

FINAL

Habitat Restoration and Monitoring Plan

Valley South Subtransmission Project

Prepared for

Southern California Edison

August 13, 2019

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For



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Applicable Agencies
California Public Utilities Commission
California Department of Fish and Wildlife

Applicant-Proposed Measures, Permit Conditions, and Mitigation Measures Covered

Final Environmental Impact Report: Mitigation Monitoring and Reporting Plan

MM BIO-4 Develop a Habitat Restoration and Monitoring Plan.

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

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Definitions

Annual Restoration and Monitoring Report—Report that covers restoration site progress to date, summarizes maintenance and monitoring activities for the previous year, provides results and a discussion of results for maintenance and monitoring activities, provides information regarding Project progress toward achieving established success criteria, and offers remedial measures and/or management implications if necessary.

Biological Monitoring—Qualitative and quantitative monitoring that is conducted at regular intervals to evaluate the development of habitat and progress within the restoration/mitigation site. Biological monitoring includes, but is not limited to, collection of cover data; photo-documentation; and survival, species diversity, and plant density monitoring.

Broadcast Seeding—A method of seeding that is completed either mechanically using a seed spreader or by hand using a belly-grinder to evenly distribute seed over a restoration/mitigation site.

Density—Number of species in a defined area (e.g., per square mile).

Diversity—An index that incorporates the number of species in a given area as well as their abundance.

Enhancement—Restoration in which the quality of an existing native community is improved by removing non-native species and/or introducing additional native species. By preventing the spread of non-native and typically invasive species, competition for resources is reduced, and native vegetation is better able to regain dominance within a community.

Hydroseed—A seeding technique that involves spraying a slurry of seed, mulch, and typically a binding agent/dye onto a disturbed area to establish a cover crop of vegetation and prevent erosion and/or revegetate the site.

Impact—To affect or influence in a significant or undesirable manner.

Invasive—Any species that is non-native to the ecosystem and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

Maintenance Monitoring—Monitoring that concentrates on the overall performance of the restoration/mitigation site, with consideration of various factors and conditions. Data collected typically include soil conditions (e.g., moisture), hydrology, plant health and vigor, plant growth and cover, seed germination, the need for supplemental hand watering, the presence of volunteer native or non-native plant species, significant disease or pest problems, and soil erosion problems.

Maintenance and Monitoring Period—The period during which the maintenance needs of the revegetation site are addressed and biological monitoring is conducted to evaluate the progression toward specified success criteria. The maintenance and monitoring period commences after final soil stabilization and hydroseeding, and continues for five years or until all success criteria have been achieved.

Mitigation—The process of creating, restoring, reclaiming, or enhancing habitat to compensate for impacts on an existing habitat.

Non-Native—A species that is found outside of its native distributional range.

Offsite Mitigation—The process of creating or restoring habitat at a location other than the site affected by Project construction.

Pest—An organism that is considered detrimental to a restoration/mitigation site because of its negative effect on plant growth, establishment, or survival.

Photo-documentation—A technique utilizing photographs or other imagery to monitor or document changes over time within a restoration/mitigation site.

Pure Live Seed—A measure used by the seed industry to describe the percentage of a quantity of seed that would germinate. This is obtained by multiplying the purity percentage by the percentage of total viable seed, then dividing by 100.

Qualitative—Descriptive assessment or evaluation of a particular condition, factor, or aspect of a restoration/mitigation site.

Quantitative—Quantity of native or non-native plants within a restoration site.

Remedial Measures—Action(s) to repair or correct a fault or deficiency.

Restoration Ecologist—A person with specialized knowledge, education, and experience in the revegetation of disturbed areas.

Restoration—Process of reestablishing plants in a disturbed area by applying seed.

Soil Amendment—Any material added to a soil to improve its physical properties. Improvements to soil properties include improved aeration, water retention, permeability, water infiltration, drainage, aeration, and structure. Soil amendments could be organic (moss, grass clippings, wood chips, straw, compost, sawdust) or inorganic (vermiculite, perlite, gravel, sand).

Success Criteria—Specific performance standards or thresholds.

Topsoil—Upper layer of soil, typically 2 to 10 inches deep, with a high concentration of nutrients and organic matter. This layer is commonly referred to as the "A Horizon."

Work Area—The footprint for a given Project component. For example, the actual impact area for structure and associated work site.

Survey Area—The area surveyed for the Project that includes a surrounding 500-foot buffer area on either side of the alignment.

SECTION 1 INTRODUCTION

The purpose of this Habitat Restoration and Monitoring Plan (HRMP) is to comply with the habitat restoration and mitigation requirements for Southern California Edison (SCE) Valley South Subtransmission Project (Project or VSSP) as described by Final Environmental Impact Report (FEIR) Chapter C.5.4, Environmental Impacts and Mitigation Measures (Aspen 2016) and the MSHCP Certificate of Inclusion (RCA 2017), and the Biological Technical Report and MSHCP Consistency Determination (BTR; EI 2017). The FEIR's MM BIO-04 is the primary driver of this HRMP. The Plan provides guidelines for restoration and mitigation for impacts to habitat resulting from construction of the Project.

1.1 Project Description

Wilson Utility Construction Company (Wilson) has been contracted by SCE to perform the engineering, environmental compliance, property acquisition, material procurement, and construction of the Valley South Subtransmission Project. The Project includes construction of a new 115kV subtransmission line approximately 15.4 miles in length from Valley Substation in the City of Menifee to just west of Triton Substation in the City of Temecula.

Segment 1 consists of the construction of approximately 12 miles of new 115kV subtransmission line from Valley Substation, including the associated wood and steel poles and relocation of distribution and telecommunication facilities along the corridor to a tubular steel pole (TSP) at the intersection of Leon and Benton Road. Additionally, Segment 1 includes two sections of 115kV underground trenching and conduit installation within Riverside County. Segment 2 consists of the replacement of 3.4 miles of existing 115kV subtransmission line conductor from the intersection of Leon and Benton road to the existing terminal TSP on the south side of Nicolas Road near Triton Substation.

VSSP work activities performed by SCE or others include equipping an existing 115kV line position and providing protection equipment as required at Valley Substation, installation of telecommunications equipment at Triton and Valley substations to connect the Project to SCE's existing telecommunication system, and the installation of the 115kV underground cable and connections.

1.2 Project Location

The Project is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area and passes through the cities of Menifee, Murrieta, Temecula, and portions of unincorporated communities of southwestern Riverside County, California (Exhibit 1). Project components would be constructed primarily within existing SCE easements and fee-owned property, public franchise areas, and MSHCP Public/Quasi-Public (PQP) and Additional Reserved Lands (ARL).

Throughout this report, the "Work Area" refers to the Project footprint (i.e., the actual impact area for all structures and associated sites). The Project area and a surrounding 500-foot buffer area are referred to as the "Survey Area." The Survey Area is located within the following U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles: Romoland, Winchester, and Bachelor Mountain.

1.3 Applicable Mitigation Requirements

The following Section provides the full text of each of the applicable FEIR biological Mitigation Measures (MMs), and MSHCP MMs that guided development of this HRMP. The FEIR's MM BIO-4 is the primary driver of this HRMP.

MM BIO-4 Develop a Habitat Restoration and Monitoring Plan

The intent of this mitigation measure is to require SCE to restore temporarily disturbed areas to pre-construction conditions or better and provide for habitat creation/restoration resulting from permanent impacts to sensitive vegetation communities (refer to Mitigation Measure BIO-3 above). Prior to the site mobilization activities and removal of any vegetation, SCE shall retain a qualified biologist (approved by the CPUC) knowledgeable in the area(s) of restoration as they pertain to the on-site vegetation communities, to prepare a Habitat Restoration and Monitoring Plan (HRMP); the plan must be approved by the CPUC prior to the start of site mobilization activities. This biologist will also be responsible for monitoring the implementation of the plan as well as the progress on achieving the established success criteria.

The purpose of the HRMP will be to explicitly identify the process by which all temporarily disturbed areas shall be restored to pre-construction conditions. The plan will also address restoration and revegetation related to permanent impacts to sensitive vegetation communities from construction.

- *Figures depicting areas proposed for temporary disturbance – The HRMP shall include detailed figures indicating the locations and vegetation types of areas proposed for temporary disturbance. These figures shall be updated, as necessary, to reflect current site conditions should they change.*
- *Proposed species for restoration/revegetation – The species palette proposed for restoration/revegetation shall include an appropriate native seed mix representative of the current species composition in the restoration/revegetation areas, and shall not contain non-native invasive species. Seed must be from genetic stock appropriate to Western Riverside County.*
- *Planting methodology – A description of the preferred methods proposed for seeding shall be provided (e.g., hydroseeding, drill seeding, broadcast seeding, etc.). Additionally, a discussion on timing of seeding, type of irrigation system proposed (as needed), type and duration of irrigation, and erosion controls proposed for revegetation activities shall be included.*
- *Schedule – A proposed schedule for all restoration and/or habitat creation shall be provided. When applicable restoration or habitat creation activities shall occur once construction activities are complete within a specific area, the Project area should be broken up into sections based on the required construction activities. Once construction is complete within a defined section, restoration and/or habitat creations should commence. Restoration and/or creation of habitat should occur within an appropriate window for each specific community and species makeup (i.e., impacts to habitat during the summer months may not be initiated until the fall to promote native seed germination).*
- *Success criteria – A description of the success criteria for the restoration/revegetation efforts, and supplemental activities to be conducted to ensure success criteria are met.*
- *Monitoring program – Areas subject to restoration/revegetation shall be monitored to assess progress and to make recommendations for successful habitat establishment. Monitoring will be performed by a qualified biologist(s) knowledgeable in the area of habitat restoration specific to the on-site vegetation communities. Monitoring should include, at a minimum:*
 - *Qualitative Monitoring – Qualitative monitoring surveys will be performed monthly in all restored/revegetated areas for the first year following planting in any phase of the VSSP. Qualitative monitoring will be on a quarterly schedule thereafter, until final completion and approval by the appropriate regulatory agencies. Qualitative surveys will assess native plant*

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species performance, including growth and survival, germination success, reproduction, and plant fitness and health as well as pest or invasive plant problems.

- *Monitoring at this stage will indicate need for remediation or maintenance work well in advance of final success/failure determination. The monitoring reports will describe site progress toward achieving success criteria, conditions, and all observations pertinent to eventual success, and make recommendations as appropriate regarding remedial work, maintenance, etc.*
- *Quantitative Monitoring – Quantitative monitoring will occur annually for years one to five or until the success criteria are met. Within each revegetation area, the biologist will collect data in a series of 1 m² quadrats to estimate cover and density of each plant species within the restored/revegetated areas. In year two or three, depending on the growth within the restoration area, the qualitative monitoring methods may deviate from the quadrat methodology to toe-point transects based on methods described by Evans and Love (1957). Data will be used to measure native species growth performance, to estimate native and non-native species coverage, seed mix germination, native species recruitment and reproduction, and species diversity. Based on these results, the biologist will make recommendations for maintenance or remedial work on the site and for adjustments to the approved seed mix.*
- *Reporting – Reporting will include progress reports summarizing site status and recommended remedial measures that will be submitted by the biologist on a quarterly basis, with the exception of the site visits immediately preceding the development of each annual status report (see below). Each progress report will list estimated species coverage and diversity, species health and overall vigor, the establishment of volunteer native species, topographical/soils conditions, problem weed species, the use of the site by wildlife, significant drought stress, and any recommended remedial measures deemed necessary to ensure compliance with specified success criteria.*

One annual site status report that summarizes site conditions will be forwarded by the biologist to the appropriate regulatory agencies (i.e., USACE, CDFW, and CPUC) at the end of each year following implementation of this plan until the established success criteria have been met. Each annual report will list plant species coverage and diversity measured during yearly quantitative surveys, compliance/non-compliance with required success criteria, species health and overall vigor, the establishment of volunteer native species, hydrological and topographical conditions, use of the site by wildlife, and the presence of invasive weed species. In the event of substantial non-compliance with the required success criteria, the reports will include remedial measures deemed necessary to ensure future compliance with specified performance criteria. Each annual report will include, at the minimum:

- *The name, title, and company of all persons involved in restoration monitoring and report preparation;*
- *Maps or aerials showing restoration areas, transect locations, and photo documentation locations;*
- *An explanation of the methods used to perform the work, including the number of acres treated for removal of non-native plants; and*
- *An assessment of the treatment success.*

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MSHCP BMP-11

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

SECTION 2 EXISTING CONDITIONS

2.1 Topography

Segment 1 transects a mixture of habitats and land uses including agricultural and developed areas where local hydrology and drainage patterns have been significantly altered, along with undeveloped land consisting of rough foothills and low-gradient rolling hills. The undeveloped areas are composed primarily of ruderal, non-native grassland, and coastal sage scrub vegetation bordered by residential and agricultural land uses. Surface water runoff within Segment 1 appears to be captured by perennial drainages and underground storm water systems associated with the urban developments. Elevations range from around 1,300 feet above mean sea level (AMSL) at the southern end of the alignment to approximately 1,530 feet AMSL at the northern end.

Segment 2 occurs within the French and Auld Valleys, with the Santa Ana Mountains to the west and the San Jacinto Mountains to the east. Topography across the area is predominately flat. Elevations range from around 1,160 feet AMSL at the southern end of the alignment to approximately 1,400 feet AMSL at the northern end.

2.2 Land Use

The Project occurs within a predominantly rural and natural landscape comprising the interior valleys, rolling hills, and rugged peaks between the Santa Ana Mountain range and San Jacinto Mountain range of western Riverside County. The Project primarily follows existing roadways that pass through relatively gradual terrain of the Perris, Domenigoni, Paloma, French, and Auld Valleys, as well as portions of the northeast Sedco Hills.

The Project would run adjacent to existing roadways, mostly located within existing and newly acquired easements and franchise rights. Several land uses on and immediately adjacent to the Project include electrical infrastructure (e.g., power poles), vacant land, agriculture, drainage basin, residential, schools, daycares, religious facilities, open space, recreation, public utilities, railroad, and commercial/retail. The Project crosses PQP and ARL MSHCP conserved lands owned and managed by the Western Riverside County Regional Conservation Authority (RCA).

Numerous 115kV subtransmission lines are present within and surrounding the Project. These 115kV subtransmission lines supply power from Valley 500/115kV Substation to distribution substations throughout the Project. Along with 500 kV transmission line structures to the south, east, and northeast of Valley 500/115kV Substation and communication tower structures, 115kV subtransmission line structures define the region's visual character. The Project would follow portions of existing SCE facilities.

Human-caused modifications to the landscape include artificial water reservoirs and large tracts of non-native trees. Dense suburban and commercial development with associated landscaping and water control features constitute the most recent additions to the landscape. Dense development accounts for approximately one-quarter of the area mapped within the Project buffer. These developments occur as discrete areas within the matrix of rural or undeveloped lands.

2.3 Soils

The Natural Resources Conservation Service (NRCS) maintains an online database of soil survey data for Riverside County. The Project contains several soil types mapped by NRCS (2015). The soils are within the Castaic-Balcom Soil association. These soils are derived from deposits of the sediment and alluvial materials, primarily from the erosion of intrusive granitic rocks, metamorphic schist, slates, and sedimentary sandstone and shale rocks originating from the nearby mountains. The soils underlying the Project area are generally well drained, with some excessively drained, consisting of loamy sands, silty clay loams, clayey loams, coarse

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sandy loams, and rocky sandy loams on low river terraces and alluvial deposits. Most soils in the Project area have a low to moderate shrink/swell potential; the susceptibility to erosion ranges from low to very high, being influenced both by soil type and slope.

2.4 Hydrology

Segment 1 transects a mixture of habitats and land uses including agricultural and developed areas where local hydrology and drainage patterns have been significantly altered, along with undeveloped land consisting of rough foothills and low-gradient rolling hills. The undeveloped areas are composed primarily of ruderal, non-native grassland, and coastal sage scrub vegetation bordered by residential and agricultural land uses. Surface water runoff within Segment 1 appears to be captured by perennial drainages and underground storm water systems associated with the urban developments. There are several creeks that drain the area. The northern portion of Segment 1 is drained by Salt Creek, and the southern portion of Segment 1 is drained by Warm Springs Creek.

Segment 2 is drained by an unnamed creek in the northern section, Tocalota Creek in the central portion, and Santa Gertrudis Creek in the south section. Portions of these creeks support riparian scrub and wetland habitats associated with riparian-dependent plant and wildlife species. The Project will have no impacts on riparian vegetation.

2.5 Vegetation Communities

Several biological studies have been performed to map vegetation communities and landcover types within the Project Survey Area from 2012–2015 in support of the Proponent Environmental Assessment (PEA; SCE 2014) and FEIR (Aspen 2016).

The Project Survey Area consists of urbanized development, agricultural development, disturbed/ruderal areas, and natural areas. Urbanized development includes existing and to-be-acquired SCE fee-owned properties and ROWs. Other uses in the vicinity include public roads and residential, commercial, and industrial properties.

Vegetation community types were based on descriptions in Holland (1986), with modifications by Oberbauer et al. (2008). The Holland-Oberbauer vegetation types were also translated to the classification scheme by Sawyer et al. (2009). Ten plant communities, defined by Holland-Oberbauer were mapped within the Survey Area and include: disturbed/ruderal habitat, non-native grassland, Diegan coastal sage scrub, non-native woodland/ornamental, disturbed wetland, mulefat scrub, freshwater marsh, southern willow scrub, southern cottonwood-willow riparian forest, and tamarisk scrub. An additional four non-vegetation cover types (land cover types) were also mapped and include: agriculture, urban/developed, open water, and non-vegetated channel.

In total, six vegetation communities and land cover types were mapped within the Project Work Areas and include: disturbed/ruderal, non-native grassland, Diegan coastal sage scrub, non-native woodland/ornamental, agriculture, and developed/urban. Of these, non-native grassland and Diegan coastal sage scrub are the only sensitive vegetation communities that will be impacted by the Project. While sensitive vegetation communities are defined by CDFW (2018) as, "...communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects", non-native grassland is considered sensitive due to the reliance of many MSHCP protected species on this habitat type and relative rarity in the region. In addition, Section 9.1 of the MSHCP states "[s]ensitive upland communities include chaparral, coastal sage scrub, grasslands, and Riversidean alluvial fan sage scrub."

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Below are the vegetation descriptions from the FEIR for all vegetation communities and landcover types where impacts are proposed:

Disturbed/Ruderal (Holland-Oberbauer code 11300)

Disturbed/Ruderal areas are by far the most dominant vegetation type mapped in the Survey Area. Ruderal vegetation is composed of herbaceous pioneering plant species that readily colonize open disturbed soil and thrive as a result of anthropogenic impacts. Within the Survey Area, this vegetation was most often found on the edges of fields, road margins, fallowed agricultural fields, and other areas previously mechanically disturbed (i.e., abandoned and graded construction pads). Typical species composition varied depending on the location and level of disturbance, but was dominated by herbaceous annuals and grasses. Species observed included mustards, wild radish, wild oat, ripgut grass (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), Australian saltbush (*Atriplex semibaccata*), totalote (*Centaurea melitensis*), telegraph weed, castor bean (*Ricinus communis*), pineapple-weed (*Chamomilla suaveolens*), sowthistle (*Sonchus oleraceus*), horseweed, Russian thistle, tree tobacco, tarweeds (*Deinandra* sp.), and goosefoot (*Chenopodium* spp.).

Non-Native Annual Grassland (Holland-Oberbauer code 42200)

As the second most dominant vegetation community, non-native annual grasslands were mapped throughout the Survey Area and were often observed in association with livestock grazing. The non-native annual grasslands in the Survey Area were dominated by a mixture of non-native species such as wild oats and various bromes (*Bromus diandrus*, *B. tectorum*, and *B. madritensis* ssp. *rubens*).

Diegan Coastal Sage Scrub (Holland- Oberbauer code 32500)

As one of the more abundant vegetation communities, Diegan coastal sage scrub was mapped throughout the Survey Area. This community was generally low in stature and comprised of woody or semi-woody shrubs and sub-shrubs averaging less than 2 meters in height. Most of the Diegan coastal sage scrub within the Survey Area was dominated by buckwheat (*Eriogonum fasciculatum*); California sagebrush (*Artemisia californica*) was observed in varying proportions, but was much less common than buckwheat. Other species observed included brittlebush (*Encelia farinosa*), California cholla (*Cylindropuntia californica*), and prickly pear (*Opuntia littoralis*).

Non-Native Woodland/Ornamental (Holland-Oberbauer codes 79000 and 11100)

Non-native woodland/ornamental vegetation was mapped throughout the Survey Area. Most of the ornamental species within the Survey Area are non-native such as the frequently observed Eucalyptus (*Eucalyptus* spp.). Some areas however, such as the western side of the northern extent of Leon Road (adjacent to the water reservoirs), includes some intentionally planted native species. Some of the native species observed included coast live oak (*Quercus agrifolia*), Engelmann oak (*Quercus engelmanni*), and Western sycamore (*Platanus racemosa*).

Agriculture (Holland-Oberbauer code 18000)

Agriculture represents the largest land use throughout the Survey Area. The predominant form of agriculture in lowland areas of western Riverside County is dry grain cultivation, particularly wheat (*Triticum aestivum*).

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Urban/Developed (Holland-Oberbauer code 12000)

Urban/developed areas, occurring as the second most dominant land use, were mapped throughout the Survey Area. Within the Survey Area these areas included flood control facilities, commercial buildings, established roads/bridges, and residential buildings. This cover type also includes areas that are devoid of vegetation or support scattered ornamental species or low densities of weeds due to continual disturbance by vehicles, pedestrians, or other anthropogenic means.

SECTION 3 IMPACTS SUMMARY

Project impacts are classified as temporary or permanent. Temporary impacts are associated with clearing of Work Areas required for access roads, stringing sites, pole removal and installation areas, and other temporary work and staging areas. Permanent impacts would result from disturbance associated with permanent roads and structures (e.g., poles) and future O&M vegetation clearing within a 10-foot radius around utility poles and supporting structures. Both permanent and temporary impacts would result from removal of wood and light weight steel (LWS) poles, construction of new TSPs, LWS poles and wood poles, installation of anchors, reconfiguration of pole tops, stringing conductor/cable, underground conduit and cable, underground vaults, and access roads. Most impacts associated with construction activities for the Project are classified as “temporary.”

The majority of the temporary impact Work Areas are planned to be “drive and crush” or considered “limited-to-no impacts”. “Drive and crush” work areas include areas where no grading, earth moving, grubbing, or clearing of vegetation is anticipated. “Limited-to-no impacts” would occur during the reconfiguration of pole tops because this work would be conducted from existing access routes to the extent feasible. Temporary impacts to Work Areas in non-native grassland and non-sensitive vegetation communities, including agriculture, disturbed/ruderal, urban/developed, and non-native woodland/ornamental, are expected to recover naturally or will be stabilized and revegetated per the requirements of the Project Stormwater Pollution Prevention Plan (SWPPP). Combined, the Project will potentially affect 131.13 acres of vegetation. Of these impacts, temporary impacts will affect 3.89 acres of Diegan coastal sage scrub and 124.05 acres of non-native grassland and non-sensitive vegetation. Permanent impacts will affect 0.03 acres of Diegan coastal sage scrub and 3.16 acres of non-native grassland and non-sensitive vegetation. The exact acreage of impacts will be recalculated once construction activities have been completed.

Exhibit 2 illustrates the locations of temporary impacts to Diegan coastal sage scrub that are anticipated in Segments 1 and 2 of the Project.

A summary of the potential disturbances to vegetation communities and sensitive vegetation communities is provided in Table 1.

Table 1. Summary of Impacts to Vegetation Communities

Vegetation Community	Temporary Impacts (Acres)	Permanent Impacts* (Acres)	Total (Acres)
Sensitive Vegetation			
Diegan coastal sage scrub	3.89	0.03	3.92
Non-native Grassland	8.54	0.26	8.80
Total Sensitive:	12.43	0.29	12.72
Non-Sensitive Vegetation			
Disturbed/Ruderal	34.85	1.10	35.95

Impacts Summary

Nonnative Woodland/Ornamental	4.47	0.23	4.70
Agriculture	34.78	1.03	35.81
Urban/Developed	41.41	0.54	41.95
Total Non-Sensitive:	115.51	2.90	118.41
Total:	127.94	3.19	131.13

*Permanent impacts are mitigated through MSHCP participation and are not included in the HRMP. Acreage data cited from the BTR (EI 2017)

SECTION 4 MITIGATION STRATEGY

SCE's mitigation approach to compensate for temporary and permanent impacts to sensitive biological resources and vegetation communities due to construction of the Project is through SCE's participation as a Participating Special Entity (PSE) with the MSHCP and with RCHCA HCP and restoration of 3.89 acres of temporary impacts to Diegan coastal sage scrub. The remaining 124.05 acres of temporary impacts to non-native grassland, non-sensitive vegetation communities and/or barren/developed will be stabilized and revegetated per the requirements of the SWPPP.

4.1 Onsite Restoration

In accordance with FEIR MM BIO-4, and MSHCP BMP-11, onsite restoration will occur within all Project Work Areas where sensitive vegetation communities are temporarily impacted by construction activities. "Temporary impact" Work Areas will be revegetated to pre-construction conditions or better. Sensitive vegetation within "limited-to-no impact" Work Areas is expected to remain undisturbed and revegetation would only occur if construction requires off-road work. Both "temporary impact" and "limited-to-no impact" work areas will be evaluated post construction and will be monitored according to the monitoring methods (including success criteria and remedial and contingency measures) identified in Section 7 of the HRMP to determine if revegetation or restoration is needed. Since post-construction conditions at disturbed/ruderal, non-native grassland, non-native woodland/ornamental, agricultural, and urban/developed will not significantly change after construction, only impacts in one sensitive vegetation community, Diegan coastal sage scrub will be revegetated onsite. Acreages of temporarily impacted areas subject to restoration are summarized in Table 1.

Revegetation activities will be conducted in accordance with the strategies and methods described in Section 5, Implementation. Monitoring methods described in Section 7.1 will be conducted to determine the success of revegetated areas of Diegan coastal sage scrub.

SECTION 5 IMPLEMENTATION

This section describes general methods that would be used to revegetate and restore sensitive vegetation communities temporarily impacted by the Project. Implementation of restoration activities will occur as soon as practical after completion of construction activities in the affected area. Plan implementation will require the following steps:

- **Site Preparation:** Following completion of construction activities, any Work Areas where existing topography has been significantly altered by construction would be recontoured. The Work Areas would also be decompacted if deemed necessary. Prior to seeding, large patches of non-native plants would be removed from the site.
- **Materials (Seed):** Seeding would be the primary restoration method within temporary disturbance areas. Native plant seeds of local origin (certified as being from genetic stock appropriate to Western Riverside County) would be purchased from a commercial seed supplier. Plant material types and quantities would be based on the plant lists presented in Appendix A, Seed List.
- **Installation:** Seed would be broadcast by hand, mechanically with land imprinters, or by hydroseeding. To the extent possible, seeding would be conducted when atmospheric moisture levels are high (generally between October and early December).
- **Maintenance:** Maintenance tasks to be completed within restoration areas may include, but are not limited to, supplemental watering, erosion control, and weed/pest abatement. Maintenance is described in more detail in Section 6: Maintenance.

5.1 Baseline Conditions

Documenting baseline conditions is an important component of the restoration program, as the performance criteria for the 5-year restoration will be based on this data. Baseline condition (pre-impact) data will be collected for temporary impact areas. Pre-impact data for the Project site will consist of identifying the vegetation community (native species, nonnative species, native cover, nonnative cover); presence of special status species; soils present; slope aspect(s); any observed disturbance from previous or historic activities; any other applicable project specific data; and photographs. Prior to construction, quantitative native species richness, native shrub cover percentage, and non-native herb cover will be estimated for temporary work areas. If work areas cannot be assessed prior to vegetation disturbance, adjacent reference sites containing similar vegetation will be assessed.

5.2 Site Preparation

5.2.1 Recontouring

Temporary impact areas that are disturbed by Project construction activities would be recontoured to restore the original land contour and the slope grade of the adjacent areas to the extent feasible. Recontouring is expected to be minimal or unnecessary within Project Work Areas because the Project area is relatively flat and ground disturbance is predominantly drive and crush. Excavations for pole holes and underground vaults/conduits will be backfilled and restored to line and grade at the time of Project construction.

Land recontouring shall not conflict with specifications set forth in the SCE Construction of Transmission Line Access Roads and Tower Site Preparation (SCE E-2008-21, latest revision) in applicable areas.

5.2.2 Soil Decompaction

Soil in restoration areas that are compacted or become compacted as a result of Project construction activities will be loosened prior to seeding. It is anticipated that decompaction will be required within Work Areas requiring excavation and compaction for LWS pole removal and underground vault installation. Decompaction may also be required at other Work Areas where heavy vehicles cause compaction. It will occur prior to the initiation of restoration installation activities, as determined by SCE. Decompaction will be achieved by loosening the soil with a backhoe, equipment with ripping teeth, or a disk harrow. The soil will be loosened to a minimum depth of 12 inches. Loosening may need to occur at a greater depth, depending on the existing soil conditions. Once the soil has been worked in successive parallel passes in one direction, additional passes will be made at a 60 to 120-degree angle to the alignment of the first series of passes using the same equipment. Additional angled passes are not required on steep slopes or in areas with limited space. The surface will be left rough textured, with no clods or rocks greater than 3 inches in diameter. Following loosening, the soil will be track walked or worked using a ring roller or sheepsfoot roller to create a surface suitable for hydroseeding and planting.

Soil decompaction shall not conflict with specifications set forth in the SCE Construction of Transmission Line Access Roads and Tower Site Preparation (SCE E-2008-21, latest revision) in applicable areas.

5.2.3 Soil Amendments

The use of soil amendments is not anticipated. SCE may elect to add organic soil amendments such as a mycorrhizal inoculant or greenwaste compost to improve nutrient holding capacity, soil structure, and root development.

5.2.4 Non-Native Plant Removal

Prior to seed and plant installation, SCE will remove any non-native plants from the restoration site by hand-pulling, mechanical removal, and/or herbicide application. Non-native plant materials containing viable seed shall be immediately bagged, removed from the site and disposed of at an approved location. Rhizomatous species will be treated with herbicide to ensure that plants cannot re-sprout. If the use of herbicide is determined to be appropriate to control weeds, the herbicide will typically be a foliar herbicide such as glyphosate. Pre-emergent herbicides will not be used. All herbicides shall be applied in accordance with all state and federal regulations and manufacturer's instructions by a Licensed Qualified Applicator under the direction of a Pest Control Advisor (PCA). Herbicides shall not be applied during or within 72 hours of a rain event, or when wind velocities exceed 5 miles per hour. No work is planned to occur in riparian areas, but in the event work in riparian areas occurred, water-safe herbicides approved for use near water, such as Aquamaster, shall be used unless otherwise approved.

5.2.5 Removal of Debris

All restoration areas will be free of trash and debris. SCE will make all reasonable efforts to remove trash and debris from all restoration areas prior to installation and throughout maintenance and monitoring period.

5.2.6 Erosion Control

SCE will maintain erosion control best management practices (BMPs) within restoration sites in compliance with SWPPP requirements. To prevent sediment from leaving the restoration areas or rills from forming, SCE shall ensure that the proper remedial measures are in place. This may include hydroseeding and/or installation of erosion control measures such as silt fencing, straw wattles, hay bales, or jute netting. SCE will make every effort to integrate SWPPP treatments with restoration site preparation.

5.3 Materials

5.3.1 Seed

Native plant seed of local origin (as locally sourced as possible) would be purchased from a commercial seed supplier. Seed would comply with U.S. Department of Agriculture rules and regulations under the Federal Seed Act. Purity and germination rates would be warranted by the seed supplier (e.g., all seed mixtures will be certified “weed free”). All seed would be furnished in sealed standard containers. If sufficient seed cannot be procured for a particular species or vegetation community, that seed would be substituted with seed of a comparable species. Plant material types and quantities would be based on the plant lists for the seed Diegan Coastal Sage Scrub Mix presented in Appendix A, Seed List. The seed mix was developed based on the relative abundance and diversity of native species found in the scrub community within the Project. Seed may be collected onsite to supplement purchased seed.

Shrub species that are common throughout the alignment are marked as “required” in the seed mix list. Other species were marked as optional species but to maintain species richness a minimum of 12 species is recommended for the sage scrub seed mix. The seed mix list contains recommended pounds per acre of each seed species. The seed mix may be amended and submitted to the CPUC for approval following the results of the preconstruction analysis of vegetation cover and species diversity at each temporary work area. The recommended seed mix application rate is 30lb of seed per acre. No seed pretreatment is recommended at this time. If seeds are determined to require pretreatment such as scarification prior to broadcast or hydroseeding, steps will be taken to ensure seeds are treated based on current restoration practices.

5.4 Installation

Seeding will be completed following site preparation activities and non-native plant abatement. To the extent possible, seeding will be conducted when atmospheric moisture levels are high (generally between October and February). Upon completion of the initial seeding and any other on-site restoration work, all trash, seed containers, and ancillary material shall be removed, and the site left in a neat and orderly condition. Any additional non-vegetative trash present in the seeding areas shall be promptly removed.

Two techniques for seeding are discussed in this plan: hydroseeding and broadcast seeding. The seeding method implemented will depend on accessibility and the size of the area to be seeded. Easily accessible areas will be seeded with the hydroseeding method; smaller, more remote and/or inaccessible areas will be broadcast seeded, at the discretion and direction of SCE or SCE’s designated restoration ecologist. These methods are described below.

5.4.1 Hydroseeding

Hydroseeding will be the primary technique used for seeding of restoration areas. The designated seeding areas shall be seeded using a two-stage hydroseed application method. Preventive measures must be taken to avoid damage to adjacent vegetation. If hydroseeding is used, seeding will take place after construction activities are complete. The seed mix (quantity will vary based on habitat type and site-specific conditions) will be mixed with 2,000 pounds per acre of long-strand wood fiber, a colorant, 150 pounds per acre of binder (Aztac or an approved substitution), and sufficient water to allow the mix to be applied evenly over the restoration area. All hydroseeding mixing will be performed in a clean tank that has been rinsed a minimum of three times (to ensure the removal of any residual seed). The hydroseeder would be equipped with a continuous agitation and recirculation system to produce a uniform slurry and have the capacity to apply this slurry at a uniform and continuous rate. The designated areas would be sprayed with the slurry in a sweeping

Implementation

motion and an arched stream until a uniform coat is achieved, with no slumping or shadowing as the material is spread at the required rate.

The seed slurry will be applied within 1 hour of preparation because, after that time, the viability of the seed could be compromised. The slurry will be applied with a sweeping and arched technique to ensure uniform coverage and that material is spread evenly. Any excessive mulch coating on plants will be removed before leaving the site. Following application, activity should be kept minimal on the hydroseeded areas.

First Application

- 500 pounds/acre of long-strand wood fiber
- Specified seed and suitable carrier
- 60 pounds/acre of endomycorrhizal inoculum

Second Application

- The second application should occur within 2 hours of completion of the first application.
- 1,500 pounds/acre of long strand wood fiber
- 90 pounds/acre of M-Binder

5.4.2 Broadcast Seeding

In areas where imprinting or hydroseeding is not feasible, seed may be broadcast by hand over smaller sites. Seed may also be broadcast onto the site by using a hand-crank seed spreader. Seed will be premixed with dispersal agent (such as rice bran or hulls) at approximately 20 percent of the overall volume. Prior to seeding, the site may be watered to saturate the surface soil and aid in seed adhesion to the surface. Granular mycorrhizal inoculant may be added to the seed dispersal mix or may be dispersed following broadcast seeding according to label specifications. Seed shall be mixed with a carrier, as stated above, and divided into two equal parts. Half of the seed shall then be hand broadcast by walking across the entire site in a north-south orientation or other linear orientation appropriate for the site. The remaining half of the seed shall then be hand broadcast by walking across the site in an east-west orientation or perpendicular to the first application. This method ensures even distribution of seed throughout the site. Seeded areas may be lightly raked or dragged with a chain or other implement to incorporate seeds and mycorrhizal inoculant into the soil.

5.5 Schedule

The schedule for implementation of the HRMP is directed by the construction schedule. The phasing of restoration activities will reflect construction phasing sequence and therefore will depend on the timing of when each phase of the Project is completed.

Prior to construction, SCE will conduct baseline conditions data collection and may conduct initial weed removal prior to ground disturbance, as needed. After construction, seeding will be the primary means of restoring affected areas following temporary disturbance activities. To the extent feasible, seeding will occur between October and February to benefit from the winter rain events, with the intent to maximize seed exposure to natural rainfall after seeding occurs.

Implementation

Seeding early in the season (October – December) maximizes likelihood that seeds will be exposed to most of the rainfall during the year, whereas seeding late in the season risks that seeds will receive little or no rain. Even early seeding risks the possibility that rainfall during the revegetation year may not be enough for germination and establishment. SCE recognizes that dependence on natural rainfall alone for seed germination and vegetation establishment carries a risk of failure due to the possibility of drought, and that seeding later in the season increases that risk. SCE will to the extent feasible implement seeding early in the season (Oct – Dec). In the event, seeding has to occur later in the season, SCE will irrigate the revegetation sites to supplement natural rainfall, if needed and to improve germination and maximize establishment success.

Weeding and restoration site maintenance will be conducted as needed throughout the 5-year restoration period for restoration within MSCHP Conserved Lands. Weeding will typically occur between February and June depending on the timing of seasonal rainfall.

It is anticipated construction of Segment 2 will be completed in October 2019 and Segment 1 completed in November 2020. As needed recontouring and decompaction will begin after construction is complete at each work area and is estimated to be complete by June 2019 for Segment 2 and September 2020 for Segment 1. Initial restoration including final site preparation, weed abatement and seeding is estimated to begin October 2019 for Segment 2 and October 2020 for Segment 1.

Table 2: Schedule of Restoration Activities for Native Plant Species

Collection of quantitative plant data (EPC Contractor)	April 2019 – November 2020
Construction of VSSP project (EPC Contractor)	April 2019 – November 2020
Purchase of native seed (EPC Contractor)	September 2019 (reserve native seed August 2019)
Site preparation (EPC Contractor)	October 2019 – December 2020
Hydroseeding (EPC Contractor)	October - December 2019 and/or October - December 2020
SCE Restoration Contractor on board	September 2021
Maintenance by EPC Contractor (supplemental watering, erosion control, weed/pest abatement and adaptive measures as necessary)	November 2019 – September 2021
Maintenance by SCE (supplemental watering, erosion control, weed/pest abatement and adaptive measures as necessary)	September 2021 – September 2025
Monitoring by EPC Contractor	October 2019 – September 2021
Monitoring by SCE	September 2021 – September 2025

Note: Restoration of non-native annual grassland will be implemented through SWPPP compliance beginning immediately after the completion of construction at those sites.

SECTION 6 MAINTENANCE

Maintenance will be initiated upon completion of restoration implementation activities and conducted as needed. Maintenance tasks may include supplemental watering, erosion control, and weed/pest abatement. Environmental conditions will be monitored and adaptive measures may be applied as necessary.

6.1.1 Irrigation

Germination at seeded areas will rely on natural precipitation. Supplemental watering is not proposed for the seeded revegetation efforts. However, if the applied seed does not successfully germinate due to low seasonal precipitation, supplemental watering may be considered as a remedial action to promote plant establishment and growth.

6.1.2 Weed Control

Weed control measures will be implemented during post-construction restoration where necessary. Weed control measures may include physical (hand-pulling, mechanical removal) and chemical (herbicide application) treatment methods. These control methods shall be dependent on the weed species, location of weeds and the time of year that weed control operations occur. Any weed debris generated during abatement activities will be collected, sealed in bags to avoid the spread of non-native seed, and disposed of at an approved location. Any noxious weeds will be given the highest priority for treatment or removal.

Physical Methods

Physical/Manual weed control methods may be appropriate in sensitive habitats, around germinating native species, and in areas where chemical methods are prohibited. Recommended physical control methods are as follows:

- Hand-pulling may be used to remove localized and discrete populations of herbaceous species prior to seed set. Cutting may be used to remove shrub and tree species. This method may require follow-up herbicide applications to kill the root system and prevent re-sprouting.
- Mechanical removal may be used to remove weed infestations from large areas where few or no native plant species are present. This method may use a mower, weed whacker, or tiller.

Chemical Methods (Herbicides)

Herbicides can be a very effective method in controlling weed species by killing or inhibiting plant growth. The appropriate chemical and method of application is based on the species, the degree of infestation, time of year, temperature, and environmental conditions. Herbicides will be used in compliance with the manufacturer's instructions and/or state and federal regulations. The environmental risks of using herbicides will be minimized by using marker dyes to make the herbicide visible in areas where it has been applied.

The habitat restoration specialist will provide guidance for weed control methods on the site conditions and species present in the restoration areas and surrounding vicinity. Hand pulling is appropriate for most weed species, particularly in small numbers or where interspersed with native plants. Larger infestations of abundant and common weeds such as annual non-native grasses and mustards can be treated with herbicide or mechanically removed (mowed or weed whipped) to about 2 inches, to remove the bolting crown; however, follow-up monitoring will be conducted and follow-up treatment implemented as needed because established roots are likely to continue to bolt throughout the growing season. Broad herbicide

Maintenance

application on dense annual grasses will be minimized in seeded areas where small native seedlings may be present and difficult to detect. Preservation of seeded species is imperative. Like most weeding efforts, mechanical and herbicide treatment is usually conducted in this region of Riverside County from early in the growing season, with follow-up treatments through April, May, or later depending on rainfall before seeds mature to prevent addition of weed seed to the soil. Control of other abundant weeds such as yellow starthistle (*Centaurea solstitialis*) will likely be more efficient with herbicide treatment. Herbicide application will be timed to occur at the appropriate season per species to maximize effectiveness. Chemical controls are not recommended in areas with special-status plant species. Invasive plants that can regrow from rhizomes and root fragments such as perennial pepperweed (*Lepidium latifolium*) or Bermuda grass (*Cynodon dactylon*) should not be removed by mechanical means alone. These plants should be removed by hand and likely require at least two rounds of herbicide treatment as follow-up. Weed control efforts will focus on removing highly invasive plant species including yellow starthistle and perennial pepperweed and other species that may outcompete native species. Early and routine weed abatement will be essential to minimizing weed cover to allow native plants to become established and achieve the success criteria for native cover. General and species-specific methods for weed removal may be obtained from the California Invasive Plan Council (CallPC) and materials such as *Weed Control Methods Handbook: Tools & Techniques for Use in Natural Areas* (Tu, M., Hurd, C., & J.M. Randall, 2001).

SECTION 7 MONITORING AND REPORTING

7.1 Monitoring

SCE will perform periodic monitoring to assess site stabilization and revegetation progress at the restoration site. Assessments during monitoring may include seed germination observations, evaluating revegetation progress including volunteer recruitment of native species, determining percent cover/percent site stabilization, and determining/correcting any erosion problems. SCE may also evaluate other performance indicators including the presence of non-native plant species, the presence of significant disease or pest problems, and the need for remedial measures. Monitoring may be conducted under the SWPPP program to document site stabilization.

SCE will conduct monitoring on a monthly or quarterly basis depending on the conditions on site including germination success, weed cover, precipitation, erosion, and non-project related site disturbance. Once vegetation is established, and site stabilization is achieved at each site the restoration will be deemed successful.

7.1.1 Qualitative Monitoring

SCE will conduct qualitative biological monitoring on a monthly basis for the first year, following restoration activities in any phase of the Project, and on a quarterly basis for years two through five. Qualitative monitoring will include the assessment of native plant species performance, including growth and survival, germination success, reproduction, and plant fitness and health, as well as pest or invasive plant growth. Monitoring at this stage will indicate need for remediation or maintenance work to achieve final success criteria. Photo documentation of the restoration sites will be conducted annually from permanently established photo points. The monitoring reports will describe site progress toward achieving success criteria, conditions, and all observations pertinent to eventual success, and make recommendations as appropriate regarding remedial work, maintenance, etc. Data collected during qualitative monitoring will be included in the annual report in addition to the results of the quantitative monitoring.

7.1.2 Quantitative Monitoring

SCE will conduct quantitative monitoring during the growing season annually for years one through five, or until the success criteria are met. The goal of monitoring is to evaluate the progress of the restoration site towards achieving success criteria. Data collection may include the general site conditions, native and nonnative plant percent cover, bare ground cover, plant density, species richness, and photo documentation and/or aerial surveys.

Within each restoration area, SCE will collect data using the quadrat method to estimate cover and density of each plant species within the restoration areas. Transects will be established within each restoration area and total 30 meters in length. Species diversity and vegetation coverage data will be collected using 1 meter-square quadrats at four equally separated intervals along each transect. In year two or three, depending on the growth within the restoration areas, the quantitative monitoring methods may deviate from the quadrat methodology to step-point transects based on methods described by Evans and Love (1957). Data will be used to measure native species growth performance, to estimate native and non-native species coverage, seed mix germination, native species recruitment and reproduction, and species diversity. Based on these results, SCE will make recommendations for maintenance or remedial work on the site and for adjustments to the approved seed mix. Data collected during quantitative monitoring will be included in the annual report in addition to the results of the qualitative monitoring. Restoration areas that are too small for a 30-meter

Monitoring and Reporting

transect and quadrat methods will be evaluated with a visual qualitative analysis of cover at a minimum to determine cover and need for remedial action if any.

7.1.3 Monitoring Schedule

In accordance with MM BIO-4, a five-year maintenance and monitoring period will commence following restoration efforts to track progress toward achieving success criteria (see Table 3).

Table 3. Monitoring Schedule for Revegetation Areas

Site Type	Year 1	Year 2	Year 3	Year 4	Year 5
On-Site Restoration Area	Monthly qualitative monitoring	Quarterly qualitative monitoring	Quarterly qualitative monitoring	Quarterly qualitative monitoring	Quarterly qualitative monitoring
	Annual quantitative monitoring	Annual quantitative monitoring	Annual quantitative monitoring	Annual quantitative monitoring	Annual quantitative monitoring

7.1.4 Success Criteria

The following section provides standards to determine the successful completion of the restoration/revegetation effort. Restoration/revegetation success will be based on mitigation requirements identified in the FEIR (Aspen 2016), the COI (RCA 2017) and the success standards listed herein.

As outlined in Section 5.1: Baseline Conditions, prior to construction SCE will determine native species richness and native and nonnative cover as a baseline for the success criteria. Relative cover by native plants is a key component of determining project success. In the event, work areas cannot be assessed prior to disturbance, adjacent reference sites with similar vegetation will be assessed and annual performance goals relative to a reference site will be used to track the progress of the mitigation effort.

Temporarily disturbed areas in non-sensitive vegetation communities that were vegetated prior to impacts, would be re-established to a vegetative cover typically equivalent to a minimum of 70 percent of the preconstruction cover, and/or pursuant with SWPPP requirements. Sites will be evaluated to ensure that weed species occur at no more than pre-existing or adjacent areas' species densities and composition.

Temporarily disturbed areas in sensitive vegetation communities (Diegan coastal sage scrub), will be restored to a vegetative cover comparable (i.e. species richness, composition and diversity) to preconstruction baseline conditions with a 1) minimum relative native cover of 70 percent of total pre-disturbance native cover with an equal or greater proportion of native shrub cover; 2) minimum native shrub species richness of 50 percent of pre-disturbance species richness; and 3) maximum nonnative relative cover of not more than 10 percent above nearby undisturbed native reference sites, as measured in the same season and year, over a 5-year period. An example of relative cover would be as follows: if baseline conditions are 90% absolute native cover, the success criteria will be relative to the baseline as 70% of the 90% baseline cover which equals 63% absolute native cover.

7.1.5 Remedial and Contingency Measures

As needed, SCE will implement adaptive management measures to facilitate success of the restoration areas. If areas do not meet the minimum cover requirement or site stabilization, remedial measures would be implemented, including reseeding, supplemental watering, controlling invasive plant species, the addition of other stabilization measures (e.g., erosion control blankets), and/or regulating human and/or wildlife access to the restoration site. Replacement or supplemental seeding would be consistent with the assemblage of native plant species for the associated habitat area, provided in Appendix A, Seed List.

If an unforeseen, catastrophic event (e.g., flood, fire, vandalism) substantially damages one or more restoration sites after the restoration effort is accepted and confirmed complete in writing by CPUC, SCE will not be responsible for replanting the damaged areas. If said event(s) occurs prior to acceptance and confirmation that restoration is complete, SCE will be responsible for remediating the restoration site(s) and satisfying MM BIO-4 and the success criteria identified in this HRMP. If a second similar event occurs on the same site(s), no replanting is required.

7.2 Reporting

SCE shall provide a final monitoring report following the one year of restoration and maintenance on restoration sites of sensitive vegetation communities. The final report will summarize Project impacts to sensitive vegetation communities, size of restoration area restored, restoration techniques, and maintenance activities.

7.2.1 Quarterly Report

Reporting for restoration sites will include progress reports summarizing site status and recommended remedial measures that will be submitted on a quarterly basis, with the exception of the site visits immediately preceding the development of each annual status report (see below). Each progress report will assess species health and overall vigor, the establishment of volunteer native species, topographical/soils conditions, problem weed species, the use of the site by wildlife, significant drought stress, and any recommended remedial measures deemed necessary to ensure compliance with specified success criteria.

7.2.2 Annual Report

One annual site status report that summarizes site conditions will be submitted to the appropriate regulatory agencies (i.e., CDFW, USFWS, and CPUC) at the end of each year following implementation of this HRMP until the established success criteria have been met. Each annual report will list plant species coverage and diversity measured during yearly quantitative surveys, compliance/non-compliance with required success criteria, species health and overall vigor, the establishment of volunteer native species, hydrological and topographical conditions, use of the site by wildlife, and the presence of invasive weed species. In the event of substantial non-compliance with the required success criteria, the reports will include remedial measures deemed necessary to ensure future compliance with specified success criteria. The report will include a discussion of the amount (acres) of Diegan coastal sage scrub construction related impacts and corresponding restoration. Each annual report will include, at the minimum:

- The name, title, and company of all persons involved in restoration monitoring and report preparation;
- Maps or aerials showing restoration areas, transect locations, and photo documentation locations;
- An explanation of the methods used to perform the work, including the number of acres treated for removal of non-native plants; and

Monitoring and Reporting

- An assessment of the treatment success.

7.3 Completion of Mitigation

7.3.1 Notification of Completion

SCE will notify the CPUC, RCA and the resource agencies (i.e., CDFW and USFWS) when submitting the final monitoring report that the final success criteria have been met for the restoration areas. The notification would be submitted electronically and will be accompanied by a brief letter report summarizing key work performed, seeding efforts, maintenance activities and remedial measures (if applicable), and representative photographs. Acceptance of SCE's notice of completion is subject to CPUC approval and written notification to SCE.

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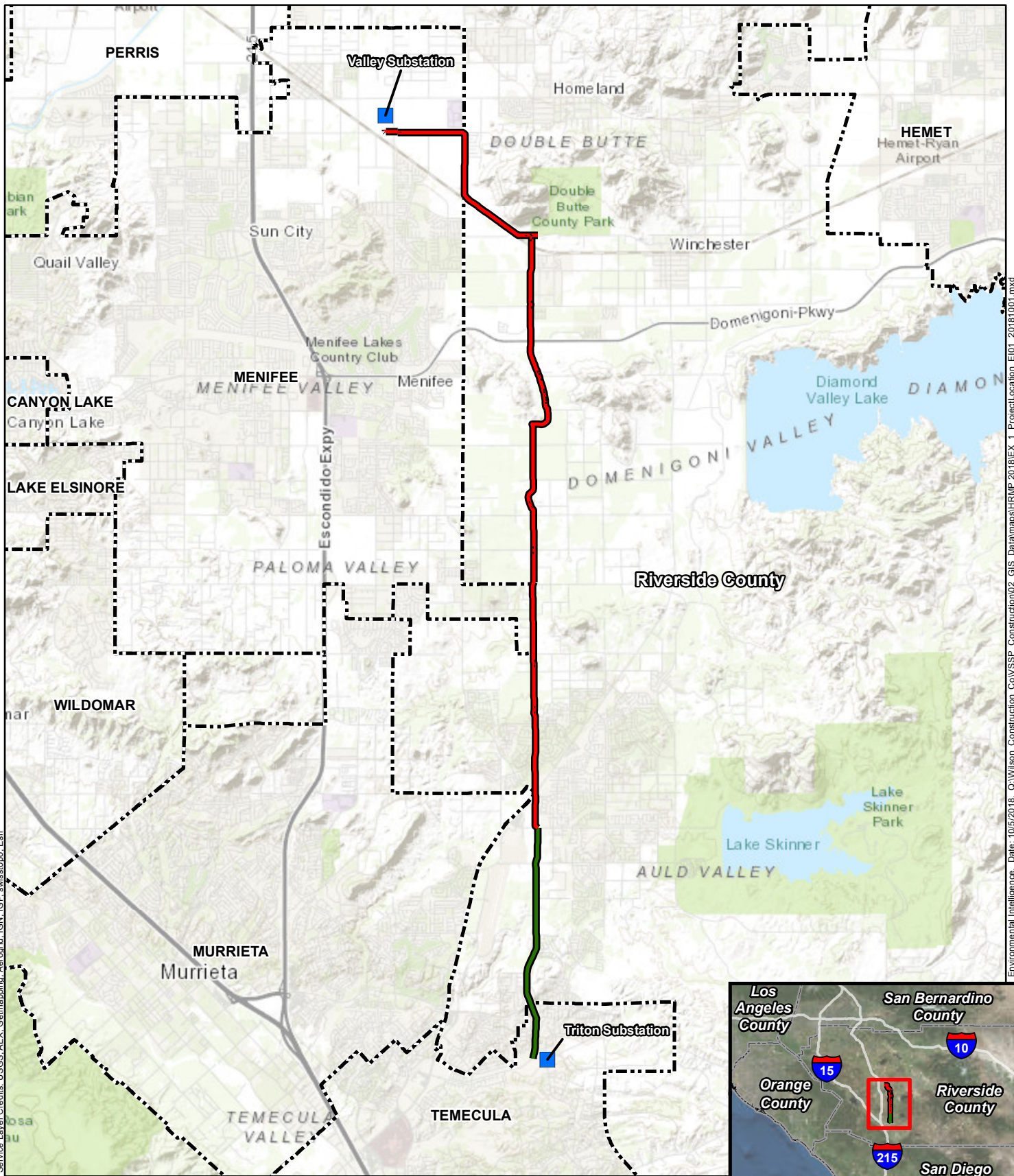
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EXHIBIT 1

Project Location



Service Layer Credits: USGS, AEX, Getmapping, AerGRID, IGN, IGP, swisstopo, Esri

Environmental Intelligence, Date: 10/5/2018, Q:\Wilson_Construction_CoVSSP_Construction02_GIS_Data\mapa\HRMP_2018\EX_1_ProjectLocation_EI01_20181001.mxd

- City Boundary
- Substation
- Project Alignment**
- Segment 1
- Segment 2



EXHIBIT 1 - PROJECT LOCATION
SCE - VALLEY SOUTH SUBTRANSMISSION PROJECT | RIVERSIDE COUNTY, CA

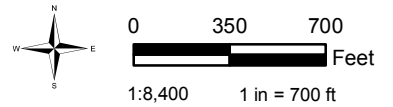
EXHIBIT 2

Impacts to Sensitive Vegetation Communities

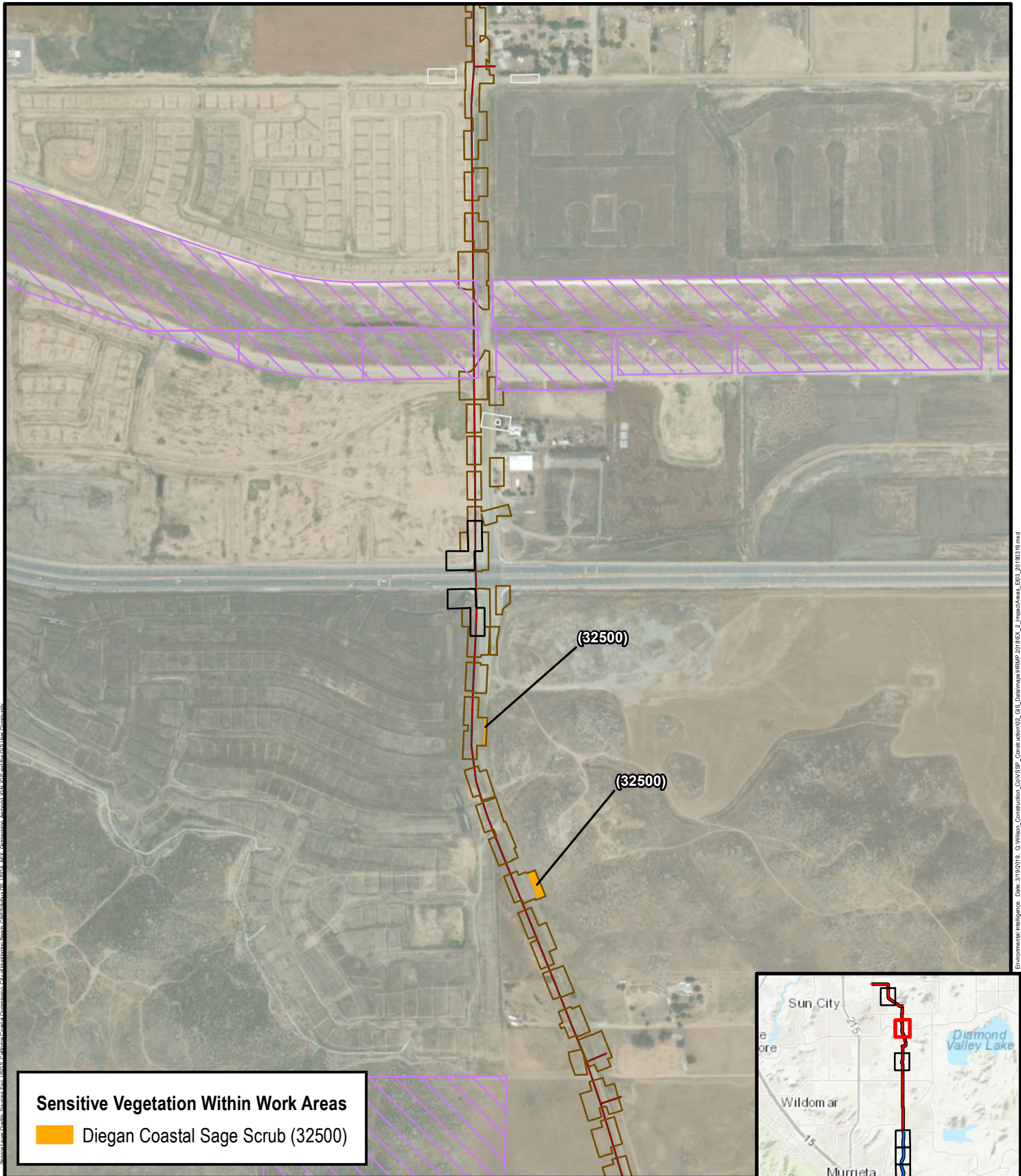


Sensitive Vegetation Within Work Areas
 Diegan Coastal Sage Scrub (32500)

Project Alignment	Work Area Impact Type	MSHCP Conserved Lands
— Segment 1	Temporary	Additional Reserve Lands (ARL)
— Segment 2	Drive and Crush	Public/Quasi-Public (PQP)
	Limited/No Impact	

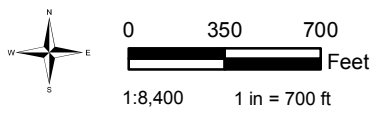


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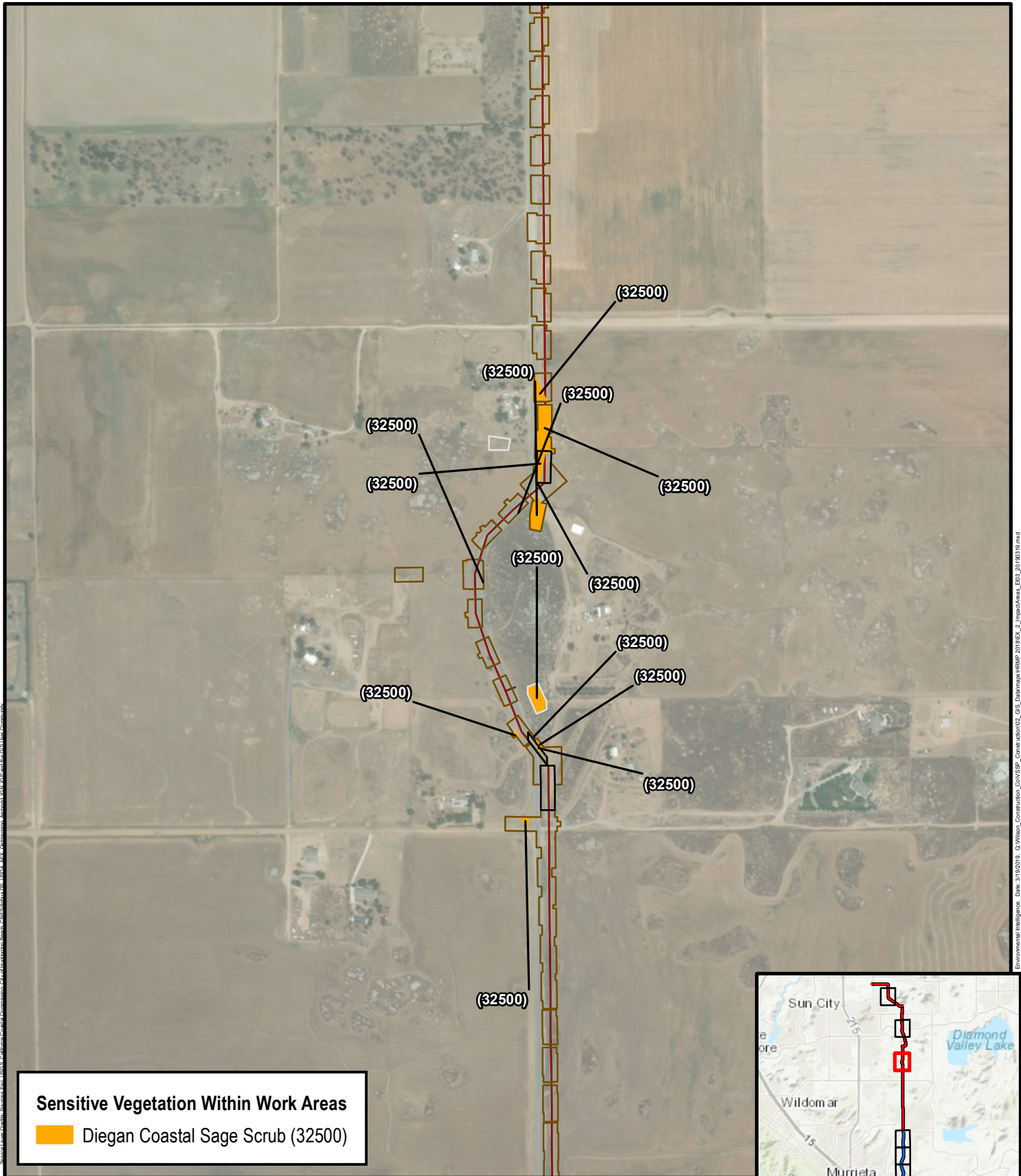


Sensitive Vegetation Within Work Areas
 Diegan Coastal Sage Scrub (32500)

- | Project Alignment | Work Area Impact Type | MSHCP Conserved Lands |
|-------------------|-----------------------|----------------------------------|
| — Segment 1 | □ Temporary | ▨ Additional Reserve Lands (ARL) |
| — Segment 2 | □ Drive and Crush | ▨ Public/Quasi-Public (PQP) |
| | □ Limited/No Impact | |

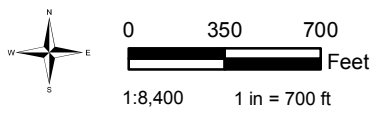
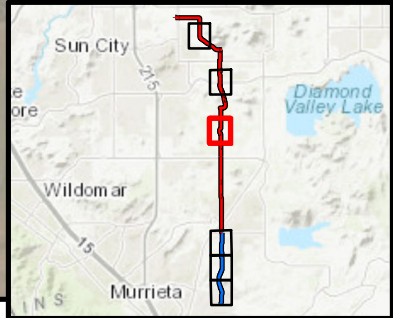


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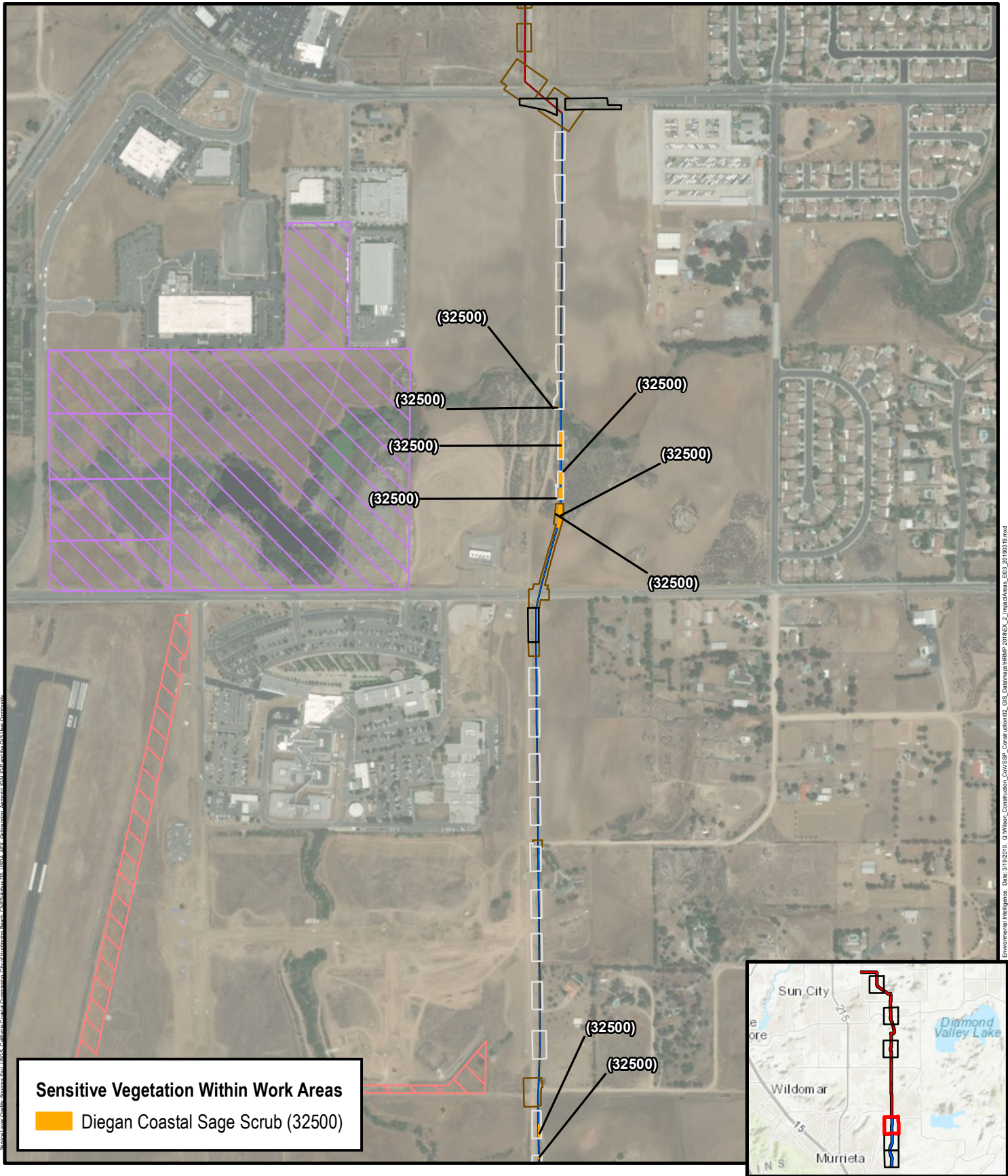


Sensitive Vegetation Within Work Areas
 Diegan Coastal Sage Scrub (32500)

Project Alignment	Work Area Impact Type	MSHCP Conserved Lands
— Segment 1	Temporary	Additional Reserve Lands (ARL)
— Segment 2	Drive and Crush	Public/Quasi-Public (PQP)
	Limited/No Impact	

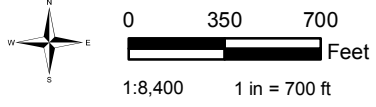


Environmental Intelligence, Date: 3/19/2019, C:\Wilson_Construction_CorVSSP_Constr\user\02_085_Data\mva\190807_2018\EX_C_1\map\Area_001_20180119.mxd

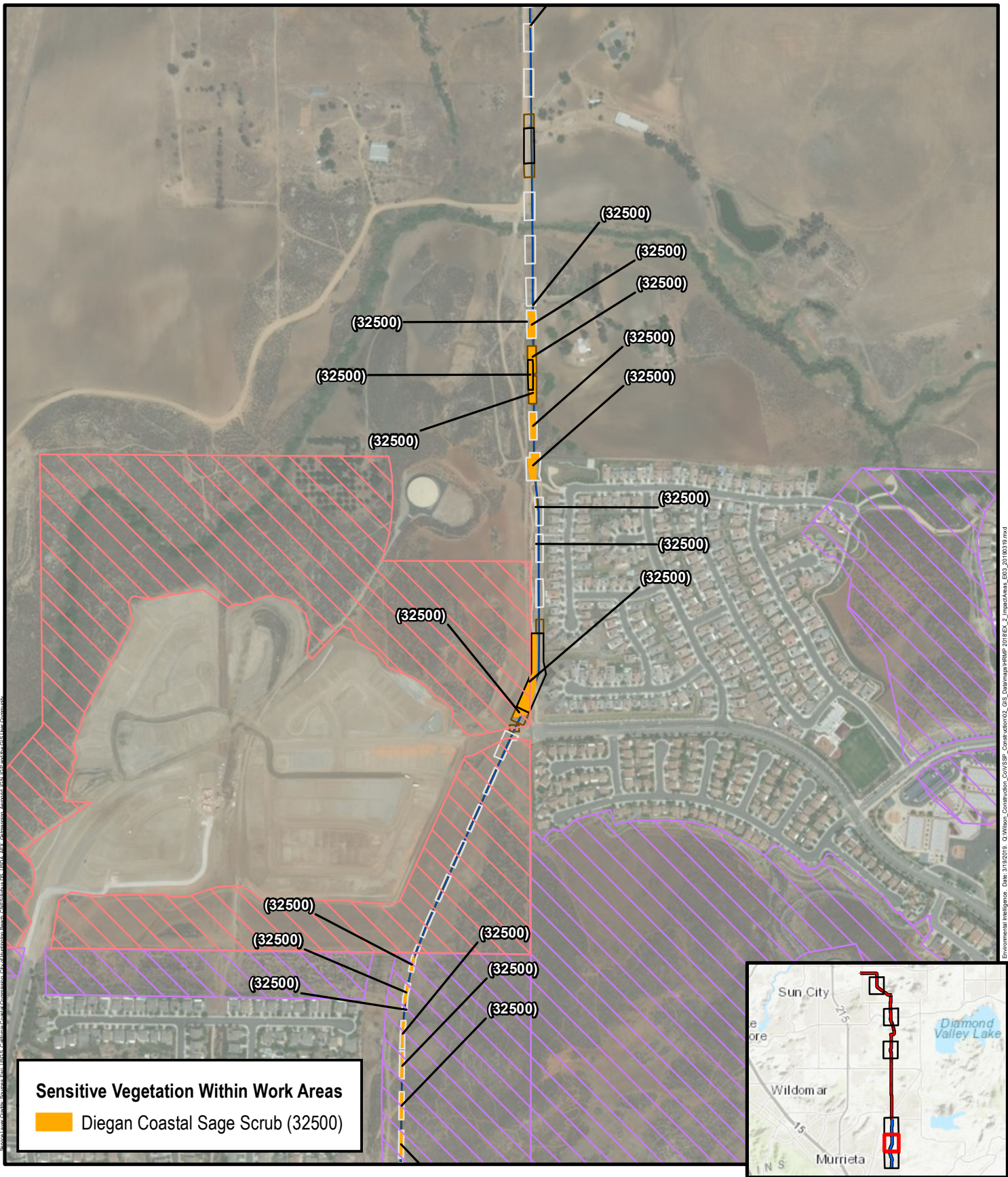


Sensitive Vegetation Within Work Areas
 Diegan Coastal Sage Scrub (32500)

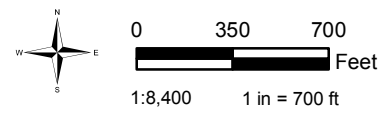
Project Alignment	Work Area Impact Type	MSHCP Conserved Lands
— Segment 1	Temporary	Additional Reserve Lands (ARL)
— Segment 2	Drive and Crush	Public/Quasi-Public (PQP)
	Limited/No Impact	



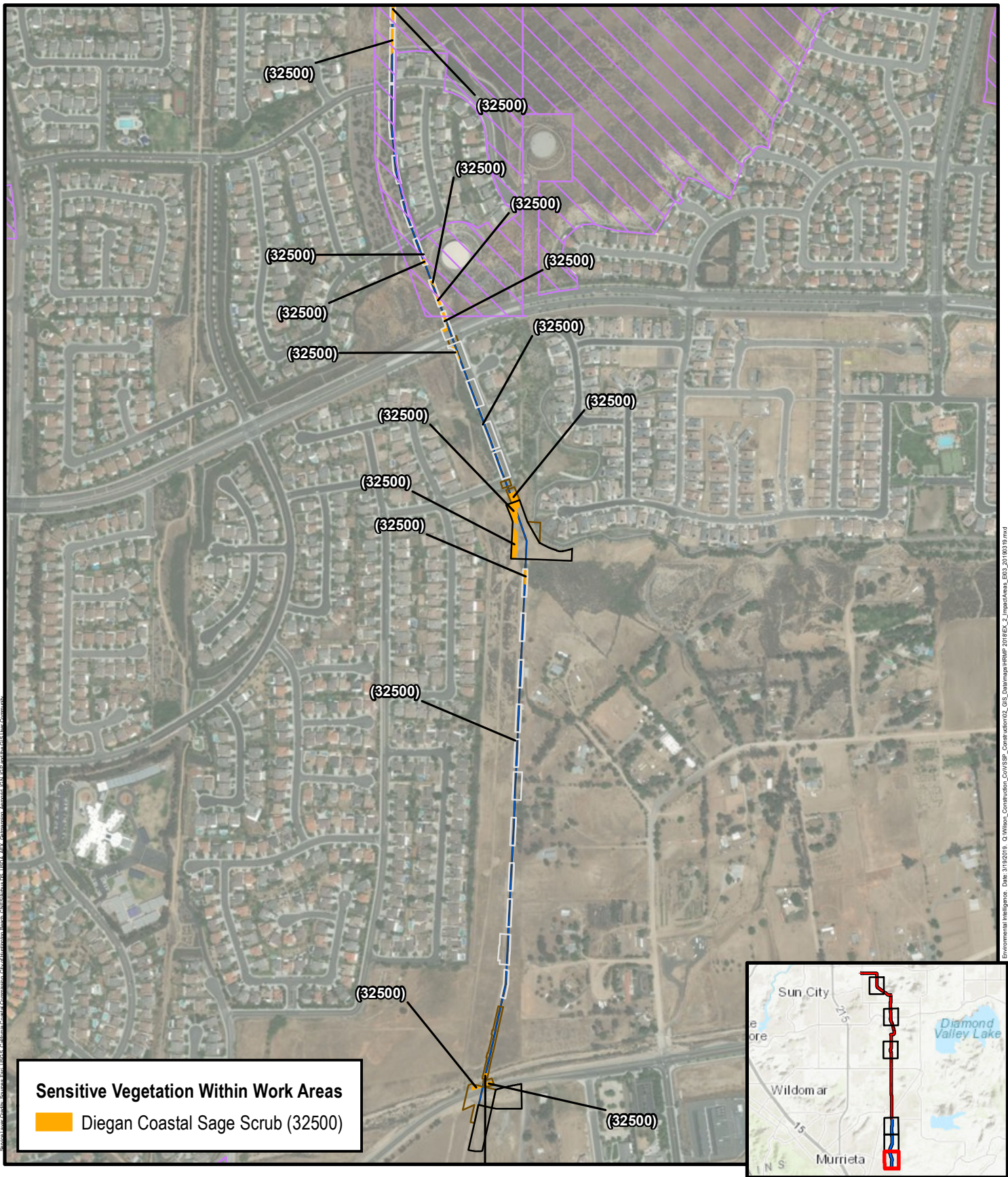
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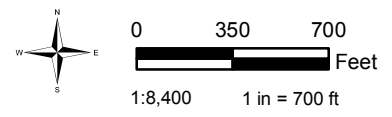
Project Alignment	Work Area Impact Type	MSHCP Conserved Lands
— Segment 1	□ Temporary	▨ Additional Reserve Lands (ARL)
— Segment 2	□ Drive and Crush	▨ Public/Quasi-Public (PQP)
	□ Limited/No Impact	



Environmental Intelligence, Date: 3/19/2018, Q:\Wilson_Construction_Corvys\Corvys_Data\mva\18087_2018\CK_C_1\map\sheet_001_20180319.mxd



Project Alignment	Work Area Impact Type	MSHCP Conserved Lands
— Segment 1	□ Temporary	▨ Additional Reserve Lands (ARL)
— Segment 2	□ Drive and Crush	▨ Public/Quasi-Public (PQP)
	□ Limited/No Impact	



Environmental Intelligence Date: 3/19/2019 C:\Wilson_Construction_CorVSSP_Conservation\MSHCP_2018\CK_C\Impacts\Map_001_20180319.mxd

APPENDIX A

Seed List

Appendix A:
SEED MIX



Diegan Coastal Sage Scrub Mix

Species	Recommended Bulk Lbs/Acre
<i>Artemisia californica</i> ¹	6.0
<i>Eriogonum fasciculatum</i> ssp. <i>foliolosum</i> ¹	5.0
<i>Eriogonum fasciculatum</i> ssp. <i>polifolium</i> ¹	5.0
<i>Salvia apiana</i> ¹	1.0
<i>Salvia mellifera</i> ¹	2.0
<i>Acmispon glaber</i> var. <i>brevialatus</i> ² [<i>Lotus scoparius</i> var. <i>brevialatus</i>]	2.0
<i>Encelia farinosa</i> ²	0.5
<i>Brickellia californica</i> ²	0.5
<i>Corethrogyne</i> [<i>Lessingia</i>] <i>filaginifolia</i> ²	0.5
<i>Elymus</i> [<i>Leymus</i>] <i>condensatus</i> ²	1.0
<i>Eriophyllum confertiflorum</i> ²	0.5
<i>Keckiella antirrhinoides</i> ²	0.5
<i>Malacothamnus fasciculatus</i> ²	1.0
<i>Mirabilis laevis</i> var. <i>crassifolia</i> ² [<i>M. californica</i>]	0.5
<i>Pseudognaphalium californicum</i> ²	0.5
<i>Stipa</i> (<i>Nasella</i>) <i>pulchra</i> ²	2.0
<i>Stipa</i> (<i>Nasella</i>) <i>lepida</i> ²	1.0
<i>Poa secunda</i> ²	0.5
<i>Festuca</i> (<i>Vulpia</i>) <i>microstachys</i> ²	3.0
<i>Lupinus succulentus</i> ²	2.0
<i>Lupinus truncatus</i> ²	1.0
<i>Phacelia distans</i> ²	0.5
<i>Phacelia minor</i> ²	0.5

¹ Represents required shrub species.

² Represents optional species in the seed mix.

