A	**0.06**
Total RPO Wetlands	3.77	0.57	3:1	1.71	N/A	**1.71**
RPO Buffer	4.9	1.10[1]	N/A	N/A	N/A	—
Total Off-Site RPO Wetlands and Buffer	**8.67**	**1.67**	**N/A**	**—**	**N/A**	

[1]Additional impacts to RPO buffer would result from improvements at Mar Vista (0.24 acre)

Impacts to RPO wetlands are within four discrete on-site impact areas and five off-site areas (two locations along Deer Springs Road, Camino Mayor, I-15 interchange, and the sewer improvement area). RPO wetland impact area 1 is located at the northern end of Gist Road at the project Site entrance. This area consists of oak riparian forest associated with an intermittent stream channel. The oak riparian forest is bisected by a dirt trail. Impact area 1 would be directly, permanently impacted by activities occurring within the FMZ. This RPO wetland area would be affected by all three FMZ areas: Zone 1 (Irrigated Structure Setback Zone); Zone 2 (Thinning Zone); and a Special Management Zone where only highly flammable, dead, and dying native species would be removed. RPO wetland impact area 2 is located just north east of area 1 and consists of two small polygons of southern willow scrub (0.08 and 0.05 acre) and associated stream channel. These two wetlands would be directly and permanently impacted by the development of the proposed project. Two small patches (0.05 and 0.04 acre) of mule fat scrub comprise RPO impact area 3. These two patches are located immediately adjacent to the on-site portion of Gist Road and will be permanently impacted by development. The fourth RPO impact area is located along the eastern project boundary and I-15, just north of the Mesa Rock Road cul-de-sac. Of the 0.8 acre of oak

riparian forest that comprises this RPO wetland, 0.2 acre of the southern tip would be impacted by activities associated with Zone 2 fuel modification. The five off-site RPO areas impacted by the proposed project are associated with improvements to Deer Springs Road, Camino Mayor, I-15 interchange, and sewer facility upgrade. Improvements to Deer Springs Road would result in both permanent and temporary impacts to oak riparian forest canopy immediately adjacent to the existing road (0.83 acre) and both mulefat scrub (0.03 acre) and southern willow scrub (0.06 acre permanent and 0.04 acre temporary) at Deer Springs Road and Sycamore Drive. Improvements to Camino Mayor would permanently impact a small polygon of southern willow scrub (0.06 acre). Improvements to the I-15 interchange would result in 0.02 acres of permanent impacts to coast live oak woodland and 0.12 acre of temporary impacts. Upgrading sewer facilities near Twin Oaks Valley Road would result in permanent impacts to 0.35 acre of southern willow scrub and 0.14 acre of arrundo dominated riparian habitat.

The RPO Analysis for wetlands concludes that the project would be fully consistent with the County RPO with the exception of impacts to 2.13 acres of on-site RPO wetlands and 0.92 acre of off-site impacts with additional off-site impacts to the RPO buffers (see Table 3). These impacts are required given the project goals of concentrating development in the southern portion of the property to create a biological preserve in the northern portion of the property, creating large FMZs for fire protection, providing a core habitat block in the Merriam Mountains, and improving Deer Springs Road as well as other offsite improvemetns. As described above, the majority of RPO wetlands would remain within open space preserve, and the greatest impacts would result from fuel modification activities. Approximately 3% of the 30.2 acres of RPO wetlands within the project Site would be directly impacted by the proposed development.

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5 STEEP SLOPE LANDS

The RPO, Section 86.602(p), defines "Steep Slope Lands" as follows:

> All lands having a slope with natural gradient of 25% or greater and a minimum rise of 50 feet, unless said land has been substantially disturbed by previous grading. The minimum rise shall be measured vertically from the toe of slope to the top of slope within the project boundary (County of San Diego 2007).

The project Site contains 1,086 acres of Steep Slope Lands as defined by the RPO. Of these lands, 148 acres are located within the project development footprint. Steep slopes are shown in Figure 7.

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6 FLOODPLAINS

The RPO, Section 86.602(j), defines "floodplains" as follows:

> The relatively flat area of low lands adjoining and including the channel of a river, stream watercourse, bay, or other body of water which is subject to inundation by the flood waters of the 100 year frequency flood as shown on floodplain maps approved by the Board of Supervisors.

The RPO, Section 86.602(j), defines "floodways" as follows:

> All land, as determined by the Director of Public Works, which meets the following criteria:
>
> 1. The floodway shall include all areas necessary to pass the 100 year flood without increasing the water surface elevation more than 1 foot (or, in the case of San Luis Rey River, San Dieguito River, San Diego River, Sweetwater River, and Otay River, upon adoption by the Board of Supervisors of revised floodplain maps which so specify, the increase shall be no more than 2/10ths of 1 foot).
> 2. The floodway shall include all land area necessary to convey a ten-year flood without structural improvements.
> 3. To avoid creating erosion and the need for channelization, rip-rap or concrete lining, the floodway will not be further reduced in width when the velocity at the floodway boundary is six feet per second or greater.
> 4. Floodways are determined by removing equal conveyance (capacity for passing flood flow) from each side unless another criterion controls.

No RPO floodplains or floodways are present on Site; therefore, the project would be in compliance with the RPO with regards to floodplains or floodways.

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7 LANDS CONTAINING SIGNIFICANT PREHISTORIC AND HISTORIC SITES

Significant sites are those that provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, state, or federal importance. Such sites include the following (County of San Diego 2007):

1. Any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object either:
   aa. Formally determined eligible or listed in the National Register of Historic Places by the Keeper of the National Register; or
   bb. To which the Historic Resource ("H" Designator) Special Area Regulations have been applied; or
2. One-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data and materials; and
3. Any location of past or current sacred religious or ceremonial observances which is either:
   aa. Protected under Public Law 95-341, the American Indian Religious Freedom Act or Public Resources Code Section 5097.9, such as burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures, or
   bb. Other formally designated and recognized sites which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

Native American Consultation

The County of San Diego contacted the Native American Heritage Commission to request information and/or input regarding Native American concerns for the proposed project, and the names of individuals in the area who should be contacted. Those individuals identified by the Native American Heritage Commission have been contacted by letter, and information about cultural resources within the project Site was requested. Additional project notification will be conducted through general public distribution of the environmental report. Information about the project's design and development impacts, including the widening of Deer Springs Road, was given to Native American contacts. All open space planning, including use of cultural resources for public interpretation and/or capping and protection of the resources, has been and will continue to be discussed with local Native Americans. Records of tribal correspondence are on file with the County of San Diego and are included in Appendix I of the EIR. Mark Mojado (San Luis Rey Band of Luiseño Indians) and Manuel Masiel (Pechanga Band of Luiseño Indians)

provided monitoring services for surveys and test excavation fieldwork. Banning Taylor and PJ Stoneburner, representing Saving Sacred Sites, provided monitoring services during the additional survey and evaluation fieldwork performed by Dudek in 2016 and 2017.

The proposed project would protect and preserve the County's important cultural resources from loss or destruction, and require development-appropriate mitigation to protect the quality and integrity of these resources. Potential impacts to cultural resources would be minimized and/or mitigated in accordance with the project's cultural resource mitigation requirements. The proposed project's impacts to significant cultural resources would be reduced to less than significant through mitigation measures that include the placement of significant sites within an avoidance area (open space), reburial of cultural resources at an agreed-upon reinternment area on the project site, data recovery of archaeological and cultural resources, curation of archaeological and cultural artifacts (unless identified for reburial), and archaeological monitoring programs. The mitigation measures, including establishment of the reinternment area, will be set forth in a Tribal Treatment Plan developed through the County's consultation with the applicant and the affected Tribes. In addition, the cultural resources monitoring program would include avoidance or data recovery at any new discoveries of cultural resources.

8 CONCLUSION

8.1 Study Results by RPO Ordinance

8.1.1 Sensitive Habitat Lands

The proposed project does not contain any unique vegetation communities as defined by the County of San Diego Resource Protection Ordinance. All of the vegetation types found within the project Site are found elsewhere in San Diego County and currently considered relatively common and widespread.

Coastal California gnatcatcher was detected on Site during biological surveys, and has the potential to use the project Site for both nesting and foraging. There would be direct and indirect impacts to both suitable nesting and foraging habitat as a result of the proposed project. On-site impacts total 54.5 acres of the 79.7 acres within the project Site. An additional 1.9 acres of coastal sage scrub will be impacted off site as a result of road improvements, for a total of 56.4 acres of coastal sage scrub impact. All of the suitable habitat on site is considered occupied. To compensate for impacts to occupied habitat beyond those already mitigated on Site, the project applicant has purchased off-site mitigation acreage that provides habitat for the species. All individuals of Ramona horkelia will be mitigated through transplantation of the existing plants into the preserve per the conceptual revegetation plan prepared for the proposed project. Onsite preservation of 1,160 individuals of summer holly would provide a mitigation ratio of approximately 6:1, which exceeds the maximum 3:1 required ratio for list A plant species.

Implementation of the proposed project is not expected to result in long-term or permanent direct impacts to habitat connectivity and wildlife corridors for large mammals. For the most part, the area in and around the project Site is very similar with regard to undeveloped landscapes with limited human disturbance, similar topographic relief, and similar vegetation communities. The project Site is considered part of a regional corridor based on regional planning, topography, connectivity to adjacent regional open space, resources on Site; it would remain as such even after development.

Although large sections of this landscape would be developed, the project includes proposed open space that would form a centroid of habitat connectivity to the north, south, east, and west, thereby retaining connectivity of undeveloped landscapes throughout and surrounding proposed development. In addition, the proposed open space design includes a diverse array of environmental features including ridgetops, hill tops, and rocky outcrops.

Wildlife movement within the proposed open space design would occur within three large blocks of open space and four corridors located between development (Figure 4). Although small mammals may regularly use the dense chaparral occurring on Site, larger mammals such as mule

deer, mountain lions, and coyotes are expected to use dirt trails and any riparian corridors occurring throughout the open space as their primary means of travel. Similarly, small wildlife species (e.g., lizards and small mammals) would continue to use the dense chaparral and dirt trails within the proposed open space.

The project Site is currently undeveloped with a network of trails and connectivity to surrounding undeveloped landscapes. Although wildlife movement would be restricted within developed areas, the proposed open space design would allow for habitat connectivity and wildlife movement within on-site open space and surrounding preserves (Figure 4).

The culverts, fences, and bridges mapped along I-15 and Deer Springs Road demonstrate that wildlife can move in some areas in an east–west direction, as well as north–south. Because the open space is designed to preserve open space in the east, south, and north, smaller wildlife species would be able to continue using this area. As such, the proposed project is consistent with the County RPO.

8.1.2 Resource Protection Ordinance Wetlands

Of the 8.21 acres of RPO wetlands within the project Site, approximately 2.13 would be impacted by the proposed project, with a large majority of those impacts resulting from fuel modification activities. An additional 1.49 acres of direct impacts would result from off-site improvements. In addition, RPO buffers would be impacted by road improvements (3.5 acres). On-site and off-site impacts are required given the project goals of concentrating development in the southern portion of the property to create a Biological Open Space area in the northern portion of the property, and providing a core habitat block in the Merriam Mountains. In the Mobility Element of the General Plan, the current classification for Deer Springs Road is a 6.2 Prime Arterial (six-lane). One option for development is to maintain that classification, and the second option would be to reclassify the road from a 6.2 Prime Arterial (six-lane) to a 4.1A Major Road with Raised Median (four-lane) and a 2.1B Community Collector with Continuous Turn Lane (two-lane). The six-lane option would result in 0.99 acre of impacts to RPO wetlands, and the reclassification option would reduce impacts by 0.21 acre to 0.78 acre. Improvements to Deer Springs Road are required by the General Plan and in order to meet those requirements, the improvements will result in impacts to RPO wetlands immediately adjacent to the road. Improvements to Camino Mayor are necessary to provide secondary access to the project Site for emergency purposes. Additional improvements are required for sewer facilities, as well as other road improvements.

8.1.3 Steep Slope Lands

Steep Slope Lands are present within the project Site. The consolidated nature of the Site's plan was developed to provide preservation of large, contiguous blocks of habitat. As a result, large, contiguous blocks of Steep Slope Lands would also be preserved, but actual lot-by-lot encroachments would exceed the allowances of Section 86.604.e.1.aa of the County RPO. However, it would be consistent with Section 86.604.e.1.cc of the County RPO, which allows encroachment into Steep Slope Lands "to avoid impacts to significant environmental resources that cannot be avoided by other means, provided no less environmentally damaging alternative exists" (County of San Diego 2007).

8.1.4 Floodplains

No RPO floodplains are present within the project Site. Floodplains as defined by the Federal Emergency Management Agency are present along the southerly reach of Sarver Lane, north of Deer Springs Road, and along Deer Springs Road from Sarver Lane to North Twin Oaks Valley Road. Portions of these two public County roads are below the 100-year flood elevation, and in conjunction with project-triggered traffic mitigation measures at these road segments, the project proposes grading and drainage improvements to ensure that roadways would provide dry passage in accordance with the County Drainage Manual. Analysis of these proposed roadway drainage improvements is included in the Preliminary Drainage Study (Appendix Z of the Newland Sierra Project EIR).

8.1.5 Prehistoric and Historic Locations

Sites CA-SDI-4558, CA-SDI-5951, and CA-SDI-9822 are located within an off-site improvement area (Deer Springs Road improvements) that is proposed to include public projects (roadway improvement and utilities), and, as such, complete avoidance will not be possible. These types of public projects are considered essential and include public use, and are, therefore, considered exempt from the RPO, according to Article V of the RPO (County of San Diego 2007). The County has determined that the Deer Springs Road improvement is an essential public facility (as determined in the General Plan Update 2011), and that sites CA-SDI-4558, CA-SDI-5951, and CA-SDI-9822 are exempt from RPO compliance.

Mitigation of potential direct impacts for sites CA-SDI-4558, CA-SDI-5951, and CA-SDI-9822 (portions that may exist within Deer Springs Road and adjacent to the road) would be achieved through either the proposed at-grade option of data recovery or the alternative option of index sampling and site capping with surcharged fill. If the proposed at-grade is chosen, then the data recovery program would involve excavation of 35 1-by 1-meter units at CA-SDI-4558, 45 1- by 1-meter units at CA-SDI-5951, 100 1- by 1-meter units at CA-SDI-9822, artifact

analysis, special studies, and a report of finding. For either the proposed at-grade or the alternative, reanalysis of previously collected artifacts (Palomar Community College) would be conducted. Detailed mitigation is described in the Cultural Resources Report for the Newland Sierra Project, included as Appendix I of the Newland Sierra EIR.

8.2 Resource Protection Ordinance Amendment

This Resource Protection Plan concludes that the project would be fully consistent with the County RPO, with the exception of impacts to coastal California gnatcatcher–occupied habitat along the eastern side of the project Site and impacts associated with RPO wetlands. These impacts are required in order to meet the project goals of concentrating development in the southern portion of the Site, creating a biological preserve in the northern portion of the Site, providing a core habitat block in the Merriam Mountains, and required improvements to Deer Springs Road. An amendment to the County RPO is proposed as part of the project to add an Exemption to Section 86.605 of the RPO. The exemption would exempt "any project located within the approximately 1,985 acre property known as 'Newland Sierra Specific Plan' if determined to be consistent with a comprehensive Resource Management Plan (RMP) [that] has been adopted by the Board of Supervisors as the functional equivalent of RPO." The project includes a CRMP (Appendix H of the EIR), which addresses all RPO resources and describes features incorporated in the project to protect and manage those resources.

9 LITERATURE CITED

14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

Beier, P., and S. Loe. 1992. A Checklist for Evaluating Impacts to Wildlife Movement Corridors. *Wildlife Society Bulletin* 20:434–440.

Bond, S.I. 1977. An Annotated List of the Mammals of San Diego County, California. *Transactions of the San Diego Society of Natural History* 18:229–248.

Bowman, R.H. 1973. *Soil Survey, San Diego Area, California, Part 1.* U.S. Department of the Agriculture. December 1973.

CDFW (California Department of Fish and Wildlife). 2014. RareFind, Version 3.1.0 (Commercial Subscription), California Natural Diversity Database (CNDDB). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed September 2014. http://www.dfg.ca.gov/biogeodata/cnddb/rarefind.asp.

CNPS (California Native Plant Society). 2014. *Inventory of Rare and Endangered Plants.* Online ed. Version 8-02. Sacramento, California: CNPS. Accessed September 2014. http://www.rareplants.cnps.org.

County of San Diego. 2011. An Ordinance Codifying and Amending the Resource Protection Ordinance, Relating to Wetlands, Prehistoric and Historic Sites, Agricultural Operations, Enforcement, and Other Matters. Ordinance No. 9842. March 21, 2007. Amended by Ord. No. 10167 on October 14, 2011.

County of San Diego. 2008a. "Planning Agreement by and among the County of San Diego, the California Department of Fish and Game, and the United States Fish and Wildlife Services Regarding the North and East County Multiple Species Conservation Program Plans: Natural Community Conservation Program Plans and Habitat Conservation Plan." October 29, 2008.

County of San Diego. 2009. *Draft North County Multiple Species Conservation Program*. February 2009.

County of San Diego. 2010. *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources*. Fourth Revision. Land Use and Environment Group, Department of Land Use and Planning & Development Services,

Department of Public Works. September 15, 2010. http://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/Biological_Guidelines.pdf.

Dudek. 2009. *Biological Resources Technical Memorandum for the Merriam Mountains Specific Plan and the General Plan Amendment/Circulation Element, San Diego County, California.* Memorandum to the County of San Diego Department of Planning and Land Use. January 15, 2009.

Emmel, T.C., and J.F. Emmel. 1973. *The Butterflies of Southern California*. Science Series 26:1–148. Natural History Museum of Los Angeles County. November 30, 1973.

Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California Department of Fish and Game. October 1986.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County.* March 2008. http://www.sdcanyonlands.org/canyon-groups/canyon-group-resources/canyon-enhancement-guide/189-canyon-enhancement-planning-guide-materials.

PSBS (Pacific Southwest Biological Services). 2003. Draft Merriam Mountains North San Diego County, California Preliminary Wildlife Movement Study. September 15, 2003.

PSBS. 2007. *Merriam Mountains Project Biological Technical Report: Summary of Studies and Impact Analysis.* June 15, 2007.

SDNHM (San Diego Natural History Museum). 2014a. Data retrieved from Herbarium and Plant Atlas databases for grid squares F8-F10, G8-G10, and H8-H10. *San Diego County Plant Atlas Project*. Online ed. Version February 2014. Accessed September 2014. http://www.sdplantatlas.org/publicsearch.aspx.

SDNHM. 2014b. Data retrieved for grid squares F8-F10, G8-G10, and H8-H10. *San Diego County Bird Atlas*. Google Earth presentation. Accessed September 2014. http://www.sdnhm.org/science/birds-and-mammals/projects/san-diego-county-bird-atlas/.

Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians*. 3rd edition. New York, New York: Houghton Mifflin Company.

Unitt, P. 2004. *San Diego County Bird Atlas*. San Diego, California: San Diego Natural History Museum.

USFWS (U.S. Fish and Wildlife Service). 2014. "Critical Habitat and Occurrence Data" [map]. Accessed September 2014. http://www.fws.gov/data.

Western Regional Climate Center. 2014. Historical Climate Information: Vista 1 NE. Accessed March 2014: http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9378.

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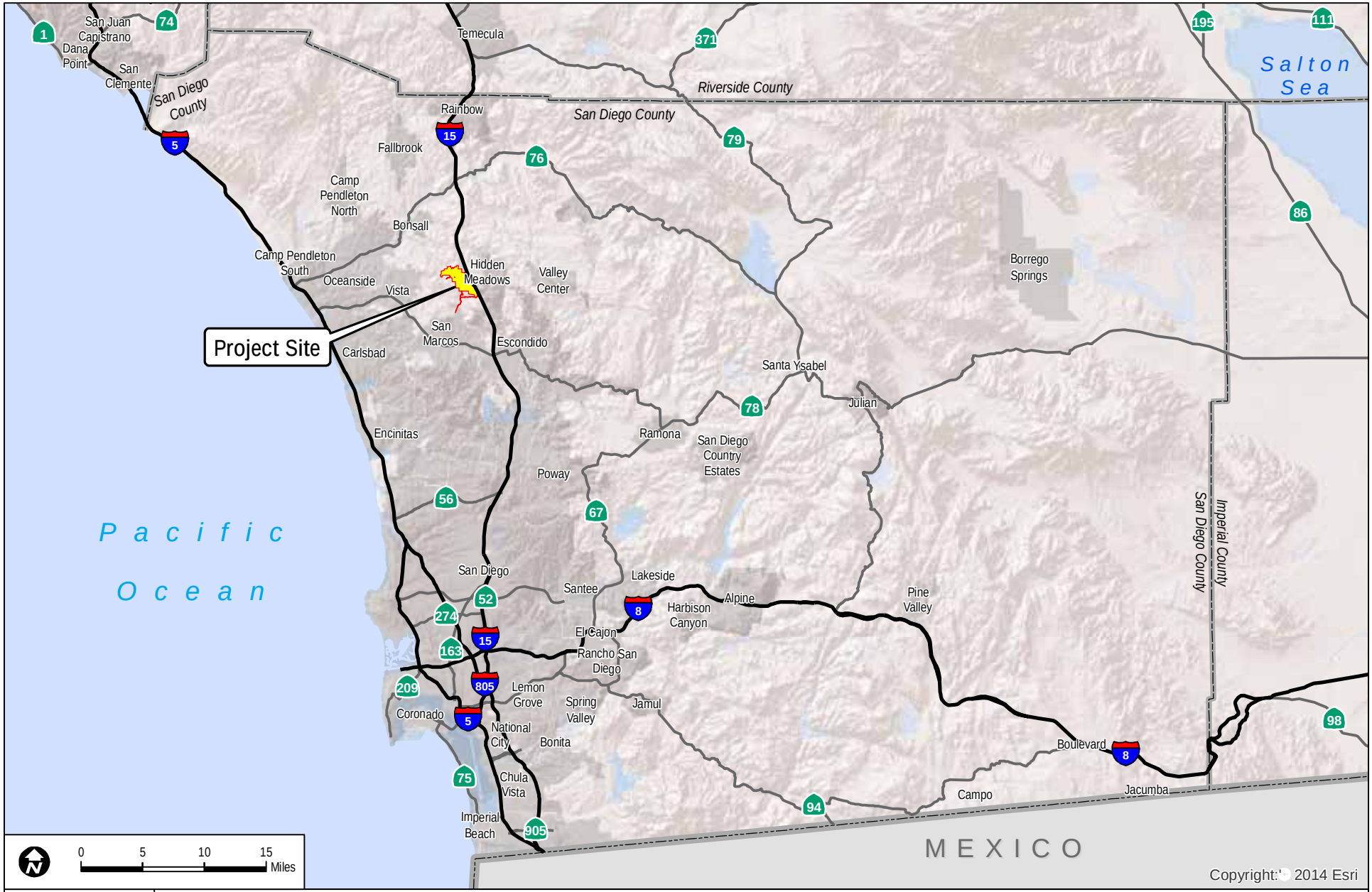

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FIGURE 1

Regional Map

Newland Sierra Project Draft Resource Protection Plan

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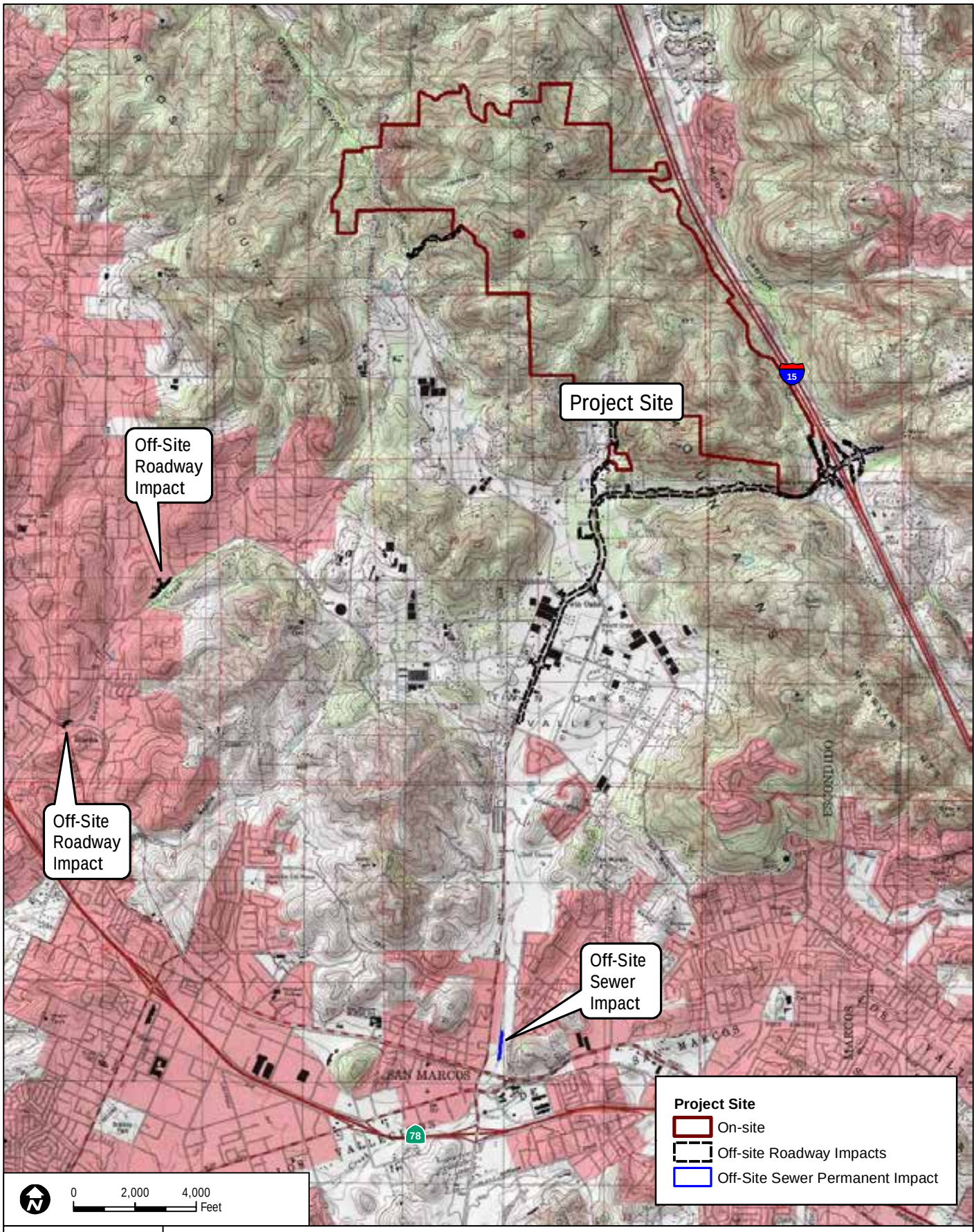

SOURCE: USGS 7.5-Minute Series San Marcos Quadrangle.

FIGURE 2

Vicinity Map

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Newland Sierra Project Draft Resource Protection Plan

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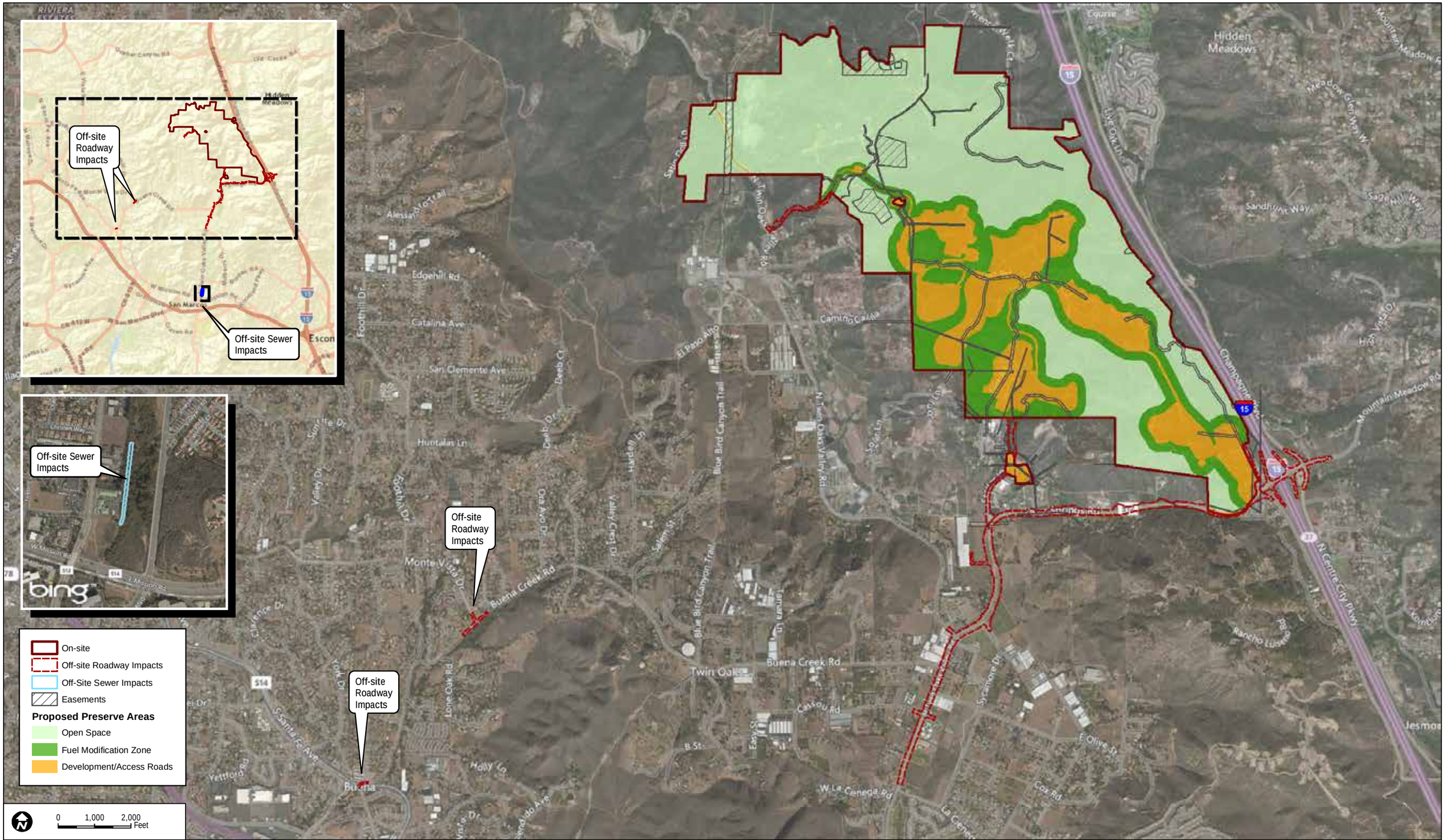

SOURCE: Bing 2016; Fuscoe Engineering 2016

FIGURE 3

Proposed Project

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Newland Sierra Project Draft Resource Protection Plan

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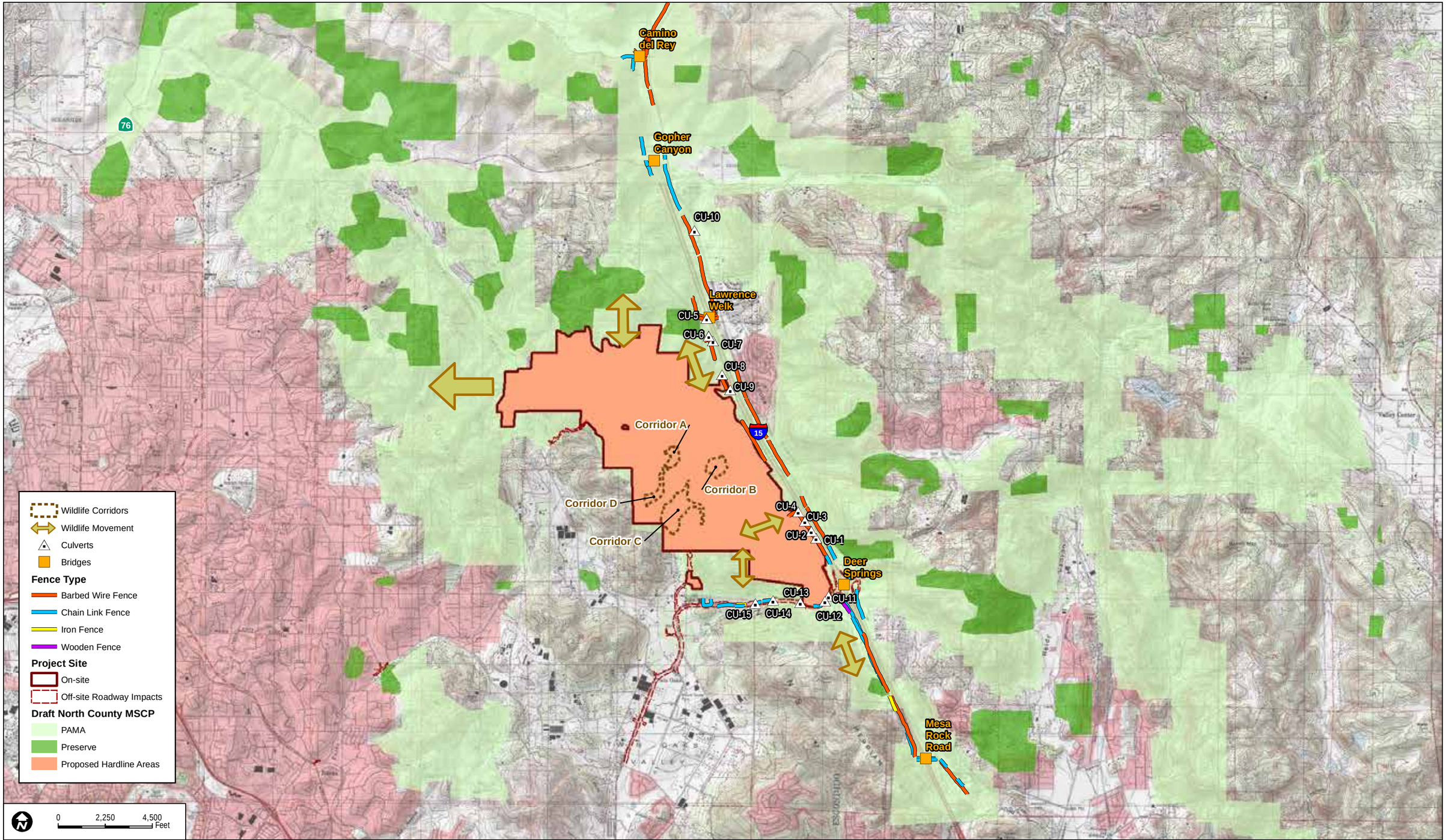

SOURCE: Bing 2016; County of San Diego 2014

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FIGURE 9

Habitat Connectivity and Wildlife Corridors

Newland Sierra Project Draft Resource Protection Plan

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Project Site
- On-site
- Off-site

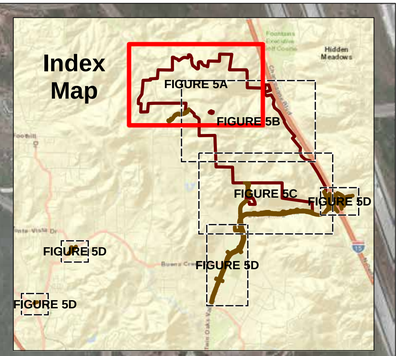
Vegetation Communities
- AGR, Agriculture
- CLOW, Coast live oak woodland
- CSS, Diegan coastal sage scrub
- CSS-CHP, Coastal sage - chaparral transition
- CSSB, Coastal sage scrub - Baccharis dominated
- DEV, Urban/developed
- DH, Disturbed habitat
- DW, Disturbed Wetland
- E-AGR, Agriculture
- EUC, Eucalyptus woodland
- FWM, Freshwater marsh
- I-AGR, Intensive agriculture
- IA, Intensive agriculture
- MFS, Mulefat scrub
- NNG, Non-native grassland
- NNW, Non-native Woodland
- ORC, Orchard and vineyards
- ORF, Southern coast live oak riparian forest
- SMX, Southern mixed chaparral
- SOC, Scrub oak chaparral
- SWS, Southern willow scrub
- SWS/TS, Southern willow scrub/tamarisk scrub
- dBSC, Flat-topped buckwheat - disturbed
- dCLOW, Coast Live Oak Woodland - disturbed
- dCSS, Diegan coastal sage scrub - disturbed
- dCSSB, Coastal sage scrub - Baccharis dominated - disturbed
- dSMX, Southern mixed chaparral - disturbed
- Oak Root Zones
- Las Posas Soil Series

Wildlife Species
- Coastal California gnatcatcher
- Nuttall's woodpecker
- Oak titmouse
- Red-shouldered hawk
- Sharp-shinned hawk
- Yellow warbler
- Desert woodrat (midden)
- Blainville's horned lizard
- Blainville's horned lizard (scat)
- Coast patch-nosed snake
- Coastal whiptail
- Red diamond rattlesnake

Plant Species
- Engelmann oak
- Munz's sage
- Ramona horkelia
- Summer holly
- ashy spike-moss
- chaparral rein orchid

Engelmann oak
Orcutt's brodiaea
Ramona horkelia
Summer holly

Index Map



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SOURCE: SANDAG Imagery 2014; Fuscoe Engineering 2017

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FIGURE 5A
Biological Resources

Newland Sierra Project Draft Resource Protection Plan

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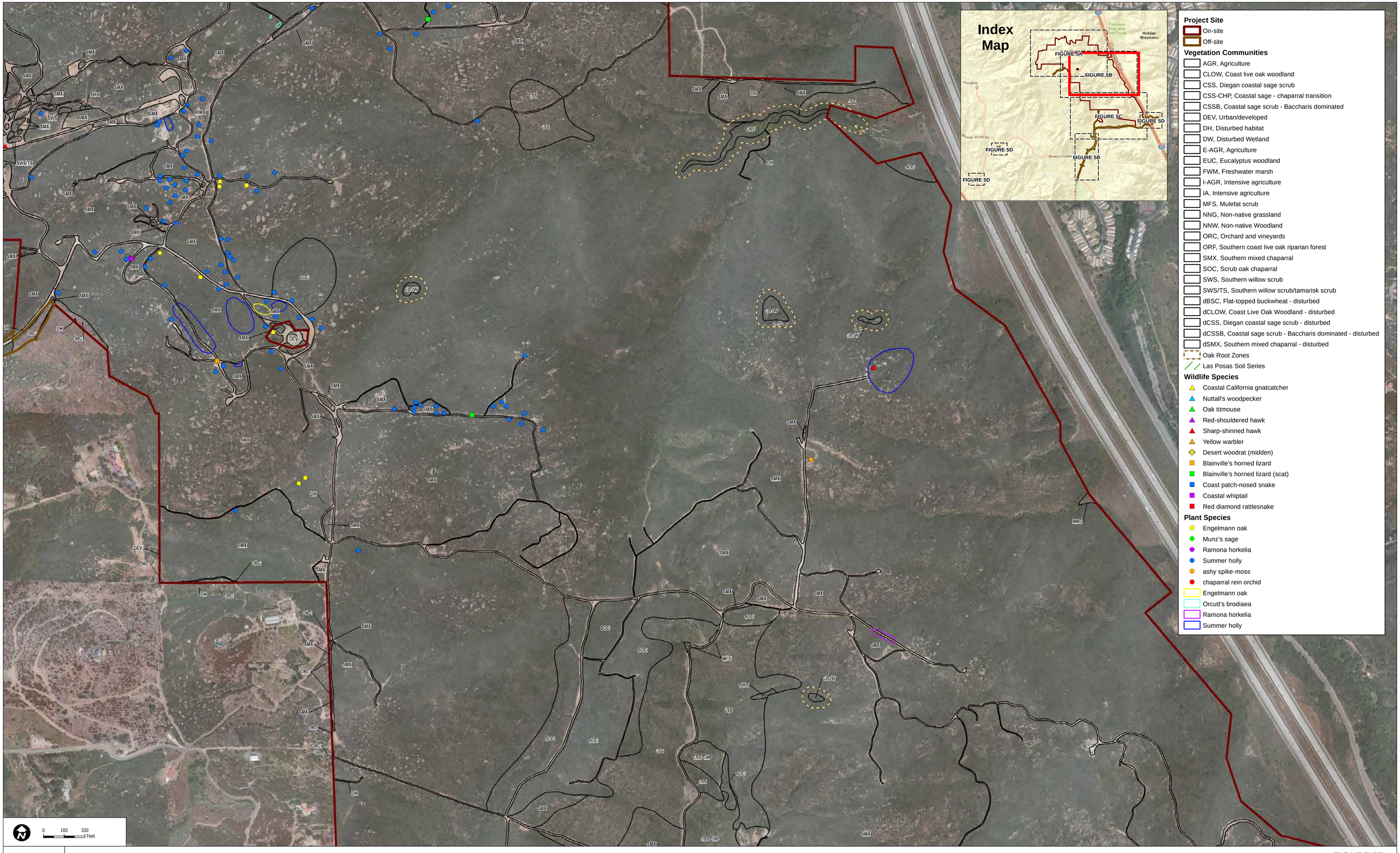

SOURCE: SANDAG Imagery 2014; Fuscoe Engineering 2017

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FIGURE 5B

Biological Resources

Newland Sierra Project Draft Resource Protection Plan

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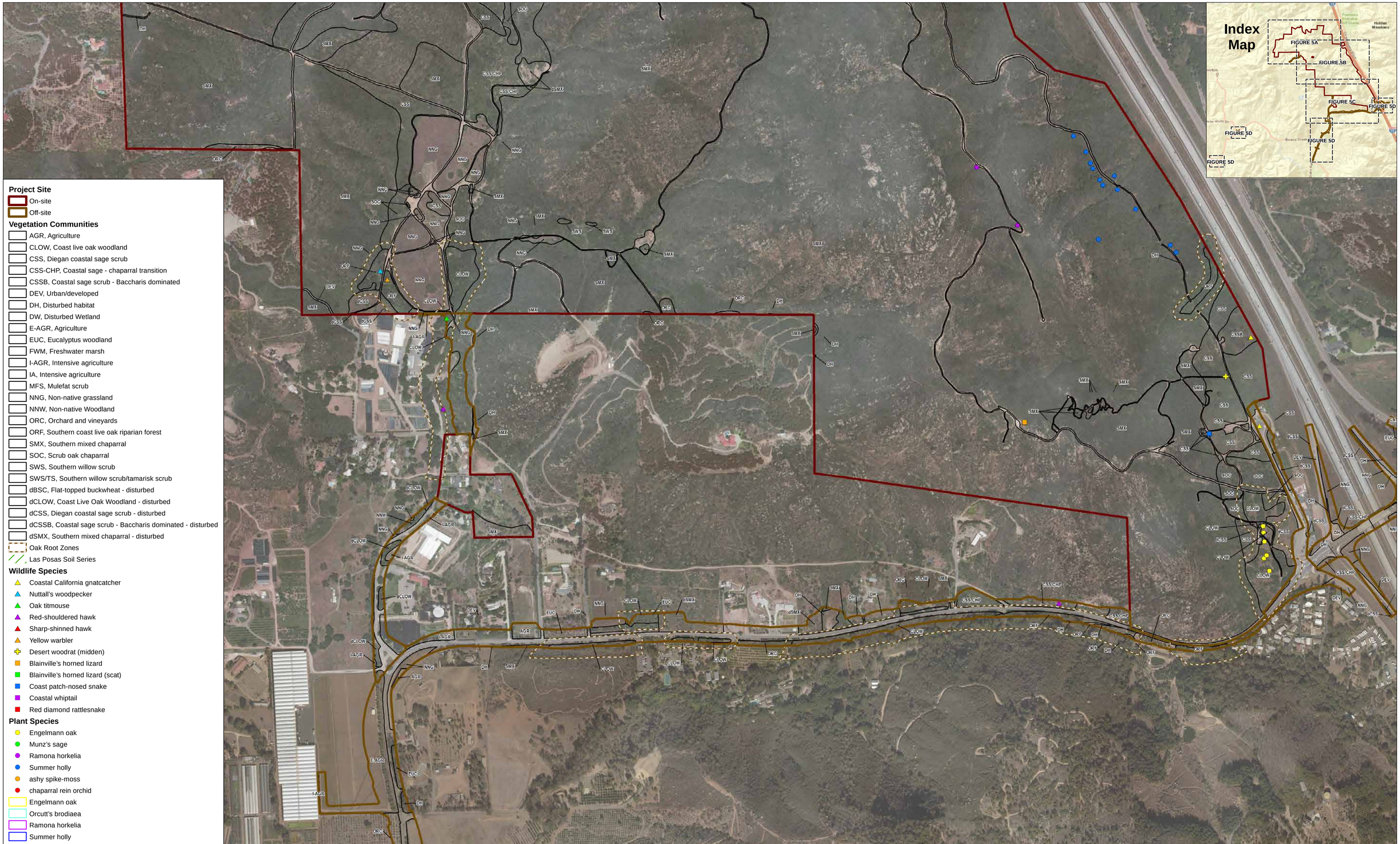

SOURCE: SANDAG Imagery 2014; Fuscoe Engineering 2017

DUDEK

FIGURE 5C

Biological Resources

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Project Site
- On-site
- Off-site

Wildlife Species
- Coastal California gnatcatcher
- Nuttall's woodpecker
- Oak titmouse
- Red-shouldered hawk
- Sharp-shinned hawk
- Yellow warbler
- Desert woodrat (midden)
- Blainville's horned lizard
- Blainville's horned lizard (scat)
- Coast patch-nosed snake
- Coastal whiptail
- Red diamond rattlesnake

Plant Species
- Engelmann oak
- Munz's sage
- Ramona horkelia
- Summer holly
- ashy spike-moss
- chaparral rein orchid
- Engelmann oak
- Orcutt's brodiaea
- Ramona horkelia
- Summer holly

Vegetation Communities
- AGR,
- CLOW, Coast live oak woodland
- CSS, Diegan coastal sage scrub
- CSS-CHP, Coastal sage - chaparral transition
- CSSB, Coastal sage scrub - Baccharis dominated
- DEV, Urban/developed
- DH, Disturbed habitat
- DW, Disturbed Wetland
- E-AGR,
- EUC, Eucalyptus woodland
- FWM, Freshwater marsh
- I-AGR, Intensive agriculture
- IA, Intensive agriculture
- MFS, Mulefat scrub
- NNG, Non-native grassland
- NNW, Non-native Woodland
- ORC, Orchard and vineyards
- ORF, Southern coast live oak riparian forest
- SMX, Southern mixed chaparral
- SOC, Scrub oak chaparral
- SWS, Southern willow scrub
- SWS/TS, Southern willow scrub/tamarisk scrub
- dBSC, Flat-topped buckwheat - disturbed
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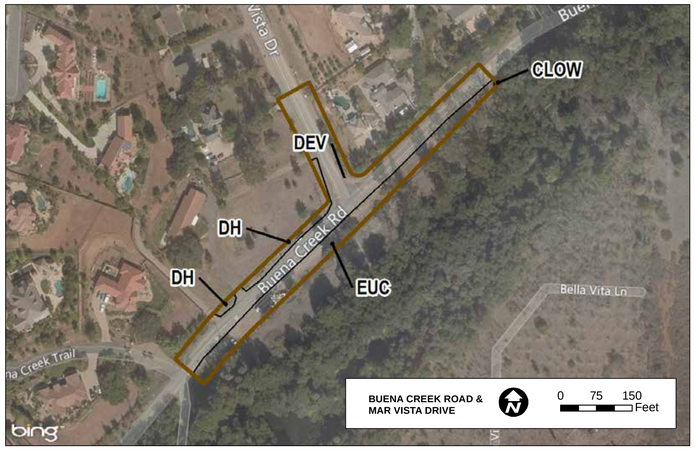
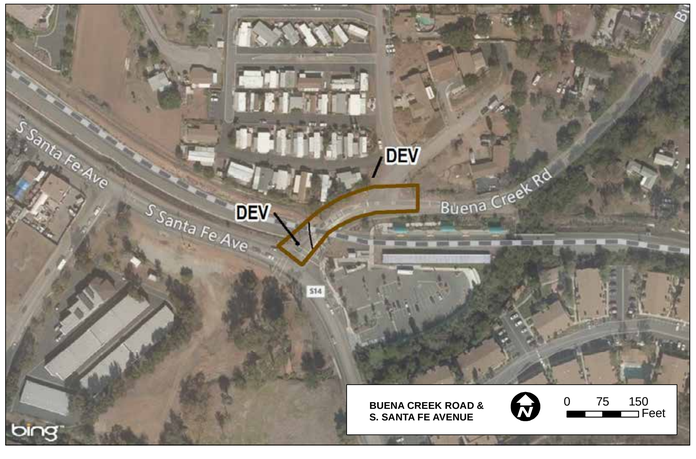
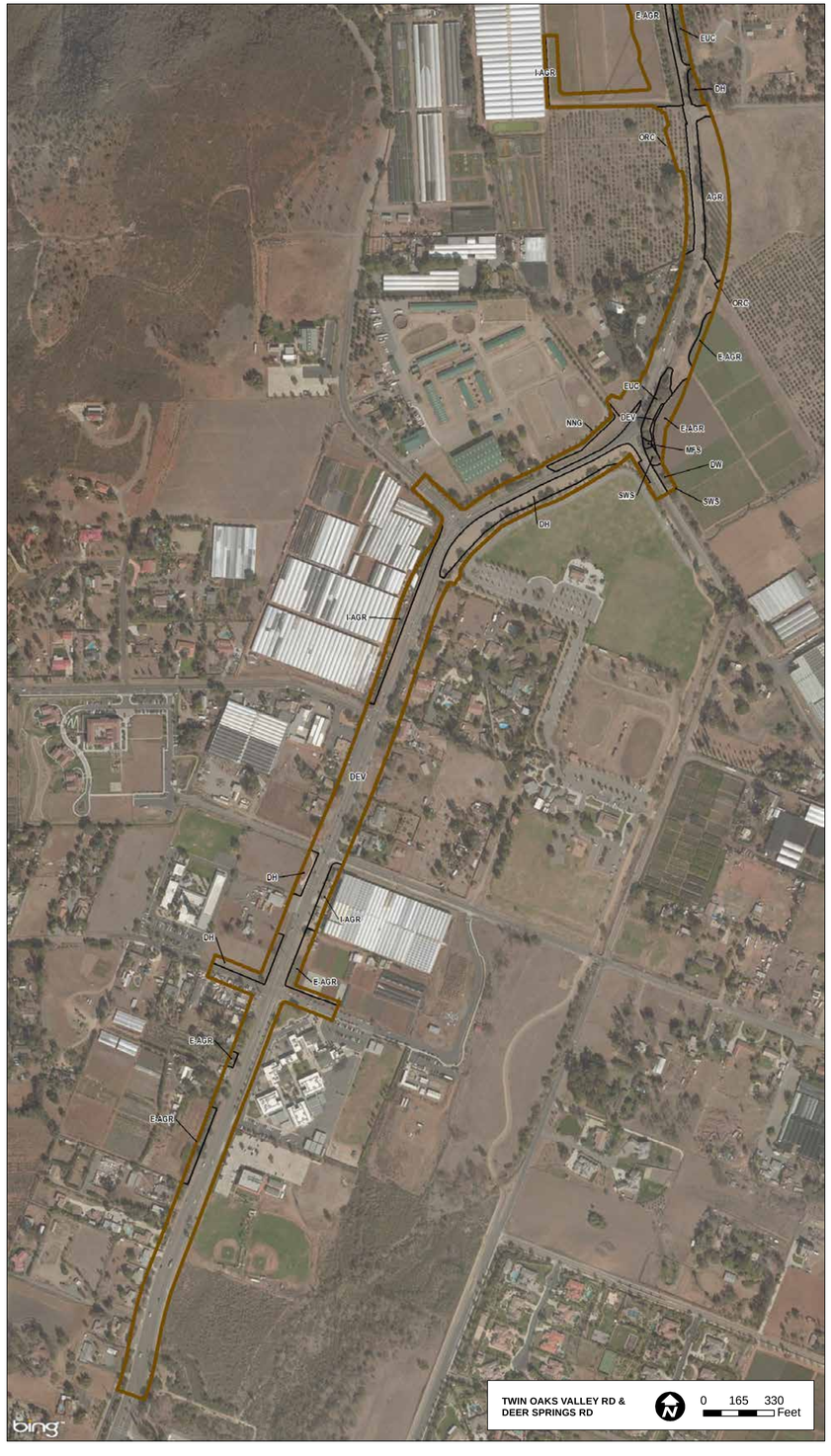
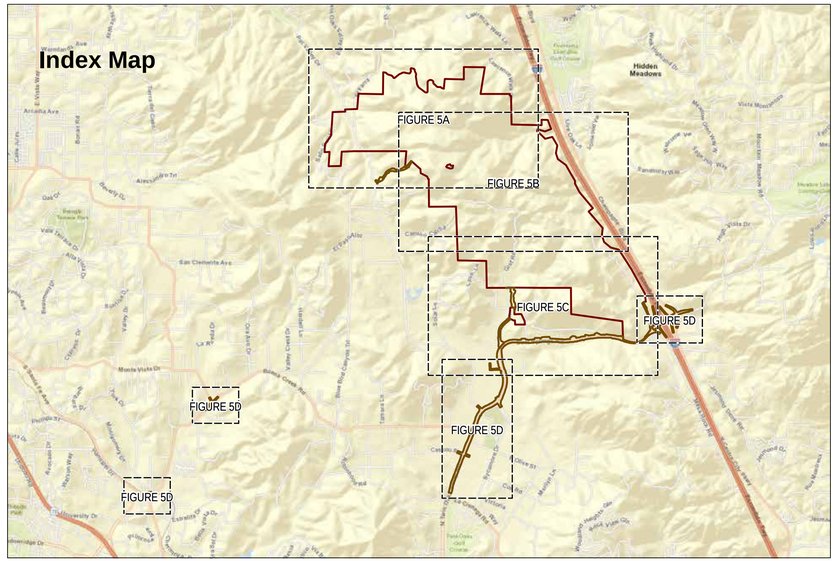
- dCSS, Diegan coastal sage scrub - disturbed
- dCSSB, Coastal sage scrub - Baccharis dominated - disturbed
- dSMX, Southern mixed chaparral - disturbed









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SOURCE: SANDAG IMAGERY 2014; FUSCOE ENGINEERING 2017

FIGURE 5D
Biological Resources

Newland Sierra Project Draft Resource Protection Plan

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Project Site
- On-site
- Off-site
- RPO 75-Ft Buffer
- Data Stations

Jurisdictional Waters (ACOE/CDFW/RWQCB)
- Ephemeral
- Intermittent
- Perennial
- RPO Wetlands

Jurisdictional Wetlands
- ACOE/CDFW/RWQCB/RPO COUNTY WETLANDS
- CDFW/COUNTY RPO WETLANDS
- CDFW ONLY

Vegetation Communities
- CLOW, Coast live oak woodland
- CSS, Diegan coastal sage scrub
- CSS-CHP, Coastal sage - chaparral transition
- CSSB, Coastal sage scrub - Baccharis dominated
- DEV, Urban/developed
- DH, Disturbed habitat
- EUC, Eucalyptus woodland
- FWM, Freshwater marsh
- IA, Intensive agriculture
- MFS, Mulefat scrub
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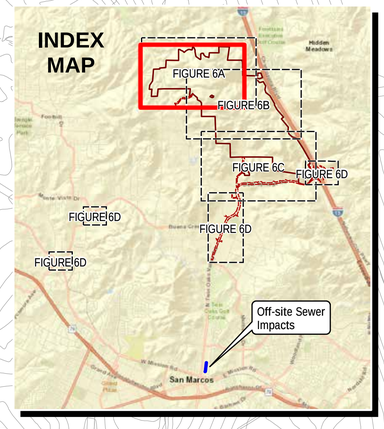
- SOC, Scrub oak chaparral
- SWS, Southern willow scrub
- SWS/TS, Southern willow scrub/tamarisk scrub
- dBSC, Flat-topped buckwheat - disturbed
- dCSS, Diegan coastal sage scrub - disturbed
- dCSSB, Coastal sage scrub - Baccharis dominated - disturbed
- dSMX, Southern mixed chaparral - disturbed

INDEX MAP



South Fork of Gopher Canyon

South Fork of Moosa Canyon

0 150 300 Feet

SOURCE:Topo-Fuscoe Engineering 2017

DUDEK

FIGURE 6A
Jurisdictional Resources

Newland Sierra Project Draft Resource Protection Plan

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Project Site
- On-site
- Off-site
- RPO 75-Ft Buffer
- Data Stations
- RPO Wetlands

Jurisdictional Wetlands
- ACOE/CDFW/RWQCB/RPO COUNTY WETLANDS
- CDFW/COUNTY RPO WETLANDS
- CDFW ONLY

Jurisdictional Waters (ACOE/CDFW/RWQCB)
- Ephemeral
- Intermittent
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Vegetation Communities
- CLOW, Coast live oak woodland
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- dCSSB, Coastal sage scrub - Baccharis dominated - disturbed
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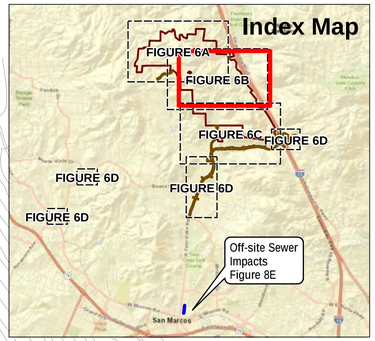
Index Map



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SOURCE: Fuscoe Engineering 2017

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FIGURE 6B
Jurisdictional Resources

Newland Sierra Project Draft Resource Protection Plan

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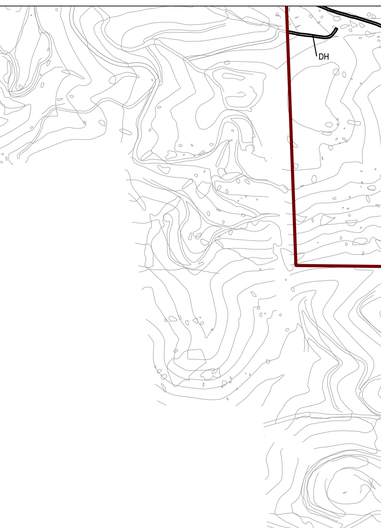

0 150 300 Feet

Project Site
- On-site
- Off-site
- RPO 75-Ft Buffer
- Data Stations
- RPO Wetlands

Jurisdictional Wetlands
- ACOE/CDFW/RWQCB/RPO COUNTY WETLANDS
- CDFW/COUNTY RPO WETLANDS
- CDFW ONLY

Jurisdictional Waters (ACOE/CDFW/RWQCB)
- Ephemeral
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- Perennial

Vegetation Communities
- CLOW, Coast live oak woodland
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- dCSSB, Coastal sage scrub - Baccharis dominated - disturbed
- dSMX, Southern mixed chaparral - disturbed

SOURCE: Fuscoe Engineering 2017

DUDEK

Newland Sierra Project Draft Resource Protection Plan

FIGURE 6C
Jurisdictional Resources

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Project Site

- On-site
- Off-site
- RPO Wetlands

Jurisdictional Wetlands

- ACOE/CDFW/RWQCB/RPO COUNTY WETLANDS
- CDFW/COUNTY RPO WETLANDS
- ACOE/CDFW/RWQCB WETLANDS
- CDFW ONLY

Jurisdictional Waters (ACOE/CDFW/RWQCB)

- Ephemeral
- Intermittent
- Perennial

Vegetation Communities

- AGR, Agriculture
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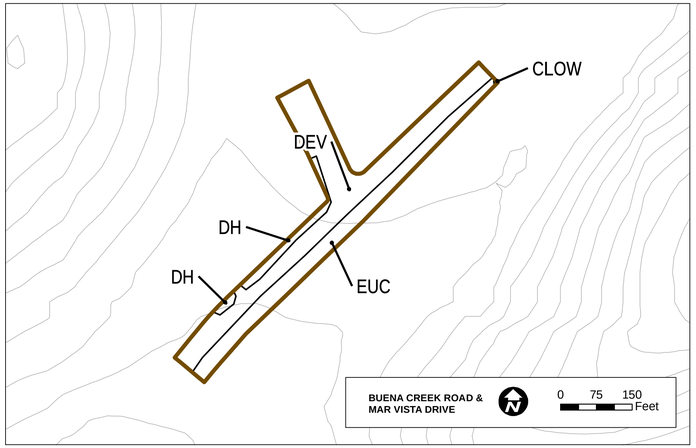

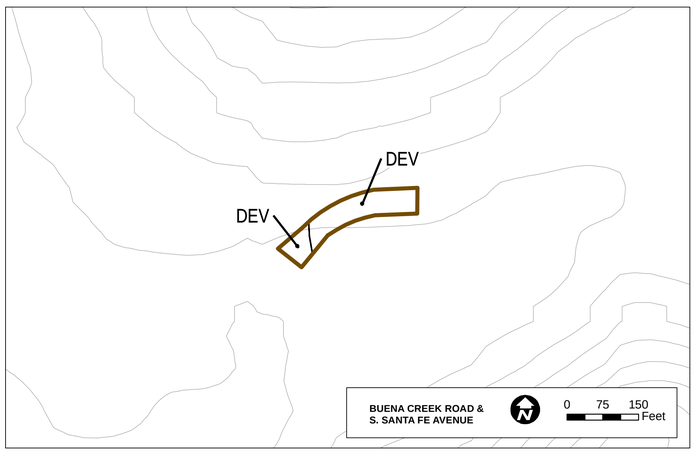

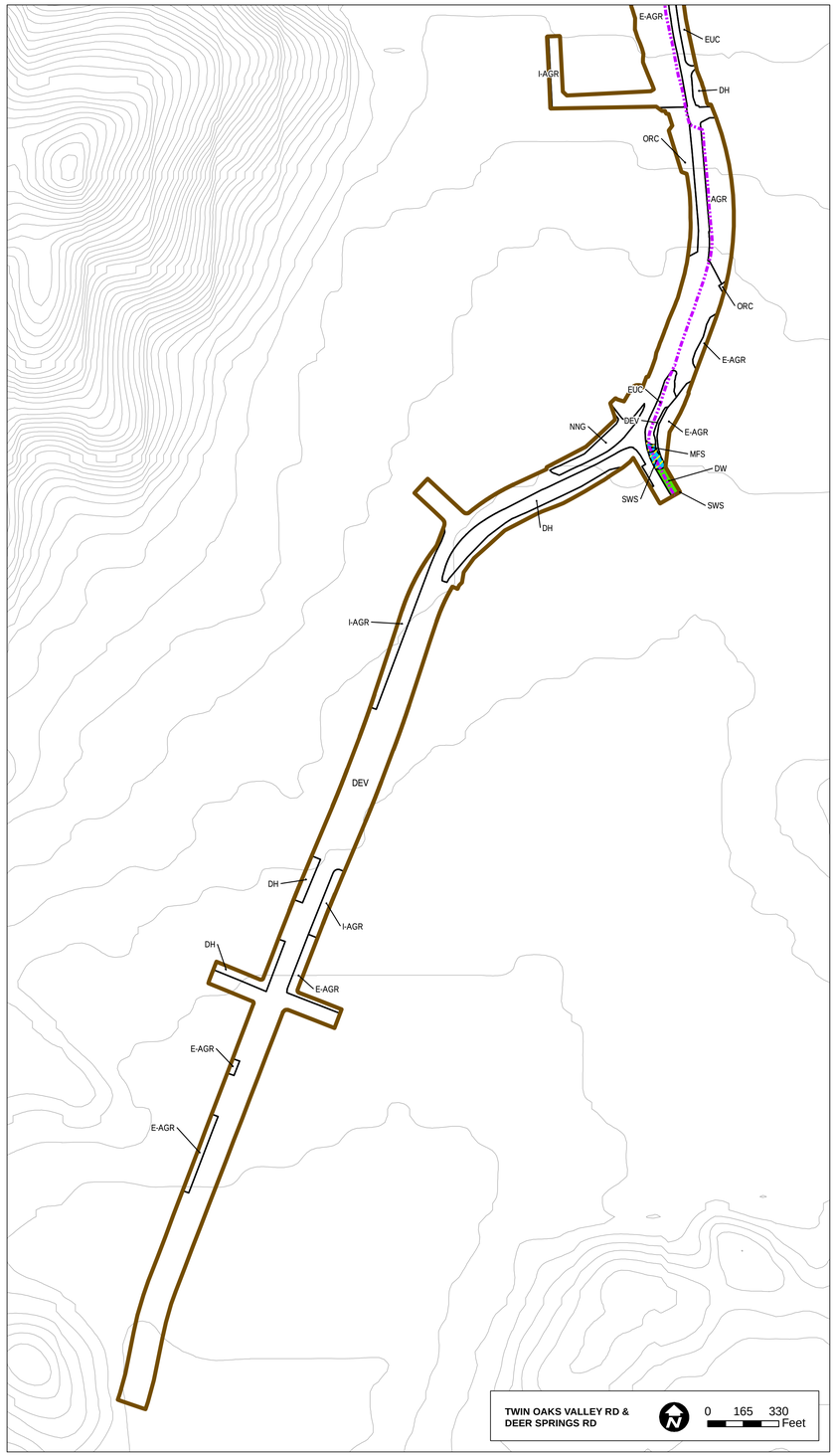

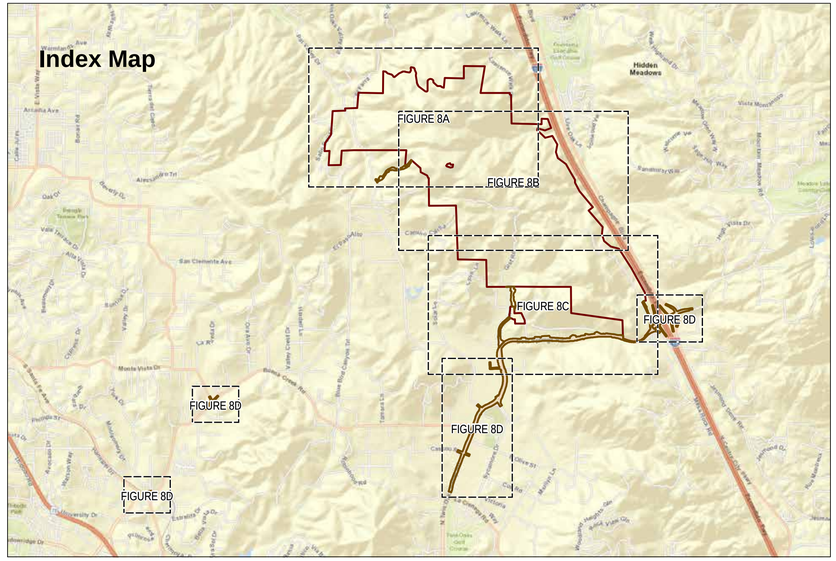

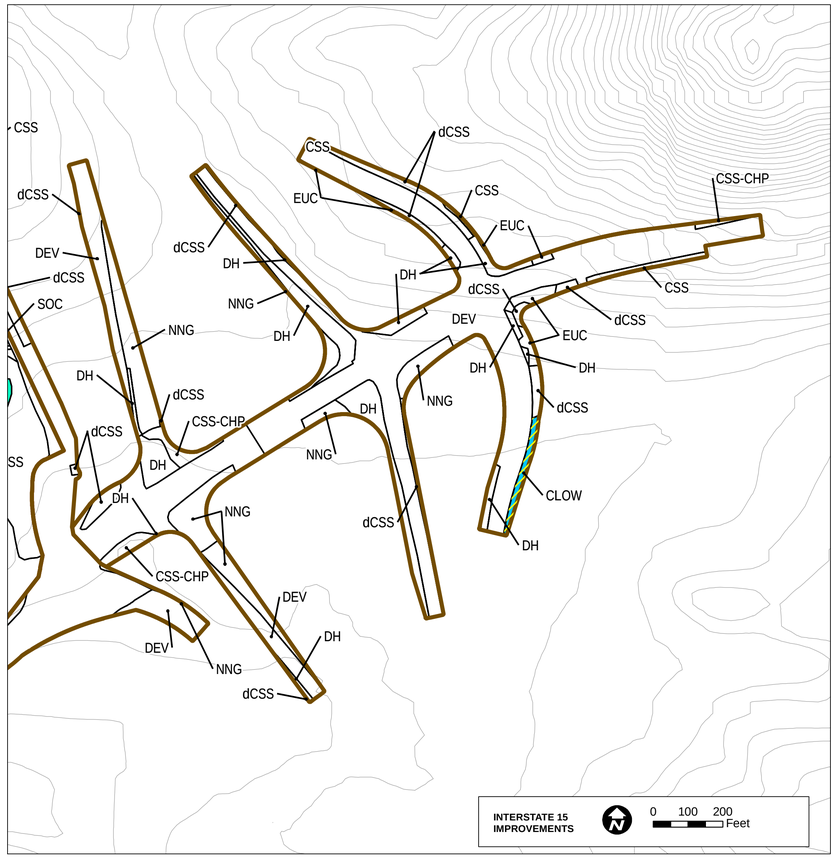

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SOURCE: SANDAG IMAGERY 2014; FUSCOE ENGINEERING 2017

FIGURE 6D
Jurisdictionall Resources

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100-Ft Buffer Of 30-Ft Sewer Easement

Proposed Sewer Line

Vegetation Mapping

Jurisdictional Wetlands

ACOE/CDFW/RWQCB/RPO COUNTY WETLANDS

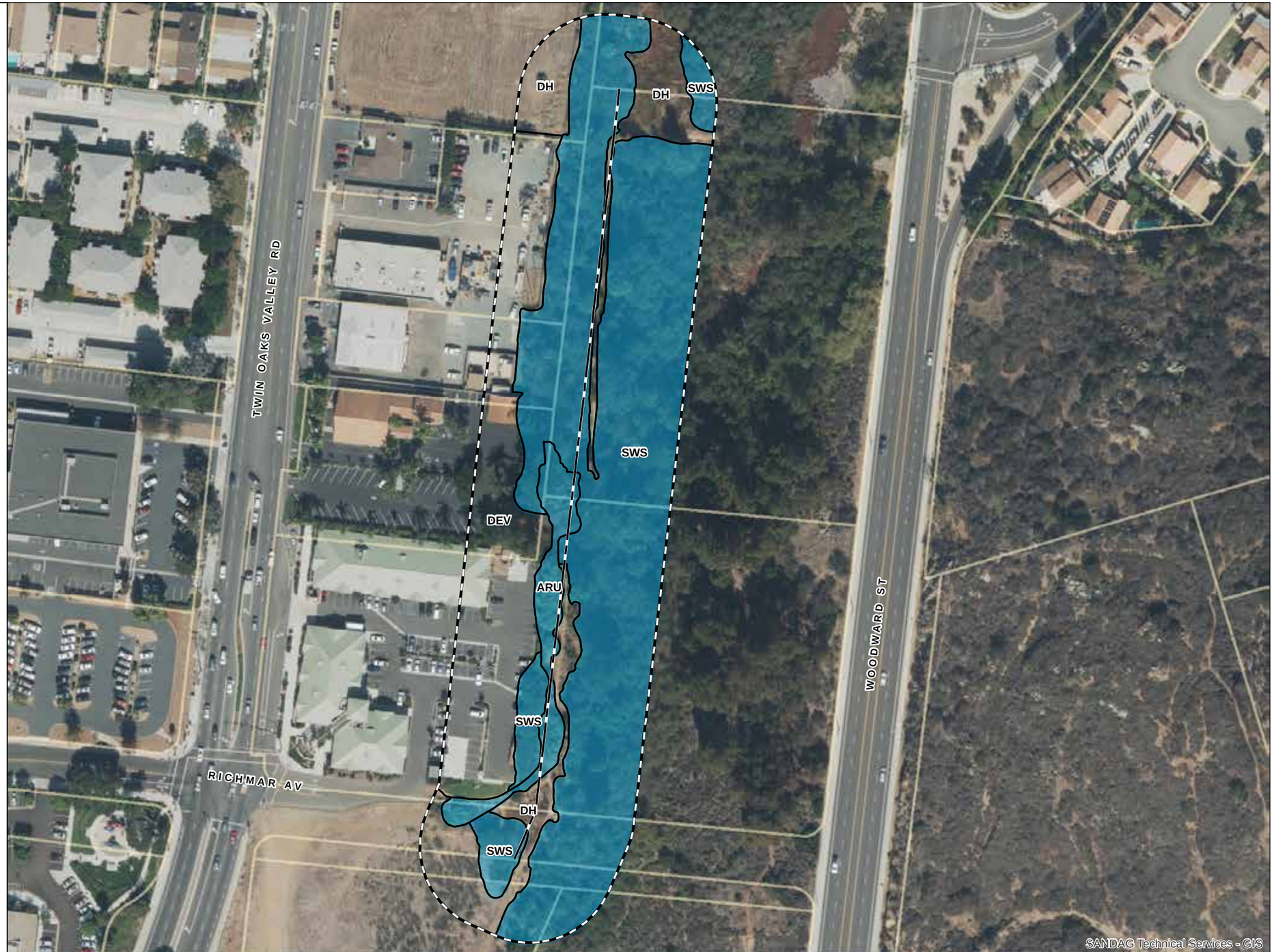
Vegetation Communities/Land Covers

ARU, Arundo Dominated Riparian

DEV, Urban Developed Ornamental

DH, Disturbed Habitat

SWS, Southern Willow Scrub



N 0 60 120 Feet

SOURCE: AERIAL-SANDAG IMAGERY 2014

DUDEK

FIGURE 6E

Jurisdictional Resources for Off-Site Wastewater Upgrade East of Twin Oaks Valley Road

Newland Sierra Project Draft Resource Protection Plan

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