
Restoration Plan

Nighthawk Energy Storage Project City of San Diego, California

JUNE 2023

Prepared for:

NIGHTHAWK ENERGY STORAGE, LLC

412 West 15th Street, 15th Floor

New York, New York 10011

Prepared by:

DUDEK

605 Third Street

Encinitas, California 92024

Contact: Erin McKinney

Table of Contents

SECTION	PAGE NO.
Acronyms and Abbreviations.....	v
Executive Summary.....	vii
1 Project Description.....	1
1.1 Responsible Parties.....	1
1.2 Project Background.....	1
2 Objectives.....	3
3 Project Impacts and Analysis.....	5
3.1 Upland Habitat Impacts and Mitigation.....	5
3.2 Aquatic Resources.....	8
3.3 Special-Status Plant Species.....	8
3.4 Special-Status Wildlife Species.....	9
4 Baseline Conditions.....	10
4.1 Restoration Location.....	10
4.2 Topography.....	10
4.3 Soil Conditions.....	10
4.4 Existing Vegetation Communities.....	11
4.4.1 Diegan Coastal Sage Scrub.....	12
4.4.2 Diegan Coastal Sage Scrub (<i>Baccharis</i> -dominated).....	13
4.4.3 Non-Native Grassland.....	13
4.4.4 Scrub Oak Chaparral.....	13
4.4.5 Disturbed Habitat/Land.....	14
4.4.6 Urban/Developed (Including Ornamental).....	14
4.5 Special-Status Plant Species.....	14
4.5.1 Nuttall's Scrub Oak (<i>Quercus dumosa</i>).....	14
4.5.2 San Diego Goldenstar (<i>Bloomeria [Muilla] clevelandii</i>).....	15
4.5.3 Small-Flower Microseris (<i>Microseris douglasii</i> ssp. <i>platycarpha</i>).....	15
4.6 Existing Wildlife.....	15
4.6.1 Coastal California Gnatcatcher (<i>Polioptila californica californica</i>).....	16
4.6.2 Southern California Rufous-Crowned Sparrow (<i>Aimophila ruficeps canescens</i>).....	16
4.6.3 Cooper's Hawk (<i>Accipiter cooperii</i>).....	16
5 Mitigation Work Plan.....	17
5.1 Project Implementation Personnel.....	17
5.1.1 Permittee/Project Manager.....	17

5.1.2	Project Biologist	17
5.1.3	Restoration Contractor	17
5.1.4	Seed Supplier	18
5.2	Preliminary Design and Engineering	18
5.3	Rationale for Expecting Success	18
5.4	Mitigation Area Site Selection.....	19
5.5	Site Access.....	19
5.6	Site Preparation.....	19
5.6.1	Avoidance and Minimization	19
5.6.2	Topsoil Translocation.....	21
5.6.3	Plant Salvage for Translocation	21
5.6.4	Seed Collection	21
5.6.5	Weed Control.....	24
5.6.6	Irrigation Source	24
5.6.7	Erosion Control Best Management Practices	25
5.7	Implementation Installation.....	25
5.7.1	Plant Palette.....	25
5.7.2	Container Plant Installation.....	26
5.7.3	Native Seed Application	26
5.7.4	Goldenstar Translocation	27
6	120-Day Plant Establishment Period.....	28
7	Maintenance Plan	31
7.1	5-Year Maintenance Activities and Schedule	31
7.2	Weed Management.....	32
7.3	Pest and Herbivory Management.....	33
7.4	General Site Maintenance	33
7.5	Erosion and Sedimentation	33
8	Ecological Performance Standards.....	34
8.1	Restoration Area Performance Standards.....	34
8.2	Translocation Area Performance Standards.....	34
8.3	Reference Sites	35
9	Monitoring Plan	36
9.1	Monitoring and Reporting Schedule.....	36
9.2	As-Built Report.....	36
9.3	120-Day Plant Establishment Period and Report.....	37
9.4	Qualitative Monitoring.....	37
9.5	Quantitative Monitoring	37
9.5.1	Restoration Area Monitoring.....	37

9.5.2 Translocation Area Monitoring..... 38

9.6 Annual Monitoring Reports 38

10 Adaptive Management Plan 40

10.1 Drought 40

10.2 Herbivory..... 40

10.3 Fire 41

11 Financial Assurances 42

12 Completion of the Restoration Program 44

13 Long-Term Management 45

14 References 47

TABLES

Table 1. Mitigation for Impacts to Upland Vegetation Communities.....7

Table 2. Direct Impacts to Special-Status Plants within the Work Area9

Table 3. Soils within the Restoration Areas 11

Table 4. Impacts to Vegetation Communities and Land Cover Types 11

Table 5. Coastal Sage Scrub Seed Mix (Restoration Areas 1, 2 (partial), 4 - Approximately 1.67 Acres)..... 22

Table 6. Coastal Sage Scrub Seed Mix (Restoration Area 3 - If-Needed) 23

Table 7. Coastal Sage Scrub Plant Palette (Approximately 1.67 Acres Total) 25

Table 8. Plant Establishment Period Maintenance Schedule..... 28

Table 9. 5-Year Maintenance Schedule 31

Table 10. Non-Native Plant Target Species and Treatments..... 32

Table 11. Restoration Area Performance Standards 34

Table 12. Goldenstar Translocation Performance Standards 34

Table 13. Monitoring and Reporting Schedule 36

FIGURES

1 Project Location 49

2 Multi-Habitat Planning Area (MHPA) and Local Jurisdictions 51

3A Impacts to Biological Resources 53

3B Impacts to Biological Resources 55

4 Restoration Areas..... 57

5 Soils 59

6A Biological Resources..... 61

6B Biological Resources..... 63

7A Conceptual Restoration Plan..... 65

7B Conceptual Restoration Plan..... 67

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
amsl	above mean sea level
APN	Assessor's Parcel Number
BTR	biological technical report
CRPR	California Rare Plant Rank
gen-tie	generation transmission
kV	kilovolt
MHPA	Multi-Habitat Planning Area
MSCP	Multiple Species Conservation Program
SDG&E	San Diego Gas & Electric Company
USGS	U.S. Geological Survey

INTENTIONALLY LEFT BLANK

Executive Summary

This Restoration Plan (Plan) for impacts to upland habitats addresses the proposed on-site revegetation and mitigation (together comprising the restoration) for impacts to upland habitats and associated sensitive species resulting from the generation transmission (gen-tie) line portion of the proposed Nighthawk Energy Storage Project (project) within the City of San Diego. The gen-tie line spans the City of San Diego and the City of Poway and includes land on the Marine Corps Air Station Miramar. The City of San Diego property is south of Beeler Canyon Road and will provide the connection to the San Diego Gas & Electric Company (SDG&E) Sycamore Canyon Substation located approximately 1.1 miles to the south. The only portion of the overall project that requires development within City of San Diego lands is the gen-tie line; therefore, this report focuses only on the gen-tie alignment and associated impacts (work area). The work area is within the City of San Diego Final Multiple Species Conservation Program (MSCP) Subarea Plan.

Permanent structures (equipment vaults) will be constructed at three locations along the alignment, at the very northern and southern ends as well as within the central portion of the alignment, just north of Stonebridge Parkway. Construction of the proposed project will implement open-cut trenching. Upon project construction, the work areas around the vaults and all locations of trenching (impact areas) will be restored to pre-project conditions; as such, these are considered temporary impacts. Avoidance of City of San Diego wetland and non-wetland waters located south of Stonebridge Parkway will be achieved via Jack and Bore. Jack and Bore is a trenchless construction technique whereby a tunnel is drilled under a designated area and then a pipeline or other utility is pulled through the drilled underground tunnel.

Based on species composition and resources observed, four sensitive vegetation communities and two non-native vegetation communities/land cover types were mapped within the impact areas: Diegan coastal sage scrub, Diegan coastal sage scrub (*Baccharis*-dominated), non-native grassland, scrub oak chaparral, disturbed habitat, and urban/developed land.

Implementation of the project would result in permanent impacts to 0.57 acres of Diegan coastal sage scrub located inside of the MHPA. Implementation of the project would result in permanent impacts outside of the MHPA to 0.33 acres of Diegan coastal sage scrub (*Baccharis*-dominated), 0.02 acre of coastal sage scrub, and 0.04 acre of southern mixed chaparral.

The work area supports two special-status plant species: San Diego goldenstar (*Bloomeria [Muilla] clevelandii*; 78 individuals identified) and small-flower microseris (*Microseris douglasii* ssp. *platycarpa*; 17 individuals identified). Small-flower microseris will be directly impacted. However, this species has a California Rare Plant Rank (CRPR) of 4.2, which does not generally meet the CEQA standards and thresholds for impact considerations and as such, does not require mitigation. There is a potential for all 78 San Diego goldenstar to be directly impacted. Populations of San Diego goldenstar will be flagged and avoided where possible and translocating San Diego goldenstar according to the 5-year restoration plan where San Diego goldenstar is impacted. .

The impact area supports two special-status wildlife species: coastal California gnatcatcher (*Poliophtila californica californica*) and Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*). Additionally, Cooper's hawk (*Accipiter cooperii*) may be indirectly impacted by the project.

Mitigation areas will be finalized in the landscape plans for this project, however, this Plan assumes that 1.35 acres of mitigation will be provided within the MHPA and 0.32 acres of mitigation will be provided outside of the MHPA. This Plan also outlines the goldenstar translocation, installation, maintenance, monitoring, reporting, performance standards, financial assurances, and contingency measures in accordance with the City of San Diego's Biology Guidelines (City of San Diego 2018a

1 Project Description

1.1 Responsible Parties

Applicant/Permittee

Nighthawk Energy Storage, LLC
412 West 15th Street, 15th Floor
New York, New York 10011
Contact: Keith Latham
Phone: 619.729.6001

Biological Consultant

Dudek
2280 Historic Decatur Road, Suite 200
San Diego, California 92106
Contact: Erin McKinney
Phone: 760.479.4189

1.2 Project Background

The City of Poway is the lead agency for the Nighthawk Energy Storage Project (project). This project consists of a 300-megawatt battery energy storage system that will deliver and receive electric power from the existing San Diego Gas & Electric (SDG&E) Sycamore Canyon Substation. The primary project components would be located on a portion of approximately 82 acres of partially developed land consisting of Assessor Parcel Number (APN) 320-031-0300 in the City of Poway, California, and improvements associated with a high-voltage underground transmission line would be located within the City of San Diego, California, and Marine Corps Air Station Miramar.

The only portion of the overall project that requires development within City of San Diego lands is the generation transmission (gen-tie) line; therefore, this Plan focuses only on the gen-tie alignment and associated impacts (work area; Figure 1, Project Location, and Figure 2, Multi-Habitat Planning Area (MHPA) and Local Jurisdictions). The work area is within the City of San Diego Final Multiple Species Conservation Program (MSCP) Subarea Plan and the City's Multi-Habitat Planning Area (MSCP Subarea Plan; City of San Diego 1997).

Trenching will be required to construct the 138-kilovolt (kV) gen-tie line underground, and may include the use of trenchers, backhoes, excavators, haul vehicles, compaction equipment, and water trucks. Construction of the 138 kV gen-tie line will occur primarily within the greater project site in the City of Poway and in the City of San Diego, primarily in developed areas. The workspace will be limited to within the road right-of-way and/or private property. Within the northern portion of the gen-tie alignment, work will be located entirely within developed lands (paved roads).

Permanent structures (equipment vaults) will be constructed at three locations along the alignment, at the very northern and southern ends as well as within the central portion of the alignment, just north of Stonebridge Parkway.

Temporary work areas will be designated around each of the vaults. Construction of the proposed project will implement open cut trenching. Upon project construction the temporary work areas around the vaults and all locations of trenching will be restored to pre-project conditions and as such, are considered temporary impacts. Avoidance of impacts to City of San Diego wetlands located south of Stonebridge Parkway will be achieved via Jack and Bore. Jack and Bore is a trenchless construction technique whereby a tunnel is drilled under a designated area and a pipeline or other utility is then pulled through the drilled underground tunnel.

A conservation easement grant was recorded May 9, 2003, as instrument number 2003-0547336 and corrected on March 5, 2004, as instrument number 2004-0180743 and finally mapped as number 14895 filed on October 21, 2004, and number 14931 filed on December 17, 2004, runs south of Stonebridge parkway. The conservation easement was part of the biological mitigation for the Sycamore Estates development near the project site and was added to the MHPA. Due to this area being under a conservation easement a higher mitigation ratio was required by City of San Diego guidelines (City of San Diego 2018a).

Figure 2 shows a biological core area and biological linkage area within the northern section of the gen-tie line. The site is also considered adjacent to the biological core area and biological linkage area within the northern section. The northern work section consists entirely of developed land (paved roads) and disturbed land. The developed land is adjacent to and within biological core area and biological linkage area therefore, adjacency guidelines are also followed. The central section of the site is outside the MHPA and biological core area and biological linkage area. The southern section of the site is located within the MHPA. A portion of the southern section consists of wetlands and coastal sage scrub. All wetlands will be avoided.

The proposed project will directly impact 0.57 acres of Diegan coastal sage scrub within the MHPA; and 0.33 acres of Diegan coastal sage scrub (*Baccharis*- dominated), 0.02 acres of Diegan coastal sage scrub habitat, and 0.04 acres of southern mixed chaparral outside of the MHPA (Figures 3A and 3B, Impacts to Biological Resources).

This Plan provides guidelines for the restoration of 1.67 acres of Tier II habitat, which provides mitigation for all impacts to sensitive uplands. Translocation of San Diego goldenstar (*Bloomeria [Muilla] clevelandii*) that would be impacted as a result of this project will be implemented directly adjacent to existing goldenstar locations (Figure 4, Restoration Areas). This Plan outlines the translocation, installation, maintenance, monitoring, reporting, performance standards, financial assurances, and contingency measures in accordance with the City of San Diego's Biology Guidelines (City of San Diego 2018).

2 Objectives

The goal of this Plan is to provide for compensatory mitigation for impacts to sensitive habitats resulting from the project development and improvements within the City of San Diego. Proposed on-site restoration will provide functions and values displaced due to development project impacts. The quality of the mitigation vegetation communities will be equal to or will exceed that of the impacted habitat communities. Specific increases in functions and services expected to benefit the upland areas are discussed below and support the following objectives:

Objective 1: Upland Habitat Restoration. The proposed restoration includes planting and seeding of native plant species to restore native plant communities and enhance existing habitat within the restoration area. Replacement of the non-native vegetation and associated debris with native vegetation will increase the vegetation structure and diversity and improve habitat functions for wildlife.

Objective 2: Avoidance of Special-Status Plant Species. The project has avoidance measures in place for special-status species, including San Diego goldenstar. The project will avoid the San Diego goldenstar to the maximum extent practicable. Translocation of San Diego goldenstar will be implemented for any San Diego goldenstar impacted within the work area. This measure will bring the potential significant impacts down to a level that is less than significant.

Objective 3: Goldenstar Translocation. The proposed mitigation includes translocation of 78 goldenstar. (*Bloomeria [Muilla] clevelandii*) that would be impacted as a result of this project will be implemented directly adjacent to existing goldenstar populations. The on-site translocation area has the appropriate soils and slope aspect for the successful translocation of these special status plant species. This measure will bring the potential significant impacts down to a level that is less than significant.

Objective 4: Invasive Plant Species Control. The proposed restoration will control plant species such as tocalote (*Centaurea melitensis*), stinkwort (*Dittrichia graveolens*), and non-native grasses within the restoration area. This will provide opportunity for growth and colonization of native species suited to the restoration area, as well as reducing propagules and seeds of non-native species that might otherwise become established within the restoration area.

Objective 5: Native Wildlife Habitat Restoration. The proposed restoration is designed to provide habitat for wildlife, including birds, invertebrates, amphibians, reptiles, rodents, and other mammals. The restoration area will also provide habitat for sensitive wildlife species, including special-status riparian bird species, that occur in the area.

INTENTIONALLY LEFT BLANK

3 Project Impacts and Analysis

Based upon the project description, direct impacts, indirect (short-term and long-term), and cumulative impacts are defined as follows.

Direct impacts may include both the permanent loss of on-site habitat and the plant and wildlife species that it contains, as well as the temporary loss of on-site habitat. Permanent impacts typically result in a loss of function and value of habitat. An example is a permanent structure being installed like a building or permanent removal of a root system of a plant. Temporary impacts may also result in a loss; however, typically does not permanently change the landform, land use or function. An example is trimming a tree or driving over a root system. For wetland communities, both temporary and permanent impacts are considered and treated as permanent impacts and require mitigation to meet state and federal no net loss policy and City of San Diego Wetland Regulations.

Impacts to easements due to continued use are considered permanent impacts. Mitigation cannot be proposed within easement areas.

Direct impacts were quantified by overlaying the proposed impact alignment onto the biological resources map and evaluating the impacts by vegetation community.

Development of the underground gen-tie line requires the construction of three above ground vault structures. Since these structures are permanent fixtures on the landscape, all impacts associated with their construction are considered a permanent direct impact.

The work areas (impact areas) around the vault structures and the trenches associated with placement of the underground gen-tie line will be revegetated immediately following project construction to the City of San Diego Landscape Guidelines (City of San Diego 2023).

Indirect impacts refer to off-site and on-site effects that are short-term impacts due to the project construction or long-term design of the project and the effects it may have to adjacent resources. Indirect impacts imply a secondary source that is usually adjacent that would create an indirect effect on a sensitive species or habitat. Examples include lighting, noise, non-natives, or drainage.

Pursuant to the City of San Diego Municipal Code, Land Development Code–Biology Guidelines (San Diego Biology Guidelines, City of San Diego 2018a), direct impacts to sensitive upland habitat require mitigation (City of San Diego 2018a). The project will result in impacts to three sensitive upland vegetation communities, Diegan coastal sage scrub (Tier II habitat), Diegan coastal sage scrub (Baccharis-dominated) (Tier II habitat), and southern mixed chaparral (Tier IIIA habitat), which all require mitigation (see Section 3.1).

Additionally, two special-status species are located within the impact area: San Diego goldenstar, and small-flower microseris (*Microseris douglasii* ssp. *platycarpha*) (see Section 3.3).

The sensitive upland communities are discussed in Section 3.1, and the sensitive plant species are discussed in Section 3.3, Special-Status Plant Species.

3.1 Upland Habitat Impacts and Mitigation

The vegetation communities and land cover types were mapped according to Holland (1986) and Oberbauer et al. (2008), with a few exceptions. Some vegetation communities were given additional descriptions to identify highly

dominant species within the community. These habitats were then cross-walked to their corresponding communities listed in the San Diego Biology Guidelines (City of San Diego 2018a).

Implementation of the project would result in direct permanent impacts to 0.57 acres of Diegan coastal sage scrub located inside of the MHPA within the preserve area and 0.33 acres of Diegan coastal sage scrub (Baccharis-dominated), 0.02 acres of Diegan coastal sage scrub located outside of the MHPA in open space, and 0.04 acres of southern mixed chaparral (Figures 3A and 3B). Mitigation will be accomplished through on-site restoration of Diegan coastal sage scrub within the MHPA at ratios noted in Table 1. Final mitigation areas will be defined in the landscape plans, but this Plan assumes that the mitigation needs will be met through use of Restoration Area 1, partial use of Restoration Area 2 (total of 1.35 acres within the MHPA), and full use of Restoration Area 4 (0.32 acres outside the MHPA). Additionally, 78 goldenstar will be directly impacted and mitigated through translocation of these individuals within restoration area 1 (see Section 5.4.2).

Impacts would occur from open-cut trenching, grading, and clearing, and construction of equipment vaults. Table 1 lists direct impacts to upland vegetation communities that would occur within the impact area. Corresponding San Diego Biology Guidelines (City of San Diego 2018a) regarding habitats and their associated tiers are also listed. Sufficient area to mitigate all impacts to upland habitat from the project is included in this plan. Final mitigation locations will be included in the landscape plans for this restoration project.

Table 1. Mitigation for Impacts to Upland Vegetation Communities

Vegetation Community	Subarea Plan Tier	Permanent Impacts (acres)	Mitigation Ratio Provided outside the MHPA ^a	Mitigation Ratio within Previously Mitigated Area ^b	Mitigation Ratio Provided within the MHPA ^a	Mitigation Ratio within Previously Mitigated Area ^b	Restoration Mitigation (acres) ^c
Diegan Coastal Sage Scrub: <i>Baccharis</i> -dominated	Tier II	0.33 outside MHPA	1.5:1	N/A	1:1	N/A	0.50 outside MHPA or 0.33 inside MHPA
Diegan Coastal Sage Scrub	Tier II	0.02 outside the MHPA	1.5:1	N/A	1:1	N/A	0.03 outside MHPA or 0.02 inside MHPA
Diegan Coastal Sage Scrub	Tier II	0.57 inside MHPA	2:1	4:1	1:1	2:1	2.28 outside MHPA or 1.14 inside MHPA
Southern Mixed Chaparral	Tier IIIA	0.04 outside MHPA	1.5:1	N/A	1:1	N/A	0.06 outside MHPA or 0.04 inside MHPA

Notes: MSCP = Multiple Species Conservation Plan; CSS = coastal sage scrub; N/A = not applicable.

^a Mitigation ratios are from Table 3 of the City Biology Guidelines.

^b The mitigation ratio is doubled for impacts to the Sycamore Estates mitigation site that is mapped MHPA and placed in a recorded conservation easement.

^c Totals may not sum due to rounding.

Once the 138 kV gen-tie line is placed underground no additional maintenance or re-trenching through the existing habitat will be required. Any maintenance to the wiring can be achieved by pulling the wire through the vaults and repairing with no impacts to the surrounding habitat. Should a catastrophic event or new project be proposed in this area that would require mitigation, it would be addressed as a separate project not associated with the permitting and mitigation for the Nighthawk Energy Storage Project. As such, and in accordance with the project biological technical report (BTR) mitigation measures (Dudek 2024), compensation for the loss of sensitive upland habitats would be provided through on-site restoration as described in Table 1 (Dudek 2024).

This Plan outlines the upland habitat restoration program for 1.67 acres of Tier II Diegan coastal sage scrub restoration. Impacts to 78 San Diego goldenstar will be mitigated through translocation of this species within restoration area using the block method (see Section 5.4.2). For additional information on habitat and land types that will be impacted by the project and the mitigation required, refer to the BTR (Dudek 2024).

3.2 Aquatic Resources

The jurisdictional delineation conducted on site for the proposed project mapped ephemeral channels, wetlands, and non-wetland waters that are regulated by U.S. Army Corps of Engineers, California Department of Fish and Wildlife, Regional Water Quality Control Board, and City of San Diego. Specifically, a non-wetland water and mapped wetland occur along a portion of the proposed gen-tie line route south of Stoneridge Parkway (Figures 3A and 3B). While these jurisdictional water resources or City of San Diego wetlands occur along the gen-tie alignment, avoidance of aquatic resources will be achieved via HDD beneath the ephemeral channels and wetlands. Therefore, no direct impacts to jurisdictional resources or City of San Diego wetlands will occur as a result of implementing the project.

Aquatic resources are not discussed further in this Plan. For additional information on wetlands, see the BTR (Dudek 2023).

3.3 Special-Status Plant Species

Focused rare plant surveys were conducted in April and August of 2022 to determine the presence/absence of special-status species determined to have potential to occur within 50 feet of the work area. During the surveys, four sensitive species were observed within the work area and the 50-foot-wide buffer area (see the BTR; Dudek 2023). Of those, two sensitive species are located within the work area: San Diego goldenstar (78 individuals), and small-flower microseris (17 individuals). Table 2 lists the number of individuals of each of these special-status plant species that will be directly impacted and for which mitigation will be required.

Small-flower microseris will be directly impacted, However, this species has a California Rare Plant Rank (CRPR) of 4.2, which does not generally meet the CEQA standards and thresholds for impact considerations and as such, does not require mitigation. There is a potential for all 78 San Diego goldenstar to be directly impacted.

Populations of San Diego goldenstar will be flagged and avoided where possible. Where impacts to this species are unavoidable, the individuals will be translocated within restoration area 1. A total of 78 individuals were identified for translocation, however, should any additional individuals be observed during pre-construction surveys, those individuals will also be translocated to restoration area 1 (Dudek 2023).

Table 2. Direct Impacts to Special-Status Plants within the Work Area

Species	Status (Federal/State/CRPR/MSCP Subarea Plan)	Individuals Observed	Anticipated Impacts (Number of Individuals)	Mitigation Requirements
Species Observed in the Temporary Impact Footprint				
San Diego goldenstar	None/None/1B.1/Covered	78	Unknown – Avoidance where feasible	Habitat-based restoration
Small-flower microseris	None/None/4.2/None	17	17	None

Source: Dudek 2023.

Notes: CRPR = California Rare Plant Rank; MSCP = Multiple Species Conservation Program.

CRPR

1B: Plants rare, threatened, or endangered in California and elsewhere

4: Plants of Limited Distribution – A Watch List

Threat Rank

0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

0.2 – Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)

For additional information on special-status plant species that will be impacted by the project and the mitigation required, refer to the BTR (Dudek 2023).

3.4 Special-Status Wildlife Species

Two special-status wildlife species, coastal California gnatcatcher (*Polioptila californica californica*) and Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) were directly observed within or directly adjacent to the work area during field surveys conducted in March 2021 and February through August 2022 (refer to the BTR for specific dates of surveys; Dudek 2023). In addition, Cooper’s hawk, a Multiple Species Conservation Program (MSCP) covered species, has a high potential to utilize the habitat within or directly adjacent to the work area (City of San Diego 1997). These special-status wildlife species are described in detail in Section 4.6, Existing Wildlife.

The special-status species have a relatively wide distribution and impacts would be adequately mitigated through habitat-based measures in accordance with the BTR (Dudek 2023).

4 Baseline Conditions

Baseline conditions are included below and are used to help determine the appropriate compensatory mitigation and success criteria, and to guide mitigation design, installation, maintenance, and monitoring procedures.

4.1 Restoration Location

The overall project spans the City of San Diego and the City of Poway and includes land on the Marine Corps Air Station Miramar (Figures 1 and 2). The City of San Diego property is south of Beeler Canyon Road and will provide the connection to the SDG&E Sycamore Canyon Substation located approximately 1.1 miles to the south.

The 1.67-acre restoration project is located approximately 4.6 miles east of Interstate 15, 0.5 miles south of Scripps Poway Parkway, directly south of Beeler Canyon Road, and to the north and south of Stonebridge Parkway within the City of San Diego (Figure 4). The impact area is located within Assessor's Parcel Number (APN) 325-070-1600, APN 325-070-1300, and APN 325-070-1100).

The proposed project impact footprint within San Diego is located inside the MHPA and outside the MHPA. The northern part of the project is within biological core area and biological linkage area; therefore, the project is expected to document compliance with biological core area and biological linkage area and MHPA Land Use Adjacency Guidelines. The southern portion of the project site south of Stonebridge Parkway is located within the MHPA boundary. A conservation easement, part of the biological mitigation for the Sycamore Estates development, runs south of Stonebridge parkway.

Restoration will take place within the impact area (Figures 7a and 7b) and in adjacent locations with currently low functioning habitat. In addition, 78 goldenstar will be translocated to an area directly adjacent to existing goldenstar populations (Figure 7c). The exact location of translocation will be decided prior to implementation (see Section 5.4).

4.2 Topography

Currently the area for the proposed gen-tie line consists of a paved road and vegetated land along a hillside. Surrounding land uses include open space and paved roads. The elevations in the restoration area range from approximately 849 feet above mean sea level (amsl) at the lowest point within the paved areas to approximately 905 feet amsl level at the highest section of the slope within City of San Diego property (Figure 1).

4.3 Soil Conditions

Two soil types occur within the restoration area: Redding cobbly loam (dissected), 15% to 30% slopes, and Visalia gravelly sandy loam, 2% to 5% slopes (Figure 5, Soils).

According to the U.S. Department of Agriculture, Natural Resources Conservation Service, the Redding cobbly loam (dissected), 15% to 30% slopes, consist of well-drained soils with very high runoff, a mean annual precipitation of approximately 14 to 25 inches, and a mean annual air temperature of 61°F to 63°F. The soil's available water supply is very low (approximately 1.2 inches). These soils include cobbly loam, cobbly clay loam, cobbly clay, and an indurated layer (USDA 2023a).

Visalia gravelly sandy loam, 2% to 5% slopes, consists of well-drained soils with very low runoff, a mean annual precipitation of approximately 15 inches, and a mean annual air temperature of 61°F. The soil’s available water supply is moderate (approximately 6.4 inches). These soils include gravelly sandy loam and gravelly loam (USDA 2023a).

These soil types are shown in Table 3 and on Figure 5 (USDA 2023a). These soil types do not require different approaches to habitat restoration and slope angle and aspect are likely to be more impactful to final habitat conditions. Neither soil type is ranked as hydric (USDA 2023b).

Table 3. Soils within the Restoration Areas

Soil Category	Soil Description	Hydric Rating	Acreage of Potential Mitigation Area (Acres) ^a
Redding cobbly loam ^a	Redding cobbly loam (dissected), 15% to 30% slopes	Nonhydric	2.21
Visalia ^b	Visalia gravelly sandy loam, 2% to 5% slopes	Nonhydric	0.32
Total			1.59

Sources: USDA 2023a, 2023b.

^a Restoration Areas 1, 2 (partial), and 3

^b Restoration Area 2 (partial), 4

4.4 Existing Vegetation Communities

Six vegetation communities and land cover types were recorded within the work area and are described in detail in the following subsections. The acreages of these vegetation communities and land cover types are presented in Table 4, and their spatial distributions are presented on Figures 6A and 6B, Biological Resources. Also included in Table 4 are the sensitivity designations of each vegetation community according to the tiers described in the San Diego Biology Guidelines (City of San Diego 2018a).

Table 4. Impacts to Vegetation Communities and Land Cover Types

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Tier ^a	Permanent Impacts outside MHPA (Acres)	Permanent Impacts inside MHPA (Acres)
Sensitive Upland Vegetation Communities				
Coast Live Oak Woodland	Oak Woodland	I	0.00	0.00
Scrub Oak Chaparral	Scrub Oak Chaparral	I	0.00	0.00
Diegan Coastal Sage Scrub: <i>Baccharis</i> -dominated	Coastal Sage Scrub	II	0.33	0.00
Diegan Coastal Sage Scrub	Coastal Sage Scrub	II	0.02	0.57

Table 4. Impacts to Vegetation Communities and Land Cover Types

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Tier ^a	Perman ent Impact s outside MHPA (Acres)	Perman ent Impacts inside MHPA (Acres)
Chamise Chaparral	Chamise Chaparral	IIIA	0.00	0.00
Southern Mixed Chaparral	Mixed Chaparral	IIIA	0.04	0.00
Non-Native Grassland	Non-Native Grassland	IIIB	0.00	0.00
<i>Sensitive Upland Vegetation Communities Subtotal²</i>			0.39	0.57
Wetlands				
Emergent Wetland	Freshwater Marsh	Wetland	—	--
Freshwater Marsh	Freshwater Marsh	Wetland	—	--
Non-Vegetated Channel	Natural Flood Channel	Wetland	—	
Southern Riparian Woodland	Riparian forest or woodland	Wetland	0.001	0.00
<i>Wetlands Subtotal²</i>			0.001	0.00
Non-Native Vegetation Communities and Land Covers				
Disturbed Habitat	Disturbed Land	IV	0.02	0.02
Urban/Developed	Developed	IV	0.90	0.00
Urban/Developed -Ornamental	Developed	IV	0.00	0.00
<i>Non-Native Vegetation Communities and Land Covers Subtotal^b</i>			0.92	0.02

Notes:

- ^a City of San Diego 2018a. This column includes the City’s Biology Guidelines Tier I–IV ranking system, which refers to upland habitat types.
- ^b May not total due to rounding.

4.4.1 Diegan Coastal Sage Scrub

Diegan coastal sage scrub is a native vegetation community that, according to Oberbauer et al. (2008), is composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species—such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), and sages (*Salvia* spp.)—with scattered evergreen shrubs, including lemonadeberry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*). According to the San Diego Biology Guidelines, Diegan coastal sage scrub is considered a Tier II sensitive vegetation community (City of San Diego 2018a).

Diegan coastal sage scrub within the work area is characterized mostly of native species. Dominant species include black sage (*Salvia mellifera*), California sagebrush, California buckwheat, spiny redberry (*Rhamnus crocea*), and laurel sumac. Less commonly occurring plant species include lemonadeberry, broom baccharis (*Baccharis sarothroides*), long-stem golden-yarrow (*Eriophyllum confertiflorum* var. *confertiflorum*), fascicled tarweed (*Deinandra fasciculata*), and spreading goldenbush (*Isocoma menziesii* var. *menziesii*). This vegetation community is considered a Tier II habitat by the San Diego Biology Guidelines (City of San Diego 2018a).

4.4.2 Diegan Coastal Sage Scrub (*Baccharis*-dominated)

Diegan coastal sage scrub (*Baccharis*-dominated) is similar to Diegan coastal sage scrub but dominated by *Baccharis* species (broom baccharis and/or coyote brush [*Baccharis pilularis*]) (Oberbauer et al. 2008). This community typically occurs on disturbed sites or those with nutrient-poor soils and is often found within other forms of Diegan coastal sage scrub and on upper terraces of river valleys.

This vegetation community occurs on the edges of roads and edges of disturbed areas. On-site Diegan coastal sage scrub (*Baccharis*-dominated) is dominated by broom baccharis. Broom baccharis makes up approximately 85% of the vegetation community. Less commonly occurring species include compact brome (*Bromus madritensis*), deerweed (*Acmispon glaber*), and California buckwheat. This vegetation community is considered a Tier II habitat by the San Diego Biology Guidelines (City of San Diego 2018a).

4.4.3 Non-Native Grassland

Non-native grassland consists of dense to sparse cover of annual grasses with flowering culms between 0.5 feet to 3 feet in height (Oberbauer et al. 2008). In San Diego County the presence of wild oat (*Avena fatua*), brome grasses (*Bromus* spp.), storksills (*Erodium* spp.), and mustards (*Brassica* spp.) are common indicators. In some areas, depending on past disturbance and annual rainfall, annual forbs may be the dominant species; however, it is presumed that grasses will dominate.

The non-native grasslands within the work area are small and patchy. These areas are small, therefore not providing ideal foraging ground for raptors. Non-native grassland on site consists of a variety of European bromes, including red brome (*Bromus rubens*), rip-gut brome (*B. diandrus*), and soft chess (*B. hordeaceus*). Tocalote is also common within the non-native grassland patches. Less common within these non-native grasslands are slender wild oat (*Avena barbata*) and wild oat (*A. fatua*). According to the San Diego Biology Guidelines, non-native grassland is considered a Tier IIIB sensitive vegetation community (City of San Diego 2018a).

4.4.4 Scrub Oak Chaparral

Scrub oak chaparral contains a dense, evergreen chaparral up to 20 feet tall, often dominated by Nuttall's scrub oak with considerable mountain-mahogany (*Cercocarpus* spp.). In San Diego County, scrub oak (*Quercus berberidifolia*) is often the dominant species (over 50% cover) and usually occurs in small patches within a variety of other vegetation communities (Oberbauer et al. 2008). Scrub oak chaparral is somewhat more mesic than many chaparrals, and often occurs at slightly higher elevations (to ~5,000 feet amsl). These more favorable sites recover from fire more quickly than other chaparrals. Substantial leaf litter accumulates. In San Diego County, this is usually found on north-facing or otherwise mesic slopes and can occur at various elevations (Oberbauer et al. 2008).

Areas mapped as scrub oak chaparral are dominated by Nuttall's scrub oak and San Diego mountain-mahogany (*Cercocarpus minutiflorus*). On the hillsides where scrub oak chaparral occurs, almost a 50% cover of both species occur, with minimal ground cover and high-density shrubs. Within the flatter areas, especially within the work area, non-native grasses and tocalote are present within the understory. This vegetation community is considered a Tier I habitat by the San Diego Biology Guidelines (City of San Diego 2018a).

4.4.5 Disturbed Habitat/Land

Disturbed lands are areas that have been subjected to extensive physical anthropogenic disturbance and as a result cannot be identified as a native or naturalized vegetation association. However, these areas typically still have a recognizable soil substrate. The existing vegetation is typically composed of non-native ornamental or exotic species (Oberbauer et al. 2008).

Disturbed habitat occurs in a few locations within the work area. Disturbed habitat occurs on old roads of the site that consist of no vegetation, little vegetation, or non-native plant species. When disturbed habitat does not consist of bare ground, non-native vegetation is dominant. Disturbed habitat is dominated by tocalote. Less commonly occurring within the disturbed habitat is prickly sow-thistle (*Sonchus asper* ssp. *asper*), short-pod mustard (*Hirschfeldia incana*), and tree tobacco (*Nicotiana glauca*). This land cover is ranked as Tier IV and is not considered sensitive under the San Diego Biology Guidelines (City of San Diego 2018a).

4.4.6 Urban/Developed (Including Ornamental)

According to Oberbauer et al. 2008, urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping.

Developed land within the work area includes the paved roads, buildings, and manmade structures. Additionally, ornamental land cover consists of species planted for landscaping purposes. Areas mapped as ornamental are located along many of the slopes near paved roads. This land cover is synonymous with disturbed land and is considered a Tier IV vegetation community (City of San Diego 2018a).

4.5 Special-Status Plant Species

Focused rare plant surveys in April and August of 2022 captured most perennial and annual plant species that occur within the gen-tie alignment. A total of 112 species of native or naturalized plants, including 76 native (68%) and 36 non-native (32%), were recorded during the biological reconnaissance and rare plant surveys. For a cumulative list of all common and sensitive plant species observed, refer to the BTR (Dudek 2023).

All special-status species will be avoided to the maximum extent practicable. Two special-status plant species were detected within the gen-tie alignment during focused rare plant surveys: San Diego goldenstar and small-flower microseris. Potentially all 78 identified San Diego goldenstar and 17 small-flower microseris will be directly impacted by the construction of the project (Figures 3A and 3B).

4.5.1 Nuttall's Scrub Oak (*Quercus dumosa*)

Nuttall's scrub oak is a CRPR 1B.1 species and is not an MSCP covered species. Nuttall's scrub oak is a California native shrub that occurs throughout the state near the coast (Calflora 2020). This species is typically found in chaparral and coastal sage scrub habitats and naturally occurs at an elevation of 45 to 1,310 feet amsl.

One Nuttall's scrub oak was observed outside the proposed work area. (Figures 3A and 3B).

4.5.2 San Diego Goldenstar (*Bloomeria [Muilla] clevelandii*)

San Diego goldenstar has a CRPR of 1B.1 and is a covered species under the City's MSCP. San Diego goldenstar is a perennial herb and is distributed along the southwestern region of San Diego County (CNPS 2023). San Diego goldenstar is found in valley grassland, coastal sage scrub, chaparral, and foothill woodland. This species occurs equally in wetlands and non-wetlands and can be found associated with vernal pools. This species' blooming period is between April and May. San Diego goldenstar occurs at elevations from less than 100 feet amsl to 5,710 feet amsl.

A total of 242 San Diego goldenstar individuals were observed on the hillside within Diegan coastal sage scrub in one area in the southern portion of the proposed gen-tie line route. Of those, 78 individuals were within the work area (Figures 3A and 3B).

4.5.3 Small-Flower Microseris (*Microseris douglasii* ssp. *platycarpha*)

Small-flower microseris has a CRPR of 4.2. Small-flower microseris is an annual herb and is distributed along the coast of San Diego County (CNPS 2023). Small-flower microseris is found in valley grassland, coastal sage scrub, and foothill woodland. This species' blooming period is between March and May. Small-flower microseris occurs in wetlands at elevations less than 3,600 feet amsl.

A total of 22 small-flower microseris individuals were observed on the hillside within Diegan coastal sage scrub in one area in the southern portion of the proposed gen-tie line route. Of those, 17 individuals were within the work area (Figures 3A and 3B).

Refer to the BTR for more information (Dudek 2023).

4.6 Existing Wildlife

Biological field surveys for the proposed project were conducted in March 2021 and February through August 2022 by Dudek biologists Brock Ortega and Erin Bergman. A total of 73 native wildlife species, including 41 birds, 17 butterflies, 10 mammals, 2 amphibians, and 3 reptiles, were recorded during the biological reconnaissance surveys for the work area. Of the total 73 wildlife species observed during the biological surveys, 2 special-status species were observed directly adjacent to the work area: the coastal California gnatcatcher and the Southern California rufous-crowned sparrow. Additionally, Cooper's hawk has a high potential to utilize the habitat within the work area. For a cumulative list of all common and sensitive wildlife species observed and protocol survey information, refer to the BTR (Dudek 2023).

4.6.1 Coastal California Gnatcatcher (*Polioptila californica californica*)

Coastal California gnatcatcher is federally listed as threatened, a California species of special concern, and an MSCP covered species. Coastal California gnatcatcher breeds in lower elevations (less than 500 meters, or 1,640 feet, amsl) south and west of the Transverse and Peninsular Ranges (Atwood and Bolsinger 1992). Higher densities of this species occur in coastal San Diego and Orange Counties, and lower densities are found in Los Angeles, Orange, western Riverside, southwestern San Bernardino, and inland San Diego Counties (Atwood 1993; Preston et al. 1998). The coastal California gnatcatcher primarily occupies open coastal sage scrub habitat that is dominated by California sagebrush. This species is relatively absent from coastal sage scrub habitats dominated by black sage, white sage (*Salvia apiana*), or sugar sumac (*Rhus ovata*).

One coastal California gnatcatcher individual was observed in the coastal sage scrub habitat adjacent to the work area within the City of San Diego in April 2021. This individual is thought to have been moving through generally poor habitat to better habitat as it was never detected in that area again in 2021 or 2022 (Figure 3B). Suitable habitat within the work area has the potential to support the federally threatened coastal California gnatcatcher. This habitat is the dominant vegetation community within the work area.

4.6.2 Southern California Rufous-Crowned Sparrow (*Aimophila ruficeps canescens*)

Southern California rufous-crowned sparrow is a California Watch List species, and an MSCP covered species that inhabits open coastal scrub and chaparral with a low cover of scattered scrub interspersed with rocky and grassy patches. There are suitable grasslands and coastal sage scrub for this species to nest and forage within the 50-foot-wide buffer area.

Southern California rufous-crowned sparrow was observed on site during the biological surveys.

4.6.3 Cooper's Hawk (*Accipiter cooperii*)

Cooper's hawk is a California Watch List and an MSCP covered species. Cooper's hawks inhabit live oak, riparian deciduous, and other forest habitats near water. Breeding occurs from March through August, with peak activity in May through July. Males defend an area of about 330 feet around potential nest sites (Zeiner et al. 1990).

Cooper's hawk was not observed on site during the biological surveys; however, it is a covered MSCP species and has a high potential to utilize habitat within the work area. Refer to the BTR for more information (Dudek 2023).

5 Mitigation Work Plan

This section describes who will be responsible for each task and how the proposed compensatory mitigation program will be accomplished.

5.1 Project Implementation Personnel

5.1.1 Permittee/Project Manager

As the permittee, Nighthawk Energy Storage, LLC, will be responsible for mitigation and revegetation installation and successful implementation of this Plan. Project management will be provided by Nighthawk Energy Storage, LLC (or subsequent legal owners), who will be financially responsible for implementation and management of the proposed project.

5.1.2 Project Biologist

Nighthawk Energy Storage, LLC, will select a qualified Project Biologist who will review the environmental permits, documents, final Plan, and mitigation and revegetation construction documents, and help to ensure that all site protections, pre-work bird surveys, and any other required items are adequately performed prior to restoration work implementation.

The Project Biologist will perform site monitoring during mitigation implementation and throughout the 5-year maintenance and monitoring period. The Project Biologist will prepare mitigation annual reports with the required biological data and submit them to Nighthawk Energy Storage, LLC, and the City of San Diego. The Project Biologist will have a degree in biology, ecology, or related field, and will be able to demonstrate at least three successful similar restoration projects in San Diego County. The Project Biologist will possess at least 5 years of habitat restoration experience in Southern California.

5.1.3 Restoration Contractor

Nighthawk Energy Storage, LLC, will select a qualified Restoration Contractor to implement the mitigation installation work and provide subsequent restoration area maintenance. Restoration installation and maintenance work will be performed by a contractor who possesses a valid California landscape contractor's license (Class C-27) and who has previous experience with native habitat restoration in San Diego County and can demonstrate at least three successful similar restoration projects in San Diego County. The Restoration Contractor must be able to field implementation crew members who can identify San Diego County native plants and common weed species and demonstrate knowledge of habitat restoration techniques.

The Restoration Contractor will be responsible for conformance to this Plan and permit requirements for the project. The Restoration Contractor's responsibility for installation will continue until successful completion and final acceptance by Nighthawk Energy Storage, LLC, and the Project Biologist. The Restoration Contractor will not be released from contractual obligations for installation until written notification is received from Nighthawk Energy

Storage, LLC, that all required installation tasks as defined in the installation contract, final plans and specifications, this Plan, and the project permits have been successfully completed.

After initial installation and completion of implementation, a 5-year habitat maintenance program will be performed by a qualified Restoration Contractor who specializes in the maintenance and management of native habitat restoration and/or natural lands management. Maintenance work will be performed as indicated herein and per the Project Biologist's recommendations. Nighthawk Energy Storage, LLC, may choose to hire a maintenance contractor that is separate from the installation contractor or replace a contractor that fails to perform work satisfactorily.

5.1.4 Seed Supplier

Should seed need to be procured, the seed supplier must be a qualified commercial native plant seed supplier having collection sources from within the 25 miles of the restoration area and must have experience collecting seeds from native riparian and upland areas appropriate for the project.

Seed collection will follow sound ecological restoration practices. Any seed within areas of permanent impact may be collected to 100%. However, should seed need to be collected from within adjacent open space areas, no more than 5% of the available seed will be taken on any given year. The Project Biologist may substitute plant species as appropriate should the species listed in this Plan not be available at the time of collection or purchase. Seed collection will comply with all project permits and requirements.

5.2 Preliminary Design and Engineering

The restoration program includes approximately 1.67 acres of Diegan coastal sage scrub mitigation and the translocation of 78 impacted goldenstar (Figures 7A and 7B, Conceptual Restoration Plan and Figure 7C, Conceptual Translocation Plan). Additional restoration of Restoration will include topsoil removal prior to impacts and re-application once trenching has been completed. The grading plans and landscape design sheets include detailed information on the final state of the construction areas prior to restoration.

This restoration plan was prepared in accordance with the City of San Diego Landscape Standards (City of San Diego 2023) and habitat restoration and erosion control treatments shall be installed within disturbance areas and native habitat, in accordance with the San Diego's Biology Guidelines (City of San Diego 2018a), and San Diego Landscape Guidelines (City of San Diego 2023) and the City of San Diego's Biology Guidelines (City of San Diego 2018a). Additional details are described further in the following sections of this Plan.

5.3 Rationale for Expecting Success

Success will be largely dependent on native plant establishment and adequate treatment of invasive weeds to encourage the establishment of native annual and perennial species. Container plants will be installed to accelerate the establishment of native perennial species in the restoration project, and a native seed mix will be applied to provide initial colonization of native species in bare areas. Additionally, the seed mix will contribute to the existing seed bank and support long-term stability of habitat recovery.

The selected plant palette and seed mix includes species that occur within and adjacent to the project impact areas. Supplemental irrigation will be used during the first 3 years to aid in the establishment of native species from container

plants and seed. The implementation, maintenance, and monitoring tasks outlined in this Plan are anticipated to produce viable vegetation communities that augment the surrounding unimpacted native vegetation communities.

5.4 Mitigation Area Site Selection

Restoration Area 1 is a 0.57-acre area within the MHPA, Restoration Area 2 is a 1.05 acre area within the MHPA, and Restoration Area 3 is a 0.59 acre area within the MHPA (Figures 7a and 7b). An additional 0.32 acres of restoration are planned outside the MHPA area at Restoration Area 4. Final mitigation areas will be defined in the landscape plans, but this Plan assumes that the mitigation needs will be met through use of Restoration Area 1, partial use of Restoration Area 2 (total of 1.35 acres within the MHPA), and full use of Restoration Area 4 (0.32 acres outside the MHPA) for a total of 1.67 acres. Photos of the restoration areas are included in Appendix A and the photo point location are shown on Figure 7b.

Receptor locations for the 78 goldenstar to be translocated are adjacent to the existing populations and outside of project impact areas (Figure 7c).

5.5 Site Access

Consistent with the City's rights and duties as holder of Sycamore Estate's open space and conservation easements, including its right to enter the conserved areas to manage them, preserve them in their natural condition, protect them, and restore them when their natural condition is damaged by non-native intrusions, the City shall provide Nighthawk Energy Storage, LLC, or their designee access to perform the restoration work described herein.

5.6 Site Preparation

Site preparation will be conducted under direction from Nighthawk Energy Storage, LLC, and the Project Biologist. Specific site preparation tasks are outlined below. Prior to site preparation, photo points will be identified and pre-implementation photos taken to document site conditions prior to mitigation implementation.

Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits, Nighthawk Energy Storage, LLC, or their designee will provide written confirmation that a biological monitor approved by the City of San Diego has been retained. This biologist(s) will be present during clearing, grubbing, and/or grading activities to prevent disturbance to areas outside the limits of grading.

5.6.1 Avoidance and Minimization

Temporary fencing (with silt barriers) will be required at the limits of work for the restoration project to prevent inadvertent impacts to areas outside of the restoration area footprint.

Impacts from fugitive dust that may occur during filling and grading activities adjacent to the restoration project will be avoided to the maximum extent practicable and minimized through watering and other appropriate measures.

The Project Biologist will be on site to oversee installation of temporary fencing and any grading within 100 feet of existing wetland and non-wetland waters.

Equipment will be checked for leaks prior to operation and repaired as necessary. A spill kit for each piece of construction equipment will be on site and must be used in the event of a spill.

In order to avoid indirect impacts to sensitive resources, the project would be required to meet National Pollutant Discharge Elimination System regulations; incorporate best management practices (BMPs) during construction; and install permanent BMPs in accordance with the City's Storm Water Standards Manual (City of San Diego 2018b).

As discussed in Section 3.3, all special-status species within the work area will be avoided to the maximum extent practicable. The populations of San Diego goldenstar will be flagged and avoided where possible. Impacted San Diego goldenstar will be translocated according to this 5-year restoration plan.

To avoid any direct impacts to nesting birds such as Coastal California gnatcatcher, Southern California rufous crowned sparrow, and Cooper's hawk, construction activities shall occur outside the breeding season (February 1 to September 15). If construction activity is scheduled during the general bird breeding season, a qualified biologist shall conduct a preconstruction survey to determine the presence or absence of nesting birds within the proposed work areas and 50-foot-wide buffer area. The preconstruction survey shall be conducted within 3 calendar days prior to the start of construction activities. See the BTR for additional information on nesting bird surveys and protocol California gnatcatcher surveys (Dudek 2023).

In addition, the project would be required to adhere to all standard construction protection measures listed in the project's mitigation monitoring and reporting plan (MMRP), which includes having a qualified biologist present to supervise flagging of sensitive resources prior to construction, to provide environmental training, and to be present during construction to ensure no unauthorized impacts occur.

5.6.1.1 Fencing

Temporary fencing along the perimeter of restoration project shall be placed adjacent to sensitive vegetation communities or other biological resources as identified by the Project Biologist in accordance with the BTR (Dudek 2023). All temporary fencing shall be shown on grading plans and will serve as the boundary limits and to discourage pedestrian entry into restoration areas. The temporary fencing will remain in place for the duration of the 5-year maintenance and monitoring period and shall be removed following successful completion of restoration. Temporary fencing shall consist of metal T-post stakes with yellow nylon rope. Use of plastic construction fencing (snow fencing) is not permitted.

5.6.1.2 Special-Status Plant Species

All special-status plant species shall be avoided during site preparation, implementation, and site maintenance to the maximum extent practicable. Restoration actions shall not take place beyond the approved restoration areas; therefore, no additional impacts to special-status plant species are anticipated.

5.6.1.3 Special-Status Wildlife Species

Impacts to special-status wildlife species are not anticipated to occur during implementation of the mitigation program. Implementation of this Plan is anticipated to take place outside of the bird nesting season (typically February through September). However, if any work involving heavy equipment is required during the nesting bird season, nesting bird surveys shall be required within 3 days prior to work and within 300 feet of the work area.

Implementation and maintenance staff shall be trained to identify sensitive wildlife species and their habitats so as not to disturb species during implementation and maintenance activities.

5.6.2 Topsoil Translocation

The contractor shall salvage native topsoil from the trenching footprint as determined by the Project Biologist. Prior to soil salvaging, the native vegetation will be crushed, if necessary, with bulldozers or other appropriate equipment, to facilitate removal by standard earth moving equipment. Most vegetation can be adequately crushed by track walking over it several times. Larger diameter material may need to be handled separately and cut with chain saws into manageable sizes. Any larger diameter material will be stockpiled separately from the soil.

Topsoil, along with the crushed vegetation, will be salvaged to a depth of six inches using standard earth moving equipment. The salvaged topsoil shall be deposited in a designated location where it shall be kept segregated from any other stockpiled material. Nighthawk Energy Storage, LLC shall be responsible for designating an area for the contractor to store topsoil. The topsoil shall be kept in windrows no more than three feet deep and 12 feet wide. The windrows shall not be compacted.

Once trenching of the project has been completed, the salvaged topsoil and organic debris shall be spread over the impact area to provide topsoil, organic matter, and any soil biota it may contain. The depth of this layer will depend on the amount of material salvaged. The surface layer shall be track walked and shall not be smoothed. Once completed, any stockpiled large diameter material will be scattered throughout Restoration Area 4. Surplus topsoil from impact areas with high quality habitat may be used at restoration areas 1, 2, and 3 as directed by the Project Biologist.

5.6.3 Plant Salvage for Translocation

The primary translocation method to be used for relocating the goldenstar will be the “block salvage method.” This translocation methodology involves removing large blocks of soil containing the goldenstar corms from the salvage site and relocating them to a suitable receptor site. Entire blocks of soil containing the goldenstar corms will be removed prior to initial ground disturbance. Soil blocks will be removed in up to 1-meter by 1-meter pieces at a depth of 12–18 inches using heavy equipment. A CAT 279 rubber-tracked multi-terrain loader with a seven-foot by two-foot bucket (or similar) will be used to excavate the soil blocks. Occasionally, manual removal, using a shovel or similar tool, is used on small occurrences, or on scattered individuals.

Soil blocks will be removed as part of topsoil removal and stockpiling during initial ground disturbing activities. To the extent feasible, soil block salvage will occur outside of the growing season when the soil is dry and the subject species are dormant. Soil blocks will be removed in a grid-like pattern from a portion of the suitable habitat for the goldenstar will be impacted. Areas of suitable habitat in non-impact areas that are left in place will be included in the monitoring for the goldenstar. In addition, efforts will be made to minimize impacts to these areas, including limiting the size of the impact area in suitable habitat.

5.6.4 Seed Collection

Native seed shall be collected and/or sourced from local sources originating within 25 miles of the restoration project, as practicable. The preferred seed collection location is within upland areas within the proposed work area and areas adjacent to the restoration project that are proposed to be impacted by the project (see Figures 3A and 3B). Seed

shall be collected for seeding as well as for container plant propagation. Seed shall be mixed and container plants shall be grown and propagated at a reputable native plant nursery.

The species proposed in Tables 5 and 6 are selected to provide similar species diversity and appropriate functions and services as compared to impacted vegetation. The seed palettes have been designed to include a mixture of native grasses, forbs, and low-growing shrubs adapted to the target restoration areas. Plants with different germination responses, water affinities, and growth forms have been chosen to provide plant growth under a wide range of conditions that may occur in the restoration project. The two seed mixes differ based on the locations that they would be used within. It is possible given the availability of more mitigation area than required that the final area of application of each seed mix will differ in the final landscape plans.

Some species may not be available as seed at the time of initial installation. Those species may be obtained when available and installed at a later date. Substitutions, other donor sites, or use of commercial material may be allowed if materials are unavailable, under direction of the Project Biologist.

Pure live seed recommendations are shown in Tables 5 and 6; however, if the available seed differs from specified purity and germination rates presented herein, the total pounds per acre rates shall be adjusted accordingly to achieve the specified pounds of pure live seed.

Table 5. Coastal Sage Scrub Seed Mix (Restoration Areas 1, 2 (partial), 4 - Approximately 1.67 Acres)

Botanical Name	Common Name	Percent Purity/ Germination ^a	Application Rate (Pounds per Acre)
<i>Acmispon glaber</i>	deerweed	95/80	2
<i>Artemisia californica</i>	California sagebrush	25/80	3
<i>Baccharis sarothroides</i>	broom baccharis	5/40	1
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	San Diego sand-aster	2/4	2
<i>Deinandra fasciculata</i>	fascicled tarweed	10/25	3
<i>Diplacus puniceus</i>	coast monkey flower	2/60	3
<i>Dipterostemon capitatus</i>	blue dicks	90/80	1
<i>Encelia californica</i>	California encelia	40/60	3
<i>Eriogonum fasciculatum</i>	California buckwheat	10/65	2
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	Long-stem golden-yarrow	30/50	2
<i>Hazardia squarrosa</i> var. <i>squarrosa</i>	sawtooth goldenbush	10/20	2
<i>Isocoma menziesii</i>	coastal goldenbush	20/35	2
<i>Melica imperfecta</i>	coast range melic	80/60	2
Total			28

Note:

^a Seed purity and germination can vary across collections. The purity and germination rates shown are typical of each species.

Table 6. Coastal Sage Scrub Seed Mix (Restoration Area 3 - If-Needed)

Botanical Name	Common Name	Percent Purity/ Germination ^a	Application Rate (Pounds per Acre)
<i>Artemisia californica</i>	California sagebrush	25/80	3
<i>Cercocarpus minutiflorus</i>	San Diego mountain-mahogany	50/70	4
<i>Diplacus puniceus</i>	coast monkey flower	2/60	5
<i>Dipterostemon capitatus</i>	blue dicks	90/80	1
<i>Encelia californica</i>	California encelia	40/60	5
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	golden-yarrow	30/50	3
<i>Malosma laurina</i>	laurel sumac	98/62	2
<i>Melica imperfecta</i>	coast range melic	80/60	2
<i>Mirabilis laevis</i> var. <i>crassifolia</i>	coastal wishbone plant	90/50	2

Table 6. Coastal Sage Scrub Seed Mix (Restoration Area 3 - If-Needed)

Botanical Name	Common Name	Percent Purity/ Germination ^a	Application Rate (Pounds per Acre)
<i>Stipa pulchra</i>	purple needlegrass	20/50	6
Total			33

Note:

^a Seed purity and germination can vary across collections. The purity and germination rates shown are typical of each species.

5.6.5 Weed Control

To the maximum extent practicable, this mitigation program should begin in the fall after nesting bird season. As part of site prep, dead thatch, deadwood, and other organic litter will be removed. Weed control will be conducted. Maintenance crews will be trained to identify native plant species for avoidance of volunteers that recruit into the restoration areas.

Weed control will include hand-pulling of weeds, use of hand tools, use of line-trimmers, and/or foliar treatments of appropriate herbicides as determined by the Project Biologist. Specific herbicide application rates and methods will be based on manufacturer specifications, and will follow the general guidelines summarized below:

- Application methods will follow manufacturer’s specifications regarding application and safety procedures. Herbicide application will comply with state and local regulations. All application tasks will be performed by or under supervision of a licensed applicator with the Pest Control Business License issued by the State of California Department of Parks and Recreation and registered with the County Agricultural Commissioner.
- Herbicide Application will consist of (1) spot applications to individual plants where weed coverage is sparse and (2) broadcast applications to dense patches of weed species where native species are not establishing. Applications will be uniform and complete. Contact with native species must be avoided; in the event of gusty winds or winds in excess of 5 mph, application work will be temporarily discontinued to protect applicators and adjacent natural resources from herbicide drift. Treatment will not occur if rainfall is predicted and will be temporarily discontinued in the event of rainfall because rainfall reduces the effectiveness of the herbicide.
- Sprayed vegetation will be left undisturbed for 7 days to allow the herbicide to be distributed throughout the entire plant. Visible effects of herbicide application consist of wilted foliage, brown foliage, and disintegrated root material.
- Excessive dead weed materials will be removed from the soil surface and disposed of off site.

5.6.6 Irrigation Source

Long term, the restoration project will receive hydrologic inputs from rainfall and shallow groundwater.

During the maintenance and monitoring periods for the restoration areas, a temporary aboveground irrigation system may be designed and installed to supplement natural rainfall to facilitate survival of the container plantings. This irrigation system would be used whenever there is not sufficient or frequent enough rainfall to support establishing plants, particularly if there is a dry winter and/or spring season.

If a permanent water source is not available at the time the mitigation plantings need to be implemented, then the irrigation system may be designed to be remotely supplied by a water truck or the plants shall be directly watered from a water truck using hoses.

5.6.7 Erosion Control Best Management Practices

BMPs are schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention, educational practices, maintenance procedures, and other management practices to prevent or reduce, to the maximum extent practicable, the discharge of pollutants directly or indirectly to receiving waters. It is the responsibility of Nighthawk Energy Storage, LLC, or his/her designee (Restoration Contractor) to select, install, and maintain appropriate construction BMPs. BMPs are used to effectively reduce the mobilization and transport of sediments from the restoration areas during initial implementation and during the maintenance and monitoring period. Suitable BMPs shall be installed based on site conditions in accordance with the stormwater pollution prevention plan and the City of San Diego’s Storm Water Standards (City of San Diego 2018b).

5.7 Implementation Installation

5.7.1 Plant Palette

The restoration project will utilize native species that are appropriate to the site context and mitigation and revegetation goals. The intent of the plant palette is to create a diverse assemblage of native species that will provide improved habitat functions. While the final plant quantities will be defined in the landscape plans Table 7 holds the recommended planting density that should be followed.

Table 7. Coastal Sage Scrub Plant Palette (Approximately 1.67 Acres Total)

Botanical Name	Common Name	Container Plants	Average Spacing (Feet on Center)	Plant Groupings	Total (1.67 Acres) ^a
<i>Artemisia californica</i>	California sagebrush	1 gallon	5	3	200
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	San Diego sand-aster	1 gallon	4	3	30
<i>Encelia californica</i>	California encelia	1 gallon	5	5	200
<i>Eriogonum fasciculatum</i>	California buckwheat	1 gallon	5	5	200
<i>Hazardia squarrosa</i> var. <i>squarrosa</i>	sawtooth goldenbush	1 gallon	4	3	81
<i>Hesperoyucca whipplei</i>	chaparral candle	1 gallon	4	3	45
<i>Isocoma menziesii</i>	coastal goldenbush	1 gallon	5	5	150

Table 7. Coastal Sage Scrub Plant Palette (Approximately 1.67 Acres Total)

Botanical Name	Common Name	Container Plants	Average Spacing (Feet on Center)	Plant Groupings	Total (1.67 Acres) ^a
<i>Malosma laurina</i>	laurel sumac	1 gallon	6	1	45
<i>Melica imperfecta</i>	coast range melic	1 gallon	4	3	45
<i>Opuntia littoralis</i>	coastal prickly-pear	1 gallon	5	5	100
<i>Salvia apiana</i>	white sage	1 gallon	5	3	200
<i>Salvia mellifera</i>	black sage	1 gallon	5	3	200
Total					1,496

Notes: N/A = not applicable.

^a This table assumes that 1.35 acres will be mitigated within the MHPA and 0.32 acres will be mitigated outside the MHPA for a total of 1.67 acres.

5.7.2 Container Plant Installation

Implementation of this Plan must be coordinated with the Restoration Contractor, Nighthawk Energy Storage, LLC, and Project Biologist. Plant species and quantities will be confirmed upon arrival at the project site, and all container plants will be checked for viability and general health by the Project Biologist. Plant materials not meeting acceptable standards of health as determined visually by the Project Biologist will be rejected. Reasons for rejection of plant material may include plants that show signs of damaged foliage or stalks, diminutive stature, or signs of disease or pests, and plants that are rootbound in the container.

Planting design and container plant layout will be randomly patterned (as opposed to planted in rows) to create a natural patchiness that is typical within the target plant community. The Restoration Contractor will lay out container plants in groupings by species as described in the plant palette. Plant species that require more water will go into the areas that are anticipated to be wetter and plant species that require less water will be placed in drier areas. The Project Biologist will inspect the locations and adjust placement of groupings, if necessary.

Standard planting procedures will be employed for installing container plants, including holes approximately twice the width of the rootball of the plant and slightly deeper than rootball. If insufficient soil moisture is present, holes will be filled with water and allowed to drain immediately prior to planting. Backfill soil containing amendments (as defined by the landscape construction documents and as directed by the Project Biologist) will be placed in every planting hole following soaking. Plants will be thoroughly watered following planting to settle backfill soil around the plant rootball.

5.7.3 Native Seed Application

The seed mixes shown on Tables 5 and 6 will be applied after initial container planting is complete. Labels for each seed bag delivered to the restoration project will be inspected and approved by the Project Biologist prior to mixing and application. Seed application will consist of hydroseeding. If any species are not available at the time of the initial seeding, they may be substituted by the Project Biologist or acquired when available and

hand broadcast at a later date. If seed needs to be stored temporarily, all seed mixes will be stored in a dark, cool, and dry storage location.

Application of seed from October to the end of December is ideal for establishment during the cooler and wetter time of the year. However, seed application timing may be modified as directed by the Project Biologist to avoid loss in stormflow events or to take advantage of predicted rain events. Diegan coastal sage scrub seed mix will be placed throughout the mitigation and revegetation areas as shown on Figures 7A and 7B.

5.7.4 Goldenstar Translocation

Goldenstar translocation will occur in conjunction with the restoration activities. Prior to goldenstar translocation, the receptor sites will be weeded and dethatched as necessary to remove any non-native plant species within the area. The excavated soil blocks will be deposited at the receptor site immediately following excavation. At the specified receptor site, soil is excavated to a depth equal to the depth of the soil blocks to be deposited there. Depending on the size and depth of the soil, this will be accomplished by hand with shovels (which is the preferred method), or may include the use of small, mechanized equipment such as a trencher, mini-excavator, or small backhoe. Soil will be placed in the prepared areas by hand and then backfilled with soil removed during preparation. Depending on the timing of the transplant and site conditions, the soil patches may be watered after installation.

At the specified receptor site, the surface grade will be adjusted so that when the blocks are placed, the finish contours match the surrounding elevations. Soils used to adjust the surface grade will be native soils obtained onsite that are unoccupied by goldenstar.

After the soil blocks are installed, gaps between blocks are filled in with native soil and compacted to prevent the formation of cracks or air pockets. The final step in the transplantation procedure is watering-in the soil blocks. This helps to settle the soil, fill air pockets and seal off the soil surface. A follow-up visit may be necessary to spread additional native soil over the surface to fill in gaps, holes or depressions that result from the additional soil settling.

The designated receptor site is located onsite directly adjacent to the existing goldenstar outside of the impact area (Figure 7c). The majority of the area at the receptor site consists of the same soil and habitat as the area where goldenstar occurs. The impact area will be within a utility easement that will not be used for translocation and will not be considered part of the preserve acreage. The preserve area was designed to have capacity for all of the goldenstar onsite, with at least a 10-foot buffer surrounding the perimeter.

Because there are unique conditions at each salvage location related to existing soils, topography and vegetation, the best techniques for translocating goldenstar at individual sites may vary. Modifications to the proposed procedure may be made in the field by the supervising biologist based upon actual field conditions to improve the effectiveness of the salvaging procedure. Modifications to the proposed procedure or methodology may consist of, but are not limited to, adjusting the depth of the soil blocks, varying the size of the soil blocks, utilizing an additional piece of equipment, changing the type of equipment used, or altering the size of the areas to be excavated based upon actual subsurface conditions encountered.

6 120-Day Plant Establishment Period

During the first 120 days following completion of installation, the Restoration Contractor will be responsible for the health and mortality of the installed plant material. The Project Biologist will visit the restoration areas at 30, 60, 90, and 120 days during this plant establishment period (PEP). At the 90-day visit, the Project Biologist will observe site conditions and seed germination and will provide a punch-list of replacement plants for the Restoration Contractor. Generally, plants will be recommended for in-kind replacement; however, the Project Biologist may recommend alternative species if it is suspected that the site is unsuitable for certain species. Plants noted for replacement will be installed prior to the 120-day walkthrough with the Project Biologist. Plants must be in the ground at least 30 days prior to completion of the PEP. At the 120-day PEP, the Restoration Contractor is responsible for guaranteeing that the installed plant material will have a 100% survival rate. As a part of this period, the Restoration Contractor who performs the installation is contractually obligated to guarantee their workmanship and perform remedial measures to fix any observed problems as necessary before the 120-day PEP is considered complete and the work transitions into the 5-year maintenance and monitoring period. The following criteria must be met for the 120-day PEP to be considered successful:

1. Areas relatively free of weeds (0% cover of California Invasive Plant Council Inventory weed species and less than 10% cover of all other weed species)
2. Areas free of debris
3. No erosion or trash
4. 100% survivorship of container plants

A PEP schedule is provided in Table 8.

Table 8. Plant Establishment Period Maintenance Schedule

Work Task	1-30 Days	31-60 Days	61-90 Days	91-120 Days
Weed abatement	X	X	X	X
Site protection and signage	X	As needed	As needed	As needed
Plant replacement	As needed	As needed	As needed	As needed
Re-seeding	As needed	As needed	As needed	As needed
Supplemental water	X	X	X	X
Erosion control	X	X	X	X
Pest and herbivory control	X	X	X	X
Vandalism repair	As needed	As needed	As needed	As needed
Site cleanup and maintenance	X	X	X	X

6.1.1 Goldenstar Translocation

The receptor site will be evaluated and maintained during the 120-day PEP. Tasks to be completed during the PEP include:

- Photo documentation of goldenstar growing in goldenstar plots

- Visual estimates of goldenstar abundance (once a month)
- Hand removal of native and nonnative plants from the goldenstar plots
- Removal of trash and/or debris within the plots
- Plot assessments including: irrigation quality, signs of herbivory, and plant health
- Preparation of a letter report summarizing activities and results and recommendations

The PEP will begin immediately following completion of goldenstar transplantation. During the PEP, the site will be visited weekly during the first 2 months and every 2 weeks during the third and fourth months. At the end of the PEP, a letter report that summarizes activities and data collected will be prepared for submittal to the appropriate agencies.

Goldenstar translocation should achieve 75 percent survival of transplanted goldenstar. For example, if the original population count is to 78 aerial shoots, then 75 percent survival at the end of the 120-day PEP would be equal to 59 aerial shoots.

INTENTIONALLY LEFT BLANK

7 Maintenance Plan

Maintenance activities will begin upon completion and approval of installation work. The Restoration Contractor’s maintenance activities will be performed as indicated herein and as necessary to meet the established performance standards.

7.1 5-Year Maintenance Activities and Schedule

Maintenance activities will be directed by the Project Biologist to correct any deficiencies. Following installation, during the 120-day PEP, maintenance activities will be conducted monthly; Years 1 through 5 maintenance activities will be conducted quarterly. Regardless of the schedule below, more frequent maintenance and monitoring will be conducted if needed to meet the performance standards indicated herein. A schedule is shown in Table 9.

Table 9. 5-Year Maintenance Schedule

Task ^a	Implementation through 120-day PEP	Year 1	Year 2	Year 3	Year 4	Year 5
Weed and pest control ^b	Monthly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly
Plant replacement ^c	—	As needed; conducted in Oct–Dec	As needed; conducted in Oct–Dec	As needed; conducted in Oct–Dec	As needed; conducted in Oct–Dec	As needed; conducted in Oct–Dec
Supplemental water ^d	As needed	As needed	As needed	As needed	—	—
General site maintenance	Monthly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly
Erosion control	Monthly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly
Trash removal	Monthly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly

Notes:

- ^a Maintenance task schedule and frequency will be adjusted, as appropriate, depending on site conditions and in coordination with the Project Biologist. It is anticipated that more intensive maintenance will occur during the first few years and taper down as the work approaches Year 5.
- ^b Any maintenance performed during the nesting season (January 15–September 15) will be conducted under direction of the Project Biologist.
- ^c Should extensive planting be required in Years 4 and 5, even due to unforeseen circumstances, the mitigation and monitoring program may be required to be extended.
- ^d Only to be performed as needed during the first 3 years of the 5-year program, depending on site conditions. No supplemental watering will occur for 2 years prior to completion of the maintenance and monitoring period.

7.2 Weed Management

The Restoration Contractor will coordinate with the Project Biologist to identify weeds for removal as needed. Non-native plant control measures will primarily include the application of approved herbicides. Mechanical or hand control methods will be used where herbicide cannot be used or the level of weeds does not warrant the use of herbicides. Should mechanical or hand control methods be used, weeds will be pulled and/or cut when plants are 6–12 inches tall or when they can be positively identified, and prior to the formation of seed heads.

Chemical herbicide control will be used for both annual and perennial species. Herbicide treatments must be pre-approved by the Project Biologist and applied by a licensed or certified pest control applicator. Application of herbicide will be suspended should precipitation be expected to occur within 24 hours of application and/or if wind exceeds 6 mph. Specific herbicide application rates and methods will be based on manufacturer specifications and will follow the general guidelines summarized in Section 5.4.4, Weed Control.

Table 10 shows the non-native plant species that will be targeted during site preparation and maintenance, as well as potential methods for removal and control. Additional weed control information is provided in Section 5.4.4.

Table 10. Non-Native Plant Target Species and Treatments

Weed Species		Potential Control Methods				
Botanical Name	Common Name	De-Thatch	Herbicide	Hand Pull	Mowing	Cut and Treat
<i>Brassica nigra</i>	black mustard	X	X	X	X	
<i>Bromus hordeaceus</i>	softchess brome	X	X	X	X	
<i>Bromus madritensis</i>	compact brome	X	X	X	X	
<i>Bromus rubens</i>	red brome	X	X	X	X	
<i>Carpobrotus edulis</i>	hottentot-fig		X	X		X
<i>Centaurea melitensis</i>	star-thistle	X	X	X	X	
<i>Cortaderia selloana</i>	Pampas grass		X		X	X
<i>Erodium botrys</i>	broad leaf filaree	X	X	X	X	
<i>Eucalyptus camaldulensis</i>	river red gum		X	X		X
<i>Eucalyptus globulus</i>	blue gum		X	X		X
<i>Eucalyptus spp.</i>	eucalyptus		X	X		X
<i>Foeniculum vulgare</i>	sweet fennel		X	X		
<i>Hypochaeris glabra</i>	smooth cat's ear	X	X	X	X	X
<i>Nicotiana glauca</i>	tree tobacco		X		X	X
<i>Phoenix canariensis</i>	Canary Island date palm		X			X
<i>Salsola tragus</i>	tumbleweed					
<i>Schinus terebinthifolius</i>	Brazilian pepper tree		X			X
<i>Sonchus oleraceus</i>	common sow-thistle	X	X	X	X	X
<i>Tamarix ramosissima</i>	saltcedar		X			X

Table 10. Non-Native Plant Target Species and Treatments

Weed Species		Potential Control Methods				
Botanical Name	Common Name	De-Thatch	Herbicide	Hand Pull	Mowing	Cut and Treat
<i>Washingtonia robusta</i>	Mexican fan palm		X			X

7.3 Pest and Herbivory Management

If any plant diseases or pests become significant enough to warrant control, the Restoration Contractor will consult with the Project Biologist along with a licensed pest control adviser for specific control measures, which will be conducted following all applicable laws, regulations, label directions, and safety precautions, as well as in coordination with the citywide Integrated Pest Management Plan. Pest control will be performed by the Restoration Contractor using the least toxic method available, such as washing pests off plants with a strong stream of water, using insecticidal soap, or installing plant protection devices.

Some herbivory (grazing and browsing) is expected to occur within the restoration project. However, the Restoration Contractor will confer with the Project Biologist if significant plant mortality and/or reduction in overall cover occurs. Remedial measures, such as browse guards (plastic fencing/wire cages) or plant collars (collars made of plastic, peat, or paper), may be installed around the base of trees and young shrub plants in affected areas to reduce plant mortality.

7.4 General Site Maintenance

Pruning or clearing of native vegetation will generally not be allowed within the restoration project except as directed by the Project Biologist. Native dead biomass and plant litter will not be removed and will be left in place unless its removal is required for a specific management objective. Native organic biomass and leaf litter provide valuable microhabitats for terrestrial invertebrates, reptiles, small mammals, and birds. In addition, the decomposition of plant material is essential for the replenishment of soil nutrients and minerals. Fertilizers will not be used unless deemed necessary by the Project Biologist to rectify a specific nutrient deficiency.

Trash will be removed from the restoration project by the Restoration Contractor on a regular basis. Trash consists of all anthropogenic (human-generated) materials, equipment, or debris dumped, thrown, washed, blown, or left within the restoration area.

7.5 Erosion and Sedimentation

BMPs are not anticipated to be needed after vegetation has established in the restoration area. However, temporary BMPs, such as burlap fiber rolls, silt fence, and burlap gravel bags, will be maintained as needed for proper function until the mitigation areas have been stabilized, reached Year 3, or until the Project Biologist has deemed the BMPs unnecessary. Once the restoration project is stabilized by native vegetation, the Restoration Contractor will not be required to repair temporary BMPs and they may be left to decompose in place. If, after Year 3, there is active erosion or sedimentation within or directly adjacent to the mitigation areas, the Project Biologist will use the methods and protocols set forth in Section 10, Adaptive Management Plan, of this Plan.

8 Ecological Performance Standards

Performance standards for vegetation cover are regarded as interim objectives designed to achieve the final mitigation goals and will be used to assess the annual progress of the mitigation program. Annual performance standards are provided to serve as a benchmark toward achieving the final success criteria and mitigation goals. These interim performance targets will be used to assess the progress of the mitigation program each year.

Monitoring will be conducted qualitatively and quantitatively by the Project Biologist to determine if the restoration project is meeting the established criteria. Table 11 summarizes the annual performance standards through the five-year maintenance and monitoring period. If the restoration project fails to meet the performance standard in any given year, the Project Biologist will recommend remedial actions to bring the restoration project to a level of satisfactory establishment.

8.1 Restoration Area Performance Standards

Native cover of the mitigation areas is expected to be 70% or greater relative to the reference site by the end of Year 5, with native species richness of 10 or more, 10% or less absolute cover by general non-native species (such as annual weeds), and 5% absolute cover by perennial invasive plant species, as shown in Table 11. All non-native weed species will be controlled as part of the maintenance effort.

Table 11. Restoration Area Performance Standards

Year	Native Species Richness	Native Species Plant Cover (Percentage Relative to the Reference Site) ^a	Container Plant Percent Survival	Maximum Percent Total Non-Native Cover	Maximum Percent Cal-IPC Perennial Invasive Species
1	5	20	100	20	0
2	6	30	90	20	0
3	7	50	80	10	0
4	9	60	80	10	0
5	10	70	80	10	0

Notes: Cal-IPC = California Invasive Plant Council.

^a In-kind natural recruitment of native plants through seedling germination can serve to compensate for container plant mortality.

8.2 Translocation Area Performance Standards

The goldenstar translocation area will be subject to the following performance standards (Table 12).

Table 12. Goldenstar Translocation Performance Standards

Year	Survivorship ^a	Remedial Measures
1	90%	100
2	85%	90

Table 12. Goldenstar Translocation Performance Standards

Year	Survivorship ^a	Remedial Measures
3	85%	80
4	80%	80
5	75%	80

Notes: Cal-IPC = California Invasive Plant Council.

^a Proportion represents the abundance observed in that year relative to the original abundance of individuals translocated.

8.3 Reference Sites

Two reference sites will be identified within adjacent areas for comparison of the mitigation area conditions to natural conditions. The reference sites will fall within Diegan coastal sage scrub habitat and occupied goldenstar habitat. The City of San Diego must review and approve reference sites to be used. A justification for the selected reference sites and considerations of their representativeness will be provided in the first annual monitoring report. The reference sites will be used to determine if progress of the restoration area is consistent with response of the reference sites to prevailing weather and environmental conditions.

9 Monitoring Plan

The Project Biologist will perform mitigation monitoring throughout the five year maintenance and monitoring period to ensure the restoration program requirements are adhered to, to document the revegetation and mitigation efforts progress toward the annual performance standards, and to ensure that site maintenance is being adequately performed by the Restoration Contractor. The monitoring methods for the restoration program will be conducted as outlined below.

9.1 Monitoring and Reporting Schedule

Monitoring will consist of monthly qualitative site visits during the 120-day PEP and quarterly visit for Years 1 through 5 (Table 13). Quantitative monitoring will be conducted by the Project Biologist to determine if the site is on track to meet the annual performance standards. If mitigation efforts fail to meet the performance standards in any given year, the Project Biologist will recommend remedial actions to bring the restoration area into alignment with the performance standards.

Table 13. Monitoring and Reporting Schedule

Task	120-Day PEP	Year 1	Year 2	Year 3	Year 4	Year 5
Qualitative monitoring	At 30-, 60-, 90-, and 120-day PEP	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly
Quantitative restoration monitoring	N/A	Annually in spring	Annually in spring	Annually in spring	Annually in spring	Annually in spring
Quantitative Translocation Abundance Monitoring	N/A	Annually in spring	Annually in spring	Annually in spring	Annually in spring	Annually in spring
Reporting	As-built; site observation; 120-day PEP	Site observation annual (Jan)	Site observation; annual (Jan)	Site observation; annual (Jan)	Site observation; annual (Jan)	Site observation; annual (Jan)

Notes: PEP = plant establishment period; N/A = not applicable.

9.2 As-Built Report

Within 45 days of successful completion of the installation of planting and hydroseeding, the Project Biologist will submit a post-construction memorandum to the City of San Diego documenting the completion of the irrigation installation, container plant installation, and hydroseed application describing the “as-built” conditions of the restoration areas (As-Built Report). The report will include a copy of the reduced set of construction drawings and a figure showing the final “as-built” limits of the restoration area. Photographs will be included in the As-Built Report to document conditions at the site at the completion of the initial phase of implementation. The As-Built Report will include the following:

- Date(s) work was initiated and completed
- Summary of compliance work completed during implementation
- Color photographs (including maps of photo points) taken at the restoration area before and after construction
- One copy of the as-built drawings for the mitigation and revegetation areas
- Schedule for future monitoring and reporting

9.3 120-Day Plant Establishment Period and Report

The Project Biologist will visit the mitigation and restoration areas at approximately 30, 60, 90, and 120 days during the PEP. The Project Biologist will coordinate with the Restoration Contractor to replace any native plants that have died during the PEP. Generally, plants will be recommended for in-kind replacement; however, the Project Biologist may recommend alternative species if it is determined that certain species have higher survivorship. Plants noted for replacement will be installed prior to the 120-day walkthrough with the Project Biologist.

The following criteria must be met for the 120-day PEP to be considered successful, the results of which will be documented in the 120-day PEP report:

- All target invasive plant species removed or killed in place
- Areas free of debris and trash
- Areas free of erosion
- 100% survivorship of container plants

9.4 Qualitative Monitoring

Qualitative monitoring of the mitigation areas will include assessment of native container plant health and vigor, need for replacement planting, seed germination, plant pests, level of non-native plant infestation, site disturbance, wildlife usage, need for erosion repair, and need for trash removal. Any recommended remedial measures will be reported to Nighthawk Energy Storage, LLC, and the Restoration Contractor for immediate consideration and implementation.

Following each site visit, the Project Biologist will generate a brief site observation report indicating the condition of the site and any maintenance and/or remedial actions needed to help ensure the mitigation program meets its annual performance goals. Although no focused wildlife surveys will be conducted, wildlife usage will be documented. Copies of the site observation report will be provided to Nighthawk Energy Storage, LLC, and the Restoration Contractor.

9.5 Quantitative Monitoring

9.5.1 Restoration Area Monitoring

Quantitative monitoring will be used to assess vegetation establishment within the mitigation areas. Annual quantitative monitoring will be conducted in the spring of each monitoring year during the peak of the growing season. Mitigation and reference transect locations will be established by the Project Biologist during the first year

after installation completion in representative locations. The goal of the transect placement is to capture data representative of the larger context that the transect results are meant to represent. The specific placement of the individual transects will be randomized within target locations determined by the Project Biologist. At a minimum, two transects per acre of mitigation area will be established. Additional transects may be added if necessary.

In addition to quantitative monitoring of the mitigation areas, two permanent transects within the reference site will be established adjacent to the mitigation area and monitored in Years 1, 3, and 5, following the same methods as the mitigation area (outlined below).

Transect beginning and end points will be permanently marked by two 4-foot metal T posts driven into the ground, and GPS coordinates recorded for each position. Transects will be sampled using the point-intercept method, which is a modification of the line-intercept method (Canfield 1941). To collect data, a transect tape will be run between two posts 25 meters (82 feet) apart (or an appropriate length determined by the Project Biologist based on spatial feasibility of the polygon). A vegetative intercept line will be visually projected above and below the tape at every 0.5-meter (1.6-foot) mark for a total of 50 intercepts per 25-meter transect. Each herb, shrub, and tree that intercepts the projected line will be recorded by species. Due to the potential for vegetation to overlap in each strata layer at a given sample point, more than one plant may be recorded per sample point. This can result in a greater number of plant occurrences recorded than total number of sampling points. To address this overlap, data will be recorded as “absolute cover” in addition to “relative cover.” All species occurring within a 4-meter (13-foot) species richness belt, 2 meters (6.6 feet) on either side of the transect tape, will be recorded for inclusion in species richness data.

Native cover, non-native cover, and species richness will be calculated for the mitigation areas and compared to the success criteria annually. Quantitative monitoring will be conducted once annually in the spring beginning in Year 1 and extending through Year 5 of the mitigation program. Data regarding native cover for the mitigation areas and reference sites will be compared via their mean values. This will allow the mitigation areas to be compared to healthy native vegetation communities while accounting for natural fluctuations between years.

Permanent photo-documentation stations will be established along each transect to record the progress of quantitative data collection over the 5-year period. Additionally, photographs will be taken of any significant management issues or biological observations, including photographs of changing conditions within the mitigation areas. Photos from photo-documentation points and mapped locations will be included in annual reports.

9.5.2 Translocation Area Monitoring

Visual estimates of the total number of goldenstar shoots will be documented in the spring of each year. This data will be compared to the reference sites and included in the annual report.

9.6 Annual Monitoring Reports

An annual biological monitoring report outlining the results of the progress of the mitigation and revegetation areas will be prepared by the Project Biologist and submitted to Nighthawk Energy Storage, LLC, and the City of San Diego no later than December 1 of each year. The annual monitoring reports will describe the existing conditions of the restoration areas derived from qualitative and quantitative data, provide a comparison of annual performance standards with field conditions, identify all shortcomings of the mitigation program, and recommend remedial

measures and/or adaptive management necessary for the successful completion of the restoration program. Each annual report will provide a summary of the accumulated data.

10 Adaptive Management Plan

An integral part of a successful mitigation program is early detection of problems determining the cause(s) of those problems and attempting to correct those problems so that the restoration program achieves its objectives and ecological performance standards. If annual performance guidelines are not met for any given year in the 25-month revegetation period or 5-year mitigation period and/or if the restoration program experiences a significant unexpected problem, the Project Biologist will prepare an analysis of the cause(s) of failure and shall propose remedial actions in the annual report.

Adaptive management measures will include the use of quantitative and qualitative data gathered in the field prior to and throughout the monitoring period to assess the effects of weeding maintenance, status of seed germination, and container plant health and cover within the restoration area. Following an event that causes damage to all or part of the restoration areas, this data will be used in part to drive management considerations for the repair of damaged areas. Achieving the key goals of the mitigation program and establishing a naturally functioning native habitat will be the focus of all adaptive management decisions.

If determined necessary, the Project Biologist, in consultation with Nighthawk Energy Storage, LLC, and the City of San Diego, will prepare an analysis of the program's problems and propose remedial actions to correct the problems in order to meet the performance standards at the end of the 25-month and 5-year maintenance and monitoring periods. The maintenance and monitoring obligations will continue and/or alternative contingency measures and interim performance standards will be negotiated until the City of San Diego gives final permit compliance/approval or approval for alternative compensation measures. If it is decided that an alternative location is required to complete compensatory mitigation requirements, then Nighthawk Energy Storage, LLC, will coordinate with the City of San Diego, depending on the location of the underperforming areas, to locate an approved site.

Individual environmental stressors are discussed below, along with an anticipated range of management responses to correct any damage that may occur to the restoration area.

10.1 Drought

Seasonal drought is a normal annual cycle in San Diego County. The seed mix has been designed with drought-tolerant plant species that are capable of withstanding seasonal fluctuations in available moisture. However, periods of extended drought could occur, including low seasonal rainfall and prolonged high temperatures that may negatively affect the restoration area (e.g., lower native cover, higher plant mortality, increased potential for pest infestations on site).

If drought conditions limit native vegetation development, an additional seed application may be considered to replenish the native seed bank to allow the restoration area to respond normally with the eventual return of rainfall and more favorable site conditions.

10.2 Herbivory

As discussed in Section 7.4, Pest and Herbivory Management, some grazing and browsing by native herbivores is expected to occur. The plant palettes for each vegetation community have been designed to tolerate a moderate

level of plant browsing. If browsing levels should become elevated (i.e., if significant plant mortality and cover reduction occurs), as indicated by qualitative monitoring of the restoration area, remedial measures will be implemented. Browse guards and plant collars may be installed around the base of trees and young shrub plants in affected areas to reduce plant mortality. In addition, remedial planting or seeding may be necessary, depending upon the stage of the mitigation program.

10.3 Fire

San Diego County experiences periodic wildfires on a regular basis. Vegetation communities native to the area are adapted to this periodic fire regime, with plant species possessing the ability to stump, sprout, or otherwise regenerate from underground plant material. Although fire is a co-evolutionary factor, it also presents the possibility for faster-growing, early successional non-natives to out-compete the recovering native species. In the event of fire affecting the restoration area, the Project Biologist will assess the post-fire conditions and provide adaptive management recommendations, including an increase in weed control management.

11 Financial Assurances

As permittee of the restoration program, Nighthawk Energy Storage, LLC, is financially responsible for implementation and management of the restoration program. Costs include planning and design, construction, and interim maintenance and monitoring through the 5-year maintenance and monitoring period. Financial assurance in the form of performance bonds will be provided to cover the cost to construct and implement the restoration program and monitor and maintain the restoration program until formal sign off by the City of San Diego. The same funding source established by Nighthawk Energy Storage, LLC, will be available to complete the restoration program, to provide alternative restoration, and/or for use by a third party to complete required tasks, should the initial restoration effort fail to be successful. As conditioned in the Site Development Plan (SDP), a PAR equivalent is in process for this project. The PAR equivalent will be submitted and approved by the City of San Diego prior to grading permit issuance. As conditioned in the SDP, an endowment will be tendered to the long term manager in the second year of the 5-year mitigation monitoring program to provide funding for the long-term maintenance of the conservation values of the project site and its mitigation restoration area in accordance with the tasks outlined in the PAR equivalent.

INTENTIONALLY LEFT BLANK

12 Completion of the Restoration Program

At the end of Year 5, a final annual monitoring report will be submitted to the City of San Diego, including an evaluation of restoration, and translocation program success. The reports will make a determination as to whether the requirements and performance standards of the restoration and translocation program have been achieved. Successful restoration will be considered to have been achieved when the restoration area has met the performance standards and when the restoration areas are self-sustaining without supplemental irrigation for a minimum of 2 years.

At the conclusion of the 5-year maintenance and monitoring period, or at such time that the restoration program has achieved the performance standards, the Project Biologist will inform Nighthawk Energy Storage, LLC, and the City of San Diego and request final sign-off/approval from the City, DSD and MSCP. A site review will be scheduled for all interested parties to review the restoration area to confirm final conditions. Upon verbal and/or preferably written confirmation of restoration program success by the City of San Diego, the City will release Nighthawk Energy Storage, LLC, of all obligations associated with the 5-year maintenance and monitoring program.

INTENTIONALLY LEFT BLANK

13 Long-Term Management

The overall goal of long-term management is to promote long-term viability of the restoration area's resources and surrounding habitat. Monitoring and management will be performed in perpetuity by a qualified entity and will be funded by an endowment. Routine monitoring and minor maintenance tasks are included herein to ensure the viability of the restoration area in perpetuity.

Sycamore Estates was a planned residential community that clustered its development and granted the remaining open space areas to the City pursuant to its entitlement conditions. Consistent with the City's ESL Regulations, the Sycamore Estates landowner granted the City covenants of easement in the form of a standalone Conservation Easement in 2004 and open space easement on its final map – the conservation areas. As the holder of these conservation and open space easements, the City included the land in its MSCP and MHPA.

Development of the Proposed Project is authorized via the City's ESL regulations, which authorize the releases from a conservation easement with USFWS/CDFW written concurrence when they are no longer necessary to achieve the City's land use goals. Here, there is substantial evidence to support that finding for several reasons, including but not limited to that fact that the City's land use goals include development of battery storage facilities inside and outside the City to help achieved greenhouse gas reduction targets and the fact that the project facilitates a net increase in protection of the conservation values of the conserved area through its restoration of areas within the conserved area that have degraded over time. Moreover, utility lines are a conditionally compatible use in the MHPA.

Both the existing conservation easement (Section 11) and the ESL Regulations (SDMC section 143.0512) permit a release of the prohibitions on conservation easement, but do not mandate a permanent release. Accordingly, with the concurrence of USFWS/CDFW and concurrent with the issuance of the Proposed Project's Site Development Permit, the City issued a temporary, partial release from the conservation easement prohibitions for installation of the Proposed Project's private utility line until such time as the initial 5-year restoration work mitigating the impacts of the Proposed Project is complete. Thereafter, the prohibitions of the existing conservation easement and open space easements resume and the long-term management of the Proposed Project's work area within the conserved areas will resume. This is possible because the Proposed Project does not require reentry into the conserved area for maintenance and repair, the release is temporary, the release is limited to the work area of the Proposed Project, and the release does not grant to the underlying fee owner the right to grant other private utility easement.

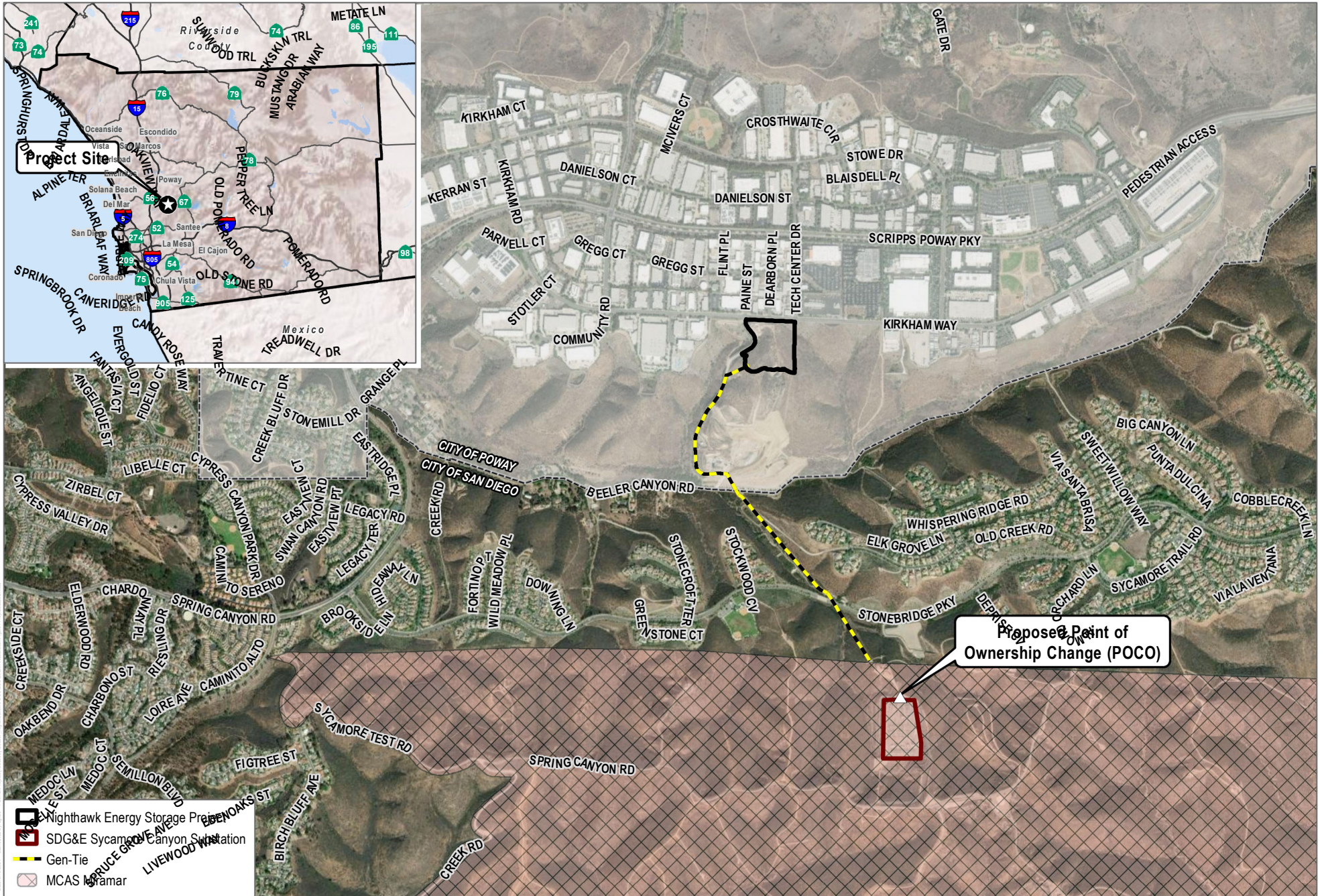
Upon completion of the 5-year maintenance and monitoring period, management responsibilities will be continued under a long-term management plan under separate cover. A PAR equivalent will be prepared to calculate the endowment needed to perform the long-term management tasks outlined in the long-term management plan.

INTENTIONALLY LEFT BLANK

14 References

- Atwood, J.L. 1993. "California Gnatcatchers and Coastal Sage Scrub: The Biological Basis for Endangered Species Listing." In *Interface between Ecology and Land Development in California*, ed. J.E. Keeley, 149–169. Los Angeles: Southern California Academy of Sciences.
- Atwood, J.L., and J.S. Bolsinger. 1992. "Elevational Distribution of California Gnatcatchers in the United States." *Journal of Field Ornithology* 63:159–168.
- Calflora. 2020. *The Calflora Database: Information on Wild California Plants*. Berkeley: Calflora. Accessed May 2023. <http://www.calflora.org>.
- Canfield, R.H. 1941. "Application of the Line Interception Method in Sampling Range Vegetation." *Journal of Forestry* 39:388–394.
- City of San Diego. 1997. *City of San Diego MSCP Subarea Plan*. Prepared by the City of San Diego Community and Economic Development Department. March 1997. <http://www.sandiego.gov/planning/programs/mscp/docsmaps/index.shtml>.
- City of San Diego. 2018a. *Biology Guidelines*. Amended February 1, 2018, by Resolution No. R-311507. https://www.sandiego.gov/sites/default/files/amendment_to_the_land_development_manual_biology_guidelines_february_2018_-_clean.pdf.
- City of San Diego. 2018b. *The City of San Diego Storm Water Standards*. October 1, 2018. https://www.sandiego.gov/sites/default/files/storm_water_standards_manual_oct_2018.pdf.
- City of San Diego. 2023. *City of San Diego Landscape Guidelines*. Accessed November 2023. Core Sub-Area.doc (sandiego.gov). <https://www.sandiego.gov/sites/default/files/legacy/developmentservices/pdf/industry/standards09.pdf>
- City of San Diego. 2024. *San Diego Municipal Code Land Development Code Landscape Standards*. Accessed May 2024. <https://www.sandiego.gov/sites/default/files/legacy/development-services/pdf/industry/standards09.pdf>
- CNPS (California Native Plant Society). 2023. *Rare Plant Inventory* (online edition, v9.5). CNPS, Rare Plant Program. Accessed May 2023. <http://www.rareplants.cnps.org>.
- Dudek. 2024. Biological Technical Report for the Nighthawk Energy Storage and Gen-Tie Line Project. March 2023.
- Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California.

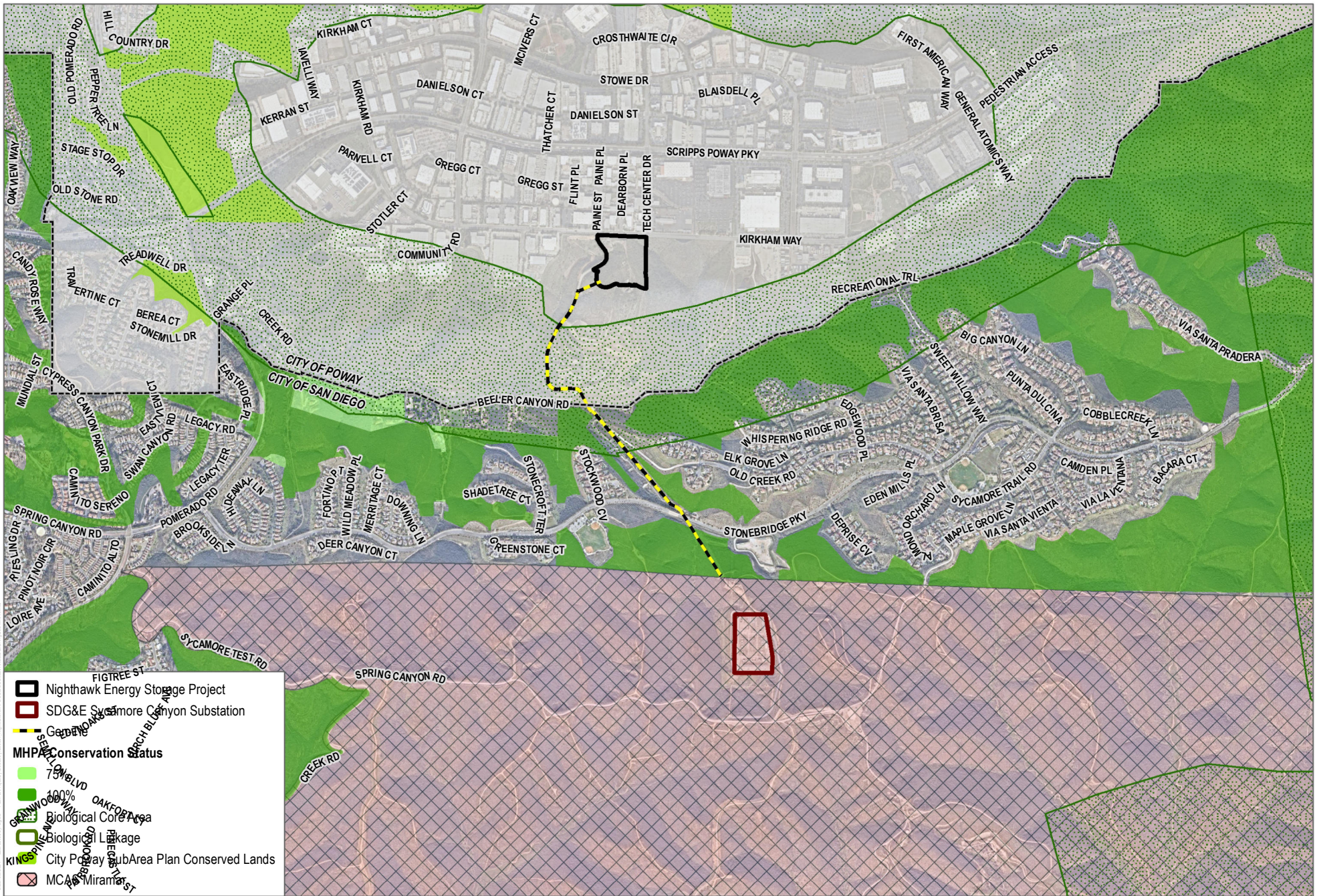
- Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. Based on *Preliminary Descriptions of the Terrestrial Natural Communities of California*, by R.F. Holland, October 1986. March 2008.
- Preston, K.L., P.J. Mock, M.A. Grishaver, E.A. Bailey, and D.F. King. 1998. "California Gnatcatcher Territorial Behavior." *Western Birds* 29:242–257.
- USDA (U.S. Department of Agriculture). 2023a. *Web Soil Survey*. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed May 2023. <http://websoilsurvey.nrcs.usda.gov/>.
- USDA. 2023b. "State Soil Data Access (SDA) Hydric Soils List." Accessed May 2023. <https://www.nrcs.usda.gov/publications/query-by-state.html>.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990. *California's Wildlife*. Vol. I–III. Updated in the California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game, Sacramento: California Department of Fish and Game. <https://www.wildlife.ca.gov/Data/CWHR>.



SOURCE: Arevon 2024; SANGIS 2024; ESRI World Imagery

FIGURE 1
Project Location
Nighthawk Energy Storage Project

INTENTIONALLY LEFT BLANK



SOURCE: Arevon 2024; City Poway SubArea Plan; SANGIS 2023, 2024

FIGURE 2

Multi-Habitat Planning Area (MHPA) and Local Jurisdictions

Nighthawk Energy Storage Project

INTENTIONALLY LEFT BLANK

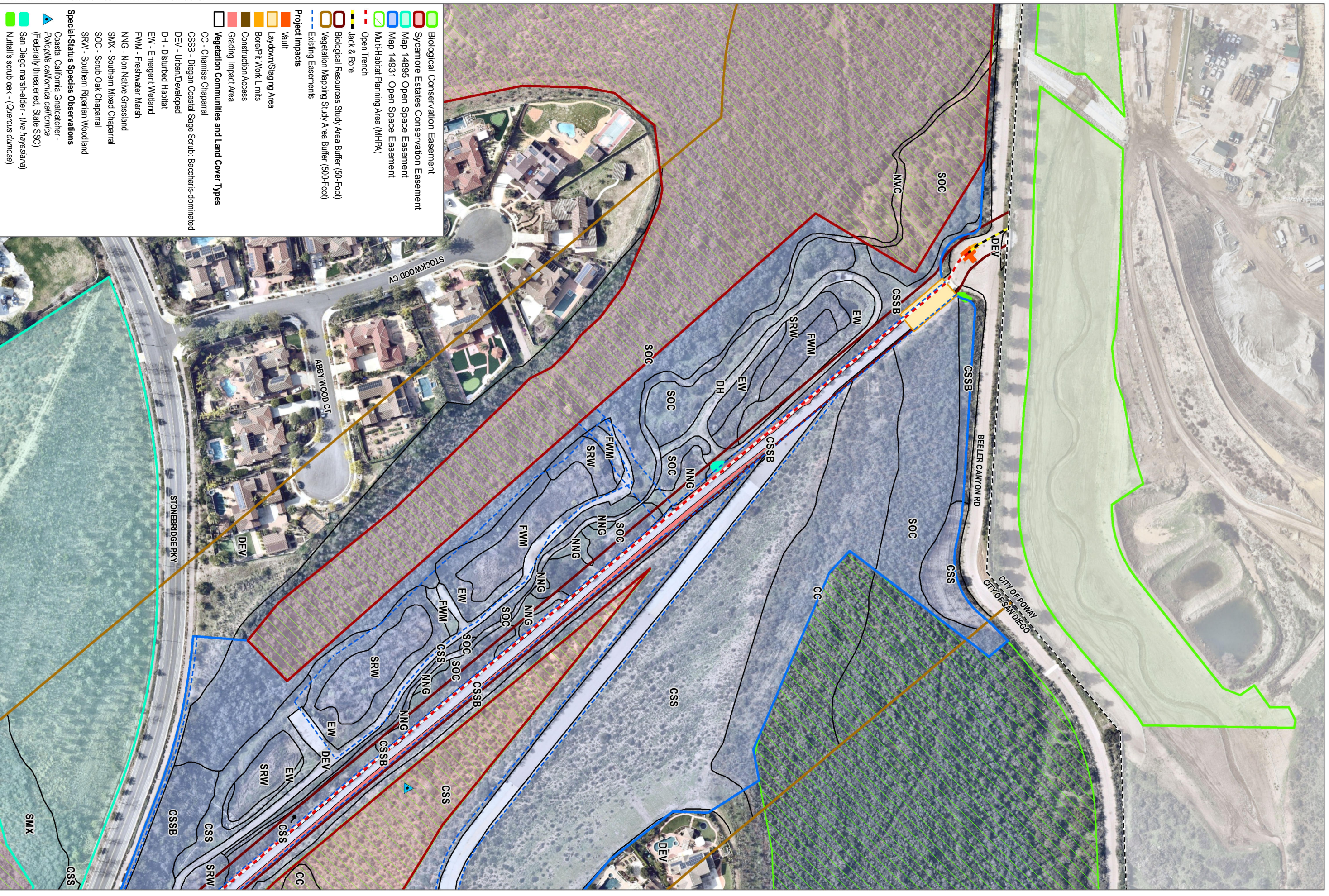
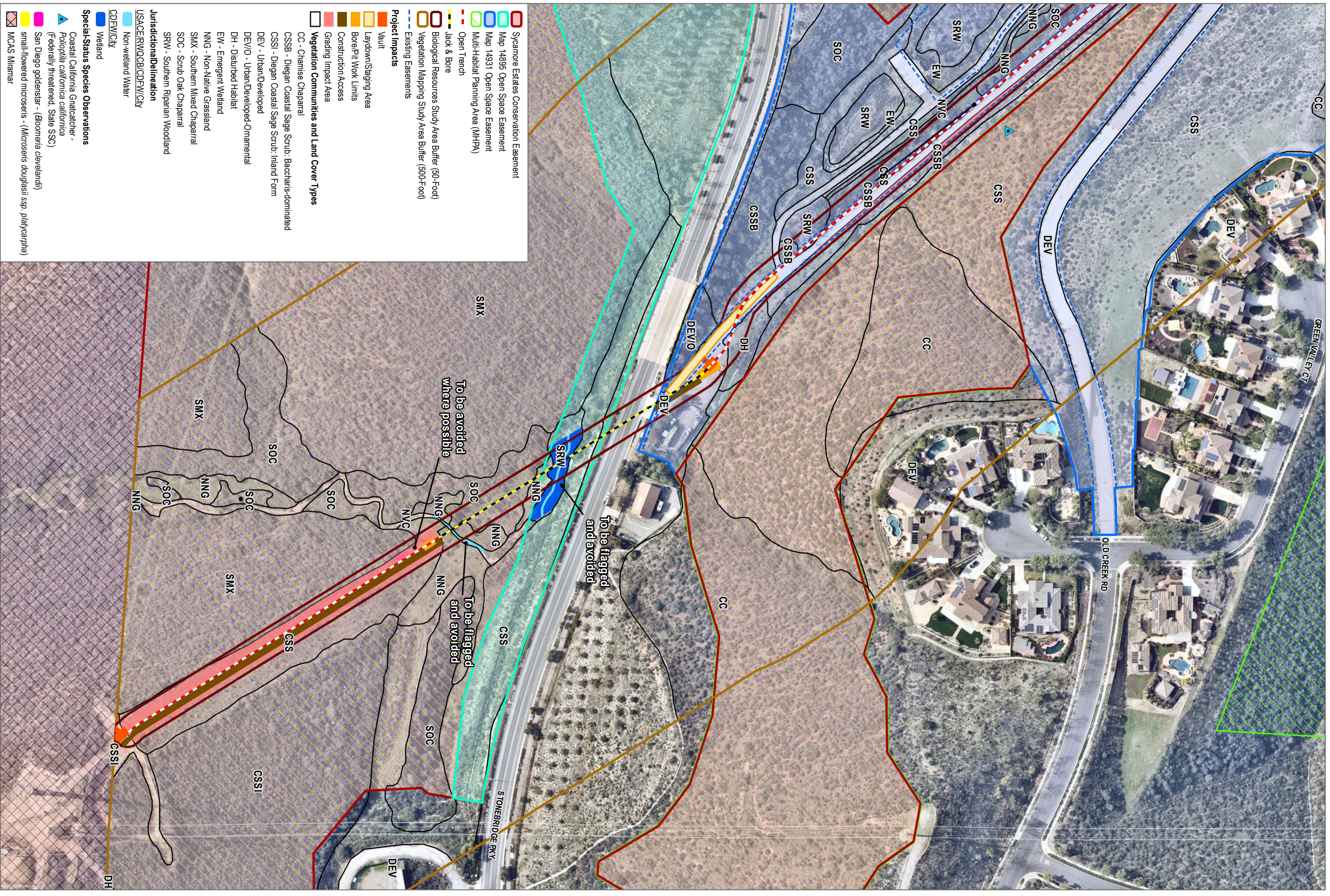


FIGURE 3A

Impacts to Biological Resources

Nighthawk Energy Storage Project

INTENTIONALLY LEFT BLANK



- ▭ Sycamore Estates Conservation Easement
- ▭ Map 14895 Open Space Easement
- ▭ Map 14931 Open Space Easement
- ▭ Multi-Habitat Planning Area (MHPA)
- ▭ Open Trench
- ▭ Jack & Bore
- ▭ Biological Resources Study Area Buffer (50-Foot)
- ▭ Vegetation Mapping Study Area Buffer (500-Foot)
- ▭ Existing Easements
- ▭ Project Impacts
- ▭ Vault
- ▭ Laydown/Staging Area
- ▭ Bore/Pit Work Limits
- ▭ Construction Access
- ▭ Grading Impact Area
- ▭ Vegetation Communities and Land Cover Types
- ▭ CC - Chamise Chaparral
- ▭ CSSB - Diegan Coastal Sage Scrub: Baccharis-dominated
- ▭ CSSI - Diegan Coastal Sage Scrub: Inland Form
- ▭ DEV - Urban/Developed
- ▭ DEV/O - Urban/Developed-Omnamental
- ▭ DH - Disturbed Habitat
- ▭ EW - Emergent Wetland
- ▭ NNG - Non-Native Grassland
- ▭ SMX - Southern Mixed Chaparral
- ▭ SOC - Scrub Oak Chaparral
- ▭ SRW - Southern Riparian Woodland
- ▭ Jurisdictional Delineation
- ▭ USACE/RWQCB/CDFW/City
- ▭ Non-wetland Water
- ▭ CDFW/City
- ▭ Wetland
- ▭ Special-Status Species Observations
- ▭ Coastal California Gnatcatcher - *Polygonia californica californica*
- ▭ Federally threatened, State SSC
- ▭ San Diego goldenstar - (*Bloomeria clevelandii*)
- ▭ small-flowered microseris - (*Microseris douglasii* ssp. *platycarpa*)
- ▭ MCAS Milamar

SOURCE: Power Engineering 2022; SANIGIS 2023



FIGURE 3B

Impacts to Biological Resources
Nighthawk Energy Storage Project

INTENTIONALLY LEFT BLANK

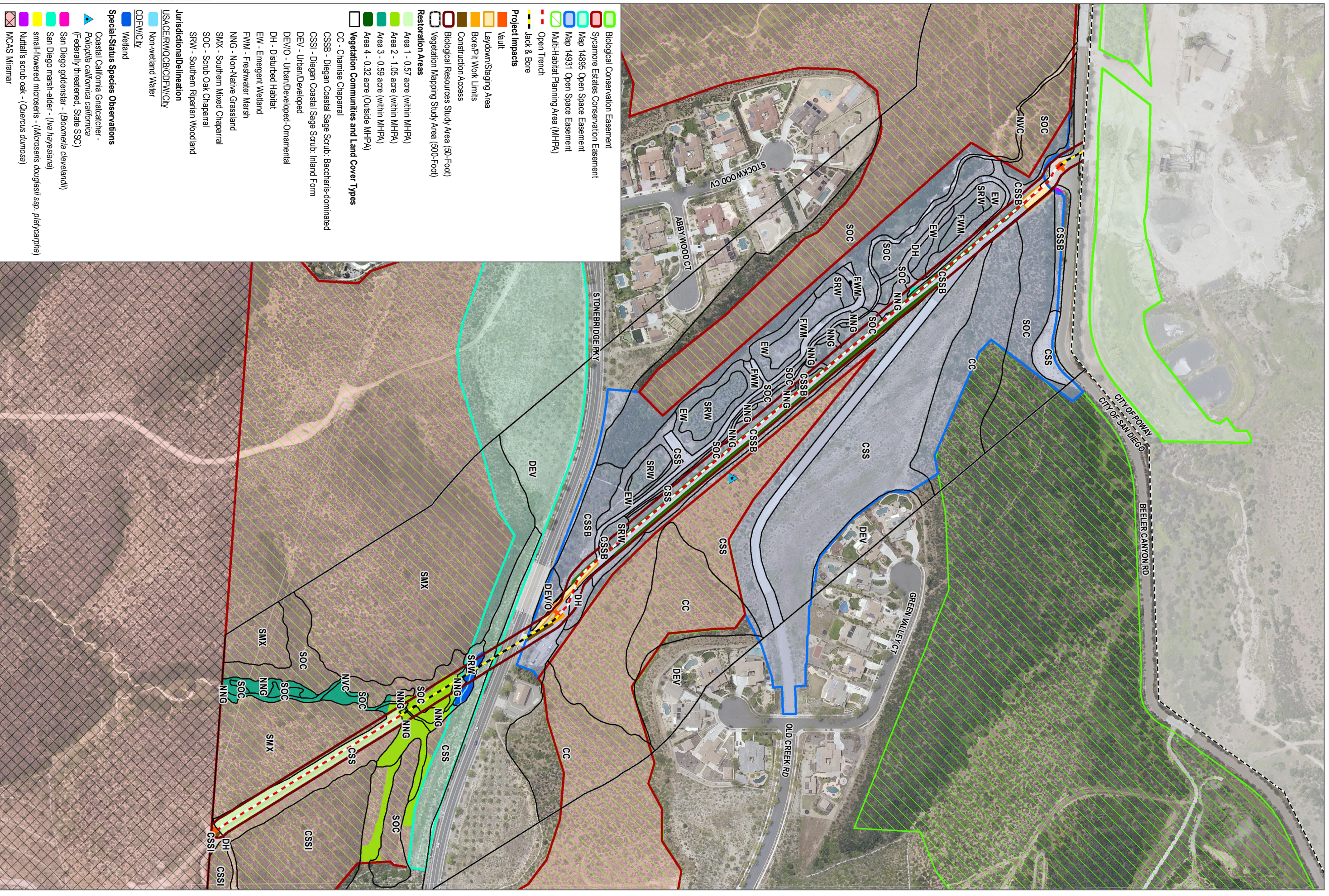


FIGURE 4

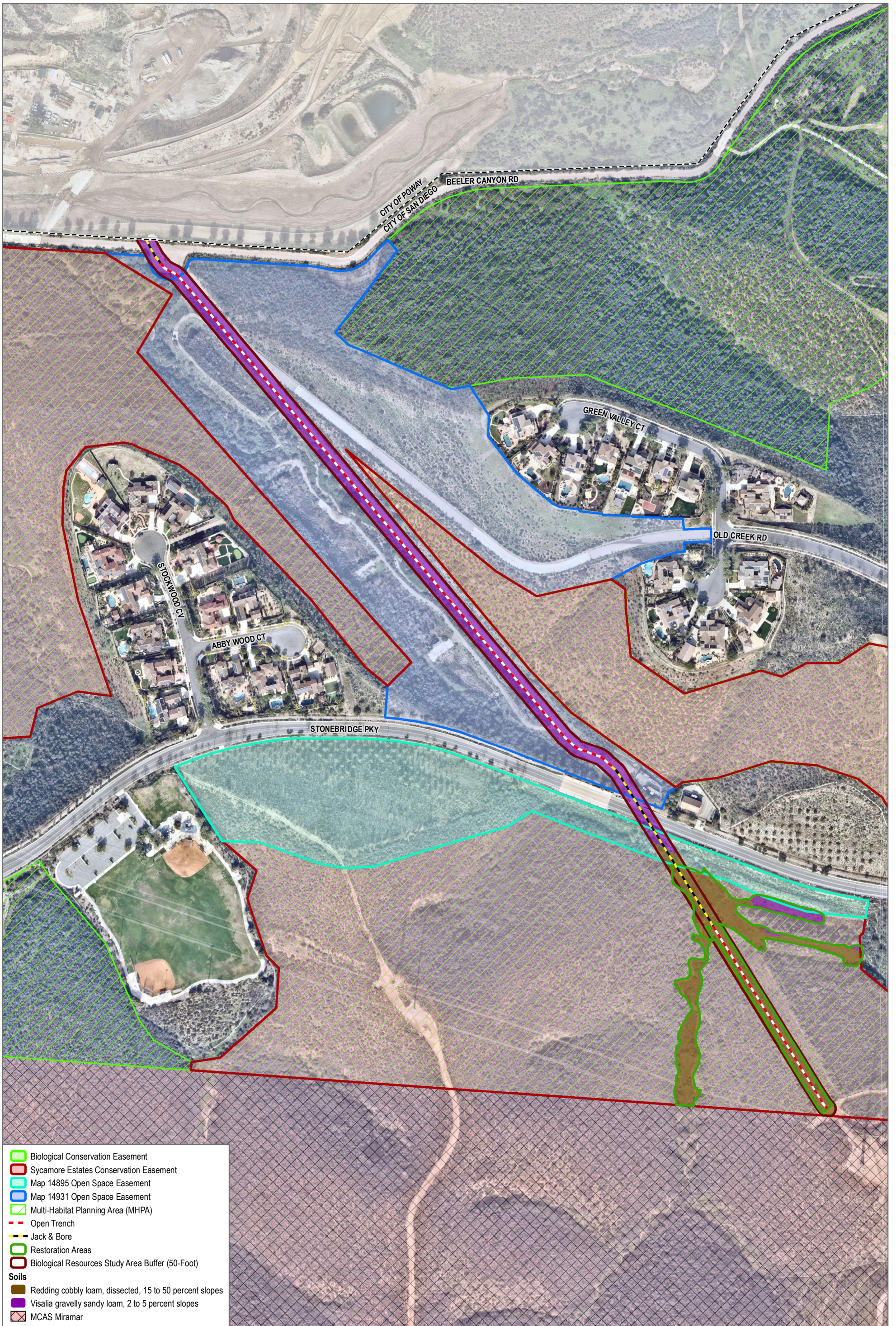
Restoration Areas

Nighthawk Energy Storage Project

SOURCE: Power Engineering 2022; SANIGIS 2020, 2023



INTENTIONALLY LEFT BLANK



SOURCE: Arevon 2024; USDA NRCS; SANGIS 2023, 2024

FIGURE 5
Soils

INTENTIONALLY LEFT BLANK

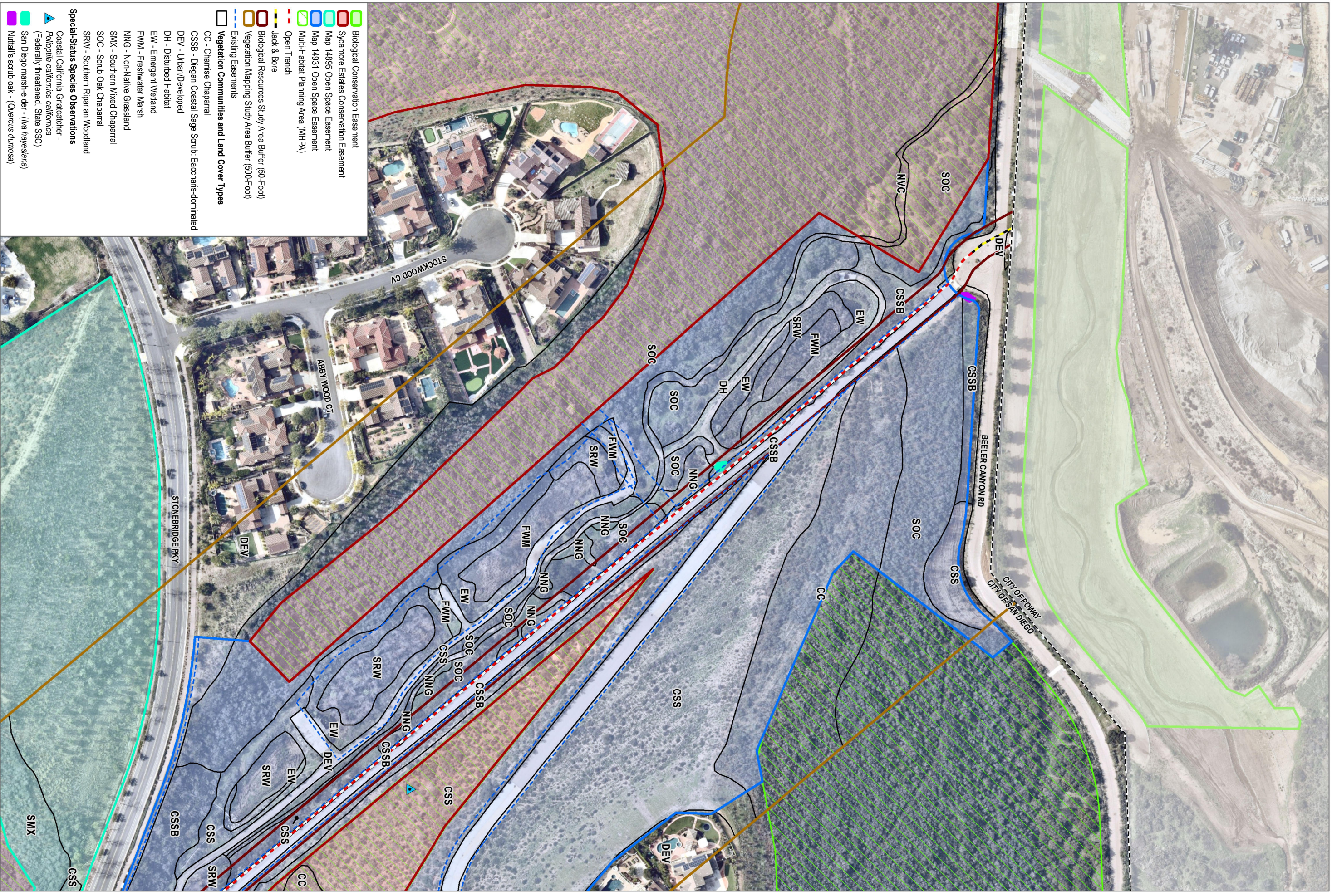
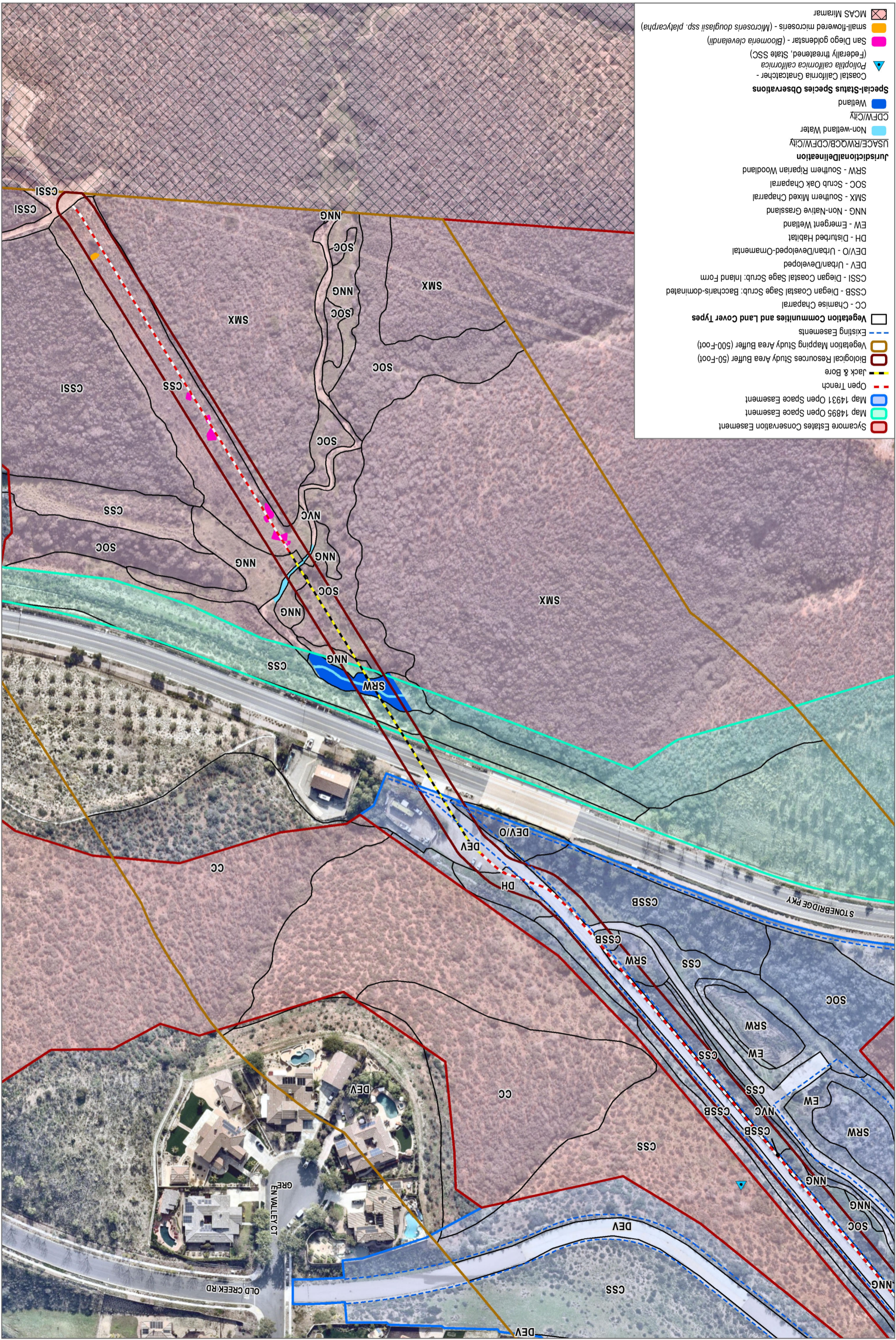


FIGURE 6A

Biological Resources
Nighthawk Energy Storage Project



INTENTIONALLY LEFT BLANK



Vegetation Communities and Land Cover Types

- SRW - Southern Riparian Woodland
- DEV - Urban/Developed
- DH - Disturbed Habitat
- EW - Emergent Wetland
- NNG - Non-Native Grassland
- SOC - Scrub Oak Chaparral
- SMX - Southern Mixed Chaparral
- CSS - Diegan Coastal Sage Scrub: Baccharis-dominated
- CC - Chamise Chaparral

Jurisdictional Delineation

- USACE/RWQCB/CDFW/City
- CDFW/City
- Non-wetland Water
- Wetland

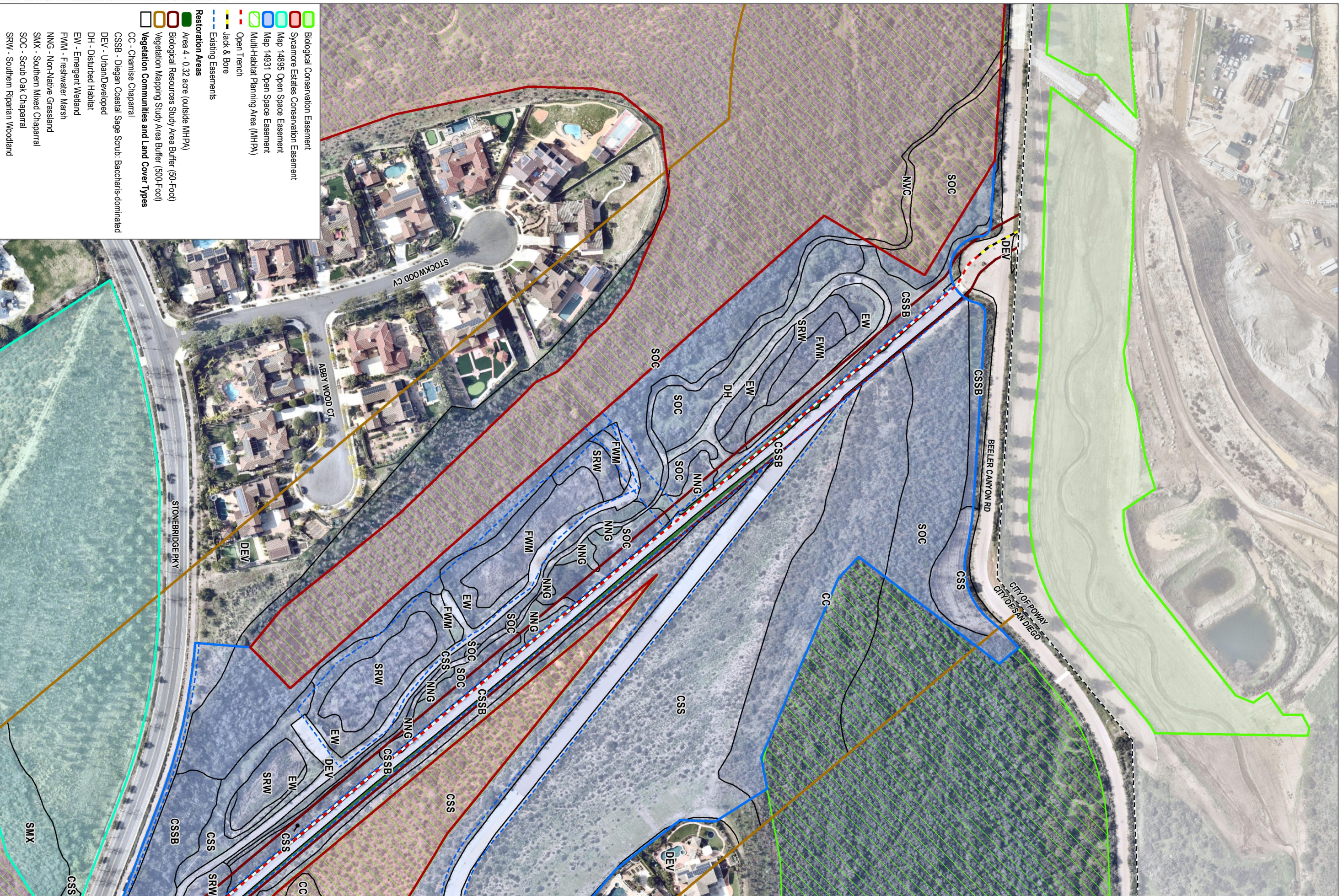
Special-Status Species Observations

- Coastal California Gnatcatcher - *Pollipolia californica californica* (Federally threatened, State SSC)
- San Diego goldenstar - (*Bloomeria clevelandii*)
- small-flowered microseris - (*Microseris douglasii* ssp. *platycarpa*)
- MCA5 Miramar

Easements

- Sycamore Estates Conservation Easement
- Map 14931 Open Space Easement
- Map 14895 Open Space Easement
- Open Trench
- Jack & Bore
- Biological Resources Study Area Buffer (50-Foot)
- Vegetation Mapping Study Area Buffer (500-Foot)
- Existing Easements

INTENTIONALLY LEFT BLANK



- ▭ Biological Conservation Easement
- ▭ Sycamore Estates Conservation Easement
- ▭ Map 14895 Open Space Easement
- ▭ Map 14931 Open Space Easement
- ▭ Multi-Habitat Planning Area (MHPA)
- ▭ Open Trench
- ▭ Jack & Bore
- ▭ Existing Easements
- ▭ Restoration Areas
- ▭ Area 4 - 0.32 acre (outside MHPA)
- ▭ Biological Resources Study Area Buffer (50-Foot)
- ▭ Vegetation Mapping Study Area Buffer (500-Foot)
- ▭ Vegetation Communities and Land Cover Types
- ▭ CC - Chamise Chaparral
- ▭ CSSB - Diegan Coastal Sage Scrub: Baccharis-dominated
- ▭ DEV - Urban/Developed
- ▭ DH - Disturbed Habitat
- ▭ EW - Emergent Wetland
- ▭ FWM - Freshwater Marsh
- ▭ NNG - Non-Native Grassland
- ▭ SMX - Southern Mixed Chaparral
- ▭ SOC - Scrub Oak Chaparral
- ▭ SRW - Southern Riparian Woodland

SOURCE: Atrion 2024; SANGIS 2023, 2024



FIGURE 7A

Conceptual Restoration Plan
Nighthawk Energy Storage Project

INTENTIONALLY LEFT BLANK

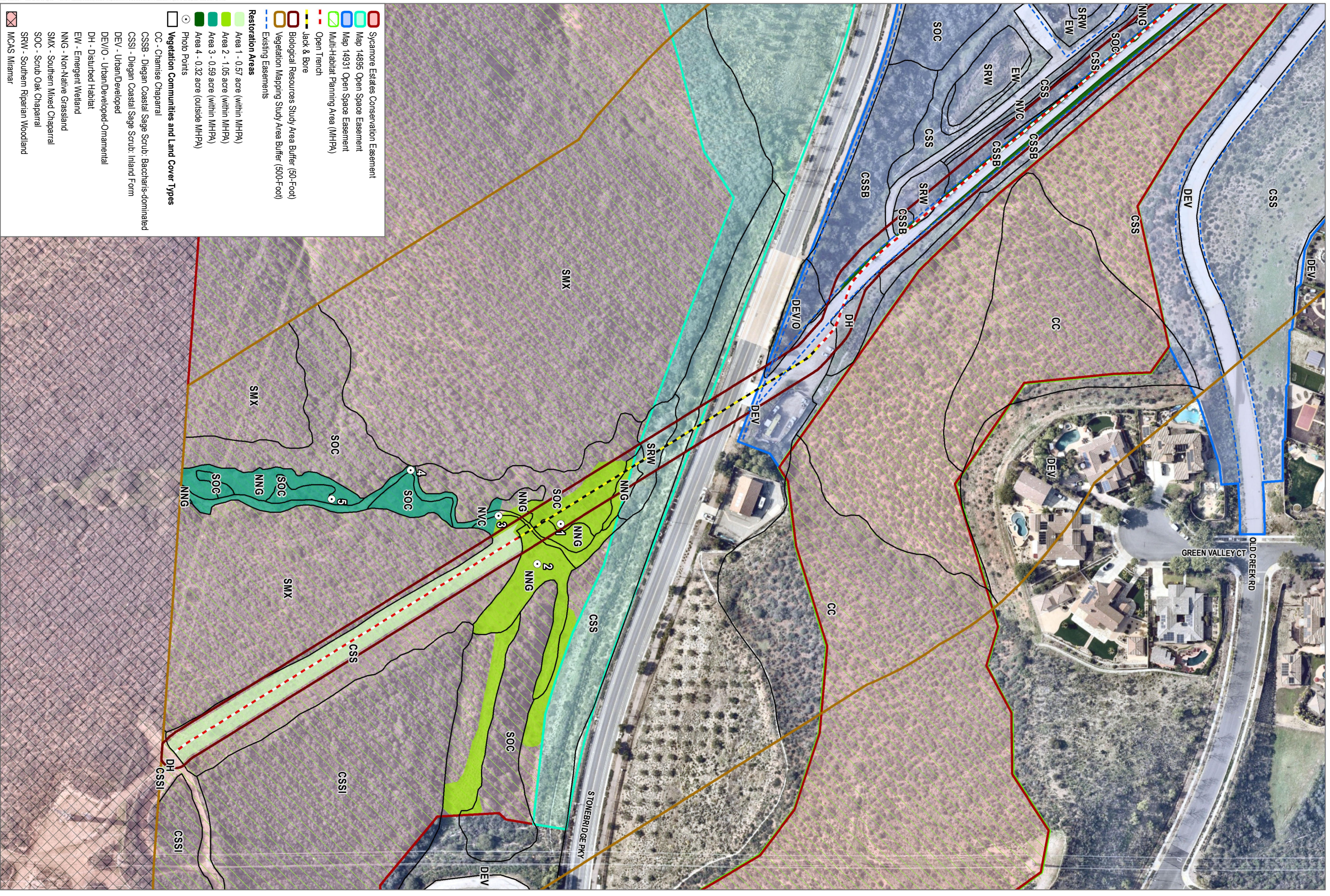
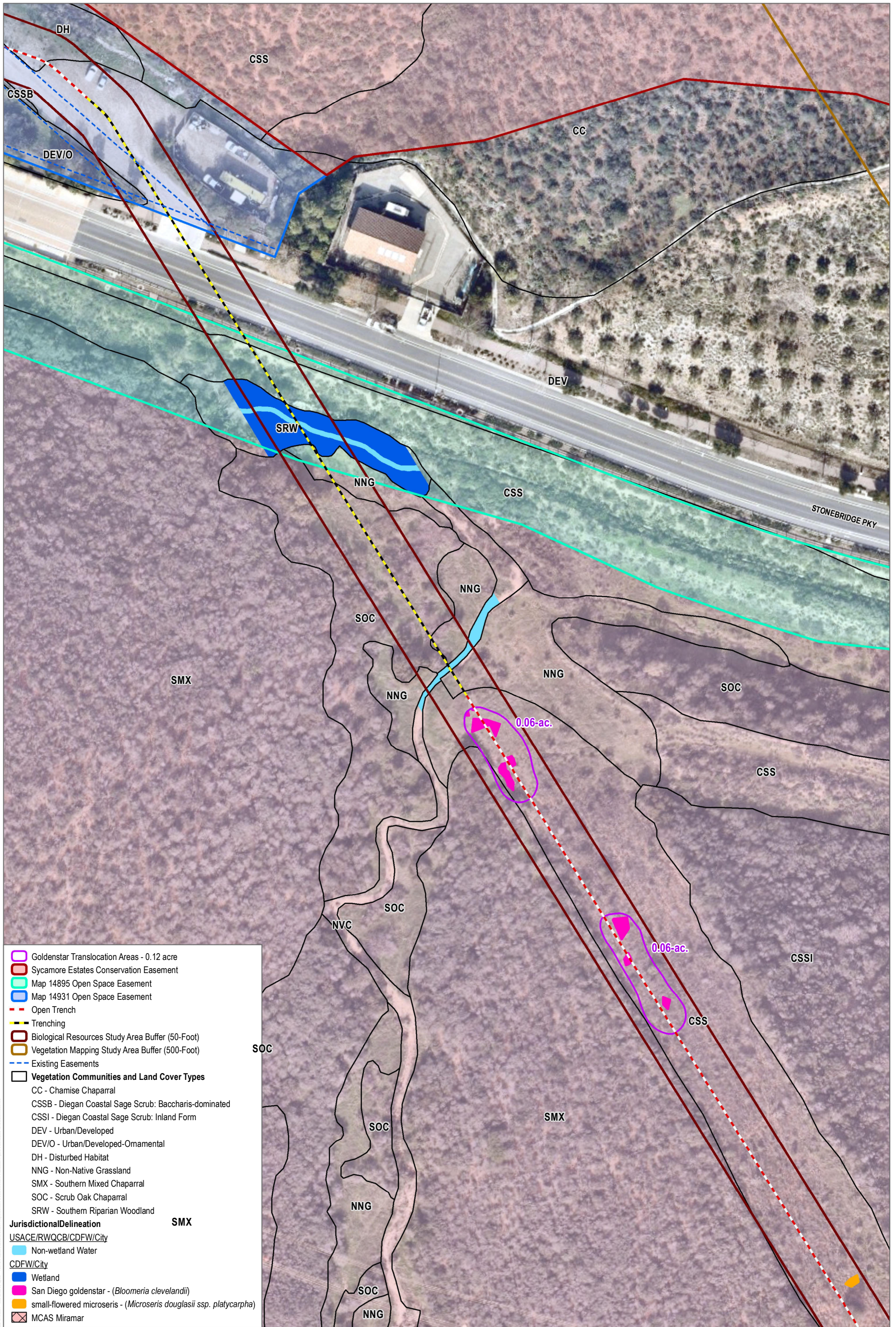


FIGURE 7B

INTENTIONALLY LEFT BLANK



SOURCE: Arevon 2024; SANGIS 2023, 2024



FIGURE 7C

San Diego Goldenstar Translocation Areas

Nighthawk Energy Storage Project

INTENTIONALLY LEFT BLANK