ATTACHMENT B: SPECIAL-STATUS PLANT SPECIES SURVEY REPORT

SAN DIEGO GAS & ELECTRIC COMPANY AND SOUTHERN CALIFORNIA GAS COMPANY'S

PIPELINE SAFETY & RELIABILITY PROJECT
SPECIAL-STATUS PLANT SPECIES SURVEY REPORT

Prepared for:

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A Sempra Energy utility®

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September 2015

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1 – INTRODUCTION

San Diego Gas & Electric (SDG&E) and Southern California Gas Company—herein referred to as the Applicants—are proposing the Pipeline Safety & Reliability Project (Proposed Project), which involves construction, operation, and maintenance of an approximately 47-mile-long, 36-inch-diameter natural gas transmission pipeline that will carry natural gas from SDG&E's existing Rainbow Metering Station to the pipeline's terminus on Marine Corps Air Station (MCAS) Miramar.

Insignia Environmental (Insignia) conducted surveys for special-status plant species for the Proposed Project within the Biological Resources Survey Area (BRSA), which includes all Proposed Project components plus an approximately 150-foot buffer on each side of these components. In total, the BRSA covers approximately 2,264 acres. Insignia assessed all areas in the BRSA, except for developed areas (e.g., orchards and vineyards, intensive agricultural areas, ornamental areas, etc.). The surveys were conducted in two passes during the spring of 2015. This Special-Status Plant Species Survey Report provides an overview of the project, summarizes the field methods, and presents the results of Insignia's 2015 surveys.

2 – PROJECT DESCRIPTION

2.0 PROJECT OVERVIEW

The Proposed Project involves construction, operation, and maintenance of an approximately 47-mile-long, 36-inch-diameter natural gas transmission pipeline and the following permanent aboveground equipment that will be appurtenant to the pipeline:

- approximately 10 new aboveground mainline valves (MLV) spaced a maximum of five miles apart;
- one pressure-limiting station (i.e., the Rainbow Pressure-Limiting Station);
- three cross-tie facilities (i.e., Line 1600, Line 1601, and Line 2010);
- internal inspection launching and receiving equipment;
- cathodic protection system units with an estimated three rectifiers and three deep-well anode beds at three of the proposed MLVs; and
- an intrusion detection and leak monitoring system.

Construction is scheduled to begin in the first quarter of 2018 and is expected to take 12 to 18 months to complete.[1] The Applicants are required to comply with General Order 112-E in constructing a natural gas transmission pipeline and is choosing to seek a CPCN from the CPUC for the Proposed Project. Federal authorizations will also be required because the Proposed Project route includes land on MCAS Miramar, which is under the jurisdiction of the Department of the Navy/United States (U.S.) Marine Corps (USMC). In addition to the CPCN and the authorization for rights-of-way (ROWs) on MCAS Miramar, the Applicants will obtain all

[1] The construction start date is based on receiving a Certificate of Public Convenience and Necessity (CPCN) from the California Public Utilities Commission (CPUC) by 2017 and issuance of other required permits by late 2017 or early 2018.

required permits for the Proposed Project from federal, state, and local agencies prior to construction.

It is anticipated that the Department of the Navy will serve as the lead federal agency for the Proposed Project under the National Environmental Policy Act because the Proposed Project will require a new easement for ROWs through MCAS Miramar. If the Department of the Navy determines that the authorization for the construction and operation of the Proposed Project "may effect" species listed under the federal Endangered Species Act (FESA), the lead federal agency will be expected to engage in Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) regarding the effects to listed species.

2.1 PROJECT LOCATION AND SETTING

The Proposed Project is located in San Diego County, California, and crosses the cities of San Diego, Escondido, and Poway. As shown in Figure 1: Project Overview Map, the Proposed Project will be installed primarily within existing roadways and road shoulders. The pipeline will be installed approximately 42 inches below the ground surface using conventional trenching methods. The pipeline alignment will cross several major roads, including Interstate (I-) 15, as well as a number of water features, including the San Luis Rey River, Lake Hodges, and Escondido Creek. At these crossings, horizontal directional drilling and horizontal boring methods will be implemented to minimize impacts to riparian habitat and water quality.

As depicted in Figure 1: Project Overview Map, the potential route begins at SDG&E's existing Rainbow Metering Station in the unincorporated community of Rainbow and terminates just north of State Route (SR-) 52 within MCAS Miramar. Within MCAS Miramar, the route parallels an unpaved aqueduct road for approximately 2.6 miles. The Proposed Project will tie into the existing Line 2010 at its southern terminus.

3 – METHODOLOGY

This section describes the methods used to perform the literature review (conducted prior to special-status plant species surveys) and the special-status plant species surveys.

3.0 BACKGROUND RESEARCH

Botanical resources data for the BRSA were obtained through a literature review of publicly available spatial data in ArcGIS, including aerial photographs, U.S. Geological Survey (USGS) topographic maps, and San Diego Association of Governments (SANDAG) vegetation mapping (SANDAG 2012). Reference materials were also utilized, such as plant occurrence databases, local guides, and survey protocols and publications. The data provided botanists with a general understanding of the special-status plant species that have the potential to occur within the BRSA.

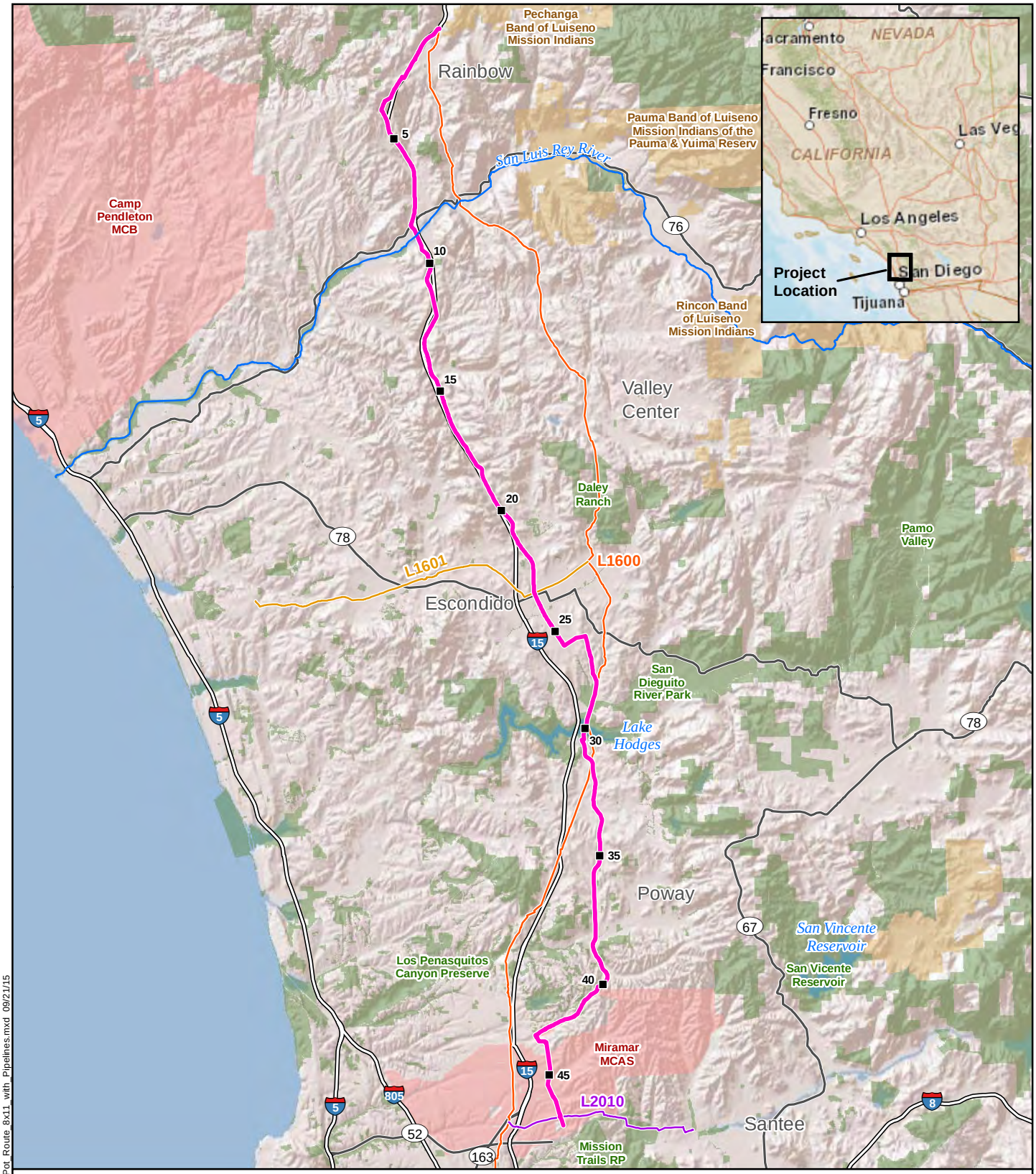

Figure 1: Project Overview Map **Pipeline Safety & Reliability Project**

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For the purposes of this report, special-status plant species are defined as follows:

- Federally listed species (i.e., plants listed as threatened or endangered under the FESA). FESA gives regulatory authority over terrestrial species to the USFWS.

- State-listed species (i.e., plants listed as threatened or endangered under the California Endangered Species Act [CESA]). The CESA is enforced by the California Department of Fish and Wildlife (CDFW).

- Species that are candidates for possible future listing as threatened or endangered under the FESA (50 Code of Federal Regulations Part 17; Federal Register Vol. 64, No. 205, pages 57533-57547, October 25, 1999) and under the CESA (California Fish and Game Code § 2068).

- Plants that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) (14 California Code of Regulations [CCR] § 15380 (b) and (d), including the following:

    - Species considered by the California Native Plant Society (CNPS) to be "rare, threatened or endangered in California" (California Rare Plant Ranks [CRPRs] 1A, 1B, 2A, and 2B).

    - Some species included on the California Natural Diversity Database (CNDDB) Special Plants, Bryophytes, and Lichens List (CDFW 2015b).

    - Plants that are considered a locally significant species, which is a species that is not rare from a statewide perspective, but is rare or uncommon in a local context, such as within a county or region (14 CCR § 15125 [c]), or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). This includes all List A, B, C, and D plants on the County of San Diego Sensitive Plant List, included in the Guidelines for Determining Significance and Report Format and Content Requirements (County of San Diego 2010). Many of the County of San Diego List C and D plants are also CRPR 3 and 4 plant species.

A list of potentially occurring special-status plant species was developed by compiling all species that are documented in the CNDDB (CDFW 2015a) within five miles of the Proposed Project, as well as special-status plant species identified in a Nine-Quad Search of the CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS 2014).[2] The CNPS Nine-Quad Search included special-status plant species documented from the seven USGS quadrangles (quads) overlapping the BRSA (i.e., the Temecula, Bonsall, San Marcos, Valley

[2] The CNPS Nine-Quad Search covered 27 quadrangles, including Temecula, Bonsall, San Marcos, Valley Center, Escondido, Poway, La Mesa, Wildomar, Murrieta, Bachelor Mountain, Fallbrook, Pechanga, Morro Hill, Pala, San Luis Rey, Encinitas, Rancho Santa Fe, Boucher Hill, Rodrigues Mountain, San Pasqual, Del Mar, San Vicente Reservoir, La Jolla, Point Loma, National City, Jamul Mountains, and El Cajon.

Center, Escondido, Poway, and La Mesa quads) and the adjacent quads. The CNPS Nine-Quad Search returned only CRPR 1A, 1B, and 2 species.

Additional sources of information specifically related to special-status species occurrences, habitat requirements, and geographic distribution and abundance were consulted in determining the species potential to occur within the BRSA. These sources included:

- the CNDDB RareFind Version 5 website (CDFW 2015c);
- the MCAS Miramar Integrated Natural Resources Management Plan (USMC 2014);
- the USFWS Environmental Conservation Online System Species Profiles (USFWS 2015) and associated documents;
- the San Diego County Natural History Museum (SDNHM) herbarium and associated distribution mapping (SDNHM 2015);
- species accounts from the Rare Plants of San Diego County online resource (Reiser 1994); and
- planning documents relevant to the Proposed Project were also reviewed. Relevant planning documents include the County of San Diego General Plan and SDG&E Subregional Natural Communities Conservation Plan.

3.0.0 Special-Status Species' Potential to Occur

Once the list of potentially occurring special-status species was compiled using the previously listed sources, Insignia biologists determined the potential for those species to occur within the BRSA based on information from the literature and database searches and the habitat assessment. The following four categories were developed:

- **No Potential:** No suitable habitat exists or a species is not known to occur from the general area of the BRSA (i.e., generally more than 15 miles outside of the BRSA, or outside of San Diego County). The definition of habitat includes the major vegetation communities (e.g., chaparral or coastal scrub), as well as microhabitat conditions, such as specific edaphic (i.e., soil) requirements. In addition, the elevation range where the species occurs may be more than 300 feet above or below the elevation range within the BRSA, or the species is known to be extirpated from the BRSA.
- **Low Potential:** Habitat for the species is present, but the geographic and/or elevation ranges within the BRSA vary from those documented for the species. Specifically, the species occurs between five and 15 miles of the BRSA, if all occurrences within five miles of the BRSA are more than 30 years old, or the elevation range where the species occurs is between 100 and 300 feet above or below the elevation range of the BRSA.
- **Moderate Potential:** Habitat for the species is present; the geographic and elevation ranges within the BRSA are consistent with those documented for the species; and the species has been documented within one to five miles of the BRSA.

- **High Potential:** Habitat for the species is present; the geographic and elevation ranges within the BRSA are consistent with those documented for the species; and the species has been documented within one mile of the BRSA.

3.1 SURVEY METHODOLOGY

Special-status plant surveys were conducted in two passes during the spring of 2015 within 965 acres throughout the BRSA. Special-status plant surveys were conducted in accordance with survey guidelines published by the CNPS (2001), CDFW (2009), and USFWS (1996). These guidelines state that special-status surveys should be conducted at the proper time of year when special-status and locally significant plants are both evident and identifiable. The guidelines also state that the surveys must be floristic in nature, and the species, subspecies, or variety must be identified for every observed plant to determine their rarity status. Finally, these surveys must be conducted in a manner that is consistent with conservation ethics and accepted plant collection and documentation techniques. Following these guidelines, surveys were conducted during the months when special-status plant species from the region are known to be evident and flowering. All areas of the project site were examined by walking transects through potential habitat, and by closely examining any existing microhabitats that could potentially support special-status plants. Developed areas—including orchards and vineyards, intensive agricultural areas, and ornamental areas—were not surveyed. Areas mapped as disturbed habitat, as well as eucalyptus woodlands and non-native woodlands, were surveyed where there was potential for special-status plants to occur.

On April 3, 2015, Insignia botanist Makela Mangrich conducted a reference population check for three federally listed plant species in central San Diego County to ensure that these species were blooming and, therefore, visible and present within the BRSA. These species included San Diego ambrosia (*Ambrosia pumila*), San Diego button celery (*Eryngium aristulatum* var. *parishii*), and San Diego mesa mint (*Pogogyne abramsii*). All three species were blooming at the time of the reference population check. In addition, an Insignia biologist observed the phenology of various plant species during the early spring of 2015 and noted that many species appeared to be blooming earlier than normal, likely due to the high temperatures and low rainfall in the late winter and early spring of 2015. As a result of these observations and the reference population check, it was determined that special-status plant surveys could commence.

The first pass of special-status plant surveys started on April 6, 2015 and was completed on April 21. The second pass of surveys began on May 18, 2015 and was completed on June 2. Table 1: Special-Status Plant Species Survey Schedule provides the botanists conducting the special-status plant surveys and the survey schedule.

Table 1: Special-Status Plant Species Survey Schedule

Biologists	Geographic Area	Dates	Weather/ Visibility
First Pass - April 2015			
Makela Mangrich, Isabelle de Geofroy, Sheryl Creer, and Lee Ripma	MCAS Miramar	April 6 and 8, 2015	0% cloud cover/ Excellent
Makela Mangrich, Isabelle de Geofroy, Sheryl Creer, and Melanie Dicus	MCAS Miramar	April 7, 2015	0% to 25% cloud cover/ Excellent
Makela Mangrich, Isabelle de Geofroy, Sheryl Creer, and Melanie Dicus	Urbanized section (community of Scripps Ranch and City of Poway)	April 9, 2015	0% cloud cover/ Excellent
Makela Mangrich, Isabelle de Geofroy, Sheryl Creer, and Jim Rocks	Urbanized section (communities of Scripps Ranch and Rancho Bernardo, and Kit Carson Park)	April 10, 2015	0% cloud cover/ Excellent
Makela Mangrich and Lee Ripma	Urbanized section (Kit Carson Park to the northern portion of the City of Escondido)	April 13, 2015	0% to 25% cloud cover/ Excellent
Sheryl Creer and Lee Ripma	Urbanized section (Northern portion of the city of Escondido to Deer Springs Road)	April 14, 2015	0% to 25% cloud cover/ Excellent
Makela Mangrich and Sheryl Creer	Urbanized section (Deer Springs Road to Pala Mesa area north of SR-76)	April 15 to 17, 2015	0% to 25% cloud cover/ Excellent
Sheryl Creer and Nick Fisher	Urbanized section (Pala Mesa area north of SR-76 to the northern terminus of the BRSA)	April 20 and 21, 2015	0% to 25% cloud cover/ Excellent
Second Pass - May and June 2015			
Makela Mangrich and Lee Ripma	MCAS Miramar	May 18, 2015	0% to 25% cloud cover/ Excellent
Brian Lohstroh and Melanie Dicus	Urbanized section (community of Scripps Ranch and City of Poway)	May 19, 2015	0% to 25% cloud cover/ Excellent
Melanie Dicus and Kristen Lehman	Urbanized section (communities of Scripps Ranch and Rancho Bernardo, and Kit Carson Park)	May 20 and 21, 2015	0% to 25% cloud cover/ Excellent
Makela Mangrich and Lee Ripma	Urbanized section (City of Escondido to Deer Springs Road)	May 27, 2015	70% to 80% cloud cover/ Excellent

Biologists	Geographic Area	Dates	Weather/ Visibility
Melanie Dicus and Sheryl Creer	Urbanized section (Deer Springs Road to Pala Mesa area north of SR-76)	May 28 to 30, 2015	0% to 25% cloud cover/ Excellent
Melanie Dicus and Sheryl Creer	Urbanized section (Pala Mesa area north of SR-76 to the northern terminus of the BRSA)	June 1 and 2, 2015	0% to 25% cloud cover/ Excellent

4 – RESULTS

4.0 DATABASE AND LITERATURE REVIEW

Based on the literature and database review, as well as results from the field surveys, 129 special-status plant species were identified to have the potential to occur within the BRSA. CNDDB occurrences of special-status plant species are mapped in Attachment A: CNDDB Occurrences for Special-Status Plant Species. These species, descriptions of their listing status, life history, blooming period, habitat requirements, and a brief assessment of their potential to occur within the BRSA are shown in Attachment B: Special-Status Plant Species with the Potential to Occur. Of those 129 species, 51 occur either in an elevation range outside of the BRSA, or in habitats that do not occur within the BRSA. These species were therefore determined to have no potential to occur within the BRSA.

4.1 VEGETATION COMMUNITIES

A total of 35 vegetation communities were identified within the BRSA. These communities are further detailed in Section 5.1 General Vegetation Communities of the Biological Resources Technical Report (Insignia 2015), to which this Special-Status Plant Species Survey Report is attached.

4.2 SPECIAL-STATUS PLANT SURVEY RESULTS

Nineteen special-status plant species were observed within the BRSA during focused special-status plant surveys conducted in 2015, as summarized in Table 2: Special-Status Plant Species Occurrences within the BRSA and shown in Attachment C: Special-Status Plant Species Occurrences Map. No federally or state-listed special-status plant species were observed within the BRSA during the surveys. The majority of the special-status plant species identified within the BRSA are located in the southern portion of MCAS Miramar and along Pomerado Road. A complete list of all plant species observed during surveys is included in Attachment D: Plant Species Observed. Representative photographs of some of the special-status plant species observed within the BRSA are included in Attachment E: Special-Status Plant Species Photographs.

Thirty-five special-status plant species were determined to not be present within the BRSA. Twenty-four special-status plant species that were not observed during either pass of the special-status plant species surveys are described as “not expected to occur” in Attachment B: Special-Status Plant Species with the Potential to Occur. These species are either annual herbs, perennial rhizomatous herbs, or perennial bulbiferous species that might not have germinated due to the drought conditions of the winter of 2014-2015. Special-status species that could occur within areas that were inaccessible to survey teams were also included in this category.

Table 2: Special-Status Plant Species Occurrences within the BRSA

Plant Species	CRPR Status	Number of Plants Identified
Ashy spike-moss (*Selaginella cinerascens*)	4.1	33,000[3]
San Diego sagewort (*Artemisia palmeri*)	4.2	37
San Diego County viguiera (*Bahiopsis* [*Viguiera*] *laciniata*)	4.2	1,334
Graceful tarplant (*Holocarpha virgata* ssp. *elongata*)	4.2	589
Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)	1B.2	145
Small-flowered microseris (*Microseris douglasii* ssp. *platycarpha*)	4.2	50
Golden-rayed pentachaeta (*Pentachaeta aurea* ssp. *aurea*)	4.2	5,787
San Diego barrel cactus (*Ferocactus viridescens*)	2B.1	1
Western dichondra (*Dichondra occidentalis*)	4.2	580
Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)	1B.2	1
Nuttall's scrub oak (*Quercus dumosa*)	1B.1	321
Engelmann oak (*Quercus engelmannii*)	4.2	67
Brewer's calandrinia (*Calandrinia breweri*)	4.2	121
Parry's tetracoccus (*Tetracoccus dioicus*)	1B.2	50
Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)	1B.2	1,351

[3] This species is difficult to count on an individual level, and most occurrences within the BRSA covered a large area. Therefore, the count for this species is an estimate based on density at each occurrence location.

Plant Species	CRPR Status	Number of Plants Identified
California adolphia (*Adolphia californica*)	2B.1	750
Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*)	4.2	16
San Diego goldenstar (*Bloomeria clevelandii*)	1B.1	3,991
Orcutt's brodiaea (*Brodiaea orcuttii*)	1B.1	2,309

4.2.0 Species Present in the BRSA

Ashy Spike-Moss

Ashy spike-moss (*Selaginella cinerascens*) is a CRPR 4.1 perennial spore-bearing species in the spike-moss family that occurs in coastal scrub and chaparral habitats from 66 to 2,100 feet in elevation. It is easily identifiable at any time of the year due to its characteristic ashy moss-like vegetation. This species was observed throughout almost all of the undisturbed native habitats on MCAS Miramar. Due to the widespread nature of this species, mapping for this species was conducted to provide only generalized locations.

San Diego Sagewort

San Diego sagewort (*Artemisia palmeri*) is a CRPR 4.2 perennial deciduous shrub in the sunflower family that occurs in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland areas between 50 and 3,000 feet in elevation. Thirty-seven occurrences of this species were noted within the BRSA on the southern end of Pomerado Road, and were associated with the large, intermittent drainage south of Pomerado Road.

San Diego County Viguiera

San Diego County viguiera (*Bahiopsis* [*Viguiera*] *laciniata*) is a CRPR 4.2 perennial shrub in the sunflower family that occurs in chaparral and coastal sage scrub communities from 190 to 2,460 feet in elevation. This species was documented within the BRSA along the southern end of Pomerado Road in the community of Scripps Ranch. These shrubs appear to have been planted during revegetation efforts because they are located immediately along the road edge within a revegetated area. Approximately 1,334 individual shrubs were observed.

Graceful Tarplant

Graceful tarplant (*Holocarpha virgata* ssp. *elongata*) is a CRPR 4.2 annual herb in the sunflower family that blooms from May to November. It is usually found in mildly disturbed or overgrazed grasslands, and is often abundant and numbering in the thousands. Because its habitat is usually on relatively level ground where development is common, it is presumed to be declining in San Diego County (Reiser 1994). Graceful tarplant was observed within the BRSA on MCAS Miramar. Approximately 473 graceful tarplant individuals were observed growing under a solar array on the northern portion of MCAS Miramar, and approximately 116 individuals were observed along the west end of the aqueduct road, south of the paved Green Farm Road (also referred to as Rifle Range Road or H Road).

Decumbent Goldenbush

Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*) is a CRPR 1B.2 perennial shrub in the sunflower family that occurs in chaparral and sandy, often disturbed coastal scrub habitats between 30 and 450 feet in elevation. Decumbent goldenbush is identifiable during a flowering period from April to November. It is also possible to identify this species outside of the flowering period because it has distinguishing vegetative characters. Approximately 145 individuals were observed north of Scripps Poway Parkway along Pomerado Road.

Small-Flowered Microseris

Small-flowered microseris (*Microseris douglasii* ssp. *platycarpha*) is a CRPR 4.2 annual herb in the sunflower family that occurs within cismontane woodland, coastal scrub, valley and foothill grasslands, and vernal pools from 50 to 3,510 feet in elevation. This species is typically identifiable during a March to May blooming period. Approximately 50 individuals of this species were observed within vernally mesic areas on MCAS Miramar.

Golden-Rayed Pentachaeta

Golden-rayed pentachaeta (*Pentachaeta aurea* ssp. *aurea*) is a CRPR 4.2 annual herb in the sunflower family that occurs in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, and valley and foothill grasslands at elevations between 260 and 6,070 feet. It is normally identifiable from March to July. Golden-rayed pentachaeta was observed during the Quino checkerspot butterfly (QCB) surveys on MCAS Miramar in February 2015, as well as during the first pass of special-status plant surveys in April 2015 on MCAS Miramar and within the Elliot Field Station, which is directly north of MCAS Miramar. Approximately 6,000 individuals were observed within these areas.

San Diego Barrel Cactus

San Diego barrel cactus (*Ferocactus viridescens*) is a CRPR 2B.1 perennial stem succulent in the cactus family that occurs in chaparral, coastal scrub habitats, valley and foothill grasslands, and vernal pool habitat at elevations between nine and 1,480 feet. One individual was mapped within the BRSA along the aqueduct road on MCAS Miramar.

Western Dichondra

Western dichondra (*Dichondra occidentalis*) is a CRPR 4.2 perennial rhizomatous herb in the morning-glory family that usually occurs under shrubs in woodlands, coastal sage scrub, or chaparral between 160 and 1,640 feet in elevation. Although it blooms from January to July, it is identifiable outside of that period by its characteristic leaf shape. Approximately 580 individuals were observed in the understory of trees growing along Pomerado Road in the southern portion of the BRSA.

Summer Holly

Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*) is a CRPR 1B.2 perennial evergreen shrub in the heath family that occurs in chaparral and cismontane woodland between 980 and 2,595 feet in elevation. Summer holly is normally identifiable during an April to June flowering period, but can also be identified from its characteristic leaf shape. One individual summer holly was observed in a steep, east-facing drainage on the west side of Old Highway 395, north of Deer Springs Road.

Nuttall's Scrub Oak

Nuttall's scrub oak is a CRPR 1B.1 perennial evergreen shrub in the oak family that is found in coastal chaparral habitats (Reiser 1994). On flat terrain, this species appears to favor open coastal chaparral habitat, and this shrub may grow in dense stands on north-facing slopes. It often has a rounded, almost "pruned" appearance, with small, spinose leaves. Reiser (1994) confirms that Nuttall's scrub oak occurs on MCAS Miramar "in considerable numbers" and "in

the hills at Camp Elliott."[4] The BRSA is situated within an area of overlap between the geographic range of Nuttall's scrub oak and the common scrub oak.

Approximately 321 individual Nuttall's scrub oak trees were observed in the southern BRSA along Pomerado Road. These occurrences were found in association with southern mixed chaparral communities on north-facing slopes, and within more open chaparral (e.g., southern mixed chaparral and chamise chaparral) communities on flat terrain.

Nuttall's scrub oak observed within the BRSA exhibited characteristics indicative of hybridization with the common scrub oak. The most diagnostic character that distinguishes Nuttall's scrub oak from the common scrub oak is the presence in Nuttall's scrub oak of two- to six-rayed spreading trichomes (i.e., hairs) on the underside of the leaf that can generally be observed by the unaided eye or with a hand lens under low magnification. The common scrub oak exhibits minute, appressed, four- to 10-rayed trichomes that are generally not visible without magnification. Upon examination of the scrub oak specimens on MCAS Miramar using a microscope, it was noted that some leaves exhibited both the long two- to six-rayed trichomes indicative of Nuttall's scrub oak, and the minute four- to 10-rayed trichomes indicative of the common scrub oak. As a result, it can be concluded that many of the small, rounded scrub oaks observed within MCAS Miramar and the southern BRSA along Pomerado Road (generally south of Scripps Poway Parkway) are hybrids of these two species. To ensure consistency in mapping Nuttall's scrub oak in the field, specimens were determined to be Nuttall's scrub oak only if spreading two- to six-rayed hairs were readily visible with or without the use of a hand lens on the underside of the leaves examined. If biologists did not readily observe these trichomes, they were not mapped and were presumed to be the common scrub oak.

Engelmann Oak

Engelmann oak (*Quercus engelmannii*) is a CRPR 4.2 deciduous tree in the oak family that occurs in chaparral, cismontane woodland, riparian woodland, and valley and foothill grasslands between 164 and 4,265 feet in elevation. This species is normally identifiable at any time of the year due to its characteristic grey-green foliage, and long, wavy leaves. Sixty-seven Engelmann oak individuals were observed in scattered locations throughout the urbanized areas in the northern portion of the BRSA, often associated with or adjacent to drainages.

Engelmann oak individuals north of Deer Springs Road and south of Gopher Canyon Road appear to be hybridizing with Torrey oak (*Quercus* x. *acutidens*), a common scrub oak hybrid. Specifically, these Engelmann oak individuals exhibited brighter green leaves, an occasional leaf with serration, and a smaller growth form than other Engelmann oak individuals observed in the BRSA. Consistent with the dichotomous key for the *Quercus* genus in *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012), leaf color and size—as well as the size of the individual tree—were used as diagnostic characteristics to differentiate these individuals from Torrey oak.

[4] The former Camp Elliott encompasses portions of the Tierrasanta and West Hills communities, the planned Castlerock community, Mission Trails Region Park, and the East Elliott Community Planning Area. Additionally, portions of the former camp are still used by the U.S. Marine Corps.

Brewer's Calandrinia

Brewer's calandrinia (*Calandrinia breweri*) is a CRPR 4.2 annual herb in the miner's lettuce family that occurs on sandy or loamy soils—as well as disturbed sites and burns—within chaparral and coastal scrub communities between 32 and 4,002 feet in elevation. It is normally identifiable from March to June. Over 100 individuals were observed during the QCB surveys on MCAS Miramar in February 2015. This species was blooming at the time of the observations, which was slightly earlier than normal. However, this was not unexpected given the early precipitation events in the winter of 2014 and the dry January and early February in 2015.

Parry's Tetracoccus

Parry's tetracoccus (*Tetracoccus dioicus*) is a CRPR 1B.2 perennial deciduous shrub in the bitter-tree family that occurs in chaparral and coastal scrub between 540 and 3,280 feet in elevation. This perennial deciduous shrub is normally identifiable during an April to May flowering period, although it is somewhat characteristic in vegetative form and can be identified outside of the flowering period. One CNDDB occurrence of this species was documented within 0.25 mile of the Proposed Project area. Occurrences have also been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. In addition, the SDNHM includes records of this species within one mile of the northern end of the BRSA, on the west side of I-15 near the community of Rainbow. This species was observed within a drainage on the west side of Rainbow Hills Road within the BRSA. Approximately 50 individual shrubs were observed on the south bank of this drainage.

Long-Spined Spineflower

Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*) is a CRPR 1B.2 annual herb in the buckwheat family that occurs in chaparral, coastal scrub, meadows, seeps, valley and foothill grasslands, and vernal pools below 5,000 feet in elevation and often on clay soils. Five recent CNDDB occurrences dated from 2003 have been reported within one mile of the BRSA. Long-spined spineflower is normally identifiable during an April to July flowering period.

Approximately 1,350 individual long-spined spineflower individuals were observed in the BRSA across multiple locations within the central portion of MCAS Miramar. Some occurrences were small, with just a few individuals, and others were large, with more than 100 individuals. This species was observed within mapped clay soils, primarily within highly compacted soils with low cover of non-native species (e.g., brome grasses). These occurrences also coincide with the location of a CNDDB element record for this species.

California Adolphia

California adolphia (*Adolphia californica*) is a CRPR 2B.1 perennial deciduous shrub in the buckthorn family that occurs on clay soils in chaparral, coastal scrub, and valley and foothill grasslands at elevations between 140 and 2,500 feet. California adolphia is typically identifiable during a flowering period from January to April. It is also possible to identify this species outside of the flowering period because it has distinguishing cauline spines.

At least 750 California adolphia individuals were observed within a remnant patch of Diegan coastal sage scrub on an east-facing slope, south of the Lake Hodges area. California adolphia was present in this stand at an absolute cover of 50 to 60 percent and comprised a distinct Diegan coastal sage scrub stand.

Southwestern Spiny Rush

Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*) is a CRPR 4.2 perennial rhizomatous herb in the rush family that occurs in coastal dunes, meadows, and seeps, and occasionally within alkaline seeps, marshes and swamps, and coastal salt marshes. Sixteen individuals were observed within two intermittent drainages in the southern portion of the BRSA.

San Diego Goldenstar

San Diego goldenstar (*Bloomeria clevelandii*) is a CRPR 1B.1 bulbiferous herb in the brodiaea family that occurs on clay substrates in chaparral, coastal scrub, valley and foothill grasslands, and vernal pools between 160 and 1,525 feet in elevation. Fifteen recent occurrences have been reported within one mile of the BRSA, the most recent dating from 2010. Nearly 4,000 individuals were observed throughout MCAS Miramar and within the Elliot Field Station, which is directly north of MCAS Miramar. These occurrences were in peak bloom during the first pass of the special-status plant surveys conducted in April 2015 and were often associated with golden-rayed pentachaeta occurrences. One large population was observed in the understory of a eucalyptus (*Eucalyptus* spp.) grove.

Orcutt's Brodiaea

Orcutt's brodiaea (*Brodiaea orcuttii*) is a CRPR 1B.1 perennial bulbiferous herb in the brodiaea family that occurs in clay soils in closed-cone coniferous forest, chaparral, cismontane woodland, meadows, seeps, valley and foothill grasslands, and vernal pools between 90 and 5,550 feet in elevation. Orcutt's brodiaea is typically identifiable during a May to July flowering period.

Approximately 2,300 Orcutt's brodiaea individuals were observed within mapped clay soils on MCAS Miramar. This species was in peak bloom during the first pass of the special-status plant surveys conducted in April 2015. It was often associated with non-native grasslands, and was often intermixed with or very near to long-spined spineflower and San Diego goldenstar occurrences.

5 – DISCUSSION

Special-status plant surveys conducted within the BRSA during 2015 may underrepresent the total abundance and distribution of special-status plants because of the historic California drought. Between October 1, 2014 and April 26, 2015, the area experienced approximately 66 percent of the normal rainfall, according to the San Diego Lindbergh Field station (National Oceanic and Atmospheric Administration [NOAA] 2015), and temperatures were four to eight degrees above normal from January to April 2015 (U.S. Climate Data 2015). This combination of higher-than-normal temperatures and below-average precipitation resulted in early spring

flowering, with peak bloom on or around April 15, 2015. Drought conditions also likely resulted in lower population numbers than average.

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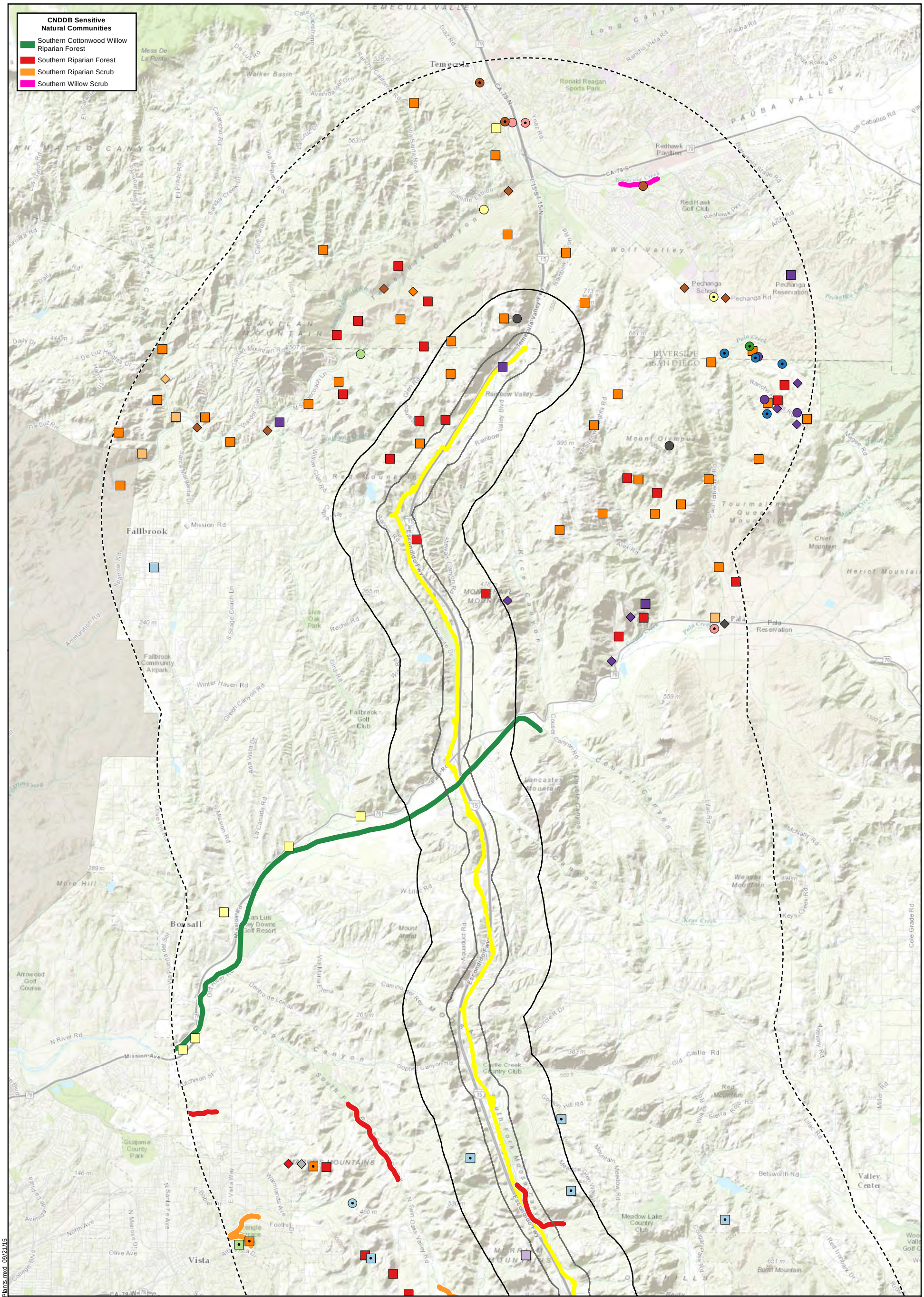
ATTACHMENT A: CNDDB OCCURRENCES FOR SPECIAL-STATUS PLANT SPECIES



Attachment A: CNDDB Occurrences for Special-Status Plant Species Map 1 of 3

Pipeline Safety & Reliability Project

- 0.25-Mile
- 1-Mile
- 5-Miles
- Biological Resource Survey Area
- California screw moss
- Coulter's goldfields
- Gander's ragwort
- Jaeger's milk-vetch
- Nevin's barberry
- Orcutt's brodiaea
- Orcutt's pincushion
- Parry's tetracoccus
- Payson's jewelflower
- Rainbow manzanita
- Ramona horkelia
- Robinson's pepper-grass
- San Diego ambrosia
- San Diego thorn-mint
- San Miguel savory
- Shevock's copper moss
- chaparral nolina
- chaparral sand-verbena
- decumbent goldenbush
- delicate clarkia
- felt-leaved monardella
- intermediate monardella
- long-spined spineflower
- mesa horkelia
- slender-horned spineflower
- smooth tarplant
- summer holly
- thread-leaved brodiaea
- wart-stemmed ceanothus

1:100,000

0 1 2 Miles

SoCalGas A Sempra Energy utility

SDGE A Sempra Energy utility

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CNDDB Sensitive Natural Communities

- Southern Coast Live Oak Riparian Forest
- Southern Cottonwood Willow Riparian Forest
- Southern Riparian Forest
- Southern Riparian Scrub

Attachment A: CNDDB Occurrences for Special-Status Plant Species Map 2 of 3

Pipeline Safety & Reliability Project

- 0.25-Mile
- 1-Mile
- 5-Miles
- Biological Resource Survey Area
- California adolphia
- Del Mar manzanita
- Encinitas baccharis
- Nuttall's scrub oak
- Orcutt's brodiaea
- Palmer's goldenbush
- Parry's tetracoccus
- Rainbow manzanita
- Ramona horkelia
- Robinson's pepper-grass
- San Diego ambrosia
- San Diego barrel cactus
- San Diego button-celery
- San Diego marsh-elder
- San Diego milk-vetch
- San Diego sagewort
- San Diego thorn-mint
- decumbent goldenbush
- delicate clarkia
- felt-leaved monardella
- purple stemodia
- sea dahlia
- smooth tarplant
- southern tarplant
- spreading navarretia
- summer holly
- thread-leaved brodiaea
- variegated dudleya
- wart-stemmed ceanothus

1:100,000

0 1 2 Miles

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CNDDB Sensitive Natural Communities

- San Diego Mesa Hardpan Vernal Pool
- Southern Coast Live Oak Riparian Forest
- Southern Cottonwood Willow Riparian Forest
- Southern Maritime Chaparral
- Southern Riparian Forest
- Southern Riparian Scrub
- Southern Sycamore Alder Riparian Woodland
- Valley Needlegrass Grassland

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Attachment A: CNDDB Occurrences for Special-Status Plant Species Map 3 of 3

Pipeline Safety & Reliability Project

- 0.25-Mile
- 1-Mile
- 5-Miles
- Biological Resource Survey Area
- California Orcutt grass
- California adolphia
- Campbell's liverwort
- Coulter's goldfields
- Coulter's saltbush
- Del Mar Mesa sand aster
- Del Mar manzanita
- Encinitas baccharis
- Nuttall's scrub oak
- Orcutt's brodiaea
- Orcutt's spineflower
- Otay Mesa mint
- Palmer's goldenbush
- Palmer's grapplinghook
- Robinson's pepper-grass
- San Diego ambrosia
- San Diego barrel cactus
- San Diego button-celery
- San Diego goldenstar
- San Diego gumplant
- San Diego marsh-elder
- San Diego mesa mint
- San Diego sagewort
- San Diego thorn-mint
- chaparral ragwort
- decumbent goldenbush
- delicate clarkia
- felt-leaved monardella
- little mousetail
- long-spined spineflower
- oil neststraw
- prostrate vernal pool navarretia
- purple stemodia
- singlewhorl burrobrush
- smooth tarplant
- southern tarplant
- spreading navarretia
- summer holly
- thread-leaved brodiaea
- variegated dudleya
- wart-stemmed ceanothus
- willowy monardella
- woven-spored lichen

1:100,000

0 1 2 Miles

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ATTACHMENT B: SPECIAL-STATUS PLANT SPECIES WITH THE POTENTIAL TO OCCUR

ATTACHMENT B: SPECIAL-STATUS PLANT SPECIES WITH THE POTENTIAL TO OCCUR

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
BRYOPHYTES - LIVERWORTS					
Sphaerocarpos drewei Bottle liverwort	1B.1	Bottle liverwort occurs on soil in openings in chaparral and coastal scrub between 295 and 1,970 feet in elevation.	Not applicable/ Ephemeral Liverwort	Past occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. However, there are only two records of this species for San Diego County in the CNDDB and much of the suitable historic habitat for this species has been lost to urbanization. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**
BRYOPHYTES - MOSSES					
Schizymenium shevockii Shevock's copper moss	1B.2	Shevock's copper moss occurs on metamorphic, rock, and mesic areas in cismontane woodland between 2,460 and 4,600 feet in elevation.	Not applicable/ Moss	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species occurs at elevations higher than those within the BRSA. **No Potential**
Tortula californica California screwmoss	1B.2	California screwmoss occurs in sandy soils in chenopod scrub and valley and foothill grassland between 30 feet and 4,790 feet in elevation.	Not applicable/ Moss	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. One recent CNDDB occurrence is documented within five miles of the Proposed Project area.	Suitable habitat for this species is present, the geographic and elevation ranges within the BRSA are consistent with those documented for this species, and this species has been documented within one to five miles of the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**

[1] Explanation of state and federal listing codes:

Federal listing codes:

-FE: Federally listed as Endangered
-FT: Federally listed as Threatened
-FPE: Federally proposed for listing as Endangered
-FPT: Federally proposed for listing as Threatened
-FPD: Federally proposed for delisting
-FC: Federal candidate species

California listing codes:

-CE: State-listed as Endangered
-CT: State-listed as Threatened
-CR: State-listed as Rare
-CCE: Candidate for state listing as Endangered
-CCT: Candidate for state listing as Threatened
-CEQA: Not a state-listed species, but protected under the California Environmental Quality Act (CEQA)

California Rare Plant Ranks (CRPRs):

-1A: Presumed extinct in California
-1B: Rare or Endangered in California and elsewhere
-2: Rare or Endangered in California, more common elsewhere
-3: Plants for which we need more information; a review list
-4: Plants of limited distribution; a watch list

CRPR Threat Codes:

-.1: Seriously Endangered in California (over 80 percent of occurrences Threatened/high degree and immediacy of threat)
-.2: Fairly Endangered in California (20 to 80 percent of occurrences Threatened)
-.3: Not very Endangered in California (less than 20 percent of occurrences Threatened or no current threats known)

Note: CRPR List 1A and some List 3 plant species lacking any threat information receive no threat code extension.

[2] The California Native Plant Society (CNPS) Nine-Quad Search refers to a query of the CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS Inventory) (CNPS, 2014). All occurrence records in the CNPS Inventory include mention of the United States (U.S.) Geological Survey (USGS) 7.5-minute quads where this species has been documented. The CNPS Nine-Quad Search includes species that have been documented from the USGS quads overlapping the Line 3602 Natural Gas Transmission Project (Proposed Project) area or the quads immediately adjacent to those quads. All species with a CRPR of 1A, 1B, and 2 are included within the CNPS Nine-Quad Search. CRPR List 3 and 4 species have been added to this table if they were observed within the BRSA during field surveys.

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Triquetrella californica Coastal triquetrella	1B.2	Coastal triquetrella occurs on soil in coastal bluff scrub and coastal scrub between 30 and 440 feet in elevation. The San Diego occurrence of this species at San Vicente Dam was documented at 650 feet in elevation.	Not applicable/ Moss	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. The remaining 12 occurrences are documented from the Bay Area. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**
LYCOPHYTES					
Selaginellaceae – Spike Moss Family					
Selaginella cinerascens Ashy spike-moss	4.1	Ashy spike-moss occurs in coastal scrub and chaparral habitats from 60 to 2,100 feet in elevation.	Not applicable/ Perennial rhizomatous herb	There are no California Natural Diversity Database (CNDDB) occurrences of this species documented within five miles of the Proposed Project area.	This species was observed in patches sporadically throughout Marine Corps Air Station (MCAS) Miramar and nearby areas, primarily within relatively undisturbed Diegan coastal sage scrub, southern mixed chaparral, and chamise chaparral habitats. **Present**
GYMNOSPERMS					
Cupressaceae – Cypress Family					
Hesperocyparis forbesii Tecate cypress	1B.1	Tecate cypress occurs on clay, gabbroic, or metavolcanic substrates in closed-cone coniferous forest and chaparral between 260 and 4,920 feet in elevation.	Not applicable/ Perennial Evergreen Tree	CNPS occurrences have been reported within USGS 7.5-minute quads surrounding the BRSA. However, the nearest occurrence of this species is approximately 12 miles to the northwest of the BRSA in southern Riverside County. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**
Pinaceae – Pine Family					
Pinus torreyanna ssp. *torreyanna* Torrey pine	1B.2	Torrey pine occurs on sandstone in closed-cone coniferous forest and chaparral between 240 and 525 feet in elevation. This species is restricted to the immediate coastal zone of San Diego County and has not been documented east of I-15.	Not applicable/ Perennial Evergreen Tree	CNPS occurrences have been reported within USGS 7.5-minute quads surrounding the BRSA. No occurrences of this species have ever been documented as far inland as the BRSA. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**
ANGIOSPERMS - DICOTS					
Apiaceae (Umbelliferae) – Carrot Family					
Eryngium aristulatum var. *parishii* San Diego button-celery	FE CE 1B.1	San Diego button-celery occurs in coastal scrub, valley and foothill grassland, and vernal pools, often in mesic areas below 2,000 feet in elevation.	April-June/ Annual or Perennial Herb	One past CNDDB occurrence was documented within 0.25 mile of the Proposed Project area in 1983, and one past occurrence was documented within one mile in 1979. Recent occurrences have been documented within five miles of the Proposed Project area. This species occurs on MCAS Miramar.	Suitable habitat for this species is present within the vernal pools on MCAS Miramar, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was confirmed to be blooming during reference population checks in a nearby vernal pool preserve area in April 2015. However, it was not observed within vernal pools occurring in the BRSA during either pass of special-status plant surveys in 2015. **Not Present**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Eryngium pendletonense Pendleton button-celery	1B.1	Pendleton button-celery occurs on clay soils in vernally mesic areas in coastal bluff scrub, valley and foothill grassland, and vernal pools between 50 and 365 feet in elevation.	April-July/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species is restricted to areas on Marine Corps Base, Camp Pendleton within approximately two miles of the Pacific Ocean, which is approximately 15 miles west of the BRSA. No occurrences of this species have been documented as far inland as the BRSA. **No Potential**
Asteraceae (Compositae) – Sunflower Family					
Ambrosia chenopodifolia San Diego bur-sage	2B.1	San Diego bur-sage occurs in coastal scrub habitat between 180 and 510 feet in elevation. This species is apparently restricted to the Otay Mesa area of southern San Diego County.	April-June/ Perennial Shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species is apparently restricted to the Otay Mesa area of southern San Diego County, approximately 20 miles south of the BRSA. **No Potential**
Ambrosia monogyra Singlewhorl burrobush	2.2	Singlewhorl burrobush occurs in chaparral and Sonoran desert scrub, often in sandy substrates and below 1,600 feet in elevation. This species is documented from south of SR-52 to the U.S.-Mexico border and as far east as the community of Dulzura.	August-November/ Perennial Shrub	Past CNDDB occurrences have been reported within one mile of the BRSA. One historic CNDDB occurrence of this species was documented within one mile of the Proposed Project area in 1979. However, considering the geographic distribution of this species, it would be most likely within MCAS Miramar. This species has never been documented as occurring on MCAS Miramar (USMC 2014).	Suitable habitat for this species is present in the form of chaparral, but this species is a recognizable shrub species and was not observed during either pass of special-status plant surveys in 2015. **Not Present**
Ambrosia pumila San Diego ambrosia	FE 1B.1	San Diego ambrosia occurs in sandy loam or clay, often in disturbed areas, and sometimes alkaline in chaparral, coastal scrub, valley and foothill grassland, and vernal pools between 60 and 1,365 feet in elevation throughout coastal San Diego County.	April-October/ Perennial Rhizomatous Herb	There is one recent CNDDB record documented within one mile of the Proposed Project area. Recent occurrences are documented within five miles of the Proposed Project area. The SDNHM reports one occurrence of this species on the west side of I-15 adjacent to Lake Hodges, which is within one mile of the BRSA.	Suitable habitat for this species is present, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was blooming at the time of reference population checks at a known site near the BRSA. However, this species was not observed during either pass of special-status plant surveys in 2015, and would have been visible it was if present. **Not Present**
Artemisia palmeri San Diego sagewort	4.2	This species occurs in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland areas between 50 and 3,000 feet in elevation.	February-September/ Perennial deciduous shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species was observed within the BRSA on the southern end of Pomerado Road, and is associated with riparian habitat. **Present**
Baccharis vanessae Encinitas baccharis	FT CE 1B.1	Encinitas baccharis occurs on sandstone in chaparral and cismontane woodland between 190 and 2,370 feet in elevation. It occurs primarily in low-growing chaparral in Corralitos loamy sand, Cieneba rocky coarse sandy loam soils or associated with large granitic boulders.	August-November/ Perennial Deciduous Shrub	Recent CNDDB occurrences are documented within five miles of the Proposed Project area. One past CNDDB occurrence was documented within one mile in 1984. The SDNHM herbarium includes records from Lake Hodges approximately two miles west of the BRSA.	Suitable habitat for this species is present within Kit Carson Park and the San Dieguito River Park, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. Cieneba rocky coarse sandy loam soils also occur within the BRSA. However, this species was not observed within the BRSA during either pass of special-status plant surveys in 2015 and would have been visible if present. In addition, this species' geographic range is fairly narrow within San Diego County, and very little habitat occurs for this species within that geographic range, none of which could be characterized as low-growing chaparral. **Not Present**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Bahiopsis laciniata (formerly *Viguiera laciniata*) San Diego County viguiera	4.2	San Diego County viguiera occurs in chaparral and coastal sage scrub communities from 190 to 2,460 feet in elevation.	February-August/ Perennial Shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species was documented within the BRSA along the southern end of Pomerado Road in the community of Scripps Ranch. These individuals appear to have been planted during revegetation efforts because they are located immediately along the road edge within a revegetated area. **Present**
Centromadia parryi ssp. *australis* Southern tarplant	1B.1	Southern tarplant occurs in marshes and swamps, occasionally along estuary margins, valley and foothill grasslands, occasionally in vernally mesic areas, and vernal pools below 1,575 feet in elevation.	June-November/ Annual Herb	One recent CNDDB occurrence is documented within 0.25 mile of the Proposed Project area, and one recent occurrence is documented within one mile. One past occurrence was documented within 0.25 mile of the Proposed Project in 1916. This species occurs within the same general geographic and elevation range as the BRSA.	Suitable habitat for this species is present, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Centromadia pungens ssp. *laevis* Smooth tarplant	1B.1	Smooth tarplant occurs in alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland below 7,200 feet in elevation. This species occurs widely in San Diego County from Marine Corps Base, Camp Pendleton to the City of Santee.	April-September/ Annual Herb	Recent CNDDB occurrences for this species are recorded within five miles of the Proposed Project area.	Potentially suitable habitat exists in meadows and seeps, riparian woodlands, and grasslands within the BRSA. The extent to which alkaline soils are present within the BRSA is undetermined. No chenopod scrub was observed, but tamarisk scrub was observed directly south of the San Luis Rey River, and on the northern shore of Lake Hodges. While tamarisk is not restricted to alkaline soils, it is well adapted to alkaline conditions. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	1B.1	Orcutt's pincushion occurs in sandy coastal bluff scrub and on coastal dunes below 330 feet in elevation.	January-August/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable bluff scrub or dune habitat for this species is present within the BRSA. **No Potential**
Corethrogyne filaginifolia var. *incana* San Diego sand aster	1B.1	San Diego sand aster occurs in coastal bluff scrub, chaparral, and coastal scrub between 10 and 380 feet in elevation.	June-September/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. All SDNHM herbarium records are restricted to areas within the immediate coastal zone, with the exception of one outlier in the southern San Diego mountains.	Although suitable habitat for this species is present, this species typically occurs between five and 15 miles from the BRSA. This species was not observed during either pass of the 2015 special-status plant surveys and would have been visible if present. **Not Present**
Corethrogyne filaginifolia var. *linifolia* Del Mar Mesa sand aster	1B.1	Del Mar Mesa sand aster occurs in sand substrates on coastal bluff scrub, chaparral (e.g., maritime and openings), and coastal scrub between 50 and 500 feet in elevation.	May-September/ Perennial Herb	Recent CNDDB occurrences of this species have been recorded within five miles of the BRSA. This species is known from only the immediate coastal zone, with the majority of the occurrences near the cities of Del Mar and Solana Beach.	No suitable habitat was observed within the BRSA. **No Potential**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Deinandra conjugens Otay tarplant	FT CE 1B.1	Otay tarplant occurs on clay soils in coastal scrub and valley and foothill grassland between 80 and 990 feet in elevation.	May-June/ Annual Herb	CNPS occurrences have been reported from within the USGS 7.5-minute quads within or surrounding the BRSA (i.e., the National City and Jamul Mountains quads). However, this species has never been documented north of I-8, with the closest occurrence approximately eight miles to the southeast of the BRSA. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species' geographic range is restricted to areas south of I-8 and was not observed during either pass of the 2015 special-status plant surveys. **Not Present**
Ericameria palmeri var. *palmeri* Palmer's goldenbush	1B.1	Palmer's goldenbush occurs in coastal scrub, typically in mesic areas, below 2,000 feet in elevation.	September-November/ Perennial Evergreen Shrub	Recent CNDDB occurrences of this species have been recorded within five miles of the BRSA. This species has a wide distribution according to SDNHM herbarium records.	Suitable habitat is present, the geographic and elevation ranges within the BRSA are consistent with those documented for this species, and this species has been documented within one to five miles of the BRSA. This species was not observed within the BRSA during surveys in 2015, and would have been visible in mesic coastal sage scrub stands if present. **Not Present**
Grindelia hallii San Diego gum plant	1B.2	San Diego gum plant occurs in chaparral, lower montane coniferous forest, meadows, and valley and foothill grassland between 600 and 5,730 feet in elevation.	May-October/Perennial Herb	CNPS occurrences have been reported within the La Mesa and Poway quads. As a result, this species is most likely to be observed within the MCAS Miramar portion of the BRSA and isolated natural areas along Pomerado Road within the City of Poway and the community of Scripps Ranch. This species is not documented in the MCAS Miramar INRMP (USMC 2014). One recent CNDDB occurrence is documented within five miles of the Proposed Project area.	Suitable habitat for this species is present; the geographic and elevation ranges within the BRSA are consistent with those documented for this species; and this species has been documented within one to five miles of the BRSA. This species was not observed during either pass of 2015 special-status plant surveys. **Not Present**
Hazardia orcuttii Orcutt's hazardia	CT 1B.1	Orcutt's hazardia occurs in maritime chaparral and coastal scrub, often on clay soils between 260 and 280 feet in elevation.	August-October/ Perennial Evergreen Shrub	CNPS occurrences have been reported from within a USGS 7.5-minute quad adjacent to the BRSA (i.e., the Rancho Santa Fe quad). However, the SDNHM herbarium record for this species is approximately 10 miles southwest of the BRSA, also in the community of Rancho Santa Fe area. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present in the form of coastal scrub, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species typically occurs at lower elevations than the BRSA. This species was not observed during either pass of the 2015 special-status plant surveys. **Not Present**
Heterotheca sessiliflora ssp. *sessiliflora* Beach goldenaster	1B.1	Beach goldenaster occurs in coastal chaparral, coastal dunes, and coastal scrub below 4,020 feet in elevation.	March-December/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. No records of this species have been documented east of I-5 because this species is restricted to areas within the immediate coastal zone.	The BRSA is outside of this species' known geographic distribution. **No Potential**
Holocarpha virgata ssp. *elongata* Graceful tarplant	4.2	Graceful tarplant occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities between 190 and 3,610 feet in elevation.	May-November/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search	Graceful tarplant was observed in two locations within MCAS Miramar—one at the northern end of the aqueduct road and one on the west side of the aqueduct road south of the paved Green Farms Road. **Present**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Hulsea californica San Diego sunflower	1B.3	San Diego sunflower occurs in openings and burned areas in chaparral, lower montane coniferous forest, and upper montane coniferous forest between 3,000 and 9,565 feet in elevation.	April-June/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species occurs at significantly higher elevations than the BRSA. **No Potential**
Isocoma menziesii var. *decumbens* Decumbent goldenbush	1B.2	Decumbent goldenbush occurs in chaparral and sandy, often disturbed coastal scrub habitats between 30 and 450 feet in elevation.	April-November/ Perennial Shrub	Recent CNDDB occurrences are recorded within five miles of the Proposed Project area. The SDNHM also has records of this species west of I-15 near Rancho Bernardo, and within a few miles of the BRSA.	Suitable habitat for this species is present, the geographic and elevation ranges within the BRSA are consistent with those documented for this species, and this species has been documented within one to five miles of the BRSA. Individual goldenbush (*Isocoma menziesii)* individuals were observed in the BRSA and this intraspecific taxon (i.e., var. *decumbens*) was verified within the BRSA during surveys in May 2015. Approximately 145 individuals were observed north of Scripps Poway Parkway along Pomerado Road. **Present**
Iva hayesiana San Diego marsh-elder	2B.2	San Diego marsh-elder occurs in marshes and swamps and on playas between 30 and 1,640 feet in elevation. This species is widely distributed in San Diego County, with the majority of the SDNHM records documented south of the City of Escondido to the U.S.-Mexico border.	April-October/ Perennial Herb	One historic CNDDB occurrence was reported within 0.25 mile of the Proposed Project area in 1970. Recent CNDDB occurrences are documented within five miles of the Proposed Project area. This species was documented from a drainage near Lake Miramar just north of MCAS Miramar, approximately one mile from the BRSA.	Suitable habitat for this species is present in scattered locations throughout the BRSA; the geographic and elevation ranges within the BRSA are consistent with those documented for this species; and this species has been documented within one to five miles of the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015, but may be present within riparian areas that were inaccessible to special-status plant surveyors. **Not Expected**
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	1B.1	Coulter goldfields occurs in alkaline soils in coastal salt marshes, playas, and vernal pools below 4,600 feet in elevation.	February-June/ Annual Herb	CNDDB occurrences of this species have been recorded within five miles of the BRSA.	The extent to which alkaline soils are present within the BRSA is undetermined. No chenopod scrub was observed, but tamarisk scrub was observed directly south of the San Luis Rey River and on the northern shore of Lake Hodges. While tamarisk is not restricted to alkaline soils, it is well adapted to alkaline conditions. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Leptosyne maritima Sea-dahlia	2.2	Sea-dahlia occurs in coastal bluff scrub and coastal scrub below 500 feet in elevation. It is geographically restricted to areas immediately along the Pacific Ocean in San Diego County, south of the City of Encinitas.	March-May/ Perennial Herb	Recent CNDDB occurrences of this species have been recorded within five miles of the BRSA. This species has never been documented as far inland as the BRSA.	The BRSA is outside of this species' known geographic distribution. **No Potential**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Microseris douglasii ssp. *platycarpha* Small-flowered microseris	4.2	Small-flowered microseris occurs within cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools from 50 to 3,510 feet in elevation.	March-May/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species was observed within vernally mesic areas on MCAS Miramar. **Present**
Packera gander Gander's ragwort	CR 1B.2	Gander's ragwort occurs on burns and gabbroic outcrops in chaparral between 1,310 and 3,940 feet in elevation.	April-June/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species occurs at elevations higher than those within the BRSA, primarily in the mountains east of the City of San Diego. **No Potential**
Pentachaeta aurea ssp. *aurea* Golden-rayed pentachaeta	4.2	Golden-rayed pentachaeta occurs in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, and valley and foothill grasslands at elevations between 260 and 6,070 feet.	March-July/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species was observed within the BRSA in multiple locations on MCAS Miramar. **Present**
Pseudognaphalium leucocephalum White rabbit-tobacco	2B.2	White rabbit-tobacco occurs in sandy, gravelly areas in chaparral, cismontane woodland, coastal scrub, and riparian woodland below 6,890 feet in elevation.	July-December/ Perennial Herb	CNPS occurrences have been reported within USGS 7.5-minute quads surrounding the BRSA. However, the nearest documented occurrence of this species is approximately 10 miles away on Marine Corps Base, Camp Pendleton. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed during either pass of special-status plant surveys in 2015 and would have been visible if present. **Not Present**
Senecio aphanactis Chaparral ragwort	2.2	Chaparral ragwort occurs in chaparral, cismontane woodland, and coastal scrub, below 2,600 feet in elevation.	January-April/ Annual Herb	One historic CNDDB occurrence was documented within 0.25 mile of the Proposed Project area in 1900, and one occurrence was documented within five miles in 1935.	Suitable habitat for this species is present, but all of the occurrences within five miles of the BRSA are more than 60 years old. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Stylocline citroleum Oil neststraw	1B.1	Oil nestsraw occurs in clay soils in chenopod scrub and coastal scrub between 100 and 1,300 feet in elevation.	April/ Annual Herb	One historic CNDDB occurrence of this species was recorded within five miles of the BRSA. This occurrence was from known from a single collection made in 1883 and the exact location of the collection is not known. The CNDDB mapped the collection in the "general vicinity of San Diego." It is not included on the most recent checklist of plants in San Diego County.	It is presumed that this species is extirpated from San Diego County. **No Potential**
Symphyotrichum defoliatum San Bernardino aster	1B.2	San Bernardino aster occurs near ditches, streams, and springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grassland between six and 6,700 feet in elevation. In San Diego County, this species occurs at elevations higher than 3,900 feet.	July-November/ Perennial Rhizomatous herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	In San Diego County, this species occurs at elevation ranges much higher than the BRSA. **No Potential**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Beberidaceae – Barberry Family					
Berberis nevinii Nevin's barberry	FE CE 1B.1	Nevin's barberry occurs on sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub between 900 and 2,710 feet in elevation.	March-April/ Perennial Evergreen Shrub	One recent CNDDB occurrence is documented within five miles of the Proposed Project area, specifically along Temecula Creek in the City of Temecula. The only record of this species in the SDNHM herbarium is from east of the Pauma Valley area, approximately 13 miles east of the BRSA	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed during either pass of the 2015 special-status plant surveys, and would have been visible if present. **Not Present**
Boraginaceae – Borage Family					
Cryptantha wigginsii Wiggin's cryptantha	1B.2	Wiggin's cryptantha occurs in coastal scrub, often on clay soils, between 60 and 910 feet in elevation. This species is apparently restricted to the immediate coastal zone in San Diego County.	February-June/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. This species is not known from as far inland as the BRSA, with the nearest SDNHM herbarium occurrence reported approximately 11 miles west of the BRSA.	Suitable habitat for this species is present. However, this species typically occurs at elevations below the lowest point within the BRSA, and this species typically occurs between five and 15 miles from the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Nama stenocarpa Mud nama	2B.2	Mud nama occurs in marshes, and in swamps on lake margins and riverbanks between 10 and 1,640 feet in elevation. The extant San Diego sites for this species are all created wetland sites.	January-July/ Annual or Perennial Herb	CNPS occurrences have been reported within the San Luis Rey quad approximately 10 miles west of the BRSA. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present along Lake Hodges and perennial waters such as the San Luis Rey River. However, the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015, nor were any areas of mud observed adjacent to wetlands. **Not Present**
Phacelia stellaris Brand's star phacelia	1B.1	Brand's star phacelia occurs in coastal dunes and coastal scrub below 650 feet in elevation.	March-June/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search, but all records of this species have been documented west of or immediately east of I-5 because this species is restricted to coastal areas.	The BRSA is outside of this species' known geographic distribution. **No Potential**
Brassicaceae (Cruciferae) – Mustard Family					
Erysimum ammophilum Sand-loving wallflower	1B.2	Sand-loving wallflower occurs in sandy openings in maritime chaparral, coastal dunes, and coastal scrub below 200 feet in elevation.	February-June/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable maritime habitat is present, and this species occurs below the elevations in the BRSA. **No Potential**
Sibaropsis hammittii Hammitt's clay-cress	1B.2	Hammitt's clay-cress occurs on clay soils in openings in chaparral and in valley and foothill grasslands between 2,360 and 3,500 feet in elevation. The SDNHM's herbarium records are all from the vicinity of the community of Alpine.	March-April/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species occurs at elevations higher than those within the BRSA and in a geographically isolated area approximately 20 miles east of the BRSA. **No Potential**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Cactaceae – Cactus Family					
Bergerocactus emoryi Golden-spined cereus	2B.2	Golden-spined cereus occurs in sandy soils in closed-cone coniferous forest, chaparral, and coastal scrub between 10 and 1,300 feet in elevation. Maritime succulent scrub is the primary habitat of this coastal cactus and moist ocean breezes may be a key to its habitat requirements.	May-June/ Perennial Stem Succulent	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. There are no recent CNDDB occurrences within five miles of the Proposed Project area.	There is no maritime succulent scrub within the BRSA and very few stem succulents species were observed within the BRSA. In addition, this species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**
Cylindropuntia californica var. *californica* Snake cholla	1B.1	Snake cholla occurs in chaparral and coastal scrub between 90 and 500 feet in elevation. This species is documented from southern San Diego County south of I-8, and from the Del Mar quad.	April-May/ Perennial Stem Succulent	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. However, there are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present. However, this species typically occurs at elevations below the lowest point within the BRSA, and this species typically occurs between five and 15 miles from the BRSA. This species was not observed during either pass of the special-status plant surveys conducted in 2015. **Not Present**
Ferocactus viridescens San Diego barrel cactus	2B.1	San Diego barrel cactus occurs in chaparral, coastal scrub habitat, valley and foothill grassland, and vernal pools between nine and 1,480 feet in elevation.	May-June/ Perennial Stem Succulent	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species was observed within the BRSA at the southern end of the aqueduct road on MCAS Miramar. **Present**
Chenopodiaceae – Goosefoot Family					
Aphanisma blitoides Aphanisma	1B.2	Aphanisma occurs on sandy soils in coastal bluff scrub, coastal dunes, and coastal scrub below 1,000 feet in elevation.	March-June/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. No records of this species have been documented east of Interstate (I-) 5 because this species is restricted to areas within the immediate coastal zone.	No suitable habitat is present. The Biological Resources Survey Area (BRSA) is outside of this species' known geographic distribution. **No Potential**
Atriplex coulteri Coulter's saltbush	1B.2	Coulter's saltbush occurs in alkaline or clay substrates in coastal dunes, coastal scrub, and valley and foothill grassland between seal level and 1,500 feet in elevation. Its suitable microhabitat conditions include ocean bluffs, ridgetops, and alkaline low places.	March-October/ Perennial Herb	In 1971, one past CNDDB occurrence was documented within one mile of the Proposed Project area and one past occurrence was documented within five miles.	Suitable habitat for this species is present in the form of alkaline low places and ridgetops in coastal scrub and grassland habitats. This species is documented from the same general geographic and elevation ranges occurring within the BRSA. However, this species was not observed during either pass of special-status plant surveys in 2015 and would likely have been visible if present. **Not Present**
Atriplex pacifica South Coast saltscale	1B.2	South Coast saltscale occurs in coastal bluff scrub, coastal dunes, coastal scrub, and playas below 460 feet in elevation.	March-October/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. There are no CNDDB occurrences within five miles of the Proposed Project area. The nearest SDNHM record is approximately four miles west of the BRSA.	Suitable habitat for this species is present in the form of coastal scrub; the geographic and elevation ranges within the BRSA are consistent with those documented for this species; and this species has been documented within one to five miles of the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Atriplex parishii Parish's brittlescale	1B.1	Parish's brittlescale occurs on alkaline substrates in chenopod scrub, playas, and vernal pools between 80 and 6,240 feet in elevation.	June-October/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable chenopod scrub or playa habitat is present. Vernal pool habitat is present on MCAS Miramar but this species has never been documented on MCAS Miramar (USMC 2014). **No Potential**
Suaeda esteroa Estuary seablite	1B.2	Estuary seablite occurs in coastal marshes and swamps below 20 feet in elevation.	May-January/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present. **No Potential**
Convolvulaceae – Morning-Glory Family					
Dichondra occidentalis Western dichondra	4.2	Western dichondra occurs usually under shrubs in woodlands, coastal sage scrub, or chaparral between 160 and 1,640 feet.	January – July/ Perennial Rhizomatous Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	Suitable habitat for this species is present and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was observed in the understory of trees growing along Pomerado Road in the southern portion of the BRSA, as well as underneath Nuttall's scrub oak on MCAS Miramar. **Present**
Crassulaceae – Stonecrop Family					
Dudleya blochmaniae ssp. *blochmaniae* Blochman's dudleya	1B.1	Blochman's dudleya occurs on rocky and often clay or serpentinite substrates in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland between 10 and 1,480 feet in elevation.	April-June/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. All records of this species have been documented west of or immediately east of I-5 because this species is restricted to the coastal zone.	The BRSA is outside of this species' known geographic distribution. **No Potential**
Dudleya brevifolia Short-leaved dudleya	CE 1B.1	Short-leaved dudleya occurs on Torrey sandstone in maritime openings in chaparral, and coastal scrub between 90 and 820 feet in elevation.	April-May/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable maritime habitat is present within the BRSA. **No Potential**
Dudleya multicaulis Many-stemmed dudleya	1B.2	Many-stemmed dudleya occurs in chaparral, coastal scrub and alley and foothill grassland, often on clay soils, between 50 feet and 2,600 feet in elevation.	April-July/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. SDNHM herbarium records for this species are exclusively within Marine Corps Base, Camp Pendleton, approximately 17 miles west of the BRSA.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is more than 15 miles from the BRSA. **No Potential**
Dudleya variegata Variegated dudleya	1B.2	Variegated dudleya occurs on clay soils in chaparral, cismontane woodland, coastal scrub habitat, valley and foothill grassland, and vernal pools between 10 and 1,900 feet in elevation.	April-June/ Perennial Herb	One recent CNDDB occurrence is documented within 0.25 mile of the Proposed Project area, and two recent occurrences are documented within one mile. Multiple recent occurrences are documented within five miles of the Proposed Project area. This species has also been documented on MCAS Miramar.	Suitable habitat for this species is present and clay soils are known to occur within the BRSA. This species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. This species can be very diminutive and difficult to detect if it occurs within areas dominated by non-native grasslands. Its populations are also smaller during drought years, making it more difficult to detect. As a result, this species is not expected to occur within the BRSA. **Not Expected**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Dudleya viscida Sticky dudleya	1B.2	Sticky dudleya occurs on rocky substrates in coastal bluff scrub, chaparral, cismontane woodland and coastal scrub between 30 and 1,810 feet in elevation.	May-June/ Perennial Herb	CNPS occurrences have been reported within USGS 7.5-minute quads surrounding the BRSA. The nearest documented SDNHM record is approximately 10 miles to the east on Marine Corps Base, Camp Pendleton, with CNPS records from quads adjacent to the BRSA. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed during either pass of the 2015 special-status plant surveys, and would have been visible if present. **Not Present**
Ericaceae – Heath Family					
Arctostaphylos glandulosa ssp. *crassifolia* Del Mar manzanita	FE 1B.1	Del Mar manzanita occurs on sandy maritime mesas and bluffs in chaparral below 1,200 feet in elevation, primarily west of I-15, with the majority of the occurrences in and around the cities of Encinitas, Solana Beach, and Del Mar in coastal San Diego.	December-June/ Perennial Evergreen Shrub	Recent CNDDB occurrences have been reported within 0.25 mile of the Proposed Project area. This species occurs on MCAS Miramar, and the SDNHM has a specimen that was taken near the intersection of Pomerado Road and Poway Road. However, this occurrence was not located during special-status plant surveys and is presumed extirpated.	Suitable habitat for this species is present on MCAS Miramar, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. However, no manzanita (*Arctostaphylos* spp.) was observed within the BRSA on MCAS Miramar or in the southern portion of the BRSA. This species was not observed during 2015 special-status plant surveys. **Not Present**
Arctostaphylos otayensis Otay manzanita	1B.2	Otay manzanita occurs on metavolcanic soil in chaparral and cismontane woodland between 900 and 5,580 feet in elevation.	January-April/ Perennial Evergreen Shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species has never been documented outside of Jamul Mountain and Otay Mountain, which are approximately 20 miles southeast of the BRSA. **No Potential**
Arctostaphylos rainbowensis Rainbow manzanita	1B.1	Rainbow manzanita occurs in chaparral between 670 and 2,200 feet in elevation. This species has a fairly wide distribution to the north, west, and east of the community of Rainbow, with one physically isolated occurrence north of the City of Escondido on the west side of I-15.	January-February/ Perennial Evergreen Shrub	One recent CNDDB occurrence and one past CNDDB occurrence are recorded within 0.25 mile of the Proposed Project area. Recent occurrences are documented within one mile of the Proposed Project area. At least one occurrence of this species has been documented between SR-76 and the City of Escondido.	Suitable habitat for this species is present within the BRSA, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA, within a fairly restricted geographic range near the community of Rainbow. However, this species was not observed within the BRSA during either pass of the 2015 special-status plant surveys. **Not Present**
Comarostaphylis diversifolia ssp. *diversifolia* Summer holly	1B.2	Summer holly occurs in chaparral and cismontane woodland between 980 and 2,595 feet in elevation, and is geographically situated west of I-15 and in a few higher-elevation sites in southern San Diego County.	April-June/ Perennial Evergreen Shrub	One recent CNDDB occurrence was documented within 0.25 mile of the Proposed Project area. Recent CNDDB occurrences are recorded within one mile of the Proposed Project area. The SDNHM herbarium reports records from just south of the BRSA on Mission Trails Regional Park.	Suitable habitat for this species is present, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. One individual was observed within the BRSA in a drainage approximately one mile north of Deer Springs Road on the west side of Old Highway 395. **Present**
Euphorbiaceae – Spurge Family					
Euphorbia misera Cliff spurge	2B.2	Cliff spurge occurs in rocky, coastal bluff scrub, coastal scrub, and Mojavean desert scrub between 320 and 1,640 feet in elevation. Maritime sage scrub with a high incidence of cactus is typical of the preferred habitat for this species.	December-October/ Perennial Shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	No suitable habitat in the form of maritime sage scrub with a high incidence of cactus is present with the BRSA. This species appears to be restricted to known sites at Point Loma, La Jolla, Fairbanks Ranch, Otay Mesa, and near San Ysidro. It is presumed that most U.S. populations of cliff spurge have already been discovered. **Not Present**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Fabaceae – Legume Family					
Astragalus deanei Dean's milkvetch	1B.1	Dean's milkvetch occurs in chaparral in cismontane woodland, coastal scrub, and riparian forest between 240 and 2,280 feet in elevation. This species is documented primarily from Alpine, El Cajon, Jamul Mountains, and Barrett Lake in central San Diego County.	February-May/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. Most occurrences are south and east of MCAS Miramar. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015, but may be present within riparian areas that were inaccessible to special-status plant surveyors. **Not Expected**
Astragalus oocarpus San Diego milk-vetch	1B.2	San Diego milk-vetch occurs in chaparral (openings) and cismontane woodland between 1,000 and 5,000 feet in elevation.	May-August/ Perennial Herb	One historic CNDDB occurrence was recorded within five miles of the Proposed Project area in 1900. However, most occurrences are from the mountains in central and northern San Diego County, approximately 25 miles east of the BRSA.	Suitable habitat for this species is present, but the nearest CNDDB record is more than 60 years old, and the general geographic range of this species is more than 15 miles away from the BRSA. **No Potential**
Astragalus pachypus var. *jaegeri* Jaeger's milkvetch	1B.1	Jaeger's milkvetch occurs in sandy or rocky soils in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland between 1,200 and 3,000 feet in elevation.	January-December/ Perennial Shrub	Historical CNDDB occurrences of this species have been recorded within five miles of the BRSA, and suitable habitat exists on site. However, the most recent CNDDB occurrence was recorded in 1881, and the southern extent of this species' range is approximately six miles north of the BRSA in the Temecula area. It is not known from San Diego County.	The BRSA is outside of this species' known geographic distribution. **No Potential**
Astragalus tener var. *titi* Coastal dunes milk-vetch	FE CE 1B.1	Coastal dunes milk-vetch prefers vernally mesic areas in sandy coastal bluff scrub, coastal dunes, and mesic coastal prairie between 30 and 165 feet in elevation.	March-May/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present. **No Potential**
Lotus nuttallianus Nuttall's Acmispon	1B.1	Nuttall's Acmispon occurs on coastal dunes and in sandy areas in coastal scrub below 30 feet in elevation.	March-July/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present. This species occurs at elevations lower than the BRSA. **No Potential**
Fagaceae – Oak Family					
Quercus cedrosensis Cedros Island oak	2B.2	Cedros Island oak occurs in closed-cone coniferous forest, chaparral, and coastal scrub between 830 and 3,150 feet in elevation.	April-May/ Perennial Evergreen Tree	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present. However, this species occurs at elevations higher than the BRSA and the majority of the documented occurrences of this species in San Diego County are in the Tijuana River valley at the U.S.-Mexico border. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Quercus dumosa Nuttall's scrub oak	1B.1	Nuttall's scrub oak occurs in chaparral, coastal scrub, and closed-cone coniferous forest, often in sandy or clay-loam substrates, below 1,300 feet in elevation.	February-March/ Perennial Evergreen Shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species was observed during the special-status plant surveys along Pomerado Road and in one occurrence within the Elliot Field Station. The low-growing scrub oaks observed along aqueduct road on MCAS Miramar were determined to be the common scrub oak (*Quercus berberidifolia*), although with characteristics (e.g., a "pruned" appearance, and occasional spreading stellate hairs on a very small portion of the abaxial leaf surface) demonstrated evidence of hybridization with Nuttall's scrub oak. **Present**
Quercus engelmannii Engelmann oak	4.2	Engelmann oak occurs in chaparral, cismontane woodland, riparian woodland, and valley and foothill grasslands between 160 and 4,265 feet in elevation.	March-June/ Perennial Deciduous Tree	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species was observed during the habitat assessment surveys in scattered locations along the urbanized section. **Present**
Frankeniaceae – Frankenia Family					
Frankenia palmeri Palmer's frankenia	2B.1	Palmer's frankenia occurs in coastal dunes, coastal salt marshes and swamps, and playas below 30 feet in elevation. This species is apparently restricted to the immediate coast, and does not occur in inland salt marsh habitat.	May-June/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable coastal dune or salt marsh habitat is present within the BRSA. Although cismontane alkali marsh was observed in the immediate vicinity of Lake Hodges, this species would not occur that far inland. **No Potential**
Geraniaceae – Geranium Family					
California macrophylla Round-leaved filaree	1B.1	Round-leaved filaree occurs on clay soils in cismontane woodland and valley and foothill grassland between 50 and 3,940 feet in elevation.	March-May/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. There are no CNDDB occurrences within five miles of the Proposed Project area.	Suitable habitat for this species is present, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Lamiaceae – Mint Family					
Acanthomintha ilicifolia San Diego thorn-mint	FT CE 1B.1	San Diego thorn-mint occurs in vertisol clay soils in openings of chaparral, coastal scrub, valley and foothill grassland, and vernal pools below 3,000 feet in elevation. This species is widely distributed south of community of Bonsall to the U.S.-Mexico border.	April-June/ Annual Herb	One recent CNDDB occurrence is documented within 0.25 mile of the Proposed Project area. Multiple recent occurrences are recorded within five miles of the Proposed Project area.	Suitable habitat for this species is present, and clay soils are known to occur within the BRSA. This species is known from the same general geographic and elevation range as the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Clinopodium chandleri San Miguel savory	1B.2	San Miguel savory occurs on rocky, gabbroic, or metavolcanic substrates in chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland between 390 and 3,530 feet in elevation.	March-July/ Perennial Shrub	CNPS occurrences have been reported the Temecula and San Vicente quads. One CNDDB occurrence was documented within five miles of the Proposed Project area in 1983.	Suitable habitat for this species is present, the geographic and elevation ranges within the BRSA are consistent with those documented for this species, and this species has been documented within one to five miles of the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015, but may be present within riparian areas that were inaccessible to special-status plant surveyors. **Not Expected**
Lepechinia cardiophylla Heart-leaved pitcher sage	1B.2	Heart-leaved pitcher sage occurs in closed-cone coniferous forest, chaparral, and cismontane woodland between 1,700 and 4,500 feet in elevation. The only records of this species in San Diego County are from Iron Mountain.	April-July/ Perennial Shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present in the form of chaparral and cismontane woodlands. However, this species occurs at elevations higher than those within the BRSA and in a geographically isolated area approximately six miles east of the BRSA. In addition, this species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**
Lepechinia ganderi Gander's pitcher sage	1B.3	Gander's pitcher sage occurs on gabbroic or metavolcanic rock in closed-cone coniferous forest, chaparral, coastal scrub and valley and foothill grassland between 1,000 and 3,300 feet in elevation. This species has only been documented in southern San Diego County on mountains, such as Otay Mountain and San Miguel Mountain (SDNHM 2015a; Reiser 1994).	June-July/ Perennial Shrub	Past occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present in the form of chaparral, coastal scrub, and grasslands. However, this species requires specific edaphic conditions (metavolcanic derived soils) not documented within the BRSA and is apparently restricted to a specific area in southern San Diego County, approximately 20 miles south of the BRSA. In addition, this species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**
Monardella hypoleuca ssp. *intermedia* Intermediate monardella	1B.3	Intermediate monardella occurs in chaparral, cismontane woodland, and lower montane coniferous forest between 1,310 and 4,100 feet.	April-September/ Perennial Rhizomatous Herb	Recent CNDBB occurrences have been reported within five miles of the Proposed Project area. The SDNHM includes only one herbarium record for this species at the far northwestern corner of San Diego County on Marine Corps Base, Camp Pendleton, approximately 17 miles northwest of the BRSA.	Suitable habitat for this species is present. However, this species is only known from the Santa Ana and Palomar mountains, and many occurrences are historical. In addition, this species occurs at elevations approximately 200 feet higher than those in the northern portion of the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Monardella hypoleuca ssp. *lanata* Felt-leaved monardella	1B.2	Felt-leaved monardella occurs in chaparral and cismontane woodland between 980 and 5,200 feet in elevation. This species typically occupies undeveloped peaks and mountainous ridgelines.	June-August/ Perennial Rhizomatous Herb	Two past CNDDB occurrences were documented within five miles of the Proposed Project area in 1978 and 1900. One recent occurrence is documented within five miles of the Proposed Project area.	Suitable habitat for this species is present. However, this species typically occurs at higher elevations than the BRSA, and often on ridgelines and peaks, which were documented in very few isolated locations in the northern urbanized section. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Monardella macrantha ssp. *hallii* Hall's monardella	1B.3	Hall's monardella occurs in broad-leaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland between 2,400 and 7,200 feet in elevation.	June-October/ Perennial Rhizomatous Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species occurs at elevations higher than those within the BRSA, primarily north of SR-76 in the Santa Rosa Mountains, approximately 15 miles east of the BRSA. **No Potential**
Monardella nana ssp. *leptosiphon* San Felipe monardella	1B.2	San Felipe monardella occurs in chaparral and lower montane coniferous forest between 3,930 and 6,090 feet in elevation. This species is known from the Santa Rosa and Laguna mountains of central San Diego County.	June-July/ Perennial Rhizomatous Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species typically occurs at elevations much higher than the BRSA and is geographically restricted to an area approximately 30 miles east of the BRSA. **No Potential**
Monardella. viminea Willowy monardella	FE CE 1B.1	Willowy monardella occurs in alluvial ephemeral washes in chaparral, coastal scrub habitat, riparian forest, riparian scrub, and riparian woodland between 160 and 740 feet in elevation.	June-August/ Perennial Herb	Three recent CNDDB occurrences have been recorded within 0.25 mile of the Proposed Project area, two of which are presumed extant. One recent CNDDB occurrence is documented within one mile of the Proposed Project area, and multiple recent occurrences are documented within five miles. This species occurs on MCAS Miramar near the BRSA along an intermittent, cobbly drainage.	Suitable habitat for this species is present, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. Willowy monardella was not observed within the BRSA during either pass of special-status plant surveys in 2015. The CNDDB occurrence near the BRSA on MCAS Miramar was observed and mapped to confirm its presence outside of the BRSA. **Not Present**
Pogogyne abramsii San Diego mesa mint	FE CE 1B.1	San Diego mesa mint occurs in vernal pools between 295 and 660 feet in elevation.	March-July/ Annual Herb	One recent CNDDB occurrence of this species is documented within 0.25 mile of the Proposed Project area, and recent occurrences are documented within one mile. This species occurs on MCAS Miramar.	Suitable habitat for this species is present within the vernal pools on MCAS Miramar, and this species is documented at the same general geographic and elevation ranges that occur within the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Pogogyne nudiuscula Otay Mesa mint	FE CE 1B.1	Otay Mesa mint occurs in vernal pools between 295 and 820 feet in elevation.	May-July/ Annual Herb	Only one CNDDB occurrence has been documented within five miles of the BRSA and this occurrence has since been extirpated. The majority of the occurrences of this species is in the Otay Mesa area, approximately 20 miles south of the BRSA.	Suitable habitat for this species is present in the vernal pools on MCAS Miramar. However, MCAS Miramar has not documented the presence of this species in its Integrated Natural Resources Management Plan (INRMP) (USMC 2014). In addition, the geographic range of this species is more than 15 miles from the BRSA. **No Potential**
Salvia munzii Munz's sage	2B.2	Munz's sage occurs in chaparral and coastal scrub between 370 and 3,500 feet in elevation. This shrub is often a dominant plant of the area where it occurs. It is known primarily from southern San Diego County in the Otay and Tijuana river watersheds.	February-April/ Perennial Evergreen Shrub	There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present. However, the geographic range of Munz's sage in San Diego County appears to be approximately 20 miles south of the BRSA. **No Potential**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Scutellaria bolanderi ssp. *austromontana* Southern mountains skullcap	1B.2	Southern mountains skullcap occurs in mesic areas in chaparral, cismontane woodland, and lower montane coniferous forest between 1,390 and 6,560 feet in elevation. In San Diego County, it appears to be restricted to the mountains east of the City of San Diego.	June-August/ Perennial Rhizomatous Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No portion of the BRSA is within this species' documented geographic range. **No Potential**
Limnanthaceae – Meadowfoam Family					
Parish's meadowfoam (*Limnanthes alba* ssp. *parishii*)	CE 1B.2	Parish's meadowfoam occurs in vernally mesic areas in lower montane coniferous forest, meadows and seeps, and vernal pools between 1,960 and 6,560 feet in elevation.	April-June/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species occurs at much higher elevations than the BRSA. **No Potential**
Malvaceae – Mallow Family					
Ayenia compacta California ayenia	2B.3	California avenia occurs on rocky substrates in Mojavean and Sonora desert scrub between 490 and 3,600 feet in elevation. The geographic range of this species is the northern Laguna Mountains and southern Santa Rosa Mountains of eastern San Diego County.	March-April/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search, specifically the Wildomar quad in Riverside County. The majority of occurrences of this species in San Diego County are in the Anza Borrego Desert State Park.	No suitable habitat is present and no portion of the Proposed Project is within this species' documented geographic range. **No Potential**
Fremontodendron mexicanum Mexican flannelbush	FE CR 1B.1	Mexican flannelbush occurs on gabbroic, metavolcanic, or serpentinite soils in closed-cone coniferous forest, chaparral, and cismontane woodland between 30 and 2,350 feet in elevation.	March-June/ Perennial Evergreen Shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. However, no SDNHM records have been documented within five miles of the BRSA. In addition, there are no CNDDB occurrences of this species within five miles of the Proposed Project area. The nearest SDNHM herbarium record is from east of the community of Pala, approximately eight miles east of the BRSA. The majority of documented records of this species are from along Cedar Creek on Otay Mountain in southern San Diego County, approximately 20 miles south of the BRSA.	Suitable habitat for this species is present (i.e., chaparral and cismontane woodland), but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed during either pass of the 2015 special-status plant surveys. **Not Present**
Montiaceae – Miner's Lettuce Family					
Calandrinia breweri Brewer's calandrinia	4.2	Brewer's calandrinia occurs on sandy or loamy soils, disturbed sites and burns, within chaparral and coastal scrub communities between 30 and 4,010 feet in elevation.	March-June/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	Over 100 individuals of this species were observed on the MCAS Miramar component of the BRSA. **Present**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Nyctaginaceae – Four O'Clock Family					
Abronia villosa var. *aurita* Chaparral sand-verbena	1B.1	Chaparral sand-verbena occurs on sandy soils in chaparral, coastal scrub, and desert dunes between 240 and 5,250 feet.	January-September/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search, specifically around the community of Fallbrook. The closest records for this species in the SDNHM herbarium are in the Fallbrook area approximately five miles from the BRSA. Recent CNDDB occurrences are documented within five miles of the Proposed Project area.	Suitable habitat for this species is present, the geographic and elevation ranges within the BRSA are consistent with those documented for this species, and this species has been documented within one to five miles of the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Onagraceae – Evening Primrose Family					
Clarkia delicata Delicate clarkia	1B.3	Delicate clarkia often occurs in gabbroic soils in chaparral and cismontane woodland between 770 and 3,280 feet in elevation. This species occurs at the periphery of oak woodlands and cismontane chaparral stands. This species is often observed in areas partially shaded by tree canopy or large shrubs, and typically in vernally mesic areas.	April-June/ Annual Herb	Recent CNDDB occurrences of this species are documented within five miles of the Proposed Project area. The SDNHM includes multiple records of this species near the BRSA.	Suitable habitat exists within the BRSA and the species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was not observed during special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Orobanchaceae – Broomrape Family					
Chloropyron maritimum ssp. *maritimum* Salt marsh bird's-beak	FE CE 1B.2	Salt marsh bird's-beak occurs on coastal dunes and in coastal salt marshes and swamps below 90 feet in elevation.	May-October/ Annual Hemiparasitic Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable coastal dune or salt marsh habitat is present. This species is not known to occur within the elevation range of the BRSA. **No Potential**
Dicranostegia orcuttiana Orcutt's birds-beak	2B.1	Orcutt's birds-beak occurs in coastal scrub between 30 and 1,150 feet in elevation. The vast majority of SDNHM occurrences of this species are from the Otay and Tijuana river watersheds in southern San Diego County.	March-September/ Annual Hemiparasitic Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	The geographic distribution of this species is more than 15 miles outside of the BRSA. **No Potential**
Picrodendraceae – Bitter-Tree Family					
Tetracoccus dioicus Parry's tetracoccus	1B.2	Parry's tetracoccus occurs in chaparral and coastal scrub between 540 and 3,280 feet in elevation.	April-May/ Perennial Deciduous Shrub	Two CNDDB occurrences of this species are documented within 0.25 mile of the Proposed Project area. One record is from 1936. Recent CNDDB occurrences are documented within one mile of the Proposed Project area. In addition, the SDNHM includes records of this species within one mile of the northern end of the BRSA, on the west side of I-15 near the community of Rainbow.	This species was observed within a drainage on the southern end of Rainbow Hills Road within the BRSA. Approximately 50 individuals were observed along the south edge of this drainage. **Present**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Plantaginaceae – Plantain Family					
Stemodia durantifolia Purple stemodia	2B.1	Purple stemodia occurs in often mesic, sandy areas in scrub habitat between 590 and 990 feet in elevation.	January-December/ Perennial Herb	Two recent CNDDB records are within five miles of the BRSA near MCAS Miramar. However, this species has not been documented within MCAS Miramar.	Suitable habitat for this species is present within the BRSA, the geographic and elevation ranges within the BRSA are consistent with those documented for this species, and this species has been documented within one to five miles of the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015, and would have been visible in mesic scrub habitats if present. **Not Present**
Polemoniaceae – Phlox Family					
Linanthus orcuttii Orcutt's linanthus	1B.3	Orcutt's linanthus occurs in openings in chaparral, lower montane coniferous forest, and pinyon and juniper woodland between 3,000 and 7,040 feet in elevation.	May-June/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present. This species occurs at elevations higher than the BRSA. **No Potential**
Navarretia fossalis Spreading navarretia	1B.1	Spreading navarretia occurs in chenopod scrub habitat, assorted shallow freshwater (including marshes and swamps), on playas and in vernal pools between 90 and 2,150 feet in elevation.	April-June/ Annual Herb	Recent CNDDB occurrences have been reported within five miles of the BRSA.	Suitable habitat for this species is present, the geographic and elevation ranges within the BRSA are consistent with those documented for this species, and this species has been documented within one to five miles of the BRSA. This species was not observed within the BRSA during either pass of the special-status plant surveys in 2015, but was confirmed blooming during reference population checks in a nearby vernal pool preserve area in April 2015. As a result, this species is presumed not present within the BRSA. **Not Present**
Navarretia prostrata Prostrate vernal pool navarretia	1B.1	Prostrate vernal pool navarretia occurs in mesic coastal scrub habitats, meadows and seeps, alkaline valley and foothill grassland and vernal pools between 50 and 3,970 feet in elevation.	April-July/ Annual Herb	One historic CNDDB occurrence was documented within five miles of the Proposed Project area in 1981, specifically in the vernal pools at roughly SR-52 and SR-163. However, the MCAS Miramar INRMP does not include this species as occurring within MCAS Miramar (USMC 2014).	Suitable habitat for this species is present within vernal pools on MCAS Miramar. In addition, the geographic and elevation ranges within the BRSA are consistent with those documented for this species, and this species has been documented within five miles of the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Polygonaceae – Buckwheat Family					
Chorizanthe orcuttiana Orcutt's spineflower	FE CE 1B.1	Orcutt's spineflower occurs in sandy openings in closed-cone coniferous forest, maritime chaparral, and coastal scrub habitats between 10 and 410 feet in elevation. This species requires a distinctive loose sandy substrate. Occurrences are situated within a few miles of the Pacific Ocean.	March-May/ Annual Herb	Only one CNDDB occurrence has been documented within five miles of the BRSA and this site is probably extirpated. This species has never been documented as far inland as the BRSA.	No suitable maritime scrub habitat is present within the BRSA. **No Potential**
Chorizanthe parryi var. *parryi* Parry's spineflower	1B.1	Parry's spineflower occurs on sandy or rocky substrates in openings in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland between 900 and 4,000 feet in elevation.	April-June/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species range is north of the BRSA within Los Angeles, Riverside, and San Bernardino counties. It is not known in San Diego County. **No Potential**
Chorizanthe polygonoides var. *longispina* Long-spined spineflower	1B.2	Long-spined spineflower occurs in chaparral, coastal scrub, meadows, seeps, valley and foothill grassland, and vernal pools, often in clay soils and below 5,000 feet in elevation.	April-July/ Annual Herb	CNDDB occurrences have been reported within one mile of the BRSA. Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species was observed within the BRSA in multiple locations along the aqueduct road on MCAS Miramar during special-status plant surveys in April 2015. **Present**
Dodecahema leptoceras Slender-horned spineflower	FE CE 1B.1	Slender-horned spineflower occurs on sandy soils in chaparral, cismontane woodland, and alluvial fans in coastal scrub between 650 and 2,500 feet in elevation. The southernmost extent of its geographic range is southern Riverside County, near the City of Temecula.	April-June/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	The southern extent of this species' range is approximately six miles north of the BRSA in the Temecula area. It is not known from San Diego County. **No Potential**
Nemacaulis denudata var. *denudata* Coast wooly-heads	1B.2	Coast wooly-heads occurs on coastal dunes below 330 feet in elevation.	April-September/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present. **No Potential**
Nemacaulis denudata var. *gracilis* Slender cottonheads	2B.2	Slender cottonheads occurs on coastal dunes, desert dunes, and Sonoran desert scrub below 1,320 feet in elevation. This species is restricted to the immediate coastal zone in San Diego County.	March-May/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present. In addition, this species has not been documented as far inland as the BRSA within San Diego County. **No Potential**
Ranunculaceae – Buttercup Family					
Delphinium hesperium ssp. *cuyamacae* Cuyamaca larkspur	CR 1B.2	Cuyamaca larkspur occurs in mesic areas in lower montane coniferous forest, meadows, seeps, and vernal pools between 4,000 and 5,350 feet in elevation.	May-July/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species occurs at substantially higher elevations than the BRSA. **No Potential**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Myosurus minimus ssp. *apus* Little mousetail	3.1	Little mousetail occurs in vernal pools (alkaline) between 65 and 2,100 feet in elevation.	March-June/ Annual Herb	Two recent CNDDB occurrences have been reported within five miles of the Proposed Project area. In addition, this species has been documented to occur within MCAS Miramar (U.S. Marine Corps [USMC] 2014).	Suitable vernal pool habitat for this species is present on MCAS Miramar. This species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Rhamnaceae – Buckthorn Family					
Adolphia californica California adolphia	2B.1	California adophia occurs on clay soils in chaparral, coastal scrub, and valley and foothill grassland between 140 and 2,500 feet in elevation.	January-April/ Perennial Deciduous Shrub	One recent CNDDB occurrence is recorded within 0.25 mile of the Proposed Project area, and one recent occurrence is documented within one mile. Multiple other recent CNDDB occurrences are documented within five miles of the Proposed Project area.	Suitable habitat for this species is present, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was observed in one stand of remnant coastal sage scrub directly south of Lake Hodges. Hundreds of individuals were observed, comprising the dominant species of that coastal sage scrub stand. **Present**
Ceanothus cyaneus Lakeside ceanothus	1B.2	Lakeside ceanothus occurs in closed-cone coniferous forest and chaparral between 770 and 2,480 feet in elevation.	April-June/ Perennial Evergreen Shrub	There are no CNDDB records of this species within five miles of the Proposed Project area. All SDNHM records are approximately 10 miles from the BRSA, and the majority are in the community of Lakeside.	Suitable habitat (i.e., chaparral) exists on site but this species' geographic range is between five and 15 miles from the BRSA. This species was not observed within MCAS Miramar or the southern portion of the BRSA during either pass of the 2015 special-status plant surveys, and as a result, is presumed absent. **Not Present**
Ceanothus ophiochilus Vail Lake ceanothus	FT CE 1B.1	Vail Lake ceanothus occurs on gabbroic or pyroxenite-rich outcrops in chaparral between 1,900 and 3,500 feet.	February-March/ Perennial Evergreen Shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species is not known to occur within the elevation range of the BRSA and is not documented from San Diego County. **No Potential**
Ceanothus otayensis Otay Mountain ceanothus	1B.2	Otay Mountain ceanothus occurs on metavolcanic or gabbroic substrates in chaparral between 1,960 and 3,610 feet in elevation.	January-April/ Perennial Evergreen Shrub	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present, and this species occurs at higher elevations than the BRSA. **No Potential**
Ceanothus verrucosus Wart-stemmed ceanothus	2B.2	Wart-stemmed ceanothus occurs in chaparral between three and 1,250 feet in elevation, primarily west of I-15.	December-May/ Perennial Evergreen Shrub	Recent CNDDB occurrences are documented within five miles of the Proposed Project area. One occurrence is located within 0.25 mile, and one occurrence is located within one mile of the Proposed Project area; however, these occurrences were documented in 1939. This species has been observed on MCAS Miramar and is widely distributed within one to five miles of the BRSA.	Suitable habitat for this species is present, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was not observed during either pass of special-status plant surveys conducted in 2015, but chaparral habitat is difficult to access when it is mature, and visibility within chaparral stands can be limited by tall, dense vegetation. As a result, this species is not expected to occur within the BRSA. **Not Expected**

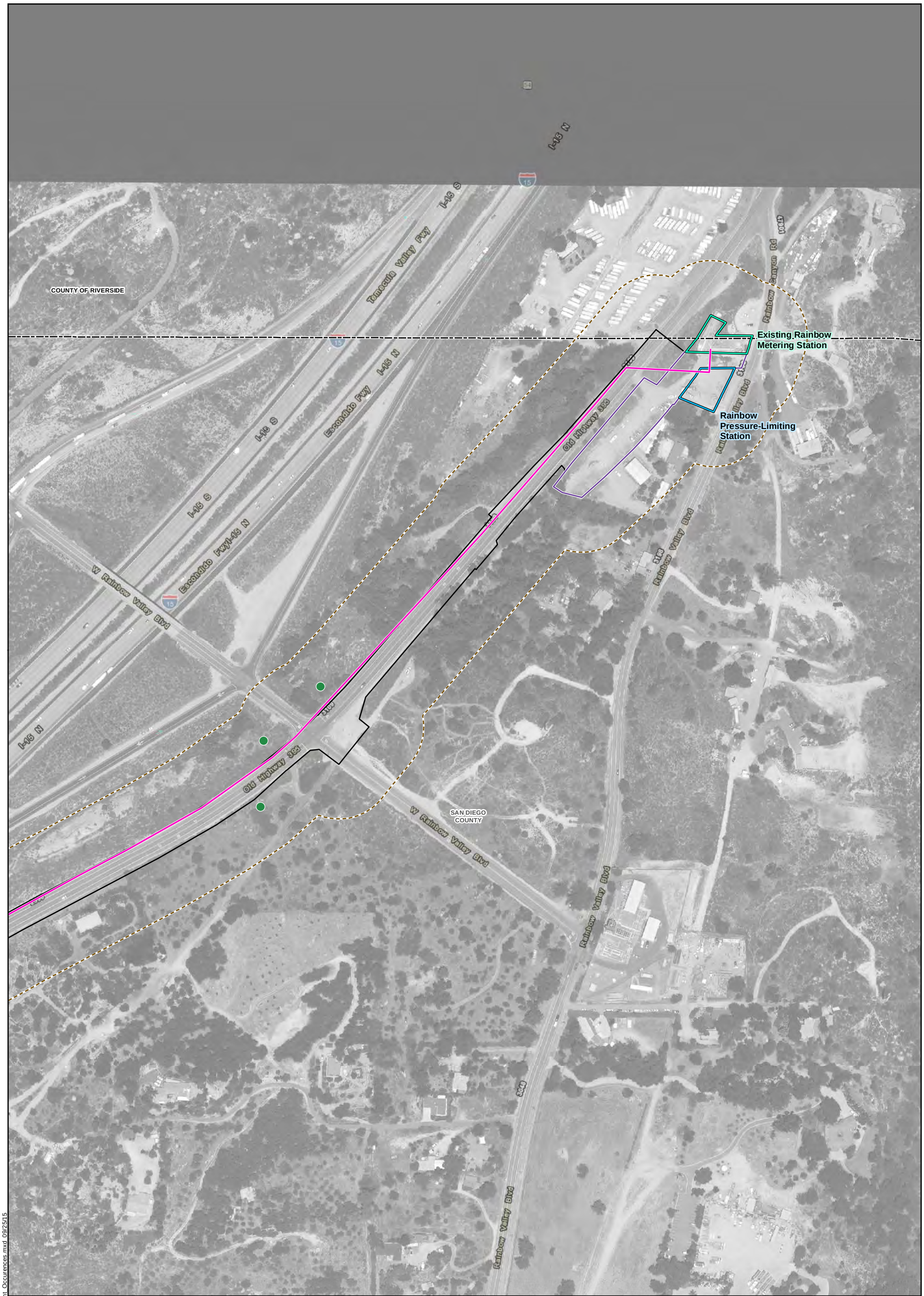
Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Rosaceae – Rose Family					
Horkelia cuneata var. *puberula* Mesa horkelia	1B.1	Mesa horkelia occurs in sandy or gravelly areas in maritime chaparral, cismontane woodland and coastal scrub between 230 and 2,660 feet in elevation. The southernmost extent of its geographic range is northern San Diego County.	February-September/ Perennial Herb	Two past CNDDB occurrences have been reported within five miles of the Proposed Project area—one in 1926 and one in 1940. There are no SDNHM herbarium records mapped for this species. In addition, the northern portion of the BRSA represents the southernmost end of this species' geographic range.	Suitable habitat for this species is present, but all of the occurrences within five miles of the BRSA are more than 60 years old. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. This species may flower as late as September, and absent flowers, may not have been documented during the special-status plant surveys. **Not Expected**
Horkelia truncata Ramona horkelia	1B.3	Ramona horkelia occurs in clay and gabbroic substrates in chaparral and cismontane woodland between 1,300 and 4,270 feet in elevation. Geographic distribution in San Diego County is diverse, with occurrences from Marine Corps Base, Camp Pendleton southeast to the southern San Diego mountains near Barrett Lake.	May-June/ Perennial Herb	One past CNDDB occurrence for this species is recorded within one mile of the Proposed Project area.	Suitable habitat exists on site, but this species typically occurs at higher elevations than the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**
Rubiaceae – Madder Family					
Galium proliferum Desert bedstraw	2B.2	Desert bedstraw occurs on rocky, carbonate (limestone) in Joshua tree woodland, Mojavean desert scrub, and Pinyon and juniper woodland 3,900 and 5,350 feet in elevation.	March-June/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present. **No Potential**
Violaceae – Violet Family					
Viola purpurea ssp. *aurea* Golden violet	2B.2	Golden violet occurs in sandy soils in Great Basin scrub and pinyon and juniper woodland between 3,280 and 8,200 feet in elevation.	April-June/ Perennial Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present, and this species occurs at substantially higher elevations than those within the BRSA. **No Potential**
ANGIOSPERMS - MONOCOTS					
Alliaceae – Onion Family					
Allium munzii Munz's onion	FE CT 1B.1	Munz's onion occurs on mesic, clay soil in chaparral, cismontane woodland, coastal scrub, Pinyon and juniper woodland, and valley and foothill grassland between 970 and 3,510 feet.	March-May/ Perennial Bulbiferous Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	The southern extent of this species' range is approximately six miles north of the BRSA in the Temecula area. It is not known from San Diego County. **No Potential**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Agavaceae – Agave Family					
Agave shawii var. *shawii* Shaw's agave	2B.1	Shaw's agave occurs in coastal bluff scrub and coastal scrub between 30 and 400 feet in elevation. It is geographically restricted to areas immediately along the Pacific Ocean in San Diego County, south of the City of Del Mar.	September-May/ Perennial Leaf Succulent	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	The BRSA is outside of this species' known geographic range. This species has never been documented as far inland as the BRSA. **No Potential**
Juncaceae – Rush Family					
Juncus acutus ssp. *leopoldii* Southwestern spiny rush	4.2	Southwestern spiny rush occurs in coastal dunes, meadows and seeps (occasionally within alkaline seeps), and marshes and swamps, and occasionally within coastal salt marshes from sea level to 2,950 feet in elevation.	March-June/ Perennial Rhizomatous Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species was observed within intermittent drainages in the southern portion of the BRSA. **Present**
Juncus luciensis Santa Lucia dwarf rush	1B.2	Santa Lucia dwarf rush occurs in chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, and vernal pools between 980 and 6,700 feet in elevation. This species appears to be widely distributed in California, but there is only one recorded location for this species in San Diego County, which is near Cuyamaca Rancho State Park at approximately 4,600 feet in elevation.	April-July/ Annual Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present. However, this species' geographic distribution in San Diego County indicates that it may only be found at higher elevations than in the BRSA. This species was not observed during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Liliaceae – Lily Family					
Calochortus dunnii Dunn's mariposa lily	CR 1B.2	Dunn's mariposa lily occurs on gabbroic or metavolcanic, rocky soils in closed-cone coniferous forest, chaparral, and valley and foothill grassland between 600 and 6,000 feet in elevation.	February-June/ Perennial Bulbiferous Herb	Past occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search. However, the majority of the SDNHM herbarium records are from southern San Diego County (approximately 13 miles south of the BRSA), and eastern San Diego County (approximately 18 miles east of the BRSA). There are no CNDDB occurrences of this species within five miles of the Proposed Project area.	Suitable habitat for this species is present in the form of chaparral and grasslands, but the nearest documented occurrence of this species is between five and 15 miles from the BRSA. This species was not observed during special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Calochortus weedii var. *intermedius* Intermediate mariposa lily	1B.2	Intermediate mariposa lily occurs on rocky, calcareous substrates in chaparral, coastal scrub, and valley and foothill grassland between 340 and 2,810 feet in elevation. The southern extent of its known range appears to be in and around the City of Temecula.	May-July/ Perennial Bulbiferous Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	The southern extent of this species range is approximately six miles north of the BRSA in the Temecula area. It is not known from San Diego County. **No Potential**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Lilium parryi Lemon lily	1B.2	Lemon lily occurs in mesic areas in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest between 4,000 and 9,010 feet in elevation.	July-August/ Perennial Bulbiferous Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	No suitable habitat is present. This species occurs at elevations higher than those within the BRSA. **No Potential**
Poaceae – Grass Family					
Orcuttia californica California Orcutt grass	FE CE 1B.1	California Orcutt grass occurs in vernal pools between 50 and 2,965 feet in elevation.	April-June/ Annual Herb	Recent CNDDB occurrences have been recorded within five miles of the Proposed Project area. This species is present on MCAS Miramar.	Suitable habitat for this species is present and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was not observed within vernal pools during either pass of special-status plant surveys in 2015, but drought conditions in the winter of 2014-2015 may have suppressed seedling germination. As a result, this species is not expected to occur within the BRSA. **Not Expected**
Ruscaceae – Butcher's Broom Family					
Nolina cismontane Chaparral nolina	1B.2	Chaparral nolina occurs in sandstone or gabbroic substrates in chaparral and coastal scrub between 460 and 4,185 feet in elevation. The San Diego Natural History Museum (SDNHM) occurrences nearest to the BRSA are primarily located along and north of State Route (SR-) 76.	March-July/ Perennial Evergreen Shrub	Recent CNDDB occurrences have been recorded within one mile of the BRSA in the northern BRSA along and north of SR-76.	Suitable habitat is present and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**
Themidaceae – Brodiaea Family					
Bloomeria clevelandii San Diego goldenstar	1B.1	San Diego goldenstar occurs on clay substrates in chaparral, coastal scrub, valley and foothill grassland, and vernal pools between 160 and 1,525 feet in elevation.	April-May/ Perennial Bulbiferous Herb	Two recent CNDDB occurrences are documented within 0.25 mile of the Proposed Project area. Recent CNDDB occurrences have been documented within one mile of the Proposed Project area.	Suitable habitat for this species is present, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was observed on MCAS Miramar during the first pass of special-status plant surveys in 2015. **Present**
Brodiaea filifolia Thread-leaved brodiaea	FT CE 1B.1	Thread-leaved brodiaea occurs on clay soils in coastal scrub, cismontane woodland, valley and foothill grassland, vernal pools between 80 and 3,680 feet in elevation.	March-June/ Perennial Bulbiferous Herb	Recent CNDDB occurrences have been recorded within five miles of the BRSA near the cities of Vista and San Marcos and the community of Rancho Santa Fe.	Suitable habitat for this species is present; clay soils are known to occur within the BRSA; the geographic and elevation ranges within the BRSA are consistent with those documented for this species; and this species has been documented within one to five miles of the BRSA. This species was confirmed to be blooming on Marine Corps Base, Camp Pendleton during the first pass of special-status plant surveys. However, this species was not observed within the BRSA during either pass of special-status plant surveys in 2015. **Not Present**

Species Name	Federal, State, and CRPR[1]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Records[2]	Potential to Occur
Brodiaea orcuttii Orcutt's brodiaea	1B.1	Orcutt's brodiaea occurs on clay in closed-cone coniferous forest, chaparral, cismontane woodland, meadows, valley and foothill grassland, vernal pools between 90 and 5,550 feet in elevation.	May-July/ Perennial Bulbiferous Herb	Recent CNDDB occurrences are documented within 0.25 mile of the Proposed Project area.	Suitable habitat for this species is present, and this species is documented from the same general geographic and elevation ranges occurring within the BRSA. This species was observed in the BRSA at multiple locations within MCAS Miramar during both passes of special-status plant surveys in 2015. **Present**
Brodiaea santarosae Santa Rosa basalt brodiaea	1B.2	Santa Rosa basalt brodiaea occurs on basaltic substrates in valley and foothill grassland between 1,850 and 3,430 feet in elevation. This species is geographically restricted to the Santa Rosa plateau in Riverside County.	May-June/ Perennial Bulbiferous Herb	Occurrences have been reported from within at least one of the nine quads in the CNPS Nine-Quad Search.	This species occurs at elevations that are at least 300 feet higher than the BRSA, and its geographic range is more than 15 miles from the BRSA. **No Potential**

ATTACHMENT C: SPECIAL-STATUS PLANT SPECIES OCCURRENCES MAP



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Attachment C: Special-Status Plant Species Occurrences Map 1 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Engelmann oak

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Attachment C: Special-Status Plant Species Occurrences Map 2 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Engelmann oak

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Attachment C: Special-Status Plant Species Occurrences Map 3 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Engelmann oak

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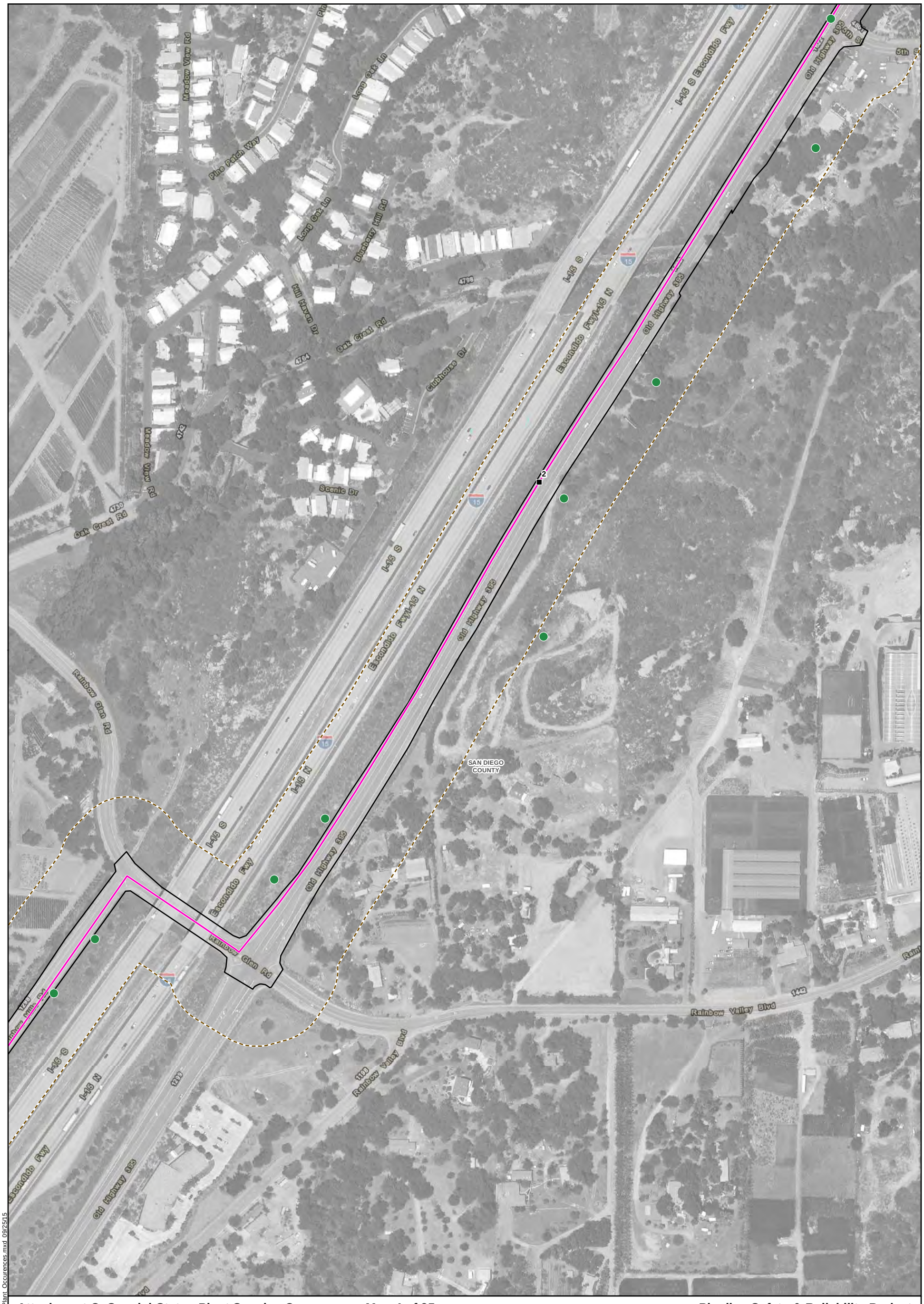

Attachment C: Special-Status Plant Species Occurrences Map 4 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve
- Engelmann oak

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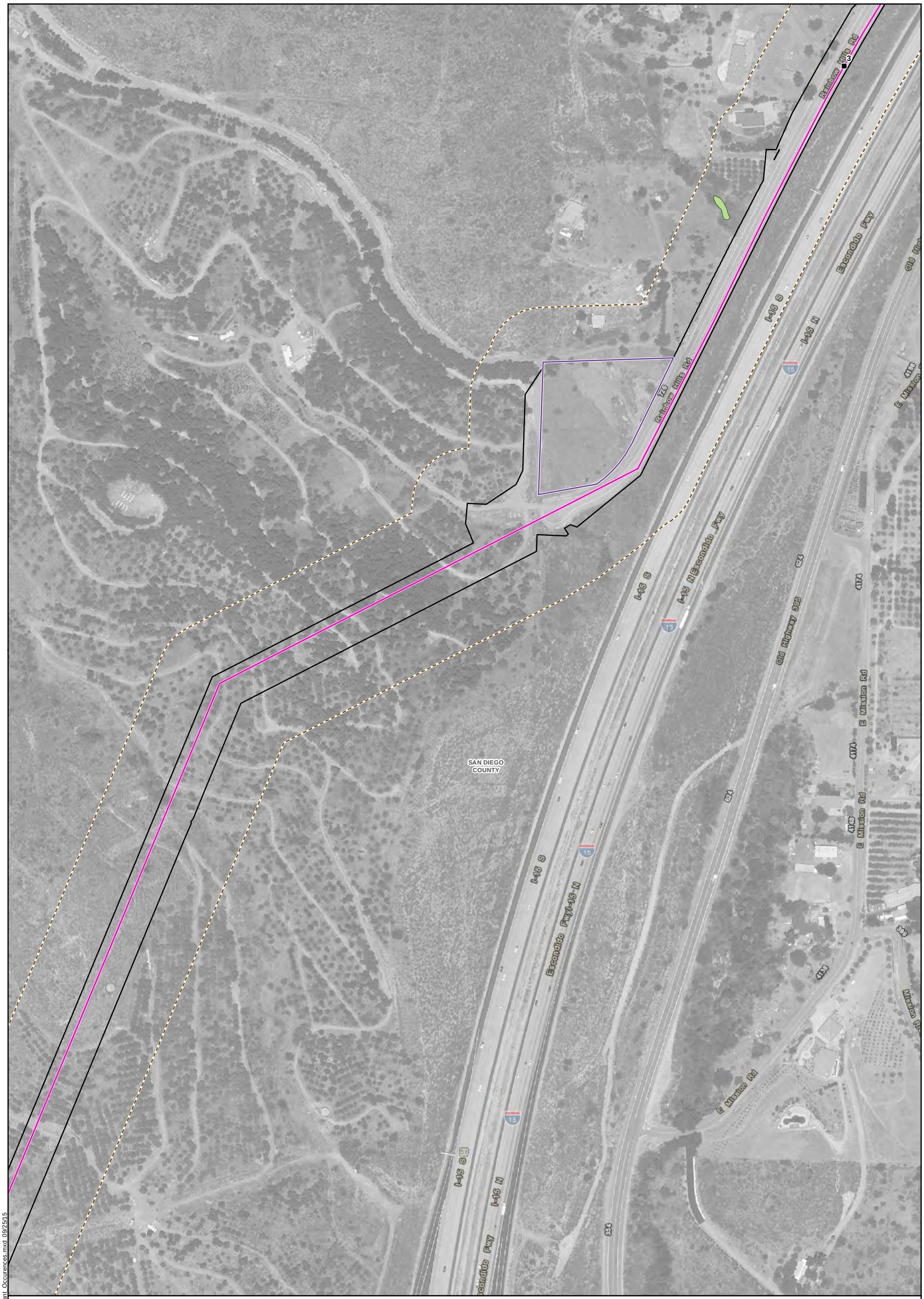

Attachment C: Special-Status Plant Species Occurrences Map 5 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve
- Parry's tetracoccus

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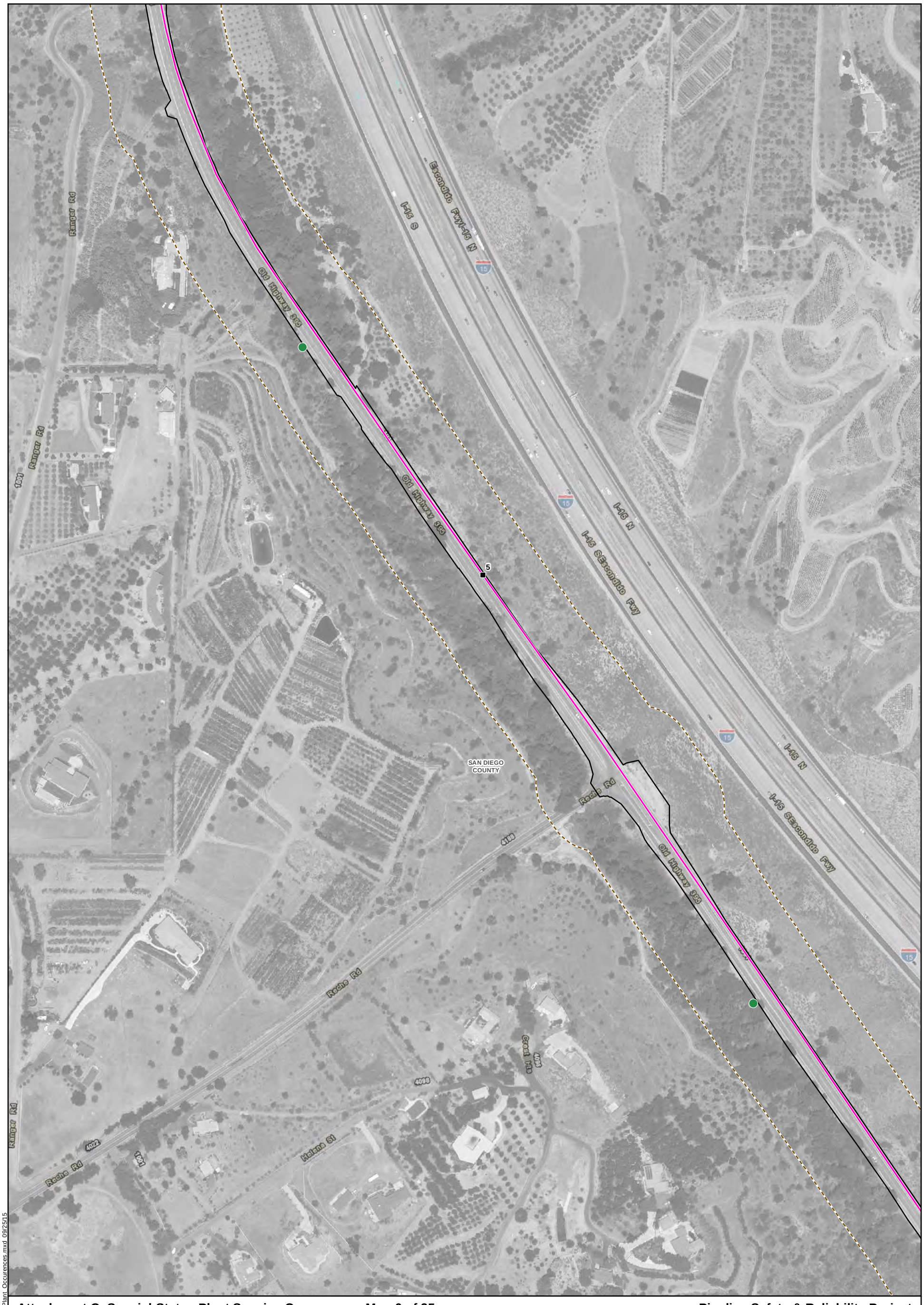

Attachment C: Special-Status Plant Species Occurrences Map 6 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve
- Engelmann oak

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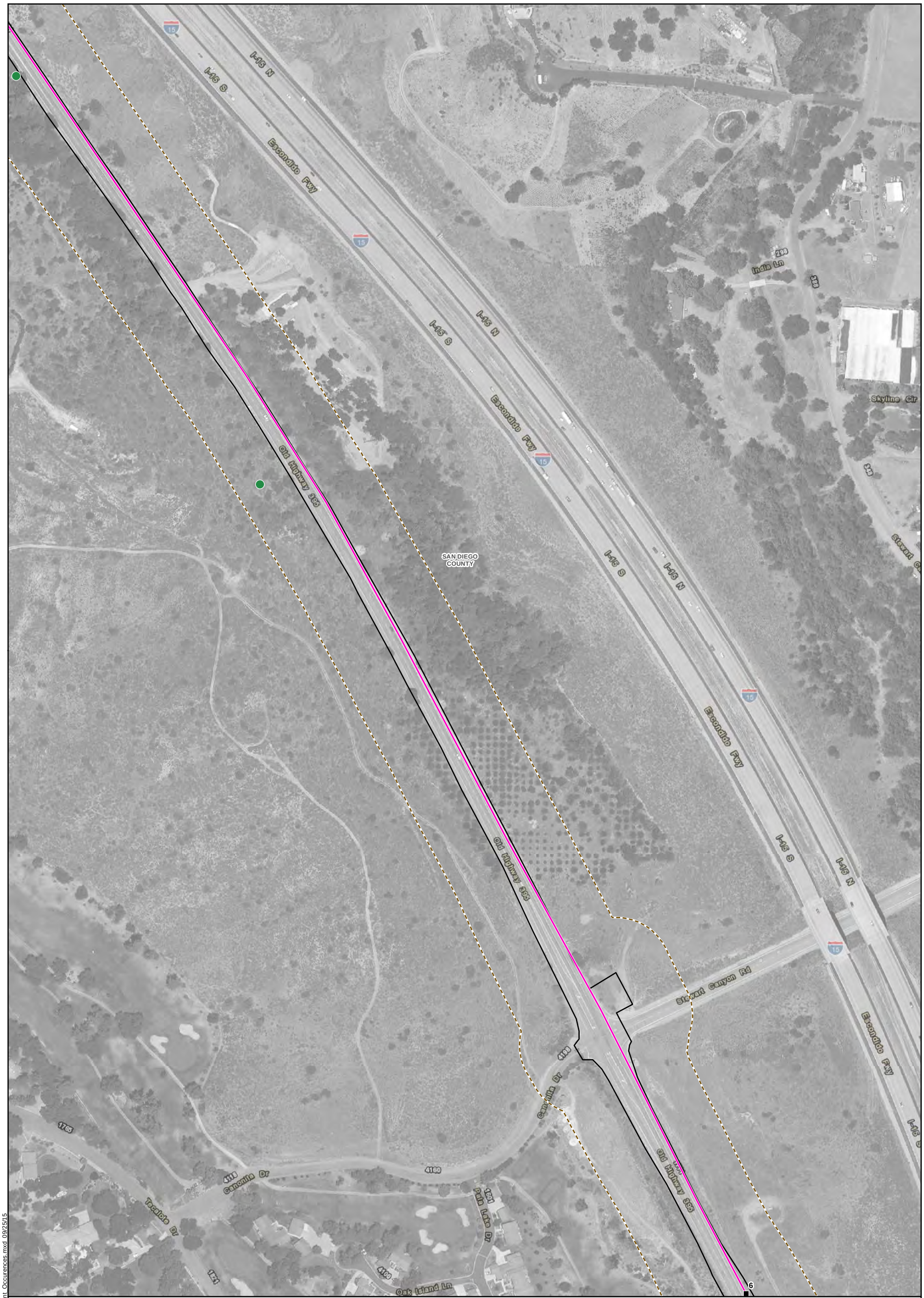

Attachment C: Special-Status Plant Species Occurrences Map 7 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Engelmann oak

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Attachment C: Special-Status Plant Species Occurrences Map 8 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Engelmann oak

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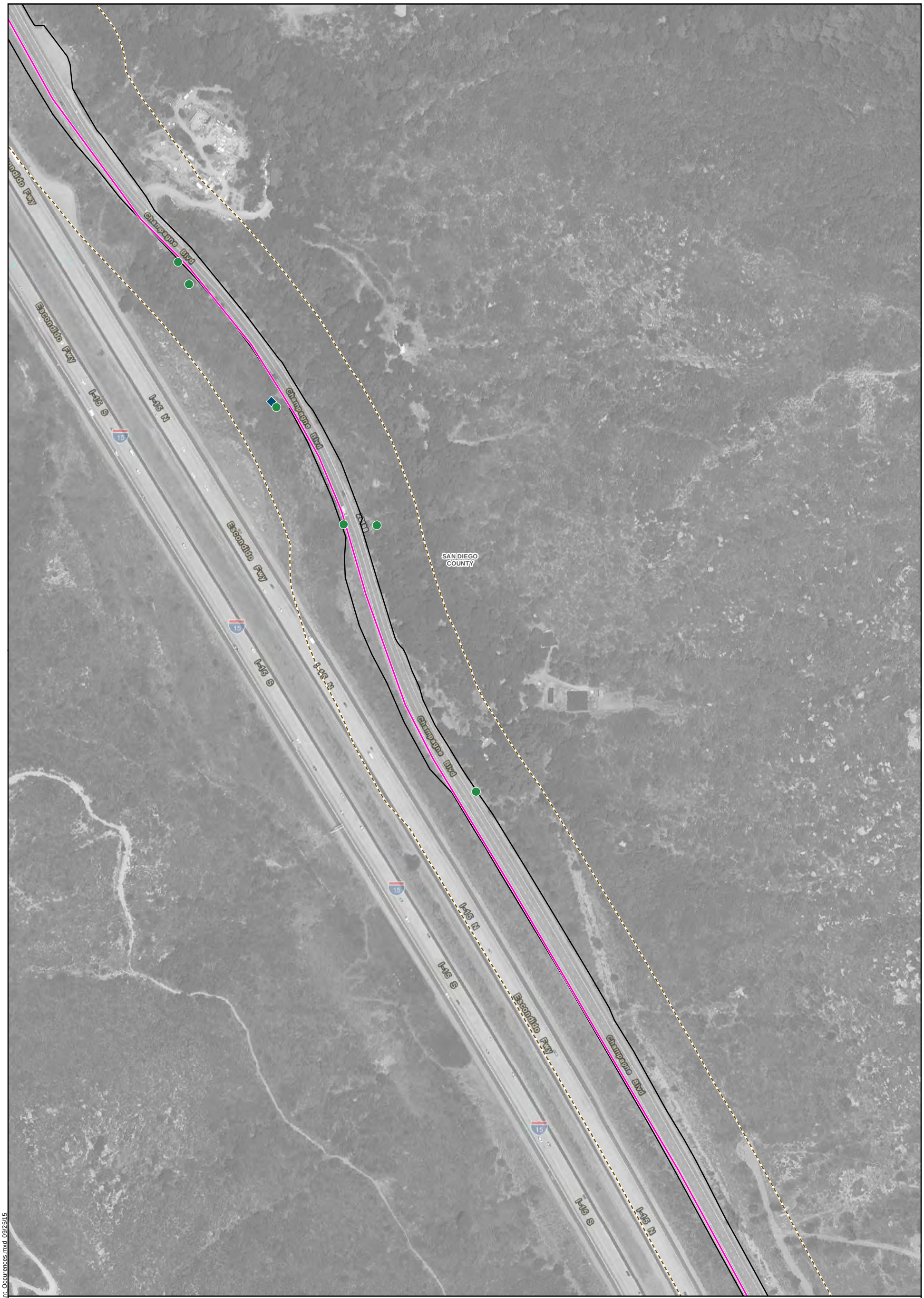

Attachment C: Special-Status Plant Species Occurrences Map 9 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Engelmann oak
- Summer holly

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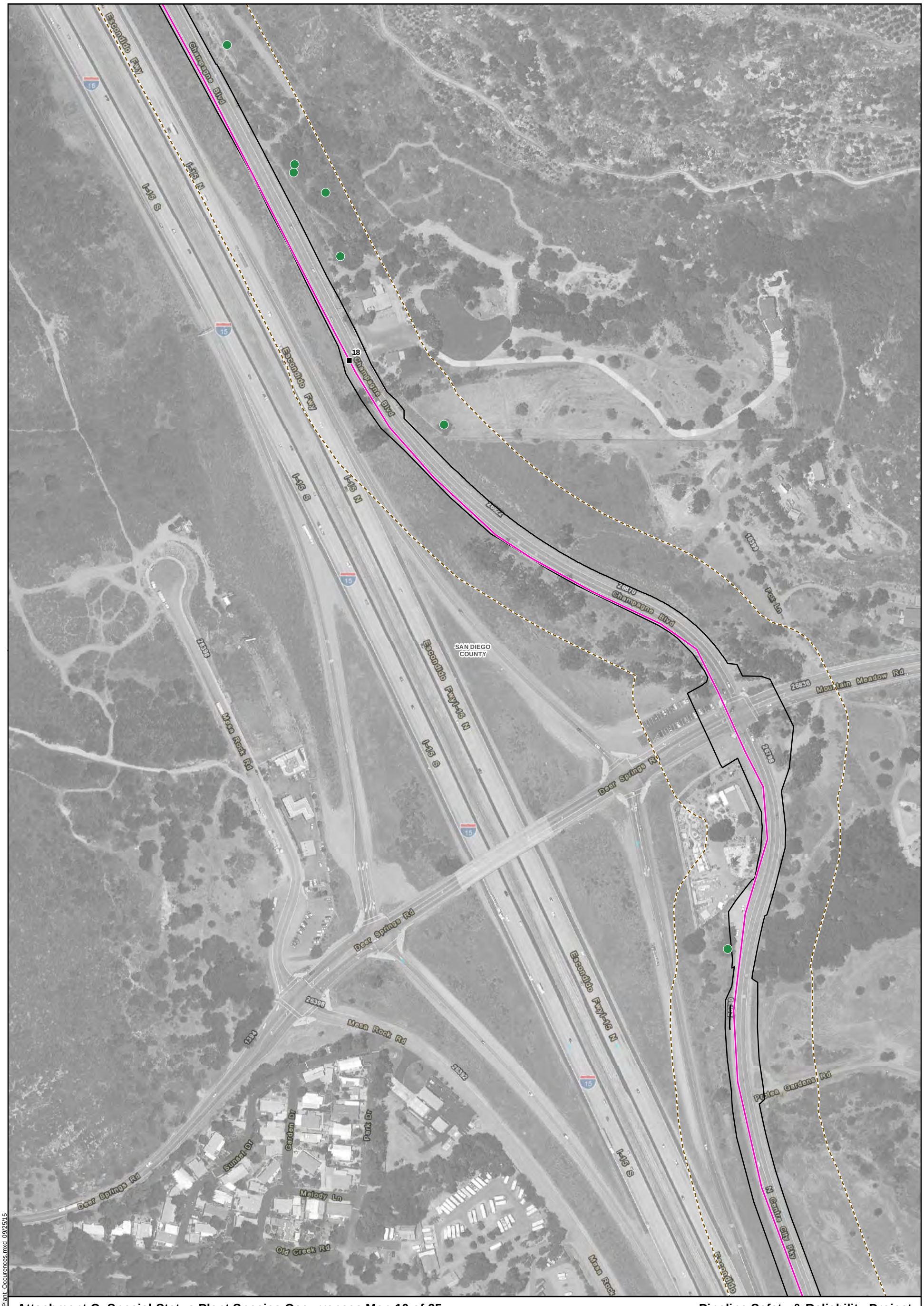

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Attachment C: Special-Status Plant Species Occurrences Map 10 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve
- Engelmann oak

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Attachment C: Special-Status Plant Species Occurrences Map 11 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Engelmann oak
- California adolphia

1:3,000
0 200 400 Feet

SoCalGas A Sempra Energy utility
SDGE A Sempra Energy utility
INSIGNIA ENVIRONMENTAL

Attachment C: Special-Status Plant Species Occurrences Map 12 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- Engelmann oak
- Decumbent goldenbush
- Graceful tarplant
- Nuttall's scub oak
- San Diego County viguiera
- San Diego sagewort
- Southwestern spiny rush
- Nuttall's scrub oak

1:3,000

0 200 400 Feet

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\MXDs\BRTR\Rare_Plant_Occurences.mxd 09/25/15

Attachment C: Special-Status Plant Species Occurrences Map 13 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- Nuttall's scrub oak
- San Diego County viguiera

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0 200 400 Feet

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Attachment C: Special-Status Plant Species Occurrences Map 14 of 25 — **Pipeline Safety & Reliability Project**

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- San Diego County viguiera

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0 200 400 Feet

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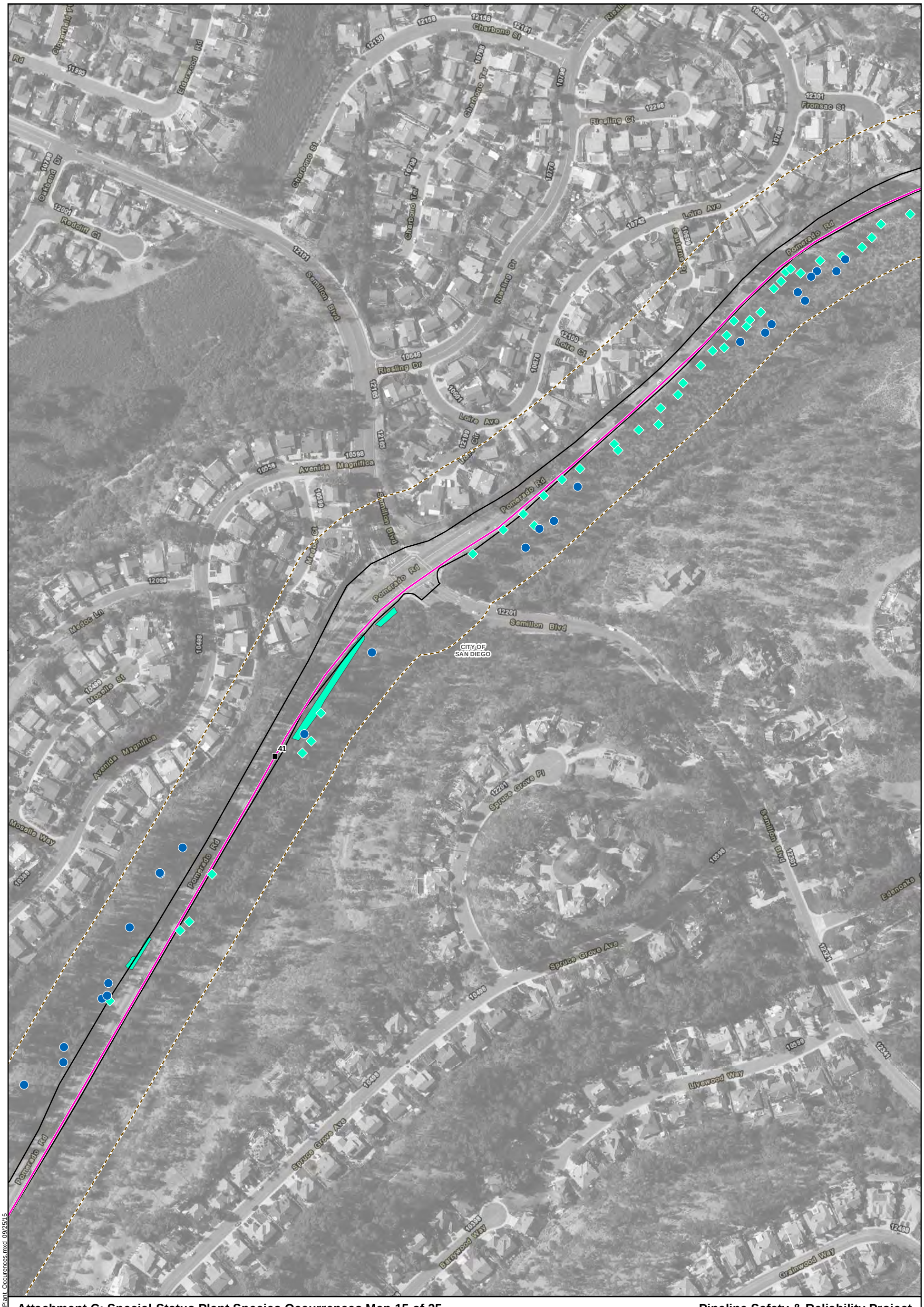

Attachment C: Special-Status Plant Species Occurrences Map 15 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- San Diego County viguiera
- San Diego County viguiera

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0 200 400 Feet

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Attachment C: Special-Status Plant Species Occurrences Map 16 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- San Diego County viguiera

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0 200 400 Feet

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Attachment C: Special-Status Plant Species Occurrences Map 17 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- San Diego County viguiera
- Orcutt's brodiaea
- San Diego County viguiera

1:3,000

0 200 400 Feet

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Attachment C: Special-Status Plant Species Occurrences Map 18 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- San Diego County viguiera

1:3,000

0 200 400 Feet

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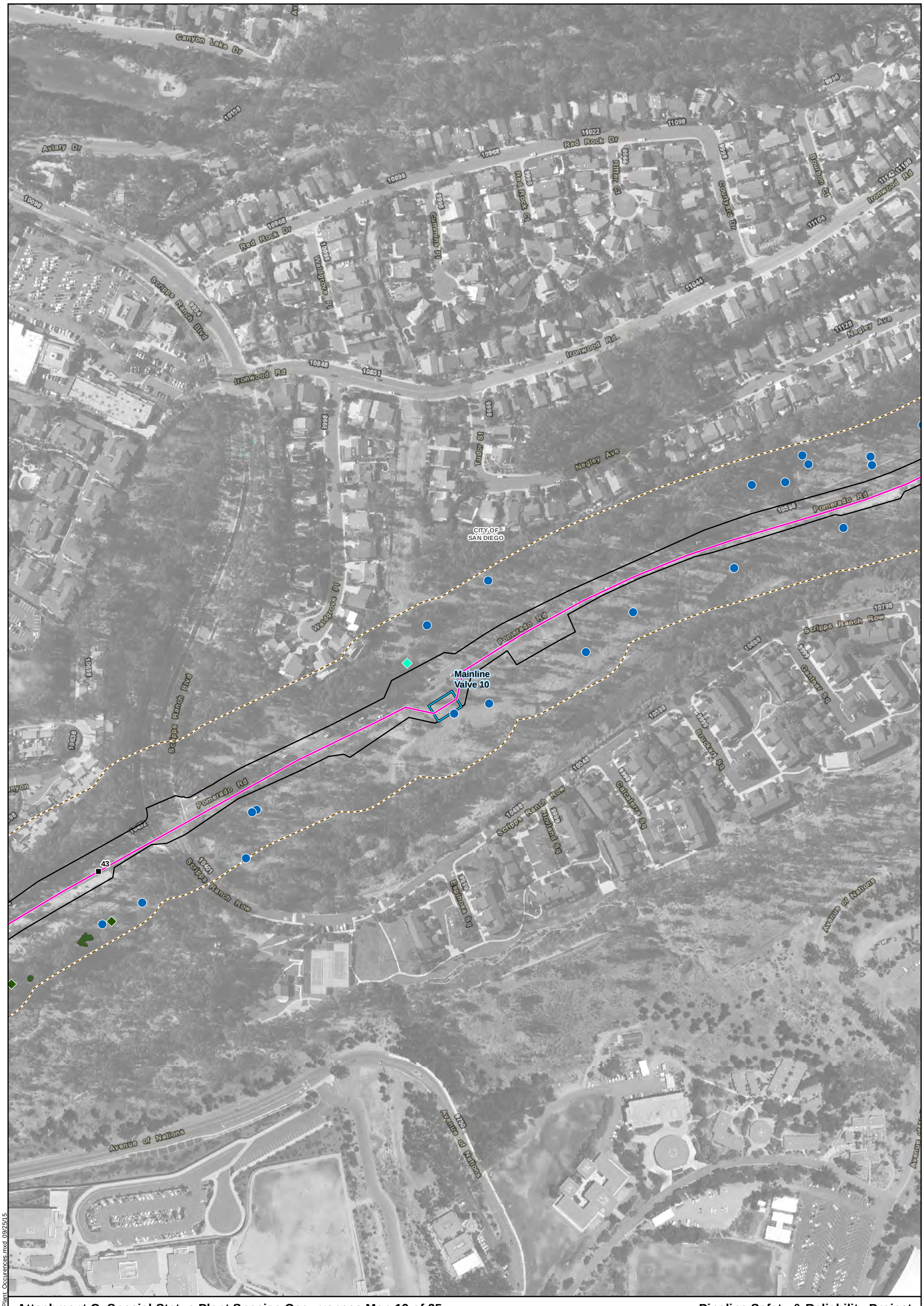

Attachment C: Special-Status Plant Species Occurrences Map 19 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- San Diego County viguiera
- Western dichondra
- Western dichondra

1:3,000

0 200 400 Feet

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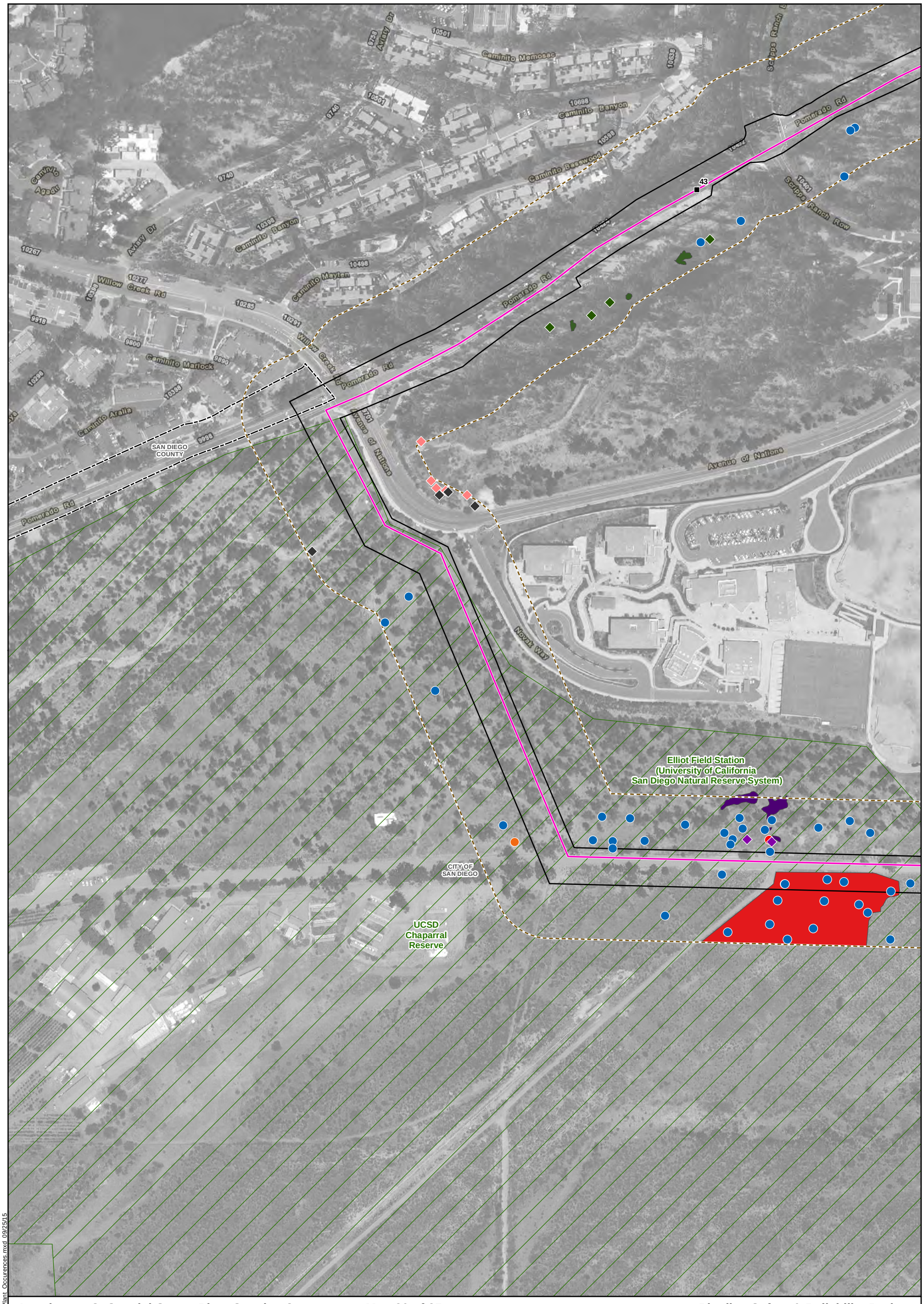

Attachment C: Special-Status Plant Species Occurrences Map 20 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- Golden-rayed pentachaeta
- Nuttall's scrub oak
- San Diego goldenstar
- San Diego sagewort
- Southwestern spiny rush
- Western dichondra
- Golden-rayed pentachaeta
- San Diego goldenstar
- Western dichondra

1:3,000

0 200 400 Feet

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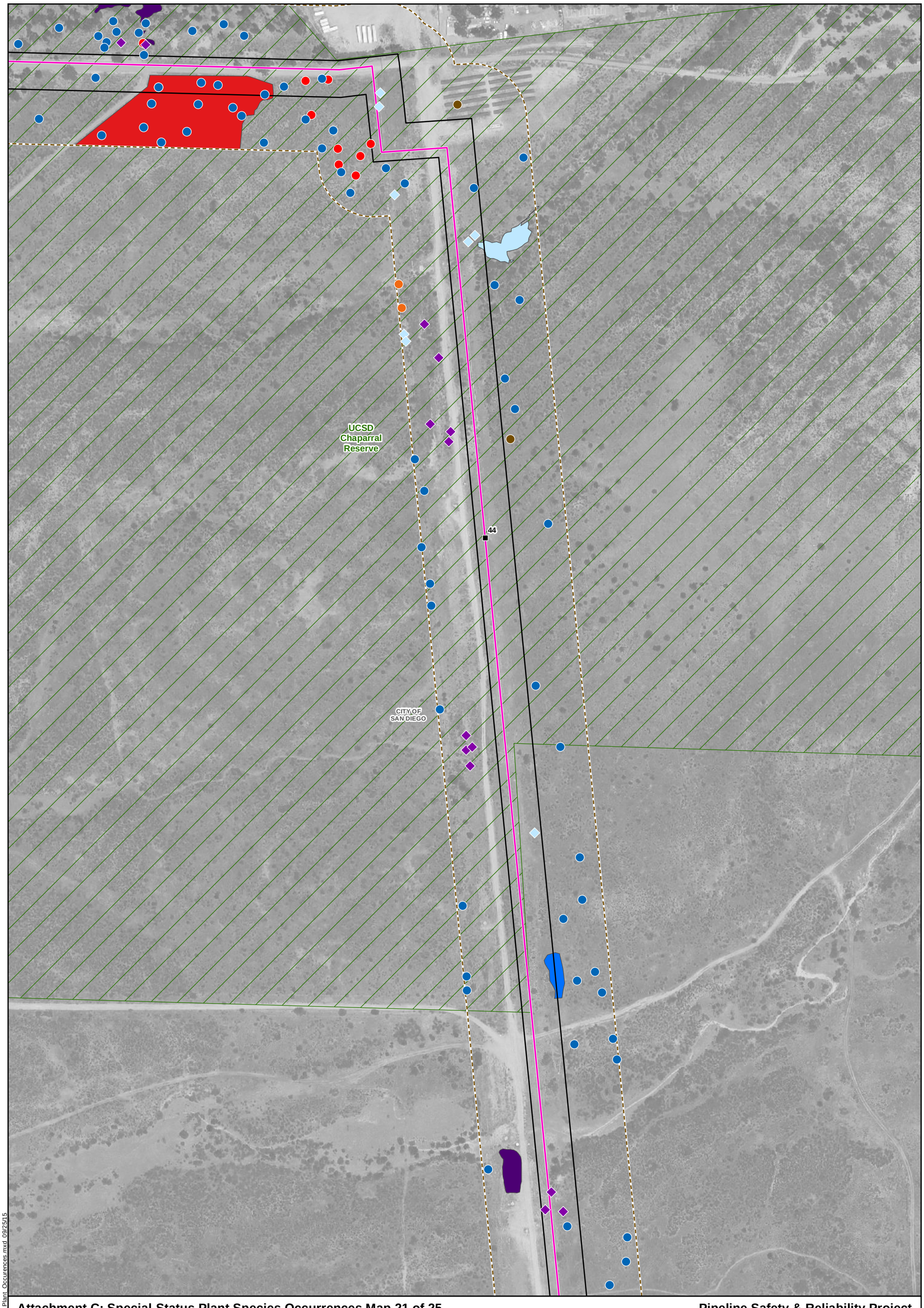

Attachment C: Special-Status Plant Species Occurrences Map 21 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- Golden-rayed pentachaeta
- Graceful tarplant
- Nuttall's scrub oak
- Orcutt's brodiaea

- San Diego goldenstar
- Ashy spike-moss
- Golden-rayed pentachaeta
- Orcutt's brodiaea
- San Diego goldenstar

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0 200 400 Feet

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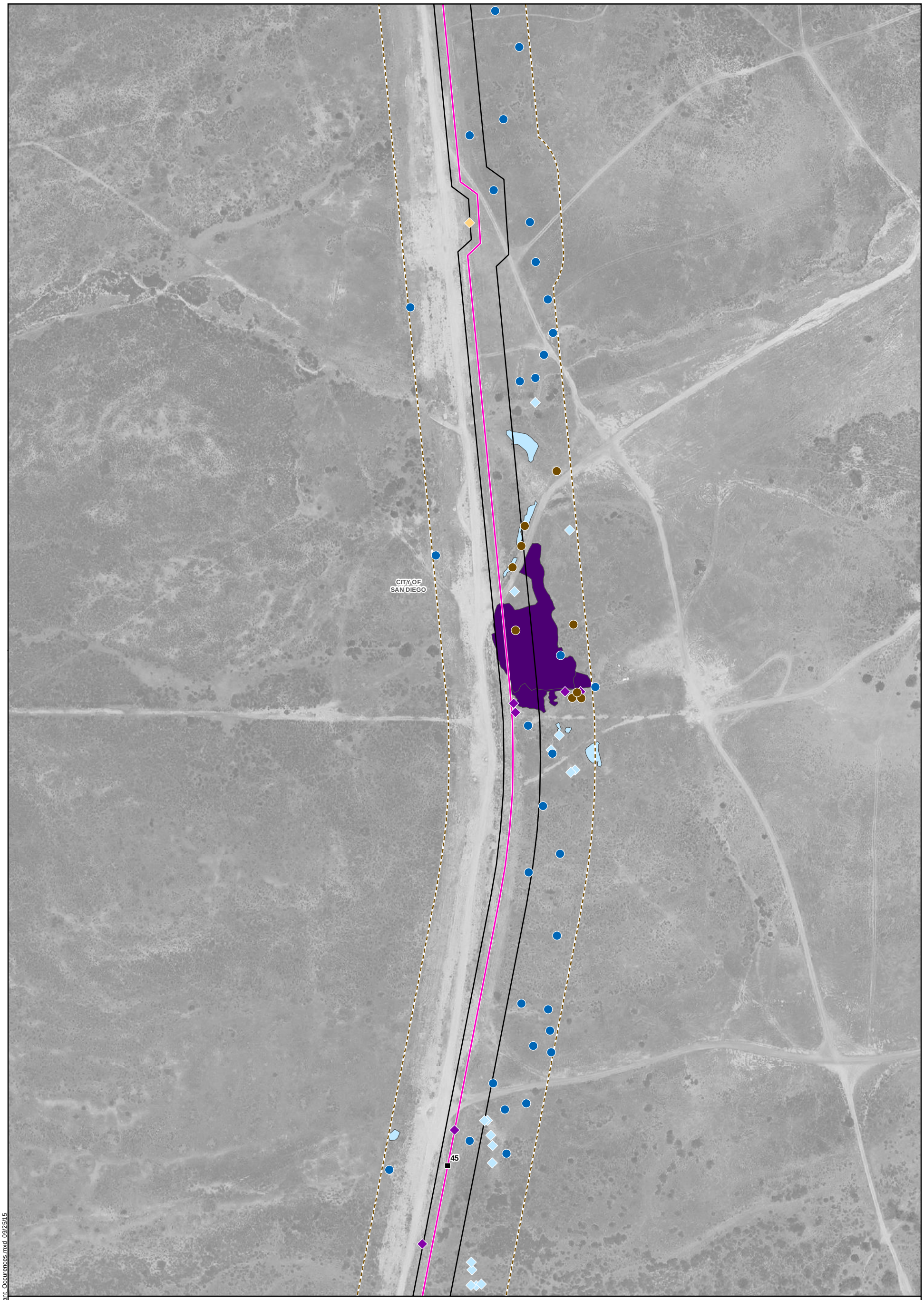

Attachment C: Special-Status Plant Species Occurrences Map 22 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- Graceful tarplant
- Orcutt's brodiaea
- San Diego goldenstar
- Small-flowered microseris

- Orcutt's brodiaea
- San Diego goldenstar

1:3,000

0 200 400 Feet

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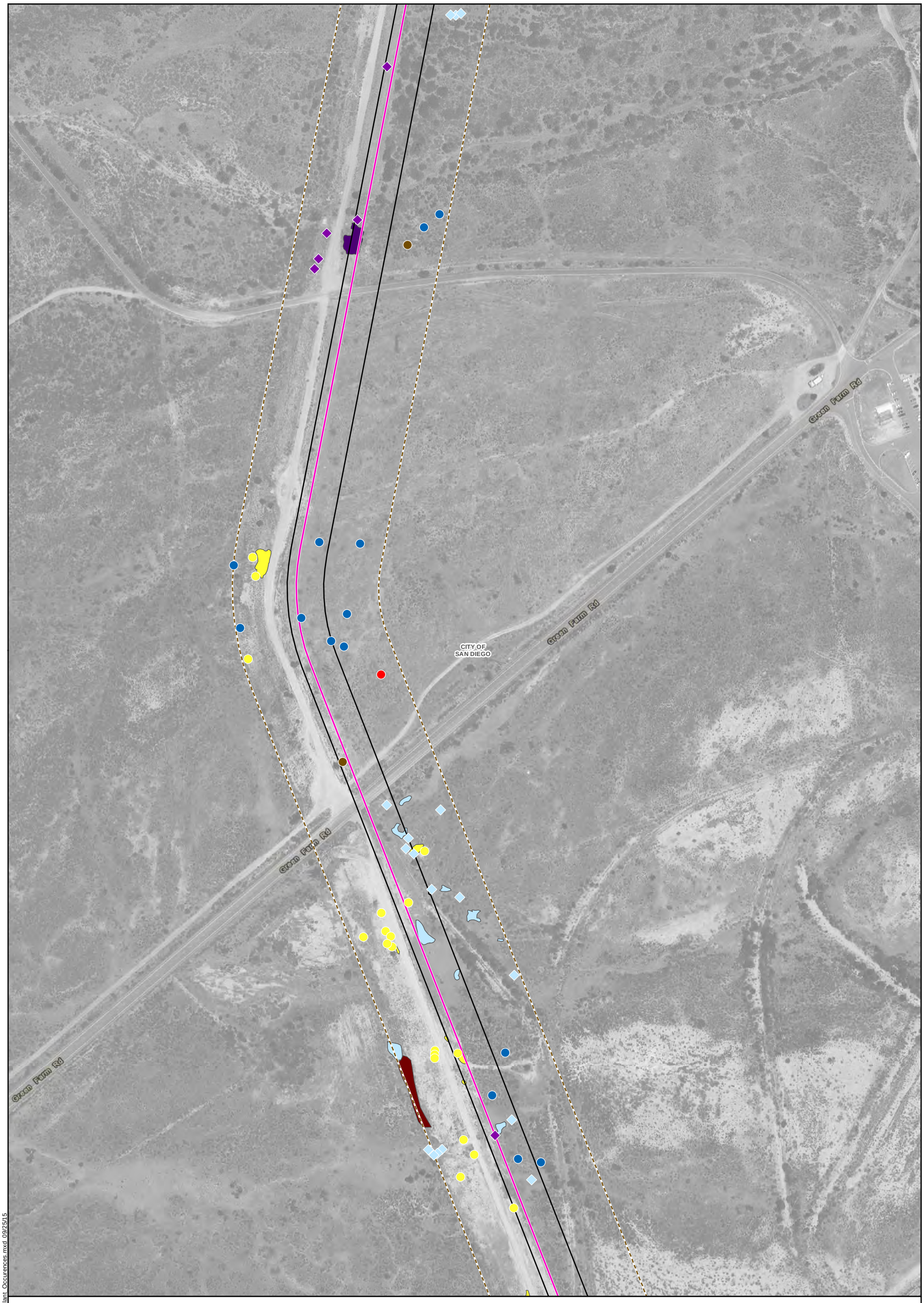

Attachment C: Special-Status Plant Species Occurrences Map 23 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- Golden-rayed pentachaeta
- Graceful tarplant
- Long-spined spineflower
- Orcutt's brodiaea

- San Diego goldenstar
- Graceful tarplant
- Long-spined spineflower
- Orcutt's brodiaea
- San Diego goldenstar

1:3,000
0 200 400 Feet

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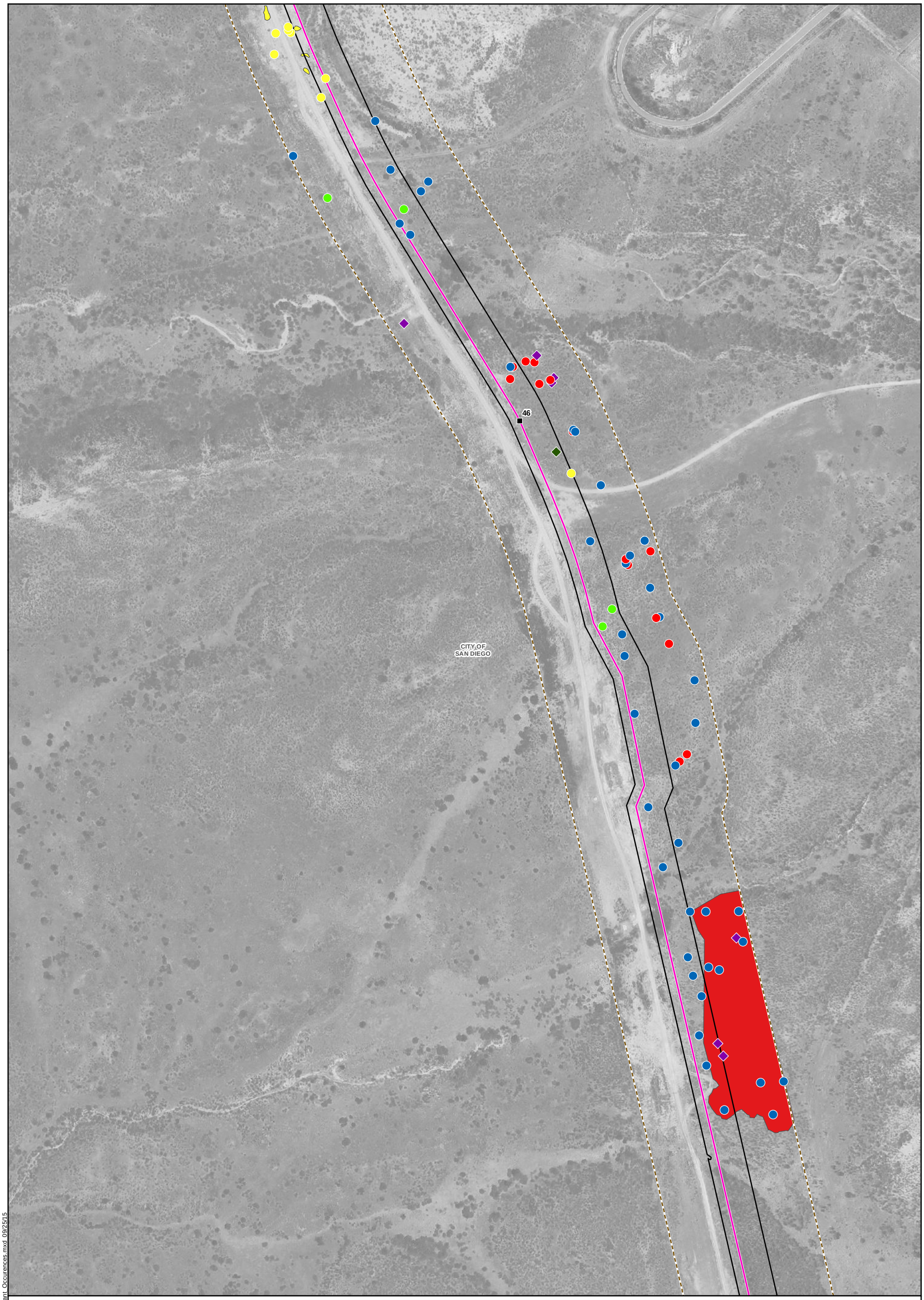

Attachment C: Special-Status Plant Species Occurrences Map 24 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- Brewer's calandrinia
- Golden-rayed pentachaeta
- Long-spined spineflower
- San Diego goldenstar
- Western dichondra
- Golden-rayed pentachaeta
- Long-spined spineflower

1:3,000
0 200 400 Feet

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CITY OF
SAN DIEGO

Line 2010
Cross-Tie

Attachment C: Special-Status Plant Species Occurrences Map 25 of 25

Pipeline Safety & Reliability Project

- Milepost
- Proposed Project Route
- Cross-Tie Connector Line
- Existing Facility

Permanent Impacts
- Aboveground Facility

Temporary Impacts
- Laydown Area
- Workspace

- Biological Resource Survey Area
- UCSD Chaparral Reserve

- Ashy spike-moss
- San Diego barrel cactus

1:3,000

0 200 400 Feet

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ATTACHMENT D: PLANT SPECIES OBSERVED

Attachment D
Plants Species Observed

Ferns and Allies

Polypodiaceae - Polypody Family

Polypodium caifornicum	California polypody

Pteridaceae - Brake Family

Cheilanthes newberryi	Newberry's lip fern
Pellaea andromedaefolia	Coffee fern
Pellaea mucronata var. *mucronata*	Bird's-foot cliff-break
Pentagramma triangularis ssp. *triangularis*	Goldback fern

Selaginellaceae - Spike-Moss Family

Selaginella asprella	Bluish spike-moss
Selaginella cinerascens	Ashy spike-moss

Gymnosperms

Cupressaceae - Cypress Family

Sequoia sempervirens	Coast redwood

Pinaceae - Pine Family

**Pinus* sp.	Pine

Angiosperms - Dicots

Adoxaceae - Muskroot Family

Sambucus nigra ssp. *caerulea*	Blue elderberry

Aizoaceae - Fig-Marigold Family

**Carpobrotus edulis*	Fig-marigold
**Mesembryanthemum crystallinum*	Crystalline iceplant

Amaranthaceae - Amaranth Family

**Amaranthus albus*	Tumble pigweed
Amaranthus californicus	California amaranth

Anacardiaceae - Cashew or Sumac Family

Malosma laurina	Laurel sumac
Rhus aromatica	Sourberry
Rhus integrifolia	Lemonadeberry
Rhus ovata	Sugar sumac
**Schinus molle*	Peruvian pepper tree
**Schinus terebinthifolius*	Brazilian pepper tree
Toxicodendron diversilobum	Western poison-oak

Apiaceae (Umbelliferae) - Carrot Family

**Anthriscus caucalis*	Bur-chervil
Apiastrum angustifolium	Wild celery
**Apium graveolens*	Celery
Bowlesia incana	Hoary bowlesia
**Conium maculatum*	Poison hemlock
**Daucus carota*	Queen Anne's lace
Daucus pusillus	Southwestern carrot
**Foeniculum vulgare*	Sweet fennel
Sanicula arguta	Sanicle

**Torilis arvensis*	Knot hedge parsley

Apocynaceae - Dogbane/Milkweed Family

Asclepias fascicularis	Narrow-leaf milkweed
Asclepias linaria	Milkweed
**Vinca major*	Periwinkle

Asteraceae (Compositae) - Sunflower Family

Achillea millefolium	Common yarrow
Acourtia microcephala	Acourtia
Agoseris retrorsa	Spear-leaf agoseris
Ambrosia acanthicarpa	Annual bur-sage
Ambrosia psilostachya	Western ragweed
**Anthemis cotula*	Mayweed
Artemisia californica	California sagebrush
Artemisia douglasiana	Douglas' mugwort
Artemisia palmeri	San Diego sagewort
Baccharis pilularis ssp. *consanguinea*	Coyote brush
Baccharis salicifolia ssp. *salicifolia*	Mulefat
Baccharis sarothroides	Broom baccharis
Bahiopsis laciniata	San Diego County viguiera
Baileya multiradiata	Desert-marigold
Bebbia juncea var. *aspera*	Rush sweetbush
Brickellia californica	California brickell bush
**Centaurea melitensis*	Tocalote
**Carduus pycnocephalus* ssp. *pycnocephalus*	Italian thistle
Chaenactis artemisiifolia	White pincushion
Chaenactis glabriuscula	Pebble pincushion
**Cirsium vulgare*	Spear thistle
Corethrogyne filaginifolia	Sand-aster
**Cotula australis*	Australian brass-buttons
**Cynara cardunculus* ssp. *cardunculus*	Artichoke
Deinandra fasciculata	Clustered moonshine-daisy
**Dittrichia graveolens*	Stinkwort
Encelia californica	California encelia
Encelia farinosa	Brittlebush
Erigeron foliosus var. *confinis*	Leafy fleabane
Eriophyllum confertiflorum	Yellow-yarrow
**Glebionis coronarium*	Garland daisy
Gutierrezia californica	California matchweed
Hazardia squarrosa	Saw-toothed hazardia
**Hedypnois cretica*	Crete weed
Helianthus annuus	Common sunflower
Helianthus californicus	California sunflower
**Helminthotheca echioides*	Bristly ox-tongue
Heterotheca grandiflora	Telegraph weed
Holocarpha virgata ssp. *elongata*	Graceful tarplant
**Hypochaeris glabra*	Smooth cat's-ear
**Hypochaeris radicata*	Rough cat’s ear
Isocoma menziesii	Goldenbush
Isocoma menziesii var. *decumbens*	Decumbent godenbush
Isocoma menziesii var. *menziesii*	San Diego goldenbush
Isocoma menziesii var. *vernonioides*	Coastal goldenbush
**Lactuca serriola*	Prickly lettuce
Laennecia coulteri	Coulter's conyza

Lasthenia californica ssp. *californica*	California goldfields
Layia platyglossa	Coastal tidy tips
Logfia depressa	Dwarf cottonrose
**Logfia gallica*	Narrowleaf cottonrose
**Matricaria discoidea*	Pineapple-weed
Microseris douglasii ssp. *douglasii*	Douglas' silverpuffs
Microseris douglasii ssp. *platycarpha*	San Diego silverpuffs
Osmadenia tenella	Osmandenia
Pentachaeta aurea ssp. *aurea*	Golden-rayed pentachaeta
Pluchea odorata	Salt marsh fleabane
Porophyllum gracile	Odora
Pseudognaphalium benolens	White everlasting
Pseudognaphalium biolettii	Bioletti's rabbit-tobacco
Pseudognaphalium californicum	California everlasting
**Pseudognaphalium luteoalbum*	Everlasting cudweed
Pseudognaphalium microcephalum	San Diego rabbit-tobacco
Pseudognaphalium stramineum	Cotton-batting plan
Psilocarphus brevissimus var. *brevissimus*	Dwarf woolly-heads
Psilocarphus tenellus	Slender woolly-marbles
**Silybum marianum*	Milk thistle
**Sonchus asper* ssp. *asper*	Prickly sow-thistle
**Sonchus oleraceus*	Common sow-thistle
Stephanomeria exigua	Stephanomeria
Stylocline gnaphaloides	Everlasting neststraw
Uropappus lindleyi	Silver puffs
Xanthium strumarium	Cocklebur

Boraginaceae - Borage Family

Amsinckia menziesii	Rancher's fireweed
Cryptantha intermedia var. *hendersonii*	Henderson's cryptantha
Cryptantha intermedia var. *intermedia*	Common cryptantha
Cryptantha micromeres	Minute-flowered cryptantha
Emmenanthe penduliflora ssp. *rosea*	Whispering bells
Eriodictyon crassifolium var. *crassifolium*	Thickleaf yerba santa
Eucrypta chrysanthemifolia var. *bininnatifida*	Eucrypta
Eucrypta chrysanthemifolia var. *chrysanthemifolia*	Common eucrypta
Heliotropium curassavicum var. *oculatum*	Salt heliotrope
Nemophila menziesii	Baby blue-eyes
Pectocarya linearis ssp. *ferocula*	Narrow-toothed pectocarya
Phacelia cicutaria var. *hispida*	Caterpillar phacelia
Phacelia distans	Common phacelia
Phacelia grandiflora	Grand phacelia
Phacelia parryi	Parry phacelia
Phacelia ramosissima	Branching phacelia
Pholistoma auritum var. *auritum*	Blue fiesta flower
Pholistoma racemosum	San Diego fiesta flower
Plagiobothrys collinus var. *californicus*	Californica popcornflower

Brassicaceae (Cruciferae) - Mustard Family

**Brassica nigra*	Black mustard
**Brassica rapa*	Field mustard
**Brassica tournefortii*	Sahara mustard
Caulanthus lasiophyllus	California mustard
**Lepidium didymum*	Wart cress
**Lepidium latifolium*	Broad-leaf pepperwort

**Nasturtium officinale*	Watercress
**Raphanus sativus*	Wild radish
**Sisymbrium altissimum*	Tumble mustard
**Sisymbrium orientale*	Indian hedge mustard

Cactaceae - Cactus Family

Cylindropuntia californica var. *parkeri*	Cane cholla
Ferocactus viridescens	San Diegio cactus
**Opuntia ficus-indica*	Indian-fig
Opuntia littoralis	Mesa prickly-pear

Caprifoliaceae - Honeysuckle Family

Lonicera subspicata	Honeysuckle

Caryophyllaceae - Pink Family

Cerastium arvense ssp. *strictum*	Field mouse-ear chickweed
**Herniaria hirsuta* var. *cinerea*	Rupturewort
**Silene gallica*	Small-flower catchfly
Silene laciniata ssp. *laciniata*	Mexican pink
**Spergula arvensis*	Stickwort
**Spergularia bocconi*	Boccone's sand-spurrey
Spergularia macrotheca	Sticky sand-spurrey

Chenopodiaceae - Goosefoot Family

Atriplex canescens var. *canescens*	Shadscale
**Atriplex prostrata*	Fat-hen
**Atriplex semibaccata*	Australian saltbush
**Atriplex suberecta*	Sprawling saltbush
**Chenopodium album*	Lamb's quarters
**Chenopodium murale*	Nettle-leaf goosefoot
**Salsola tragus*	Russian thistle

Cistaceae - Rock-Rose Family

**Cistus ladanifer*	Gum cistus
Helianthemum scoparium var. *scoparium*	Peak rush-rose

Convolvulaceae - Morning-Glory Family

Calystegia macrostegia	Morning-glory
**Convolvulus arvensis*	Bindweed
Cressa truxillensis	Alkali weed
Cuscuta californica var. *californica*	Dodder
Dichondra occidentalis	Western dichondra

Crassulaceae - Stonecrop Family

Crassula connata	Sand pygmy-weed
**Crassula ovata*	Jade plant
Crassula solieri	Smooth-seed pygmy-weed
Dudleya edulis	Lady-fingers
Dudleya lanceolata	Lance-leaved dudleya
Dudleya pulverulenta	Chalk dudleya

Cucurbitaceae - Gourd Family

Cucurbita foetidissima	Calabazilla
Marah macrocarpa	Cucamonga manroot

Dipsacaceae - Teasel Familly

**Dipsacus* sp.	

Ericaceae - Heath Family

Comarostaphylis diversifolia ssp. *diversifolia*	Summer holly
Xylococcus bicolor	Mission-manzanita

Euphorbiaceae - Spurge Family

Croton californicus	Croton
Croton setigerus	Turkey mullein
**Euphorbia maculata*	Spotted spurge
**Euphorbia pepulus*	Petty spurge
Euphorbia polycarpa	Prostrate spurge
**Ricinus communis*	Castor bean

Fabaceae (Leguminosae) - Legume Family

**Acacia cyclops*	Western coastal wattle
**Acacia melanoxylon*	Blackwood acacia
**Acacia redolens*	Vanilla-scented wattle
**Acacia retinoides*	Everblooming wattle
Acmispon americanus var. *americanus*	Spanish lotus
Acmispon glaber var. *brevialatus*	California broom
Acmispon glaber var. *glaber*	Deerweed
Acmispon micranthus	Small-flowered lotus
Acmispon strigosus	Strigose lotus
Amorpha californica var. *californica*	California indigobush
**Lathyrus latifolius*	Perennial sweetpea
**Lathyrus sativus*	Grass pea
Lathyrus vestitus var. *alefeldii*	Wild pea
Lupinus bicolor	Miniature lupine
Lupinus formosus var. *robustus*	Lupine
Lupinus hirsutissimus	Stinging lupine
Lupinus truncatus	Collar lupine
**Medicago polymorpha*	California burclover
**Melilotus albus*	White sweetcover
**Melilotus indicus*	Sourclover
**Parkinsonia aculeata*	Mexican palo verde
Senegalia greggii	Catclaw acacia
**Senna marilandica*	Maryland senna
**Spartium junceum*	Spanish broom
**Trifolium hirtum*	Rose clover
Vicia americana ssp. *americana*	American vetch
**Vicia benghalensis*	Purple vetch

Fagaceae - Oak Family

Quercus agrifolia var. *agrifolia*	Coast live oak
Quercus berberidifolia	Scrub oak
Quercus dumosa	Nuttall's scrub oak
Quercus engelmannii	Engelmann oak
Quercus x *acutidens*	California Scrub Oak

Frankeniaceae - Frankenia Family

Frankenia salina	Alkali heath

Gentianaceae - Gentian Family

Zeltnera venusta	California centaury

Geraniaceae - Geranium Family

**Erodium botrys*	Broad-leaf filaree
**Erodium cicutarium*	Red-stemmed filaree
**Erodium moschatum*	White-stem filaree
Geranium carolinianum	Carolina geranium

Grossulariaceae - Gooseberry Family

Ribes indecorum	White flowering currant

Ribes speciosum	Fuchsia-flowered gooseberry

Juglandaceae - Walnut Family

Juglans hindsii	Northern California black walnut
**Juglans nigra*	Black walnut

Lamiaceae (Labiatae) - Mint Family

**Marrubium vulgare*	White horehound
**Rosmarinus officinalis*	Rosemary
Salvia apiana	White sage
Salvia columbariae	Chia
Salvia leucophylla	Purple sage
Salvia mellifera	Black sage
**Stachys ajugoides*	Bugle hedge-nettle
Trichostema lanatum	Woolly bluecurls
Trichostema lanceolatum	Vinegar weed

Lythraceae - Loosestrife Family

**Lythrum hyssopifolia*	Hyssop loosestrife

Malvaceae - Mallow Family

Fremontodendron californicum	Fremontia
Malacothamnus densiflorus	Bush mallow
Malacothamnus fasciculatus	Chaparral mallow
**Malva nicaeensis*	Bull mallow
**Malva parviflora*	Cheeseweed
Sidalcea sparsifolia	Southern checkerbloom

Montiaceae - Miner's Lettuce Family

Calandrinia breweri	Brewer's calandrinia
Calandrinia ciliata	Red maids
Claytonia perfoliata	Common miner's lettuce

Moraceae - Mulberry Family

**Ficus carica*	Common fig

Myrsinaceae - Myrsine Family

**Lysimachia arvensis*	Scarlet pimpernel

Myrtaceae - Myrtle Family

**Eucalyptus camaldulensis*	Red gum
**Eucalyptus citriodora*	Lemon-scented gum
**Eucalyptus cladocalyx*	Sugar gum
**Eucalyptus globulus*	Blue gum

Nyctaginaceae - Four O'Clock Family

Mirabilis laevis var. *crassifolia*	Wishbone bush

Oleaceae - Olive Family

**Fraxinus udehi*	Shamel ash
Fraxinus velutina	Velvet ash
**Olea europaea*	Olive

Onagraceae - Evening Primrose Family

Camissoniopsis bistorta	California sun cup
Camissoniopsis hirtella	Suncup
Clarkia epilobioides	Clarkia
Clarkia purpurea ssp. *quadrivulnera*	Winecup clarkia
Clarkia unguiculata	Elegant clarkia
Epilobium ciliatum	Fringed willow-herb
Eulobus californicus	Camissonia
Oenothera elata ssp. *hookeri*	Hooker's evening primrose

**Oenothera speciosa*	Evening primrose
Oenothera suffrutescens	Scarlet gaura

Orobanchaceae - Broomrape Family

Castilleja densiflora ssp. *densiflora*	Owl's-clover
Castilleja exserta ssp. *exserta*	Red owl's-clover

Oxalidaceae - Oxalis Family

**Oxalis pes-caprae*	Bermuda buttercup

Paeoniaceae - Peony Family

Paeonia californica	California peony

Papaveraceae - Poppy Family

Eschscholzia californica	California poppy
Eschscholzia minutiflora	Poppy
Platystemon californicus	Cream cups

Phrymaceae - Lopseed Family

Mimulus aurantiacus var. *aurantiacus*	Orange bush monkeyflower
Mimulus aurantiacus var. *puniceus*	Sticky monkeyflower
Mimulus guttatus	Common monkeyflower

Picrodendraceae - Bitter-Tree Family

Tetracoccus dioicus	Parry's tetracoccus

Plantaginaceae - Plantain Family

Antirrhinum kelloggii	Snapdragon
Antirrhinum nuttallianum ssp. *nuttallianum*	Snapdragon
Collinsia heterophylla var. *austromantana*	Downy Chinese houses
Keckiella cordifolia	Straggly keckiella
Nuttallanthus texanus	Blue toadflax
Penstemon spectabilis var. *spectabilis*	Beardtongue
**Plantago coronopus*	Cut-leaf plantain
Plantago erecta	California plantain
**Plantago lanceolata*	English plantain

Platanaceae - Plane Tree Family

Platanus racemosa	Western sycamore

Polemoniaceae - Phlox Family

Allophyllum glutinosum	Allophyllum
Eriastrum diffusum	Miniature wool star
Eriastrum filifolium	Lavender woolly-star
Eriastrum sapphirinum	Sapphire wool star
Gilia capitata	Globe gilia
Gilia stellata	Star gilia
Navarretia hamata ssp. *leptantha*	Navarretia

Polygonaceae - Buckwheat Family

Chorizanthe fimbriata var. *fimbriata*	Fringed spineflower
Chorizanthe polygonoides var. *longispina*	Long-spined spineflower
Chorizanthe procumbens	Prostrate spineflower
**Emex spinosa*	Devil's thorn
Eriogonum fasciculatum var. *fasciculatum*	Coastal California buckwheat
Eriogonum fasciculatum var. *foliolosum*	Leafy California buckwheat
Eriogonum gracile var. *gracile*	Slender buckwheat
Lastarriaea corriacea	Leather-spineflower
Pterostegia drymarioides	Woodland threadstem
**Rumex crispus*	Curly dock
Rumex salicifolius	Willow dock

Ranunculaceae - Buttercup Family

Clematis pauciflora	Southern California clematis
Delphinium cardinale	Scarlet larkspur
Delphinium parishii ssp. *parishii*	Parish's larkspur
Delphinium parishii ssp. *subglobosum*	Desert larkspur
Thalictrum fendleri	Fendler's meadow-rue

Rhamnaceae - Buckthorn Family

Adolphia californica	California adolphia
Ceanothus crassifolius var. *crassifolius*	Hoaryleaf ceanothus
Ceanothus cuneatus var. *cuneatus*	Buck brush
Ceanothus leucodermis	Chaparral whitethorn
Ceanothus oliganthus var. *orcuttii*	Ceanothus
Ceanothus tomentosus	Woollyleaf ceanothus
Rhamnus crocea	Spiny redberrry
Rhamnus ilicifolia	Hollyleaf redberry
Rhamnus pilosa	Hairyleaf redberry

Rosaceae - Rose Family

Adenostoma fasciculatum	Chamise
Cercocarpus betuloides var. *betuloides*	Birch-leaf mountain mahogany
Cercocarpus minutiflorus	San Diego mountain mahogany
Drymocallis glandulosa	Glandular cinquefoil
Heteromeles arbutifolia	Toyon
Prunus ilicifolia ssp. *ilicifolia*	Holly-leafed cherry
Rubus ursinus	California blackberry

Rubiaceae - Madder Family

Galium angustifolium ssp. *angustifolium*	Narrow-leaved bedstraw
Galium aparine	Goose grass
Galium nuttallii ssp. *nuttallii*	San Diego bedstraw
Galium porrigens var. *porrigens*	Climbing bedstraw

Rutaceae - Rue Family

Cneoridium dumosum	Bushrue

Salicaceae - Willow Family

Populus fremontii ssp. *fremontii*	Fremont cottonwood
Salix exigua	Narrow-leaved willow
Salix gooddingii	Goodding's black willow
Salix laevigata	Red willow
Salix lasiolepis	Arroyo willow

Sauruaceae - Lizard's-Tail Family

Anemopsis californica	Yerba mansa

Scrophulariaceae - Figwort Family

Scrophularia californica	California figwort

Simaroubaceae - Quassia Family

**Ailanthus altissima*	Tree of heaven

Solanaceae - Nightshade Family

Datura wrightii	Thornapple
**Nicotiana glauca*	Tree tobacco
**Solanum elaeagnifolium*	White horse-nettle
Solanum parishii	Parish's purple nightshade
Solanum xanti	Purple nightshade

Tamaricaceae - Tamarisk Family

**Tamarix ramosissima*	Salt cedar

Urticaceae - Nettle Family

Hesperocnide tenella	Western nettle
Parietaria hespera	Western pellitory
Urtica dioica ssp. *holosericea*	Hoary nettle
**Urtica urens*	Dwarf nettle

Verbenaceae - Vervain Family

Phyla lanceolata	Lance-leaf frog-fruit
Verbena lasiostachys var. *lasiostachys*	Western verbena

Violaceae - Violet Family

Viola pedunculata	Johnny-jump-up

Vitaceae - Grape Family

**Parthenocissus vitacea*	Woodbine
Vitis girdiana	Desert wild grape

Zygophyllaceae - Caltrop Family

**Tribulus terrestris*	Puncture vine

Angiosperms -Monocots

Agavaceae – Agave Family

Chlorogalum parviflorum	Small-flowered amole
Chlorogalum pomeridianum var. *divaricatum*	Soaproot
Hesperoyucca whipplei	Our Lord's candle
Yucca schidigera	Mohave yucca

Alliaceae - Onion Family

Allium haematochiton	Red-skinned onion
Allium peninsulare var. *peninsulare*	Peninsular onion
Allium praecox	Onion

Arecaceae (Palmae) - Palm Family

**Washingtonia robusta*	Mexican fan palm

Asparagaceae - Asparagus Family

**Asparagus asparagoides*	Asparagas

Asphodelaceae - Asphodel Family

**Asphodelus fistulosus*	Asphodel

Cyperaceae - Sedge Family

Cyperus eragrostis	Tall flatsedge
Eleocharis macrostachya	Creeping spikerush
Schoenoplectus acutus var. *occidentalis*	Common tule
Schoenoplectus americanus	Olney's bulrush
Schoenoplectus californicus	California bulrush

Iridaceae - Iris Family

Sisyrinchium bellum	Western blue-eyed grass

Juncaceae - Rush Family

Juncus acutus ssp. *leopoldii*	Southwestern spiny rush
Juncus bufonius	Toad rush
Juncus mexicanus	Mexican rush

Juncaginaceae - Arrow-Grass Family

Triglochin scilloides	Flowering quillwort

Liliaceae - Lily Family

Calochortus splendens	Lilac mariposa lily
Calochortus weedii var. *weedii*	Mariposa lily

Melanthiaceae - Death Camas Family

Toxicoscordion fremontii	Star zygadene

Poaceae (Gramineae) - Grass Family

**Arundo donax*	Giant reed
**Avena barbata*	Slender wild oat
**Avena fatua*	Wild oat
**Brachypodium distachyon*	Purple falsebrome
**Bromus catharticus* var. *catharticus*	Rescue grass
**Bromus diandrus*	Ripgut grass
**Bromus hordeaceus*	Soft chess
**Bromus madritensis* ssp. *madritensis*	Foxtail chess
**Bromus madritensis* ssp. *rubens*	Red brome
**Cortaderia selloana*	Selloa pampas grass
**Digitaria sanguinalis*	Hairy crabgrass
Distichlis spicata	Saltgrass
**Ehrharta erecta*	Panic veldt grass
Elymus condensatus	Giant wildrye
Elymus triticoides ssp. *triticoides*	Creeping wildrye
Festuca microstachys	Small fescue
**Festuca myuros*	Rattail sixweeks grass
**Festuca perennis*	Italian ryegrass
**Gastridium phleoides*	Nit grass
**Hordeum murinum*	Foxtail barley
**Lamarckia aurea*	Goldentop
Melica imperfecta	Small-flowered melic
Melinis repens	Natal grass
Muhlenbergia microsperma	Littleseed muhly
Muhlenbergia rigens	Deer grass
**Parapholis incurva*	Curved sickle grass
**Paspalum dilatatum*	Dallis grass
**Pennisetum setaceum*	Crimson fountain grass
**Phalaris aquatica*	Harding grass
**Polypogon monspeliensis*	Rabbit's-foot grass
**Schismus barbatus*	Mediterranean grass
Stipa lepida	Foothill needlegrass
Stipa pulchra	Purple needlegrass

Themidaceae - Brodiaea Family

Bloomeria clevelandii	San Diego goldenstar
Brodiaea orcuttii	Orcutt's brodiaea
Dichelostemma capitatum ssp. *capitatum*	Blue dicks
Muilla maritima	Common muilla

Typhaceae - Cattail Family

Typha domingensis	Southern cattail

ATTACHMENT E: SPECIAL-STATUS PLANT SPECIES PHOTOGRAPHS

ATTACHMENT E: SPECIAL-STATUS PLANT SPECIES PHOTOGRAPHS

Photograph 1:
A population of Brewer's calandrinia (*Calandrinia breweri*)

Photograph 2:
An individual Engelmann oak (*Quercus engelmannii*)

Photograph 3:

An individual long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*).

Photograph 4:

Close-up of Orcutt's brodiaea (*Brodiaea orcuttii*)

Photograph 5:
Close-up of fruit on Parry's tetracoccus (*Tetracoccus dioicus*)

Photograph 6:
Close-up of San Diego County viguiera (*Bahiopsis* [*Viguiera*] *laciniata*)

Photograph 7:
Close-up of summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)

Photograph 8:
Western dichondra (*Dichondra occidentalis*)