Creekside Assisted Living

Technical Appendices

Appendix C

Biological Resources

ROCKS
BIOLOGICAL CONSULTING



CREEKSIDE ASSISTED LIVING PROJECT

BIOLOGICAL TECHNICAL REPORT

San Diego County, California

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1 SUMMARY

This report presents the results of a general biological resource assessment conducted by Rocks Biological Consulting (RBC) for the Creekside Assisted Living Project (project) in the City of San Marcos, San Diego County, California. The approximately 3.78-acre site is within the County of draft San Marcos Subarea Plan/Natural Community Conservation Plan (NCCP) for the City of San Marcos.

2 INTRODUCTION

2.1 PROJECT LOCATION

The 3.78-acre project site is in the City of San Marcos, San Diego County, California. The project site is comprised of the following properties identified by San Diego County Assessor's Parcel Numbers (APNs): 220-063-03, and 220-063-05. The project site is located northeast of the intersection of North Twin Oaks Valley Road and East Mission Road and south of Richmar Avenue and is bordered by undeveloped lots on the east and northeast (Figure 1). The eastern portion of the project site is adjacent to Twin Oaks Creek and a portion of the project site is within Twin Oaks Creek floodway/floodplain. The project occurs on the U.S. Geological Survey (USGS) 7.5' quadrangle (San Marcos) map, unsectioned land in Los Vallecitos de San Marcos land grant.

2.2 PROJECT DESCRIPTION

The project would include development of an approximate 121,566 square foot assisted living residence on the approximately 3.78-acre site at the southeast corner of Twin Oaks Valley Road and Richmar Avenue in the City of San Marcos (APNs 220-063-03 and 220-063-05). Based on preliminary plans, the project applicant is proposing approximately 138 units, which would include a mix of memory care units, studio units, one-bedroom units and two-bedroom units, support facilities, garden/outdoor areas, landscaping and parking.

The project site has a General Plan designation of Specific Plan Area (Heart of the City Specific Plan – Commercial). The project applicant is requesting General Plan Amendment to remove the Richmar Avenue bridge from the Mobility Element, a Specific Plan Amendment to allow the Assisted Living Facility use within the commercial designation of the Heart of the City Specific Plan with approval of a Conditional Use Permit. The project site is adjacent to Twin Oaks Creek, and a portion of the site is within a regulatory floodway.

2.3 SCOPE OF WORK

This report provides an analysis of impacts on biological resources associated with the proposed project in the context of the draft San Marcos Subarea Plan (City of San Marcos 2001), the California Environmental Quality Act (CEQA; California Public Resources Code §§ 21000 et seq.), and state and federal regulations such as the federal Endangered Species Act (FESA; 16 U.S. Code [U.S.C.] § 1531 et seq.), Clean Water Act (CWA; 33 U.S.C. §1251 et seq.), and the California Fish and Game Code (CFGC).

For this analysis, the following tasks were performed: (1) Biological and aquatic resource database review; (2) General biological survey and vegetation mapping; (3) Habitat assessments for special-status plant and wildlife species; and (4) A reconnaissance-level assessment for areas that may be jurisdictional under the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the CWA, under the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act; Water Code Section 13000 et seq.), and under the California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the CFGC. No formal aquatic resources delineation was performed and no focused surveys for sensitive plants or wildlife were conducted, but locations of such species, if observed, were noted.

2.4 REGULATORY FRAMEWORK

Several regulations have been established by federal, state, and local agencies to protect and conserve biological resources as listed below. Detailed descriptions of state and federal agency regulations that may be applicable to the project are provided in Appendix A, and a summary of the Draft San Marcos MHCP Subarea Plan and General Plan are provided below.

Federal Regulations

- FESA
- Migratory Bird Treaty Act (MBTA)
- Rivers and Harbors Appropriation Act of 1899
- CWA

State Regulations

- California Endangered Species Act
- CEQA
- Native Plant Protection Act and NCCP Act
- CFGC Sections 1600-1602
- CFGC Sections 3503, 3511, 3513, 3800, 4700, 5050, and 5515
- Porter-Cologne Act

Regional and Local Plans

- City of San Marcos General Plan
- San Diego County MHCP
- Draft San Marcos Subarea Plan

2.4.1 MHCP BACKGROUND & REGULATORY CONSIDERATIONS

The proposed project site occurs within the County of San Diego MHCP, a regional Natural Community Conservation Plan (NCCP) and Habitat Conservation Plan (HCP) under state and federal endangered species acts. The plan was developed by the San Diego Association of Governments (SANDAG), the County of San Diego, and the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista as a regional approach to species

conservation and development planning. Each participating agency is responsible for drafting subarea plan/implementing regulations and an implementing agreement with the US Fish and Wildlife Service (USFWS) or the California Department of Fish and Wildlife (CDFW) in order to enact the MHCP within their jurisdiction.

The City of San Marcos prepared its *Draft MHCP Subarea Plan* in 2001 but the plan has not yet been adopted by the San Marcos City Council and the City does not yet have an MHCP implementing agreement with the USFWS or the CDFW. The City of San Marcos uses the draft Subarea Plan as a guide in project processing and mitigation planning.

A portion of the parcel occurs within an area designated under the City of San Marcos' Draft MHCP Subarea Plan as a Focused Planning Area (FPA). FPAs are defined as "Lands of high biological value that will be considered for inclusion at varying conservation rates as part of this plan." Most of this area would be avoided under the project, however a very small portion of the rear parking area (0.06 acre) would occur within the FPA.

2.4.2 SAN MARCOS GENERAL PLAN

The of the City's General Plan Conservation and Open Space Element (2012) includes policies applicable to the project site, as follows:

Goal COS-1: Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.

- Policy COS-1.1: Support the protection of biological resources through the establishment, restoration, and conservation of high quality habitat areas.
- Policy COS-1.2: Ensure that new development, including Capital Improvement Projects, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats policy.
- Policy COS-1.3: Continue to work with other federal, State, regional, and local agencies to implement the MHCP.

Goal COS-2: The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.

- Policy COS-2.1: Provide and protect open space areas throughout the City for its recreational, agricultural, safety, and environmental value.
- Policy COS-2.2: Limit, to the extent feasible, the conversion of open space to urban uses and place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, water and agricultural resources protection, and overall community benefit.
- Policy COS-2.6: Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.

Goal COS-3: Protect natural topography to preserve and enhance the natural beauty of San Marcos.

- Policy COS-3.3: Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.
- Policy COS-3.4: Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.

Goal COS-8: Focus watershed protection, surface and groundwater quality management on sources and practices that the City has the ability to affect.

- Policy COS-8.4: Require new development and redevelopment to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, Best Management Practices (BMPs), low impact development (LID), hydromodification strategies consistent with the Current San Diego Regional Water Quality Control Board Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, and all future municipal stormwater permits.

2.5 EXISTING CONDITIONS

The project site is relatively flat with elevations of approximately 573 to 607 feet above mean sea level (amsl). The majority of the project site supports non-native grassland and ruderal/weedy vegetation (Figure 2). The eastern portion of the site, though, supports native habitats including southern riparian woodland, with small amounts of southern willow scrub, southern mixed chaparral, and Diegan coastal sage scrub scattered on the eastern side of the site.

3 METHODS

On-site resources and potential impacts on biological resources as well as an analysis of project consistency with CEQA, the MHCP, and the draft San Marcos Subarea Plan were performed for the project and included a database query, literature review, and field survey.

RBC biologist Brenda Bennett and regulatory specialist Sarah Krecja conducted a field survey on July 18, 2019. The field survey focused on a number of objectives to comply with CEQA requirements, including general biological surveys and vegetation mapping; habitat assessments for special-status species; and a reconnaissance-level aquatic resource assessment of potential local, state, and/or federal jurisdictional wetland and/or waters of the U.S./State.

3.1 DATABASE QUERIES AND LITERATURE REVIEW

Prior to the field survey, RBC queried and reviewed the following databases and literature:

- CDFW's California Natural Diversity Database (CNDDB; CDFW 2019a, CDFW 2019b) within one mile of the project site (Figure 3A)

- USFWS Database of Species (USFWS 2019b) within one mile of the project site (Figure 3B)
- USFWS Designated Critical Habitat (USFWS 2019a) within one mile of the project site (Figure 3B)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2019) for the San Marcos USGS 7.5' quadrangle and surrounding eight quadrangles in the elevational range of 450 to 650 feet amsl
- Natural Resources Conservation Service (NRCS) (NRCS 2019) for the soils present on the project site
- USFWS National Wetlands Inventory data (USFWS 2019c)
- USGS National Hydrography Dataset and topography data (USGS 2018)

3.2 VEGETATION MAPPING AND GENERAL BIOLOGICAL SURVEYS

RBC biologists identified plant species using *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012) and local botanical knowledge. The project site was traversed on foot and binoculars (10x42) were used to aid in field identification of wildlife species. Plant and wildlife species observed on the project site are presented in Appendix B. Vegetation was mapped directly on a 200-scale (1"=200') aerial photograph following Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986).

3.3 INITIAL AQUATIC RESOURCE ASSESSMENT

RBC conducted an initial assessment to identify potential areas that may be considered jurisdictional under the Corps pursuant to Section 404 of the CWA; jurisdictional under the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Act; and streambed and riparian habitats under the CDFW pursuant to Cal. Fish and Game Code §1602. No formal jurisdictional delineation was conducted as part of this effort.

4 RESULTS

4.1 DATABASE QUERIES AND LITERATURE REVIEW RESULTS

The CNDDB and USFWS database results include historical occurrences of four special-status plant species and four special-status wildlife species within one mile of the project site (Figure 3A and 3B; CDFW 2019a and USFWS 2019b). A wider multiple-quadrangle search of the CNPS electronic inventory search results included an additional 44 plant species with a California Rare Plant Ranking (CRPR) of 1B.1 or 1B.2. Analysis of the potential for special-status species occurrence on-site is provided below and in Appendix C.

4.2.1 SPECIAL-STATUS PLANT SPECIES

CNDDB results identify a historical occurrence of one special-status plant species in the immediate project area, spreading navarretia (*Navarretia fossalis*; federally threatened, CRPR 1B.1). Historical occurrences for three additional special-status plant species, Parry's tetracoccus (*Tetracoccus dioicus*; CRPR 1B.2), San Diego button-celery (*Eryngium aristulatum* var. *parishii*; federally endangered, state endangered, CRPR 1B.1), and southern tarplant (*Centromadia parryi* ssp. *australis*; CRPR 1B.1), are identified within one mile of the project site (Figure 3A; CDFW 2019a). However, based on lack of suitable vernal pool habitat and historical site disturbance, these special-status plant species do not have a moderate or high potential to occur on the project site (Appendix C).

4.2.2 SPECIAL-STATUS WILDLIFE SPECIES

CNDDB and USFWS database results identify one federally or state-listed wildlife species in the immediate project area, least Bell's vireo (*Vireo bellii pusillus*; federally, state endangered). Historical occurrences for three additional special-status wildlife species, American badger (*Taxidea taxus*; CDFW Species of Special Concern) coastal California gnatcatcher (*Polioptila californica californica*; federally threatened, CDFW Species of Special Concern) and Townsend's big-eared bat (*Corynorhinus townsendii*; CDFW Species of Special Concern) occur within one mile of the project site (Figure 3A and 3B; CDFW 2019a and USFWS 2019b), and USFWS designated critical habitat for coastal California gnatcatcher occurs within three miles of the project site (Figure 3B; USFWS 2019a).

4.2 VEGETATION MAPPING AND GENERAL BIOLOGICAL SURVEY

The project site supports primarily ruderal, weedy vegetation and non-native grassland, with smaller areas of native habitats such as Diegan coastal sage scrub and southern riparian woodland. Based on a review of historic aerial photographs, the property has been mildly disturbed in the past in the form of roads. Plant and wildlife species observed during the field survey are presented in Appendix B.

4.2.1 VEGETATION COMMUNITIES

Developed

Developed lands within the project site (0.33 acre) support no native vegetation and are comprised of paved and dirt roads, and bare ground (Figure 2). Developed lands are found on the western portion of the site.

Diegan Coastal Sage Scrub

Diegan coastal sage scrub habitat (0.21 acre) occurs in the northeastern corner of the project site and is dominated by California buckwheat (*Eriogonum fasciculatum*) (Figure 2). This vegetation community is a form of coastal sage scrub comprised of low, soft-woody subshrubs to about one meter (three feet) high, many of which are facultatively drought-deciduous.

Diegan Coastal Sage Scrub - *Baccharis* Dominated

Diegan coastal sage scrub – *Baccharis* dominated habitat (0.04 acre) occurs in the northern portion of the project site and contains coyote brush (*Baccharis pilularis*) and broom baccharis (*B. sarothroides*) (Figure 2). This vegetation community is a form of Diegan coastal sage scrub comprised of low, soft-woody subshrubs to about one meter high, containing more than 50% cover of one or more *Baccharis* species.

Disturbed

Disturbed lands within the project site (0.12 acre) support bare ground or sparse non-native plant species that have been established through human disturbance. Disturbed lands on the project site consist of a human-disturbed area at the northern end of the project site (Figure 2).

Eucalyptus Woodland

Eucalyptus woodland habitat within the project site (0.02 acre) occurs at the northern project boundary and supports groves of eucalyptus trees (Eucalyptus spp.) within the Twin Oaks Creek (Figure 2). Eucalyptus woodlands typically support a minimal understory and provide suitable nesting habitat for raptor species.

Non-Native Grassland

Non-native grassland supports greater than 50 percent cover of non-native grasses. Non-native grassland vegetation within the project site (0.97 acre) largely occurs in the middle of the site and consists of red brome (*Bromus rubens*), rat-tail fescue (*Festuca myuros*), and doveweed (*Croton setiger*) (Figure 2).

Ornamental

Ornamental plantings are comprised of exotic trees and other ornamental vegetation that are maintained or artificially irrigated. The ornamental area within the project site (0.01 acre) includes hottentot-fig (*Carpobrotus edulis*), and shamel ash (*Fraxinus uhdei*).

Ruderal

Ruderal areas support vegetation capable of tolerating some form of disturbance. This disturbed community within the project site is dominated by broad-leaf herbaceous species with a less than 50 percent cover of non-native grasses. Ruderal habitat occurs in the center of the project site (1.44 acres) and primarily consists of short pod mustard (*Hirschfeldia incana*).

Southern Mixed Chaparral

Southern mixed chaparral is comprised of broad-leaved sclerophyllus shrubs 1.5-3 meters tall. Patches of bare soil are often scattered throughout chaparral habitats. Southern mixed chaparral within the project site (0.07 acre) is dominated by lemonade berry (*Rhus integrifolia*) and spiny redberry (*Rhamnus crocea*).

Southern Riparian Woodland

Southern riparian woodland is comprised of moderately dense stands of small trees or shrubs with scattered, taller riparian trees. Characteristic species include cottonwood (*Populus* spp.), sycamore (*Platanus* spp.), and willow (*Salix* spp.). Southern riparian woodland within the project site (0.53 acre) is dominated by black willow (*Salix gooddingii*) and arroyo willow (*Salix lasiolepis*).

Southern Willow Scrub

Southern willow scrub is comprised of dense, broadleaf, winter-deciduous riparian thickets dominated by willow species (*Salix* spp.) and are often too dense to allow significant understory development. Southern willow scrub within the project site (0.04 acre) is dominated by arroyo willow (*Salix lasiolepis*) and mulefat (*Baccharis salicifolia*).

Note that the small area of southern willow scrub on-site was cleared subsequent to the on-site biological survey. The habitat was cleared sometime in late 2019 by the Vallecitos Water District as part of their ongoing maintenance activities; the southern willow scrub was located within VWD's easement (see photo 8, Appendix D). Following clearing, the habitat is reported to have been mulched and no longer occurs in that area; however, given the unknown permitting history or jurisdictional status of this area, we have retained the southern willow scrub mapping for the purposes of this analysis.

4.2.2 SPECIAL-STATUS PLANT SPECIES

No special-status plant species were observed on the project site during the field survey and none have a moderate or high potential to occur on the project site due to historical disturbance and lack of suitable habitat. Plant species observed during the field survey are presented in Appendix B, and an assessment of special-status plant species to occur on-site is provided in Appendix C.

4.2.3 SPECIAL-STATUS WILDLIFE SPECIES

Two state and federally-listed species, least Bell's vireo (*Vireo bellii pusillus*) and coastal California gnatcatcher (*Poliptila californica californica*) have a moderate potential to occur on-site. No special-status wildlife species were observed during the field study. Wildlife species observed during the field survey are presented in Appendix B, and an assessment of special-status wildlife species' potential to occur on the project site is provided as Appendix C.

Coastal California Gnatcatcher (*Polioptila californica californica*)

The coastal California gnatcatcher is federally listed as threatened and is considered a California Species of Special Concern. This species is a year-round resident of southern California and is found in the six southernmost California counties located within the coastal plain (San Bernardino, Ventura, Los Angeles, Orange, San Diego, and Riverside).

The primary cause of this species' decline is conversion of coastal sage scrub vegetation to urban and agricultural uses. USFWS has estimated that coastal sage scrub habitat has been reduced by 70 to 90 percent of its historical extent (USFWS 1991). Coastal California gnatcatcher generally

inhabit coastal sage scrub habitats such as California buckwheat scrub dominated by California sagebrush and flat-topped buckwheat, generally below 1,500 feet in elevation along the coastal slope. When nesting, this species typically avoids slopes greater than 25% with dense, tall vegetation. Gnatcatcher pairs will attempt several nests each year (average of 4), each placed in a different location inside their breeding territory, but most nest attempts are unsuccessful because of depredation by a variety of species (Preston et al. 1998; Atwood and Bontrager 2001). Clutch size ranges from one to 5 eggs, with 3 or 4 eggs most common. Males and females will remain paired through the non-breeding season and will often expand their home range when not breeding.

This species is particularly vulnerable to habitat destruction and fragmentation because of their low dispersal rate, reliance on a specific habitat type, and low breeding success. Coastal California gnatcatcher has been described as "an obligate resident of coastal sage scrub" (Atwood and Bontrager 2001), a vegetation community that is vulnerable to urban pressures. The destruction of coastal sage scrub by wildfire also has a detrimental effect on local populations. This species also inhabits chaparral vegetation where adjacent to coastal sage scrub.

Historical occurrences for coastal California gnatcatcher are present within one mile of the project site (Figure 3A and 3B). Suitable habitat for the coastal California gnatcatcher occurs in the eastern portion of the site, east of the creek. Within the proposed project limits, this habitat is limited to one very small patch (0.04 acre) of Diegan coastal sage scrub – *Baccharis* dominated.

Coastal California gnatcatcher has a moderate potential for occurrence within the Diegan coastal sage scrub habitat on the eastern portion of the site, where considerable on-site habitat occurs and is connected to larger adjacent suitable habitats; however, gnatcatcher has low probability to occur within the proposed western project impact area, as the majority of the impact area is non-native grassland or disturbed and only a small very small patch (less than 0.5 acre) of *Baccharis*-dominated coastal sage scrub occurs (Figure 2).

Least Bell's Vireo (*Vireo bellii pusillus*)

The least Bell's vireo is federally and state-listed as endangered. Historically, this species was a common summer visitor to riparian habitat throughout much of California. The species is now found only in riparian woodlands in southern California, with the majority of breeding pairs in San Diego, Santa Barbara, and Riverside Counties. Least Bell's vireo is a migratory species and typically arrives in southern California in late March or early April and leaves for its wintering ground in September.

This species is restricted to riparian woodland and is most frequent in areas that include an understory of dense young willows or mulefat with a canopy of tall willows. Least Bell's vireo typically build their nests along edges of riparian thickets (Unitt 2004) approximately three feet above the ground.

Least Bell's vireo decline has been attributed primarily to habitat loss, degradation, and fragmentation combined with brood/nest parasitism by the brown-headed cowbird (*Molothrus ater*). Significant effort has been focused on preserving, enhancing, and creating suitable nesting

habitat for the species, and extensive cowbird control programs have helped this species populations rebound along several of its breeding drainages in southern California (USFWS 2006).

This species has been historically documented within Twin Oaks Creek in the vicinity of the project (Figure 3A and 3B). Additionally, the site supports riparian habitats that, though somewhat disturbed, support a willow component and have potential to support the least Bell's vireo (Figure 2). According to CNDDB records and reports, four males were observed in the area in 1997, one pair and one single male were observed in 2006, and two pair and three un-paired individuals were observed in 2008.

Least Bell's vireo has a moderate to high potential for occurrence within riparian habitats on site.

4.3 POTENTIAL FEDERAL AND STATE JURISDICTIONAL AQUATIC RESOURCES

The project site supports areas that will likely be considered jurisdictional aquatic resources by the Corps, RWQCB, and CDFW, as shown on Figure 4. Specifically, Twin Oaks Creek flows from north to south along the eastern project boundary and within the northern portion of the project site (Figure 4).

Twin Oaks Creek is a waterway that likely flows year-round. While a formal aquatic resources delineation has not been conducted on-site, the anticipated extent of the potentially jurisdictional area is indicated as southern riparian woodland on Figure 4 and may also include the areas mapped as southern willow scrub. Coordination and permitting with the Corps, RWQCB, and CDFW would be required for impacts on any jurisdictional aquatic resources. Pursuant to Section 404 of the Clean Water Act (CWA), the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands and non-wetlands/other waters of the U.S.), which include those waters listed in 33 CFR 328.3. Additionally, a water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The RWQCB provides oversight of the 401 permit process in California and is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." The CDFW regulates streambeds and riparian and wetland areas associated with streambeds to the full extent of the riparian dripline pursuant to the California Fish and Game Code (CFGC) section 1602.

A small utility access road occurs immediately upslope of Twin Oaks Creek; this pathway comes off East Mission Road and extends approximately 165 feet north, onto the project site. This area is a paved roadway; however, a small portion of the southern riparian canopy extends over the end of the roadway (see Appendix D - Photo 7). If impacts on the canopy were to occur, consultation with the agencies would be necessary and permits may be required. For alterations to the existing developed roadway that do not impact riparian trees, impacts on jurisdictional resources are not anticipated.

Note that the NRCS maps the extent of project site as hydric soils (NRCS 2019). A formal aquatic resources delineation would be required to confirm the presence or absence of federal- or state-

jurisdictional wetland parameters, including hydric soils, and/or the extent non-wetland waters of the State/U.S. and CDFW streambed (including associated riparian and/or wetland habitat).

5 IMPACTS

Direct impacts refer to any alteration, disturbance, or destruction of biological resources caused by and occurring at the same time and place as the project. Examples include direct losses to native habitats, potential jurisdictional waters, wetlands, and special-status species; the crushing of adult plants, bulbs, or seeds; the diversion of natural surface water flows; injury, death, and/or harassment of listed and/or special-status species; and the destruction of habitats necessary for species breeding, feeding, or sheltering.

Indirect impacts may occur later in time or at a place that is farther removed in distance from the project than direct impacts, but indirect impacts are still reasonably foreseeable and attributable to project-related activities. Examples include habitat fragmentation; elevated noise, dust, and lighting levels; changes in hydrology, runoff, and sedimentation; decreased water quality; soil compaction; increased human activity; and the introduction of invasive wildlife (domestic cats and dogs) and plants.

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

CEQA Guidelines Form J thresholds of significance have been used to determine whether project implementation would result in a significant direct, indirect, and/or cumulative impact. These thresholds are based on Appendix G of the CEQA Guidelines (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000–15387). A significant biological resources impact would occur if the project would:

- 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 CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
- Have a substantial adverse effect on federal protected wetlands (including, but not limited to, marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy, or ordinance;

- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP); NCCP; or other approved local, regional, or state habitat conservation plan.

5.1 VEGETATION COMMUNITIES/LAND USE IMPACT ANALYSIS

The project will impact six habitats or land uses (Table 1). The project will primarily impact ruderal land; however, impacts on two sensitive upland habitats, non-native grassland (0.94 acre) and *Baccharis*-dominated Diegan coastal sage scrub (0.06 acre) would also occur. These impacts are considered potentially significant.

Though the project footprint would not extend into southern riparian woodland or southern willow scrub habitats, development would occur in very close proximity to such habitats, and has the potential for impacts on these resources if project boundaries are not strictly adhered to. Any impact on such habitats would be potentially significant.

Note that non-native grassland on-site likely provides minor avian foraging habitat; however, this area is relatively small and is not expected to be a significant loss of foraging habitat or a significant foraging impact. Impacts on non-native grassland will be mitigated in accordance with City of San Marcos Draft MHCP ratios as outlined in section 6, below.

5.2 SPECIAL-STATUS PLANTS IMPACT ANALYSIS

There are no special-status plant species with moderate or high potential to occur on the project site. Given the size of the project site and high level of site disturbance, special-status plant species are not anticipated to occur on site; as such, impacts on special-status plant species would be less than significant.

5.3 SPECIAL-STATUS WILDLIFE IMPACT ANALYSIS

Two federally and state-listed wildlife species, the least Bell's vireo and coastal California gnatcatcher, have a moderate potential for occurrence on site.

Least Bell's Vireo

Impacts on riparian habitats that may be inhabited by least Bell's vireo are not proposed as part of the project. However, development of parking areas is proposed in very close proximity to potential habitat for this species, and if project boundaries are not strictly adhered to during construction impacts on these habitats could occur and are potentially significant.

Additionally, due to the close proximity of development to riparian woodland, potential noise impacts on this species could occur during project construction. Such impacts are potentially significant.

Table 1. Project Vegetation Community/Land Use Impacts and Avoidance Acreages

Vegetation Community/Land Use (Map Code)	Project Impacts (Acres)*	Remaining/Non-Impacted (Acres)*
Developed	0.36	0.00
Diegan Coastal Sage Scrub	0.00	0.21
Diegan Coastal Sage Scrub-*Baccharis* Dominated	0.06	0.00
Disturbed	0.12	0.00
Eucalyptus Woodland	0.00	0.02
Non-Native Grassland	0.94	0.03
Ornamental	0.01	0.00
Ruderal	1.31	0.14
Southern Mixed Chaparral	0.00	0.07
Southern Riparian Woodland	0.00	0.53
Southern Willow Scrub	0.00	0.04
Total	2.80	1.04

Gray Shaded – indicates habitats typically considered sensitive/declining by resource agencies.

Blue Shaded – indicates habits that may be jurisdictional aquatic resources under state and federal regulations.

** Acreages rounded to hundredths based on raw numbers provided during GIS analysis of the project, which are available upon request.*

Coastal California Gnatcatcher

The project will impact a small area (0.06 acre) of isolated Diegan coastal sage scrub – *Baccharis* dominated. This patch of habitat is separated from the larger Diegan coastal sage scrub on the east side of the project site by Twin Oaks Creek. Given its small size, disconnection from other habitat, and low suitability for the species due to high cover of coyote brush and broom baccharis, this area is not likely to support coastal California gnatcatcher. Impacts on this species would be less than significant.

5.4 NESTING BIRD IMPACT ANALYSIS

The project site has the potential to impact active bird nests if vegetation is removed, ground disturbing activities occur, or structures are removed during the nesting season (February 1 to August 31). Impacts on nesting birds are prohibited by the MBTA and CFGC. A project-specific mitigation measure that will avoid project impacts on nesting birds is identified in Section 6.4 of this report. With implementation of this measure, impacts on nesting birds would be less than significant.

5.5 POTENTIALLY JURISDICTIONAL AQUATIC RESOURCES IMPACT ANALYSIS

Based on proposed project impacts and a reconnaissance-level aquatic resource assessment of the site, the project will not impact aquatic resources and associated riparian habitat that could potentially be determined as jurisdictional by the Corps, RWQCB, and/or CDFW (Figure 4).

Coordination with and permitting through the Corps, RWQCB, and CDFW would be required if impacts on any jurisdictional aquatic resources, including associated riparian vegetation occur. Furthermore, a formal aquatic resources delineation survey and report would be required by the agencies should permitting be required for the project and/or to confirm the presence/absence and extent of the on-site jurisdictional resources. The project applicant would be responsible for acquiring the necessary authorizations required by the Corps, RWQCB, and CDFW and associated compensatory requirements, if applicable.

Wetland Buffers

The project is proposed in close proximity to potentially jurisdictional resources. Twin Oaks Creek is highly constrained through the project area and is undergrounded immediately south of the site, but still serves as wildlife habitat and a minor wildlife corridor, primarily for aquatic and avian species. As an inland area, the river area near the proposed project does not provide ocean wave action shielding or erosive waves, but the area does provide some value in storm and flood water storage and retention. On-site aquatic resources do not likely significantly contribute to ground water recharge, though may have some contribution in this area. The creek provides important water filtration for area runoff, and provides a narrow band of undeveloped land through a highly developed region and thus serves as a wildlife refuge.

The proposed project would occur within previously disturbed land and would be located in similar proximity to the creek as adjacent development. Immediately north of the site, development occurs with a very similar buffer to the creek as the proposed development. Additionally, development further north is also situated very near the creek for approximately 3,000 feet along Twin Oaks Valley Road. At that point, no development occurs along Twin Oak Valley Road, but residential development occurs in close proximity to the creek on the east side of the channel for another approximately 1,500 feet. As such, the proposed buffer would be similar as what occurs along the channel in nearby areas.

Given that the project would not directly impact riparian vegetation, the channel is underground immediately south of the site, and the project wetland buffer would be similar to that which occurs for approximately 4000-5000 feet north of the site, the proposed project is not anticipated to significantly degrade existing wetland functions and values, including important water quality and wildlife movement functions. Additionally, the developed areas nearest the creek would be parking areas and are expected to have less adjacency impacts compared to buildings or other development. Additionally, the development would have a project-specific stormwater management plan to avoid toxins or other pollutant runoff into the creek area.

Because development would occur within previously-impacted areas, would occur in similar proximity to the creek as surrounding development and would follow water quality control regulations, no significant wetland buffer impacts would occur with project implementation and the project would result in no net loss of functions or values in adjacent wetlands.

5.6 CITY OF SAN MARCOS REGULATORY COMPLIANCE

5.6.1 DRAFT MHCP

Most of the site occurs outside lands designated as FPAs in the City's Draft MHCP Subarea Plan (2001). However, the channel is designated as FPA under the draft plan and a small project area occurs within FPA mapping. Under the City's Draft MHCP Subarea Plan, the creek is designated as a hard-line '100% Conservation Area', meaning that the goal for this area is full conservation.

A very small area of the project (0.06 acre) would occur within lands mapped as FPA. This 0.06 acre is ruderal land and does not include any riparian or other sensitive habitat or species. The area would accommodate 11 parking spaces. The spaces are necessary in order to meet facility parking needs. The spaces would be used exclusively by employees, and access to the parking area would be controlled via gate. As such, the area would not be a high traffic/high use area, thus limiting the potential for effects to adjacent biological resources.

The FPA was mapped at a regional scale; based on discussions with City of San Marcos staff, the intent of mapping within this area is protection of the creek and associated riparian habitat (Pedersen, 2020). The project was re-designed to stay out of riparian habitats and would not impacts the target preserve habitats. Additionally, most of this area is within the VWD easement so subject to periodic utility maintenance (Figure 3). As such, the project would not conflict with the goals of the City's Draft MHCP Subarea Plan.

5.6.2 GENERAL PLAN

The project would be developed in compliance with the City's general plan and draft MHCP Subarea Plan. The trees documented on site are associated with the creek and would not be impacted by the proposed development. No conflicts with local policies or ordinances would occur with project implementation.

5.7 WILDLIFE CORRIDORS

A wildlife corridor can be defined as a physical feature that links wildlife habitat, often consisting of native vegetation that joins two or more larger areas of similar wildlife habitat. Corridors enable migration, colonization, and genetic diversity through interbreeding and are therefore critical for the movement of animals and the continuation of viable populations. Corridors can consist of large, linear stretches of connected habitat (such as riparian vegetation) or as a sequence of stepping-stones across the landscape (discontinuous areas of habitat such as wetlands and ornamental vegetation), or corridors can be larger habitat areas with known or likely importance to local fauna.

Regional corridors are defined as those linking two or more large patches of habitat, and local corridors are defined as those allowing resident animals to access critical resources (food, cover,

and water) in a smaller area that might otherwise be isolated by urban development. A viable wildlife migration corridor consists of more than an unobstructed path between habitat areas. Appropriate vegetation communities must be present to provide food and cover for both transient species and resident populations of less mobile animals. There must also be a sufficient lack of stressors and threats within and adjacent to the corridor for species to use it successfully.

The project area occurs at the southern extent of a wildlife corridor identified in the City's General Plan (See Figure 4-2; City 2012). The corridor, with the creek, ends at West Mission Road and does not connect to any open space areas to the south. Because the project would not remove any riparian habitat, occurs is at the end of this local movement corridor, and is consistent with other development regarding proximity to the creek, the development is not expected to substantially alter wildlife corridor usage. Impacts on wildlife movement and corridors would be less than significant and no mitigation is required.

5.8 INDIRECT IMPACT ANALYSIS

In the context of biological and aquatic resources, indirect impacts are those effects associated with development activities. Examples of indirect effects include water quality impacts from site drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities. The project is adjacent to already developed or disturbed areas and will comply with stormwater regulations, the project will not result in significant indirect stormwater impacts.

The project does have the potential for adverse impacts on adjacent riparian habitats through the introduction of non-native invasive plant species through site landscaping. Impacts are potentially significant.

5.9 CUMULATIVE IMPACT ANALYSIS

Project development would impact primarily disturbed areas and non-native grassland, with a small impact (0.06 acre on Bacharris-dominated Diegan coastal sage scrub). Impacts on riparian habitats would be avoided. Though impacts on non-native grassland and Bacharris-dominated Diegan coastal sage scrub are adverse, they are relatively small and would be mitigated in conformance with City of San Marcos regulations. As such, project implementation would not result in significant cumulative impacts on biological resources.

6 MITIGATION AND AVOIDANCE MEASURES

The following discussion provides project-specific mitigation/avoidance measures for potential impacts on biological resources.

6.1 VEGETATION COMMUNITIES MITIGATION

As noted above, the proposed project will directly impact sensitive vegetation communities, all of which would occur outside of draft San Marcos MHCP Subarea Plan designated Focused Planning

and water) in a smaller area that might otherwise be isolated by urban development. A viable wildlife migration corridor consists of more than an unobstructed path between habitat areas. Appropriate vegetation communities must be present to provide food and cover for both transient species and resident populations of less mobile animals. There must also be a sufficient lack of stressors and threats within and adjacent to the corridor for species to use it successfully.

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In the context of biological and aquatic resources, indirect impacts are those effects associated with development activities. Examples of indirect effects include water quality impacts from site drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities. The project is adjacent to already developed or disturbed areas and will comply with stormwater regulations, the project will not result in significant indirect stormwater impacts.

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Areas. The project would impact two sensitive habitats, including 0.06 acre of Diegan coastal sage scrub-*Baccharis* dominated, and 0.94 acre of non-native grassland.

Table 2. Mitigation for Potential Project Impacts on Vegetation Communities/Land Uses

Vegetation Community/Land Use (Map Code)	Impacts within Project Boundary (Acres)*	Mitigation Ratio**	Required Mitigation (Acres)
Diegan Coastal Sage Scrub - *Baccharis* dominated (DCSS-B)	0.06	1:1	0.06
Non-native Grassland (NNG)	0.94	0.5:1	0.47
TOTAL	1.00		0.53

** Acreages rounded to the hundredths based on raw numbers provided during GIS analysis of the project, which are available upon request.*

*** Mitigation ratios are consistent with those presented in Tables 4-6 and 4-7 of the MHCP (SANDAG 2003) and Section 5.2.1 of the draft San Marcos Subarea Plan (City 2001) for projects located outside of FPAs.*

Implementation of MM-1, below, would reduce impacts on vegetation communities to less than significant. Mitigation for impacts on sensitive vegetation communities is consistent with the mitigation ratios presented in Tables 4-6 and 4-7 of the MHCP (SANDAG 2003) and Section 5.2.1 of the draft San Marcos Subarea Plan (City 2001)(Table 2).

MM-1 – Project impacts on 0.06 acre of Diegan coastal sage scrub-*Baccharis* dominated (1:1 mitigation ratio), and 0.94 acres of non-native grassland (0.5:1) would be mitigated at the appropriate ratios either through placing on-site lands that are not included in the development footprint or brush management areas into a conservation easement or purchasing land off site for mitigation

6.2 LEAST BELL'S VIREO NOISE MITIGATION

Due to the site's location adjacent to suitable habitat for least Bell's vireo, construction noise that exceeds the maximum levels allowed shall be avoided during the species' breeding seasons for the Least Bell's vireo (3/15-9/15). If construction is proposed during the breeding season, U.S. Fish and Wildlife Service protocol surveys shall be required in order to determine species presence/absence (i.e., seven surveys conducted at least two weeks apart April-July). If protocol surveys are not conducted in suitable habitat during the breeding season for the aforementioned listed species, presence shall be assumed and noise attenuation and monitoring will be required.

Specifically, the following mitigation shall be implemented:

MM-2 – No construction activities shall result in noise levels exceeding 60 dB(A) hourly average from March 15 through August 15 within occupied least Bell's vireo habitat (as determined by a qualified avian biologist based on USFWS protocol surveys). An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly

average must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with ESA-listed animal species) at least two weeks prior to commencement of construction activities. Prior to the commencement of construction activities during the least Bell's vireo breeding season (March 15 – August 15), areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist.

OR

At least two weeks prior to the commencement of construction activities that occur between March 15 – August 15, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that construction noise levels will not exceed 60 dB(A) hourly average at the edge of potentially occupied least Bell's vireo habitat (as determined by a USFWS-permitted biologist based on USFWS protocol surveys). Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of suitable least Bell's vireo habitat to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques are determined to be inadequate by the qualified acoustician or biologist, then construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of breeding season (August 16). Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of suitable habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the wildlife agencies, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

6.3 NESTING BIRD MITIGATION

To avoid impacts on nesting birds and comply with state and federal regulations, the following mitigation shall be implemented:

MM-3 – To avoid direct impacts to raptors and/or native/migratory birds, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, a qualified biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-construction (precon) survey shall be conducted within ten (10) calendar days prior to the start of construction activities (including removal of vegetation). If nesting birds are observed, a letter report or mitigation plan in conformance with applicable State and Federal Law (i.e. appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be

prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the CDFW and/or USFWS as applicable for review and approval and implemented to the satisfaction of those agencies. The project biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction. If nesting birds are not detected during the precon survey, no further mitigation is required.

6.4 INVASIVE PLANT SPECIES MITIGATION

Due to the site's location near sensitive habitats, the following mitigation measure shall be implemented:

MM-4 – To avoid indirect impacts on adjacent sensitive habitats, final landscape plans will be reviewed by a qualified biologist to ensure that no invasive plant materials are included in planting plans.

6.5 SITE MONITORING AND ADJACENT IMPACT AVOIDANCE

To prevent inadvertent disturbance to suitable special-status species habitat and potential aquatic resources areas outside the limits of the proposed project activities, the following monitoring requirements and best management practices (BMPs) shall be implemented:

MM-5 – A biologist shall be contracted to perform regular random checks (at minimum once a month) to ensure implementation of the following monitoring requirements and BMPs. Monitoring reports and a post-construction monitoring report will be prepared to document compliance with these requirements.

1) To prevent inadvertent disturbance to areas outside the limits of work, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary visibility construction fence) prior to ground disturbance activities and all construction activities, including equipment staging and maintenance shall be conducted within the marked disturbance limits. The work limit delineation will be maintained throughout project construction.
2) Biologist will flush special-status species (i.e., avian or other mobile species) from suitable habitat areas to the maximum extent practicable immediately prior to initial vegetation removal activities.
3) Construction vehicles shall not exceed 15 miles per hour on unpaved roads adjacent to project site or the right-of-way accessing the site.
4) If trash and debris need to be stored overnight during the maintenance activities, fully covered trash receptacles that are animal-proof and weather-proof will be used by the maintenance contractor to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Alternatively, standard trash receptacles may be used during the day, but must be removed each night.
5) Cut vegetation or other trash and debris shall not be placed or stored in or directly adjacent to potentially jurisdictional aquatic resources (including riparian habitat). Such materials shall be stored, if necessary, where it cannot be washed by rainfall or runoff into the potentially

jurisdictional areas. When maintenance activities are completed, any excess materials or debris will be removed from the project site.

6) Temporary structures and storage of construction materials will not be located in potentially jurisdictional aquatic resource areas, including riparian habitat.
7) Staging/storage areas for construction equipment and materials will not be located in potentially jurisdictional aquatic resource areas, including riparian habitat.
8) The operator will not permit pets on or adjacent to the construction site.
9) Spoil sites will not be located within 30 feet from the boundaries of jurisdictional waters or in locations that may be subject to high storm flows, where spoils might be washed back into drainages.
10) Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, will be prevented from contaminating the soil and/or entering avoided jurisdictional waters.
11) No equipment maintenance will occur within 100 feet of jurisdictional waters and no petroleum products or other pollutants from the equipment will be allowed to enter these areas or enter any off-site state-jurisdictional waters under any flow.

7 CONCLUSION

The project would impact primarily ruderal and non-native grassland areas and would avoid nearby riparian habitats, however, would be developed in close proximity to those habitats. Mitigation outlined in Section 6 would ensure impacts on adjacent habitats are avoided during project construction. Impacts on 0.94 acre of non-native grassland and 0.06 acre of *Bacharris*-dominated Diegan coastal sage scrub would be mitigation in conformance with City of San Marcos regulations.

The least Bell's vireo has a moderate potential to occur on site immediately adjacent to proposed development; focused species surveys should be conducted to determine species presence/absence as outlined in Section 6, or noise abatement measures shall be required during construction. Based on the presence of suitable avian nesting habitat, pre-construction clearance survey for nesting birds should be conducted to ensure there are no impacts on nesting birds. With the implementation of the mitigation measures outline above, impacts on special-status bird species and nesting birds would be less than significant.

With implementation of these mitigation measures, impacts would be reduced to less than significant.

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FIGURE 1

Project Location

CREEKSIDE ASSISTED LIVING

ROCKS BIOLOGICAL CONSULTING

0 1,000 2,000 FEET

N

Aerial Photo: SANDAG & SanGIS 2017
Regional Map: National Geographic, Esri

FIGURE 2

Project Site Aerial Photograph

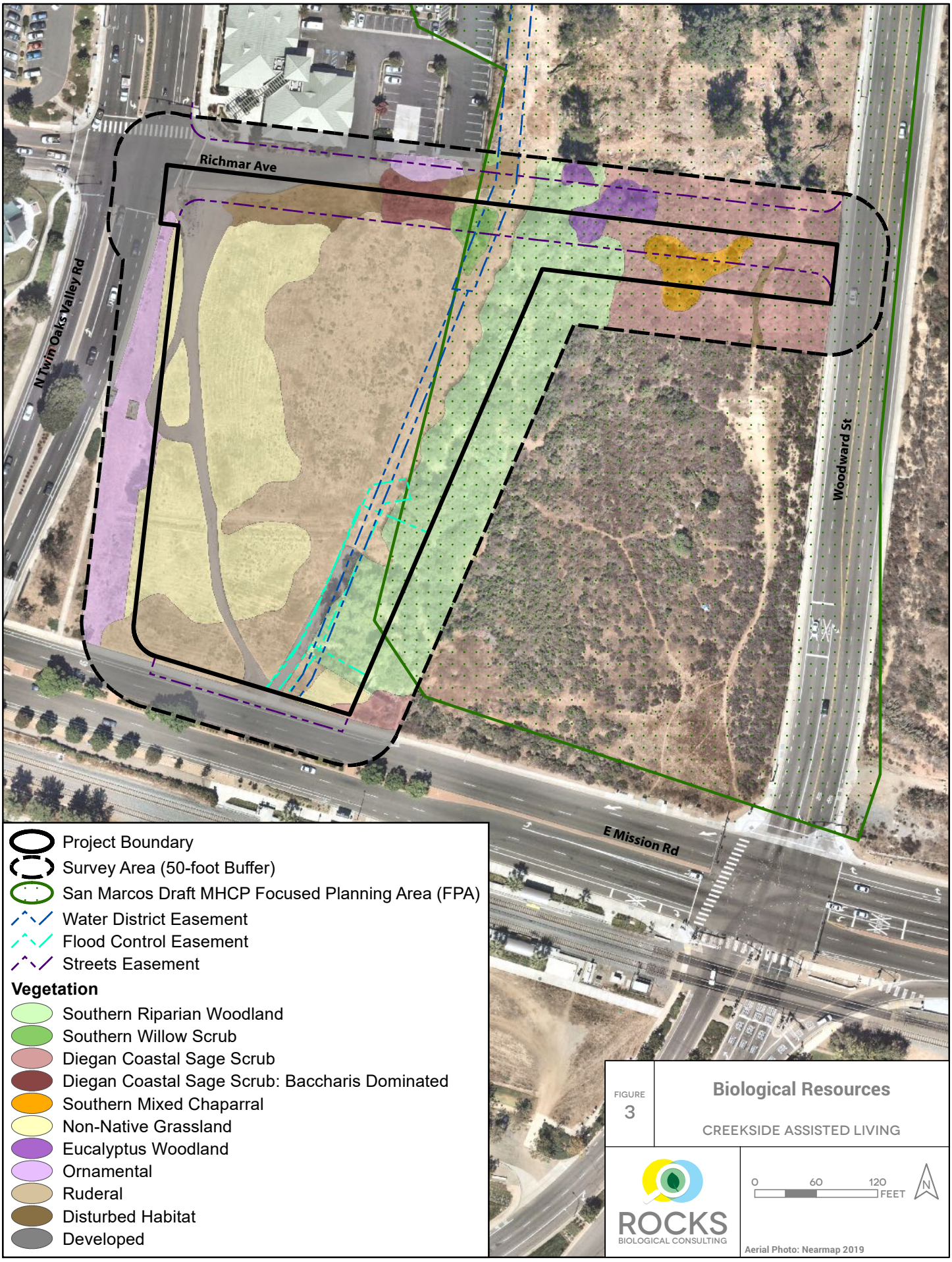
CREEKSIDE ASSISTED LIVING

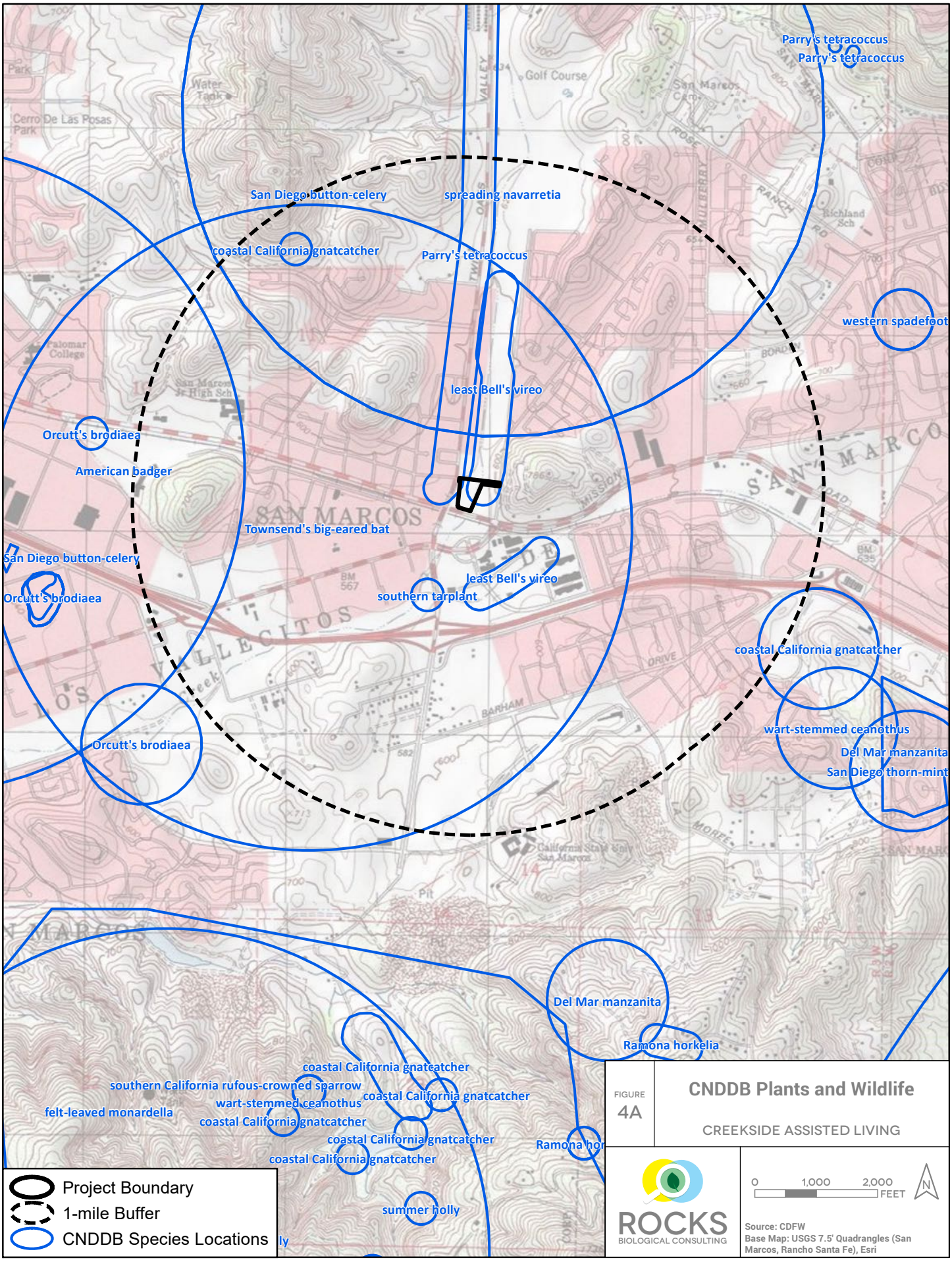
ROCKS BIOLOGICAL CONSULTING

0 60 120 FEET

N

Aerial Photo: Nearmap 2019


Richmar Ave
N Twin Oaks Valley Rd
Woodward St
E Mission Rd
Project Boundary
Survey Area (50-foot Buffer)
San Marcos Draft MHCP Focused Planning Area (FPA)
Water District Easement
Flood Control Easement
Streets Easement
Vegetation
Southern Riparian Woodland
Southern Willow Scrub
Diegan Coastal Sage Scrub
Diegan Coastal Sage Scrub: Baccharis Dominated
Southern Mixed Chaparral
Non-Native Grassland
Eucalyptus Woodland
Ornamental
Ruderal
Disturbed Habitat
Developed
FIGURE 3
Biological Resources
CREEKSIDE ASSISTED LIVING
ROCKS BIOLOGICAL CONSULTING
0 60 120 FEET
N
Aerial Photo: Nearmap 2019


Parry's tetracoccus
Parry's tetracoccus
San Diego button-celery
spreading navarretia
coastal California gnatcatcher
Parry's tetracoccus
western spadefoot
least Bell's vireo
Orcutt's brodiaea
American badger
Townsend's big-eared bat
San Diego button-celery
Orcutt's brodiaea
least Bell's vireo
southern tarplant
coastal California gnatcatcher
wart-stemmed ceanothus
Del Mar manzanita
San Diego thorn-mint
Orcutt's brodiaea
Del Mar manzanita
Ramona horkelia
coastal California gnatcatcher
southern California rufous-crowned sparrow
coastal California gnatcatcher
wart-stemmed ceanothus
felt-leaved monardella
coastal California gnatcatcher
coastal California gnatcatcher
coastal California gnatcatcher
summer holly
Project Boundary
1-mile Buffer
CNDDB Species Locations
FIGURE 4A
CNDDB Plants and Wildlife
CREEKSIDE ASSISTED LIVING
ROCKS BIOLOGICAL CONSULTING
0 1,000 2,000 FEET
N
Source: CDFW
Base Map: USGS 7.5' Quadrangles (San Marcos, Rancho Santa Fe), Esri

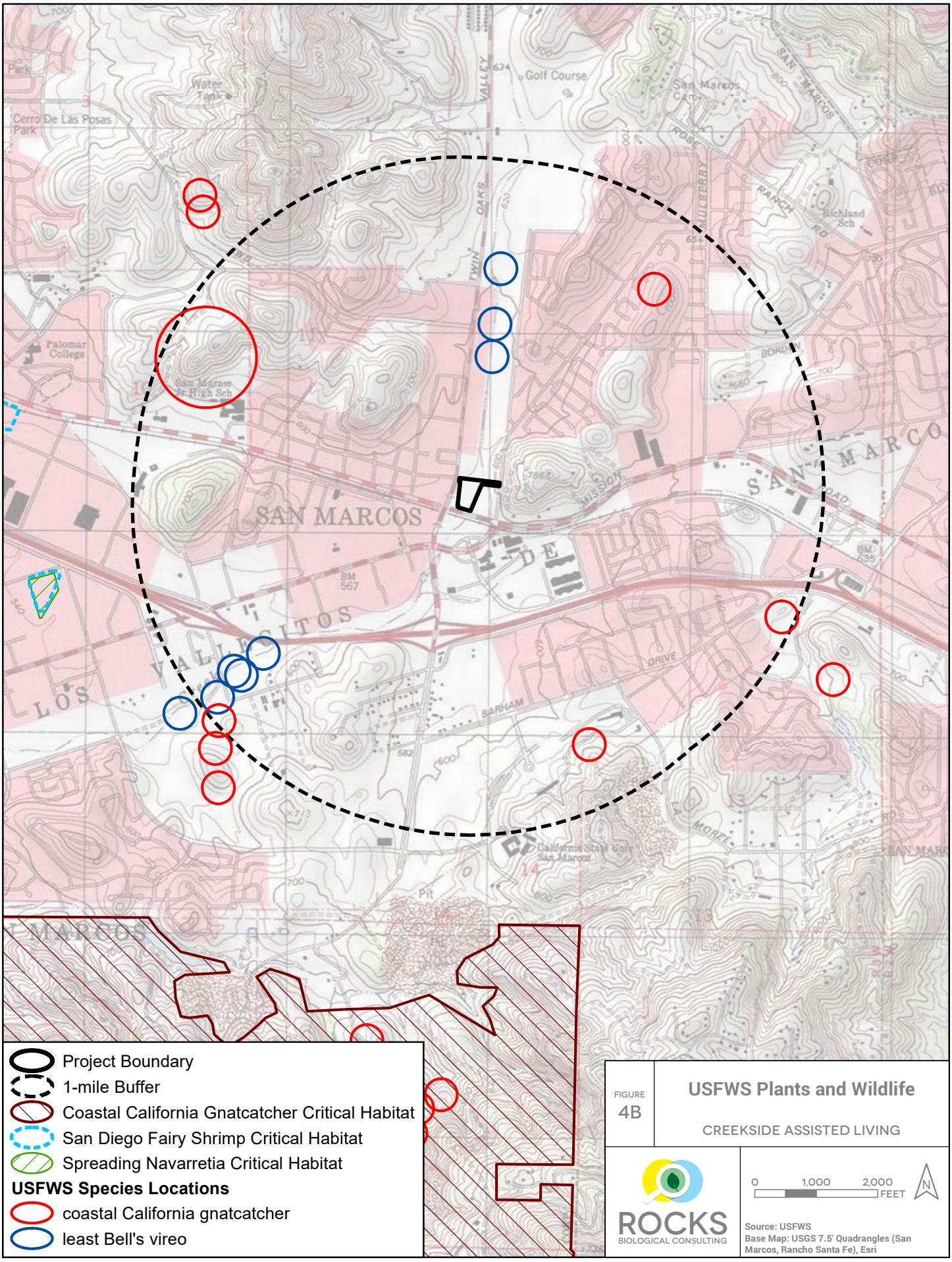
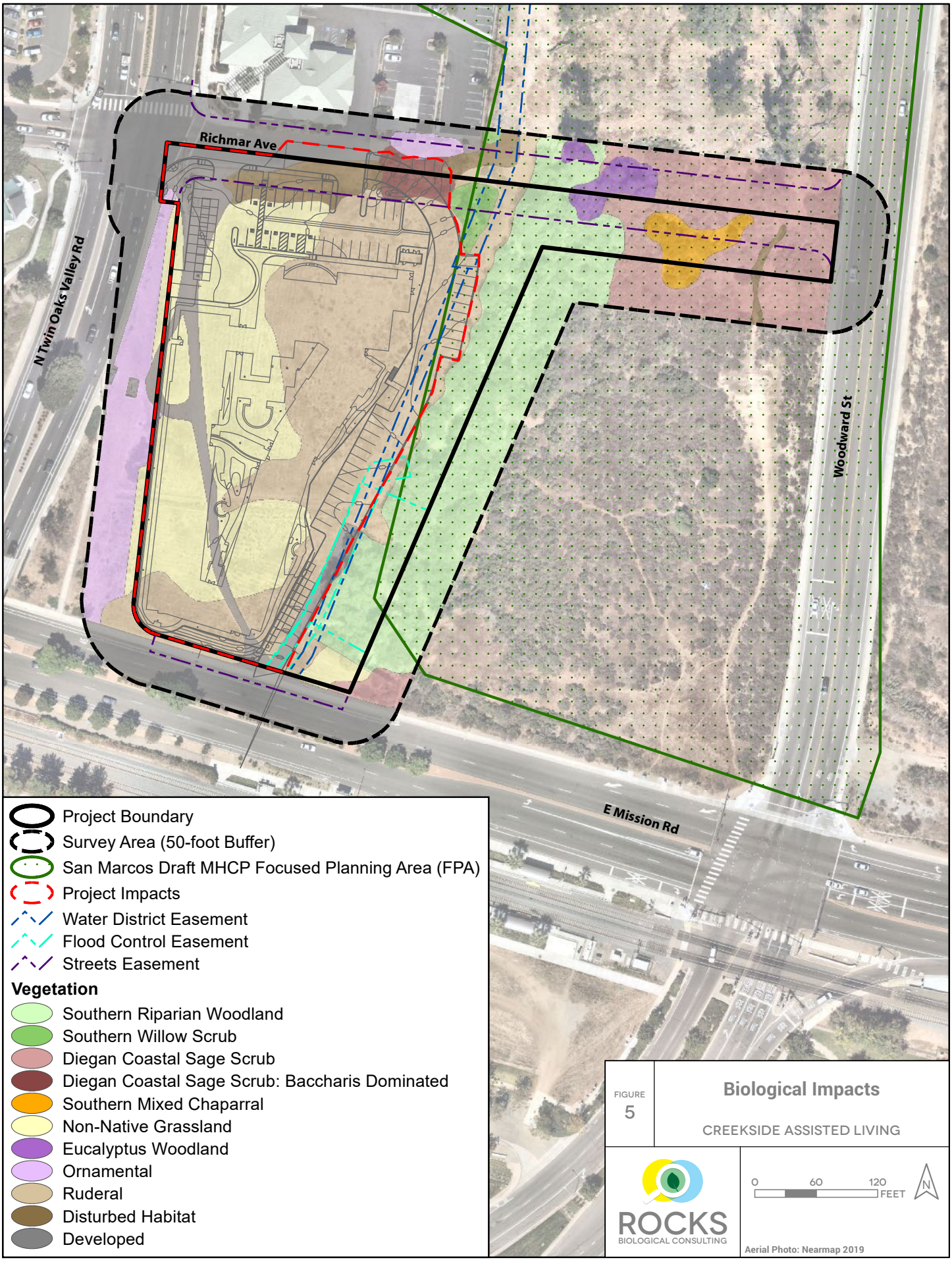


FIGURE 4B

USFWS Plants and Wildlife

CREEKSIDE ASSISTED LIVING

ROCKS BIOLOGICAL CONSULTING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Diegan Coastal Sage Scrub: Baccharis Dominated
Southern Mixed Chaparral
Non-Native Grassland
Eucalyptus Woodland
Ornamental
Ruderal
Disturbed Habitat
Developed
FIGURE 5
Biological Impacts
CREEKSIDE ASSISTED LIVING
ROCKS BIOLOGICAL CONSULTING
0 60 120 FEET
N
Aerial Photo: Nearmap 2019

Appendix A
Regulatory Framework

Federal Regulations

Federal Endangered Species Act

The federal Endangered Species Act of 1973, as amended, (FESA; 16 U.S. Code [U.S.C.] § 1531 et seq.) provides for listing of endangered and threatened species of plants and animals and designation of critical habitat for such listed species. FESA regulates the "taking" of any endangered fish or wildlife species, per Section 9 of FESA. As development is proposed, the responsible agency or individual landowner is required to consult with the U.S. Fish and Wildlife Service (USFWS) to assess potential impacts on listed species (including plants) or their critical habitat, pursuant to Sections 7 and 10 of FESA. USFWS is required to make a determination as to the extent of impact to a particular species a project would have. If it is determined that potential impacts to a species would likely occur, measures to avoid or reduce such impacts must be identified. Following consultation and the issuance of a Biological Opinion, USFWS may issue an incidental take permit, which allows for take of the species that is incidental to another authorized activity, provided that the action will not adversely affect the existence of the species. Section 10 of FESA provides for issuance of incidental take permits to non-federal parties with the development of a habitat conservation plan (HCP); Section 7 of FESA provides for permitting of federal projects or projects requiring federal permits.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703 et seq.) implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and listed at 50 Code of Federal Regulations (CFR) 10.13. USFWS enforces the MBTA and prohibits "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation.

Rivers and Harbors Appropriation Act of 1899

The Rivers and Harbors Appropriation Act of 1899 (Rivers and Harbors Act; 33 U.S.C. § 401 et seq.) prohibits the discharge of any material into navigable waters, or tributaries thereof, of the U.S. without a permit. The Rivers and Harbors Act also makes it a misdemeanor to excavate, fill, or alter the course, condition, or capacity of any port, harbor, or channel; or to dam navigable streams without a permit.

Many activities originally covered by the Rivers and Harbors Act are now regulated under the Clean Water Act of 1972 (CWA; 33 U.S.C. § 1251 et seq.), discussed below. However, the 1899 act retains relevance and created the structure under which the U.S. Army Corps of Engineers (Corps) oversees Clean Water Act 404 permitting.

Clean Water Act

Pursuant to Section 404 of the CWA, the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which

include those waters listed in 33 CFR 328.3. The Corps, with oversight from the U.S. Environmental Protection Agency (EPA), has the principal authority to issue CWA Section 404 permits.

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The Regional Water Quality Control Board (RWQCB), a division of the State Water Resources Control Board, provides oversight of the 401 permit process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that a proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA. Substantial impacts to wetlands may require an Individual Permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits (NWPs).

State Regulations

California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Game Code [CFGC] § 2050 et seq.) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the California Fish and Game Commission. Unlike FESA, CESA does not list invertebrate species.

Section 2080 of CESA addresses the taking of threatened, endangered, or candidate species by stating "[n]o person or public agency shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Section 86 of the CFGC defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the State to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific,

educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the CFGC provide that notification is required prior to disturbance.

California Environmental Quality Act

The California Environmental Quality Act (CEQA; Public Resources Code § 21000 et seq.) was established in 1970 as California's counterpart to the National Environmental Policy Act (NEPA; 42 U.S.C. § 4321 et seq.). CEQA requires state and local agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, where feasible.

CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity, which must receive some discretionary approval from a government agency (meaning that the agency has the authority to deny the requested permit or approval) that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

Native Plant Protection Act and Natural Community Conservation Planning Act

CESA, in combination with California's Native Plant Protection Act of 1977 (NPPA; CFGC § 1900 et seq.), regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within California. California also lists species of special concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. The California Department of Fish and Wildlife (CDFW) is responsible for assessing development projects for their potential to impact listed species and their habitats. State-listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding).

In 1991, the California Natural Community Conservation Planning (NCCP) Act (CFGC § 2800 et seq.) was approved and the NCCP Coastal Sage Scrub program was initiated in Southern California. The State established the NCCP program "to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP Act encourages preparation of plans that address habitat conservation and management on an ecosystem basis rather than one species or habitat at a time.

California Fish and Game Code Sections 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the CFGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake that supports fish or wildlife. A Notification of Lake or Streambed Alteration must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation (i.e., drip line) or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect

affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3800, 4700, 5050, and 5515

CDFW protects and manages fish, wildlife, and native plant resources within California. The California Fish and Game Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the CFGC address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish). In addition, the protection of birds of prey is provided for in Sections 3503, 3513, and 3800 of the CFGC.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis. The RWQCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCB regulates discharges to surface waters under the CWA. In addition, the RWQCB is responsible for administering the Porter-Cologne Water Quality Control Act.

Pursuant to the Porter-Cologne Water Quality Control Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 is not required for the activity. “Waste” is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

Regional and Local Plans

City of San Marcos General Plan

The Conservation and Open Space Element of the City of San Marcos (City) General Plan (City 2012) includes the following policies applicable to the project site as they relate to the conservation and protection of natural resources within the City.

Goal COS-1: Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.

- Policy COS-1.1: Support the protection of biological resources through the establishment, restoration, and conservation of high quality habitat areas.
- Policy COS-1.2: Ensure that new development, including Capital Improvement Projects, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats policy.
- Policy COS-1.3: Continue to work with other federal, State, regional, and local agencies to implement the MHCP.

Goal COS-2: The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.

- Policy COS-2.6: Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.

Goal COS-3: Protect natural topography to preserve and enhance the natural beauty of San Marcos.

- Policy COS-3.4: Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.

Goal COS-8: Focus watershed protection, surface and groundwater quality management on sources and practices that the City has the ability to affect.

- Policy COS-8.4: Require new development and redevelopment to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, Best Management Practices (BMPs), low impact development (LID), hydromodification strategies consistent with the Current San Diego Regional Water Quality Control Board Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, and all future municipal stormwater permits.

San Diego County Multiple Habitat Conservation Program

The San Diego County Multiple Habitat Conservation Program (MHCP) is a comprehensive habitat conservation/planning program for northwestern San Diego County (the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista) (SANDAG 2003b, SANDAG 2003c). The intent of the MHCP is to provide a coordinated, comprehensive approach to maintaining biodiversity and ecosystem health in the region while maintaining quality of life and providing economic growth opportunities throughout northwestern San Diego County. The goal of the MHCP is to have a 19,781-acre reserve system, of which 8,800 acres are already in public ownership (SANDAG 2019). Each of the cities within the MHCP planning area, except for the City of Solana Beach, is required to implement their portion of the MHCP via a city-wide subarea plan.

The MHCP identifies focused planning areas (FPAs), which are specific areas within which lands "will be dedicated for open space and habitat conservation" (SANDAG 2003a). The MHCP provides a preliminary list of 50 special-status animal and plant species proposed as covered species under the MHCP. The wildlife agencies (USFWS and CDFW) will make a final determination as to a species coverage (including take authorization for listed species) upon completion of a USFWS Section 7 consultation regarding permit issuance for each city-specific subarea plan and will attach a city-specific covered species list to each city's subarea plan implementing agreement (SANDAG 2003a).

Draft San Marcos Subarea Plan

The City prepared a draft San Marcos Subarea Plan in 2001 to obtain 'take' authorization of special status species under the MHCP. The goal of the City's Subarea Plan is to identify a City-wide preserve system that meets local and regional biological goals while minimizing fiscal and economic effects to the City and adverse effects on private property owners (City 2001). To assist in achieving this goal, the City's Subarea Plan has designated focused planning areas (FPAs) with "parcel level preserve goals" which will contribute to achieving the "local and regional conservation goals" while minimizing "adverse effects on property rights and property values" (City 2001). The City's Subarea Plan provides a list of 26 covered species (seven plant species and 19 animal species). Although the City does not yet have an MHCP implementing agreement with the USFWS or CDFW, the City uses the draft San Marcos Subarea Plan and San Diego County MHCP as guides for project processing and mitigation planning.

Appendix B

Plant and Wildlife Species Observed

Family	Common Name	Scientific Name
PLANTS		
Aizoaceae	hottentot-fig*	*Carpobrotus edulis*
Anacardiaceae	laurel sumac	*Malosma laurina*
Anacardiaceae	lemonadeberry	*Rhus integrifolia*
Apiaceae	common poison hemlock*	*Conium maculatum*
Apiaceae	sweet fennel*	*Foeniculum vulgare*
Asteraceae	Western ragweed	*Ambrosia psilostachya*
Asteraceae	coastal sagebrush	*Artemisia californica*
Asteraceae	coyote brush	*Baccharis pilularis*
Asteraceae	mulefat	*Baccharis salicifolia*
Asteraceae	broom baccharis	*Baccharis sarothroides*
Asteraceae	tocalote*	*Centaurea melitensis*
Asteraceae	artichoke thistle*	*Cynara cardunculus*
Asteraceae	fascicled tarweed	*Deinandra fasciculata*
Asteraceae	California encelia	*Encelia californica*
Asteraceae	horseweed	*Erigeron canadensis*
Asteraceae	bristly ox-tongue*	*Helminthotheca echioides*
Asteraceae	goldenbush	*Isocoma menziesii*
Asteraceae	prickly lettuce*	*Lactuca serriola*
Asteraceae	California everlasting	*Pseudognaphalium californicum*
Asteraceae	fragrant everlasting cudweed*	*Pseudognaphalium luteoalbum*
Asteraceae	spiny sowthistle*	*Sonchus asper*
Asteraceae	cocklebur	*Xanthium strumarium*
Brassicaceae	sahara mustard*	*Brassica tournefortii*
Brassicaceae	short-pod mustard*	*Hirschfeldia incana*
Brassicaceae	water-cress*	*Nasturtium officinale*
Brassicaceae	wild radish*	*Raphanus sativus*
Cyperaceae	tall flatsedge	*Cyperus eragrostis*
Myrtaceae	river red gum*	*Eucalyptus camaldulensis*
Euphorbiaceae	doveweed	*Croton setiger*
Euphorbiaceae	caper spurge*	*Euphorbia lathyris*
Euphorbiaceae	petty spurge*	*Euphorbia peplus*
Euphorbiaceae	castor bean*	*Ricinus communis*
Fabaceae	white sweetclover*	*Melilotus albus*
Fagaceae	coast live oak	*Quercus agrifolia var. agrifolia*
Lamiaceae	horehound*	*Marrubium vulgare*
Lamiaceae	black sage	*Salvia mellifera*

Family	Common Name	Scientific Name
Myrsinaceae	scarlet pimpernel*	*Lysimachia arvensis*
Oleaceae	Shamel ash*	*Fraxinus uhdei*
Onagraceae	evening primrose	*Oenothera elata*
Plantaginaceae	English plantain*	*Plantago lanceolata*
Poaceae	giant reed*	*Arundo donax*
Poaceae	red brome*	*Bromus rubens*
Poaceae	rat-tail fescue*	*Festuca myuros*
Polygonaceae	California buckwheat	*Eriogonum fasciculatum*
Polygonaceae	curly dock*	*Rumex crispus*
Resedaceae	dyer's rocket*	*Reseda luteola*
Resedaceae	mignonette*	*Reseda sp.*
Rhamnaceae	spiny redberry	*Rhamnus crocea*
Rosaceae	toyon	*Heteromeles arbutifolia*
Salicaceae	Goodding's black willow	*Salix gooddingii*
Salicaceae	arroyo willow	*Salix lasiolepis*
Simaroubaceae	tree-of-heaven*	*Ailanthus altissima*
Solanaceae	tree tobacco*	*Nicotiana glauca*
Tamaricaceae	saltcedar*	*Tamarix ramosissima*
Urticaceae	stinging nettle	*Urtica dioica*
Vitaceae	southern California wild grape	*Vitis girdiana*
Birds		
Accipitridae	red-tailed hawk	*Buteo jamaicensis*
Aegithalidae	bushtit	*Psaltriparus minimus*
Fringillidae	house finch	*Haemorhous mexicanus*
Icteridae	hooded oriole	*Icterus cucullatus*
Passerellidae	California towhee	*Melozone crissalis*
Passerellidae	song sparrow	*Melospiza melodia*
Passerellidae	spotted towhee	*Pipilo maculatus*
Passeridae	house sparrow*	*Passer domesticus*
Picidae	Nuttall's woodpecker	*Picoides nuttallii*
Troglodytidae	Bewick's wren	*Thryomanes bewickii*
Tyrannidae	black phoebe	*Sayornis nigricans*
Tyrannidae	Cassin's kingbird	*Tyrannus vociferans*
Invertebrates		
Cambaridae	red swamp crayfish*	*Procambarus clarkii*
Lycaenidae	marine blue	*Leptotes marina*
Nymphalidae	monarch	*Danaus plexippus plexippus*
Papilionidae	western tiger swallowtail	*Papilio rutulus*

Family	Common Name	Scientific Name
Pieridae	cabbage white	*Pieris rapae rapae*
Pieridae	checkered white	*Pontia protodice*
Riodinidae	Wright's metalmark	*Calephelis wrighti*
Mammals		
Procyonidae	raccoon (sign)	*Procyon lotor*
Sciuridae	California ground squirrel	*Otospermophilus beechyi*
*: non-native species		

Appendix C

Special-Status Plant and Wildlife Species Potential to Occur

Species	Status	Habitat	Potential to Occur
PLANTS			
beach goldenaster (*Heterotheca sessiliflora* ssp. *sessiliflora*)	CRPR 1B.1	Perennial herb. Blooms March-December. Chaparral (coastal), coastal dunes, coastal scrub. Elev. 0-4,020 ft.	Low. Minimal chaparral and scrub habitat present; site is highly disturbed.
Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*)	CRPR 1B.1	Perennial herb. Blooms April-June. Coastal bluff scrub, chaparral, coastal scrub, valley and foothill grassland. Elev. 15-1,475 ft.	Low. Minimal scrub, chaparral and grassland on site; site is highly disturbed
California adolphia (*Adolphia californica*)	CRPR 2B.1	Perennial deciduous shrub. Blooms December-May. Chaparral, coastal scrub, valley and foothill grassland. Elev. 30-2,430 ft.	None. Species would have been observed if present.
California Orcutt grass (*Orcuttia californica*)	FE, SE, CRPR 1B.1	Annual herb. Blooms May-June. Vernal pools. Elev. 45-2,165 ft.	Low. No vernal pool habitat present.
chaparral nolina (*Nolina cismontana*)	CRPR 1B.2	Perennial evergreen shrub. Blooms (March) May-July. Chaparral, coastal scrub. Elev. 455-4,185 ft.	None. Would have been observed if present.
chaparral sand-verbena (*Abronia villosa* var. *aurita*)	CRPR 1B.1	Annual herb. Blooms (January)March-September. Chaparral, coastal scrub, desert dunes. Elev. 245-5,250 ft.	None. Would have been observed if present.
cliff spurge (*Euphorbia misera*)	CRPR 2B.2	Perennial shrub. Blooms December-August (October). Coastal bluff scrub, coastal scrub, Mojavean desert scrub. Elev. 30-1,640 ft.	None. Would have been observed if present.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	CRPR 1B.1	Annual herb. Blooms February-June. Coastal salt marshes and swamps, playas, vernal pools. Elev. 3-4,002 ft.	None. No coastal swamp marsh, swamps, playas and vernal pools present
Coulter's saltbush (*Atriplex coulteri*)	CRPR 1B.2	Perennial herb. Blooms March-October. Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Elev. 5-1,510 ft.	Low. Minimal scrub and grassland habitat present; site is highly disturbed.
Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*)	FE, CRPR 1B.1	Perennial evergreen shrub. Blooms December-July. Chaparral (maritime, sandy). Elev. 0-1,200 ft.	None. Would have been observed if present.
Del Mar Mesa sand aster (*Corethrogyne filaginifolia* var. *linifolia*)	CRPR 1B.1	Perennial herb. Blooms May, July, August, September. Sandy soils within coastal bluff scrub, chaparral (maritime openings), coastal scrub. Elev. 45-490 ft.	None. Would have been observed if present.
Dunn's mariposa lily (*Calochortus dunnii*)	CR, CRPR 1B.1	Perennial bulbiferous herb. Bloom (February) April-June. Gabbroic or metavolcanics, rocky soils within closed-cone coniferous forest, chaparral, valley and foothill grassland. Elev. 605-6,500 ft.	Low. Minimal grassland and chaparral habitat present; site is highly disturbed.

Species	Status	Habitat	Potential to Occur
Encinitas baccharis (*Baccharis vanessae*)	FT, SE, CRPR 1B.1	Perennial deciduous shrub. Blooms (August)October-November. Sandstone soils within chaparral (maritime) and cismontane woodland. Elev. 196-2,363 ft.	Low. Chaparral habitat on site is very limited.
Lewis' evening-primrose (*Camissoniopsis lewisii*)	CRPR 3	Annual herb. Blooms March-May(June). Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland. Elev. 0-985 ft.	Low. Minimal scrub habitat present; site is highly disturbed.
little mousetail (*Myosurus minimus* ssp. *apus*)	CRPR 3.1	Annual herb. Blooms March-June. Valley and foothill grassland and alkaline vernal pools. Elev. 65-2,100 ft.	Low. No vernal pool habitat present; site is highly disturbed.
long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)	CRPR 1B.2	Annual herb. Blooms April-July. Occurs often on clay soils in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Elev. 98-5,019 ft.	Low. Suitable soils not present.
many-stemmed dudleya (*Dudleya multicaulis*)	CRPR 1B.2	Perennial herb. Blooms April-July. Chaparral, coastal scrub, valley and foothill grassland. Elev. 45-2,590 ft.	Low. Minimal scrub habitat present; site is highly disturbed.
mesa horkelia (*Horkelia cuneata* var. *puberula*)	CRPR 1B.1	Perennial herb. Blooms February-July (September). Chaparral (maritime), cismontane woodland, coastal scrub. Elev. 225-2,655 ft.	Low. Minimal scrub habitat present; site is highly disturbed.
mud nama (*Nama stenocarpa*)	CRPR 2B.2	Annual/perennial herb. Blooms January-July. Marshes and swamps (lake margins, riverbanks). Elev.15-1,640 ft.	Low. Riverbank habitat highly disturbed.
Munz's sage (*Salvia munzii*)	CRPR 2B.2	Perennial evergreen shrub. Blooms February-April. Chaparral, coastal scrub. Elev. 375-3,495 ft.	Low. Minimal scrub habitat present; site is highly disturbed.
Nuttall's scrub oak (*Quercus dumosa*)	CRPR 1B.1	Perennial evergreen shrub. Blooms February-April(May-August). Sandy, clay loam soils within closed-cine coniferous forest, chaparral, and coastal scrub. Elev. 49-1,313 ft.	None. Species would have been observed if present.
Orcutt's brodiaea (*Brodiaea orcuttii*)	CRPR 1B.1	Perennial bulbiferous herb. Blooms May-July. Mesic, clay soils within closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools. Elev. 98-5,552 ft.	Low. Minimal scrub habitat or intact soils present; site is highly disturbed.
Palmer's goldenbush (*Ericameria palmeri* var. *palmeri*)	CRPR 1B.1	Perennial evergreen shrub. Blooms (July) September-October. Chaparral, coastal scrub. Elev. 95-1,970 ft.	Low. Minimal scrub habitat present; site is highly disturbed.
Parish's brittlescale (*Atriplex parishii*)	CRPR 1B.1	Annual herb. Blooms June-October. Alkaline habitats including chenopod scrub, playas, and vernal pools. Elev. 80-6,235 ft.	None. No suitable habitat present; site is highly disturbed.

Species	Status	Habitat	Potential to Occur
Parry's tetracoccus (*Tetracoccus dioicus*)	CRPR 1B.2	Perennial deciduous shrub. Blooms April-May. Chaparral, coastal scrub. Elev. 540-3,280 ft.	None. Species would have been observed it present.
purple stemodia (*Stemodia durantifolia*)	CRPR 2B.1	Perennial herb. Blooms (January) April, June, August, September, October, December. Found in often mesic, sandy soils within Sonoran desert scrub and riparian habitats and drying streambeds. Elev. 590-985 ft.	Low. Riparian habitat highly disturbed.
San Diego ambrosia (*Ambrosia pumila*)	FE, CRPR 1B.1	Perennial rhizomatous herb. Blooms April-October. Found in sandy loam or clay soils in chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Elev. 65-1,360 ft.	Low. Minimal scrub present; site is highly disturbed.
San Diego barrel cactus (*Ferocactus viridescens*)	CRPR 2B.1	Perennial stem succulent. Blooms May-June. Found on chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Elev. 5-1,475 ft.	None. Would have been observed if present.
San Diego button-celery (*Eryngium aristulatum* var. *parishii*)	FE, SE, CRPR 1B.1	Annual/perennial herb. Blooms April-June. Mesic habitats in coastal scrub, valley and foothill grassland, and vernal pools. Elev. 65-2,035 ft.	No. No vernal pool habitat present; site is highly disturbed.
San Diego goldenstar (*Bloomeria clevelandii*)	CRPR 1B.1	Perennial bulbiferous herb. Blooms April-May. Occurs on clay soils in chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Elev. 164-1,525 ft.	Low. Suitable habitat limited; bulbiferous plants not observed.
San Diego marsh-elder (*Iva hayesiana*)	CRPR 2B.2	Perennial herb. Blooms April-October. Occurs in marshes, swamps and playas. Elev. 32-1,640 ft.	None. Species would have been observed if present.
San Diego mesa mint (*Pogogyne abramsii*)	FE, SE, CRPR 1B.1	Annual herb. Blooms March-July. Vernal pools. Elev. 295-655 ft.	None. No vernal pool habitat present; site is highly disturbed.
San Diego thorn-mint (*Acanthomintha ilicifolia*)	FT, SE, CRPR 1B.1	Annual herb. Blooms April-June. Chaparral, coastal scrub, valley and foothill grassland, vernal pools. Elev. 30-3,150 ft.	Low. Minimal scrub present; site is highly disturbed.
sea dahlia (*Leptosyne maritima*)	CRPR 2B.2	Perennial herb. Blooms March-May. Coastal bluff scrub, coastal scrub. Elev. 15-490 ft.	None. Species would have been observed if present.
smooth tarplant (*Centromadia pungens* ssp. *laevis*)	CRPR 1B.1	Annual herb. Blooms April-September. Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland. Elev. 0-2,100 ft.	None. Species would have been observed if present.
south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*)	CRPR 3.2	Perennial herb. Blooms March-August. Chaparral, coastal dunes, coastal scrub, marshes and swamps (coastal salt). Elev. 15-985 ft.	None. Would have been observed if present.

Species	Status	Habitat	Potential to Occur
south coast saltscale (*Atriplex pacifica*)	CRPR 1B.2	Annual herb. Blooms March-October. Coastal bluff scrub, coastal dunes, coastal scrub, playas. Elev. 0-460 ft.	Low. Minimal scrub present; site is highly disturbed.
southern tarplant (*Centromadia parryi* ssp. *australis*)	CRPR 1B.1	Annual herb. Blooms May-November. Marshes and swamps (margins), valley and foothill grassland (vernally mesic), vernal pools. Elev. 0-1,575 ft.	None. Species would have been observed if present.
spreading navarretia (*Navarretia fossalis*)	FT, CRPR 1B.1	Annual herb. Blooms April-June. Chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, vernal pools. Elev. 95-2,150 ft.	Low. Suitable habitat not present; site is highly disturbed.
sticky dudleya (*Dudleya viscida*)	CRPR 1B.2	Perennial herb. Blooms May-June. Coastal bluff scrub, chaparral, cismontane woodland, coastal scrub. Elev. 30-1,805 ft.	Low. Minimal scrub present; site is highly disturbed.
summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)	CRPR 1B.2	Perennial evergreen shrub. Blooms April-June. Chaparral, cismontane woodland. Elev. 98-2,592 ft.	None. Species would have been observed if present.
thread-leaved brodiaea (*Brodiaea filifolia*)	FT, SE, CRPR 1B.1	Perennial bulbiferous herb. Blooms March-June. Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Elev. 80-3,675 ft.	Low. Suitable habitat limited; bulbiferous plants not observed.
Torrey pine (*Pinus torreyana* ssp. *torreyana*)	CRPR 1B.2	Perennial evergreen tree. Sandstone soils within closed-cone coniferous forest, chaparral. Elev. 95-525 ft.	None. Species would have been observed if present.
variegated dudleya (*Dudleya variegata*)	CRPR 1B.2	Perennial herb. Blooms April-June. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools. Elev. 5-1,905 ft.	Low. Minimal scrub present; site is highly disturbed.
vernal barley (*Hordeum intercedens*)	CRPR 3.2	Annual herb. Blooms March-June. Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), vernal pools. Elev. 15-3,280 ft.	Low. Minimal scrub present; site is highly disturbed.
wart-stemmed ceanothus (*Ceanothus verrucosus*)	CRPR 2B.2	Perennial evergreen shrub. Blooms December-May. Chaparral. Elev. 3-1,247 ft.	None. Species would have been observed if present.
white rabbit-tobacco (*Pseudognaphalium leucocephalum*)	CRPR 2B.2	Perennial herb. Blooms (July) August-November (December). Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elev. 0-6,890 ft.	None. Species would have been observed if present.
Wiggins' cryptantha (*Cryptantha wigginsii*)	CRPR 1B.2	Annual herb. Blooms February-June. Coastal scrub. Elev. 65-900 ft.	Low. Minimal scrub present; site is highly disturbed.

Species	Status	Habitat	Potential to Occur
BIRDS			
coastal California gnatcatcher (*Polioptila californica californica*)	FT, SSC	Found in coastal sage scrub habitats including Diegan coastal sage scrub, often dominated by California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*).	Moderate. Coastal sage scrub habitat on east side of site is suitable for species and is part of larger intact habitat.
Cooper's hawk (*Accipiter cooperii*)	WL (Nesting)	Breeds in a variety of woodland habitats, often near rivers and streams and in urban areas.	Low. Suitable habitat is limited on site.
least Bell's vireo (*Vireo bellii pusillus*)	FE, SE (Nesting)	Breeds in riparian woodlands with understory of dense young willows or mulefat (*Baccharis salicifolia*) and willow canopy. Nests often placed along internal or external edges of riparian vegetation.	Moderate. Suitable riparian habitat on site. Species historically known from within one mile of site.
yellow-breasted chat	SSC (Nesting)	Breeds in a variety of riparian habitats and occasionally disturbed and successional habitats.	Moderate. Suitable riparian habitat on site.
yellow warbler	SSC (Nesting)	Breeds in a variety of riparian habitats and occasionally disturbed habitats.	Moderate. Suitable riparian habitat on site.
MAMMALS			
American badger (*Taxidea taxus*)	SSC	Found in a variety of habitats including deserts, scrublands and grasslands containing soils suitable for burrowing.	Low. Suitable foraging habitat not present.
Townsend's big-eared bat (*Corynorhinus townsendii*)	SSC	Found in a variety of habitats. Requires caves, tunnels, mines, or man-made structures to roost.	Low. Suitable roosting habitat not present.

California Rare Plant Rank (CRPR)
1A: presumed extirpated in California and rare or extinct elsewhere
1B: rare, threatened, or endangered in California and elsewhere
2A: presumed extirpated in California but more common elsewhere
2B: rare, threatened, or endangered in California but more common elsewhere
3: plants for which more information needed
4: plants of limited distribution

CRPR Threat Ranks
0.1: Seriously threatened in California (*over 80% of occurrences threatened / high degree and immediacy of threat*)
0.2: Moderately threatened in California (*20-80% occurrences threatened / moderate degree and immediacy of threat*)
0.3: Not very threatened in California (*<20% of occurrences threatened / low degree and immediacy of threat or no current threats known*)

FE: Endangered Species Act (ESA) Federally Endangered Species
FT: Endangered Species Act (ESA) Federally Threatened Species
SE: California Endangered Species Act (CESA) State Endangered Species
SR: California Endangered Species Act (CESA) State Rare Species
SSC: California Department of Fish and Wildlife (CDFW) Species of Special Concern
WL: California Department of Fish and Wildlife (CDFW) Watch List Species

Appendix D

Site Photographs

Photo 1. View of non-native grassland and ruderal vegetation, facing north. July 18, 2019.

Photo 2. View of ruderal vegetation (foreground) and southern riparian woodland (background), facing east. July 18, 2019.

Photo 3. View of Diegan coastal sage scrub along Woodward Street, facing south. July 18, 2019.

Photo 4. View of disturbed road, facing north. July 18, 2019.

Photo 5. View of ruderal vegetation (foreground) and southern riparian woodland (background), facing south. July 18, 2019.

Photo 6. View of channel within southern riparian woodland, facing south. July 18, 2019.

Photo 7. View of utility access road below willow canopy, facing north. May 6, 2020.

Photo 8. View of cleared southern willow scrub area (foreground). Photo provided by client on May 4, 2020.