

**2855 MCMILLAN AVENUE,  
SAN LUIS OBISPO,  
SAN LUIS OBISPO COUNTY, CALIFORNIA**  
(Assessor's Parcel Number 053-212-005)

## **BIOLOGICAL RESOURCES ASSESSMENT**



*Prepared for:*

**GTW SLO LLC**  
5140 Caballeros Avenue  
San Luis Obispo, California 93401

*Prepared by:*

**KMA**  
**Kevin Merk Associates, LLC**  
P.O. Box 318  
San Luis Obispo, California 93406

*October 2021*

**TABLE OF CONTENTS**

	Page
EXECUTIVE SUMMARY.....	ii
1.0 INTRODUCTION.....	1
1.1 Project Description .....	1
1.2. Regulatory Overview .....	4
2.0 METHODS.....	8
3.0 RESULTS .....	10
3.1 Existing Conditions .....	11
3.2 Hydrologic Features, Wetlands and Riparian Habitats.....	11
3.3 Soils.....	13
3.4 Habitat Types.....	13
3.5 Special-status Biological Resources .....	15
4.0 IMPACT ANALYSIS AND RECOMMENDED MITIGATION.....	22
4.1 Direct and Indirect Effects.....	23
4.2 Cumulative Effects.....	31
5.0 CONCLUSIONS .....	32
6.0 REFERENCES.....	32

**LIST OF FIGURES**

Figure 1 – Site Location Map .....	2
Figure 2 – Aerial Overview Map .....	3
Figure 3 – Habitat Map .....	14
Figure 4 – CNDDDB Plant Occurrences Map.....	16
Figure 5 – CNDDDB Animal Occurrences Map .....	18
Figure 6 – Sensitive Natural Communities and Designated Critical Habitat Map .....	21
Figure 7 – Mitigation Site Location Map.....	28

**APPENDICES**

- Appendix A – Site Plans
- Appendix B – List of Plants and Animals Observed Onsite During the Site Visits
- Appendix C – Photo Plate
- Appendix D – Special-status Biological Resources Summary

## EXECUTIVE SUMMARY

Kevin Merk Associates, LLC (KMA) conducted this biological resources assessment (BRA) for a proposed commercial development project ("project") located at 2855 McMillan Avenue, San Luis Obispo, San Luis Obispo County, California (Assessor's Parcel Number 053-212-005, Lots 7 and 8, Block 8, in the Orcutt Subdivision, within the city limits of San Luis Obispo ["property"]). The property is zoned for Manufacturing in a land use area designated for Services and Manufacturing. It is located in a light industrial and commercial area, and is surrounded by urban development. The 0.4-acre parcel consists of a graded lot and a segment of an unnamed drainage along the property's eastern border adjacent to McMillan Avenue. The project proposes to construct an 8,300 square foot, two-story office and warehouse building. Additional site improvements include a parking area, sidewalk, curb and gutter, driveway entrance and trash/recycle enclosure. The project would require placing the drainage onsite into a culvert, which would allow for full development of the lot and solve long-standing erosion issue along McMillan Avenue.

The purpose of this assessment was to assist GTW SLO LLC with technical biological resources information to support the environmental review process by the City of San Luis Obispo (City). This report evaluates the potential for the project site to support special-status biological resources, evaluates whether these resources could be adversely affected by the project, and provides recommended mitigation to reduce the level of effects. A desktop review of available background information on special-status biological resources in the project vicinity was used for this analysis. This investigation also included focused rare plant surveys and an evaluation of the potential jurisdictional status of the drainage feature.

Four plant communities or land uses were identified within the property, and include: 1) Annual Grassland, 11,760 square feet; 2) Riparian, 3,975 square feet; 3) Developed/Ruderal, 3,050 square feet; and, 4) Ornamental, 60 square feet. The Riparian habitat type, which can be classified as Central Coast Riparian Scrub, is considered to be a sensitive natural community by California Department of Fish and Wildlife (CDFW) and is protected under City of San Luis Obispo *General Plan*. It was dominated by arroyo willow (*Salix lasiolepis*) shrubs that had previously been cut to the base, resprouted, and then had the lower limbs thinned. None of the trees onsite are expected to meet the City's definition of "Significant" or "Heritage" trees since they are small in size. The understory along the drainage was predominantly Annual Grassland and did not meet the criteria as a wetland. Annual Grassland in the upland area of the site had been regularly mowed and was comprised mainly of non-native species.

The drainage feature onsite is a remnant creek segment that has been altered from its natural state, and appears to have been realigned to facilitate construction in the area. It is still hydrologically connected to downstream features that connect to the Pacific Ocean. As such, it is expected to be a jurisdictional drainage feature regulated by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW. It is not shown as a blue-line stream or as a topographic draw on the USGS topographic map, and is not formally unnamed. It also is not indicated in the National Wetlands Inventory. However, the City has mapped it as a perennial creek unofficially called "Bishop Creek". Site observations confirmed it would be more appropriately characterized as an intermittent drainage that does not support flow all year. It is a tributary of what is locally known as "Acacia Creek", which is a jurisdictional drainage that empties into San Luis Obispo Creek. Culverts are present on both the north and south sides of the property and an open channel traverses approximately 140 feet of the parcel.

The area along the drainage that would be considered sensitive by the City was delineated as the outer edge of the riparian canopy or top of bank, whichever is farther from the channel. This area

consisted of 4,751 square feet and also corresponds to the jurisdictional limits of RWQCB and CDFW. The limits of USACE jurisdiction are the low flow channel below the Ordinary High Water Mark, which was approximately 5 feet wide and meandered within the channel for approximately 815 square feet. The project as proposed will mitigate impacts to the drainage and associated riparian scrub habitat along the same drainage feature at an offsite location on Sinsheimer Park.

One rare plant that is on a watch list, Cambria morning-glory (*Calystegia subacaulis* ssp. *episcopalis*; California Rare Plant Rank 4.2), was found during the focused rare plant surveys, consisting of one small occurrence of two plants by McMillan Avenue. No other rare plants were found onsite, and the focused rare plant surveys conducted for this investigation were considered to be comprehensive; therefore, no further surveys are recommended. Cambria morning glory is a common species in the San Luis Obispo area and is on a watch list; therefore, mitigation for the loss of two roadside plants is not significant from an ecological perspective. As such, no mitigation should be required given the project will not adversely affect its populations in the City.

Special-status animal species that could potentially occur onsite on a transitory basis are monarch butterfly (*Danaus plexippus*, population 1), Cooper's hawk (*Accipiter cooperii*) and yellow warbler (*Setophaga petechia*). No roosting habitat for monarch butterflies is present and mobile individuals such as birds could pass through the site while foraging. Similarly, the hawk and warbler may use the Riparian habitat periodically, but the habitat is not dense enough to support nesting and is maintained on a periodic basis. Other bird species protected under the Migratory Bird Treaty Act could nest onsite, and if vegetation removal occurs during the nesting season, preconstruction bird surveys and avoidance of active nests is required. Special-status bat species including the pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), western mastiff bat (*Eumops perotis californicus*), and Yuma myotis (*Myotis yumanensis*) could roost in the culvert on the downstream (south) side of the property, and may be disturbed by construction activities or displaced when the new culvert is installed. Recommended mitigation includes a preconstruction survey for roosting bats and installation of exclusion devices, if found, and delaying construction at the downstream culvert opening if a maternity roost is present. The loss of a small area of disturbed habitat surrounded by urban development is not expected to have a negative effect on wildlife species in general or on movement corridors. The property does not fall within designated critical habitat for any federally listed species.

Construction of the project will involve vegetation removal, grading, and work within the drainage channel to install the culvert and level the site. Disturbed soils could erode into the downstream area of the drainage and be carried into Acacia Creek if these areas are not stabilized and/or protected prior to significant rainfall. Best Management Practices are recommended to avoid or minimize project effects on water quality during and shortly after construction.

The proposed project is infill development on a small lot in an urban area. The property does not provide wildlife habitat or serve as a steppingstone between open space areas due to its small size and the density of development surrounding it. Placing the open channel of a manipulated drainage into a culvert will have minor negative biological effects and will decrease sedimentation by removing a source of erosion. With the incorporation of the mitigation measures described above, there would be no significant effects on biological resources or contribute to cumulative effects of other projects in the area. This evaluation determined that none of the criteria that would meet a mandatory finding of significance under the California Environmental Quality Act (CEQA) would be triggered. Mitigation measures for the six additional impacts evaluated under CEQA are described herein, and would bring project effects below a level of significance.

## **1.0 INTRODUCTION**

Kevin Merk Associates, LLC (KMA) conducted this biological resources assessment (BRA) for a proposed commercial development project ("project") located at 2855 McMillan Avenue, San Luis Obispo, San Luis Obispo County, California (Figure 1). The project is located on an approximately 0.4-acre property identified by Assessor's Parcel Number (APN) 053-212-005 and Lots 7 and 8, Block 8, in the Orcutt Subdivision, within the city limits of San Luis Obispo ("property"). It is on the U. S. Geological Survey (USGS) San Luis Obispo 7.5-minute topographic quadrangle (T 31 S, R 12 E, northwest quarter of the northwest quarter of Section 1; 35.263967° N, -120.648223° W). The property is zoned for Manufacturing in a land use area designated for Services and Manufacturing. It is located in a light industrial and commercial area, and is surrounded by urban development and the Union Pacific Railroad (Figure 2). The parcel consists of a graded lot and a segment of a drainage feature, known locally as Bishop Creek along the property's eastern border and McMillan Avenue.

The purpose of this BRA is to assist GTW SLO LLC with technical biological resources information for the City of San Luis Obispo's (City's) review of the project under the California Environmental Quality Act (CEQA). This BRA evaluates the site's existing environmental conditions to determine whether special-status biological resources (plants, animals, sensitive natural communities, designated critical habitat and Clean Water Act/California Fish and Game Code jurisdictional areas) may be present onsite and could be adversely affected by the project. Potential impacts of the project on any sensitive biological resources are identified, and mitigation measures are provided to avoid or reduce project effects. To assess jurisdictional limits of the onsite drainage feature, KMA prepared a separate delineation report documenting the limits of federal and state regulatory jurisdiction and City-protected aquatic resources present on the property. A summary of this delineation is provided herein, as well as a conceptual mitigation discussion for impacts to the drainage feature from proposed development of the site. The delineation report will be required by local, state and federal regulatory agencies for proposed drainage impacts and permitting requirements.

### **1.1 Project Description**

The project proposes to construct an 8,300 square foot, two-story office and warehouse building (see Grading and Drainage Plan, prepared by Ashley & Vance Engineering, Inc., July 23, 2021 in Appendix A). All parking for the proposed use would be provided onsite, including ADA and electric vehicle spaces. Additional site improvements include a sidewalk, curb and gutter, driveway entrance and trash/recycle enclosure. The project would require placing the drainage onsite into a culvert, which would allow for full development of the lot and solve an existing erosion issue along McMillan Avenue. The structure would be a precast six (6) feet by five (5) feet and 140 feet long box culvert, and backfilled with 275 cubic yards of native material from the site. New storm drain inlets will direct runoff from the development into the culvert. An underground stormwater retention chamber will infiltrate runoff into the ground and a storm drain will divert water to the box culvert when the chamber is full. Please refer to project plans and the site drawing included in Appendix A.

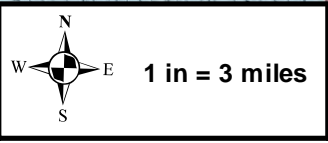


Site Location

Site Location

© OpenStreetMap (and) contributors, CC-BY-SA

Copyright © 2013 National Geographic Society, i-cubed



2855 McMillan Ave., San Luis Obispo  
 GTW SLO LLC

Figure 1  
 Site Location



Study Area Boundary



Creeks - City of SLO

NWI Wetland Type



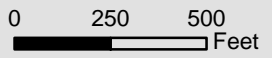
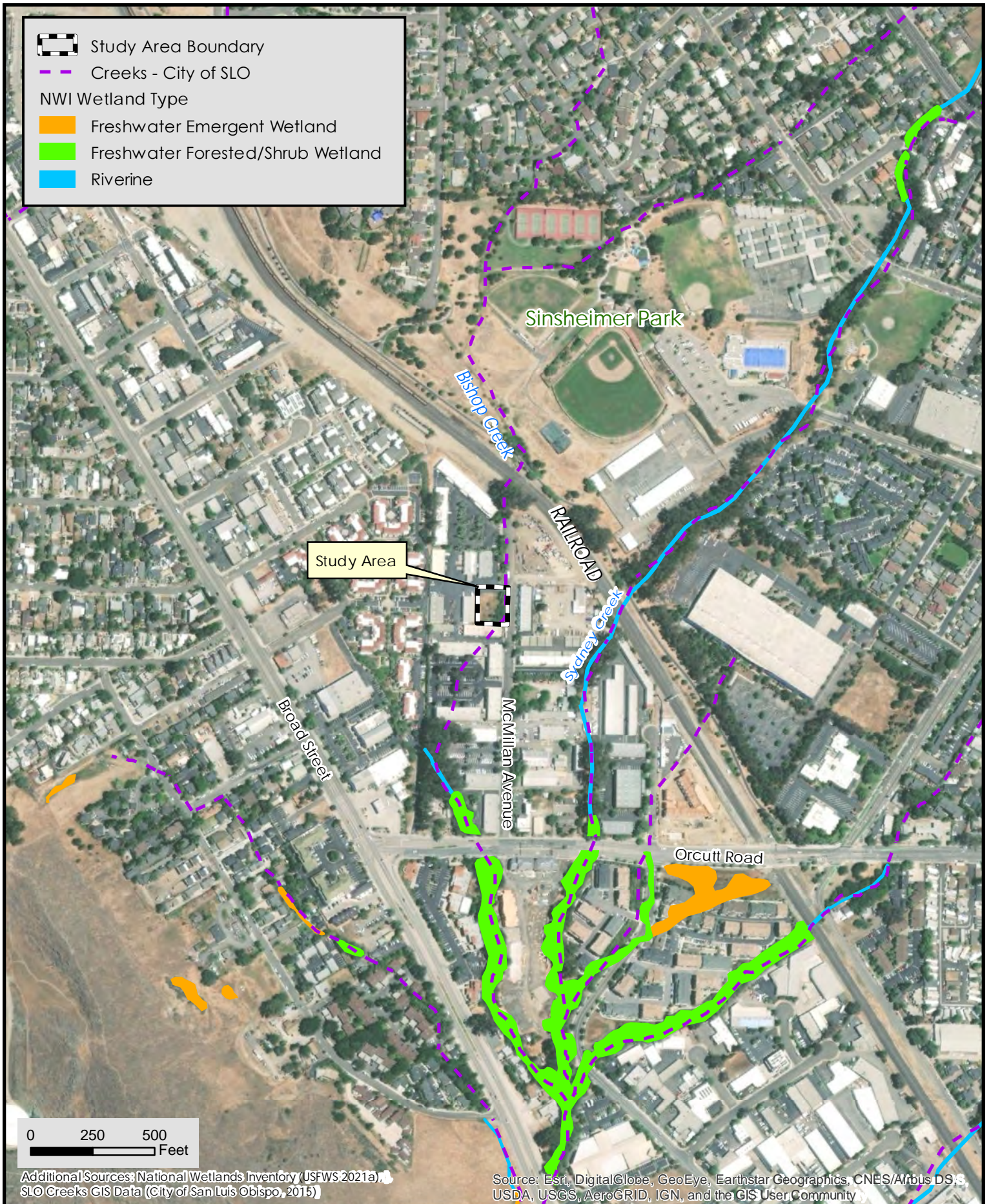
Freshwater Emergent Wetland



Freshwater Forested/Shrub Wetland

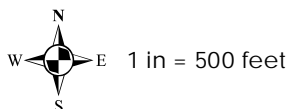


Riverine



Additional Sources: National Wetlands Inventory (USFWS 2021a),  
SLO Creeks GIS Data (City of San Luis Obispo, 2015)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,  
USDA, USGS, AeroGRID, IGN, and the GIS User Community



2855 McMillan Ave., San Luis Obispo

GTW SLO LLC

Figure 2

Aerial Overview

## 1.2 Regulatory Overview

### 1.2.1 Compliance with the California Environmental Quality Act

The CEQA defines a *significant effect on the environment* as “a substantial, or potentially substantial, adverse change in the environment.” Projects that may have significant effects are required to be analyzed in an Environmental Impact Report (EIR). Under CEQA Section 15065, a project’s effects on biotic resources would have a mandatory finding of significance if the project would do any of the following:

- Have potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare or threatened species.
- Have the potential to achieve short-term goals to the disadvantage of long-term environmental goals.
- Have possible environmental effects that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Prior to the public review of an environmental document, if a project proponent agrees to mitigation measures or project modifications that would avoid any significant effect or mitigate to a level below significance, and EIR would not be required. In addition to the criteria listed above that trigger mandatory findings of significance, *Appendix G of the CEQA Guidelines, Section IV Biological Resources*, includes six additional impacts to consider when analyzing the significance of project effects. A project’s effects on biological resources could be deemed significant if the project would do the following:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

If the project proponent agrees to mitigation measures or project modifications that would avoid all significant effects or would mitigate the significant effect(s) to a point below the level of significance, an EIR would not be required. The project proponent would be bound to implement



the mitigation measures to reduce the project effects to below a level of significance. Mitigation is not required for effects that are less than significant.

### 1.2.2 Compliance with City of San Luis Obispo Regulations and Policies

The City has established zoning regulations and several policies regarding biological resources that would apply to the development of the property. The project is located outside of any specific plan area, and falls under the City's General Plan. Within the Conservation and Open Space element, policies are specified for the protection of listed species, species of local concern, wildlife habitat and corridors. Development setbacks from creeks are required from the top of bank and riparian habitat (City 2014). Policy 8.6.3 requires compensatory mitigation for the loss of riparian or wetland habitat at a ratio of 2:1 (area created to area lost), consisting of the following option in order of preference:

1. The same kind on the same site;
2. The same kind on a different site, within the San Luis Obispo planning area;
3. A similar kind on the same site; or
4. A similar kind on a different site, within the San Luis Obispo planning area.

If appropriate mitigation sites are not available onsite or at a different location within the planning area, individual small projects can provide mitigation through payment of a fee that will be used for protecting similar resources within the planning area or through a mitigation bank. Compensatory mitigation shall be implemented in compliance with state and federal requirements and conducted by qualified professionals. Areas selected as mitigation sites should be located and designed to minimize the need for long-term maintenance or support.

The City's Municipal Code 17.70.030 also describes policies related to creek setbacks. These requirements are to apply to all creeks as defined in the General Plan Open Space element and shown on that element's creek map. The location of the top of bank and riparian vegetation are to be shown on all project plans subject to City approval. An exception to the setback requirements shall be requested through a director's hearing, and supported by a biological survey conducted by a qualified, independent person.

The City also has policies regarding tree removal. "Significant trees" are determined by the City Council upon the recommendation of the Tree Committee, Planning or Architectural Review Committee. Significant trees are to be protected to the extent possible and their removal is subject to mitigation. "Heritage trees" are not to be authorized for removal unless the authorized by the city arborist. The City's Municipal Code 12.24.090 defines the provisions for tree preservation, and a process to request tree removal permits. The exact number, species, and locations of trees to be removed by projects and those to remain are required to be specified on final project plans. Any tree removal applications are to be provided at the same time as the development permit application. Compensatory mitigation is specified as planting a minimum number of new trees for each tree authorized to be removed on the same or a different property.

### 1.2.3 Special-status Species

For the purpose of this BRA, special-status species are those plants and animals listed, or Candidates for listing, as Threatened or Endangered by the USFWS under the federal Endangered Species Act (FESA); those listed as Threatened or Endangered under the California Endangered

Species Act (CESA); animals designated as “Species of Special Concern,” “Fully Protected,” or “Watch List” by the CDFW; plants considered Endangered or Rare under the California Native Plant Protection Act; and, animals considered sensitive that do not have a specific listing status but which are recorded in the California Natural Diversity Database (CNDDDB; CDFW 2021a).

FESA provisions protect federally listed species and their habitats from unlawful take, which is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” Under these regulations, “harm” may include significant habitat modification or degradation that kills or injures wildlife. Candidate species are not afforded legal protection under FESA; however, Candidate species typically receive special attention during the CEQA environmental review process. CESA provides for the protection and preservation of native species of plants and animals that are experiencing a significant decline which if not halted would lead to a threatened or endangered designation. Habitat degradation or modification is not expressly included in the definition of take under CESA.

Rare plants are those defined as having a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, 2B, 3 or 4 (CDFW 2020a). Rank 4 species are a watch list, and typically do not meet CEQA's rarity definition (Section 15380), but are included here because they may be of local concern. The CRPR definitions are as follows:

- *Rank 1A: Presumed extirpated in California and either rare or extinct elsewhere.* These species are presumed extirpated because they have not been recorded in the wild in California for many years.
- *Rank 1B: Rare, threatened or endangered in California and elsewhere.* Plants that are rare throughout their range and the majority in this rank are endemic to California.
- *Rank 2A: Presumed extirpated in California, but more common elsewhere.* These species are presumed extirpated because they have not been recorded in the wild in California for many years, but they are common outside of the state.
- *Rank 2B: Rare, threatened or endangered in California, but more common elsewhere.* Plants that have ranges that extend into California, where they are rare, but are common in areas outside of the state.
- *Rank 3: Plants needing more information - A review list.* Information necessary to assign the species to one of the lists or reject them is lacking. Most species in this rank are taxonomically unresolved.
- *Rank 4: Plants of limited distribution - A watch list.* Species of limited distribution or infrequent occurrence throughout their range in California but which their vulnerability to extirpation appears low at this time and should be monitored.

Additionally, the CRPR system further assigns threat codes as a decimal extension to the rank, ranging from 1 to 3. CRPR 3 species do not have a threat code due to insufficiency of information needed to assign it, and CRPR 1A and 2A also do not have threat codes because they not know to currently occur in California. The threat code extensions are as follows:

- *.1: Seriously threatened in California.* More than 80% of occurrences are threatened and there is high degree and immediacy of threat.
- *.2: Moderately threatened in California.* Approximately 20 to 80% of occurrences are threatened and there is a moderate degree of immediacy of threat.

- .3: *Not very threatened in California.* Less than 20% of occurrences are threatened and there is a low degree and immediacy of threat, or no current threats are known.

CDFW (2020b) maintains a list of Species of Special Concern for those animal species in which declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as special concern is to halt or reverse their decline early enough to secure their long-term viability. Species of Special Concern may receive special attention during environmental review, but do not have statutory protection. FESA and CESA emphasize early consultation to avoid impacts on Threatened and Endangered species. As part of the consultation process, project proponents are directed to develop appropriate mitigation plans to offset project effects on listed species and their habitats.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state regulations. Birds of prey are protected in California under the California Fish and Game Code Section 3503.5. Disturbance that causes nest abandonment or loss of reproductive effort is considered take by CDFW. Eagles are protected under the Bald and Golden Eagle Protection Act. The federal Migratory Bird Treaty Act (MBTA) applies to many bird species, including common species, and prohibits killing, possessing, or trading in migratory birds, including whole birds, parts of birds, bird nests, and eggs. The act restricts construction disturbance during the nesting season that could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment.

#### 1.2.4 Designated Critical Habitat

Critical habitat is designated for species listed under FESA, and are areas that contain the physical or biological features which are essential to the conservation of those species and may need special management or protection. A 2018 Supreme Court ruling further defined critical habitat as those areas that provide habitat for the relevant species, exempting areas that are not currently occupied. Critical habitat designations affect only federal agency actions or federally funded or permitted activities. Activities by private landowners are not affected if there is no federal nexus, but biological studies generally address project effects on designated critical habitat when present at the project site.

#### 1.2.5 Sensitive Natural Communities

Sensitive natural communities are those native plant communities listed in the CNDDDB (CDFW 2021a) as rare or of limited distribution. They are evaluated using NatureServe's Heritage Methodology to assign global and state ranks based on rarity and threat, and these ranks are reviewed and adopted by CDFW's (2021b) *Vegetation Classification and Mapping Program* (VegCAMP). Evaluation with the state (S) level results in ranks ranging from 1 (very rare or threatened) to 5 (demonstrably secure). Those with ranks of S1 to S3 are to be addressed in the environmental review process under CEQA (CDFW 2021b).

#### 1.2.6 Jurisdictional Wetlands and Other Waters

Section 404 of the Clean Water Act established a program to regulate the discharge of dredged and fill material into "waters of the United States", which includes such waters as rivers, lakes, streams, and most wetlands, and are regulated by the U.S. Army Corps of Engineers (USACE). In nontidal waters of the United States, USACE jurisdiction extends to the Ordinary High Water Mark (OHWM), which is defined as "the line on the shore established by the fluctuations of water and indicated by

physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation or the presence of litter and debris.” Identification of the OHWM is conducted by examining physical evidence of surface flow in the stream channel. Wetlands under USACE jurisdiction are defined as meeting three parameters or criteria: hydrophytic vegetation, hydric soils, and wetland hydrology.

The State Water Resources Control Board (SWRCB) regulates discharges of fill and dredged material under the Clean Water Act Section 401, the Porter-Cologne Water Quality Control Act, and the state and federal "No Net Loss" policies for wetlands. The 401 Water Quality Certification and Wetlands Program protects "waters of the state", including wetlands, riparian areas, and headwaters. Most projects are regulated by the Regional Water Quality Control Board (RWQCB) which oversees the local area in which the project is located. Projects that affect only waters of the state, and not waters of the United States, must apply for Waste Discharge Requirements (WDRs) instead of a 401 Certification pursuant to California Water Code Section 13260(a).

California Fish and Game Code Section 1602 requires that CDFW be notified of any proposed activity that may affect any river, stream or lake by: 1) substantially diverting or obstructing the natural flow; 2) substantially changing or using any material from the bed, channel or bank; or, 3) depositing or disposing of debris, waste, or other materials. The notification requirement applies to ephemeral and perennial drainages, including streams, desert washes, and watercourses with subsurface flow, and may apply to projects conducted within flood plains of a regulated water body. The CDFW jurisdictional limits are generally the outer edge of riparian vegetation, or the top of bank, whichever is farther. Projects that would impact CDFW jurisdictional areas are required to complete a notification form and submit a fee, in order to obtain a Lake and Streambed Alteration Agreement (LSAA).

Projects within the boundaries of jurisdictional wetlands or waters would typically require a Section 404 permit from the USACE, a Section 401 Water Quality Certification or WDR from the appropriate RWQCB, and a LSAA from CDFW, depending on the location of project impacts within each agency's jurisdiction. Any projects requiring a Section 404 permit must first obtain a Section 401 permit. Impacts to waters of the state that do not require a Section 404 permit may require a WDR. Additionally, if any species protected under FESA may be present in the project area, the Section 404 permitting pursuant to Fish and Wildlife Coordination Act requires review and authorization by the USFWS and/or National Marine Fisheries Service (NOAA Fisheries), as appropriate.

## **2.0 METHODS**

KMA conducted a desktop review of natural resources databases, maps, literature and online sources to identify special-status biological resources documented from the region that may be present in the project site. Aerial imagery was employed in coordination with field surveys to define the current extent of onsite and adjacent biotic conditions. Time series aerial and streetside photography (Google Earth, Bing) was reviewed to obtain information on the history of land use onsite and abutting properties. KMA's Principal Biologist Kevin Merk and Senior Biologist Susan V. Christopher, PhD conducted a reconnaissance survey of the site on April 8, 2021 from 0930 to 1145 hours to assess the potential of the site to support sensitive biological resources. The weather during the survey was clear, wind 5 to 10 miles per hour, and air temperature ranged from 56° Fahrenheit (° F) at start to 65° F at end. The property was assessed in entirety, which was considered to the study area for this project. An additional survey to evaluate watershed conditions of the drainage on neighboring properties was conducted the Susan Christopher on April

13, 2021 from 1215 to 1300 hours. The sky was overcast, with winds 5 to 10 miles per hour, and air temperature 56° F. Additional surveys of the site and potential mitigation areas were conducted on July 7, 2021 and September 3, 2021.

The field surveys provided a basis to evaluate onsite conditions for the preparation of this BRA as well as an accompanying Preliminary Delineation of Wetlands and Other Waters ("wetland delineation") prepared by KMA for this project. As part of the wetland delineation, the limits of CDFW/RWQCB jurisdictional areas that corresponded to stream resources, including those protected by the City were delineated as the outer edge of the riparian canopy or top of bank, whichever was farther. These limits were recorded in the field using a Trimble GeoXH 600 Global Positioning System (GPS) unit and imported into ArcGIS for map production.

All plant and animal species observed during the surveys were recorded. Plant taxonomy followed the Jepson Flora Project (2021), and nomenclature for animals is reported as it appears in the CNDDDB (CDFW 2021a) or as updates are available (California Herps 2021). Habitat types, representing land use and plant communities, were mapped on ESRI (2021) aerial imagery. Land use types followed *A Guide to Wildlife Habitats in California*, which is updated through the California Wildlife Habitat Relationships (CWHR) System (CDFW 2021c). Designation of plant communities generally followed Holland's (1986) *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Sawyer et al.'s (2009) *Manual of California Vegetation* and *VegCAMP* (CDFW 2021b) were also referenced. Plant communities were determined as to whether or not they met the criteria of sensitive natural communities. Representative photographs of each of the habitat types within the study area are provided in a photo plate.

The surveys were conducted during the blooming period of special-status plant species that are known to occur in the region, which is the period when herbaceous annuals would have been the most readily identifiable. Plant species were identified to a level necessary to determine rarity. The methodology used during the surveys followed the guidance in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018) and *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000). This included walking the entire study area using evenly spaced transects to observe and document all plant species observed. The extent of a rare plant occurrence found in the study area was recorded using a Trimble GPS unit and imported into ArcGIS for map production.

The *Web Soil Survey* (Natural Resources Conservation Service [NRCS] 2021a) was used to identify the soil mapping units present within the study area. The *National Wetlands Inventory* (NWI) was examined to evaluate the extent of any identified wetlands on the site and in the vicinity (USFWS 2021a). USGS topographic maps were also reviewed for information on hydrologic and topographic features.

A query of the CNDDDB was completed to identify occurrence records of special-status biological resources (plants, animals and sensitive natural communities) documented within five miles of the project site. This search included the following quadrangles: San Luis Obispo, Lopez Mountain, Arroyo Grande Northeast, and Pismo Beach. A full nine-quadrangle search was determined to be unnecessary for this project due to the small size of the lot and location within a developed area. CNDDDB records of special-status plant and animal occurrences within the five-mile buffer of the study area were mapped. For the list of special-status species identified in the search, local distribution and ecological information was obtained from a variety of online and published sources (Jennings and Hayes 1994, Bolster 1998, Moyle et al. 2015, Thompson et al. 2016, Audubon

2021, Calflora 2021, California Native Plant Society [CNPS] 2021, California Herps 2021, The Cornell Lab of Ornithology 2021a, 2021b; CDFW 2021c). Based upon KMA's knowledge of the local area and other sources of species occurrence records (particularly observations recorded in Calflora [2021] and The Cornell Lab of Ornithology [2021a]), additional special-status biological resources that have been documented in the project vicinity were included. Designated critical habitat for species listed under FESA was identified and mapped based upon information provided in *Environmental Conservation Online System* (USFWS 2021b).

For the list of all special-status species known from the project vicinity, an evaluation of those species with potential to occur in the study area was performed based upon the suitability of habitat conditions on the property and the local distribution (geographical and elevational ranges) and specific requirements (plant communities and soils) of the species considered. Definitive surveys for the presence or absence of special-status animal species were not conducted, and focused plant surveys were conducted as described above. We relied on existing information and known occurrence records in the region, coupled with our site-specific observations from other locations in the surrounding area, to make determinations for the probability of occurrence of each special-status species within the study area.

Any special-status species observed during the site surveys were determined to be "Present". Those species considered as "Potential" met the following requirements: records in the site vicinity, appropriate plant community and/or soil associations onsite, and within the elevational range of the species. If any one of these elements was not met or considered to be marginal for the site, but the other elements were present, that species was considered "Unlikely". If onsite environmental conditions were clearly inappropriate, or the species has a limited distribution that does not overlap the site, those species were considered "Not Expected". If any lifestage or particular life history use (i.e., foraging) fit the requirements of the onsite conditions, even while other aspects were inappropriate for certain functions (i.e., breeding), these species were still considered to have potential to occur onsite, but the likelihood of occurring onsite along with a description of site suitability are provided in the special-status species table as well as a more in-depth analysis in the text. Because the background review determined that there were three additional special-status plant species that were documented near the site which bloom after April, an additional plant survey was conducted to search for those species during their blooming period. The evaluation of occurrence for those species was then changed based upon the results of the survey.

We determined whether special-status plant and animal species, designated critical habitat, sensitive natural communities and jurisdictional area could or do occur on or the site. Potential impacts of the proposed project were evaluated for each of these biological resource issues, including the six additional impacts in CEQA Appendix G. An evaluation of significance as defined under CEQA is provided for each potential impact, and mitigation is proposed to reduce impacts to a level below the significance threshold. We also incorporated compliance with the City's biological resources protection rules and regulations into the proposed mitigation measures.

### **3.0 RESULTS**

A list of plants and animals observed during the surveys is provided in Appendix B. A plate of photographs taken during the site visits to characterize onsite conditions and habitat types is provided in Appendix C. Appendix D is a summary of all special-status species, sensitive plant communities, and designated critical habitat recorded within the site vicinity, and KMA's evaluation of their potential presence onsite. Figure 1 is a site location map and Figure 2 is an aerial overview

map with wetland habitats recorded in the NWI in the site vicinity. Figure 3 is a habitat map of the study area showing the area occupied by each of the habitat types, location of a rare plant occurrence, as well as drainage characteristics and jurisdictional area relevant to the City, state and federal mitigation requirements. Figures 4 and 5 show the locations of special-status plants and animals, respectively, recorded in the CNDDDB within five miles of the study area. Figure 6 shows sensitive natural communities recorded in the CNDDDB and designated critical habitat.

### 3.1 Existing Conditions

The property consists of a graded lot surrounded by light industrial and urban development, with a segment of drainage (known locally as a segment of Bishop Creek) that has been confined to an eroding roadside ditch along McMillan Avenue. The drainage habitat is discussed further in Section 3.2 below. A review of time series aerial photography shows that the upland area of the lot has been regularly mowed, and the willows along the drainage have been removed in the past and trimmed regularly. The pad is level with an elevation of approximately 227 feet (69 meters) above mean sea level, and slopes slightly to the southeast. The western top of bank is at the 225/226-foot (69 meters) elevation line, the eastern top of bank is at 228-foot (69 meters) elevation, and the low flow channel is at 219 feet (67 meters) in elevation (William R. Dyer, Drainage Analysis, dated 11/6/2000). Thus, the channel banks are particularly steep and the east side is eroding (refer to photographs in Appendix C). A substantial amount of trash, including syringes, was present in the channel, showing racking against objects from past flows.

### 3.2 Hydrologic Features, Wetlands and Riparian Habitats

The drainage feature onsite is a remnant creek segment that has been altered from its natural state, and likely its historic location. It is not shown as a blue-line stream or as a topographic draw on the USGS topographic map, and therefore is unnamed by the USGS. It also is not indicated in the NWI (Figure 2). However, it is mapped in the City's (2014) *General Plan* as a perennial creek and the City's GIS layer indicates that it is unofficially called "Bishop Creek". It is a tributary of what is locally known as "Acacia Creek" further downstream that is part of the headwaters of the East Fork of San Luis Obispo Creek.

The drainage originates in the southwestern slope of what is locally known as High School Hill, which is located between the Johnson Avenue area of San Luis Obispo and Reservoir Canyon. The drainage enters a series of underground culverts at the City limits and daylights at Sinsheimer Park (Figure 2). Within the park the drainage is an eroded channel with patchy riparian and ornamental shrubs and scattered native trees such as California sycamores (*Platanus racemosa*) that have been planted along the bank. This upstream section of the drainage was dry at the time of the April 2021 survey, but had evidence of flow and cobble/rock substrate. It passes under a series of bridges for the SLO Railroad Safety Trail, Union Pacific Railroad, and driveways to businesses along upper McMillan Avenue. The drainage flows through a 48-inch diameter culvert on the upstream (north) side of the property that provides access for a driveway to offsite businesses in this area. It enters another approximately 48-inch more oval shaped culvert on the downstream end of the property where it goes underground beneath an industrial complex. It resurfaces on the east side of Garibaldi Avenue where there is a stand of mature eucalyptus mixed with riparian habitat and flows under a bridge for Orcutt Road. Downstream from Orcutt Road, the channel has a narrow band of riparian vegetation. It joins other drainage features before passing under Broad Street, where it runs south along Broad Street in an eroded, treeless channel. At this point, the drainage is referred to as Acacia Creek, and continues in a southerly direction and traverses the Damon-Garcia Sports Fields. The Damon Garcia Sports Field project included an extensive habitat restoration

component that planted trees and shrubs along the creek, which now form a well-developed riparian corridor. Further downstream, Acacia Creek joins "Orcutt Creek" from the east to form the "East Fork of San Luis Obispo Creek" on the south Tank Farm property. Both of these drainages are also unnamed on the USGS topographic maps. The East Fork of San Luis Obispo Creek joins with the main channel of San Luis Obispo Creek, and then flows southwesterly where it empties into the Pacific Ocean at Avila Beach.

There was a small trickle of flow out of the upstream culvert at the time of the April surveys, and one pool with standing water to a depth of approximately 18 inches further downstream. Racking of trash and other debris to approximately two (2) feet high indicated the limits of high flow, which helped delineate the ordinary high water mark within the channel area. The drainage onsite had a series of small pools and riffles, with no flow in riffle areas. The substrate was clay, rock and cobble with some areas of chunks of pavement and road base. The slope around the two culverts and a small erosion gully along the upper top of bank on the west side were stabilized with concrete, cement bags, and rock. The east side of the bank was steeply incised and eroded, and contained an outfall of an 18-inch diameter stormwater pipe. The bank on the west side was more gradual, with a terrace in the bend of the drainage that supported willows and may be inundated during large storms. One slightly undercut bank at a willow was present at the deepest pool. The active channel was approximately five (5) feet wide.

The water was clear with a layer of filamentous green algae along the bottom of the pools. Sierran treefrog (*Pseudacris sierra*) tadpoles, eggs and one adult frog were seen in the creek, and one called briefly from the upper bank. Aquatic invertebrates such as freshwater snails (*Physa* sp.) and water fleas (Order Cladocera) were observed. A band of thinned riparian habitat was present along the channel. Time series aerial photography shows that the riparian vegetation had been removed and thinned overtime. Streetside photography shows all but the largest red willow (*Salix laevigata*) had been cut to the base around 2014. Arroyo willow (*Salix lasiolepis*) shrubs had grown back over the channel from multiple small (less than 3 inches in diameter at breast height [DBH]) trunks at the time of the surveys. The lower limbs had been trimmed, and the willows formed a nearly closed canopy over the channel.

No areas of predominantly wetland vegetation were present along the drainage, but scattered umbrella plant (*Cyperus involucratus*), a non-native species, occurred along the channel. The vegetation on the streambanks and along the edge of the channel was similar in composition to the upland grassland vegetation found on the rest of the site, with a few additional upland species as described in Section 3.4.2 below. No depressions that could support wetland vegetation were observed in the upper grassland habitat. Tire ruts at the edge of the adjacent offsite parking area were dried mud and vegetated by non-native, upland grassland species. Aerial photography shows the southern portion of the site staying green longer into the summer possibly from shading of the neighboring buildings, but this area was entirely searched and only upland grassland species and a few Himalayan blackberry (*Rubus armeniacus*) stems were present. This area is at the lower end of the gently sloping site, and appears to have had a larger thicket of blackberry that had been cleared, which were resprouting at the time of the survey.

The drainage onsite would be considered to be a Palustrine system, which are nontidal wetlands dominated by trees, shrubs or persistent emergents (Cowardin et al. 1992). The channel below the OHWM had an Aquatic Bed, and immediately above the OHWM was an Unconsolidated Bottom (Cowardin et al. 1992). The riparian habitat is a type of Scrub/Shrub Wetland (Cowardin et al. 1992). Scrub-Shrub Wetlands are dominated by woody vegetation less than 20 feet (6 meters) tall, including shrubs, young trees, and stunted trees (Cowardin et al. 1992).



### 3.3 Soils

There is only one soil type mapped within the study area in the *Web Soil Survey* — Cropley clay, 0 to 2 percent slopes, MLRA 14 (NRCS 2021a). This is a clay soil to approximately 32 inches deep in profile, underlain by sandy clay loam. These soils form on alluvial fans and terraces, and are derived from calcareous shale. Despite the high clay composition, these soils are considered to be moderately well-drained, are not subject to flooding or ponding (NRCS 2021a). This soil type is considered to be a hydric soil in the Coastal Part of San Luis Obispo County (NRCS 2021b).

Observations in the field were of dark clay soils with some gravel-sized rocks. A past geotechnical study of the parcel indicated that the soils are generally soft and very moist to saturated slightly sandy silty clays over moderately dense silty sandy clays (Buena Geotechnical Services 2004).

### 3.4 Habitat Types

Four plant communities or land uses were identified within the study area, and include: 1) Annual Grassland; 2) Riparian; 3) Developed/Ruderal; and, 4) Ornamental. Each of these habitat types is described below. The areas occupied by these habitat types are shown on Figure 3 and representative photographs are provided in Appendix C.

#### 3.4.1 Annual Grassland

Annual Grassland occurs on the graded pad in the western two-thirds of the property, and in the understory of the Riparian habitat. Upland areas containing Annual Grassland consisted of 11,760 square feet (Figure 3). It had lush spring growth at the time of the survey, and time series aerial photography shows the area is regularly mowed. The Annual Grassland habitat type was dominated by non-native grasses and herbs such as slender wild oat (*Avena barbata*), rigput brome (*Bromus diandrus*), wild radish (*Raphanus sativus*), English plantain (*Plantago lanceolata*), black mustard (*Brassica nigra*), foxtail barley (*Hordeum murinum* ssp. *leporinum*) and big heron bill (*Erodium botrys*). Native species were present only in small patches, and included a small occurrence of California poppy (*Eschscholzia californica*). A few scattered Himalayan blackberry, curly dock (*Rumex crispus*) and goose grass (*Galium aparine*) were present in this habitat where shading from willows and buildings may affect vegetation distribution. Five small coast live oaks (*Quercus agrifolia*) were along the southern property line that may have been planted. This habitat type corresponds to the Non-native Grassland community described by Holland (1986) and the Wild Oats and Annual Brome Grasslands semi-natural alliance (CDFW 2021b).

#### 3.4.2 Riparian

The Riparian habitat along the creek channel, consisting of 3,975 square feet, was dominated by arroyo willow shrubs that had previously been cut to the base, resprouted, and then had the lower limbs thinned. Also were a red willow tree, small coast live oaks, Peruvian pepper tree (*Schinus molle*) seedlings, one small California coffeeberry (*Frangula californica*) shrub, and Himalayan blackberry in the understory of this habitat type. Coast live oaks onsite were small trees above the top of bank, with canopy continuous with the willow riparian. There were also several coast live oak seedlings observed in the understory on the streambank. The understory had all of the same non-native upland grassland species that occurred in the Annual Grassland habitat. Additional species present under the riparian canopy were Bermuda buttercup (*Oxalis pes-caprae*), smilo grass (*Stipa miliacea*), spring vetch (*Vicia sativa*), English ivy (*Hedera helix*) and coast morning glory



Study Area Boundary

Drainage Outside of Study Area

Habitat Type

Annual Grassland (11,760 SF)

Ornamental (60 SF)

Riparian (3,975 SF)

Developed/Ruderal (3,050 SF)

Rare Plant Occurrence

Cambria morning-glory (2 plants)

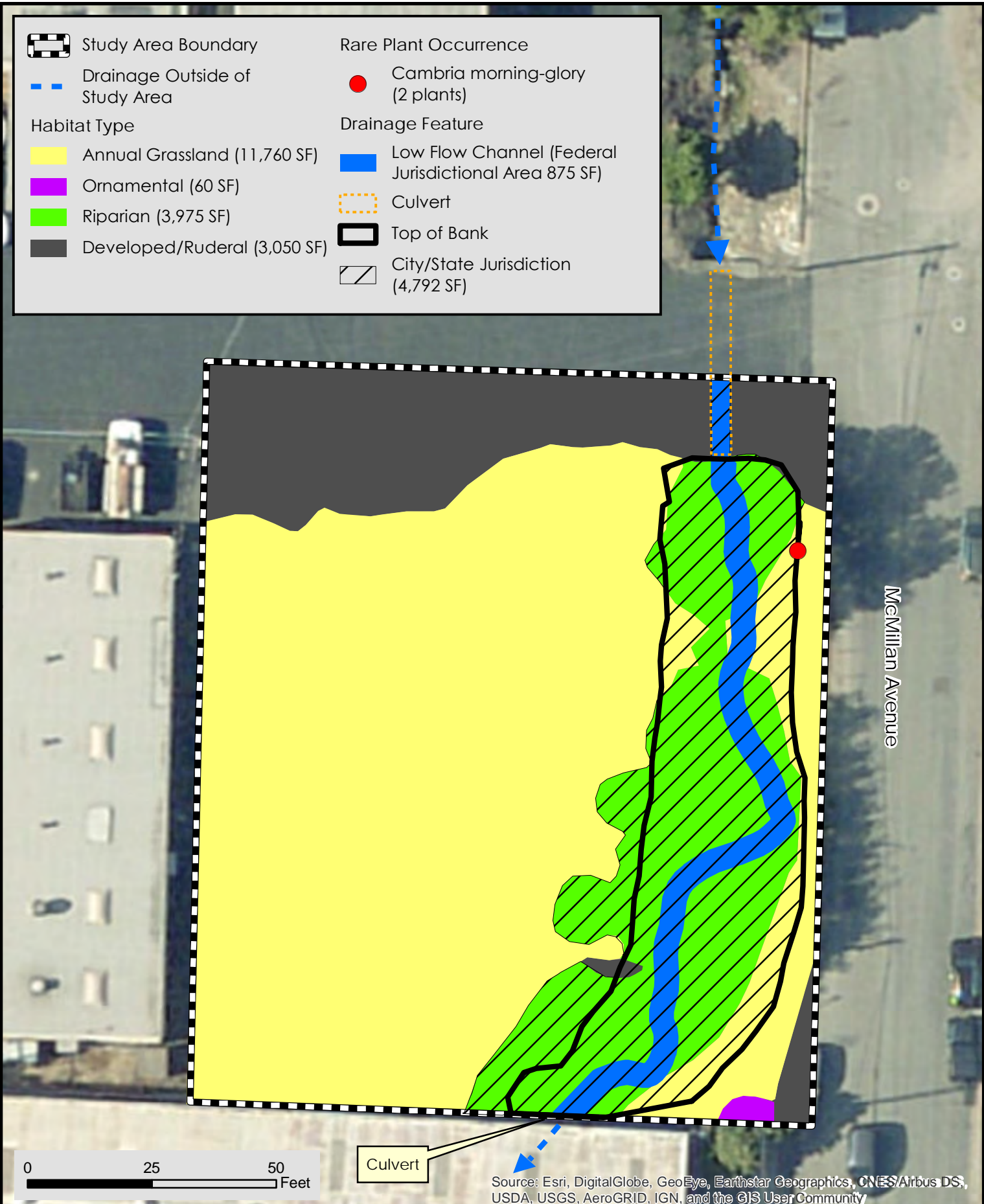
Drainage Feature

Low Flow Channel (Federal Jurisdictional Area 875 SF)

Culvert

Top of Bank

City/State Jurisdiction (4,792 SF)

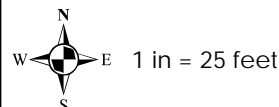


McMillan Avenue

0 25 50 Feet

Culvert

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



2855 McMillan Ave., San Luis Obispo

GTW SLO LLC

Figure 3  
Habitat Map

(*Calystegia macrostegia* ssp. *cyclostegia*). This habitat type corresponds to the Central Coast Riparian Scrub community described by Holland (1986) and the Arroyo Willow Thickets alliance described by Sawyer et al. (2009).

### 3.4.3 Developed/Ruderal

The Developed areas within the study area included a portion of the driveway and culvert that provides access for the offsite property to the north (Figure 3). There was also a small eroded ditch draining into the creek channel that had been filled with rock and debris toward the southeastern corner of the site. Ruderal (disturbed) habitat occurs along the margin of the roads and parking area where there were non-native species characteristic of the Annual Grassland habitat and a higher proportion of bare ground. Other non-native species observed in Ruderal areas included spiny sowthistle (*Sonchus asper*) and California burclover (*Medicago polymorpha*). Due to the highly disturbed condition of the Annual Grassland habitat, there was not a clear line denoting a separation between grassland and ruderal areas. This habitat type is not represented by a natural plant community because it is mostly bare ground with only sparse cover by non-native species. The paved areas would be classified as the Barren habitat type in the CWHR (CDFW 2021c). The ruderal areas would be considered to be an Urban habitat type, in the Demolition Site category, which includes vacant urban lots lacking native vegetation within commercial and industrial portions of urban areas (CDFW 2021c). Together the Developed and Ruderal areas comprised 3,050 square feet.

### 3.4.4 Ornamental

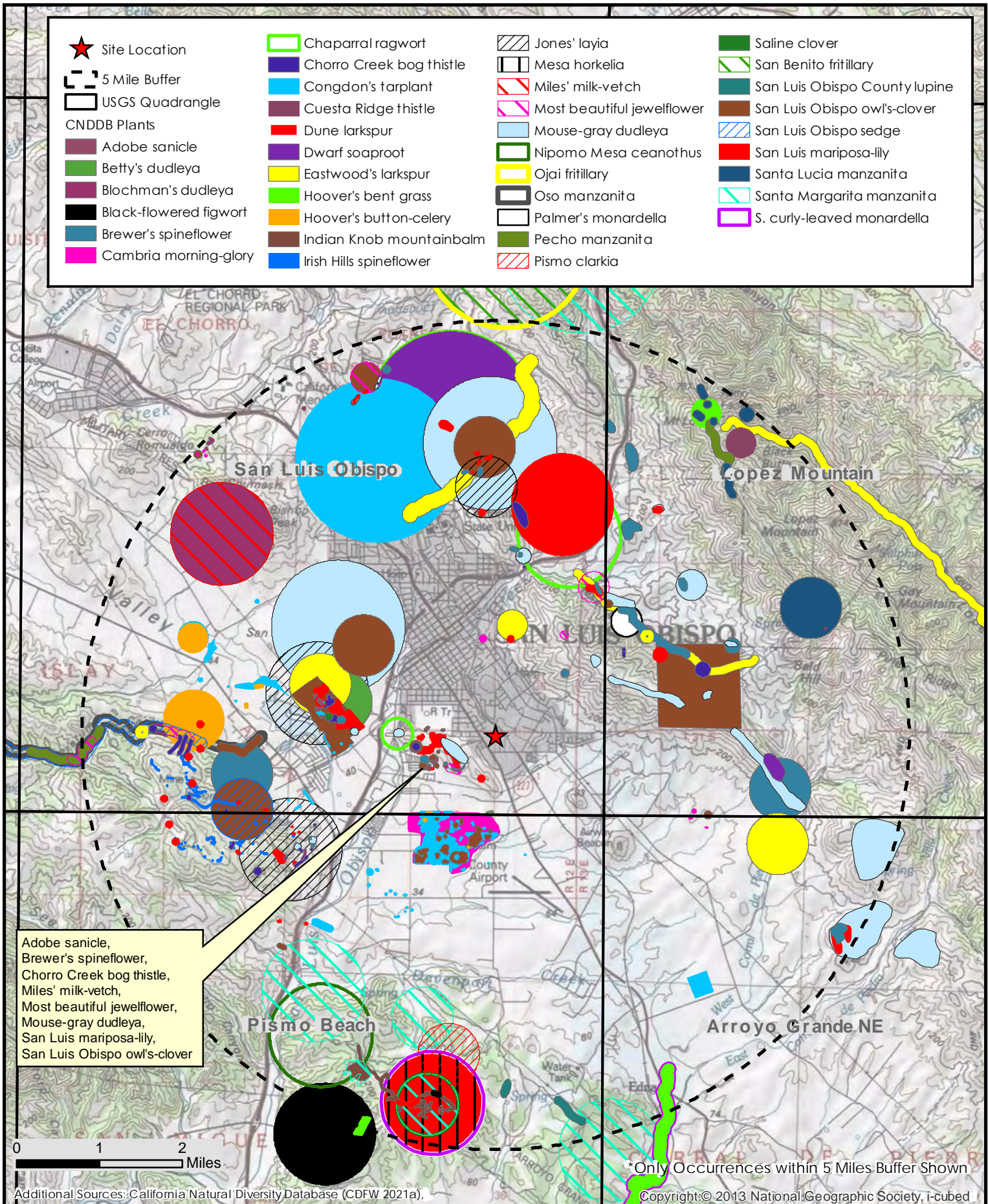
One Brazilian pepper tree (*Schinus terebinthifolius*) was planted offsite and its canopy overhung the southeastern corner of the property occupying 60 square feet. This habitat type is not a native plant community and would be classified as an Urban habitat within the CWHR System (CDFW 2021c).

## 3.5 Special-status Biological Resources

The property consists of a vacant lot surrounded by urban development, with disturbed grassland and riparian habitats. Although the background review contained a large number of special-status biological resources that have been documented within the project vicinity (Appendix D), there is low potential for the site to support special-status animal species due to its small size, ongoing disturbance, and isolation. Surveys of the site in 2021 were conducted to evaluate the potential presence of special status plants. The drainage has likely been moved from its historic alignment during the construction of McMillan Avenue, and although it has low potential to support wildlife, it would be considered to be a sensitive habitat type since it supports a continuous canopy of riparian scrub habitat and has seasonal flowing water that connects to larger drainage features downstream.

### 3.5.1 Special-status Plants

One rare plant species, **Cambria morning-glory**, was found in a small occurrence of approximately two plants on the northeastern upper streambank (Figure 4). Cambria morning-glory has a CRPR of 4.2 and is a perennial rhizomatous herb in the family Convolvulaceae. It is also called San Luis Obispo County morning glory. This species occurs in chaparral, cismontane woodland, coastal prairie and valley and foothill grassland habitats, usually on clay soils (CNPS 2021). It blooms from March until July. This species is widely distributed in San Luis Obispo County, occurring along the



north coast, Santa Lucia Range, and from Morro Bay and Los Osos inland through the vicinity of San Luis Obispo and extending to Arroyo Grande and Nipomo (Calflora 2021). Its type locality is from Cambria (CDFW 2021a). This species is recorded in the hills surrounding San Luis Obispo, a large population occurs on either side of Tank Farm Road, and there is an occurrence from the Johnson Avenue area within city limits (CDFW 2021a). Extensive occurrences are present in grasslands that are a part of the City-owned Irish Hills Natural Reserve. The clay soils onsite are suitable for this species, but it was not found in the larger grassland to the west of the drainage. Only two small plants were located at the base of a sign along McMillan Avenue.

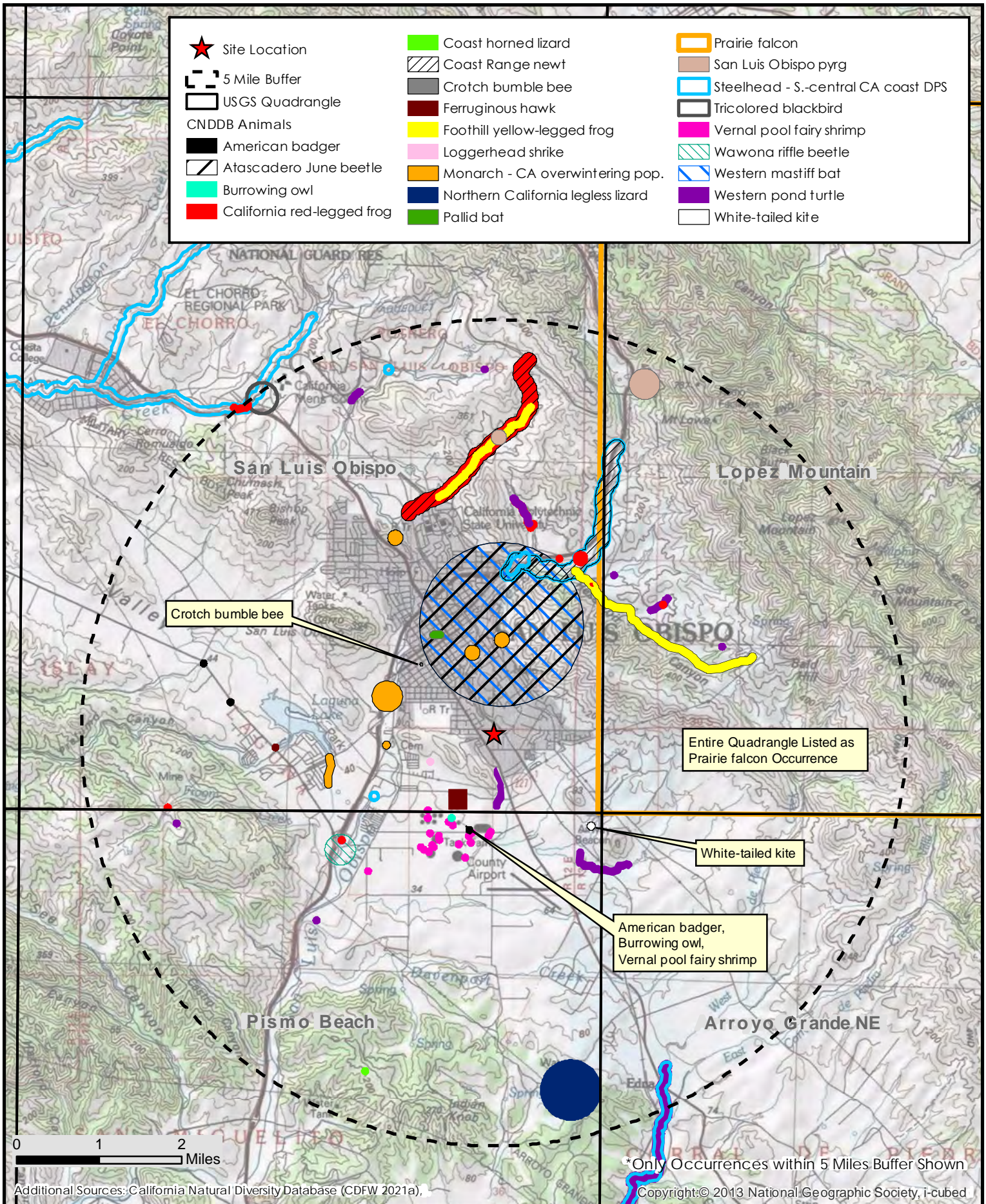
No other special status plants were observed onsite during the focused surveys in the spring and summer of 2021. Given the highly disturbed nature of the site, and lack of serpentine derived soils and rock outcrops or topographic depressions with seasonal wetlands, no other rare plants are expected to occur on the site. Please refer to Appendix D for further details related to special status plants evaluated in this study.

### 3.5.2 *Special-status Animals*

Based upon our background review of special-status species records, one invertebrate, two birds, and four mammals were considered to have "Potential" to occur on the property. No special-status amphibian or fish species would occur because the drainage has insufficient water to support these species. No special-status reptiles were considered to have potential to occur due to the small size of the habitat and surrounding industrial and urban land uses. The listing status, habitat associations and evaluation of occurrence of the species recorded in the project vicinity are summarized in Appendix D, and a map of CNDDDB animal records within five miles of the property is provided in Figure 5. These special status animal species that were determined to have Potential to occur onsite are expected as transients moving or foraging through the area, and are not expected to use the site for breeding activities. They are described in further detail below.

The **monarch butterfly** (*Danaus plexippus*, population 1) is a Candidate for federal listing by the USFWS under the Endangered Species Act and considered sensitive by CDFW for overwintering colonies. Roosting sites are considered to be of local concern within the City's (2014) *General Plan*. This species undertakes multi-generational migrations of thousands of miles (Center for Biological Diversity et al. 2014). In the late summer, the butterflies leave Canada and the northern United States to their overwintering habitat on the south-central California/Baja California coast or mountains of central Mexico. "Population 1" of the species refers to those that overwinter in California, historically ranging from northern Mendocino County through San Diego County.

In the California central coast region, they roost colonially during the winter in wind-protected groves of eucalyptus, Monterey pine and cypress. These colonial roost sites may be occupied by large numbers of butterflies throughout the winter and the individual sites are generally reused each year. The butterflies cluster together at the roost sites, which have specific microclimates that keep them cool enough to conserve lipid reserves but do not reach freezing temperatures that could result in death (Center for Biological Diversity et al. 2014). Overwintering is the most vulnerable element in the monarch life cycle, and over the past 30 years the overwintering population has declined by at least 95% (Schultz et al. 2017). "Autumnal sites" are temporary sites used for roosting that do not persist through the winter and may not be used every year. During the spring and summer, they disperse throughout the United States and southern Canada (Center for Biological Diversity et al. 2014). Adults nectar on a variety of blooming plants, including



milkweeds, asters, lilies, verbenas, mallows, wild carrots, legumes, clover, and alfalfa (Brower et al. 2006). Milkweed is required as a host plant for caterpillars, and is where the eggs are laid, but was not seen in the study area.

Eggs can hatch from between 25 days and 7 weeks (Center for Biological Diversity et al. 2014). The larvae use compounds in the milkweed plant as a defense against predators and other specific functions in their lifecycle (Agrawal et al. 2012). After metamorphosis, breeding adults lay eggs within just a few days, resulting in several generations of breeding butterflies during one summer season. Breeding generations live only two to five weeks, and generally move to the north and east following cooler temperatures and higher quality milkweed. Those that metamorphose in the fall go into reproductive diapause instead of mating, and can live up to nine months (Center for Biological Diversity et al. 2014). They undergo a series of physiological changes in order to survive their migrations, and travel 25 to 30 miles per day (Brower et al. 2006). Individuals that arrive at the roosting sites are thus "great-great-grandchildren" of those that departed the overwintering site the previous spring, and it is not known how they find the exact roost sites that were used by their ancestors (Center for Biological Diversity et al. 2014). There are several records of overwintering populations and autumnal sites from within the urban limits of San Luis Obispo; however, most overwintering occurs along the coast in the Pismo Beach, Los Osos, and Morro Bay areas where winter temperatures are moderated by the Pacific Ocean (CDFW 2021a). The thinned, shrubby riparian habitat onsite is unsuitable as a roost site for this species, but individuals could periodically fly through the site and feed on flowering plants in the grassland habitat.

**Cooper's hawk** (*Accipiter cooperii*) is on the CDFW Watch List for nesting and is considered a species of local concern by the City (2014). This is a woodland species that prefers dense stands of coast live oak, riparian forest, and mixed coniferous forests near a source of water, but also can occur in suburban habitats with tall trees. They prey on birds, small mammals, reptiles and amphibians. There are numerous observations from areas throughout the urban area of San Luis Obispo, including several very close to the property (The Cornell Lab of Ornithology 2021a). This species could occur as a transient or perch in the riparian habitat, but there is no dense woodland for nesting and the small size of the available tree habitat and lack of a significant prey base makes foraging unlikely.

The **yellow warbler** (*Setophaga petechia*) is a CDFW Species of Special Concern for nesting and is considered a species of local concern by the City (2014). In California, this species breeds along coastal areas from Del Norte County south to Ventura County, where it prefers medium-density riparian woodlands (CDFW 2021c). This is a migratory species that occurs in this area only during the breeding season. They are closely tied to riparian habitat for foraging and nesting, but they also use residential areas and orchards. There are records of this species from close to the site in an industrial park and at Damon-Garcia Sports Fields (The Cornell Lab of Ornithology 2021a). The riparian habitat onsite is of relatively low density and is not be of sufficient structure for breeding by this species, but they could forage or occur as a transient while moving through the area.

The **pallid bat** (*Antrozous pallidus*) is a CDFW Species of Special Concern. This species forages in a variety of dry, open habitats such as grassland, deserts, woodland, shrubland and coniferous forest. Maternity and winter roosting sites are cavities or caves in rock features, large trees or buildings, and these structures must substantially moderate temperature. Day roosts are in caves, crevasses, mines and occasionally hollow trees or buildings. Night roosts are in more open areas such as porches or agricultural buildings. They forage on beetles, moths, spiders, scorpions and Jerusalem crickets (CDFW 2021c). **Townsend's big-eared bat** (*Corynorhinus townsendii*) is a CDFW Species of Special Concern. This species occurs in a variety of habitats, including dry upland areas,

semidesert, coniferous forest, and riparian woodland. They prefer foraging along the edges of riparian vegetation and they drink water from ponds. They roost in caves, mines, abandoned buildings and under bridges (Gruver and Keinath 2006). They are considered to widespread throughout California except for high elevations in the Sierra Nevada and occur in this area throughout the year (CDFW 2021c). The **western mastiff bat** (*Eumops perotis californicus*) is a CDFW Species of Special Concern. It occurs in coniferous and deciduous woodlands, coastal scrub, grasslands, chaparral, deserts and urban areas (CDFW 2021c). This species is resident year-round in this region, and are active nocturnally throughout the year. They roost in cliff faces, tunnels, on buildings or in trees. Maternity roosts are restricted to crevices in rock formations or buildings (CDFW 2021c). The **Yuma myotis** (*Myotis yumanensis*) does not have a specific listing status but is considered sensitive by the CDFW (2020b). This species forages in open forests and woodlands, usually over water sources such as ponds and streams (CDFW 2021c). They prey on flying insects as well as ants. The Yuma myotis roost in buildings, mines, caves, crevices and under bridges (CDFW 2021c). This species is considered to be common and widespread throughout all but the deserts of California, and they are known to occur year-round in San Luis Obispo county (CDFW 2021c). Roosting sites of all bat species are considered to be of local concern by the City (2014). There is a chance that these bat species could forage over the site, and although the amount of natural habitat is limited, invertebrates and other prey could be present, especially around street lights. Each of these species is known to roost in tunnels. For example, the pallid bat has been documented roosting in the 1000-foot long tunnel for San Luis Obispo Creek in downtown (CDFW 2021a). While the culverted part of San Luis Obispo creek has a much larger opening, the culvert on the downstream end of the drainage extends for a considerable distance underground and may be suitable for roosting. The upstream culvert was inspected for roosting bats, including their sign such as guano piles, prey remains and urine stained walls, and none were observed.

### 3.5.3 Designated Critical Habitat

No designated critical habitat for federally listed species occurs on the site or in adjacent areas (USFWS 2021b; Appendix D). California red-legged frog critical habitat Unit SLO-3 occurs in the northern portion of San Luis Obispo, and extends west to the coast and north and east through the Santa Lucia Range (Figure 6).

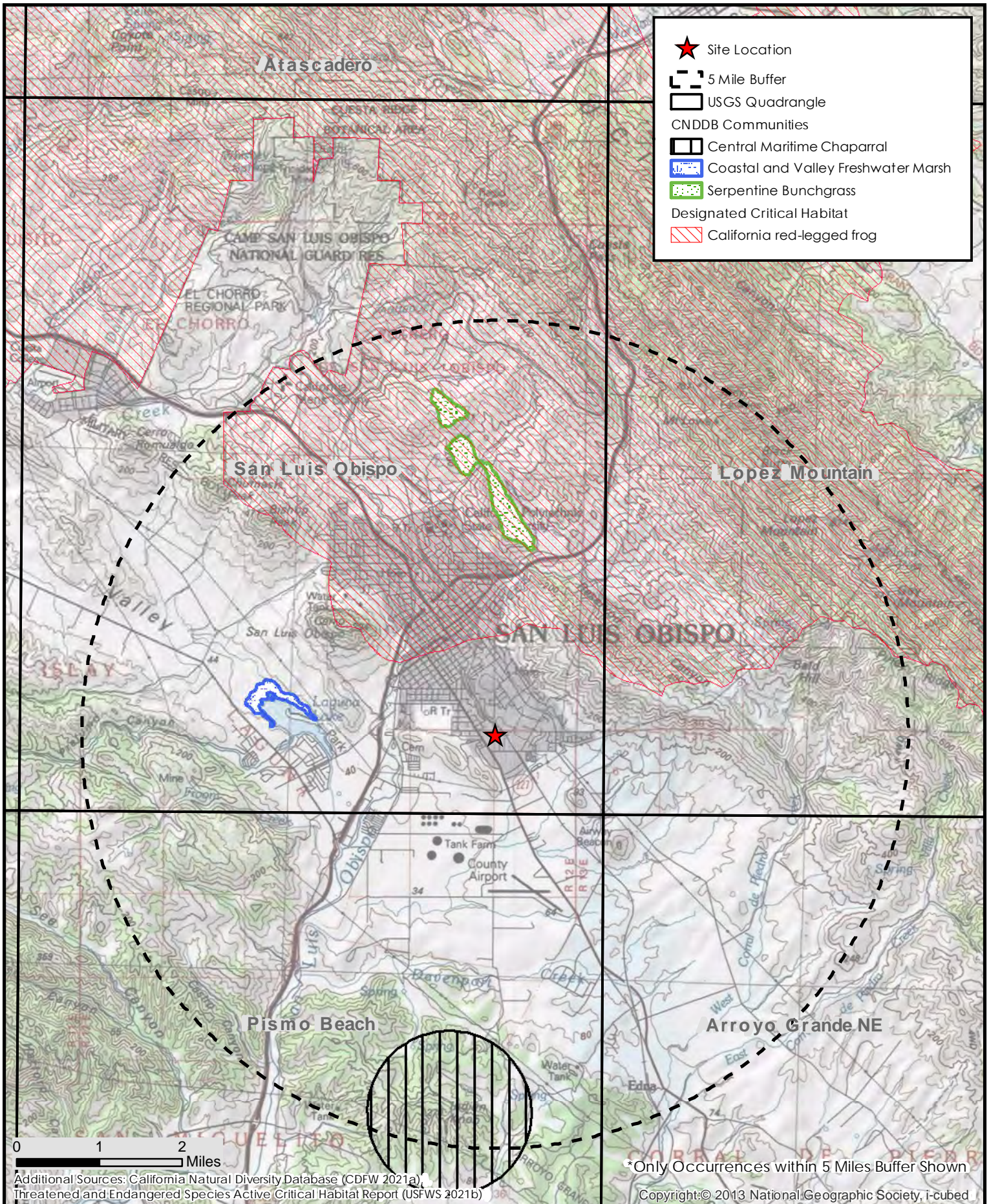
### 3.5.4 Migratory Birds and Raptors

Common bird species protected under the MBTA could nest onsite in the willow shrubs and oak trees, but no old nests or signs of nesting activity were observed during the spring and summer surveys. There is a slight chance that the yellow warbler could nest in the riparian habitat, but because the shrubs have been thinned and the site is maintained regularly, the probability is low. Raptors are not expected to nest onsite due to the small size of the trees and the available habitat area. As stated above, no old nests were observed in the onsite riparian corridor, but nesting in the future by a suite of birds protected by the MBTA is still possible.

### 3.5.5 Sensitive Natural Communities and Protected Trees

Figure 6 illustrates the sensitive natural communities in the project vicinity documented in the CNDDB. Although not mapped in the CNDDB, the Riparian habitat onsite would be considered to be Central Coast Riparian Scrub, which has a State Rarity Rank S3 and is considered to be a sensitive natural community by CDFW (2021b); therefore, it meets the threshold for consideration under CEQA. The City also regards Riparian habitat as a sensitive natural resource. The City's "SLO Creeks" GIS layer maps the onsite drainage as a perennial stream with a required 20-foot setback.





However, based on observations made of onsite, upstream and downstream segments of this drainage, it should be classified as an intermittent stream since it only contains flowing water during and shortly after storm events. The Riparian habitat and drainage feature would be regulated by CDFW pursuant to Section 1600 et seq. of California Fish and Game Code and the RWQCB pursuant to the Clean Water Act and Porter-Cologne Water Quality Control Act, as described further in Section 3.5.6 below and in the wetland delineation report currently in preparation.

No significant or heritage trees are located on the property, since the majority of willows are small (less than 6 inches DBH) and each of the coast live oak trees onsite was roughly two (2) inches DBH or less. The clusters of arroyo willow shrubs had individual trunks less than three (3) inches in diameter. The red willow is a native species and was approximately eight (8) inches DBH. As such, it would meet the City's criteria to be considered a tree. Each of the trees and shrubs with continuous canopy along the drainage, while not individually meeting the City requirement of protected trees, would be subject to mitigation under protection of Riparian habitat.

### *3.5.6 Jurisdictional Wetlands and Other Waters*

The area along the onsite drainage considered sensitive by the City was delineated as the outer limits of the riparian canopy or top of bank, whichever was farther. This area consisted of approximately 4,792 square feet and is shown on Figure 3, and also corresponds to the jurisdictional limits of RWQCB and CDFW pursuant to their respective regulations. The limits of USACE jurisdiction is the low flow channel below the OHWM, which was approximately five (5) feet wide throughout the site over a linear distance of about 163 feet, for a total of approximately 815 square feet. The section of culvert within the study area would also be included in each agencies jurisdiction for an additional area of approximately 60 square feet (15 linear feet x 4 feet wide = 60 square feet). Because the onsite drainage is hydrologically connected to San Luis Obispo Creek and the Pacific Ocean, it is expected to be considered to be a jurisdictional waterway. Moreover, the USACE and RWQCB took jurisdiction over the drainage feature for a previously proposed bank stabilization project that was never constructed (refer to Nationwide Permit No. 199915061-TW and Waiver of Water Quality Certification from 1999). The current evaluation of this feature and its regulatory status will be further detailed in the Preliminary Delineation of Wetlands and Other Waters currently in preparation for this project. It is envisioned that the delineation report will be submitted to USACE, RWQCB and CDFW for permitting the proposed culverting of the drainage feature.

## **4.0 IMPACT ANALYSIS AND RECOMMENDED MITIGATION**

The following impact analysis and recommended mitigation measures are intended to help guide project planning efforts and support the environmental review process being conducted by the City for the project. The impact discussion addresses the range of impacts that could result from implementation of the proposed project. Direct effects (or impacts) are caused by a project at the same time and place, and occur as a direct result of project activities. Indirect effects are caused by a project, but occur at a different time or place, such as in an adjacent area and occurring incidental to project activities. Cumulative effects are those that result from when the effects of the subject project combine with effects from other unrelated projects to compound environmental harm. Our understanding of the extent of proposed development footprint, along with the observations of onsite conditions from the site visits and desktop evaluation of special-status biological resources in the project vicinity, provided the basis for this analysis. Statements defining potential impacts on biological resources and proposed mitigation measures to reduce project-related impacts are provided below.

#### 4.1 Direct and Indirect Effects

The project proposes to develop the entire 0.4-acre property, including placing the drainage into a culvert between the two existing culverts. This would result in the loss of approximately 11,760 square feet of isolated and disturbed Annual Grassland and 3,975 square feet of Riparian habitat. One red willow tree within the riparian habitat would be lost, as well as several willow shrubs and young coast live oaks. The riparian habitat is a biological resource associated with a drainage feature protected by federal, state and local agencies. Mitigation for impacts to the drainage and associated riparian scrub would be completed along the same drainage feature at an upstream location on Sinsheimer Park. Mitigation would be in the form of non-native weed abatement and shrub/tree plantings to increase the habitat value and function on City-owned land.

Due to the small size of the site, the drainage having shallow water with flashy flows, past/ongoing disturbance regime and surrounding industrial land use, the property has low potential to support special status wildlife. One small occurrence of a watch list plant, Cambria morning glory, was found onsite, and the habitat suitability assessment determined there was potential for several special-status wildlife species to occur on a transitory basis. In addition, potential for indirect effects on habitats or species located downstream from the site could occur through surface runoff of disturbed areas entering the creek channel during and after the work has been completed. Each of these potential effects is discussed in the following sections.

##### 4.1.1 *Adverse Effects on Candidate, Sensitive or Special-status Species*

The project would remove a small occurrence of Cambria morning-glory, consisting of two individual plants. Cambria morning glory is a relatively common species in the region and is on a watch list with a CRPR of 4.2, which is a species of limited distribution that is moderately threatened. CDFW recommends that these species be evaluated under CEQA, and if the species is regionally rare or unique, it must be fully analyzed in a CEQA document. The level of significance of effects is to be based on:

- The type locality of a California Rare Plant Rank 4 taxon;
- Occurrences at the periphery of a species' range;
- Areas where the taxon is especially uncommon;
- Areas where the taxon has sustained heavy losses (declining);
- Occurrences exhibiting unusual morphology or occurring on unusual substrates;
- Species maintained on Bureau of Land Management (BLM), USFWS, or U.S. Forest Service (USFS) sensitive species lists; and
- Taxa associated with a habitat that is declining in California at a significant rate (CNPS 2020).

None of these conditions apply to this particular species within this localized area because numerous records of the species were identified in the CNDDDB search as well as our past studies from the region. The site is located within the center of the species' local distribution with extensive grassland habitats surrounding the City (Calflora 2021). This species is only found in the Central Coast region, but it is a common associate of coastal grasslands from San Luis Obispo west to Los Osos and north to San Simeon. The proposed project will not jeopardize the continued existence of this species in the region because it is known from a large number of occurrences locally, including City-owned open space. Extensive occurrences with sustaining populations of this

species are present in grasslands throughout the City of San Luis Obispo including on the Irish Hills Natural Reserve, the South Hills Open Space and in Laguna Lake Park. As such, loss of two plants growing along the road shoulder in an urban area would be considered less than significant from an ecological perspective and should not be considered a significant impact under CEQA.

Individual monarch butterflies could occur onsite periodically while moving through the area, but there are no substantial food resources and no roosting (i.e., autumnal or overwintering) habitat onsite. The butterflies are highly mobile species and would avoid disturbance during vegetation removal. No effects on monarch butterfly habitat would occur because no roosting habitat will be affected and compensatory mitigation for other species described below will also benefit the butterfly in the local area.

Similarly, the Cooper's hawk, yellow-warbler and common species of wildlife that could use the riparian habitat onsite on a transitory basis would not be affected by the loss of approximately 4,000 square feet of this isolated patch. The willows have been cut several times in the past and do not consist of a mature, dense stand that would support nesting sites for riparian species. No birds were seen in this habitat during the surveys, nor were any active or old nests observed. The onsite riparian would only be expected to be used as a stopover point, and there are larger riparian and grassland habitats in the surrounding area such as South Hills Open Space, Islay Hill Open Space, and a portion of the Tank Farm Road property that is planned to be preserved. Additionally, the project would provide compensatory mitigation for the loss of Riparian habitat within a City-owned property, as described below. While the loss of this small disturbed patch of Riparian habitat would not be considered to be significant from a biological perspective or under CEQA, project impacts on active bird nests that could be in this habitat prior to construction could be considered to be significant, and mitigation is prescribed below.

Special-status bat species could forage over the site, and as described above for monarch butterflies and birds, project effects on foraging would not be substantial and will be mitigated by offsite habitat creation/enhancement along the upper reach of this drainage on Sinsheimer Park. However, if bats roost in the culverts adjacent to the site, they could be disturbed by construction activities and potentially displaced by the installation of a longer culvert section at their access point. These effects and mitigation to address the effects are described below.

There would be no effect on designated critical habitat for federally listed species because none occurs on or near the site.

**Impact BIO-1. Construction activities could potentially impact nesting of special-status avian species as well as bird species protected under the Migratory Bird Treaty Act. This is a significant but mitigable impact.**

If construction activities are initiated during the nesting season (February 1 to August 31), impacts on protected nesting birds could occur. Active nests containing eggs and/or young could be killed during vegetation removal in the riparian habitat, and potentially in the adjacent grassland. The effects of construction activities on nesting birds would be limited to the seasonal time period that birds nest in this area; if the nesting season is avoided, no adverse effects are expected. To reduce potential project impacts to a level below significance, the following mitigation is required.

*Mitigation Measure BIO-1a: If feasible, conduct the initiation of construction activities outside of the nesting season. All initial site disturbance should be limited to the time period between September 1 and January 31, if feasible. The preferred time period for vegetation removal would be September*

prior to the start of the rain season. If tree removal and grading cannot be conducted outside the nesting season, then implementation of Mitigation Measure BIO-2b is required.

*Mitigation Measure BIO-1b: Conduct a preconstruction nesting bird survey and avoid active nests.* For any initial construction scheduled to start between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey for nesting birds within the limits of the property. The survey shall be conducted within seven days before the initiation of construction. During this survey, the qualified biologist shall search for birds exhibiting nesting behavior and inspect all potential nest substrates in the impact area. Any nests identified shall be monitored to determine if they are active. If no active nests are found, construction may proceed. If an active nest is found within the construction area, the nest shall be monitored by the qualified biologist until the young have left the nest. A no disturbance buffer around the nest site shall be established based on species, which would include 50 feet for common songbirds and upwards of 250 feet for raptors. The biologist shall coordinate with the City biologist and also assess topography and vegetation and other relevant factors in developing the buffer at the site. Once the young are no longer reliant on the nest, work in the area may proceed.

Implementation of these mitigation measures would reduce project effects on protected nesting birds to a level below significance.

**Impact Bio-2. Construction of the drainage improvements including extending the culvert could directly impact roosting bats. This is a potentially significant but mitigable impact.**

Sensitive bat species may roost in the culverts adjacent to the site, particularly on the south side of the study area as the culvert goes under adjacent buildings. Construction disturbance may cause the bats to abandon the roost during the day and become disoriented. The installation of a new culvert will block the entrance to the potential roost area. No signs of a maternity roost site were present, but if one was present when the culvert installation was occurring, young could be affected or killed. To reduce potential project impacts to a level below significance, the following mitigation is required.

*Mitigation Measure BIO-2: Conduct a preconstruction survey for roosting bats and install exclusion devices, if found.* Within seven days prior to the start of construction, a biologist approved by the City shall survey the culverts adjacent to the project site for sign of roosting bats such as guano piles, urine staining or prey remains. A night exit survey conducted at sunset shall also be included. If no evidence of bat activity is found, work may proceed. If more than one bat is observed leaving the culvert, the biologist shall determine whether a maternity roost is present by carefully observing individuals on the roost. If young are present, construction shall be delayed until they have matured and can fly on their own. When it has been determined that no young bats are present, the biologist shall monitor the roost in the evening immediately prior to vegetation disturbance in the drainage channel. When the bats leave to forage, the biologist will install bat exclusion netting over the opening of the culvert. The netting shall be inspected the following morning to ensure that no bats have become entangled in the netting and that none remain inside the culvert. The netting shall remain in place until the new culvert is installed, and shall be monitored on a daily basis to ensure no impacts to wildlife occur from the netting.

Implementation of these mitigation measures would reduce project effects on special-status bat species to a level below significance.

#### *4.1.2 Adverse Effects on Riparian Habitat or Sensitive Natural Communities*

The riparian habitat is considered to be a sensitive natural community by CDFW, RWQCB and the City, as well as under CEQA. It is under the jurisdiction of the RWQCB under Section 401 of the Clean Water Act and Porter Cologne Water Quality Act, by CDFW under Section 1602 of the California Fish and Game Code, and the City under General Plan policy. The active channel bottom is also included in their jurisdictions and would also be under the USACE's regulatory authority under Section 404 of the Clean Water Act. The City's General Plan requires avoidance of riparian habitat during construction projects, and Policy 8.6.3 requires mitigation for the loss of riparian habitat. The project is the last remaining lot in an industrial area with an eroding section of the road likely due to the accumulated trash and debris that affects flow dynamics. Construction of the project will require the removal of the onsite riparian scrub and placement of the drainage in a culvert so that the proposed commercial development including adjacent roadway improvements can be constructed on top of it. Due to the small size of the lot in context with surrounding development, retaining an open channel would be expected to continue eroding the roadway and contributing to sediment loading to downstream areas. The project as proposed will result in the loss of 4,732 square feet of jurisdictional riparian and stream habitat. Of this area, approximately 3,975 square feet of riparian scrub habitat would be permanently lost.

Work in the stream channel to remove vegetation and install the culvert will create disturbed soils. Sedimentation and/or toxic pollutants from equipment working in the stream channel can indirectly affect downstream areas. Riparian habitat downstream from the project site could potentially be indirectly affected by project construction should runoff from the project site and sediment from work in the stream corridor be transported offsite.

**Impact Bio-3. Construction of the project will remove Central Coast Riparian Scrub and place a section of drainage into a culvert. Riparian habitat and the drainage are special status biological resources under the jurisdiction of USACE, RWQCB, CDFW and the City. This is a potentially significant but mitigable impact.**


The project proposes full build-out of the lot, which involves installing an approximately 140-foot long culvert between the two existing culverts on the north and south sides of the property. The riparian trees and shrubs would be removed, the culvert installed, and the surrounding area filled and graded. This would result in the loss of approximately 4,732 square feet under the jurisdiction of the City, RWQCB and CDFW, and approximately 815 square feet under the jurisdiction of USACE (also refer to the wetland delineation report prepared by KMA 2021). These effects will be permanent as the habitat will be converted to commercial structures and parking areas. There will be no temporary effects since the entire site will be developed. The City requires compensatory mitigation for development within the riparian canopy and/or below the top of bank, whichever is farther, at a ratio of 2:1 (area created/restored to area lost). This area has been calculated at 4,732 square feet, and does not include the section of existing culvert (approximately 60 square feet) on the north side of the property that falls under the jurisdiction of the three respective agencies. Additionally, the onsite drainage is listed in the City's SLO Creeks geospatial data as requiring a setback of 20 feet from the edge of riparian/top of bank, and will require a creek setback exemption. Prior to project implementation, permits from the RWQCB, CDFW and USACE will also need to be obtained. The permits will require compensatory mitigation for the loss of riparian habitat and stream function and value. A Habitat Mitigation and Monitoring Plan (HMMP) is in preparation with a goal to provide a minimum ratio of 3:1 for habitat restoration/enhancement for the area lost. This mitigation plan is being prepared to meet the City's requirements for impacts on riparian habitats and associated setback areas, as well as the USACE, RWQCB and CDFW compensatory mitigation

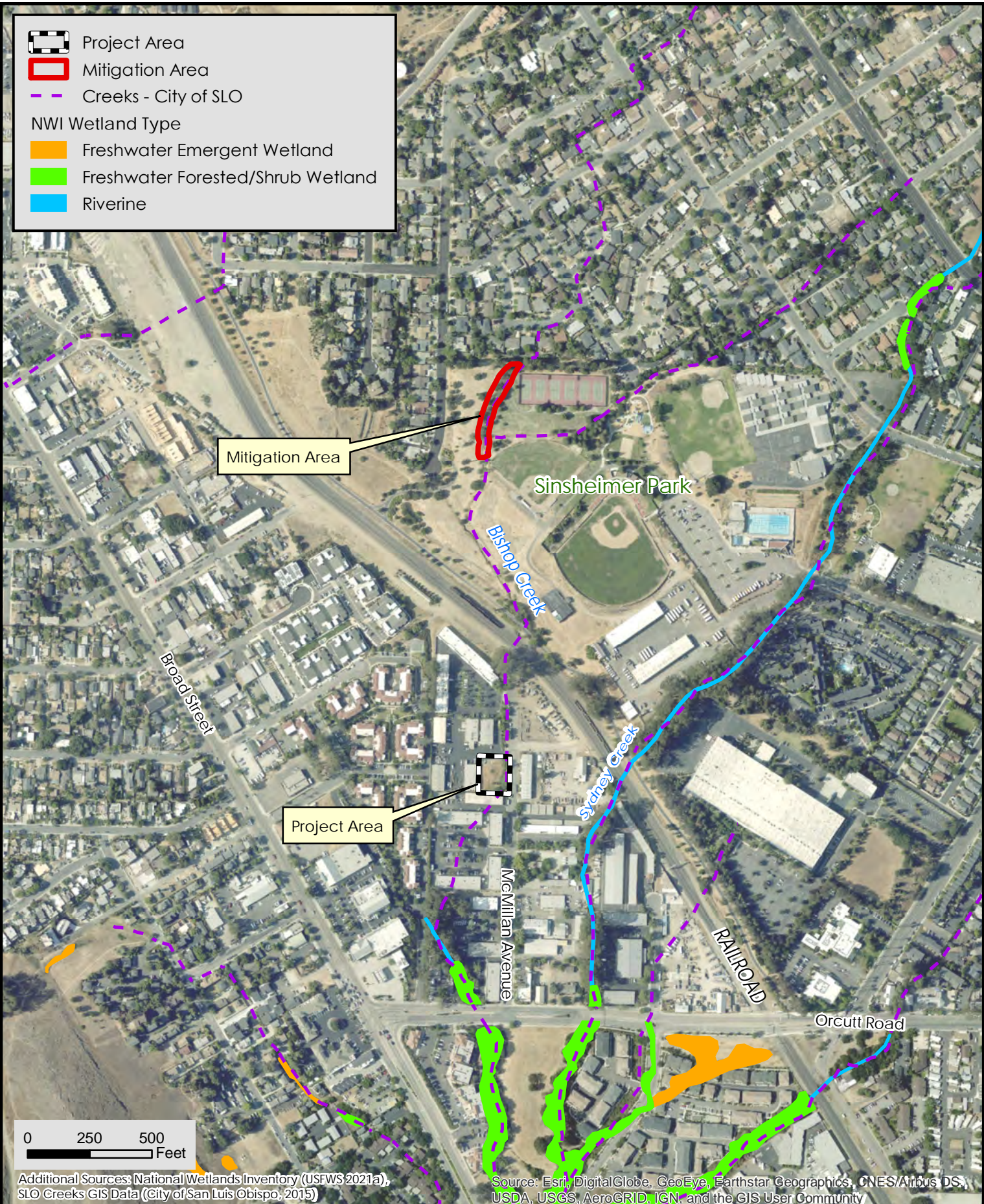
requirements for future permit acquisition. Mitigation would occur on the same drainage upstream from the site at an offsite location approved by the City. The implementation of the following mitigation measures would bring the level of effects to the drainage feature and associated riparian scrub habitat below significance under CEQA.

*Mitigation Measure BIO-3a: Obtain necessary permits for permanent impacts on waters of the state and waters of the United States.* The applicant shall prepare and submit applications to obtain a Clean Water Act Section 401 Water Quality Certification from RWQCB, a California Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement from CDFW, and a Clean Water Act Section 404 Permit from USACE. As a component of the application packages, KMA's Preliminary Delineation of Wetlands and Other Waters will be submitted, along with the HMMP describing the methods and techniques to restore and enhance the mitigation area further upstream. The applicant would then be required to show the City proof of permit acquisition or a determination from each agency that a permit is not required prior to the issuance of a grading permit. As a condition of these permits, a compensatory mitigation plan will be required for impacts on jurisdictional areas. The state agencies may require a mitigation ratio that is greater than that required by the City to ensure no net loss of stream resources. As such, the HMMP currently in preparation proposes to restore and enhance the upstream section of the same creek on Sinsheimer Park at a minimum 3:1 ratio (habitat restored to habitat impacted). The below measure provides further detail.

*Mitigation Measure BIO-3b: Prepare and implement a Habitat Mitigation and Monitoring Plan (HMMP) to be implemented at the City-approved offsite area.* Early consultation with the City Biologist, Mr. Freddy Otte, confirmed that an upstream portion of the subject drainage on the City-owned and managed Sinsheimer Park can be used as the compensatory mitigation site for this project. The total area of habitat restoration shall be established at a minimum 3:1 ratio to ensure state requirements are met. This equates to restoring and enhancing approximately 420 linear feet of drainage channel assuming approximately 140 linear feet of culvert will be installed. The HMMP will propose to create a roughly 50 foot wide riparian corridor (i.e., 25 feet on each side of the channel) for a total area of 0.42 acre to ensure a minimum of 14,196 square feet of disturbed area is restored to intact native riparian habitat. The proposed 0.42 acre area would equate to approximately 18,295 square feet to ensure sufficient area is restored, and this would be well over the City's 2:1 ratio. Additional requirements may be required by the USACE, RWQCB and CDFW as part of the permitting process and shall be incorporated into the HMMP accordingly. The mitigation area identified in consultation with the City Biologist is shown on Figure 7, the Mitigation Site Location Map. The HMMP will at a minimum include the following components:

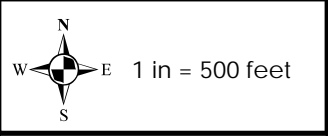
1. Description of restoration site, including its location, size, current environmental conditions, ownership and measures to ensure its long-term protection.
2. Overall goals and measurable objectives to create a self-sustaining riparian habitat that requires minimal maintenance. A description of how habitat enhancement work in the creek corridor and buffer area will promote the ecological integrity of the restoration site and compensate for the loss of onsite stream channel.
3. An implementation plan, including schedule, site preparation (including non-native invasive species removal), planting plan (species and number of each, propagule type, seeding/planting density), and responsible party.
4. A maintenance plan detailing activities to be conducted during the establishment period (irrigation, non-native species removal) and schedule for implementation. The maintenance plan shall also address the long-term guidelines and constraints to

 Project Area  
 Mitigation Area  
 Creeks - City of SLO  
 NWI Wetland Type  
 Freshwater Emergent Wetland  
 Freshwater Forested/Shrub Wetland  
 Riverine



Additional Sources: National Wetlands Inventory (USFWS 2021a),  
 SLO Creeks GIS Data (City of San Luis Obispo, 2015)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,  
 USDA, USGS, AeroGRID, IGN, and the GIS User Community



2855 McMillan Ave., San Luis Obispo  
 GTW SLO LLC

Figure 7  
 Mitigation Site Location



maintaining the vegetation in the mitigation area. No pesticides, herbicides or fertilizers shall be used in a manner in which these substances can affect the creek habitat and biota. Guidelines should be provided for the maintenance of planted trees, such as trimming or replacement.

5. A monitoring plan, including data collection methodology, how success criteria will be measured, and monitoring schedule for a period of at least five years. Monitoring will include establishing photo points that will aid in tracking the success of the planted propagules during each annual monitoring period. The vegetative density, cover and species richness of the mitigation site will be assessed.
6. Final success criteria based on the goals and measurable objectives to ensure that a viable riparian community is established consistent with the requirements established by the City and other involved regulatory agencies.
7. Contingency measures, such as supplemental planting, seeding or herbivore control, if success criteria are not being met.
8. Reporting requirements and notification of completion to responsible agencies.

Implementation of the above mitigation measures together with those resulting from regulatory agency permitting would reduce construction-related impacts on riparian and associated stream habitat function and value to a less than significant level.

**Impact Bio-4. Project construction activities could generate sediment and/or pollutants that could degrade downstream riparian habitat and water quality. This is a potentially significant but mitigable impact.**

Construction of the project will involve vegetation removal, grading, and work within the drainage channel to install the new culvert. Disturbed soils could erode into the downstream area of the drainage and be carried into downstream reaches if work occurred during the rainy season and these areas were not stabilized and/or protected prior to significant rainfall. Sedimentation is considered to be a type of pollutant in aquatic systems because it decreases water quality through increased turbidity, fills in pools or causes lateral spread of channels, and covers instream vegetation and other aquatic life. The Best Management Practices (BMPs) outlined below are recommended to avoid or minimize project effects during construction activities. Measures are described for the prevention of erosion, sedimentation, and toxic substances from reaching stream habitat on the site as well as further downstream. Toxic substances include those from construction equipment such as oil, gas, diesel, and hydraulic fluid could leak or be spilled and be carried in stormwater runoff into the drainage. To reduce the chance of indirect effects on protected riparian habitat and aquatic resources in offsite areas to a level below significance, the following mitigation measures are required.

***Mitigation Measure BIO-4: Install appropriate erosion and sediment controls during construction.***

The following erosion and sedimentation control methods are required to be implemented during the construction phases of the project:

1. If possible, the potential for erosion and sedimentation shall be minimized by scheduling construction activities associated with culvert installation to occur when the drainage is dry and no flowing or ponded water is present.
2. Sediment and erosion control measures shall be developed by a qualified engineer to protect water quality and comply with appropriate local and state regulations. Measures

may include the use of silt fence, straw wattles, erosion control blankets, straw bales, sandbags, fiber rolls and other appropriate techniques employed to protect the drainage feature on and further downstream of the property. All areas with soil disturbance shall have appropriate erosion controls and other stormwater protection BMPs installed to prevent erosion potential. All sediment and erosion control measures shall be installed per the engineer's requirements.

3. Spill kits shall be maintained on the site, and a Spill Response Plan shall be in place.
4. Equipment shall be refueled in designated areas with appropriate spill containment. Equipment storage shall utilize drip pans or ground covers as appropriate to ensure leaks are contained. All equipment and vehicles should be checked and maintained on a daily basis to ensure proper operation and to avoid potential leaks or spills.
5. Concrete washout shall be conducted in specified areas and with appropriate containment measures to ensure washout does not leave the site and enter the City's storm drain system. Washing of equipment, tools, etc. should occur in specified locations where the tainted water will not affect the drainage or City's storm drain system.
6. The use of chemicals, fuels, lubricants, or biocides shall be in compliance with all local, state, and federal regulations. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation.
7. All project-related spills of hazardous materials within or adjacent to the project site should be cleaned up immediately.

Implementation of the above BMPs would bring project impacts on offsite Riparian habitats and water quality to a level below significance.

#### *4.1.3 Protected Wetlands*

No wetland habitat is present on the property, and none is present in adjacent downstream areas because the drainage flows into a culvert offsite the runs underground beneath an industrial park. Where the channel daylights downstream from this culvert, the habitat type is riparian and mature eucalyptus woodland. Therefore, there would be no direct or indirect effects on wetland habitat. The BMPs described in Mitigation Measure BIO-4 would reduce potential project effects to a level below significance on offsite riparian habitat and water quality.

#### *4.1.4 Interference with Movement of Native Fish or Wildlife, Wildlife Corridors, and Wildlife Nursery Sites*

The proposed project will place an approximately 140-foot long culvert in a segment of a drainage between two existing culverts. Given the small channel size and intermittent nature of the drainage along with multiple instream barriers downstream of the site, no fish are expected to occur in this section of drainage. None were seen during the surveys, and the drainage upstream from the property was dry. No suitable spawning habitat for steelhead is present. For fish to reach the site, they would need to move through an approximately 475-foot long culvert on the downstream side of the property and get over/through other instream barriers. The new culvert section would not be a barrier to the movement of fish, but would increase the total distance between open sections of the drainage to roughly 655 feet, including the existing culvert on the upstream side of the property. There is no suitable habitat for fish as the drainage is a trash-filled roadside ditch with

insufficient water.

The movement of wildlife, wildlife corridors, and wildlife nursery sites would not be affected by the project because these functions would not be present in an urban land use type. The 0.4-acre property is not large enough and does not contain suitable habitat to support wildlife, and is isolated by industrial development.

Project effects on the movement of native fish or wildlife, wildlife corridors and wildlife nursery sites are expected to be less than significant, and no mitigation is required.

#### 4.1.5 Conflicts with Local Policies or Ordinances, Such as Tree Preservation

Project impacts and mitigation regarding City policies on riparian habitat and setbacks from creeks is described above in Section 4.1.2. The City's Municipal Code 12.24.090 defines the provisions approved for tree preservation, and a process to request tree removal permits. Because the willows along the drainage have been cut to the base in the past, they are currently composed of multiple trunks less than three (3) inches DBH. Each of the coast live oak trees onsite were two (2) inches DBH or less. Only one red willow tree was just over six (6) inches DBH and meets the City's tree definition threshold. Mitigation for this tree will be covered under the HMMP described above in Mitigation Measure BIO-3b. While the City has requested that no willows be planted due to the ongoing homeless encampment issues, a suite of native trees, including California sycamore (*Platanus racemosa*), coast live oak, and alder (*Alnus rubra*), will be planted at the offsite mitigation area. Therefore, the loss of protected trees would be fully mitigated and no further measures are necessary.

#### 4.1.6 Conflicts with Conservation Plans

No local, regional or state conservation plans have been prepared for the area in which the project is located. There would be no conflicts with conservation plans, and no mitigation is required.

## **4.2 Cumulative Effects**

The project site is located in an area of southeastern San Luis Obispo where there is a substantial amount of existing development and infill projects. It is specifically located within an industrial area near the railroad tracks. The project will build out a 0.4-acre lot that is surrounded by urban development. In its undeveloped state, the lot does not provide wildlife habitat or serve as a steppingstone or movement corridor between open space areas due to its small size and the density of development surrounding it. Although it contains a drainage channel, it has been significantly modified in the past from its natural state, and development in the area appears to have altered its historic alignment. The project would place the onsite segment of drainage into a culvert and eliminate a source of sedimentation by removing an eroding bank. Placing an open channel into a culvert is not without any biological effects, but in this instance those effects would be minor, especially with the implementation of a robust habitat restoration and enhancement program on the same drainage feature just upstream from the site. With the incorporation of the mitigation measures described above, there would be no significant effects on biological resources. In addition, the City has protected extensive natural areas within and adjacent to the urban environment. Given the presence of large swaths of open land in the vicinity, the project as proposed would not contribute to cumulative effects to biological resources considering other known or foreseeable projects in the area.

## 5.0 CONCLUSIONS

The proposed project involves the construction of a warehouse and office building on an undeveloped lot in an existing industrial area. The lot is heavily disturbed from being graded during development of the industrial area and regular cycle of mowing and management. It supports a thin band of riparian scrub habitat along a drainage feature that is functioning as a roadside ditch. The riparian habitat has been removed and trimmed in the past, and due to trash and debris in the channel, is actively eroding McMillan Avenue. No wetland habitat is present in the drainage since it does not support water for a sufficient duration. A small occurrence of a native plant on a watch list (consisting of two plants) was observed along McMillan Avenue. The site observations coupled with a habitat suitability analysis determined there is only low probability that special-status wildlife species could use the site on a transitory basis (i.e., flyover, foraging, etc.).

There is potential for nesting birds to occur seasonally in the trees, shrubs and grasses. Potential also exists for protected bat species to roost in an adjacent offsite culvert under the neighboring building, but there is no roosting habitat on the property. The plans involve placing a roadside drainage into a culvert that will connect with existing culverts on either side of the property. It is expected that permitting from USACE under Section 404 of the Clean Water Act and RWQCB pursuant to Section 401 of the Clean Water Act and Porter-Cologne Water Quality Act will be required for the placement of fill (culvert and soil) into waters of the United States and state. Additionally, the CDFW requires notification of the proposed activity through Section 1602 of the California Fish and Game Code and issuance of a Lake and Streambed Alteration Agreement, and the City of San Luis Obispo requires compensatory mitigation for impacts on riparian habitat and the rare plant occurrence. As described above, habitat mitigation would occur upstream on Sinsheimer Park. Mitigation measures for special-status wildlife species and to protect water quality are also provided herein to avoid and minimize project effects on the natural environment. This analysis determined that the proposed project meets none of the criteria that trigger mandatory findings of significance under CEQA. With the incorporation of the mitigation measures described herein, project impacts on the six additional impacts to be considered during CEQA review will be reduced to a level below significance.

## 6.0 REFERENCES

- Agrawal, A.A., G. Petschenka, R.A. Bingham, M.G. Weber, and S. Rasmann. 2012. Toxic cardenolides: Chemical ecology and coevolution of specialized plant-herbivore interactions. *New Phytologist* 194:28-45.
- Audubon. 2021. Guide to North American Birds. Accessed via: <https://www.audubon.org/bird-guide> in April 2021.
- Bolster, B.C. (editor). 1998. Draft Terrestrial Mammal Species of Special Concern in California. Contributing authors: P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Prepared for California Department of Fish and Game, Wildlife Management Division, Nongame Bird and Mammal Conservation Program. Contract FG3146WM.
- Brower, L.P., L.S. Fink, and P. Walford. 2006. Fueling the fall migration of the monarch butterfly. *Integrative and Comparative Biology* 46:1123-1142.
- Buena Geotechnical Services. 2004 (March 1). Geotechnical Engineering Report for Proposed 3 Unit Industrial Building, 2855 McMillan Avenue, San Luis Obispo, California. B-043672. Prepared for Rengel & Company, Architects, Inc. Paso Robles, California.

- Calflora. 2021. Information on Wild California Plants for Conservation, Education, and Appreciation. Berkeley, California. Accessed via <http://www.calflora.org/> in April 2021.
- California Department of Fish and Wildlife (CDFW). 2018 (March 20). Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.
- California Department of Fish and Wildlife (CDFW). 2020a (January). Special Vascular Plants, Bryophytes, and Lichens List. California Natural Diversity Database.
- California Department of Fish and Wildlife (CDFW). 2020b (July). Special Animals. Biogeographic Data Branch, California Natural Diversity Database.
- California Department of Fish and Wildlife (CDFW). 2021a. California Natural Diversity Database (CNDDDB). Commercial version dated April 2, 2021. Accessed via: <https://www.wildlife.ca.gov/Data/CNDDDB> in April 2021.
- California Department of Fish and Wildlife (CDFW). 2021b. Vegetation Classification and Mapping Program (VegCAMP). Accessed via: <https://www.wildlife.ca.gov/Data/VegCAMP> in April 2021.
- California Department of Fish and Wildlife (CDFW). 2021c. California Wildlife Habitat Relationships System. Accessed via: <https://www.wildlife.ca.gov/data/cwhr> in April 2021.
- California Herps. 2021. A Guide to the Amphibians and Reptiles of California. Accessed via: <http://www.californiaherps.com> in April 2021.
- California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Adopted by the CNPS Rare Plant Program Committee 21 January 2020. Sacramento, California.
- California Native Plant Society (CNPS). 2021. Inventory of Rare and Endangered Plants of California. Online edition V8-03 0.39. Accessed via: <http://www.rareplants.cnps.org> in April 2021.
- Center for Biological Diversity, Center for Food Safety, The Xerces Society, and Dr. Lincoln Brower. 2014 (August 26). Petition to Protect the Monarch Butterfly (*Danaus plexippus plexippus*) Under the Endangered Species Act. Submitted to the U.S. Secretary of Interior, U.S. Fish and Wildlife Service.
- City of San Luis Obispo (City). 2014 (December 9). General Plan; Chapter 6, Conservation and Open Space.
- The Cornell Lab of Ornithology. 2021a. eBird. Accessed via: <https://ebird.org> in April 2021.
- The Cornell Lab of Ornithology. 2021b. All About Birds. Accessed via: <https://www.allaboutbirds.org> in April 2021.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1992. Classification of Wetlands and Deepwater Habitats of the United States. Prepared for U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services, Washington, D.C. FWS/OBS-79/31.
- Gruver, J.C. and D.A. Keinath. 2006 (October 25). Townsend's Big-eared Bat (*Corynorhinus townsendii*): A Technical Conservation Assessment. Prepared for the USDA Forest Service, Rocky Mountain Region, Species Conservation Project.
- Google Earth. 2021. Google Earth Pro Version 7.3.3.7786. 1994 to 9/7/2018.
- Hershler, R. 1995. New freshwater snails of the genus *Pyrgulopsis* (Rissooidea: Hydrobiidae) from California. The Veliger 38(4):343-373.

- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento.
- Hoover, R.F. 1970. The Vascular Plants of San Luis Obispo County, California. University of California Press, Berkeley, California.
- Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California, 1 November 1994. California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California. 255 pp.
- Jepson Flora Project (editors). 2021. Jepson eFlora. The Jepson Herbarium, University of California, Berkeley. Accessed via: <http://ucjeps.berkeley.edu/eflora/> in April 2021.
- Moyle, P.B., R.M. Quinones, J.V. Katz, and J. Weaver. 2015. Fish Species of Special Concern in California, Third Edition. California Department of Fish and Wildlife, Sacramento.
- Natural Resources Conservation Service (NRCS). 2021a. Web Soil Survey. National Cooperative Soil Survey, U.S. Department of Agriculture. Accessed via: <http://websoilsurvey.nrcs.usda.gov/> in April 2021.
- Natural Resources Conservation Service (NRCS). 2021b. Hydric Soils. U.S. Department of Agriculture. Accessed via: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/> in April 2021.
- Padre Associates, Inc. 2013 (January 9). Biological Resource Survey Letter-Report for the Off-site Flower Mound Impact Area, Chevron San Luis Obispo Tank Farm, San Luis Obispo County, California. Prepared for Chevron Environmental Management Company, San Luis Obispo, California. Project No. 0601-3284.
- Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.
- Schultz, C.B., L.M. Brown, E. Pelton, and E.E. Crone. 2017. Citizen science monitoring demonstrates dramatic declines of monarch butterflies in western North America. *Biological Conservation* 214:343-346.
- Thompson, R.C., A.N. Wright, and H.B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press, Oakland, California.
- United States Fish and Wildlife Service (USFWS). 2000 (January). Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants.
- United States Fish and Wildlife Service (USFWS). 2021a. National Wetlands Inventory. U.S. Department of the Interior, Washington, D.C. Accessed via: <http://www.fws.gov/wetlands/> in April 2021.
- United States Fish and Wildlife Service (USFWS). 2021b. Threatened and Endangered Species Active Critical Habitat Report. ECOS Environmental Conservation Online System. Accessed via: <https://ecos.fws.gov> in April 2021.

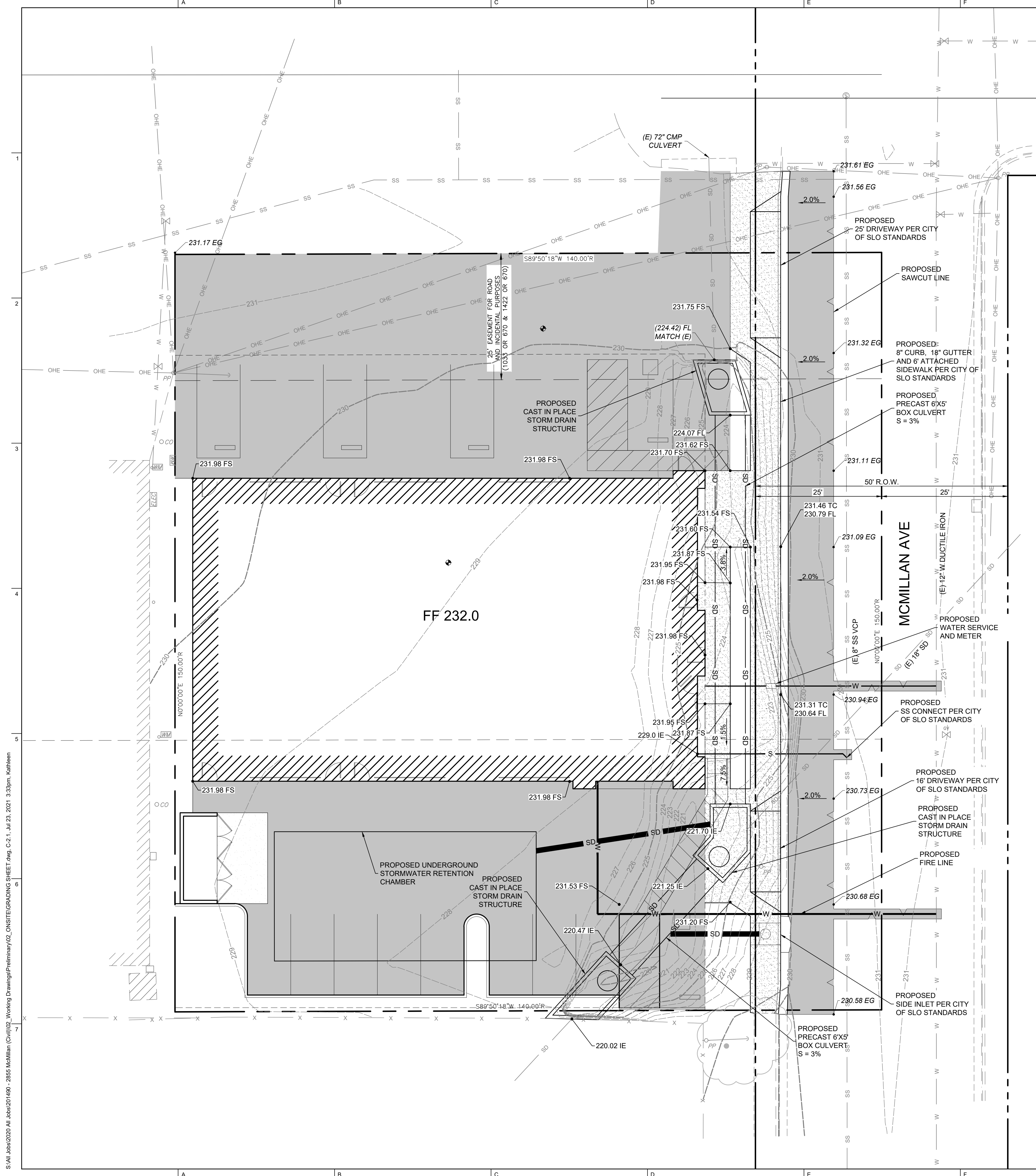
# **APPENDIX A**

---

---

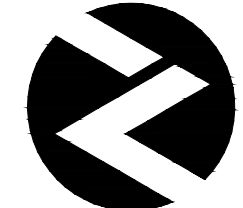
## **Site Plans**





S:\All Jobs\2020 All Jobs\201490 - 3855 McMillan (Civil)\02\_Working Drawings\Primary\02\_ONSITE\GRADING SHEET.dwg, C-2.1, Jul 23, 2021 3:33pm, Kathleen

Plan Prepared By:



**Ashley & Vance**  
ENGINEERING, INC.  
1413 Monterey Street  
San Luis Obispo, CA 93401  
(805) 545-0010  
www.ashleyvance.com

CIVIL • STRUCTURAL

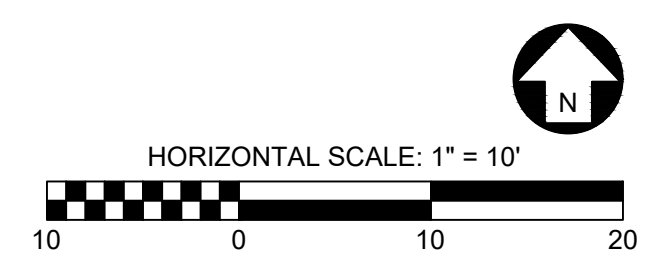
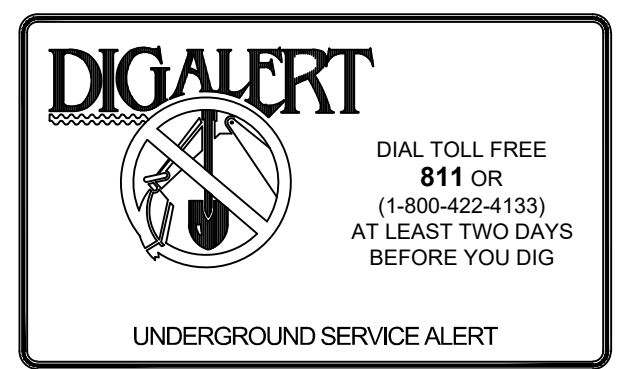
The use of these plans and specifications shall be restricted to the original site for which they were prepared and publication thereof is expressly limited to such use. Reproduction or publication by any method, in whole or in part, is prohibited. Title to these plans and specifications remain with Ashley & Vance Engineering, Inc. without prejudice. Visual contact with these plans and specifications shall constitute prima facie evidence of the acceptance of these restrictions.

**McMILLAN**  
2655 McMILLAN  
SAN LUIS OBISPO CA 93401

Revisions:

1	.
2	.
3	.
4	.
5	.

Project Engineer: KEA      Ext: 165  
Project Manager: S\_J  
Date: 7/23/2021      Scale: PER PLAN  
AV Job No: 201490      Sheet Size: 24" x 36"



GRADING AND DRAINAGE PLAN  
**C-2.1**



## **APPENDIX B**

---

---

### **List of Plants and Animals Observed Onsite During the Surveys**



**Appendix B. List of Plants and Animals Observed During the Surveys**

Scientific Name	Common Name
<b>Plants</b>	
<i>Allium triquetrum</i> *	White flowered onion
<i>Avena barbata</i> *	Slender wild oat
<i>Baccharis pilularis</i>	Coyote brush
<i>Brassica nigra</i> *	Black mustard
<i>Bromus diandrus</i> *	Rippgut brome
<i>Calystegia macrostegia</i> ssp. <i>cyclostegia</i>	Coast morning glory
<b><i>Calystegia subacaulis</i> ssp. <i>episcopalis</i></b>	<b>Cambria morning-glory (CRPR 4.2)</b>
<i>Carduus pycnocephalus</i> *	Italian thistle
<i>Cyperus involucratus</i> *	Umbrella plant
<i>Erodium botrys</i> *	Big heron bill
<i>Erodium cicutarium</i> *	Red-stemmed filaree
<i>Eschscholzia californica</i>	California poppy
<i>Festuca perennis</i> *	Italian rye grass
<i>Frangula californica</i>	California coffeeberry
<i>Galium aparine</i>	Goose grass
<i>Geranium carolinianum</i> *	Carolina geranium
<i>Hedera helix</i> *	English ivy
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	Foxtail barley
<i>Malva nicaeensis</i> *	Bull mallow
<i>Medicago polymorpha</i> *	California burclover
<i>Melilotus indicus</i> *	Yellow sweetclover
<i>Oxalis pes-caprae</i> *	Bermuda buttercup
<i>Plantago lanceolata</i> *	English plantain
<i>Quercus agrifolia</i>	Coast live oak
<i>Raphanus sativus</i> *	Wild radish
<i>Rubus armeniacus</i> *	Himalayan blackberry
<i>Rumex crispus</i> *	Curly dock
<i>Salix laevigata</i>	Red willow
<i>Salix lasiolepis</i>	Arroyo willow
<i>Schinus molle</i> *	Peruvian pepper tree
<i>Schinus terebinthifolius</i> *	Brazilian pepper tree
<i>Sonchus asper</i> *	Spiny sowthistle
<i>Stipa miliacea</i> *	Smilo grass
<i>Vicia sativa</i> *	Spring vetch
<b>Animals</b>	
<i>Calypte anna</i>	Anna's hummingbird
Cladocera	Water fleas
<i>Corvus brachyrhynchos</i>	American crow (flyover)
<i>Haemorhous mexicanus</i>	House finch#
<i>Mimus polyglottos</i>	Northern mockingbird#
<i>Physa</i> sp.	Freshwater snail
<i>Pseudacris sierra</i>	Sierran treefrog

\*Non-native species

**Bold** indicates special-status species

#Seen on adjacent property

# **APPENDIX C**

---

---

**Photo Plate**



**Appendix C. Photo Plate**

**Photo 1.** Southerly view across the parcel showing Annual Grassland habitat. Note the thick seasonal growth of non-native species comprised of wild oats, Italian ryegrass and bromes.



**Photo 2.** Easterly view across the parcel with Annual Grassland in the foreground and a band of thinned riparian shrubs along the roadside drainage in the background.



**Photo 3.** Southerly view along the western property line abutting existing industrial development.



**Photo 4.** Easterly view along the southern property line with the riparian habitat along the roadside drainage in the distance.



**Photo 5.** View from the southeast corner of the parcel looking north. Mc Millan Avenue is on the right. The road is actively eroding in this location.



**Photo 6.** View from the eastern property boundary looking north. A portion of the paved driveway and culvert fall within the parcel boundary. The drainage enters the property from this culvert and the upstream area is a ditch along McMillan Avenue seen in the distance. Two Cambria morning glory plants were seen at the base of the sign in this photo.



**Photo 7.** Westerly view across the northern portion of the parcel. A small patch of native California poppy (*Eschscholzia californica*) is seen in the foreground, otherwise, the site was dominated by non-native species.



**Photo 8.** One rare plant species, Cambria morning-glory (*Calystegia subacaulis* ssp. *episcopalis*), was found along the northeastern creek bank. It was not yet in flower but two plants were identifiable by the characteristics of the leaves and growth habit. Additional surveys confirmed it was Cambria morning glory.



**Photo 9.** View from the northeastern corner of the parcel looking downstream. One red willow (*Salix laevigata*) tree is seen on the right. Note the racking of trash, which was present throughout the drainage, indicating the limits of high water.



**Photo 10.** View from within the channel looking upstream at the culvert, with concrete slope protection around it. The tree is the same red willow as in Photo 9.





**Photo 11.** View from within the channel, looking upstream. Arroyo willows (*Salix lasiolepis*) that had previously been cut to the base had resprouted with multiple small stems. The active channel had shallow standing water. In-channel vegetation was mainly upland grassland species, but an umbrella plant (*Cyperus involucratus*) was also present.



**Photo 12.** View of the eastern eroded bank along McMillan Avenue. A terrace within the channel is seen on the right.



**Photo 13.** An outfall pipe into the channel is seen on the left. View is downstream. Note the racking of vegetation on the willow clump.



**Photo 14.** View of the culvert on the downstream side of the drainage with concrete slope protection. From this point the drainage runs under an industrial complex offsite.

## **APPENDIX D**

---

---

### **Special-status Biological Resources Summary**



**Appendix D. Special-status Biological Resources Summary**

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
<b>PLANTS/LICHENS/BRYOPHYTES</b>						
Adobe sanicle	<i>Sanicula maritima</i>	—	R	1B.1	Perennial herb; chaparral, coastal prairie, meadows and seeps, valley and foothill grassland on clay and serpentine soils; 30-240 meters in elevation; blooms February to May.	<b>Not expected.</b> While grassland habitat is present onsite, no suitable serpentine soils with seeps or mesic conditions are present. Moreover, this perennial species would have been detectable during the April surveys. Species occurs from the northern coast of SLO Co. through the city of SLO. Recorded from the South Hills Open Space on serpentine influenced soils.
Betty's dudleya	<i>Dudleya abramsii</i> ssp. <i>bettinae</i>	—	—	1B.2	Perennial herb; chaparral, coastal scrub and valley and foothill grassland on rocky, serpentine soils; 20-180 meters in elevation; blooms May to July.	<b>Not expected.</b> No suitable serpentine soils or rocky areas are present onsite. Species is restricted to serpentine outcrops in the SLO area of endemism.
Black-flowered figwort	<i>Scrophularia atrata</i>	—	—	1B.2	Perennial herb; coniferous forest, chaparral, coastal dunes, coastal scrub and riparian scrub on sand or diatomaceous shale; 10-500 meters in elevation; blooms March to July.	<b>Not expected.</b> No suitable soils are present and this perennial species would have been seen during the surveys. Within SLO Co., species is restricted to the hills around Pismo Beach. Site is outside of the species' local distribution.
Blochman's dudleya	<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	—	—	1B.1	Perennial herb; coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland on rocky, often clay or serpentine soils and sandstone rock outcrops; 5 - 450 meters in elevation; blooms April to June.	<b>Not expected.</b> No suitable serpentine soils or rocky (even sandstone) areas are present onsite. Species is generally restricted to serpentine rock outcrops in the SLO area.
Brewer's spineflower	<i>Chorizanthe breweri</i>	—	—	1B.3	Annual herb; coniferous forest, chaparral, cismontane woodland and coastal scrub on serpentinite or gravelly soils; 45-800 meters in elevation; blooms April to August.	<b>Not expected.</b> No suitable soils are present. Species occurs in hills and mountains surrounding SLO.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Cambria morning-glory	<i>Calystegia subacaulis</i> ssp. <i>episcopalis</i>	—	—	4.2	Perennial rhizomatous herb; chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland usually on clay soils; 30-500 meters in elevation; blooms March to July.	<b>Present.</b> Grassland habitat is of marginal quality given past disturbance and development. Clayey soils are present, and a small occurrence consisting of two plants was recorded along the road shoulder at the base of a sign during the surveys.
Chaparral ragwort	<i>Senecio aphanactis</i>	—	—	2B.2	Annual herb; chaparral, cismontane woodland, coastal scrub in drying alkaline flats; 15-800 meters in elevation; blooms January to April.	<b>Not expected.</b> No suitable habitat or soils present, and surveys conducted during the species' blooming period did not locate this species. Records in the hills surrounding SLO are from pre-1970 and "need fieldwork".
Chorro Creek bog thistle	<i>Cirsium fontinale</i> var. <i>obispoense</i>	E	E	1B.2	Perennial herb; chaparral, cismontane woodland, coastal scrub, valley and foothill grassland in seeps and drainages with serpentine; 35-385 meters in elevation; blooms February to September.	<b>Not expected.</b> No suitable soils are present and the site is slightly outside of the species' local distribution. Species occurs to the west and northwest of SLO in serpentine seeps.
Congdon's tarplant	<i>Centromadia parryi</i> ssp. <i>congdonii</i>	—	—	1B.1	Annual herb; valley and foothill grassland and disturbed sites on alkaline soils; 0-230 meters in elevation; blooms May to November.	<b>Not expected.</b> No seasonal wetland habitat or depressions are present. Species can tolerate disturbance, but typically is found in the historic vernal pool areas of the Laguna Lake area and along Tank Farm Road. July site visit did not observe this species, and several reference sites were visited to confirm it would have been in identifiable condition at the time the survey was conducted.
Cuesta Ridge thistle	<i>Cirsium occidentale</i> var. <i>lucianum</i>	—	—	1B.2	Perennial herb; openings in chaparral, steep rocky slopes and disturbed roadsides; 500-750 meters in elevation; blooms April to June.	<b>Not expected.</b> No suitable habitat is present, the site is greatly outside of the species' elevational range and restricted distribution.
Dune larkspur	<i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	—	—	1B.2	Perennial herb; maritime chaparral and coastal dunes; 0-200 meters in elevation; blooms April to June.	<b>Not expected.</b> No suitable habitat is present, and this species is restricted to coastal areas. Records from SLO are from the 1880s and only have general locality information.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Dwarf soaproot	<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	—	—	1B.2	Perennial bulbiferous herb; chaparral on serpentine soils; 305-1000 meters in elevation; blooms May to August.	<b>Not expected.</b> No suitable habitat or soils are present, and the site is greatly outside of the species' elevational range. Species is recorded in the serpentine hills surrounding the city of San Luis Obispo.
Eastwood's larkspur	<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i>	—	—	1B.2	Perennial herb; chaparral and valley and foothill grassland generally in serpentine soils; 75-500 meters in elevation; blooms February to March.	<b>Not expected.</b> No suitable soils are present and the site is outside of the species' elevational range. Several records in foothills surrounding the site.
Hoover's bent grass	<i>Agrostis hooveri</i>	—	—	1B.2	Stoloniferous perennial herb; chaparral, cismontane woodland, and valley and foothill grassland habitats in sandy soils; 60-600 meters in elevation; blooms April to July.	<b>Not expected.</b> No suitable soils are present and the site is outside of the species' local distribution. Recorded from coastal hills and east Cuesta Ridge.
Hoover's button-celery	<i>Eryngium aristulatum</i> var. <i>hooveri</i>	—	—	1B.1	Herb that can occur as either an annual or a perennial; vernal pools, seasonally wet grasslands, and roadside ditches; 3-45 meters in elevation; blooms June to August.	<b>Not expected.</b> No seasonal wetland habitat or depressions are present. Typically is found in the historic vernal pool areas of the Laguna Lake region and along Tank Farm Road. July site visit did not observe this species, and a reference site was visited to confirm it would have been in identifiable condition at the time the survey was conducted.
Indian Knob mountainbalm	<i>Eriodictyon altissimum</i>	E	E	1B.1	Perennial evergreen shrub; maritime chaparral, cismontane woodland, and coastal scrub in sandstone soils; 80-270 meters in elevation; blooms March to June.	<b>Not expected.</b> No suitable soils or habitat are present and the site is outside of the species' elevational range. Occurs in coastal mountains south of Morro Bay and the Indian Knob area.
Irish Hills spineflower	<i>Chorizanthe aphanantha</i>	—	—	1B.1	Annual herb; openings in chaparral and restricted to serpentine; approx. 305 meters in elevation; blooms from April to August.	<b>Not expected.</b> Known only from a very restricted area in the Irish Hills to the southwest of San Luis Obispo; no suitable habitat or soils are present.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Jones' layia	<i>Layia jonesii</i>	—	—	1B.2	Annual herb; chaparral and valley and foothill grassland on clay or serpentine; 5-400 meters in elevation; blooms March to May.	<b>Not expected.</b> Marginal grassland habitat is present, but soils are not associated with serpentine, and therefore, no suitable habitat present. Would have been seen during surveys conducted during the species' blooming period.
Mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	—	—	1B.1	Perennial herb; chaparral, cismontane woodland, and coastal scrub on sandy or gravelly soils; 70- 810 meters in elevation; blooms February to September.	<b>Not expected.</b> No suitable habitat or soils are present. The species has a wide range in the county but the closest records are from west Cuesta. Perennial species that would have been seen during the surveys.
Miles' milk-vetch	<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	—	—	1B.2	Annual herb; coastal scrub habitats with clay soils; 20-90 meters in elevation; blooms March to June.	<b>Not expected.</b> Although clay soils are present, suitable coastal scrub habitat and rocky serpentine areas are absent. Surveys were conducted during the species' blooming period. Recorded from several occurrences in the SLO area including Laguna Lake near an ephemeral drainage.
Most beautiful jewelflower	<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	—	—	1B.2	Annual herb; chaparral, cismontane woodland, and valley and foothill grassland on serpentine soils; 94-1000 meters in elevation; blooms March to October.	<b>Not expected.</b> No suitable soils are present and the site is outside of the species' elevational range. Species occurs in the Coast Range from Ragged Point to the city of SLO most always on serpentine.
Mouse-gray dudleya	<i>Dudleya abramsii</i> ssp. <i>murina</i>	—	—	1B.3	Perennial leaf succulent; chaparral, cismontane woodland and valley and foothill grassland on serpentine soils; 50-525 meters in elevation; blooms May to June.	<b>Not expected.</b> No suitable soils are present and perennial species that would have been seen during the surveys. Distribution is centered around the city of SLO.
Nipomo Mesa ceanothus	<i>Ceanothus impressus</i> var. <i>nipomensis</i>	—	—	1B.2	Perennial shrub; chaparral on sandy soil; 30-245 meters in elevation; blooms February to April.	<b>Not expected.</b> No suitable habitat or soils are present, and this species has a restricted range on the Nipomo Mesa with a few historic localities in the hills north of Pismo Beach.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Ojai fritillary	<i>Fritillaria ojaiensis</i>	—	—	1B.2	Perennial bulbiferous herb; broad-leaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest on rocky soils; 225-998 meters in elevation; blooms February to May.	<b>Not expected.</b> No suitable habitat or soils are present and the site is greatly outside of the elevational range of this species. Species occurs in mountainous areas surrounding SLO.
Oso manzanita	<i>Arctostaphylos osoensis</i>	—	—	1B.2	Perennial evergreen shrub; chaparral and cismontane woodland on dacite porphyry buttes; 95-500 meters in elevation; blooms February to March.	<b>Not expected.</b> No suitable habitat or soils are present, the site is outside of the elevational range of this species, and no manzanita shrubs were seen during the surveys. Species has a highly restricted range to the east of Morro Bay.
Palmer's monardella	<i>Monardella palmeri</i>	—	—	1B.2	Perennial herb; chaparral and cismontane woodland on serpentine soils; 200-800 meters in elevation; blooms June to August.	<b>Not expected.</b> No suitable habitat or soils are present and the site is greatly outside of the elevational range of this species. Species occurs in the coastal mountains to the east of Morro Bay and in the Irish Hills.
Pecho manzanita	<i>Arctostaphylos pechoensis</i>	—	—	1B.2	Perennial evergreen shrub; coniferous forest, chaparral and coastal scrub on siliceous shale soils; 125-850 meters in elevation; blooms November to March.	<b>Not expected.</b> No suitable habitat or soils are present, the site is outside of the species' elevational range, and no manzanita shrubs were seen during the surveys. Species is restricted to the coastal mountains between Los Osos and Avila Beach.
Pismo clarkia	<i>Clarkia speciosa</i> ssp. <i>immaculata</i>	E	R	1B.1	Annual herb; margins and openings of chaparral, cismontane woodland, and valley and foothill grassland; highly restricted to sandy soils; 25-185 meters in elevation; blooms May to July.	<b>Not expected.</b> No suitable soils are present. Site is outside of the restricted distribution of this species. Species occurs only in the hills between Pismo Beach and Edna, extending toward north of Arroyo Grande.
Saline clover	<i>Trifolium hydrophilum</i>	—	—	1B.2	Annual herb; marshes and swamps, mesic valley and foothill grassland, and vernal pools on alkaline soils; 0-300 meters in elevation; blooms April to June.	<b>Not expected.</b> Suitable habitat and soils are not present. Not found during surveys conducted during the blooming period.



Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
San Benito fritillary	<i>Fritillaria viridea</i>	—	—	1B.2	Perennial bulbiferous herb; chaparral and cismontane woodland on rocky serpentine slopes, streambanks and roadsides; 200-1525 meters in elevation; blooms March to May.	<b>Not expected.</b> No suitable habitat or soils are present, the site is greatly outside of the species' elevational range, and the only records in the vicinity is from 1964.
San Luis mariposa-lily	<i>Calochortus obispoensis</i>	—	—	1B.2	Bulbiferous, perennial herb; chaparral, coastal scrub and valley and foothill grassland on sandstone (south SLO County) or serpentine soils; 75-730 meters in elevation; blooms May to July.	<b>Not expected.</b> No suitable serpentine or sandstone rock outcrops present. Distribution is inland around the city of San Luis Obispo, with large populations nearby.
San Luis Obispo County lupine	<i>Lupinus ludovicianus</i>	—	—	1B.2	Perennial herb; chaparral and cismontane woodland on sandstone or sandy soils; 50-525 meters in elevation; blooms April to July.	<b>Not expected.</b> No suitable habitat or soils are present. Species occurs in south SLO Co.
San Luis Obispo owl's-clover	<i>Castilleja densiflora</i> var. <i>obispoensis</i>	—	—	1B.2	Annual herb; meadows, seeps, and valley and foothill grassland sometimes on serpentine; 10-400 meters in elevation; blooms March to May.	<b>Not expected.</b> While the site is within the documented elevational range and local distribution of the species and annual grassland is present, site is highly disturbed from surrounding development and regular mowing. Species was not found during focused surveys conducted during the species' blooming period. Species occurs in the grasslands on hills surrounding SLO, and has been documented on the former Tank Farm and Froom Ranch areas.
San Luis Obispo sedge	<i>Carex obispoensis</i>	—	—	1B.2	Perennial herb; coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland, often on serpentine and associated clay soils in seeps; 10-820 meters in elevation; blooms April to June.	<b>Not expected.</b> No suitable serpentine wetlands are present onsite. The majority of known extant populations are at higher elevations along the Santa Lucia ridge, Irish Hills or other foothill locations in serpentine influenced soils. Was not observed during focused surveys conducted during the blooming period.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Santa Lucia manzanita	<i>Arctostaphylos luciana</i>	—	—	1B.2	Perennial evergreen shrub; chaparral and cismontane woodland on shale soils; 350-850 meters in elevation; blooms December to March.	<b>Not expected.</b> No suitable habitat or soils are present, the site is greatly outside of the species' elevational range, and no manzanitas were observed during the surveys. Distribution is centered on the Santa Lucia Range east of Cuesta Grade.
Santa Margarita manzanita	<i>Arctostaphylos pilosula</i> (=A. wellsii)	—	—	1B.2	Evergreen perennial shrub; occurs in closed-cone coniferous forests, broadleaved upland forest, cismontane woodland, and maritime chaparral sometimes on sandstone; ranges from 75-1100 meters in elevation; blooms December to May.	<b>Not expected.</b> No suitable habitat or soils are present, and no manzanitas were observed during the surveys. Species is widely distributed throughout mountainous areas of SLO Co. except the north coast.
Southern curly-leaved monardella	<i>Monardella sinuata</i> ssp. <i>sinuata</i>	—	—	1B.2	Annual herb; chaparral, cismontane woodland, coastal dunes, and openings in coastal scrub on sandy soils; elevations below 300 meters; blooms May to September.	<b>Not expected.</b> No suitable habitat or soils are present. Species occurs to the southeast of Morro Bay to Pismo Beach in coastal areas.

\*E = Endangered; T = Threatened; R = Rare; '—' = no status; CRPR: Rank 1A - Presumed extirpated in California and either rare or extinct elsewhere; Rank 1B – Rare, threatened or endangered in California and elsewhere; Rank 2A – Presumed extirpated in California, but more common elsewhere; Rank 2B – Rare, threatened, or endangered in California, but more common elsewhere; Rank 3 - Plants needing more information, a review list; Rank 4 – Limited distribution, a watch list. Sources: California Natural Diversity Database (California Department of Fish and Wildlife 2021a); Special Vascular Plants, Bryophytes, and Lichens List (California Department of Fish and Wildlife 2020a); Inventory of Rare and Endangered Plants of California (California Native Plant Society 2021); Information on Wild California Plants for Conservation, Education, and Appreciation (California 2021).

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
<b>ANIMALS</b>						
<b>INVERTEBRATES</b>						
Atascadero June beetle	<i>Polyphylla nubila</i>	—	—	—	Sandy soils in annual grassland, chamise chaparral, and oak woodland and savannah. Restricted to Atascadero and San Luis Obispo.	<b>Not expected.</b> Onsite soils are not sandy and the only record from the vicinity is from 1956 and has an imprecise location.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
California linderiella	<i>Linderiella occidentalis</i>	—	—	—	Seasonal pools or vernal pools in grasslands or in sandstone depressions. Can occur in very small pools and are heat tolerant.	<b>Not expected.</b> No topographic depressions capable of holding water are present on this site, and species does not occur in flowing water. Recorded along Tank Farm Road.
Crotch bumble bee	<i>Bombus crotchii</i>	—	CE	—	Inhabits grasslands and scrub, especially hot and dry areas. It nests and overwinters underground. Food plants include milkweed, lupine, phacelia, sage, clarkia, poppy, and buckwheat.	<b>Unlikely.</b> Small size of the property and surrounding industrial development make the site unlikely to be inhabited by this species. One small patch of poppies was observed and no other food plants were present on this disturbed site. One individual documented in downtown SLO in 2009; otherwise little information is known about the status of the species in the area.
Monarch butterfly	<i>Danaus plexippus</i> pop. 1	C	—	— (overwintering population)	Adults feed on the nectar of various blooming plants. During breeding can be found in fields, pastures, residential areas, grassland and scrub. Eggs are laid on and caterpillars feed on milkweed. Overwinters in wind-protected tree groves of eucalyptus, Monterey pine and cypress along the coast.	<b>Potential.</b> No groves of suitable trees occur in the study area to be used as an overwintering site. However, individuals could occur periodically while foraging. There are several overwintering records from small groves and linear windrows in urban SLO and the surrounding area.
San Luis Obispo pyrg	<i>Pyrgulopsis taylora</i>	—	—	—	Freshwater snail with planktonic larvae. Also has been recorded on rocks and in leaf litter. Endemic to the San Luis Obispo Creek watershed.	<b>Unlikely.</b> Other records from the area are from perennial headwater creeks near Cuesta Grade and springs that feed into San Luis Obispo Creek. Onsite drainage does not have this type of habitat and is highly disturbed from past development and excessive trash and debris from homeless encampments. Freshwater aquatic snails were seen during the survey but were determined to be of a different genus.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	—	—	Grasslands with temporary ponded water. Inhabits small clear-water depressions in rock, vernal pools and swales, as well as anthropogenic habitats such as tire ruts, dozer scrapes and railroad pools. Needs standing water for at least 18 days to complete its lifecycle.	<b>Not expected.</b> No topographic depressions capable of holding water are present on the site, and species does not occur in flowing water. Documented from seasonal pools along Tank Farm Rd.
Wawona riffle beetle	<i>Atractelmis wawona</i>	—	—	—	Small- to medium-sized clear mountain streams with riffles; uses submerged algae. Elevational range reported to be 2000-5000 feet from Mariposa County north to Oregon and Idaho, but there is a record in San Luis Obispo Creek at 98 feet elevation identified only by larvae.	<b>Not expected.</b> The drainage in the study area is unsuitable for this species, and there is only one record in the vicinity and it is greatly outside of the known distribution of the species.
Western bumble bee	<i>Bombus occidentalis</i>	—	CE	—	Generalist foragers and found on agricultural crops such as tomatoes, peppers, cranberries, alfalfa, avocado, apples, cherries, blackberries, and blueberries. Only females survive the winter and establish new colonies the following spring. Colonies contain one queen, female workers, larvae, and when the season nears, male and female reproductive members. Nests are underground in cavities or burrows.	<b>Unlikely.</b> Potentially could forage on native plant species onsite, but species has undergone substantial range reduction, and no longer occurs in central California. Historic record from 1936 from south of San Luis Obispo.
<b>FISH</b>						
South-central California coast DPS steelhead	<i>Oncorhynchus mykiss irideus</i> pop. 9	T	—	—	Adults spawn in freshwater streams with clear, well-oxygenated, cool water and clean gravel substrate. Also require instream cover (branches, logs) and streamside vegetation. Juveniles rear in freshwater reaches or lagoons before going to the ocean to mature, and then return to freshwater to reproduce.	<b>Not expected.</b> The onsite drainage is not suitable habitat due to insufficient flows/depth, and the downstream Acacia Creek does not support quality habitat and pools in its current condition. Past surveys in the area documented steelhead in Acacia Creek even though some instream barriers are present (pers. comm. F. Otte). Documented in San Luis Obispo Creek.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
<b>AMPHIBIANS/REPTILES</b>						
Blainville's (=coast) horned lizard	<i>Phrynosoma blainvillii</i>	—	—	SSC	Grasslands, sandy washes, coastal scrub, chaparral, coniferous forest and woodlands with patches of open areas for sunning and bushes for cover. Often with loose sandy soils for burial, but also uses small mammal burrows. Preys on native species of ants and other small invertebrates.	<b>Not expected.</b> No suitable habitat or soils are present. Would not occur in an urban area. There are no records from the city of SLO area.
California red-legged frog	<i>Rana draytonii</i>	T	—	SSC	Forages and breeds in streams with deep slow-moving pools, stock ponds, reservoirs, springs, lagoons, and marshes; usually with emergent or riparian vegetation but also found at sites lacking vegetation. Uses riparian and various upland habitats in winter and for dispersal.	<b>Not expected.</b> Onsite drainage lacks pools of sufficient depth and size for this species. Riparian habitat is limited and highly disturbed. Surrounding urban environment is likely to support high density of predators, such as raccoons. Drainage upstream through Shinsheimer Park does not have sufficient water. Potentially suitable habitat is present in the drainage system downstream from Damon-Garcia to SLO Creek, but species has not been found despite numerous protocol surveys. The nearest records are 2.2 and 2.3 miles away, which is beyond the species' migratory distance and substantial barriers are located between these sites and the property.
Coast Range newt	<i>Taricha torosa</i>	—	—	SSC	Primarily terrestrial in forests, oak woodlands, chaparral, and rolling grassland. Breeds in ponds, reservoirs and pools of clear streams with rocky substrates and cascades.	<b>Not expected.</b> Onsite drainage does not have sufficient amount of water or appropriate rocky habitat with pools and cascades. Known to occur in San Luis Obispo Creek at Reservoir Canyon, but not found in areas further downstream.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Foothill yellow-legged frog - Central Coast Population	<i>Rana boylei</i>	Under Review	E	SSC	Rocky streams and rivers with open sunny banks, surrounded by forests, chaparral, riparian and grassland. Sometimes found in isolated pools, backwaters, and spring-fed pools. Reproduction is exclusively in streams and rivers. Usually found near water and both diurnal and nocturnal.	<b>Not expected.</b> Onsite drainage does not have sufficient water or rocky habitat, and downstream reaches also are unsuitable. Species is considered to be extirpated south of Rocky Point in far northwestern SLO County. Historically recorded in Brizzolari Creek, Reservoir Canyon, and Arroyo Grande Creek but not found since 1958.
Northern California legless lizard	<i>Anniella pulchra</i>	—	—	SSC	Beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, oak woodland, and stream terraces with riparian vegetation. Fossorial species requires moist, loose soils or leaf litter with plant cover or surface objects (rocks, boards, logs, etc.). Can occur in residential areas.	<b>Not expected.</b> Heavy clay soils are typically unsuitable for the species. No records are from within or in the vicinity of the city of San Luis Obispo.
Southwestern (=western) pond turtle	<i>Actinemys pallida</i> (= <i>Emys marmorata</i> )	—	—	SSC	Ponds, lakes, rivers, streams, marshes, brackish lagoons, and irrigation ditches with a mosaic of vegetation and open areas for basking. Uses upland areas for nesting and in winter, including woodland, forest, grassland, chaparral, and grasslands.	<b>Unlikely.</b> The onsite drainage does not have sufficient water depth/pools for this species. Can use small streams while moving between suitable sites, but no suitable habitat is present nearby. Upstream areas on Shinsheimer Park are unsuitable (i.e., eroded ditch with short hydroperiod). Marginally suitable habitat may be present downstream from Orcutt Road and have been observed at Damon Garcia Sports Complex and near Tank Farm Road (Merk observation), but turtles are unlikely to move through the culvert to reach the site or through the dense urban development. It is highly unlikely that they would move upstream into a more developed area with lesser quality habitat.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
<b>BIRDS</b>						
Bald eagle	<i>Haliaeetus leucocephalus</i>	—	E	FP	Open areas near water where they feed on fish, and may also eat birds, amphibians, reptiles, small mammals, and crabs. Does not breed in this area. Occurs in the winter.	<b>Not expected.</b> Site is only 0.4 acre and surrounded by industrial development. There are records of this species in eBird from open space areas surrounding SLO, and may fly over the property but would not forage onsite.
Burrowing owl	<i>Athene cunicularia</i>	—	—	SSC (burrow sites & some wintering sites)	Open treeless areas with low sparse vegetation such as grasslands, deserts, pastures, agricultural fields, airports, and artificial embankments where they prey on small vertebrates and various invertebrates. Nests in burrows created by other animals with nearby lookouts such as fence posts or shrubs. Formerly occurred year-round in this area, but now restricted to winter.	<b>Not expected.</b> Area of grassland habitat is only 0.4 acre and is surrounded by urban development. No burrows seen. Wintering has been recorded along Tank Farm Rd., where there is an open expanse of suitable habitat. Does not nest in this area.
California horned lark	<i>Eremophila alpestris actia</i>	—	—	WL	Areas with sparse vegetation or bare ground in prairies, deserts, tundra, beaches, dunes, airports, plowed fields and heavily grazed pastures where they eat seeds and insects. Nesting is on bare ground. Occurs year-round in this area.	<b>Unlikely.</b> Marginally suitable habitat is present due to the density of surrounding development. There are a few observations in eBird at scattered locations surrounding the city.
Cooper's hawk	<i>Accipiter cooperii</i>	—	—	WL (nesting)	Mature and open woodlands including oak forest, conifers and riparian; may also be found in suburban areas with tall trees. Feeds on birds, small mammals, reptiles and amphibians. Nesting is in dense woodlands. Occurs in this area year-round.	<b>Potential.</b> Could occur onsite as a transient and may perch on the riparian, but the property is small and riparian has been thinned. They have been recorded in eBird at numerous locations throughout the city and close to the site.
Ferruginous hawk	<i>Buteo regalis</i>	—	—	WL (wintering)	Open country such as grasslands, sagebrush, saltbush shrubland, and edges of pinyon-juniper forest where they prey on small mammals. Nests on lone trees, cliffs, utility poles, and shrubs from ground-level to 65-foot high. Occurs in this area during winter.	<b>Not expected.</b> The 0.4 acre of grassland habitat onsite is unsuitable to support foraging of this species, which requires open habitats. Does not nest in this area. There are records from open space areas surrounding the city.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Golden eagle	<i>Aquila chrysaetos</i>	—	—	FP, WL (nesting & wintering)	Uncommon resident of mountainous and valley-foothill areas. Foraging typically occurs in open terrain where they prey on small mammals. Nesting usually occurs on cliff ledges, and less commonly in large trees or on structures such as electrical towers. Occurs in this area year-round.	<b>Not expected.</b> Site is only 0.4 acre and surrounded by industrial development. There are records of this species in eBird from open space areas surrounding SLO, and may fly over the property but would not forage onsite.
Great blue heron	<i>Ardea herodias</i>	—	—	— (nesting colony)	Freshwater and saltwater marshes, also foraging in grasslands and agricultural fields. Nesting colonies are near lakes, ponds and wetlands bordered by forests. Nests are placed mainly in trees, but may also nest on the ground, in bushes or artificial structures. Occurs year-round in this area.	<b>Unlikely.</b> Very low potential to forage onsite periodically due to the small size of the property and density of surrounding industrial development. No nesting habitat is present. There are records in eBird downstream along Acacia Cr. at Broad St., but larger areas of undeveloped habitat are present at these locations.
Great egret	<i>Ardea alba</i>	—	—	— (nesting colony)	Forages in marshes, swamps, streams, rivers, ponds, lakes, lagoons, tidal flats, canals, ditches, flooded fields, and sometimes in upland where they prey on fish, amphibians, reptiles, crustaceans, and invertebrates. Roosts communally in trees. Nesting colonies are on lakes, ponds, marshes, and estuaries, but does not nest in this area. Occurs in this area during non-breeding season.	<b>Unlikely.</b> Very low potential to forage onsite periodically due to the small size of the property and density of surrounding industrial development. Does not nest in this area. There are records in eBird within the urban boundary of SLO, including an observation along Orcutt Rd. close to the site.
Loggerhead shrike	<i>Lanius ludovicianus</i>	—	—	SSC (nesting)	Open country with low vegetation and well-spaced shrubs or trees such as coastal scrub, grasslands, agricultural fields, pastures, riparian areas, desert scrub, savannas, prairies, golf courses, and along roadsides where they prey on insects, amphibians, reptiles and small mammals. Nests in trees, shrubs, or brush piles. Occurs in this area year-round.	<b>Not expected.</b> Property is of insufficient size for this species and surrounded by urban development. Riparian habitat has been thinned and is likely not shrubby enough for nesting. Species has been recorded in open habitats surrounding the city.



Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Merlin	<i>Falco columbarius</i>	—	—	WL (wintering)	Coastlines, open grasslands, savannas, woodlands, lakes, wetlands, and montane conifer forests where they prey on small birds, small mammals and insects. Nests in existing corvid or hawk nest but does not nest in California. Occurs in this area during winter.	<b>Unlikely.</b> Very low potential to occur as a transient while moving through the area due to the small size of the property and surrounding industrial uses. Has been recorded in eBird at several locations within the city limits, including close to the site.
Prairie falcon	<i>Falco mexicanus</i>	—	—	WL (nesting)	Grasslands, desert shrubland, tundra, coastal scrub, feedlots, and agricultural fields where they feed on small mammals, insects and birds. Nests on high cliff ledges and steep bluffs overlooking open areas. Occurs year-round in this area.	<b>Unlikely.</b> Small size of property and surrounding urban land use is not suitable for this species. No nesting habitat is present in the vicinity. Has been recorded at various locations on the outskirts of city limits as a transient or while foraging.
Sharp-shinned hawk	<i>Accipiter striatus</i>	—	—	WL (nesting)	Forages along the edges of dense mixed woodlands and forests where they prey on birds. Nests are in dense coniferous forests with closed canopies, but not in this region. Occurs only in winter in this area.	<b>Not expected.</b> Site is only 0.4 acre and surrounded by industrial development. There are records of this species in eBird from open space areas surrounding SLO, and may fly over the property but would not forage onsite.
Tricolored blackbird	<i>Agelaius tricolor</i>	BCC	T	SSC (nesting colony)	Forages in a variety of habitats including pastures, agricultural fields, rice fields, and feedlots. Nests colonially in freshwater marshes with tules or cattails, or in other dense thickets of willow, thistle, blackberry, or wild rose in close proximity to open water. Occurs year-round in this area.	<b>Not expected.</b> No suitable habitat is present on this small lot that is surrounded by urban development. Observed in open space areas surrounding the city.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	T	E	—	Riparian, desert riparian, and orchards with dense cover and a water source. Preys primarily on caterpillars, but food includes other invertebrates, amphibians, reptiles, fruits and seeds. Once common in CA's central and coastal valleys, now breeds only along a few inland rivers. Dense willows required for roosting and nesting. Migratory only occurring in CA in summer.	<b>Not expected.</b> Degraded riparian habitat is present, but species has been dramatically reduced and no longer breeds in this area. Historic records from the general area are from 1921 and 1932. Transient individuals recorded only from along the immediate coast.
White-tailed kite	<i>Elanus leucurus</i>	—	—	FP (nesting)	Savannas, open woodlands (oak or pine), riparian forest, marshes, desert grasslands, and fields where they prey on small mammals, birds, lizards, and insects. Nests and roosts in the edges of forests or in tall isolated trees. Occurs in this area year-round.	<b>Unlikely.</b> Property is too small to support foraging, but could occur in open space areas nearby and fly over the site. There are numerous observations in eBird from within city limits.
Yellow warbler	<i>Setophaga petechia</i>	—	—	SSC	Wetland and riparian habitats with willows, cottonwoods, bay, maple, sycamores and alders where they eat insects. Also uses gardens, orchards, residential areas and roadside thickets. Nesting is in shrubs or small trees. Occurs year-round in this area, although is rare in winter.	<b>Potential.</b> Could forage in the riparian but likely is not of insufficient size for breeding due to trimming and site management. Has been recorded nearby in eBird so could fly and forage throughout the area.
<b>MAMMALS</b>						
American badger	<i>Taxidea taxus</i>	—	—	SSC	Open grasslands, fields and the edge of scrub and woodland habitats; requires dry loose soils for burrowing and shelter and feeds on a variety of small mammals such as California ground squirrel and pocket gopher. Young are born in dens in March and April.	<b>Not expected.</b> Urban development surrounding site would be unsuitable for movement into or through the parcel. Site is small in size and lacks prey. No burrows seen. Last recorded at nearby areas on Tank Farm Rd. in 2008.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Pallid bat	<i>Antrozous pallidus</i>	—	—	SSC	Open dry habitats including deserts, grasslands, shrublands, woodlands, and forests. Roosts in rocky outcrops, caves, crevasses, mines, hollow trees, and buildings that moderate temperature. Night roosts on porches and open buildings.	<b>Potential.</b> Could forage over the site and roost in the downstream culvert even though it was narrow and more suitable roosting structures are present elsewhere. Has been recorded on Camp SLO and the city downtown area.
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	—	—	SSC	Desert scrub, grassland, sagebrush, chaparral, oak woodlands, riparian and coniferous forests; prefers mesic habitats and closely tied to rock cliffs with crevasses. Roosts in caves, cliffs, mines, tunnels and bridges. The year-round range of the species is considered to be all of California except high elevations in the Sierra Nevada.	<b>Potential.</b> Could forage onsite and roost in the downstream culvert or under bridges near the site. Individuals and roost sites have been recorded nearby. Has been recorded in the vicinity at Camp SLO and Chorro Creek, and individuals at Shell Beach.
Western mastiff bat	<i>Eumops perotis californicus</i>	—	—	SSC	Desert scrub, coastal scrub, chaparral, oak woodland, and coniferous forest. Roosts colonially in rock crevasses, buildings, tunnels and in trees. Does not undergo seasonal migrations or prolonged hibernation, and is present in this area year-round.	<b>Potential.</b> Could forage over the site and roost in the downstream culvert. Has been recorded in the San Luis Obispo area.
Yuma myotis	<i>Myotis yumanensis</i>	—	—	—	Open forests and woodlands with water sources such as ponds, streams, and stock tanks; roosts in buildings, mines, caves, crevices and under bridges; night roosts in more open areas.	<b>Potential.</b> Could forage over the site and roost in the downstream culvert or under the bridges nearby. There were no records in the CNDDDB, but their year-round range includes all of San Luis Obispo/Santa Barbara County.

\*E = Endangered; T = Threatened; C = Candidate; BCC = Birds of Conservation Concern; SSC = Species of Special Concern; FP = Fully Protected; WL = Watch List; '—' = no status; California Natural Diversity Database (California Department of Fish and Wildlife 2021a); Special Animals List (California Department of Fish and Wildlife 2020b); California Wildlife Habitat Relationships System (CDFW 2021c); A Guide to the Amphibians and Reptiles of California (California Herps 2021); eBird (The Cornell Lab of Ornithology 2021a); All About Birds (The Cornell Lab of Ornithology 2021b); Guide to North American Birds (Audubon 2021).

DESIGNATED CRITICAL HABITAT	
California Red-legged Frog	<b>Absent.</b> Does not occur at the subject property. Unit SLO-3 occurs in the northern portion of San Luis Obispo, and extends west to the coast and north and east through the Santa Lucia Range.

Source: *Threatened and Endangered Species Active Critical Habitat Report (United States Fish and Wildlife Service 2021b).*

SENSITIVE NATURAL COMMUNITIES	
Central Coast Live Oak Riparian Forest — State Rarity Rank 3.2	<b>Absent.</b> Band of riparian on drier, outer floodplains along perennial streams between the more mesic cottonwood or willow-dominated communities and more xeric chaparral. Dominated by coast live oak ( <i>Quercus agrifolia</i> ) with a relatively open understory of grasses. Other species in the understory include coyote brush ( <i>Baccharis pilularis</i> ), California rose ( <i>Rosa californica</i> ), fragrant sumac ( <i>Rhus aromatica</i> ), and blue elderberry ( <i>Sambucus mexicana</i> ). The riparian habitat onsite has been frequently disturbed by clearing and thinning and more closely aligns with Central Coast Riparian Scrub.
Central Coast Riparian Scrub — State Rarity Rank S3	<b>Present.</b> A dense, shrubby streamside thicket dominated by any of several species of willows ( <i>Salix</i> spp.) and has coyote brush ( <i>Baccharis pilularis</i> ) as a secondary component. Occurs on sand or gravel bars along rivers and streams with ground water close to the surface. Also occurs around dune slack ponds. The riparian habitat onsite would be classified as this community.
Central Maritime Chaparral — State Rarity Rank S2.2	<b>Absent.</b> Occurs on well-drained, sandy soils within the summer fog zone. Composed of sclerophyll shrubs dominated by one or more species of manzanita ( <i>Arctostaphylos</i> spp.). No manzanita species occur on the site and this community is not present.
Coastal and Valley Freshwater Marsh — State Rarity Rank S2.1	<b>Absent.</b> Occurs in permanently flooded sites with freshwater and lacking significant flow, dominated by perennial, emergent vegetation such as bulrushes ( <i>Scirpus</i> sp. and <i>Schoenoplectus</i> sp.) and cattails ( <i>Typha</i> sp.). No freshwater marsh vegetation was present along the drainage. The majority of the understory was upland grassland species. The few scattered umbrella sedge species were not dominant to classify the habitat as a wetland.
Serpentine Bunchgrass — State Rarity Rank S2.2	<b>Absent.</b> Restricted to areas with serpentine soils. Dominated by native perennial bunchgrasses and herbs with low total cover. Characteristic species include needlegrass ( <i>Stipa</i> spp.), California poppy ( <i>Eschscholtzia californica</i> ), and small fescue ( <i>Festuca microstachys</i> ). No suitable serpentine soils occur, and the onsite grassland has dense cover by non-native species.

Sources: *Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986); California Natural Diversity Database (California Department of Fish and Wildlife 2021a); California Sensitive Natural Communities (California Department of Fish and Wildlife 2021b).*