

**Appendix C:  
Biological Resources Supporting Information**

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## **C.1 - Biological Resources Assessment**

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## Biological Resources Assessment SDG Commerce 220 Distribution Center Project City of American Canyon, Napa County, California

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## Table of Contents

<b>Section 1: Introduction .....</b>	<b>1</b>
1.1 - Project Location.....	1
1.2 - Project Description .....	1
1.3 - Project History .....	1
<b>Section 2: Regulatory Setting .....</b>	<b>9</b>
2.1 - Federal.....	9
2.2 - State.....	11
2.3 - Regional and Local.....	15
2.4 - City of American Canyon Ordinances .....	16
<b>Section 3: Methods.....</b>	<b>17</b>
3.1 - Literature Review.....	17
3.2 - Field Surveys and Focused Surveys .....	18
3.3 - Wildlife Movement Corridors.....	20
<b>Section 4: Results.....</b>	<b>23</b>
4.1 - Environmental Setting .....	23
4.2 - Vegetation Communities and Land Cover Types .....	27
4.3 - Wildlife .....	31
4.4 - Wildlife Movement Corridors and Nursey Sites .....	32
4.5 - Protected Trees.....	33
4.6 - Habitat Conservation Plans .....	33
<b>Section 5: Sensitive Biological Resources.....</b>	<b>35</b>
5.1 - Sensitive Natural Communities .....	35
5.2 - Special-status Plant Species .....	35
5.3 - Special-status Wildlife Species .....	39
5.4 - State or Federally Protected Waters and Wetlands .....	44
5.5 - Wildlife Movement Corridors and Nursery Sites.....	44
<b>Section 6: Impact Analysis and Recommendations .....</b>	<b>45</b>
6.1 - Impact Analysis for Sensitive Natural Communities.....	45
6.2 - Impact Analysis for Special-status Species .....	45
6.3 - Impact Analysis for Wildlife Nursery Sites and Wildlife Movement Corridors.....	50
6.4 - Impact Analysis for State and Federally Protected Waters and Wetlands .....	51
6.5- Protected Trees .....	51
6.6- Conflict with Habitat Conservation Plans.....	51

### Appendix A: Site Photographs

### Appendix B: Special-status Species Tables

### Appendix C: Database Searches

### Appendix D: Supporting Documents

- D.1 - SDG Commerce Site 217 Documents
- D.2 - SDG Commerce Site 220 Documents

### Appendix E: Plant and Wildlife List

**List of Tables**

Table 1: Soil Types Present within Project Site.....23

**List of Exhibits**

Exhibit 1: Regional Location .....3  
Exhibit 2: Local Vicinity .....5  
Exhibit 3: Site Plan.....7  
Exhibit 4: Soils .....25  
Exhibit 5: Vegetation Communities and Land Cover Types.....29  
Exhibit 6: CNDDDB Occurrences.....37  
Exhibit 7: Impacts.....53

## SECTION 1: INTRODUCTION

This Biological Resources Assessment (BRA) has been prepared by FirstCarbon Solutions (FCS) for the proposed SDG Commerce Court 220 Distribution Center Project (proposed project). The purpose of the BRA is to (1) document existing and potentially occurring biological resources on the project site and adjacent areas; (2) analyze potential project-related impacts on regulated biological resources; (3) summarize relevant local, State, and federal regulations; and (4) recommend appropriate measures to mitigate potential impacts on biological resources to less than significant levels.

### 1.1 - Project Location

The approximately 10.17-acre project site is located in the City of American Canyon, in Napa County, California (Exhibit 1 and Exhibit 2). The project site is located on the *Cuttings Wharf, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map. The project site is generally trapezoidal in shape, bordered by the Commerce Court extension and eucalyptus trees to the east, eucalyptus trees and North Slough to the west, the future SDG Commerce 217 project site to the north, and the constructed and operational SDG Commerce 330 Distribution Center to the south.

### 1.2 - Project Description

The project applicant, SDG Commerce 220, LLC, proposes to develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site (Exhibit 3). The warehouse would provide 23 truck doors and up to provisions for 4,400 square feet of office space. The warehouse would have perimeter concrete tilt-up wall panels with varying parapet heights and accent spandrel glass/metal canopy features around offices and corners of the building. The average roof height would be approximately 35 feet high and portions of the building exterior walls would have various heights to provide architectural relief. The building would be insulated and refrigerated at approximately 58°F (degrees Fahrenheit), making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized.

### 1.3 - Project History

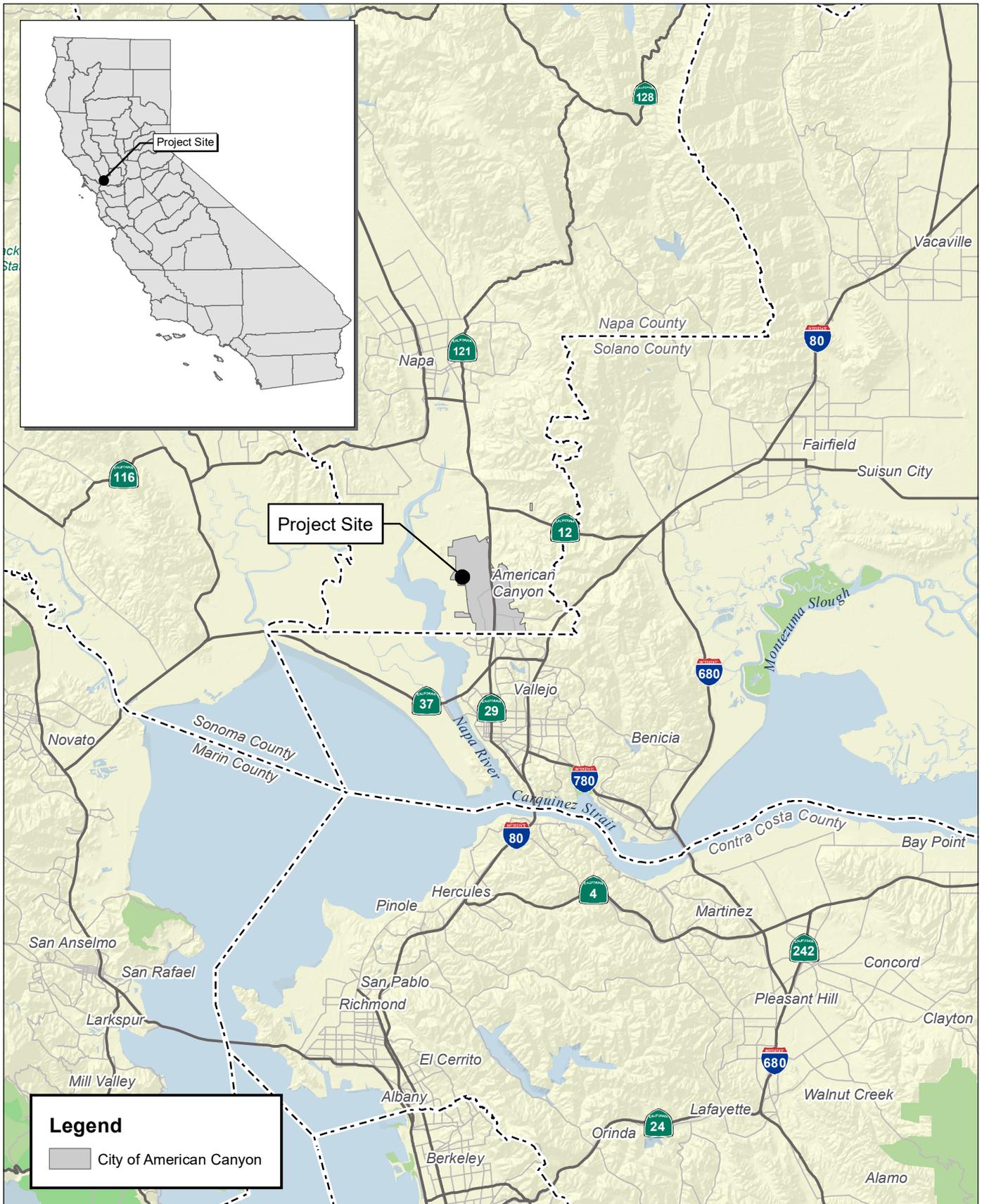
The project site is part of what was previously a larger 35.85-acre site. The site was subdivided into three lots (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330) via a tentative parcel map in February 2019. The southern parcel (SDG Commerce 330) was developed in 2021. The northern parcel (SDG Commerce 217) was entitled in 2021 and at the time of this writing is currently being developed. The central parcel (SDG Commerce 220) is the project site evaluated in this BRA. Exhibit 3 shows the relationship of the three parcels to each other. The following narrative provides background on the entire 35.85-acre project site.

Aerial photography dating back to 1937 indicates that the entire project site was occupied by planted ornamental trees; between then and the late 1950s, a eucalyptus grove was planted. From

the 1950s until 2001 the site remained relatively unchanged. From 2001 until circa 2012, the northwest corner of the site was used as a paintball field (Sherwood Forest Paintball Area) with the eucalyptus trees remaining in place.

In 2004, a warehouse was built directly to the north of the greater 35.8-acre site (as shown in Exhibit 2), and its development also included construction of Commerce Court cul-de-sac road improvements that terminated at on the northeast corner of the site. Also in 2004, the City of American Canyon installed underground utilities and a rock-paved access road through the middle of the eucalyptus grove adjacent to the east side of the project site. This work also included installation of a sanitary sewer force main that crosses the northern portion of the site (i.e., the 217 SDG Commerce parcel). In 2012 the entire 35.85-acre site was cleared and grubbed of eucalyptus trees and shrubs.

It should be noted that as part of the SDG Commerce 217 development, much of the SDG Commerce 220 project site was graded between May 29 and July 2, 2023, to procure existing, stockpiled soil for use as clean fill material for the SDG Commerce 217 site (See Appendix A for photographs). A Monk & Associates (M&A) authored *Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site* in September 2020 analyzed grading impacts (Appendix D.1). Additionally, an approved grading plan was issued by the City of American Canyon in March 2023 (Appendix D.1).



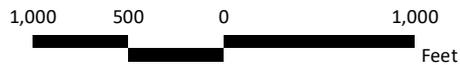
Source: Census 2000 Data, The California Spatial Information Library (CaSIL).



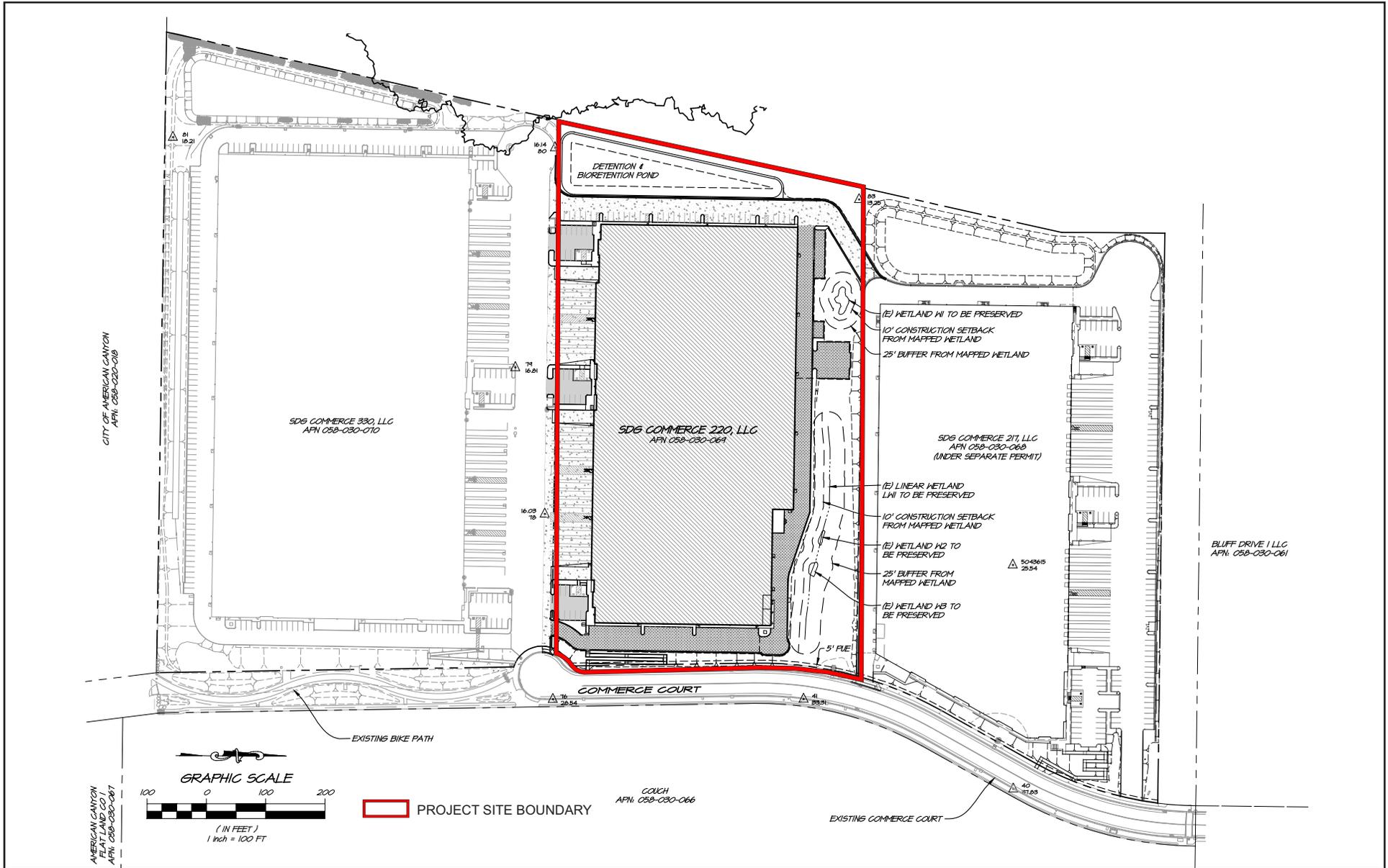
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Source: Bing Aerial Imagery.



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Source: RSA+ Consulting Civil Engineers + Surveyors. 07/21/2023.

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## SECTION 2: REGULATORY SETTING

### 2.1 - Federal

#### 2.1.1 - Endangered Species Act of 1973

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the federal Endangered Species Act of 1973. Section 9 of Endangered Species Act protects listed species from “take,” which is broadly defined as actions taken to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” The Endangered Species Act protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process.

#### 2.1.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 United States Code [USC] § 703, *et seq.*).

#### 2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq.*) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

#### 2.1.4 - Clean Water Act

##### Section 404

The United States Army Corps of Engineers (USACE) administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States.

As of the preparation of this report on August 28, 2023, the final “Revised Definition of Waters of the United States” rule was published in the Federal Register on January 18, 2023, and took effect on March 20, 2023. However, the final rule is not currently operative in certain states and for certain parties due to litigation. Moreover, the United States Environmental Protection Agency (EPA) and USACE (hereafter known as the agencies) are in receipt of the U.S. Supreme Court’s May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. In light of this decision, the agencies will interpret the phrase “waters of the United States” consistent with the Supreme Court’s decision in *Sackett*.<sup>1</sup> As a result of ongoing litigation, the agencies are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime until further notice.

<sup>1</sup> United States Environmental Protection Agency (EPA). 2023. Website: <https://www.epa.gov/wotus/current-implementation-waters-united-states>. Accessed July 12, 2023.

Therefore, since the agencies are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime until further notice, our analysis follows 40 Code of Federal Regulations 230.3(s) in effect under the pre-2015 regulatory regime, which defines “waters of the United States” as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
2. All interstate waters including interstate wetlands.
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
  - a) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
  - b) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - c) Which are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under this definition.
5. Tributaries of waters identified in paragraphs(s) (1) through (4) of this section.
6. The territorial sea.
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs(s) (1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 Code of Federal Regulations 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the EPA and/or USACE.

“Wetland” refers to areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and seasonal wetlands. Wetlands are considered jurisdictional if they fall under one of the categories of waters of the United States defined above. The USACE jurisdiction typically extends up to the ordinary high water mark (OHWM).

In general, a USACE permit must be obtained before placing fill in wetlands or other waters of the United States. The type of permit depends on the impacted acreage, the purpose of the proposed fill, and other factors.

## Section 401

As stated in Section 401 of the CWA, “any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.” Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB).

## 2.2 - State

### 2.2.1 - CEQA Guidelines

The California Environmental Quality Act (CEQA) requires public agencies to evaluate potential impacts to special-status species and their habitat. The following CEQA Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a Candidate, Sensitive, or Special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally and State-protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

### Oak Woodlands Conservation Act

California State Senate Bill (SB) 1334, the Oak Woodlands Conservation Act, became law on January 1, 2005, and was added to the CEQA statutes as 21083.4. This statute requires that a county must determine whether or not a project will result in a significant impact on oak woodlands and, if it is

determined that a project may result in a significant impact on oak woodlands then the County shall require one or more of the following mitigation measures:

- Conserve oak woodlands through the use of conservation easements.
- Plant an appropriate number of trees, including maintenance of plantings and replacement of failed plantings.
- Contribute funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements.
- Other mitigation measures developed by the county.

### 2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

### 2.2.3 - California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California’s rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA. Fish and Game Code Section 2081 established an incidental take permit program for State-listed species. The CDFW maintains a list of “Candidate” species that it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq.*) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from “take” prohibition “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right-of-way.” Project impacts to these species

are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

In addition to formal listing under the Endangered Species Act and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a Species of Special Concern. The CDFW maintains lists of Species of Special Concern that serve as species “watch lists.” Species with this status may have limited distributions or limited populations, and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500 to 5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a Candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of CESA. “Take” of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that “may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake” or “deposit debris, waste, or other materials that could pass into any river, stream, or lake.” “River, stream, or lake” includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water. CDFW jurisdiction typically extends to the edge or “drip line” of the riparian habitat or top of bank.

### 2.2.1 - California Porter-Cologne Water Quality Control Act

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the State” (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the State” (Water Code § 13050(e)). In 2019, the California State Water Resources Control Board (State Water Board) published the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Procedures) to guide wetland/waters of the State determinations and the permitting process.<sup>2</sup>

### 2.2.2 - California Native Plant Society

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Following are the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere
- **Rank 1B:** Plants rare, threatened, or endangered in California and elsewhere
- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which more information is needed
- **Rank 4:** Watch List: Plants of limited distribution

Potential impacts to populations of CNPS ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations. Nevertheless, some level of CEQA review is justified for California Rare Plant Rank (CRPR) 4 taxa, and under some circumstances, a full impact analysis is warranted. Taxa that can be shown to meet the criteria for endangered, rare, or threatened status under CEQA Section 15380(d) or that can be shown to be regionally rare or unique as defined in CEQA Section 15125(c) must be fully analyzed in a CEQA document. Some

<sup>2</sup> California State Water Resources Control Board (State Water Board). 2019. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. April 2, 2019.

circumstances, such as local rarity, having occurrences peripheral to the taxon’s distribution, or having occurrences on unusual substrates or rare and declining habitats, provide justification for treating some CRPR 4 taxa occurrences as regionally rare or unique. One limitation to fully analyzing impacts on CRPR 4 taxa is the difficulty in obtaining current data on the number and condition of the occurrences.<sup>3</sup>

## 2.3 - Regional and Local

### 2.3.1 - City of American Canyon General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site. Only those applicable to the proposed project are discussed herein:

- Goal 8** Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.
- Objective 8.1** Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.
- Policy 8.1.1** Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.
- Policy 8.1.4** Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.
- Objective 8.2** Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savanna, and wetland and riparian habitats, with new development in the City.
- Policy 8.2.1** Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savanna, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified Biologist to determine whether sensitive habitats exist on-site. In instances where the potential

<sup>3</sup> California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Sacramento, CA. January 21, 2020.

for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

**Policy 8.3.1 b** Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g" (below).

**Objective 8.3** Protect natural drainages and riparian corridors within the American Canyon Planning Area.

**Policy 8.3.1** Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:

- The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.

**Policy 8.3.1 e** Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages or corridors from built environment.

**Policy 8.3.1 f** Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.

**Policy 8.3.1 g** Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.

**Policy 8.3.5** Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.

**Policy 8.3.6** Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

## 2.4 - City of American Canyon Ordinances

Municipal Code Chapter 18.40.110 sets forth the City's Tree Ordinance. The ordinance states that existing trees shall be preserved on the site unless otherwise approved by the City Council as a part of the site development plans. Additionally, unless specifically approved by the City Council, any tree removed shall be replaced on the site. Replacement trees shall be a minimum size of a 24-inch box of the same species unless specifically approved by the City Council.

## SECTION 3: METHODS

### 3.1 - Literature Review

Literature review was conducted to analyze existing documentation regarding biological resources and habitat conditions within the project site and is summarized below.

#### 3.1.1 - Existing Documentation

As part of the literature review, an FCS Biologist compiled and analyzed existing environmental documentation for the project site and relevant areas in its vicinity. This documentation included literature pertaining to the habitat requirements of special-status species with the potential to occur in the project vicinity and federal register listings, protocols, and species data provided by the USFWS, CDFW, and CNPS. Additionally, FCS reviewed and evaluated all available supporting documentation provided by the applicant, including a pending USACE jurisdictional determination, and species-specific studies and habitat assessments. These documents are attached to this BRA (Appendix D), and include the following:

##### SDG Commerce 217 Documents

- Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. City of American Canyon, California. March 2020.
- Monk & Associates (M&A). 2020. Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site SDG Commerce 217 Distribution Center. September 2020.
- FirstCarbon Solutions (FCS). 2023. Pre-Construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 per the Mitigation Monitoring and Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California. April 2023.
- RSA+. 2023. Commerce 217 Distribution Center Borrow Site Grading Plan. March 2023.

##### SDG Commerce 220 Documents

- Pinecrest Research Corp., Inc. 2023. Special-Status Animal Survey Report. August 2023.
- Pinecrest Research Corp., Inc. 2023. Special-Status Plant Survey Report. July 2023.
- Monk & Associates (M&A). 2023. Request for Reverification of Jurisdictional Determination and a PJD SDG Commerce 220 Project Site; USACE File Number: 2011-00322N American Canyon, California. May 2023.

#### 3.1.2 - Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and

immediate vicinity.<sup>4</sup> Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS).<sup>5</sup> Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

### 3.1.3 - Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.<sup>6</sup> These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to inform whether the soil conditions on-site are potentially suitable for any special-status plant species. However, Natural Resources Conservation Service (NRCS) soil maps utilize an approximately 1.4-acre minimum mapping unit, and line placement may not be accurate on a large (i.e., parcel-level) scale.

### 3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the project vicinity based on a search of the USFWS Information for Planning and Consultation (IPaC) database,<sup>7</sup> the CNDDDB, and the CNPS Electronic Inventory (CNPEI) of Rare and Endangered Vascular Plants of California for the *Cuttings Wharf, California* USGS 7.5-minute Topographic Quadrangle Map, and the eight surrounding quadrangles.<sup>8,9</sup> The CNDDDB Biogeographic Information and Observation System (BIOS 6) was used to determine the distance between the known occurrences of special-status species and the project site.<sup>10</sup>

## 3.2 - Field Surveys and Focused Surveys

FCS Biologists familiar with the biological resources of the region conducted field surveys on December 2, 2022, and March 17, 2023. The objective of the field surveys was to ascertain general site conditions, wildlife use, and identify whether existing vegetation communities provide suitable

<sup>4</sup> United States Geological Survey (USGS). 2022. National Geospatial Program. Website: [https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science\\_support\\_page\\_related\\_con=4#qt-science\\_support\\_page\\_related\\_con](https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con). Accessed August 21, 2023.

<sup>5</sup> United States Environmental Protection Agency (EPA). 2022. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed August 21, 2023.

<sup>6</sup> Natural Resources Conservation Service (NRCS). 2022. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed August 21, 2023.

<sup>7</sup> United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed August 21, 2023.

<sup>8</sup> California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDDB) RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed August 21, 2023.

<sup>9</sup> California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed August 21, 2023.

<sup>10</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 6). Website: <https://map.dfg.ca.gov/bios/>. Accessed August 21, 2023.

habitat for special-status plant or wildlife species. Potentially sensitive areas identified during the literature review were ground-truthed during the field survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

Wildlife species detected during the reconnaissance-level surveys by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the project site.<sup>11</sup> Appropriate field guides were used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.<sup>12,13,14</sup> Online resources such as eBird and California Herps were also consulted, as necessary.<sup>15,16</sup>

M&A performed 10 field surveys on the greater 35-acre project site before the site was subdivided into three lots (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330). Consequently, the SDG Commerce 220 project site was included in these surveys which were conducted on March 1 and April 27, 2006; June 14, 2011; February 14, March 21, and June 12, 2012; May 18, 2017; March 30, 2018; December 19 and December 27, 2019. Additional details concerning these surveys can be found in Appendix D.1 of this document.

### 3.2.1 - Pre-construction Surveys for SDG Commerce 217

Seven pre-construction surveys were conducted by FCS between January 18 and April 7, 2023, for a total of approximately 30 survey hours. Surveys were conducted for the entirety of the Commerce 217 project site and relevant adjacent areas (which included the adjacent SDG Commerce 220 site). Surveys were conducted pursuant to the January 2021 Mitigation, Monitoring, and Reporting Program (MMRP) for the Commerce 217 Warehouse Project. Surveys included nesting birds (including Swainson's hawk) and burrowing owl detection. Surveys for western pond turtle adults and nests were also performed simultaneously while walking the site. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol)* and the *Staff Report on Burrowing Owl Mitigation*.<sup>17,18</sup> Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Additional details concerning these surveys can be found in Appendix D.1 of this document.

<sup>11</sup> California Department of Fish and Wildlife (CDFW). 2022. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed August 21, 2023.

<sup>12</sup> Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4<sup>th</sup> Edition. Boston: Houghton Mifflin Harcourt.

<sup>13</sup> Reid, F. 2006. A Field Guide to Mammals of North America, 4<sup>th</sup> Edition. Boston: Houghton Mifflin Harcourt.

<sup>14</sup> Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.

<sup>15</sup> eBird. 2022. Online bird occurrence database. Website: <http://ebird.org/content/ebird/>. Accessed August 21, 2023.

<sup>16</sup> California Herps. 2022. A Guide to the Amphibians and Reptiles of California. Website: <http://www.californiaherps.com/> Accessed August 21, 2023.

<sup>17</sup> Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. California Department of Fish and Wildlife, May 31, 2000.

<sup>18</sup> California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

### 3.2.2 - Special-status Animal Surveys for SDG Commerce 220

Eleven special-status animal surveys were conducted between January 18 and July 2, 2023, by Pinecrest Research Corp (Pinecrest) for the entirety of the Commerce 220 project site. Surveys were conducted by Dr. Christopher DiVittorio to determine the pre-construction presence or absence of several special-status species, including burrowing owl, Swainson’s hawk, nesting raptors, nesting passerine birds, and western pond turtle. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley*, and the *Staff Report on Burrowing Owl Mitigation*.<sup>19,20</sup> Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Additional details concerning these surveys can be found in Appendix D.2 of this document.

### 3.2.3 - Protocol-level Rare Plant Surveys for SDG Commerce 220

Protocol-level rare plant surveys were conducted by Pinecrest during the growing season of 2023. An early-season site visit was performed on March 20. Mid-season site visits were performed on April 6, April 7, and May 29. A late-season site visit was also performed on July 2. Between the mid-season and late-season site visits the majority of the site was graded thus the late-season site visit focused on remaining vegetation surrounding the areas of disturbance. Rare plants recorded and mapped in the field, if present, include all plants that are federal or State-listed as Rare, Threatened, or Endangered, all federal and State candidates for listing, all plants included in Lists 1 through 4 of the CNPS Inventory, and plants that qualify under the definition of “rare” in CEQA Guidelines Section 15380.

Botanical surveys were performed by Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by Dr. Zoya Akulova. During the site visit, Dr. DiVittorio surveyed the entirety of the project area using methods as specified in the CDFW publication titled *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities*.<sup>21</sup> Surveys were conducted by walking the entire project area on foot in parallel lines approximately 15 feet apart, identifying every species that was flowering, and making note of any species that were past flowering or that had not yet flowered. Voucher specimens were taken of any species that required identification in the laboratory. All terminology follows currently accepted nomenclature as described in The Jepson Manual. Additional details concerning these surveys can be found in Appendix D.2 of this document.

## 3.3 - Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation,

<sup>19</sup> Swainson’s Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley. California Department of Fish and Wildlife, May 31, 2000.

<sup>20</sup> California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

<sup>21</sup> California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities. March 20, 2018.

development, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated “islands” of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey and review of aerial photographs, and CDFW’s BIOS6 information on Bay Area Linkages. The focus of this study was to determine whether a change in land use at the project site could have significant impacts on the regional movement of wildlife. Conclusions are based on the information compiled during the literature review, aerial photographs, USGS topographic maps and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity.

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## SECTION 4: RESULTS

This section summarizes the results of the literature research, database analyses, and field surveys listed in Section 3 above. Sensitive biological resources including special-status species and the impact analysis are addressed separately in Section 5 and 6 of this document.

### 4.1 - Environmental Setting

The project site is generally located on the northern boundary of the City of American Canyon, where commercial use is dominant. The project site is bordered by the Commerce Court extension and eucalyptus trees to the east, eucalyptus trees and North Slough to the west (beyond which is the Napa River), future SDG Commerce 217 project site to the north, and the active SDG Commerce 330 Distribution Center to the south.

#### 4.1.1 - Topography and Hydrology

The project site is relatively flat with elevations ranging from 8 to 20 feet above sea level. The ground is undulating due to past land use disturbances including eucalyptus tree removal in 2012. The site slopes gently to the west toward the North Slough and the Napa River.

There are four wetland features (three seasonal wetlands and one linear wetland) along the northern boundary of the project site. In 2023, M&A mapped 0.023-acre of seasonal wetlands and 0.042-acre of linear wetlands within the delineation survey area. These wetlands have surface hydrologic connectivity to North Slough, which flows to the Napa River to the west. The Napa River is a traditional navigable water.

#### 4.1.2 - Soils

The NRCS Web Soil Survey (WSS) depicts one soil type within the project site; Haire clay loam (148). This soil type and its primary characteristics are summarized in Table 1 and depicted in Exhibit 4.

**Table 1: Soil Types Present within Project Site**

Soil Name	Symbol	Slope	Description	Acreage
Haire Clay Loam	148	2-9%	Alluvium derived from sedimentary rock, moderately well drained, non-saline to very slightly saline.	10.17

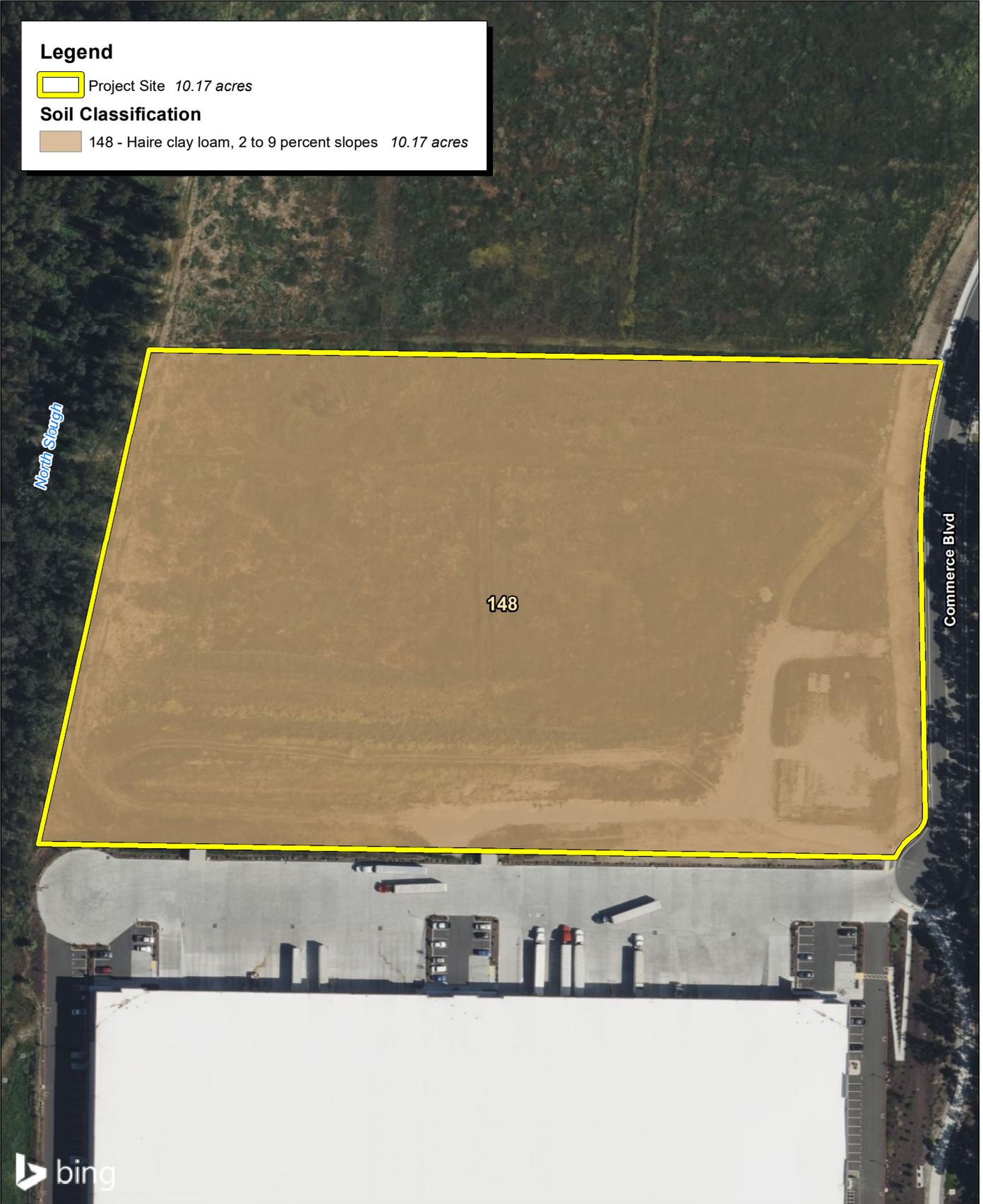
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**Legend**

 Project Site 10.17 acres

**Soil Classification**

 148 - Haire clay loam, 2 to 9 percent slopes 10.17 acres



Source: Bing Aerial Imagery. USDA Soils Data Mart, County of American Canyon.



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## 4.2 - Vegetation Communities and Land Cover Types

The following section describes the vegetation communities and land cover types present on the project site. The location and extent of each vegetation community is shown on Exhibit 5. These results are generally consistent with the results presented in the M&A BRA.

### 4.2.1 - Non-native Annual Grassland–*Avena spp.–Bromus spp. Herbaceous Semi-Natural Alliance*

This vegetation type is typically described by being dominated by non-native annual grasses and annual or perennial forbs from dense to sparse cover with less than 10 percent tree or shrub cover. With a few exceptions, the plants are dead through the summer and fall dry season, persisting as seeds. This community usually occurs below 3,000 feet and is the most common herbaceous vegetation type of the region. This vegetation type is classified by the Manual of California Vegetation (MCV) as *Avena spp.–Bromus spp. Herbaceous Semi-Natural Alliance*, which has broad membership rules, but is dominated by a non-native annual grass species. The herb layer in this alliance is generally less than 1.2 meter and cover ranges from open to continuous. Trees and shrubs may be present at low cover. This community is found on various substrates including foothills, waste spaces, rangelands, and openings in woods.

The vast majority of the project site is generally considered non-native annual grassland, with a species composition that trends strongly toward ruderal. Individual scattered shrubs (including coyote brush [*Baccharis pilularis*]) and eucalyptus saplings and resprouts are not considered their own vegetation type due to small patch size, but rather a component of the grassland matrix (see membership rules, above).

The most predominant grass species within the project site included wild oats (*Avena sp*), canary-grass (*Phalaris aquatica*), medusahead (*Taeniatherum caput-medusae*), wall barley (*Hordeum murinum*), but equally dominant are ruderal species including mustard (*Hirschfeldia incana*), stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*).

Large areas of this vegetation type were graded between May 29 and July 2, 2023 (see Appendix A and D.1). The grading did not encroach into the wetlands features or associated wetland buffer areas. The grading effectively eliminated the non-native grassland throughout much of the site.

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**Legend**

 Project Site 10.17 acres

**Vegetation Communities and Land Cover Types**

-  Avena spp.-Bromus spp. Herbaceous Semi-Natural Stand 9.46 acres
-  Developed 0.65 acre
-  Seasonal wetland 0.02 acre
-  Linear Wetland 0.04 acre



Source: Bing Aerial Imagery. Monk & Associates Environmental Consultants, 08/2023.



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## 4.2.2 - Seasonal Wetlands

Seasonal wetland habitat is present on the project site, as shown in Exhibit 5. In 2011, the USACE confirmed 0.049-acre of wetlands and 0.004-acre of “other waters” adjacent to the former gravel road on the eastern edge of the project site. On December 6, 2011, the USACE confirmed the extent of its jurisdiction on the project site (USACE File Number 2011-00322N). This determination expired on January 31, 2017, as a result, M&A conducted a reverification wetland delineation of the project site on November 16, 2016. The map was field confirmed by the USACE on May 18, 2017, and an approved jurisdictional determination (AJD) was issued on May 16, 2018. It should be noted that the 2018 AJD included one isolated wetland that is no longer part of the project site. In 2023, M&A mapped 0.023-acre of seasonal wetlands (W1-W3) and 0.042-acre of linear wetlands (LW1) within the project site. On August 30, 2023, the USACE issued a Preliminary Jurisdictional Determination (PJD) which can be found in Appendix D.2.

Vegetation observed within the seasonal wetlands included non-native and native species. Non-native species included spiny-fruit buttercup (*Ranunculus muricatus*; facultative wetland [FACW]) and Italian ryegrass (*Festuca perennis*; facultative [FAC]). Native species included creeping spikerush (*Eleocharis macrostachya*; obligate wetland species [OBL]), brown-headed rush (*Juncus phaeocephalus*; FACW) and spreading rush (*Juncus patens*; FACW). Mapped wetlands on the project site remain inundated and/or saturated seasonally for sufficient duration to satisfy wetland hydrology criteria. Hydrological indicators in the mapped wetlands include the presence of oxidized rhizosphere (a “primary” hydrological indicator) as well as biotic crust. Soil matrix colors in the wetland area identified in the field were noted as 10YR 3/2 with redoximorphic features. Soil matrix colors in areas mapped as non-hydric soils were noted as 10YR 3/3 and 10YR 3/2, with insufficient redoximorphic features. These wetland features were not impacted during the grading that occurred within upland portions of the project site between May 29 and July 2, 2023.

## 4.2.3 - Developed

While not a natural habitat type, urban/developed areas typically consist of buildings, hardscape such as asphalt or concrete and other man-made structures. Such areas typically provide little habitat value to most wildlife species. On-site, this landcover type can be found within the southeastern corner in the form of a construction trailer, a staging area, and a paved road that allows access into the site via Commerce Boulevard. The paved road runs half the length of the southern border of the project site.

## 4.3 - Wildlife

The vegetation community and land cover types discussed above provide habitat for numerous wildlife species. Wildlife activity during the 2023 field surveys consisted primarily of avian species, including Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), lesser goldfinch (*Spinus psaltria*), yellow-rumped warbler (*Setophaga coronate*), turkey vulture (*Cathartes aura*), red-shouldered hawk (*Buteo lineatus*), and California towhee (*Melospiza crissalis*). Additionally, Botta's pocket gopher (*Thomomys bottae*) burrows, black-tailed jackrabbit (*Lepus californicus*), and Columbian black-tailed deer (*Odocoileus hemionus ssp. columbianus*) were observed. Noteworthy, no signs of current or past

presence of California ground squirrel (*Otospermophilus beecheyi*) burrows were observed on-site during the 2023 surveys.

In general, FCS field surveys found that the conditions related to wildlife habitat are consistent with the results presented in the March 2020 M&A BRA which lists the following common wildlife species as observed on or near the project site: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe, American crow, mourning dove (*Zenaida macroura*), black-tailed jackrabbit, California meadow vole (*Microtus californicus*), Botta's pocket gopher, and Mule deer (*Odocoileus hemionus*), among others, all of which have been observed on the project site. Red-shouldered hawk, tree swallows (*Tachycineta bicolor*), Nuttall's woodpecker (*Picoides nuttallii*), and northern flicker (*Colaptes auratus*), among others, likely nest in the eucalyptus trees that surround the project site to the west, north and south. Chestnut-backed chickadee (*Poecile rufescens*), brown creeper (*Certhia americana*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), Bullock's oriole (*Icterus bullockii*) and western gray squirrel (*Sciurus griseus*) were also observed in the immediate project vicinity.

Wildlife use is expected to have decreased since M&A's surveys because these surveys were conducted prior the construction of the warehouse to the south (SDG Commerce 330) and before the current construction began on the warehouse to the north (SDG Commerce 217). A comprehensive list of wildlife and plant species observed by FCS and Pinecrest can be found in Appendix E.

#### 4.4 - Wildlife Movement Corridors and Nursery Sites

A wildlife corridor is an area of habitat connecting wildlife populations that can be separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation, development, or human disturbance. Wildlife corridors allow an exchange of individuals between populations, which may help prevent the negative effects of inbreeding and reduced genetic diversity (via genetic drift) that often occur within isolated populations.

The project site has been subject to decades of varying degrees of anthropogenic disturbances. More recently, adjacent developments include the construction of SDG Commerce 330 to the south and the current construction of SDG Commerce 217 to the north. Dense industrial developments are located north of the project site while a school and single-family residences are found to the south. Therefore, non-volant wildlife movement through the site is limited, and the site does not connect habitats suitable for sustainable wildlife populations. Wildlife may utilize the off-site eucalyptus grove and aquatic habitats (e.g., North Slough and Napa River) to the west for dispersal; however, the proposed project would be set back from the eucalyptus grove and aquatic habitats. No direct impacts to the eucalyptus grove and marsh habitat would occur from project construction.

There are no native wildlife nursery sites present within the project site.

## 4.5 - Protected Trees

No tree removal is proposed, the project site does not contain any trees.

## 4.6 - Habitat Conservation Plans

No habitat conservation plans exist for the project site.

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## SECTION 5: SENSITIVE BIOLOGICAL RESOURCES

The following section discusses the extent to which sensitive biological resources are present or expected on-site. Sensitive biological resources are protected by laws and regulations, including CEQA (see Section 2 for details).

### 5.1 - Sensitive Natural Communities

The CDFW maintains a list of natural communities that classifies vegetation types found within the State of California and ranks them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.<sup>22</sup> Wetlands and riparian habitats are also typically considered sensitive natural communities and are addressed in the environmental review process.

#### 5.1.1 - Seasonal Wetland Communities

The vegetation communities of the four wetland features are dominated by both non-native, and native hydrophytic species as described in detail in Section 4.2.2. Naturally occurring seasonal wetland plant communities can be considered sensitive natural communities.

### 5.2 - Special-status Plant Species

The CNDDDB and CNPS list 45 special-status or sensitive plant species that have been recorded within the *Cuttings Wharf, California*, USGS Topographic Quadrangle Map and the eight surrounding quadrangles (Appendix B).<sup>23,24,25</sup> The CNDDDB occurrences within the vicinity of the project site are shown on Exhibit 6. A list of all plant species recorded on-site during the protocol-level floristic surveys is included in Appendix E. No rare or special-status plant species were observed during the appropriately timed protocol-level floristic surveys (see Section 3.2.3) and are therefore determined to be absent from the site. This result is also supported by M&A's March 2020 BRA, which additionally states that in the recent past, blue gum eucalyptus trees covered most of the project site dating back for several decades; these trees emit allelopathic (growth inhibiting) chemicals from their leaves, acorns and bark that prevent other plants from growing under them.<sup>26</sup>

<sup>22</sup> California Department of Fish and Wildlife (CDFW). 2023. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities>. Accessed August 21, 2023.

<sup>23</sup> United States Geological Survey (USGS). 2023. National Geospatial Program. Website: [https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science\\_support\\_page\\_related\\_con=4#qt-science\\_support\\_page\\_related\\_con](https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con). Accessed August 21, 2023.

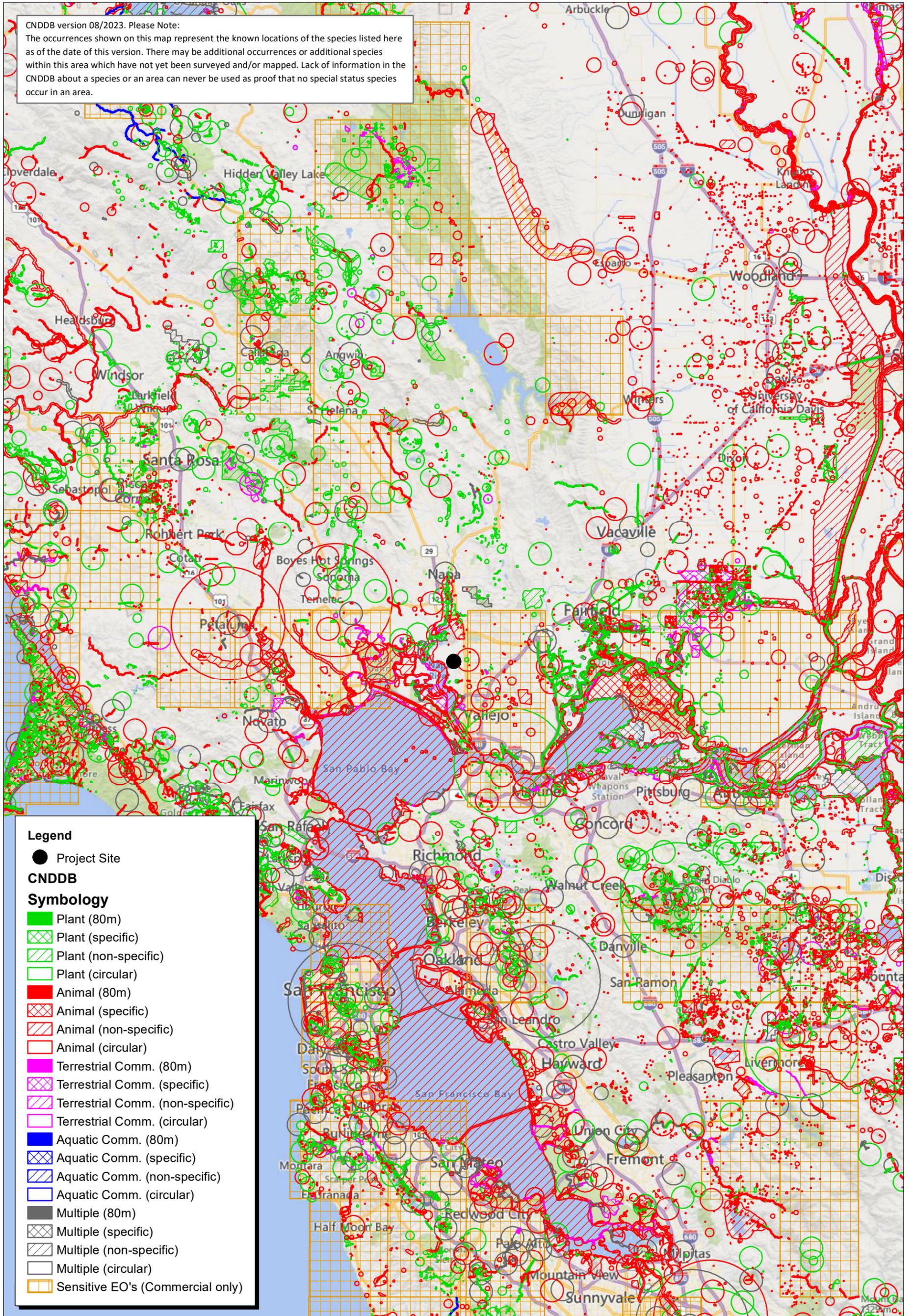
<sup>24</sup> California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed August 21, 2023.

<sup>25</sup> California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed August 21, 2023.

<sup>26</sup> Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.

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CNDDDB version 08/2023. Please Note:  
 The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area.



**Legend**

● Project Site

**CNDDDB**

**Symbology**

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (80m)
- Terrestrial Comm. (specific)
- Terrestrial Comm. (non-specific)
- Terrestrial Comm. (circular)
- Aquatic Comm. (80m)
- Aquatic Comm. (specific)
- Aquatic Comm. (non-specific)
- Aquatic Comm. (circular)
- Multiple (80m)
- Multiple (specific)
- Multiple (non-specific)
- Multiple (circular)
- Sensitive EO's (Commercial only)

Source: Bing Street Imagery. California Natural Diversity Database (CNDDDB), August 2023.



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## 5.3 - Special-status Wildlife Species

The CNDDDB identifies 43 federal and State-listed threatened and/or endangered wildlife species and State Species of Special Concern that have been recorded within the *Cuttings Wharf, California*, USGS Topographic Quadrangle Map and the eight surrounding quadrangles (Appendix B).<sup>27,28</sup> The CNDDDB occurrences within the vicinity of the project site are shown on Exhibit 6. Thirty-five of these species are unlikely to occur on-site, as discussed in the Special-status Wildlife Species Habitat Value Evaluation Table (Appendix B, Table 2).

The remaining eight species (and functional groups like nesting birds and roosting bats that include special-status species) could have at least theoretical potential to occur on-site, perhaps as vagrant, dispersing, or foraging individuals, and are therefore discussed in more detail below.

### 5.3.1 - Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is a State-listed threatened species protected pursuant to CESA and Title 14 of the California Code of Regulations. It is protected from direct take under the Federal MBTA of 1918 (16 USC 703-711). Swainson's hawks, their active nests, eggs, and young are also protected under California Fish and Game Code (FGC §§ 3503, 3503.5, 3513, and 3800).

Swainson's hawk inhabits open to semi-open areas at low to middle elevations in valleys, dry meadows, foothills, and level uplands. It nests almost exclusively in trees and will nest in almost any tree species that is at least 10 feet tall.

Foraging habitats include grasslands, alfalfa fields, fallow fields, beet, tomato, and other low growing row or field crops, dry-land and irrigated pasture, and rice land when not flooded. Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Its primary prey in the Central Valley is California meadow vole. Agricultural areas are often preferred over more natural grassland habitats due to larger prey populations. During the nesting season Swainson's hawk usually forage within 2 miles of the nest.

Swainson's hawk does not require habitats that contain many perches because it most often searches for prey aerially, therefore it can occupy habitats with few or no perches except the nest tree. Swainson's hawks are regular summer visitors and breeders throughout the western states. In the fall months, most Swainson's hawks migrate to Argentina before returning to the United States to breed in the late spring (typically April). For decades, Argentina farmers were spraying insecticides over habitats that included gregarious night roosts of the Swainson's hawk, killing many thousands of these hawks. This practice was halted in the last 10 years and the Swainson's hawk population appears to be dramatically responding in California. While in the 1970s through 1990s there were only two relatively small populations of Swainson's hawks that remained resident in California year-round in the Davis area and in the Sacramento River Delta, resident and migrant populations of the

<sup>27</sup> California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed August 22, 2023.

<sup>28</sup> California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://map.dfg.ca.gov/bios/>. Accessed August 22, 2023.

Swainson's hawks are now dramatically expanding their nesting distribution in California since insecticide use over Argentinian wintering grounds was halted. For example, Swainson's hawks were never recorded nesting in the Napa County area until relatively recently.<sup>29</sup>

The closest known record for nesting Swainson's hawk is 1.5 miles north of the project site (CNDDDB Occurrence No. 2839). No individual Swainson's hawk or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. However, the eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, there is the possibility that Swainson's hawks could nest near this project site in future years.

### 5.3.2 - Western Burrowing Owl

The western burrowing owl (*Athene cunicularia*) is a California Species of Special Concern. Its nest, eggs, and young are also protected under California Fish and Game Code (FGC §§ 3503, 3503.5, and 3800). The burrowing owl is also protected from direct take under the MBTA (50 CFR 10.13).

Burrowing owl occurs in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low growing vegetation. This species utilizes, modifies, and nests in burrows created by other species, most notably the California ground squirrel. They may also on occasion dig their own burrows or use man-made objects such as concrete culverts or rip-rap piles for cover.

The closest CNDDDB record within the last 10 years was documented 2.7 miles north of the project site (CNDDDB Occurrence No. 935). No evidence of burrowing owl activity was observed during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Furthermore, no California ground squirrel burrows were observed, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl.

However, it cannot be ruled out entirely that a vagrant burrowing owl may visit the site under unlikely circumstances before start of construction and could potentially be impacted by the proposed project.

### 5.3.3 - Northern Harrier

The northern harrier (*Circus hudsonius*) is a California Species of Special Concern. This raptor is protected under California Fish and Game Code Section 3503.5 that protects nesting raptors and their eggs/young and is also protected from direct take under the MBTA (50 CFR 10.13). Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland or marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators such as coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), and various snake species.<sup>30</sup>

<sup>29</sup> Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.

<sup>30</sup> Ibid.

The closest CNDDDB record was documented 2.8 miles west of the project site (CNDDDB Occurrence No. 29). No individual northern harriers or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. However, northern harriers have the potential to nest in the open ruderal habitats on-site that provide marginal nesting habitat for this species. Therefore, there is the possibility that northern harriers could nest on or near this project site in the future.

### 5.3.4 - Golden Eagle

The golden eagle is a migratory California resident that resides in rolling foothills, mountain areas, sage-juniper flats, and deserts from sea level to 11,500 feet (3,833 meters). It feeds mostly on lagomorphs and rodents, and occasionally other mammals, birds, reptiles, and some carrion. The golden eagle hunts in open terrain including grasslands, deserts, savannas, and early successional stages of forest and shrub habitats. It is known to hunt in pairs and pirate food from other predators. This species nests in large trees in open areas on cliffs. The breeding season for the golden eagle ranges from January through August, with a peak in March through July.

The closest CNDDDB record was documented 4.5 miles southeast of the project site (CNDDDB Occurrence No. 40). No individual golden eagles or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Regardless, the eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, it cannot be ruled out that golden eagles could nest near this project site in the future.

### 5.3.5 - White-tailed Kite

The white-tailed kite (*Elanus leucurus*) is a whitish falcon-shaped raptor. This sensitive bird is designated by CDFW as a fully protected species (FGC § 3511). Fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Nesting white-tailed kite habitat consists mainly of oak and sycamore woodlands, but the birds also use mature willows. White-tailed kite nests have been documented in a variety of tree species, including oak (*Quercus sp.*), cottonwood (*Populus sp.*), willow (*Salix sp.*), California sycamore (*Platanus racemosa*), and elder (*Acer sp.*).<sup>31</sup> Nests are placed near the top of dense oak, willow, or other tree stand approximately 20-100 feet above ground.<sup>32</sup> Nest trees have a dense canopy or are within a dense group of trees, such as riparian forest or oak woodland. Adjacent to their nesting woodland must be open foraging grasslands, where the birds can find their small mammal prey.<sup>33</sup>

<sup>31</sup> Science Applications International Corporation (SAIC). 2007. Draft Ecological Baseline Report for the Butte Regional Habitat Conservation Plan/Natural Community Conservation Plan. Prepared for the Butte County Association of Governments. May 2007.

<sup>32</sup> California Department of Fish and Wildlife (CDFW). 1988. California's Wildlife, Volume II: Birds. State of California Resources Agency. Sacramento, California.

<sup>33</sup> Gallagher, Sylvia. 1997. Atlas of Breeding Birds, Orange County, California. Sea and Sage Audubon Press, Irvine, CA.

White-tail kites forage in undisturbed, open grasslands, meadows, emergent wetlands, farmlands, crops, pastures, and other cultivated habitats. The white-tailed kite preys mostly on voles, but also takes other small, diurnal mammals, and occasionally birds, insects, reptiles, and amphibians.

The closest CNDDDB record was documented 5.3 miles north of the project site (CNDDDB Occurrence No. 181). Several white-tailed kite individuals were observed foraging over the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site and seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. This species was observed on the following dates during 2023 surveys: March 20, April 4, April 5, April 6, April 7, April 24, April 28, and July 2. These individuals were observed to be continually harassed by several crows who were observed loitering around the eucalyptus grove. After continued interactions with the crows, white-tailed kite individuals flew off to the southwest out of sight and the location of their nest could not be determined.

The eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, it cannot be ruled out that white-tailed kite could nest within relevant disturbance distance.

### 5.3.6 - Protected Nesting Birds (Including All Special-status Bird Species)

In addition to the specific special-status bird species discussed in more detail above, the active nests of most resident and migratory (game and non-game) birds (including the nests of additional special-status bird on-site) are protected by the MBTA and/or Fish and Game Code; and are therefore categorized as “special-status” wildlife functional group during this time. While a juvenile, red-shouldered hawk was observed perched off-site within a large eucalyptus tree to the north of the SDG Commerce 217 site during the 2023 surveys, no active nests were observed.

The project site is adjacent to eucalyptus groves which provide nesting opportunities for different taxa of birds, and the site itself contains the potential for ground nesters. Although the site has been significantly disturbed in the past, the grassland on-site may provide marginal foraging opportunities to support nesting and rearing habitat. Therefore, it cannot be ruled out that protected bird nests are present on or within the disturbance distance of the project site during the nesting season (typically considered to last from February 1 to August 31 for most species).

### 5.3.7 - Bats (Including Special-status Bats)

The project site is adjacent to eucalyptus groves which offer potentially viable roosting habitat for bat species. A CNDDDB recorded presence of bat species 5.2 miles northwest of the project site (CNDDDB Occurrence No. 44). Bats could potentially use cavities in trees to roost and forage over the grassland and shrubland. Of the special-status bat species that has potential to occur in the region, the pallid bat (*Antrozous pallidus*) would be more likely to roost in natural features, such as the eucalyptus grove rather than artificial structures.

Roosts are used during the daytime to seek refuge; at night between foraging excursions to rest, digest prey, seek refuge from predators or poor weather conditions, or for social purposes; and in winter for hibernation. Adult females and their young use some particularly secure roosts as

maternity roosts. The number of bats occupying a given roost can vary from a solitary individual to a large colony, depending on the species. Roosting sites are very sensitive to human disturbance, especially when bats are hibernating or rearing young.

At dusk, bats leave their roosts to forage for insects in nearby ponds or riparian habitats. Bats generally prey on insect species that are locally abundant near water bodies. Ecotone areas (areas of transition between habitats) are also used as foraging areas. The grassland habitat of the project site and eucalyptus grove adjacent has foraging and roosting potential for bat species. Therefore, it cannot be ruled out that bat roosts are within disturbance distance of the project site.

### 5.3.8 - Western Pond Turtle

The western pond turtle (*Actinemys marmorata*) is a California Species of Special Concern. This species feeds on aquatic plant material, including pond lilies, beetles, fishes, frogs, and a variety of invertebrate species. Pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Turtles slip from basking sites to underwater retreats at the approach of humans or potential predators. In colder areas, this species hibernates underwater in bottom mud.

The closest CNDDDB record was documented 0.4 mile northeast of the project site (CNDDDB Occurrence No. 552). No western pond turtle individuals or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. While there are seasonal wetland features present on-site there are no ponds or streams on-site that would be suitable for foraging or breeding. It cannot be ruled out entirely that a vagrant western pond turtle may be present on-site under unlikely circumstances before start of construction and could potentially be impacted by the project.

### 5.3.9 - Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is listed as Candidate under the Endangered Species Act, and wintering roosts are protected under the Fish and Game Code.

Preferred monarch habitat is filled with diverse nectar sources which support monarchs and native bees. Native milkweeds (*Asclepias* spp.) and other nectar sources provide monarchs with breeding habitat, resting, and refueling stops during migration, and food at overwintering sites.

Overwintering habitats consist of tree groves that typically occur within 1.5 miles of the Pacific coastline, or within the San Francisco Bay Area, where the proximity to large water bodies moderate temperature fluctuations. Overwintering begins in September or October. Suitable grove conditions include temperatures above freezing, high humidity, dappled sunlight, access to water and nectar, and protection from high winds and storms. Monarchs will select the native Monterey pine, Monterey cypress, western sycamore, and other native tree species when they are available, but will also utilize non-native eucalyptus species if other optimal habitat conditions are met. During breeding season in the late spring and summer, female monarch butterflies will lay their eggs on the underside of young leaves or flower buds of milkweeds, caterpillars then hatch within 3-5 days and begin to feed on milkweed leaves that provide energy and protective toxic compounds that protect

the caterpillars from predation. Within a month, the caterpillars will grow, produce a chrysalis, and emerge as fully formed adult butterflies.

While no milkweed has been recorded on-site as confirmed through protocol-level rare plant surveys, the project site is bounded by dense stands of eucalyptus trees, potentially suitable for overwintering monarchs. Overwintering colonies have been documented on Mare Island, approximately 7 miles to the south. For these reasons, the presence of overwintering monarchs within disturbance distance cannot be ruled out.

## 5.4 - State or Federally Protected Waters and Wetlands

There are four wetlands features present within the project site as shown on Exhibit 5 and in Appendix D.2.<sup>34</sup> The USACE issued a PJD on August 30, 2023 which includes 0.023-acre of seasonal wetlands and 0.042-acre of linear wetlands mapped within the project site. These wetlands have surface hydrologic connectivity to North Slough, which flows to the Napa River. The Napa River is a traditional navigable water. Consequently, the seasonal wetlands identified within the project site would likely be subject to USACE and RWQCB jurisdiction.

## 5.5 - Wildlife Movement Corridors and Nursery Sites

Field surveys and a query of CDFW's BIOS6 information on wildlife linkages in the Bay Area confirm that the proposed project will not interfere with the movement of native wildlife. The project site and adjacent areas are not identified by CDFW (The Critical Linkages: Bay Area and Beyond project; BIOS 6)<sup>35</sup> as lands essential to maintain or restore functional connectivity among wildlands for all species or ecological processes of interest in the California Bay Area and as a vital adaptation strategy to conserve biodiversity during climate change.

The project site has a history of disturbance associated with eucalyptus tree removal in 2012, and continued disturbance associated with the paintball facility located immediately to the southeast. Additionally, construction of the SDG Commerce 330 Distribution Center to the south recently occurred and construction of the SDG Commerce 217 site to the north is currently underway.

Wildlife may utilize the off-site eucalyptus grove and aquatic habitats (e.g., North Slough and Napa River) to the west for dispersal; however, the proposed project would not encroach into the off-site eucalyptus grove or aquatic habitats.

Wildlife nursery sites include nesting birds and maternity bat roosts, aquatic breeding habitat, and special-status and non-special-status wildlife breeding or nesting colonies. No significant breeding/nesting colonies were observed during the wildlife surveys. However, individual nesting birds and roosting bats have the potential of being present on-site and within disturbance distance seasonally.

<sup>34</sup> Monk & Associates (M&A). 2023. Request for Reverification of Jurisdictional Determination and a PJD SDG Commerce 220 Project Site; USACE File Number: 2011-00322N American Canyon, California. May 31, 2023.

<sup>35</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 6): The Critical Linkages: Bay Area & Beyond project. Website: <https://map.dfg.ca.gov/bios/>. Accessed August 21, 2023.

## SECTION 6: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential project impacts on sensitive biological resources, including special-status species, and recommends mitigation measures to avoid and/or mitigate impacts to a less than significant level under CEQA Guidelines.

### 6.1 - Impact Analysis for Sensitive Natural Communities

Seasonal wetland communities are typically considered sensitive under CEQA. The wetland features on-site would be avoided by the proposed project through the implementation of 25-foot buffers (Exhibit 7). No other sensitive communities occur on-site. Therefore, no impacts on sensitive natural communities would occur.

### 6.2 - Impact Analysis for Special-status Species

The following section analyzes potential project-related impacts on special-status species potentially occurring on or within disturbance distance of the proposed project.

#### 6.2.1 - Impact Analysis for Special-status Wildlife Species

##### Swainson's Hawk

Potentially suitable Swainson's hawk nesting trees are located adjacent to the project site. If a Swainson's hawk nest is active near the project site during construction, the proposed project could cause indirect harm to the species through the noise, light and other man-made disturbances resulting from project construction, which may result in this species abandoning its nests.

No Swainson hawks or nests were observed during the 18 field surveys conducted by FCS and Pinecrest in 2023. Out of an abundance of caution, FCS proposes that the project applicant implement the following mitigation measures (MM BIO-1a through MM BIO-1b) to avoid indirect impacts on Swainson's hawk nesting habitat and to establish adequate nest protection zones to conform with CDFW Guidelines:<sup>36</sup>

##### MM BIO-1a Pre-construction Surveys for Swainson's Hawk

Prior to ground disturbance that occurs during the nesting season for Swainson's hawk (generally March 20 to July 20), a qualified Biologist shall conduct Swainson's hawk nesting surveys within a 0.5-mile radius of the project site to determine whether nests are occupied. Occupancy shall be determined through observation of all accessible areas, including from public roads or other publicly accessible observation areas of Swainson's hawk activity (e.g., foraging) on and near the project site.

<sup>36</sup> California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee. Sacramento, California. May 31, 2000.

The qualified Biologist shall follow the survey protocol outlined in CDFW's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, which recommends surveys according to the following survey periods:

- I. **January–March 20:** Conduct one survey total.
- II. **March 20–April 5:** Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and/or 4:00 p.m. to sunset.
- III. **April 5–April 20:** Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:30 p.m. to sunset.
- IV. **April 21–June 10:** Initiating surveys are not recommended. Monitoring of known nest sites only.
- V. **June 10–July 30:** (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:00 p.m. to sunset.

Pre-construction surveys shall be completed for at least the two survey periods immediately prior to a project's initiation.<sup>37</sup>

#### **MM BIO-1b Swainson's Hawk Avoidance and Minimization and Construction Monitoring**

If nests are located and determined to be occupied, minimization measures must be implemented, and construction monitoring conducted as follows:

1. Construction activities shall be prohibited within 600 feet of an active and occupied Swainson's hawk nest, or within 600 feet of nests under construction, to prevent nest abandonment.
2. Notwithstanding the foregoing, if site-specific conditions or the nature of the construction activity (e.g., other nearby development, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project applicant may seek approval from the qualified Biologist who in coordination with the California Department of Fish and Wildlife (CDFW) shall determine the appropriate buffer size, which, once approved, shall govern.
3. No tree containing an active Swainson's hawk nest shall be removed.

#### **Western Burrowing owl**

No western burrowing owls have been observed on the project site during the 18 field surveys conducted by FCS and Pinecrest in 2023. Additionally, no suitable burrows or ground squirrels were observed on-site during the surveys. Therefore, the likelihood of presence on the project site is considered to be low. Since the western burrowing owl is a mobile species that could move onto the project site prior to development, pre-construction surveys are recommended out of an abundance of caution. If burrowing owl are present on-site before grading, the proposed project may result in impacts to the western burrowing owl, considered a potentially significant impact pursuant to CEQA.

<sup>37</sup> California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee. Sacramento, California. May 31, 2000.

However, MM BIO-2 is designed to detect, avoid, and passively relocate owls, and therefore, any potential significant impacts on this species would be reduced to less than significant.

**MM BIO-2 Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found)**

A qualified Biologist shall conduct a habitat assessment for wintering burrowing owl, and surveys if habitat is present. The qualified Biologist shall follow the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation habitat assessment and survey methodology prior to project activities occurring during the burrowing owl wintering season from September 1 to January 31. The habitat assessment and surveys shall encompass a sufficient buffer zone to detect owls nearby that may be impacted, which shall be a minimum of 1,640 feet unless otherwise approved in writing by the CDFW. Surveys shall include four nonbreeding season surveys spread evenly throughout the nonbreeding season pursuant to the CDFW 2012 Staff Report. Time lapses between surveys or project activities shall trigger subsequent surveys, as determined by a qualified Biologist, including but not limited to a final survey within 24 hours prior to ground disturbance and before construction equipment mobilizes to the project area. The qualified Biologist shall have a minimum of 2 years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections.

Detected burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report, unless otherwise approved in writing by CDFW, and any eviction plan shall be subject to CDFW review. Please be advised that CDFW does not consider eviction of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a “take” avoidance, minimization, or mitigation measure; therefore, off-site habitat compensation shall be included in the eviction plan. Habitat compensation acreages shall be approved by CDFW, as the amount depends on-site-specific conditions, and must be completed before project construction unless otherwise approved in writing by CDFW. Habitat compensation shall also include placement of a conservation easement and preparation and implementation of a long-term management plan prior to project construction.

**Other Protected Nesting Birds (including northern harrier, golden eagle, white-tailed kite and others)**

The adjacent areas of the project site provide suitable nesting habitat for a variety of species of nesting birds, including potentially for special-status bird species including northern harrier, golden eagle, white-tailed kite, and others. Disturbed grassland and barren areas provide potential nesting opportunities for ground nesting birds. Construction activities that occur during the avian nesting season (generally February 1 to August 31) could disturb protected nesting sites within the construction footprint and within disturbance distance. Grading and the removal of vegetation during the nesting season could result in direct harm to nesting birds, while noise, light, and other

construction-related disturbances may cause nesting birds adjacent to the vegetation removal areas to abandon their nests.

No active raptor nests were observed within the project site during the 2023 field surveys conducted by FCS and Pinecrest; however white-tail kite individuals were observed foraging over project site. Additionally, a juvenile, red-shouldered hawk was observed perched off-site within a large eucalyptus tree to the north of the SDG Commerce 217 site. Although no active nests have been observed on-site, it cannot be ruled out that avian species may nest within disturbance distance of the project site. With implementation of MM BIO-3, requiring pre-construction nesting bird surveys and avoidance of direct and indirect impacts on nests, potential project-related impacts on protected bird nests can be reduced to a less than significant level under CEQA.

**MM BIO-3      Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).**

1. If the proposed project requires vegetation to be removed during the nesting season (February 1 to August 31), pre-construction surveys shall be conducted no more than 7 days prior to the start of ground or vegetation disturbance (including tree removal) to determine whether or not active nests are present.
2. If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).
3. The qualified Biologist shall monitor the active nest during construction activities and modify the protection zone accordingly to prevent project-related nest disturbance, until the young have fledged.

**Roosting Bats (including Pallid Bat)**

The project site is adjacent to trees that could provide suitable bat roosting habitat, including for special-status bats such as pallid bat. Potential indirect impacts could occur to roosting bats due to the proximity to disturbance distance during project construction. These activities could potentially subject bats to risk of injury or disturbance, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual bats by displacing them into adjacent territories belonging to other individuals.

With implementation of MM BIO-4, requiring pre-construction roosting bat surveys and avoidance of indirect impacts on active bat roosts, potential project-related impacts on protected roosting bats can be reduced to a less than significant level under CEQA.

#### **MM BIO-4      Roosting Bat Pre-construction Survey and Avoidance**

A qualified Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.) within 250 feet of project construction activities (where accessible).

If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Grading shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

#### **Western Pond Turtle**

No western pond turtles or nests were observed during the 2023 surveys conducted by FCS and Pinecrest. While the site appears to be unlikely to support western pond turtle, it cannot be ruled out entirely that a vagrant western pond turtle may be present on-site under unlikely circumstances before start of construction and could potentially be impacted by the project. Impacts to western pond turtle from the proposed project are considered potentially significant. MM BIO-5 would reduce this impact to a less than significant level through avoidance and minimization measures outlined below.

#### **MM BIO-5      Protection of Western Pond Turtles**

A qualified Biologist (i.e., a Biologist with at least 2 years of experience conducting surveys for western pond turtle detections) shall submit a wildlife exclusion fencing plan to the California Department of Fish and Wildlife (CDFW) for review and approval prior to starting construction. Exclusion fencing shall be installed along the western perimeter of the project site to prevent the species from traveling from North Slough onto the project site during construction. A qualified Biologist shall survey the project site and adjacent habitat within 72 hours of the start of project activities to determine whether western pond turtle or their nests are present and guide the installation of the exclusion fence. If western pond turtles are discovered,

a qualified Biologist with experience handling and relocating the species shall move the species to the nearest suitable habitat outside of the project area and exclusion fencing. If western pond turtle nests are found, CDFW shall be notified prior to starting project activities, and the nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fence until eggs hatch and young turtles disperse to the adjacent North Slough. In addition, if nest(s) are located during surveys, moth balls (naphthalene) shall be sprinkled around the vicinity of the nest (no closer than 5 feet) to mask human scent and discourage predators. Grading within the nest site's 50-foot buffer area shall be delayed until the young leave the nest as determined by a qualified Biologist. If the CDFW allows translocation of any nestling pond turtles this shall be completed by a qualified Biologist under the direction of the CDFW.

### Monarch Butterfly

There is a potential for monarch overwintering in the eucalyptus woodland adjacent to the site. Construction activities, including dust, noise, and vibration adjacent to overwintering colonies could result in loss of overwintering monarch butterflies. Therefore, MM BIO-6 which includes a pre-construction survey and, if found, avoidance in coordination with USFWS and CDFW are recommended to reduce any potential impacts on monarch butterfly to less than significant.

#### MM BIO-6 Protection of Overwintering Monarch Butterfly

Activities such as vegetation removal, grading, or initial ground-disturbing activities shall be conducted between November 1 and July 31 (outside of the overwintering season) to the extent feasible. If such activities must be initiated during the overwintering season (August 1 through October 31), a pre-construction overwintering survey shall be conducted by a qualified Biologist no more than 7 days prior to vegetation removal, grading, or initial ground disturbance. The survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any colonies that could potentially be affected either directly or indirectly by project activities. If no colonies are present, then project activities can commence as scheduled. If a colony is present, project construction shall cease immediately to avoid all direct and indirect impacts and report the presence of the colony to the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and follow all recommendations provided by USFWS and CDFW.

## 6.3 - Impact Analysis for Wildlife Nursery Sites and Wildlife Movement Corridors

The site does not function as a critical wildlife movement corridor, as discussed in Sections 4.4 and 5.5 above. This result is consistent with M&A's March 2020 BRA (Appendix D.1). Certain common wildlife may move within or cross the site; however, it does not function to connect valuable habitats together, but rather it currently funnels wildlife east into a pocket of land generally surrounded with dense developments, including State Route (SR) 29 to the east, commercial and industrial areas to

the north, and dense residential subdivision to the south, potentially constituting a population sink. Therefore, potential project-related impacts on wildlife movement are less than significant.

No substantial wildlife nursery sites, including breeding or nesting colonies, breeding ponds, or dens are present on-site. However, individual nesting birds and roosting bats have the potential of being present within disturbance distances seasonally. Potential impacts to individual nesting birds and roosting bats are addressed through the implementation of MM BIO-1 through MM BIO-4. As such, impacts to nursery sites would be less than significant.

#### **6.4 - Impact Analysis for State and Federally Protected Waters and Wetlands**

The proposed project would avoid all impacts on potential jurisdictional wetland features through the implementation of a wetland buffer avoidance area (Exhibit 7). Additionally, the proposed project would be required to comply with applicable laws and regulations related to jurisdictional waters and wetlands (see Regulatory Background section). These generally applicable laws and regulations are designed to avoid any net loss of area and function, reducing any potential indirect or residual impacts to less than significant under CEQA.

#### **6.5- Protected Trees**

The proposed project would not remove any trees as there are no trees located within the project site. Therefore, the proposed project would not remove any City protected trees and no conflicts would occur.

#### **6.6- Conflict with Habitat Conservation Plans**

No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan is applicable to the project site. Therefore, the proposed project would not conflict with the provisions of such a document.

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**Legend**

- Project Site 10.17 acres
- 25' Wetland Buffer (No Project Impact) 0.65 acre
- Permanent Impact 9.52 acres

**Vegetation Communities and Land Cover Types**

- Avena spp.-Bromus spp. Herbaceous Semi-Natural Stand
- Developed
- Seasonal wetland
- Linear Wetland

	<b>Project Site</b>	<b>Perm Impact</b>	<b>No Impact</b>
Avena spp.-Bromus spp. Herbaceous Semi-Natural Stand	9.46 acres	8.87 acres	0.59 acre
Developed	0.65 acre	0.65 acre	0.00 acre
Seasonal wetland	0.02 acre	0.00 acre	0.02 acre
Linear Wetland	0.04 acre	0.00 acre	0.04 acre



Source: Bing Aerial Imagery. Monk & Associates Environmental Consultants, 08/2023.



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**Appendix A:  
Site Photographs**

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Photograph 1: 4.3.1–Non-native annual grassland facing west



Photograph 2: Eucalyptus saplings next to seasonal wetlands facing north



Photograph 3: Eucalyptus grove on the western periphery of the project site facing north.



Photograph 4: Grading within the project site and sectioned off seasonal wetland facing west.



Photograph 5: Grading throughout the south of the project site facing west.

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**Appendix B:  
Special-status Species Tables**

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**Table 1: Special-status Plant Species Habitat Value Evaluation**

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Habitat Value and Rationale
	ESA <sup>1</sup>	CESA <sup>2</sup>	CRPR <sup>3</sup>		
<i>Agrostis hendersonii</i> Henderson's bent grass	—	—	3.2	Valley and foothill grassland, vernal pools. Moist places in grassland or vernal pool habitat. Elevation: 65-1030 m. Blooming Period: April-June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan onion	—	—	1B.2	Cismontane woodland, valley, and foothill grassland. Clay soils; often on serpentine; sometimes on volcanics. Dry hillsides. Elevation: 5-320 m. Blooming Period: May-June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	—	—	1B.2	Dicot, perennial shrub found in broadleaf upland forest or chaparral openings Elevation: 30–590 m. Blooming period: April–July.	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	—	—	1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. Elevation: 0-170 m Blooming Period: May-July	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	—	—	1B.2	Chaparral, cismontane woodland and valley and foothill grassland. Sometimes occurs in serpentinite soils. Elevation: 45-1555 m. Blooming period: March-June.	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Blennosperma bakeri</i> Sonoma sunshine	FE	SE	1B.1	Vernal pools, wet grasslands and swales. Elevation: 10-290 m. Blooming Period: March-May	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Habitat Value and Rationale
	ESA <sup>1</sup>	CESA <sup>2</sup>	CRPR <sup>3</sup>		
<i>Blepharizonia plumosa</i> big tarplant	—	—	1B.1	Valley and foothill grassland. Dry hills & plains in annual grassland. Clay to clay-loam soils; usually on slopes and often in burned areas. Elevation: 60-505 m. Blooming Period: July-October	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Brodiaea leptandra</i> narrow-anthered brodiaea	—	—	1B.2	Monocot perennial herb found in open mixed-evergreen forest, chaparral, and gravelly soils. Elevation: 70–610 m. Blooming period: May–July.	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Calochortus pulchellus</i> Mt. Diablo fairy-lantern	—	—	1B.2	Chaparral, cismontane woodland, riparian woodland, valley, and foothill grassland. Elevation: 30–840 m. Blooming period: April–June.	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Carex lyngbyei</i> Lyngbye's sedge	—	—	2B.2	Marshes and swamps (brackish or freshwater). Elevation: 0–200 m. Blooming period: April–August	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Castilleja affinis</i> var. <i>neglecta</i> Tiburon paintbrush	FE	ST	1B.2	Valley and foothill grassland. Rocky serpentine sites. Elevation: 120–400 m. Blooming period: April–June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	—	—	1B.1	Volcanic slopes, chaparral, pine/oak woodland. Elevation: 75–1100 m. Blooming period: February–April	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Ceanothus purpureus</i> holly-leaved ceanothus	—	—	1B.2	Chaparral, cismontane woodland on volcanic substrates or slopes. Elevation: 140–720 m. Blooming period: February–April	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Habitat Value and Rationale
	ESA <sup>1</sup>	CESA <sup>2</sup>	CRPR <sup>3</sup>		
<i>Ceanothus sonomensis</i> Sonoma ceanothus	—	—	1B.2	Chaparral, serpentine or volcanic substrates. Elevation: 140–795 m. Blooming period: March–April	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Centromadia parryi ssp. congdonii</i> Congdon's tarplant	—	—	1B.1	Valley and foothill grassland. Alkaline soils sometimes described as heavy white clay. Elevation: 0–230 m. Blooming Period: March–October	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Centromadia parryi ssp. parryi</i> pappose tarplant	—	—	1B.2	Chaparral, coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland. Vernal mesic, often alkaline sites. Elevation: 1-500 m. Blooming period: March–November	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Chloropyron molle ssp. molle</i> soft salty bird's-beak	FE	CR	1B.2	Coastal salt marsh. In coastal salt marsh with <i>Distichlis</i> , <i>Salicornia</i> , <i>Frankenia</i> , etc. Elevation: 0-5 m. Blooming Period: July-November	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Cicuta maculata var. bolanderi</i> Bolander's water-hemlock	—	—	2B.1	Marshes and swamps. In fresh or brackish water. Elevation: 0-20 m. Blooming Period: July-September	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Dirca occidentalis</i> western leatherwood	—	—	1B.2	Broadleafed upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, north coast coniferous forest, riparian forest, riparian woodland. On brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. Elevation: 20–640 m. Blooming Period: November–March	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Habitat Value and Rationale
	ESA <sup>1</sup>	CESA <sup>2</sup>	CRPR <sup>3</sup>		
<i>Downingia pusilla</i> dwarf downingia	—	—	2B.2	Valley and foothill grassland (mesic sites), vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools. Elevation: 1-490 m. Blooming period: March-May	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Erigeron greenei</i> Greene's narrow-leaved daisy	—	—	1B.2	Perennial herb found in chaparral (serpentinite or volcanic) Elevation: 80 –1005 m Blooming period: May–September	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	—	—	1B.2	Vernal pools, valley and foothill grassland. In clay substrate. Elevation: 3–305 m. Blooming Period: May–June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Extriplex joaquinana</i> San Joaquin spearscale	—	—	1B.2	Chenopod scrub, meadows and seeps, Playas, Valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with <i>Distichlis spicata</i> , <i>Frankenia</i> , etc. Elevation: 0–800 m. Blooming Period: April–September	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Fritillaria liliacea</i> fragrant fritillary	—	—	1B.2	Coastal scrub, valley and foothill grassland, coastal prairie, and cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. Elevation: 3–385 m. Blooming Period: February–April	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Habitat Value and Rationale
	ESA <sup>1</sup>	CESA <sup>2</sup>	CRPR <sup>3</sup>		
<i>Helianthella castanea</i> Diablo helianthella	—	—	1B.2	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Usually in chaparral/oak woodland interface in rocky, azonal soils. Often in partial shade. Elevation: 45-1070 m. Blooming Period: April–September	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Hemizonia congesta</i> ssp. <i>congesta</i> congested-headed hayfield tarplant	—	—	1B.2	Valley and foothill grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides. Elevation: 5-520 m. Bloom period: April-November	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Hesperolinon breweri</i> Brewer's western flax	—	—	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Often in rocky serpentine soil in serpentine chaparral and serpentine grassland. Elevation: 195-910 m. Blooming Period: May-July	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Holocarpha macradenia</i> Santa Cruz tarplant	FT	CE	1B.1	Coastal prairie, coastal scrub, valley and foothill grassland. Light, sandy soil or sandy clay; often with nonnatives. Elevation: 10-275 m. Blooming Period: June–October	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Horkelia tenuiloba</i> thin-lobed horkelia	—	—	1B.2	Broad-leafed upland forest, chaparral, valley and foothill grassland with sandy soils. Often found in mesic habitats. Elevation: 45-640 m. Blooming period: May–July (August)	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Habitat Value and Rationale
	ESA <sup>1</sup>	CESA <sup>2</sup>	CRPR <sup>3</sup>		
<i>Isocoma arguta</i> Carquinez goldenbush	—	—	1B.1	Valley and foothill grassland. Alkaline soils, flats, lower hills. On low benches near drainages and on tops and sides of mounds in swale habitat. Elevation: 1-50 m Blooming Period: April–December	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE	—	1B.1	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland, swales, low depressions, in open grassy areas. Elevation: 1–450 m. Blooming Period: March–June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	—	—	1B.2	Marshes and swamps. In freshwater and brackish marshes. Often found with Typha, Aster lentus, Rosa californica, Juncus spp., Scirpus, etc. Usually on marsh and slough edges. Elevation: 0–5 m. Blooming Period: May–July	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Legenere limosa</i> legenere	—	—	1B.1	Vernal pools and in beds of vernal pools. Elevation: 1–1005 m. Blooming Period: April–June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	—	—	1B.2	Dicot annual herb found in open to partially shaded grassy slopes. On volcanic soils or the periphery of serpentine substrates. Elevation: 100–570 m. Blooming period: March–May.	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Habitat Value and Rationale
	ESA <sup>1</sup>	CESA <sup>2</sup>	CRPR <sup>3</sup>		
<i>Lilaeopsis masonii</i> Mason's lilaeopsi	—	CR	1B.1	Marshes and swamps, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. In brackish or freshwater. Elevation: 0-10 m Blooming Period: April-November	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Lupinus sericatus</i> Cobb Mountain lupine	—	—	1B.2	Perennial herb found in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest. Elevation: 275–1525 m Blooming period: March–June.	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Polygonum marinense</i> Marin knotweed	—	—	3.1	Marshes and swamps. Elevation: 0-10 m. Blooming period: May–August	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Rhynchospora californica</i> California beaked-rush	—	—	1B.1	Bogs and fens, open marshes and swamps, lower montane coniferous forest, meadows and freshwater seeps. Elevation: 45-270 m. Blooming period: May–July	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Senecio aphanactis</i> chaparral ragwort	—	—	1B.2	Dicot annual herb found in chaparral, cismontane woodland, and coastal scrub habitat. Prefers drying alkaline flats. Elevation: 15-800m. Blooming period: January–April.	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Sidalcea hickmanii</i> ssp. <i>napensis</i> Napa checkerbloom	—	—	1B.1	Chamise chaparral, rocky volcanic soil. Elevation: 400-600 m. Blooming period: April-June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Habitat Value and Rationale
	ESA <sup>1</sup>	CESA <sup>2</sup>	CRPR <sup>3</sup>		
<i>Spergularia macrotheca</i> var. <i>longistyla</i> long-styled sand-spurrey	—	—	1B.2	Marshes and swamps, meadows and seeps. Alkaline. Elevation: 0-220 m. Blooming Period: February–May	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Symphotrichum lentum</i> Suisun Marsh aster	—	—	1B.2	Marshes and swamps (brackish and freshwater). Most often seen along sloughs with Phragmites, Scirpus, blackberry, Typha, etc. Elevation: 0-15 m. Blooming Period: May–November	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Trichostema ruygtii</i> Napa bluecurls	—	—	1B.2	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools. Often in sunny, open areas Elevation: 30-600m. Blooming period: June–October	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Trifolium amoenum</i> two-fork clover	FE	—	1B.1	Coastal bluff scrub, valley and foothill grassland (sometimes serpentinite). Elevation: 5-415 m. Blooming period: April–June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Trifolium hydrophilum</i> saline clover	—	—	1B.2	Marshes and swamps, valley and foothill grassland in mesic or alkaline soils, and vernal pools. Elevation: 0-300 m. Blooming period: April–June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.
<i>Viburnum ellipticum</i> oval-leaved viburnum	—	—	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation: 215-1400 m. Blooming Period: May–June	<b>Absent:</b> The project site does not contain habitat suitable for this species. Absence confirmed through appropriately timed protocol-level rare plant surveys, in 2023.

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Habitat Value and Rationale
	ESA <sup>1</sup>	CESA <sup>2</sup>	CRPR <sup>3</sup>		
<b>Code Designations</b>					
<sup>1</sup> <b>Federal Status: 2023 Endangered Species Act (ESA) Listing</b>			<sup>2</sup> <b>State Status: 2023 California Endangered Species Act (CESA) Listing</b>		<sup>3</sup> <b>California Rare Plant Rank (CRPR): 2023 CRPR Listing</b>
<b>ESU</b> = Evolutionary Significant Unit is a distinctive population. <b>FE</b> = Listed as endangered under the Endangered Species Act. <b>FT</b> = Listed as threatened under the Endangered Species Act. <b>FC</b> = Candidate for listing (threatened or endangered) under the Endangered Species Act. <b>FD</b> = Delisted in accordance with the Endangered Species Act. <b>FPD</b> = Federally Proposed to be Delisted. <b>MBTA</b> = Protected by the Migratory Bird Treaty Act — = Not federally listed			<b>SE</b> = Listed as endangered under the California Endangered Species Act. <b>ST</b> = Listed as threatened under the CESA. <b>SSC</b> = Species of Special Concern as identified by the CDFW. <b>FP</b> = Listed as fully protected under FGC. <b>CFG</b> = FGC =protected by FGC 3503.5 <b>CR</b> = Rare in California. — = Not state listed		<b>Rank 1A</b> = Plants species that presumed extinct in California. <b>Rank 1B</b> = Plant species that are rare, threatened, or endangered in California and elsewhere. <b>Rank 2</b> = Plant species that are rare, threatened, or endangered in California, but more common elsewhere. <b>Rank 3</b> = Plants about which we need more information—A Review List <b>Rank 4</b> = Plants of limited distribution—A Watch List <b>Blooming period:</b> Months in parentheses are uncommon.
<b>Notes:</b> <sup>4</sup> <b>Habitat Description:</b> Habitat description adapted from CNDDDB and CNPS online inventory or other specified source. <sup>5</sup> <b>Potential to Occur and Rationale:</b> Location of recorded species occurrences determined by geospatial information from BIOS 6 or other specified source.					
<b>Sources:</b> California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <a href="https://map.dfg.ca.gov/rarefind/view/RareFind.aspx">https://map.dfg.ca.gov/rarefind/view/RareFind.aspx</a> . Accessed July 18, 2023. California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: <a href="http://www.rareplants.cnps.org/">http://www.rareplants.cnps.org/</a> . Accessed July 18, 2023. California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <a href="https://map.dfg.ca.gov/bios/">https://map.dfg.ca.gov/bios/</a> . Accessed July 18, 2023.					

**Table 2: Special-status Wildlife Species Habitat Value Evaluation**

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Habitat Value and Rationale <sup>4</sup>
	ESA <sup>1</sup>	CESA/FGC <sup>2</sup>		
<b>Amphibians</b>				
Dicamptodon ensatus California giant salamander	—	SSC	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County, and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
Rana boylei pop. 1 foothill yellow-legged frog- north coast DPS	—	SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Rana draytonii</i> California red-legged frog	FT	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development	<b>Absent.</b> The project site is adjacent to mapped critical habitat for this species, but the project site is significantly developed, and the site and surrounding area does not provide suitable habitat. Absence confirmed through surveys in 2023.
<i>Taricha rivularis</i> red-bellied newt	—	SSC	Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<b>Birds</b>				
<i>Agelaius tricolor</i> Tricolored blackbird	—	ST SSC	Breeds near fresh water in dense emergent vegetation.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Habitat Value and Rationale <sup>4</sup>
	ESA <sup>1</sup>	CESA/FGC <sup>2</sup>		
<i>Aquila chrysaetos</i> Golden eagle	—	FP	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert	<b>Low:</b> The species has been recorded 4.5 miles southeast of the project site and the site is adjacent to marginal nesting habitat for the species. This species was not observed during the 2023 surveys.
<i>Athene cunicularia</i> Burrowing owl	—	SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	<b>Low.</b> The species has been recorded 2.7 miles north of the project site and the site provides marginal habitat for the species. This species was not observed during the 2023 surveys.
<i>Buteo swainsoni</i> Swainson's hawk	—	ST	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	<b>Low.</b> Land adjacent to the project site provides suitable nesting habitat. The closest known record of the species is 1.5 miles north of the project site. This species was not observed during the 2023 surveys.
<i>Charadrius nivosus nivosus</i> western snowy plover	FT	SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Circus hudsonius</i> northern harrier	—	SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	<b>Low.</b> The species has been recorded 1.8 miles west of the project site and the site provides marginal nesting habitat for the species. This species was not observed during the 2023 surveys.
<i>Coturnicops noveboracensis</i> yellow rail	—	SSC	Shallow marshes, and wet meadows; in winter, drier fresh-water and brackish marshes, as well as dense, deep grass, and rice fields.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Cypseloides niger</i> black swift	—	SSC	Coastal belt of Santa Cruz and Monterey counties; central & southern Sierra Nevada; San Bernardino & San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Habitat Value and Rationale <sup>4</sup>
	ESA <sup>1</sup>	CESA/FGC <sup>2</sup>		
<i>Elanus leucurus</i> white-tailed kite	—	FP	Grasslands and open coastal scrub in coastal and valley lowlands; rarely found away from agricultural areas. Inhabits herbaceous, open stages of most habitats mostly in cismontane California.	<b>Low:</b> The species has been recorded 5.3 miles north of the project site and the site provides marginal nesting habitat for the species. Individuals were observed foraging over the project site in 2023.
<i>Falco peregrinus anatum</i> American peregrine falcon	FD	FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	—	SSC	Resident of the San Francisco Bay region, in fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Laterallus jamaicensis coturniculus</i> California black rail	—	FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Melospiza melodia maxillaris</i> Suisun song sparrow	—	SSC	Resident of brackish-water marshes surrounding Suisun Bay. Inhabits cattails, tules and other sedges, and Salicornia; also known to frequent tangles bordering sloughs.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Melospiza melodia samuelis</i> San Pablo song sparrow	—	SSC	Resident of salt marshes along the north side of San Francisco and San Pablo bays. Inhabits tidal sloughs in the Salicornia marshes; nests in Grindelia bordering slough channels.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Rallus obsoletus obsoletus</i> California Ridgway's rail	FE	FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Habitat Value and Rationale <sup>4</sup>
	ESA <sup>1</sup>	CESA/FGC <sup>2</sup>		
<i>Riparia riparia</i> bank swallow	—	ST	Nests in riparian scrub and riparian woodland. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	—	SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<b>Fish</b>				
<i>Acipenser medirostris pop. 1</i> green sturgeon-southern DPS	FT	—	Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium sized sand, gravel, cobble, or boulder.	<b>Absent:</b> The project site does not contain habitat suitable for this species.
<i>Hypomesus transpacificus</i> Delta smelt	FT	—	Aquatic and estuary habitats. Populations in the Sacramento-San Joaquin Delta.	<b>Absent:</b> The project site does not contain habitat suitable for this species.
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead-Central Valley DPS	FT	—	Populations in the Sacramento and San Joaquin rivers and their tributaries.	<b>Absent:</b> The project site does not contain habitat suitable for this species.
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	—	SSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay and associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	<b>Absent:</b> The project site does not contain habitat suitable for this species.

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Habitat Value and Rationale <sup>4</sup>
	ESA <sup>1</sup>	CESA/FGC <sup>2</sup>		
<i>Spirinchus thaleichthys</i> longfin smelt	FC	—	Longfin smelt spend their adult life in bays, estuaries, and nearshore coastal areas, and migrate into freshwater rivers to spawn. Spawning occurs primarily from January through March, after which most adults die.	<b>Absent:</b> The project site does not contain habitat suitable for this species.
<i>Thaleichthys pacificus</i> eulachon	FT	—	Found in Klamath River, Mad River, Redwood Creek, and in small numbers in Smith River and Humboldt Bay tributaries. Spawn in lower reaches of coastal rivers with moderate water velocities and bottom of pea-sized gravel, sand, and woody debris.	<b>Absent:</b> The project site does not contain habitat suitable for this species.
<b>Invertebrates</b>				
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT	—	Small vernal pools with cool water (10°C), moderate alkalinity and conductivity, and less than 1 m deep.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Bombus crotchii</i> Crotch bumble bee	—	SC	This species occurs primarily in California, including coastal habitats, western Mojave Desert, San Joaquin Valley, and adjacent foothills through most of southwestern California. It inhabits arid grasslands and shrublands, and its food sources including milkweeds, pincushions, lupines, clovers, phacelias, sages, clarkias, poppies, and buckwheats.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Bombus occidentalis</i> western bumble bee	—	SC	Formerly found in large parts of California but has been reduced in abundance and is now mostly restricted to high meadows or coastal environments. Species requires floral resources, and undisturbed nest and overwintering sites	<b>Absent:</b> Historic records from 1962 of this species were found 7 miles away from the project site, but no recent recorded occurrence exists. The site is heavily disturbed from years of anthropogenic disturbances. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Habitat Value and Rationale <sup>4</sup>
	ESA <sup>1</sup>	CESA/FGC <sup>2</sup>		
<i>Danaus plexippus</i> Monarch Butterfly	—	—	Occurs in temperate climates, such as eastern and western North America and undergoes long-distance migration. Lays eggs on obligate milkweed host plant (primarily <i>Asclepias</i> spp.). Inhabits a variety of open habitats including fields, meadows, weedy areas, marshes, and roadsides. Adults feed on variety of flowers including dogbane, lilac, red clover, lantana, thistles, goldenrods, blazing stars, ironweed, and tickseed sunflower.	<b>Low:</b> The species has been recorded 7 miles south of the project site. The site is adjacent to eucalyptus groves which provides marginal overwintering habitat for the species. This species was not observed during the 2023 surveys.
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT	—	Occurs only in the Central Valley of California, in association with blue elderberry ( <i>Sambucus mexicana</i> ). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries. Common in riparian scrub.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Speyeria callippe callippe</i> callippe silverspot butterfly	FE	—	Restricted to the northern coastal scrub of the San Francisco peninsula. Hostplant is <i>Viola pedunculata</i> . Most adults found on east facing slopes; males congregate on hilltops in search of females.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Syncaris pacifica</i> California freshwater shrimp	FE	—	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main streamflow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<b>Mammals</b>				
<i>Antrozous pallidus</i> Pallid bat	—	SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures and include trees and buildings. Species is very sensitive to disturbance of roosting sites.	<b>Low:</b> The project site is adjacent to a eucalyptus grove that has potential roosting habitat for this species. Record of this species was found 5.2 miles northwest of the project site. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Habitat Value and Rationale <sup>4</sup>
	ESA <sup>1</sup>	CESA/FGC <sup>2</sup>		
<i>Microtus californicus sanpabloensis</i> San Pablo vole	—	SSC	Saltmarshes of San Pablo Creek, on the south shore of San Pablo Bay. Constructs burrow in soft soil. Feeds on grasses, sedges and herbs. Forms a network of runways leading from the burrow.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Nyctinomops macrotis</i> big free-tailed bat	—	SSC	Migrant bats using elevations from 0-2600 meters. Roosts in rock crevices cliffs as well as in buildings, caves, and tree cavities	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	—	FP	Only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat but may occur in other marsh vegetation types and in adjacent upland areas. Does not burrow; builds loosely organized nests. Requires higher areas for flood escape.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Sorex ornatus sinuosus</i> Suisun shrew	—	SSC	Tidal marshes of the northern shores of San Pablo and Suisun bays. Require dense low-lying cover and driftweed and other litter above the mean hightide line for nesting and foraging.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Sorex vagrans halicoetes</i> salt-marsh wandering shrew	—	SSC	Salt marshes of the southern portion of the San Francisco Bay. Marsh, wetland, or swamps with Salicornia and abundant driftwood	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<i>Taxidea taxus</i> American badger	—	SSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils, specifically grassland environments. Natal dens occur on slopes.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<b>Reptiles</b>				
<i>Emys marmorata</i> western pond turtle	—	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	<b>Low:</b> The species has been recorded 0.4 miles northeast of the project site. Adjacent aquatic habitat west of the site provides marginal habitat for this species. This species was not observed during the 2023 surveys.

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Habitat Value and Rationale <sup>4</sup>
	ESA <sup>1</sup>	CESA/FGC <sup>2</sup>		
<i>Masticophis lateralis</i> <i>euryxanthus</i> Alameda whipsnake	FT	—	Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savanna and woodland habitats. Specifically, mostly south-facing slopes and ravines, with rock outcrops, deep crevices or abundant rodent burrows, where shrubs form a vegetative mosaic with oak trees and grasses.	<b>Absent:</b> The project site does not contain habitat suitable for this species. This species was not observed during the 2023 surveys.
<b>Code Designations</b>				
<b><sup>1</sup> Federal Status: 2023 Endangered Species Act (ESA) Listing</b>			<b><sup>2</sup> State Status: 2023 California Endangered Species Act (CESA) Listing</b>	
<b>ESU</b> = Evolutionary Significant Unit is a distinctive population. <b>FE</b> = Listed as endangered under the Endangered Species Act. <b>FT</b> = Listed as threatened under the Endangered Species Act. <b>FC</b> = Candidate for listing (threatened or endangered) under the Endangered Species Act. <b>FD</b> = Delisted in accordance with the Endangered Species Act. <b>FPD</b> = Federally Proposed to be Delisted. <b>MBTA</b> = protected by the Migratory Bird Treaty Act <b>—</b> = Not federally listed			<b>SE</b> = Listed as endangered under CESA. <b>ST</b> = Listed as threatened under CESA. <b>SSC</b> = Species of Special Concern as identified by the CDFW. <b>FP</b> = Listed as fully protected under the Fish and Game Code. <b>CFG</b> = FGC = protected by Fish and Game Code 3503.5 <b>CR</b> = Rare in California. <b>—</b> = Not State-listed	
<b>Notes:</b> <sup>3</sup> <b>Habitat Description:</b> Habitat description adapted from CNDDDB or other specified source. <sup>4</sup> <b>Potential to Occur and Rationale:</b> Location of recorded species occurrences determined by geospatial information from BIOS 6 or other specified source. <b>Sources:</b> California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <a href="https://map.dfg.ca.gov/rarefind/view/RareFind.aspx">https://map.dfg.ca.gov/rarefind/view/RareFind.aspx</a> . Accessed July 18, 2023. California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <a href="https://map.dfg.ca.gov/bios/">https://map.dfg.ca.gov/bios/</a> . Accessed July 18, 2023				

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**Appendix C:  
Database Searches**

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# Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Cuttings Wharf (3812223) OR Napa (3812233) OR Mt. George (3812232) OR Sonoma (3812234) OR Sears Point (3812224) OR Cordelia (3812222) OR Petaluma Point (3812214) OR Mare Island (3812213) OR Benicia (3812212))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Acipenser medirostris pop. 1</i> green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	
<i>Adela oplerella</i> Opler's longhorn moth	IILEE0G040	None	None	G2	S2	
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
<i>Agrostis hendersonii</i> Henderson's bent grass	PMPOA040K0	None	None	G2Q	S2	3.2
<i>Allium peninsulare var. franciscanum</i> Franciscan onion	PMLIL021R1	None	None	G4G5T2	S2	1B.2
<i>Amorpha californica var. napensis</i> Napa false indigo	PDFAB08012	None	None	G4T2	S2	1B.2
<i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	G2	S1	
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Astragalus tener var. tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S2	SSC
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
<i>Blennosperma bakeri</i> Sonoma sunshine	PDAST1A010	Endangered	Endangered	G1	S1	1B.1
<i>Blepharizonia plumosa</i> big tarplant	PDAST1C011	None	None	G1G2	S1S2	1B.1
<i>Bombus caliginosus</i> obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
<i>Bombus pensylvanicus</i> American bumble bee	IIHYM24260	None	None	G3G4	S2	



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California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Branchinecta lynchi</i></b> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<b><i>Brodiaea leptandra</i></b> narrow-anthered brodiaea	PMLIL0C022	None	None	G3?	S3?	1B.2
<b><i>Buteo regalis</i></b> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<b><i>Buteo swainsoni</i></b> Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
<b><i>Calasellus californicus</i></b> An isopod	ICMAL34010	None	None	G2	S3	
<b><i>Calochortus pulchellus</i></b> Mt. Diablo fairy-lantern	PMLIL0D160	None	None	G2	S2	1B.2
<b><i>Carex lyngbyei</i></b> Lyngbye's sedge	PMCYP037Y0	None	None	G5	S3	2B.2
<b><i>Castilleja affinis var. neglecta</i></b> Tiburon paintbrush	PDSCR0D013	Endangered	Threatened	G4G5T1T2	S1S2	1B.2
<b><i>Ceanothus confusus</i></b> Rincon Ridge ceanothus	PDRHA04220	None	None	G1	S1	1B.1
<b><i>Ceanothus purpureus</i></b> holly-leaved ceanothus	PDRHA04160	None	None	G2	S2	1B.2
<b><i>Ceanothus sonomensis</i></b> Sonoma ceanothus	PDRHA04420	None	None	G2	S2	1B.2
<b><i>Centromadia parryi ssp. congdonii</i></b> Congdon's tarplant	PDAST4R0P1	None	None	G3T2	S2	1B.1
<b><i>Centromadia parryi ssp. parryi</i></b> pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
<b><i>Charadrius nivosus nivosus</i></b> western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
<b><i>Chloropyron molle ssp. molle</i></b> soft salty bird's-beak	PDSCR0J0D2	Endangered	Rare	G2T1	S1	1B.2
<b><i>Cicuta maculata var. bolanderi</i></b> Bolander's water-hemlock	PDAP10M051	None	None	G5T4T5	S2?	2B.1
<b><i>Circus hudsonius</i></b> northern harrier	ABNKC11011	None	None	G5	S3	SSC
<b><i>Coastal Brackish Marsh</i></b> Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
<b><i>Coturnicops noveboracensis</i></b> yellow rail	ABNME01010	None	None	G4	S2	SSC
<b><i>Cypseloides niger</i></b> black swift	ABNUA01010	None	None	G4	S3	SSC
<b><i>Danaus plexippus plexippus pop. 1</i></b> monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
<i>Dicamptodon ensatus</i> California giant salamander	AAAAH01020	None	None	G2G3	S2S3	SSC
<i>Dirca occidentalis</i> western leatherwood	PDTHY03010	None	None	G2	S2	1B.2
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Erigeron greenei</i> Greene's narrow-leaved daisy	PDAST3M5G0	None	None	G3	S3	1B.2
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	PDAPI0Z130	None	None	G2	S2	1B.2
<i>Extriplex joaquinana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Falco peregrinus anatum</i> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
<i>Fritillaria liliacea</i> fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T3	S3	SSC
<i>Gonidea angulata</i> western ridged mussel	IMBIV19010	None	None	G3	S2	
<i>Helianthella castanea</i> Diablo helianthella	PDAST4M020	None	None	G2	S2	1B.2
<i>Hemizonia congesta ssp. congesta</i> congested-headed hayfield tarplant	PDAST4R0W1	None	None	G5T2	S2	1B.2
<i>Hesperolinon breweri</i> Brewer's western flax	PDLIN01030	None	None	G2	S2	1B.2
<i>Horkelia tenuiloba</i> thin-lobed horkelia	PDROS0W0E0	None	None	G2	S2	1B.2
<i>Hydroprogne caspia</i> Caspian tern	ABNNM08020	None	None	G5	S4	
<i>Hypomesus transpacificus</i> Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
<i>Isocoma arguta</i> Carquinez goldenbush	PDAST57050	None	None	G1	S1	1B.1
<i>Lasthenia conjugens</i> Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1



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California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Laterallus jamaicensis coturniculus</i></b> California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
<b><i>Lathyrus jepsonii</i> var. <i>jepsonii</i></b> Delta tule pea	PDFAB250D2	None	None	G5T2	S2	1B.2
<b><i>Legenere limosa</i></b> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<b><i>Leptosiphon jepsonii</i></b> Jepson's leptosiphon	PDPLM09140	None	None	G2G3	S2S3	1B.2
<b><i>Lilaeopsis masonii</i></b> Mason's lilaeopsis	PDAPI19030	None	Rare	G2	S2	1B.1
<b><i>Lupinus sericatus</i></b> Cobb Mountain lupine	PDFAB2B3J0	None	None	G2?	S2?	1B.2
<b><i>Masticophis lateralis euryxanthus</i></b> Alameda whipsnake	ARADB21031	Threatened	Threatened	G4T2	S2	
<b><i>Melospiza melodia maxillaris</i></b> Suisun song sparrow	ABPBXA301K	None	None	G5T3	S2	SSC
<b><i>Melospiza melodia samuelis</i></b> San Pablo song sparrow	ABPBXA301W	None	None	G5T2	S2	SSC
<b><i>Northern Coastal Salt Marsh</i></b> Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
<b><i>Northern Vernal Pool</i></b> Northern Vernal Pool	CTT44100CA	None	None	G2	S2.1	
<b><i>Nycticorax nycticorax</i></b> black-crowned night heron	ABNGA11010	None	None	G5	S4	
<b><i>Nyctinomops macrotis</i></b> big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
<b><i>Oncorhynchus mykiss irideus</i> pop. 8</b> steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T3Q	S3	
<b><i>Pandion haliaetus</i></b> osprey	ABNKC01010	None	None	G5	S4	WL
<b><i>Pogonichthys macrolepidotus</i></b> Sacramento splittail	AFCJB34020	None	None	G3	S3	SSC
<b><i>Polygonum marinense</i></b> Marin knotweed	PDPGN0L1C0	None	None	G2Q	S2	3.1
<b><i>Rallus obsoletus obsoletus</i></b> California Ridgway's rail	ABNME05011	Endangered	Endangered	G3T1	S2	FP
<b><i>Rana boylli</i> pop. 1</b> foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	G3T4	S4	SSC
<b><i>Rana draytonii</i></b> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<b><i>Reithrodontomys raviventris</i></b> salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S3	FP



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



<b>Species</b>	<b>Element Code</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Global Rank</b>	<b>State Rank</b>	<b>Rare Plant Rank/CDFW SSC or FP</b>
<b><i>Rhynchospora californica</i></b> California beaked-rush	PMCYP0N060	None	None	G1	S1	1B.1
<b><i>Riparia riparia</i></b> bank swallow	ABPAU08010	None	Threatened	G5	S3	
<b><i>Senecio aphanactis</i></b> chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
<b><i>Serpentine Bunchgrass</i></b> Serpentine Bunchgrass	CTT42130CA	None	None	G2	S2.2	
<b><i>Sidalcea hickmanii ssp. napensis</i></b> Napa checkerbloom	PDMAL110A6	None	None	G3T1	S1	1B.1
<b><i>Sorex ornatus sinuosus</i></b> Suisun shrew	AMABA01103	None	None	G5T1T2Q	S1S2	SSC
<b><i>Spergularia macrotheca var. longistyla</i></b> long-styled sand-spurrey	PDCAR0W062	None	None	G5T2	S2	1B.2
<b><i>Speyeria callippe callippe</i></b> callippe silverspot butterfly	IILEPJ6091	Endangered	None	G5T1	S1	
<b><i>Speyeria zerene sonomensis</i></b> Sonoma zerene fritillary	IILEPJ6083	None	None	G5T1	S1	
<b><i>Spirinchus thaleichthys</i></b> longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
<b><i>Symphotrichum lentum</i></b> Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
<b><i>Syncaris pacifica</i></b> California freshwater shrimp	ICMAL27010	Endangered	Endangered	G2	S2	
<b><i>Taricha rivularis</i></b> red-bellied newt	AAAAF02020	None	None	G2	S2	SSC
<b><i>Taxidea taxus</i></b> American badger	AMAJF04010	None	None	G5	S3	SSC
<b><i>Trichostema ruygtii</i></b> Napa bluecurls	PDLAM220H0	None	None	G1G2	S1S2	1B.2
<b><i>Trifolium amoenum</i></b> two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
<b><i>Trifolium hydrophilum</i></b> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
<b><i>Viburnum ellipticum</i></b> oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3
<b><i>Xanthocephalus xanthocephalus</i></b> yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

**Record Count: 101**

## Search Results

6 matches found. Click on scientific name for details

Search Criteria: [Fed List](#) is one of [FE:FT:FC:FD] or [State List](#) is one of [CE:CT:CR:CC:CD] , [9-Quad](#) include [3812232:3812222:3812234:3812233:3812212:3812213:3812214:3812223:3812224]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	CA RARE			DATE ADDED	PHOTO
								STATE RANK	PLANT RANK	CA ENDEMIC		
<a href="#"><i>Blennosperma bakeri</i></a>	Sonoma sunshine	Asteraceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
<a href="#"><i>Castilleja affinis</i> var. <i>neglecta</i></a>	Tiburon paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Jun	FE	CT	G4G5T1T2	S1S2	1B.2	Yes	1974-01-01	No Photo Available
<a href="#"><i>Chloropyron molle</i> ssp. <i>molle</i></a>	soft salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Nov	FE	CR	G2T1	S1	1B.2	Yes	1974-01-01	No Photo Available
<a href="#"><i>Lasthenia conjugens</i></a>	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	FE	None	G1	S1	1B.1	Yes	1974-01-01	 © 2013 Neal Kramer
<a href="#"><i>Lilaeopsis masonii</i></a>	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	None	CR	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
<a href="#"><i>Trifolium amoenum</i></a>	two-fork clover	Fabaceae	annual herb	Apr-Jun	FE	None	G1	S1	1B.1	Yes	1974-01-01	No Photo Available

Showing 1 to 6 of 6 entries

### Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website <https://www.rareplants.cnps.org> [accessed 3 August 2023].

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Napa County, California



## Local offices

San Francisco Bay-Delta Fish And Wildlife

☎ (916) 930-5603

📠 (916) 930-5654

650 Capitol Mall

330 Capitol Mall  
Suite 8-300  
Sacramento, CA 95814

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
Salt Marsh Harvest Mouse <i>Reithrodontomys raviventris</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/613">https://ecos.fws.gov/ecp/species/613</a>	Endangered

## Birds

NAME	STATUS
California Clapper Rail <i>Rallus longirostris obsoletus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/4240">https://ecos.fws.gov/ecp/species/4240</a>	Endangered
California Least Tern <i>Sterna antillarum browni</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
Northern Spotted Owl <i>Strix occidentalis caurina</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/1123">https://ecos.fws.gov/ecp/species/1123</a>	Threatened
Western Snowy Plover <i>Charadrius nivosus nivosus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8035">https://ecos.fws.gov/ecp/species/8035</a>	Threatened

## Reptiles

NAME	STATUS
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Green Sea Turtle *Chelonia mydas* Threatened  
No critical habitat has been designated for this species.  
<https://ecos.fws.gov/ecp/species/6199>

## Amphibians

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NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened

## Fishes

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NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/57">https://ecos.fws.gov/ecp/species/57</a>	Endangered

## Insects

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NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Crustaceans

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NAME	STATUS
California Freshwater Shrimp <i>Syncaris pacifica</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7903">https://ecos.fws.gov/ecp/species/7903</a>	Endangered

Conservancy Fairy Shrimp *Branchinecta conservatio* Endangered  
 Wherever found  
 There is **final** critical habitat for this species. Your location does not overlap the critical habitat.  
<https://ecos.fws.gov/ecp/species/8246>

Vernal Pool Fairy Shrimp *Branchinecta lynchi* Threatened  
 Wherever found  
 There is **final** critical habitat for this species. Your location does not overlap the critical habitat.  
<https://ecos.fws.gov/ecp/species/498>

## Flowering Plants

NAME	STATUS
Contra Costa Goldfields <i>Lasthenia conjugens</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/7058">https://ecos.fws.gov/ecp/species/7058</a>	Endangered
Showy Indian Clover <i>Trifolium amoenum</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6459">https://ecos.fws.gov/ecp/species/6459</a>	Endangered
Soft Bird's-beak <i>Cordylanthus mollis</i> ssp. <i>mollis</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8541">https://ecos.fws.gov/ecp/species/8541</a>	Endangered

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

# Bald & Golden Eagles

Bald and golden eagles are protected under the [Bald and Golden Eagle Protection Act](#) and the [Migratory Bird Treaty Act](#).

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

## There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
<b>Golden Eagle</b> <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a>	Breeds Jan 1 to Aug 31

# Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

## Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

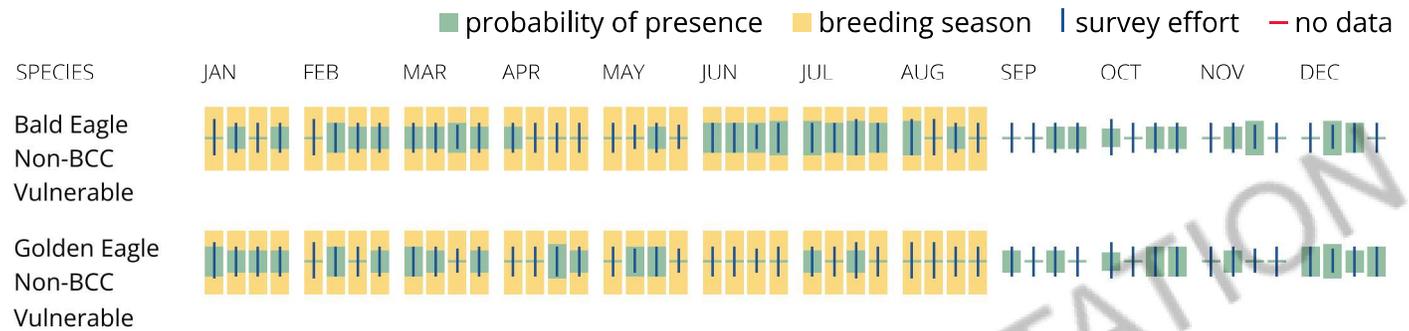
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



### What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

<b>Allen's Hummingbird</b> <i>Selasphorus sasin</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9637">https://ecos.fws.gov/ecp/species/9637</a>	Breeds Feb 1 to Jul 15
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
<b>Belding's Savannah Sparrow</b> <i>Passerculus sandwichensis beldingi</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/8">https://ecos.fws.gov/ecp/species/8</a>	Breeds Apr 1 to Aug 15
<b>Black Turnstone</b> <i>Arenaria melanocephala</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
<b>Bullock's Oriole</b> <i>Icterus bullockii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
<b>California Gull</b> <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
<b>California Thrasher</b> <i>Toxostoma redivivum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
<b>Clark's Grebe</b> <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
<b>Common Yellowthroat</b> <i>Geothlypis trichas sinuosa</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/2084">https://ecos.fws.gov/ecp/species/2084</a>	Breeds May 20 to Jul 31

<p><b>Golden Eagle</b> <i>Aquila chrysaetos</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p> <p><a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a></p>	Breeds Jan 1 to Aug 31
<p><b>Lawrence's Goldfinch</b> <i>Carduelis lawrencei</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9464">https://ecos.fws.gov/ecp/species/9464</a></p>	Breeds Mar 20 to Sep 20
<p><b>Marbled Godwit</b> <i>Limosa fedoa</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9481">https://ecos.fws.gov/ecp/species/9481</a></p>	Breeds elsewhere
<p><b>Nuttall's Woodpecker</b> <i>Picoides nuttallii</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/9410">https://ecos.fws.gov/ecp/species/9410</a></p>	Breeds Apr 1 to Jul 20
<p><b>Oak Titmouse</b> <i>Baeolophus inornatus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9656">https://ecos.fws.gov/ecp/species/9656</a></p>	Breeds Mar 15 to Jul 15
<p><b>Olive-sided Flycatcher</b> <i>Contopus cooperi</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a></p>	Breeds May 20 to Aug 31
<p><b>Short-billed Dowitcher</b> <i>Limnodromus griseus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9480">https://ecos.fws.gov/ecp/species/9480</a></p>	Breeds elsewhere
<p><b>Tricolored Blackbird</b> <i>Agelaius tricolor</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/3910">https://ecos.fws.gov/ecp/species/3910</a></p>	Breeds Mar 15 to Aug 10

Western Grebe *Aechmophorus occidentalis*

Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/6743>

Willet *Tringa semipalmata*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

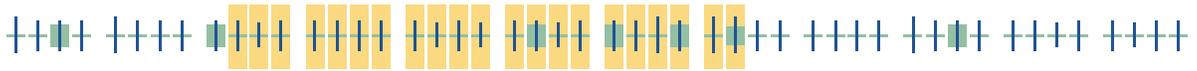
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the







## Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

## What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

## What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird

on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key

component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

### Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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**Appendix D:  
Supporting Documents**

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## **D.1 - SDG Commerce Site 217 Documents**

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April 20, 2023

John Wojtas  
Industrial and Commercial Contractors, LP  
413 W. Yosemite Avenue, Suite 105  
Madera, CA 93637

**Subject: Pre-construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 per the Mitigation Monitoring and Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California**

Dear John:

This letter summarizes results of pre-construction burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), nesting raptor, nesting passerine bird, and western pond turtle (*Actinemys marmorata*) surveys conducted to-date by FirstCarbon Solutions (FCS) consulting Biologists Dr. Christopher DiVittorio and Bernhard Warzecha as they relate to compliance with CEQA Mitigation Measures (MM) BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, and MM BIO-5 from the January 2021 Mitigation, Monitoring, and Reporting Program (MMRP) for the Commerce 217 Warehouse Project located in American Canyon, California.

The project site comprises a single parcel measuring 10.8 acres in size and consists of non-native annual and perennial grassland with several small, mapped wetland features. The site is bounded by Commerce Court to the east, a developed warehouse to the north, an open field to the south beyond which is another developed warehouse, and a eucalyptus grove to the west.

## Methods

Between January 18 and April 7, 2023, FCS conducted seven nesting bird and burrowing owl detection surveys (including for Swainson's hawk) on the project site and relevant adjacent areas (where accessible), for a total of approximately 30 survey hours. Surveys for western pond turtle adults and nests were also performed simultaneously while walking the site.

Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Protocol) and the *Staff Report on Burrowing Owl Mitigation*.<sup>1,2</sup> Survey equipment included high-quality binoculars and a high-quality spotting scope.

<sup>1</sup> Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. California Department of Fish and Wildlife, May 31, 2000.

<sup>2</sup> California Department of Fish and Wildlife 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

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Conklin, NY 13748

### CANADA

### UNITED KINGDOM

### PORTUGAL

### FRANCE

### KENYA

### AUSTRALIA

### PHILIPPINES

### CHINA

### MALAYSIA

### SINGAPORE

Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Surveys were conducted on foot. Survey dates conducted by FCS are shown below in Table 1.

**Table 1: Survey Dates**

Date	Swainson’s Hawk	Burrowing Owl	Nesting Birds including Raptors
1/18/2023	First survey in Period I	Burrowing owl breeding season survey	Nesting bird surveys–All Species
3/20/2023	First survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
3/31/2023	Second survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/4/2023	Third survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/5/2023	First survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/6/2023	Second survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/7/2023	Third survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/24/2023 (planned)	Swainson’s hawk presence/absence survey	Burrowing owl breeding season survey	Nesting bird surveys–All Species

Surveys were conducted by FCS consulting Biologists Dr. Christopher DiVittorio and Bernhard Warzecha, both of whom are experienced in conducting surveys for all of the aforementioned special-status species and have been previously approved by the California Department of Fish and Wildlife (CDFW).

Additionally Mr. Warzecha and Dr. DiVittorio have previous experience and training in the monitoring of Swainson’s hawk nesting, including Swainson’s hawk identification and behavioral patterns.

## Results

A list of all species of birds observed at the different time points is provided below. No nesting birds were observed on the project site itself, and no nests of any protected species were observed off-site in the areas that could be accessed. White-tailed kites (*Elanus leucurus*) were observed foraging in the field, but they did not appear to be nesting nearby, as described below. No Swainson’s hawk or burrowing owl were observed during any of the avian surveys to-date. No adults or nests of western pond turtle were observed. All observed animal species are listed in Attachment A: Animal Species Observed.

### **Swainson's Hawk**

No individuals of Swainson's hawk were observed during any of the surveys, and no raptor nests that could belong to Swainson's hawk were observed. The presence of other birds-of-prey utilizing territories on-site also indicates that Swainson's hawk are not utilizing this habitat currently. The negative survey results for Swainson's hawk despite approximately 30 survey hours satisfies the requirements of the survey protocol for this species, therefore it is reasonable to conclude Swainson's hawk are absent from the project site.

### **Nesting Birds (Including Raptors)**

FCS Biologists observed no active nests within the vicinity of the project site. Several American crow were loitering around the eucalyptus grove to the east of the parcel and harassing white-tail kites that approached the grove; however, their nest could not be located. Several white-tail kites were observed each day foraging over the grassland habitat; however, each time they flew off to the southwest out of sight and the location of their nest could not be determined. One juvenile red-tailed hawk was observed within the large eucalyptus tree along the north property line; however, this individual flew off-site after approximately 20 minutes. No other active nests were observed as of April 7.

### **Burrowing Owl**

No evidence of burrowing owl activity was observed during any of the field surveys. No California ground squirrel burrows were observed on-site, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl. Therefore, it is reasonable to conclude burrowing owl is absent from the project site.

### **Western Pond Turtle**

No evidence of western pond turtle activity was observed during any of the field surveys. There are some wetland features on-site, however no ponds or streams suitable for western pond turtle exist on-site and no signs of adults or nests were observed. Therefore, it is reasonable to conclude western pond turtle is absent from the project site.

### **Compliance**

With implementation of the pre-construction surveys, and implementation of the recommendations for Swainson's hawk, burrowing owl, nesting birds, and western pond turtle, the project is in compliance with MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4 and MM BIO-5.

FCS appreciates the opportunity to assist you on this project. If you have any questions concerning this letter report, please contact me at [jwaligorski@fcs-intl.com](mailto:jwaligorski@fcs-intl.com).

Sincerely,



Janna Waligorski  
Senior Project Manager  
**FirstCarbon Solutions**  
2999 Oak Road, Suite 250  
Walnut Creek, CA 94597  
530.519.9736

**Attachment A:** Animal Species Observed List



**Attachment A:  
Animal Species Observed**



## Commerce 217/220 Species List

### Site Visit: 1/18/23

**Birds:** juvenile red-shouldered hawk (*Buteo lineatus*) sitting in eucalyptus tree on N fenceline, Western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), American pelican (*Pelecanus erythrorhynchos*), black phoebe (*Sayornis nigricans*), white-crowned sparrow (*Zonotrichia leucophrys*), Northern flicker (*Colaptes auratus*), crow (*Corvus brachyrhynchos*)

### Site Visit: 3/20/23

Start Time: 6:35 AM

Weather: no wind, 49 degF, 46% RH

Note: start at sunrise; park in SE corner

**Bird Species:** wild turkey (*Meleagris gallopavo*), turkey vulture (*Cathartes aura*), Canada goose (*Branta canadensis*), crow (*Corvus brachyrhynchos*), raven (*Corvus corax*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), Western bluebird (*Sialia mexicana*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), red-shouldered hawk (*Buteo lineatus*) two individuals soaring over the eucalyptus grove to the E of the site, house wren (*Troglodytes aedon*), American robin (*Turdus migratorius*), golden-crowned sparrow (*Zonotrichia atricapilla*), Nuttall's woodpecker (*Picoides nuttallii*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), purple finch (*Haemorhous purpureus*), tree swallow (*Tachycineta bicolor*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), California gull (*Larus californicus*), brown-headed cowbird (*Molothrus ater*), Anna's hummingbird (*Calypte anna*), chestnut-backed chickadee (*Poecile rufescens*), White-tailed kite (*Elanus leucurus*)

**Other Animals:** black-tailed jackrabbit (*Lepus californicus*)

**Flowering Plants:** California poppy (*Eschscholzia californica*), coastal heron's bill (*Erodium cicutarium*), common groundsel (*Senecio vulgaris*), field marigold (*Calendula arvensis*)

### Site Visit: 3/31/23

Start time: 6:30 AM

Weather: clear, wind 0 mph, 44.5 degF, 76.5% RH

Notes: parked NE corner

**Bird species:** American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida macroura*), Western scrub jay (*Aphelocoma californica*), lesser goldfinch (*Spinus psaltria*), house wren (*Troglodytes aedon*), Canada goose (*Branta canadensis*), American goldfinch (*Spinus tristis*), house sparrow (*Passer domesticus*),

Allen's hummingbird (*Selasphorus sasin*), killedeer (*Charadrius vociferus*), raven (*Corvus corax*), unknown gull likely Western or California, American coot (*Fulica americana*), European starling (*Sturnus vulgaris*), ruby-crowned kinglet (*Regulus calendula*), black phoebe (*Sayornis nigricans*)

**Other Animals:** Mule deer (*Odocoileus hemionus*), domestic cat (*Felis catus*)

### Site Visit: 4/4/23

Start time: 6:35 AM

Weather: clear, 49 degF, no wind, 81% RH, 6:15 AM first light, 7:15 first direct sunlight

Notes: parked SW corner

**Bird Species:** red-shouldered hawk (*Buteo lineatus*) perched on eucalyptus tree on N fenceline, wild turkey (*Meleagris gallopavo*) calling and all over parking area, White-tailed kite (*Elanus leucurus*) foraging and calling, house wren (*Troglodytes aedon*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), purple finch (*Haemorhous purpureus*), song sparrow (*Melospiza melodia*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), rock wren (*Salpinctes obsoletus*), black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), fox sparrow (*Passerella iliaca*), Northern mockingbird (*Mimus polyglottos*), tree swallow (*Tachycineta bicolor*), Canada goose (*Branta canadensis*), killedeer (*Charadrius vociferus*), Anna's hummingbird (*Calypte anna*), Western bluebird (*Sialia mexicana*)

**Other Animals:** black-tailed jackrabbit (*Lepus californicus*)

### Site Visit: 4/5/23

Start time: 6:08 AM

Weather: 39 degF, 80% RH, no wind

Notes: met Jerry with Stravinsky on-site; parked SW corner

**Bird Species:** red-shouldered hawk (*Buteo lineatus*) called from southwest corner of eucalyptus grove once, wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melospiza crissalis*), raven (*Corvus corax*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), White-tailed kite (*Elanus leucurus*) 3 hovering various times over the field, Nuttall's woodpecker (*Picoides nuttallii*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*)

### Site Visit: 4/6/23

Start time: 6:17 AM

Weather: clear, 44 degF, 80% RH, no wind

Notes: fewer wildlife than yesterday; met Jerry with Stravinsky on-site; parked SW corner

**Bird Species:** wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melospiza crissalis*), brown creeper (*Certhia americana*), raven (*Corvus corax*), American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), red-shouldered hawk (*Buteo lineatus*) called from southwest corner of eucalyptus grove once similar to other mornings, White-tailed kite (*Elanus leucurus*) two individuals over east eucalyptus grove being chased by crows, song sparrow (*Melospiza melodia*), great blue heron (*Ardea herodias*) soaring overhead, unknown gulls soaring, lesser goldfinch (*Spinus psaltria*), Anna's hummingbird (*Calypte anna*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*)

**Other Animals:** runways of black-tailed jackrabbit (*Lepus californicus*) and California vole (*Microtus californicus*)

**Site Visit: 4/7/23**

Start time: 6:30 AM

Weather: cloudy, 54.5 degF, 79% RH, wind 1-2 mph

Notes: fewer birds today, met Jerry on-site

**Bird Species:** Bewick's wren (*Thryomanes bewickii*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), hermit thrush (*Catharus guttatus*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), Nuttall's woodpecker (*Picoides nuttallii*), White-tailed kites (*Elanus leucurus*) being chased by crows then two foraging in field, cliff swallow (*Petrochelidon pyrrhonota*), cedar waxwing (*Bombycilla cedrorum*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*)

**Other Animals:** black-tailed jackrabbit (*Lepus californicus*)

September 3, 2020

Industrial and Commercial Contractors, LP  
403 W. Yosemite Avenue, Suite 105  
Madera, California 93637

Attention: Mr. Brian Doswald

**RE: Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site  
SDG Commerce 217 Distribution Center, Napa, California  
APN: 058-030-065-000**

Dear Mr. Doswald:

## 1. INTRODUCTION

Monk & Associates, Inc., (M&A) has prepared this Addendum to our March 2, 2020, *Revised Biological Resource Analysis* (biology report) for the SDG Commerce 217 Distribution Center located in the City of American Canyon, California (the “project site”). Since the time M&A prepared our biology report for the project site, it has been determined that it will be necessary to acquire soil from the adjacent parcel to the south (the “borrow area parcel”) and transport this soil for use as clean fill on the project site. M&A has prepared this Addendum to our biology report to address the transportation of soil from the offsite borrow area parcel onto the project site and to analyze any affects this activity could have on mapped jurisdictional waters of the United States/State that lie inbetween the project site and the adjacent borrow area parcel. Mapped waters of the United States are shown on the attached exhibits.

## 2. DESCRIPTION OF THE PROJECT SITE AND ADJACENT BORROW AREA PARCEL

The project site and the adjacent borrow area parcel were once part of a contiguous approximately 35-acre project site that M&A conducted surveys on over multiple years dating between 2006 and 2018. Both the project site and adjacent borrow area parcel are dominated by ruderal (weedy) vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). These non-native, weedy species provide little habitat value to wildlife and they do not constitute a native plant community. Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, is also common on the 35 acres. Ruderal vegetation is the only vegetation community found on the project site. The adjacent borrow area parcel, however, in addition to supporting a ruderal herbaceous community also supports waters of the United States, as described below.

On May 16, 2018, the U.S. Army Corps of Engineers issued a jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the approximately 35-acre

Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site  
SDG Commerce 217 Distribution Center, Napa, California  
APN: 058-030-065-000

Page 2

parcel that comprises the project site, the adjacent borrow area parcel, and another property now known as 330 Commerce Center (see attached exhibits). The entire 0.043-acre of waters of the U.S. confirmed by the Corps is found on the adjacent borrow area parcel as shown on the attached exhibit "Borrow Site Rough Grading," Sheet 1 prepared by RSA on August 21, 2020. There are no waters of the United States or State on the project site.

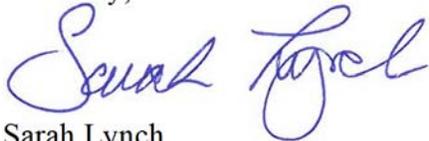
### **3. DISCUSSION OF PROPOSED ACTIVITIES AND AVOIDANCE OF IMPACTS TO MAPPED WATERS OF THE UNITED STATES**

The project applicant intends to rough grade the borrow area parcel and transport soil from that parcel onto the project site for use in development of the project site. In order to protect the waters of the United States/State that occur in between the project site and the borrow area parcel, a 25-foot buffer area around the outside edge of the wetlands will be staked and protected with fiber roll, silt fencing and high visibility orange construction fencing to prevent equipment from driving into the wetlands during hauling activities. See the attached exhibit.

With these protection measures in place, as shown on the attached Borrow Site Rough Grading exhibit, Sheet 1, attached, *there are no expected impacts to waters of the U.S./State from the transport of soil/materials from the borrow area parcel to the project site.*

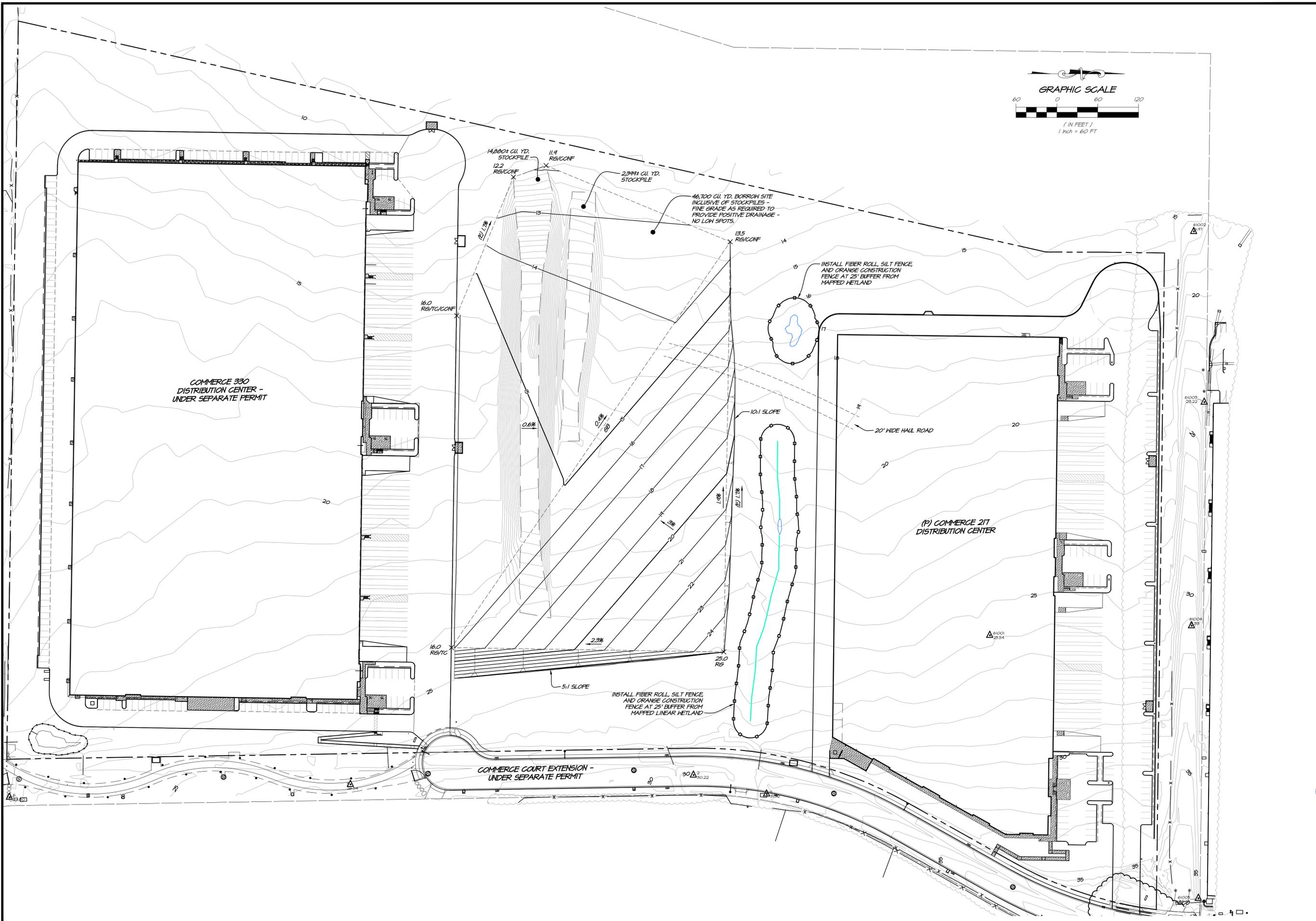
This concludes our addendum to our biology report. If you have any questions or require additional information, please do not hesitate to contact me at (925) 323-4850 or [Sarah@monkassociates.com](mailto:Sarah@monkassociates.com). Thank you.

Sincerely,



Sarah Lynch  
Senior Associate Biologist

Attachments: U.S. Army Corps of Engineers Confirmed Aquatic Resources Delineation Map;  
Sheet 1, Borrow Site Rough Grading prepared by RSA, August 21, 2020



NO.	DATE	BY	APPD.

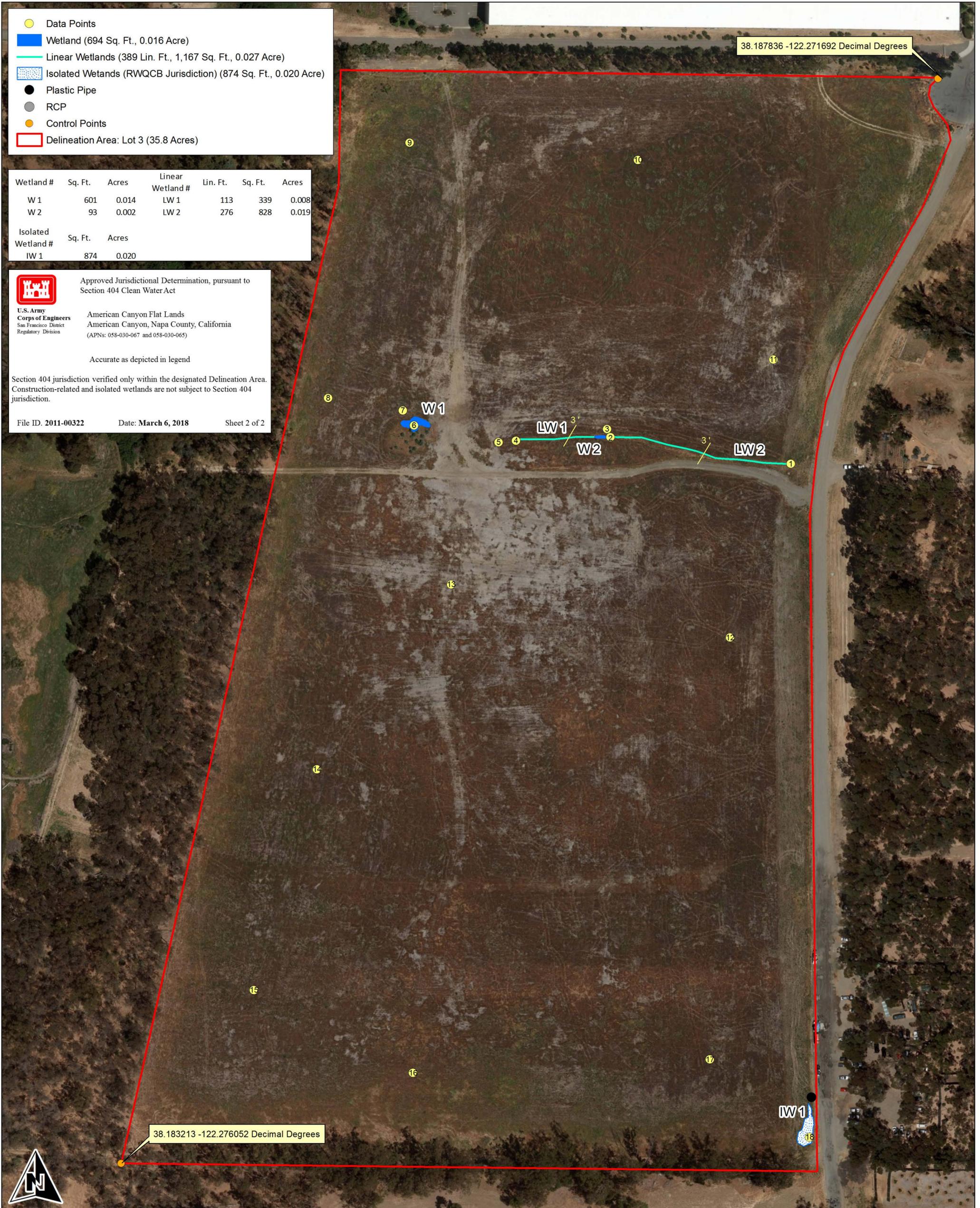
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 NAPA, CALIF. 94559  
 OFFICE 707.252.3301  
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**SDG COMMERCE 217 DISTRIBUTION CENTER  
 BORROW SITE ROUGH GRADING**  
 AMERICAN CANYON  
 CALIFORNIA



DATE	AUG. 21, 2020
DRAWN	DRL
DESIGNED	DRL
CHECKED	PSN
JOB NO.	411903710
SHEET NO.	<b>1</b>



38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees

- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetlands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
- Plastic Pipe
- RCP
- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army  
Corps of Engineers  
San Francisco District  
Regulatory Division

American Canyon Flat Lands  
American Canyon, Napa County, California  
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID: 2011-00322      Date: March 6, 2018      Sheet 2 of 2



**Revised**  
**BIOLOGICAL RESOURCE ANALYSIS**  
**SDG COMMERCE 217 DISTRIBUTION CENTER**  
**CITY OF AMERICAN CANYON, CALIFORNIA**

**March 2, 2020**

**Prepared for**

SDG Commerce 217, LLC  
413 W. Yosemite Ave. Suite 105  
Madera, California 93637

**Prepared by**

Monk & Associates, Inc.  
1136 Saranap Avenue, Suite Q  
Walnut Creek, California 94595

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

**TABLE OF CONTENTS**

**1. INTRODUCTION..... 4**

**2. PROPERTY LOCATION AND SETTING ..... 4**

**3. PROPOSED PROJECT ..... 5**

**4. ANALYSIS METHODS..... 5**

**5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES..... 5**

    5.1 Topography ..... 5

    5.2 Hydrology ..... 5

    5.3 Plant Communities and Associated Wildlife Habitats ..... 6

        5.3.1 RUDERAL HERBACEOUS VEGETATION ..... 6

    5.4 Wildlife Corridors..... 6

**6. SPECIAL-STATUS SPECIES DEFINITION ..... 7**

    6.1 Definitions..... 7

    6.2 Potential Special-Status Plants on the Project Site ..... 9

    6.3 Potential Special-Status Animals in the Project Site ..... 10

        6.3.1 CALIFORNIA RED-LEGGED FROG ..... 10

        6.3.2 SWAINSON’S HAWK..... 12

        6.3.3 WESTERN BURROWING OWL..... 13

        6.3.4 NORTHERN HARRIER ..... 14

**7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS..... 14**

    7.1 Federal Endangered Species Act..... 14

        7.1.1 RESPONSIBLE AGENCY ..... 16

        7.1.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 16

    7.2 Federal Migratory Bird Treaty Act ..... 17

        7.2.1 APPLICABILITY TO THE PROPOSED PROJECT ..... 17

    7.3 California Endangered Species Act ..... 17

        7.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT ..... 17

        7.3.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 19

    7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513 ..... 19

        7.4.1 APPLICABILITY TO THE PROPOSED PROJECT ..... 19

    7.5 City of American Canyon General Plan ..... 20

        7.5.1 GOAL 8, OBJECTIVE 8.1 AND POLICIES 8.1.1 AND 8.1.4 ..... 20

        7.5.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 20

        7.5.3 OBJECTIVE 8.2 AND POLICY 8.2.1..... 20

        7.5.4 APPLICABILITY TO THE PROPOSED PROJECT ..... 21

        7.5.5 OBJECTIVE 8.3 AND POLICY 8.3.1..... 21

        7.5.6 APPLICABILITY TO THE PROPOSED PROJECT ..... 21

        7.5.7 POLICY 8.3.1 B..... 21

        7.5.8 APPLICABILITY TO THE PROPOSED PROJECT ..... 21

        7.5.9 POLICY 8.3.1 E..... 21

        7.5.10 APPLICABILITY TO THE PROPOSED PROJECT ..... 21

        7.5.11 POLICY 8.3.1 F..... 21

        7.5.12 APPLICABILITY TO THE PROPOSED PROJECT ..... 22

        7.5.13 POLICY 8.3.1 G ..... 22

        7.5.14 POLICIES 8.3.5 AND 8.3.6 ..... 22

        7.5.15 APPLICABILITY TO THE PROPOSED PROJECT ..... 22

**8. CITY OF AMERICAN CANYON –ORDINANCES..... 22**

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

- 8.1 Trees (Ord. 18.40.110) ..... 22
  - 8.1.1 APPLICABILITY TO THE PROPOSED PROJECT ..... 22
- 9. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE ..... 22**
  - 9.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting ..... 23
    - 9.1.1 SECTION 404 OF THE CLEAN WATER ACT ..... 23
    - 9.1.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 26
  - 9.2 State Water Resources Control Board (SWRCB) / California Regional Water Quality Control Board (RWQCB)..... 26
    - 9.2.1 SECTION 401 OF THE CLEAN WATER ACT ..... 26
    - 9.2.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 27
  - 9.3 California Department of Fish and Wildlife Protections..... 27
    - 9.3.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE..... 27
    - 9.3.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 28
- 10. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORM WATER MANAGEMENT ..... 28**
  - 10.1 Construction General Permit..... 28
    - 10.1.1 APPLICABILITY TO THE PROPOSED PROJECT ..... 30
  - 10.2 RWQCB Municipal Storm Water Permitting Programs ..... 30
    - 10.2.1 NPDES C.3 REQUIREMENTS ..... 30
    - 10.2.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 31
- 11. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS ..... 32**
- 12. IMPACTS ANALYSIS..... 33**
  - 12.1 Significance Criteria ..... 33
    - 12.1.1 THRESHOLDS OF SIGNIFICANCE ..... 33
- 13. IMPACT ASSESSMENT AND PROPOSED MITIGATION..... 34**
  - 13.1 Impact BIO-1. Development of the Project Could Have a Potentially Significant Impact on Nesting Swainson’s hawks (Potentially Significant)..... 35
  - 13.2 Mitigation Measure BIO-1. Mitigation for Potential Impacts to Nesting Swainson’s Hawk ..... 36
  - 13.3 Impact BIO-2. Development of the Project Could Have a Potentially Significant Impact on Western Burrowing Owl (Potentially Significant) ..... 36
  - 13.4 Mitigation Measure BIO-2. Mitigation for Potential Impacts to Western Burrowing Owl ..... 36
  - 13.5 Impact BIO-3: Development of the Project Would Have a Potentially Significant Impact on Tree or Ground Nesting Raptors (Potentially Significant)..... 37
  - 13.6 Mitigation Measure BIO-3: Mitigation for Potential Impacts to Tree or Ground Nesting Raptors ..... 37
  - 13.7 Impact BIO-4: Development of the Project Would Have a Potentially Significant Impact on Nesting Passerine Birds. (Potentially Significant)..... 38
  - 13.8 Mitigation Measure BIO-4: Mitigation for Potential Impacts to Nesting Passerine Birds. .... 39
- 14. LITERATURE CITED ..... 40**

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

**FIGURES**  
(At Back of Report)

Figure 1. SDG Commerce 217 Distribution Center Project Site Regional Map.

Figure 2. SDG Commerce 217 Distribution Center Project Site Location Map.

Figure 3. SDG Commerce 217 Distribution Center Project Site Aerial Photograph.

Figure 4. Known Special-Status CNDDDB Records Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

Figure 5. USFWS Critical Habitat in the Vicinity of the SDG 217 Commerce Distribution Center Project Site.

**TABLES**  
(At Back of Report)

Table 1. Plant Species Observed on the SDG Commerce 217 Distribution Center Project Site.

Table 2. Wildlife Species Observed on the SDG Commerce 217 Distribution Center Project Site.

Table 3. Special-Status Plant Species Known to Occur Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

Table 4. Special-Status Wildlife Species Known to Occur Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

**ATTACHMENTS**  
(At Back of Report)

Sheet A1. Preliminary Site Plan for the SDG Commerce 217 Distribution Center, prepared by WAI (Ward Architects, Inc.) dated January 15, 2020.

Sheet 2. Confirmed Reverification Aquatic Resources Delineation Map, dated May 22, 2017.

Sheet UP4. Utility Plan for the SDG Commerce 217 Distribution Center, prepared by RSA, dated January 2020.

Storm Drain Level Spreader Detail, prepared by RSA, dated January 7, 2020.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

## 1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this biological resource analysis for the proposed SDG Commerce 217 Distribution Center project site (herein referred to as the project site) located in the City of American Canyon, California (Figures 1 and 2). The purpose of our analysis is to provide a description of existing biological resources on the project site and to identify potentially significant impacts that could occur to sensitive biological resources from the construction of a distribution center and associated parking on the project site.

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations, including the California Native Plant Society (CNPS). Biological resources also include waters of the United States and State, as regulated by the U.S. Army Corps of Engineers (Corps), California Regional Water Quality Control Board (RWQCB), and CDFW. Our analysis includes a formal delineation of “waters of the U.S.” that was confirmed in 2012 and reverified by the Corps in 2017.

This biological resources analysis also provides mitigation measures for “potentially significant” impacts that could occur to biological resources. Whenever possible, upon implementation, the prescribed mitigation measures would reduce impacts to levels considered less than significant pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code §§ 21000 et seq.; 14 Cal. Code Regs §§ 15000 et seq). Accordingly, this report is suitable for review and inclusion in any review being conducted by the City of American Canyon for the proposed project pursuant to the CEQA.

## 2. PROPERTY LOCATION AND SETTING

The approximately 10-acre project site is located at 1075 Commerce Court, American Canyon, Napa County, California (Figures 1 and 2). The project site is bordered to the southeast by Jungle Paintball, a 40-acre paintball park. To the east is located a large eucalyptus grove with scattered mobile homes. Further to the east is Oat Hill, a geographically prominent hill west of Highway 29. A mix of open space, large warehouses and distribution centers occurs north of the project site. The American Canyon Wastewater Treatment Plant and treatment ponds is located west of the project site. The Napa River and associated marshes occur greater than 300 feet west of the project site. A large distribution center, known as the SDG Commerce 330 Distribution Center, is currently under construction occurs immediately to the south of the project site. Clark Ranch, Wetlands Edge Park, and salt marsh and mudflat habitats associated with the Napa River, occur further to the south of the project site. The Napa Valley Unified School District is constructing the Napa Junction Elementary School to the southeast, along Eucalyptus Drive. Figure 3 provides an aerial photograph that shows the project site features and the surrounding land use.

The 10.39-acre project site is part of a larger 35.85-acre parcel (formerly known as Lot 3) that is comprised of a highly disturbed, ruderal (weedy) plant community, that was recently graded and leveled. This site formerly was occupied by a grove of blue gum eucalyptus (*Eucalyptus globulus*) trees that were removed in 2012.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

### **3. PROPOSED PROJECT**

The applicant proposes to construct a 217,294-square foot distribution center with associated parking areas and a detention/bioretenion pond on the 10.39-acre project site. Access to the distribution center will be provided by the Commerce Court extension, as illustrated on the Preliminary Site Plan (see attached Sheet A1).

### **4. ANALYSIS METHODS**

Prior to preparing this biological resources analysis report, M&A researched the most recent version of CDFW's Natural Diversity Database, RareFind 5 application (CNDDDB 2018) for historic and recent records of special-status plant and animal species (that is, threatened, endangered, rare) known to occur in the region of the project site. All special-status species records were compiled in tables. M&A examined all known record locations for special-status species to determine if special-status species could occur on the project site or within an area of affect.

M&A biologists have a long history of field surveys associated with the approximately 35-acre parcel. M&A biologists conducted site surveys on the parcel on March 1 and April 27, 2006, June 14, 2011, February 14, March 21, and June 12, 2012, May 18, 2017, and on March 30, 2018, December 19 and December 27, 2019. In 2006, and again in 2011, M&A conducted a wetland delineation on the entire parcel. This delineation of "waters of the U.S." was confirmed by the Corps in 2012 and reverified by this agency in 2017. The Corps Confirmed Reverification of Aquatic Resources Delineation Map is provided as Sheet 2.

During the site surveys and wetland delineations, M&A biologists recorded biological resources and assessed the likelihood of resource regulated areas on the project site. In addition to the wetland delineations, the survey involved searching all habitats on the site and recording all plant and wildlife species observed. M&A cross-referenced the habitats found on the project site against the habitat requirements of local or regionally known special-status species to determine if the proposed project could directly or indirectly impact such species. The results of our literature research and field reconnaissance are provided in the sections below.

### **5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES**

#### **5.1 Topography**

The project site is relatively flat with elevations ranging from 8 to 20 feet above sea level. The ground is undulating due to past land use disturbances including eucalyptus tree removal in 2012. The site slopes gently to the west towards North Slough and the Napa River.

#### **5.2 Hydrology**

There are no drainages on the project site. There are no indicators of hydrology on the 10-acre project site (Sheet 2).

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### 5.3 Plant Communities and Associated Wildlife Habitats

A complete list of plant species observed on the project site is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual* Second Edition (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (<http://ucjeps.berkeley.edu/interchange/index.html>). Table 2 is a list of wildlife species observed on the project site during multiple years of surveys at the project site. Nomenclature for wildlife follows CDFW's *Complete list of amphibian, reptile, bird, and mammal species in California* (CDFW 2016) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW's list.

#### 5.3.1 RUDERAL HERBACEOUS VEGETATION

A complete list of plant species observed within the project site is presented in Table 1. The project site is dominated by ruderal vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, such as is found on the project site, is also common on this parcel.

Typically, ruderal communities provide habitat for those animal species adapted to humans. Examples of animals associated with these communities include wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), California ground squirrel (*Otospermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), California meadow vole (*Microtus californicus*), and Botta's pocket gopher (*Thomomys bottae*), among others, all of which have been observed on the project site. Red-shouldered hawk (*Buteo lineatus*), tree swallows (*Tachycineta bicolor*), Nuttall's woodpecker (*Picoides nuttallii*), and northern flicker (*Colaptes auratus*), among others, likely nest in the eucalyptus trees that surround the project site to the west, north and south. Chestnut-backed chickadee (*Poecile rufescens*), brown creeper (*Certhia americana*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), Bullock's oriole (*Icterus bullockii*) and western gray squirrel (*Sciurus griseus*) were also observed in the immediate project vicinity.

### 5.4 Wildlife Corridors

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: 1) they provide avenues along which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; 2) populations can move in response to environmental changes and natural disasters; and 3) individuals can recolonize habitats from which populations have been locally extirpated (Beier and Loe 1992). All three of these functions can be met if both regional and local wildlife corridors are accessible

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Local wildlife corridors also provide access routes to food, cover, and water resources within restricted habitats.

The proposed project will not interfere with the movement of native wildlife. The project site has a history of disturbance associated with eucalyptus tree removal in 2012, and continued disturbance associated with the paintball facility located immediately to the southeast and construction of the SDG Commerce 330 Distribution Center distribution center to the south. The eucalyptus grove and the marshes associated with the Napa River to the west of the project site provide a more valuable wildlife corridor for terrestrial wildlife.

## 6. SPECIAL-STATUS SPECIES DEFINITION

### 6.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq.*; 14 CCR §670.1 *et seq.*) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);
- plants and animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;
- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS' electronic *Inventory* (CNPS 2017). The California Department of Fish and Wildlife (CDFW) recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in EIRs. Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001) (CNPS 2017). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information (more on CNPS Rank species below);
- migratory nongame birds of management concern listed by U.S. Fish and Wildlife Service (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

- animals that are designated as "species of special concern" by CDFW (2018);
- Animal species that are “fully protected” in California (Fish and Game Codes 3511, 4700, 5050, and 5515).
- Bat Species that are designated on the Western Bat Working Group’s (WBWG) Regional Bat Species Priority Matrix as: “RED OR HIGH.” This priority is justified by the WBWG as follows: “Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.”

In the paragraphs below we provide further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as Endangered or Threatened under the FESA is protected from unauthorized “take” (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a Federal listed Endangered or Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

State Threatened Species. A species listed as Threatened under the state Endangered Species Act (§2050 of California Fish and Game Code) is protected from unauthorized “take” (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to “take” a state listed Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from CDFW prior to initiating the “take.”

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered “rare.” Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a “significant effect on the environment” (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an “Inventory” of special status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federal listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the Fish and Game Code, and are eligible for state listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern, and are reviewed by CDFW and maintained on “watch lists.”

Additionally, in 2006 CNPS updated their lists to include “threat code extensions” for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered “seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)”;
- .2 is “fairly endangered in California (20-80% of occurrences threatened)”;
- .3 is “not very endangered in California (less than 20% of occurrences threatened or no current threats known).”

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA’s definition of “rare” or “endangered.” Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the white-tailed kite and golden eagle, are protected under California Fish and Game Code (§3511). Fully protected birds may not be “taken” or possessed (i.e., kept in captivity) at any time.

## **6.2 Potential Special-Status Plants on the Project Site**

Figure 4 provides a graphical illustration of the known records for special-status species within 3 miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status plants have been mapped on or adjacent to the project site. However, according to the CDFW’s CNDDDB, a total of eight special-status plant species are known to occur in the region of the project site (Table 3). Most of these plants occur in specialized habitats such as marshes, foothill grasslands, and vernal pools, none of which occur onsite. In the recent past, blue gum eucalyptus trees covered the majority of the project site dating back for several decades; these trees emit allelopathic (growth inhibiting) chemicals from their leaves, acorns and bark that prevent other plants from growing under them. Once bark and leaf debris accumulate on the ground beneath the trees, nearly nothing will grow there. Based on the negative findings during the multiple surveys conducted on this site in 2006, 2011, 2012, 2017, 2018 and 2019, special-status plants are not likely to be found onsite and mitigation for special-status plants should not be warranted.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### 6.3 Potential Special-Status Animals in the Project Site

Figure 4 provides a graphical illustration of the known records for special-status species within three miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status animal records have ever been mapped on or adjacent to the project site. However, a total of 18 special-status animal species are known to occur in the region of the project site (Table 4). Due to the disturbed nature of the project site and its history as a eucalyptus grove, there is a very low likelihood of special-status species occurring onsite. Regardless, due to the sensitivity of four of the special-status wildlife species known to occur in the area, we further discuss these species below.

#### 6.3.1 CALIFORNIA RED-LEGGED FROG

The California red-legged frog (*Rana draytonii*) was federally-listed as threatened on May 23, 1996 (Federal Register 61: 25813-25833) and as such is protected pursuant to the Federal Endangered Species Act. On March 16, 2010 the USFWS issued the final designation for California red-legged frog Critical Habitat (USFWS 2010). *The project site does not fall within mapped critical habitat, although it is adjacent* (see Figure 5).

The California red-legged frog is also a state “species of special concern.” While the state designation “species of special concern” does not provide any legally mandated protection, species of special concern must be considered in any project undergoing a CEQA review.

The California red-legged frog is typically found in ponds, slow-flowing portions of perennial and intermittent streams that maintain water in the summer months. This frog is also found in hillside seeps that maintain pool environments or saturated soils throughout the summer months. Populations probably cannot be maintained if all surface water disappears (i.e., no available surface water for egg laying and larval development habitat). Larval California red-legged frogs require 11-20 weeks of permanent water to reach metamorphosis (i.e., to change from a tadpole into a frog), in water depths of 10 to 20 inches (USFWS 2002). Riparian vegetation such as willows and emergent vegetation such as cattails are preferred red-legged frog habitats, though not necessary for this species to be present. Populations of California red-legged frog will be reduced in size or eliminated from ponds supporting non-native species such as bullfrog, Centrarchid fish species (such as sunfish, bluegill, or large-mouth bass), and signal and red swamp crayfish (*Pacifastacus leniusculus* and *Procambarus clarkii*, respectively), all of which are known California red-legged frog predators. However, the presence of these non-native species does not preclude the presence of the California red-legged frog.

California red-legged frogs also use upland habitats for migration and dispersal. The USFWS *Recovery Plan for the California Red-Legged Frog* states that frog overland excursions via uplands can vary between 0.25-mile up to 3 miles during the wet season, and that frogs “have been observed to make long-distance movements that are straight-line, point to point migrations rather than using corridors for moving in between habitats” (USFWS 2002). The information presented in the USFWS’ Recovery Plan was taken from a publication by Bulger et al. (2003) that recounts a study in coastal redwoods in Santa Cruz area. M&A believes that such overland straight-line migrations are primarily limited to periods of heavy rainfall or during periods when ambient conditions exhibit high moisture levels such as in fog belts along the coast. Working in

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

Point Reyes National Seashore on the coast of California, Fellers and Kleeman (2007) found approximately 31 percent of California red-legged frogs moved more than 30 meters from their breeding sites and about 69 percent moved less than 30 meters from their breeding site during seasonal movement periods. Similarly, Bulger et al. (2003) found that 60 percent of their radio tagged frogs stayed within 30 meters of their breeding sites.

In locations that are characterized by hot and seasonally dry climates, the California red-legged frog is inclined to stay closer to its aquatic environments or will not migrate. Tatarian (2005) who studied an inland population of California red-legged frogs in eastern Contra Costa County where the climate is far drier than the coastal environment, found that all movements started after the first 0.5 cm of rain in the fall, with more terrestrial movements being made in the fall pre-breeding season (57%) than in the winter breeding season (32%) or spring post-breeding season (11%). Tatarian (op. cit.) also found that California red-legged frogs moved greater average distances aquatically (84.6 m) than terrestrially (27.7 m). Greater terrestrial distances were moved in the pre-breeding season (35.2 m) than in the breeding season (15.5 m) or post-breeding season (16.3 m) with the majority of movements occurring for only one of the 3-4 day survey periods. The majority of frogs (57%) were position faithful within a pool, indicating they did not migrate at all. These data suggest that long forays across the landscape found in coastal populations are less likely in dry inland locations.

The USFWS *Recovery Plan for the California Red-Legged Frog* states that populations are “most likely to persist where multiple breeding areas are embedded within a matrix of habitats used for dispersal.” “The primary constituent elements for California red-legged frogs are aquatic and upland areas where suitable breeding and non-breeding habitat is interspersed throughout the landscape and is interconnected by unfragmented dispersal habitat” (USFWS 2002).

In the American Canyon/Napa area, there are no records for the California red-legged frog west of State Route 29 where the project site is located. The closest known California red-legged frog occurrence is 1.4 miles east of the project site (CNDDDB Occurrence No. 896). The California red-legged frog at this location was found in a dry cement tank adjacent to a large quarry pond that supported bullfrogs (*Lithobates catesbeiana*). State Route 29 is located between this closest California red-legged frog record and the project site and constitutes an effective geographic barrier to overland California red-legged frog movements to/from the known record location and other extant California red-legged frog populations to the project site. There is no hydrologic connectivity over any undeveloped migration route between the known records for this species and the project site. Finally, the project site does not provide suitable habitat for the California red-legged frog. Based on all the available information, it can be concluded that the project site does not provide suitable habitat for the California red-legged frog. Similarly, the surrounding parcels with dense eucalyptus groves do not provide suitable habitat. Owing to the excessively disturbed conditions on the project site due to prior grading and tree removal activities, this species is not expected to occur on the project site. *Therefore, the proposed project will not impact the California red-legged frog and mitigation should not be warranted.*

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

### 6.3.2 SWAINSON'S HAWK

The Swainson's hawk (*Buteo swainsoni*) is a state-listed threatened species, protected pursuant to the California Endangered Species Act (CESA), and Title 14 of the California Code of Regulations. While it has no special federal status, it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their active nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800).

Swainson's hawk inhabits open to semi-open areas at low to middle elevations in valleys, dry meadows, foothills, and level uplands (Kochert 1986). It nests almost exclusively in trees and will nest in almost any tree species that is at least 10 feet tall (Schmutz et. al. 1984). Nests are constructed in isolated trees that are dead or alive along drainages and in wetlands, or in windbreaks in fields and around farmsteads (Palmer 1988). Swainson's hawks occasionally nest in shrubs, on telephone poles, and on the ground. In the Central Valley of California, the majority of Swainson's hawk nests and territories are associated with riparian systems and nests are commonly found in cottonwoods and oaks (Schlorff et. al. 1984). They have also been documented nesting in eucalyptus (*Eucalyptus* spp.), black walnut (*Juglans hindsii*), black locust (*Robinia pseudoacacia*), almond (*Prunus dulcis*), Osage orange (*Maclura pomifera*), Arizona cypress (*Cupressus arizonica*), and pine (*Pinus* spp.).

Foraging habitats include grasslands, alfalfa fields, fallow fields, beet, tomato, and other low-growing row or field crops, dry-land and irrigated pasture, and rice land when not flooded (CDFG 1994). The Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Its primary prey in the Central Valley is California meadow vole (*Microtus californicus*). Agricultural areas are often preferred over more natural grassland habitats due to larger prey populations. In addition, agricultural practices (planting, maintenance, harvesting, disking) allow for access to prey, and very likely increase foraging success of Swainson's hawks by flushing prey (personal observations of G. Monk). During the nesting season Swainson's hawks usually forage within two miles of the nest. Swainson's hawk does not require habitats that contain many perches because it most often searches for prey aerially, therefore it can occupy habitats with few or no perches except the nest tree (James 1992).

Swainson's hawks are regular summer visitors and breeders throughout the western states. In the fall months, most Swainson's hawks migrate to Argentina before returning to the United States to breed in the late-spring (typically April). For decades, Argentina farmers were spraying insecticides over habitats that included gregarious night roosts of the Swainson's hawk, killing many thousands of these hawks. This practice was halted in the last 10 years and the Swainson's hawk population appears to be dramatically responding in California. While in the 1970s through 1990s there were only two relatively small populations of Swainson's hawks that remained resident in California year-round in the Davis area and in the Sacramento River Delta, resident and migrant populations of the Swainson's hawks are now dramatically expanding their nesting distribution in California since insecticide use over Argentinian wintering grounds was halted (G. Monk, personal observations). For example, Swainson's hawks were never recorded nesting in the Napa County area until relatively recently.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

The closest known record for nesting Swainson's hawk is 2.6 miles northeast of the project site (CNDDDB Occurrence No. 2744). No Swainson's hawk nests have been observed on the site or offsite in the vicinity of the project site during M&A's project site surveys. However, the nesting population appears to be increasing throughout its nesting range in northern California (recent CNDDDB records and G. Monk general observations) and the eucalyptus trees growing adjacent to the project site provide suitable nesting habitat. Therefore, there is the possibility that Swainson's hawks could nest near this project site in future years. *Hence, prior to earth-disturbance or construction, nesting surveys must be conducted that confirm or negate this species' presence as a nesting bird on or adjacent to the project site. Accordingly, impacts to Swainson's hawk are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

### 6.3.3 WESTERN BURROWING OWL

The western burrowing owl (*Athene cunicularia hypugaea*) is a California "species of special concern." Its nest, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, and §3800). The burrowing owl is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Finally, based upon this species' rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment" pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines. Thus, this owl species must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency. When these owls occur on project sites, typically, mitigation requirements are mandated in the conditions of project approval from the CEQA lead agency.

Burrowing owl habitat is usually found in annual and perennial grasslands, characterized by low-growing vegetation. Often, the burrowing owl utilizes rodent burrows, typically California ground squirrel (*Otospermophilus beecheyi*) burrows, for nesting and cover. They may also on occasion dig their own burrows or use man-made objects such as concrete culverts or rip-rap piles for cover. They exhibit high site fidelity, reusing burrows year after year. Occupancy of suitable burrowing owl habitat can be verified at a site by observation of these owls during the spring and summer months or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement (white wash) at or near a burrow. Burrowing owls typically are not observed in grasslands with tall vegetation or wooded areas because the vegetation obscures their ability to detect avian and terrestrial predators. Since burrowing owls spend the majority of their time sitting at the entrances of their burrows, grazed grasslands seem to be their preferred habitat because it allows them to view the world at 360 degrees without obstructions.

The closest CNDDDB record was documented 2.6 miles southeast of the project site in an area that has since been developed (CNDDDB Occurrence No. 109). The project site was severely disturbed during the eucalyptus removal in 2012; thus, ground squirrel burrows are few and of recent origin. The mobility of the western burrowing owl enables the species to colonize the recent burrows. M&A did not observe western burrowing owls or any indirect evidence that burrowing owls are using or residing on the project site during any of the site surveys.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

Regardless, the project site provides marginal nesting habitat for the western burrowing owl. *In order to confirm or negate the presence of western burrowing owls on site, surveys must be conducted prior to the commencement of earth-moving or construction. Accordingly, impacts to western burrowing owl are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

#### 6.3.4 NORTHERN HARRIER

The northern harrier (*Circus cyaneus*) is a California species of special concern. This raptor is protected under California Fish and Game Code §3503.5 that protects nesting raptors and their eggs/young and is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland or marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators such as coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), and various snake species. Ground nesting birds in general are also subject to disturbance by agricultural practices. Northern harriers may forage over the project site and may nest in the open ruderal habitats onsite that provide suitable nesting habitat for this species. Hence, the proposed project could result in impacts to nesting northern harriers.

The closest CNDDDB record was documented 2.8 miles west of the project site (CNDDDB Occurrence No. 29). The project site was severely disturbed during the eucalyptus removal in 2012. Regardless, the project site provides marginal nesting habitat for the northern harrier. *In order to confirm or negate the presence of northern harriers on site, surveys must be conducted prior to the commencement of earth-moving or construction. Accordingly, impacts to northern harrier are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

## 7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS

This section provides a discussion of those laws and regulations that are in place to protect native wildlife, fish, and plants. Under each law we discuss their pertinence to the proposed development.

### 7.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) forms the basis for the federal protection of threatened or endangered plants, insects, fish and wildlife. FESA contains four main elements, they are as follows:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit through approval of a Habitat Conservation Plan.

In the case of salt water fish and other marine organisms, the requirements of FESA are enforced by the National Marine Fisheries Service (NMFS). The USFWS enforces all other cases. Below, Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the proposed project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under Federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (*Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity*) ruled that the USFWS must show that a threatened or endangered species is present on a project site and that it would be taken by the project activities. According to this ruling, the USFWS can no longer require mitigation based on the probability that the species could use the site. Rather they must show that it is actually present.

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species is necessary to complete an otherwise lawful activity, this triggers the need to obtain an incidental take permit either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency), or requires preparation of a Habitat Conservation Plan (HCP) pursuant to Section 10 of FESA (for state and local agencies, or individuals, and projects without a federal "nexus").

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean: (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

geographical area occupied by a listed species that are determined essential for the conservation of the species.

The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing discretionary projects. Section 7 is by and between the NMFS and/or the USFWS and the federal agency contemplating a discretionary approval (that is, the “federal nexus agency,” for example, the Corps or the Federal Highway Administration). Private parties, cities, counties, etc. (i.e., applicants) may participate in the Section 7 consultation *at the discretion of the federal agencies conducting the Section 7 consultation*. The Section 7 consultation process is triggered by a determination of the “action agency” – that is, the federal agency that is carrying out, funding, or approving a project - that the project “may affect” a listed species or critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation between the nexus agency and the USFWS/NMFS is required. As part of the formal consultation, the USFWS/NMFS may resolve any issues informally with the nexus agency or may prepare a formal Biological Opinion assessing whether the proposed action would be likely to result in “jeopardy” to a listed species or if it could adversely modify designated critical habitat. If the USFWS/NMFS prepares a Biological Opinion, it will contain either a “jeopardy” or “non-jeopardy” decision. If the USFWS/NMFS concludes that a proposed project would result in adverse modification of critical habitat or would jeopardize the continued existence of a federal listed species (that is, it will issue a jeopardy decision), the nexus federal agency would be most unlikely to authorize its discretionary permit. If the USFWS/NMFS prepares a “non-jeopardy” Biological Opinion, the nexus federal agency may authorize the discretionary permit making all conditions of the Biological Opinion conditions of its discretionary permit. A non-jeopardy Biological Opinion constitutes an “incidental take” permit that allows applicants to “take” federally-listed species while otherwise carrying out legally sanctioned projects.

For non-federal entities, for example private parties, cities, counties that are considering a discretionary permit, Section 10 provides the mechanism for obtaining take authorization. Under Section 10 of FESA, for the applicant to obtain an "incidental take permit," the applicant is required to submit a "conservation plan" to the USFWS or NMFS that specifies the impacts that are likely to result to federally-listed species, and the measures the applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by the USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an incidental take permit can be issued.

#### 7.1.1 RESPONSIBLE AGENCY

FESA gives regulatory authority to the USFWS for federally-listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally-listed marine mammals and anadromous fish.

#### 7.1.2 APPLICABILITY TO THE PROPOSED PROJECT

The closest known California red-legged frog occurrence is 1.4 miles east of the project site (CNDDDB Occurrence No. 896). The California red-legged frog was found in a dry cement tank

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

adjacent to a large quarry pond that supported bullfrogs. State Route 29 is located between the closest California red-legged frog record and the project site and constitutes an effective geographic barrier to overland California red-legged frog movements to/from the known record location and other extant California red-legged frog populations to the project site. There is no hydrologic connectivity along any undeveloped migration route between the known records for this species and the project site. Finally, the project site does not provide suitable habitat for the California red-legged frog. Based on all the available information, it can be concluded that the project site does not provide suitable habitat for the California red-legged frog. Owing to the excessively disturbed conditions on the project site due to prior grading and tree removal activities, this species is not expected to occur on the project site. Therefore, the proposed project will not impact the California red-legged frog.

No other federally listed species are expected to occur on the project site. The project site does not provide fisheries habitat as it consists entirely of upland communities. *Therefore, it can be stated with confidence that the proposed project would not impact federally listed plant, animal, or fish species.*

## **7.2 Federal Migratory Bird Treaty Act**

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to “take” (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

### **7.2.1 APPLICABILITY TO THE PROPOSED PROJECT**

Western burrowing owl, northern harrier, Swainson’s hawk, red-shouldered hawk, and red-tailed hawk (*Buteo jamaicensis*), among other raptors (birds of prey) could nest in the eucalyptus grove in the immediate vicinity of the project site. These raptors would be protected by the Migratory Bird Treaty Act. Also, the common songbirds that could forage on the site would be protected pursuant to this Act. As long as there is no direct mortality of species protected pursuant to this Act caused by development of the site, there should be no constraints to development of the site. To comply with the Migratory Bird Treaty Act, all active nest sites would have to be avoided while such birds were nesting. Upon completion of nesting, the project could commence as otherwise planned. Please review specific requirements for avoidance of nest sites for potentially occurring species in the Impacts and Mitigations section below.

## **7.3 California Endangered Species Act**

### **7.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT**

In 1984, the state legislated the California Endangered Species Act (CESA) (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for "harm" (see discussion of FESA, above),

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If CDFW determines that a proposed project could impact a state-listed threatened or endangered species, CDFW will provide recommendations for "reasonable and prudent" project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project's benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no "irreversible or irretrievable" commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be impacts to threatened or endangered species, the lead agency typically requires project applicants to demonstrate that they have acquired "incidental take" permits from CDFW and/or USFWS (if it is a Federal listed species) prior to allowing/permitting impacts to such species.

If proposed projects would result in impacts to a state-listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a Federal incidental take permit for Federal listed species). CDFW will issue an incidental take permit only if:

- 1) The authorized take is incidental to an otherwise lawful activity;
- 2) the impacts of the authorized take are minimized and fully mitigated;
- 3) measures required to minimize and fully mitigate the impacts of the authorized take:
  - a) are roughly proportional in extent to the impact of the taking on the species;
  - b) maintain the project applicant's objectives to the greatest extent possible; and,
  - c) capable of successful implementation; and,
- 4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing a habitat conservation plan (HCP) as part of the federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should involve CDFW staff in development of the HCP. If a final Biological Opinion (federal action) has been issued for the project pursuant to Section 7 of the federal Endangered Species Act, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of "take." These species are listed in several statutes that identify "fully protected" species and "specified birds." See Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a "fully protected" species or a "specified bird" occurs, an applicant must design the project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a "non-jeopardy" federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal incidental take permit) pursuant to the FESA, to submit the federal opinion or permit to CDFW for a determination as to whether the federal document is "consistent" with CESA. If after 30 days CDFW determines that the federal incidental take permit is consistent

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

with state law, and that all state-listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the project. However, if CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are state-listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a state CESA permit under Section 2081(b). Section 2081(b) is of no use if an affected species is state-listed, but not federally-listed.

State and federal incidental take permits are issued on a discretionary basis, and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the incidental take permit(s). The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

#### 7.3.2 APPLICABILITY TO THE PROPOSED PROJECT

No state-listed plant species would likely occur on the project site due to an absence of habitat. The project site does not support any trees and does not provide nesting habitat for the Swainson's hawk. Suitable nesting habitat for this hawk exists in the eucalyptus trees on the adjacent properties; thus, preconstruction nesting surveys will be necessary to ensure that earth-work or construction does not occur while this raptor is nesting nearby or that if it does, it does not disturb the nesting birds. If the proposed project follows the proposed mitigation measures as detailed in the Impacts and Mitigation section below, *an Incidental Take Permit (ITP) from the CDFW should not be necessary for this project.*

#### 7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513

California Fish and Game Code §3503, 3503.5, 3511, and 3513 prohibit the “take, possession, or destruction of birds, their nests or eggs.” Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered “take.” Such a take would also violate federal law protecting migratory birds (Migratory Bird Treaty Act).

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, “fully protected” birds, such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). “Fully protected” birds may not be taken or possessed (that is, kept in captivity) at any time.

#### 7.4.1 APPLICABILITY TO THE PROPOSED PROJECT

Raptors that could be affected by the project include western burrowing owl, northern harrier, Swainson's hawk, red-shouldered hawk and red-tailed hawk. Preconstruction surveys would have to be conducted for these species to ensure that there is no direct take of these birds including their eggs, or young. Any active nests that were found during preconstruction surveys

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

would have to be avoided by the project. Suitable non-disturbance buffers would have to be established around nest sites until the nesting cycle is complete. More specifics on the size of buffers are provided below in the Impacts and Mitigations section.

## 7.5 City of American Canyon General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site. Only those applicable to the proposed project are discussed herein:

### 7.5.1 GOAL 8, OBJECTIVE 8.1 AND POLICIES 8.1.1 AND 8.1.4

- **Goal 8:** Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.
- **Objective 8.1:** Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.
- **Policy 8.1.1:** Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.
- **Policy 8.1.4:** Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.

### 7.5.2 APPLICABILITY TO THE PROPOSED PROJECT

Consistent with General Plan Policies 8.1.1 and 8.1.4, this report provides a detailed assessment of the biological resources present on the project site.

### 7.5.3 OBJECTIVE 8.2 AND POLICY 8.2.1

- **Objective 8.2:** Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savannah, and wetland and riparian habitats, with new development in the City.
- **Policy 8.2.1:** Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savannah, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified biologist to determine if sensitive habitats exist on-site. In instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

#### 7.5.4 APPLICABILITY TO THE PROPOSED PROJECT

Consistent with General Plan Policy 8.2.1, the project site has been evaluated for the presence of sensitive biological resources. This report represents a Biological Assessment Report documenting findings from background research, and presents the current habitats and species present on the project site.

#### 7.5.5 OBJECTIVE 8.3 AND POLICY 8.3.1

- **Objective 8.3:** Protect natural drainages and riparian corridors within the American Canyon Planning Area.
- **Policy 8.3.1:** Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:
  - a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.

#### 7.5.6 APPLICABILITY TO THE PROPOSED PROJECT

No wetland, natural drainages or riparian habitats are proposed to be impacted, as there are none present on the 10-acre project site.

#### 7.5.7 POLICY 8.3.1 B

- **Policy 8.3.1 b:** Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g" (below).

#### 7.5.8 APPLICABILITY TO THE PROPOSED PROJECT

Proposed development on the project site does not impact watercourses, riparian habitat, vernal pools or wetlands.

#### 7.5.9 POLICY 8.3.1 E

- **Policy 8.3.1 e:** Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages or corridors from built environment.

#### 7.5.10 APPLICABILITY TO THE PROPOSED PROJECT

Previous disturbance on the project site prohibits presence of land linkages, corridors, or habitat areas. Similarly, because creation of a mitigation site is not necessary for this site, there will be no habitat area or otherwise natural space in need of buffering.

#### 7.5.11 POLICY 8.3.1 F

- **Policy 8.3.1 f:** Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

#### 7.5.12 APPLICABILITY TO THE PROPOSED PROJECT

Consistent with Policy 8.3.1.f, and Policy 8.3.1.g roads and utilities have been designed to avoid conflicts with biological resources on the project site.

#### 7.5.13 POLICY 8.3.1 G

- **Policy 8.3.1 g:** Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.

#### 7.5.14 POLICIES 8.3.5 AND 8.3.6

- **Policy 8.3.5:** Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.
- **Policy 8.3.6:** Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

#### 7.5.15 APPLICABILITY TO THE PROPOSED PROJECT

There are no drainages on the project site or significant biological habitats onsite; hence, these policies do not apply to the proposed project.

## 8. CITY OF AMERICAN CANYON –ORDINANCES

### 8.1 Trees (Ord. 18.40.110)

A. Existing trees shall be preserved on the site unless otherwise approved by the city council as a part of the site development plans.

B. Unless specifically approved by the city council, any tree removed shall be replaced on the site. Replacement trees shall be a minimum size of a twenty-four-inch box of the same species unless specifically approved by the city council. (Ord. 98-10 § 1 (part), 1998).

#### 8.1.1 APPLICABILITY TO THE PROPOSED PROJECT

The project site does not support any trees.

## 9. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE

This section presents an overview of the criteria used by the U.S. Army Corps of Engineers, the California Regional Water Quality Control Board, the State Water Resources Control Board, and CDFW to determine those areas within a project area that would be subject to their regulation.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

## 9.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting

### 9.1.1 SECTION 404 OF THE CLEAN WATER ACT

Congress enacted the Clean Water Act “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” (33 U.S.C. §1251(a)). Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or fill materials into any water of the United States.

In the Federal Register "waters of the United States" are defined as, “...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce...” (33 CFR Section 328.3).

Limits of Corps’ jurisdiction:

(a) Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)

(b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:

- (1) Extends to the mean high tide line, or
- (2) When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.

(c) Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:

- (1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
- (2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
- (3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the ordinary high water mark (OHWM) or the upward extent of any adjacent wetland. The OHWM on a non-tidal water is:

- the "line on 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 soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

Wetlands are defined as: "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

#### 9.1.1.1 Significant Nexus of Tributaries

On December 2, 2008, the Corps and the Environmental Protection Agency (EPA) issued joint guidance on implementing the U.S. Supreme Court decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (herein referred to simply as "Rapanos") which address the jurisdiction over waters of the United States under the Clean Water Act. In this joint guidance these agencies provide guidance on where they will assert jurisdiction over waters of the U.S.

The EPA and Corps will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (for example, typically three months).
- Wetlands that directly abut such tributaries.

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and
- Significant nexus includes consideration of hydrologic and ecologic factors.

#### 9.1.1.2 Isolated Areas Excluded from Section 404 Jurisdiction

In addition to areas that may be exempt from Section 404 jurisdiction, some isolated wetlands and waters may also be considered outside of Corps jurisdiction as a result of the Supreme Court's decision in *Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers* (531 U.S. 159 [2001]). Isolated wetlands and waters are those areas

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

that do not have a surface or groundwater connection to, and are not adjacent to a navigable “Waters of the U.S.,” and do not otherwise exhibit an interstate commerce connection.

### 9.1.1.3 Permitting Corps Jurisdictional Areas

To remain in compliance with Section 404 of the Clean Water Act, project proponents and property owners (applicants) are required to be permitted by the Corps prior to discharging or otherwise impacting waters of the United States. In many cases, the Corps must visit a proposed project area (to conduct a “jurisdictional determination”) to confirm the extent of area falling under their jurisdiction prior to authorizing any permit for that project area. Typically, at the time the jurisdictional determination is conducted, applicants (or their representative) will discuss the appropriate permit application that would be filed with the Corps for permitting the proposed impact(s) to “waters of the United States.”

Pursuant to Section 404 of the Clean Water Act, the Corps normally provides two alternatives for permitting impacts to the type of “waters of the United States” found in the project area. The first alternative would be to use Nationwide Permit(s) (NWP). The second alternative is to apply to the Corps for an Individual Permit (33 CFR Section 235.5(2)(b)). The application process for Individual Permits is extensive and includes public interest review procedures (i.e., public notice and receipt of public comments) and must contain an “alternatives analysis” that is prepared pursuant to Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). The alternatives analysis is also typically reviewed by the federal EPA and thus brings another resource agency into the permitting framework. Both the Corps and EPA take the initial viewpoint that there are practical alternatives to the proposed project if there would be impacts to waters of the U.S., and the proposed permitted action is not a water dependent project (e.g. a pier or a dredging project). Alternative analyses therefore must provide convincing reasons that the proposed permitted impacts are unavoidable. Individual Permits may be available for use in the event that discharges into regulated waters fail to meet conditions of NWP(s).

NWPs are a type of general permit administered by the Corps and issued on a nationwide basis that authorize minor activities that affect Corps regulated waters. Under NWP, if certain conditions are met, the specified activities can take place without the need for an individual or regional permit from the Corps (33 CFR, Section 235.5[c][2]). In order to use NWP(s), a project must meet 27 general nationwide permit conditions, and all specific conditions pertaining to the NWP being used (as presented at 33 CFR Section 330, Appendices A and C). It is also important to note that pursuant to 33 CFR Section 330.4(e), there may be special regional conditions or modifications to NWPs that could have relevance to individual proposed projects. Finally, pursuant to 33 CFR Section 330.6(a), Nationwide permittees may, and in some cases must, request from the Corps confirmation that an activity complies with the terms and conditions of the NWP intended for use (i.e., must receive “verification” from the Corps).

Prior to finalizing design plans, the applicant needs to be aware that the Corps maintains a policy of “no net loss” of wetlands (waters of the United States) from project area development. Therefore, it is incumbent upon applicants that propose to impact Corps regulated areas to submit a mitigation plan that demonstrates that impacted regulated areas would be recreated (i.e., impacts would be mitigated). Typically, the Corps requires mitigation to be “in-kind” (i.e., if a

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

stream channel would be filled, mitigation would include replacing it with a new stream channel), and at a minimum of a 1:1 replacement ratio (i.e., one acre or fraction thereof recreated for each acre or fraction thereof lost). Often a 2:1 replacement ratio is required. Usually the 2:1 ratio is met by recreation or enhancement of an equivalent amount of wetland as is impacted, in addition to a requirement to preserve an equivalent amount of wetland as is impacted by the project. In some cases, the Corps allows “out-of-kind” mitigation if the compensation site has greater value than the impacted site. For example, if project designs call for filling an intermittent drainage, mitigation should include recreating the same approximate jurisdictional area (same drainage widths) at an offsite location or on a set-aside portion of the project area. Finally, there are many Corps approved wetland mitigation banks where wetland mitigation credits can be purchased by applicants to meet mitigation compensation requirements. Mitigation banks have defined service areas and the Corps may only allow their use when a project would have minimal impacts to wetlands.

#### 9.1.2 APPLICABILITY TO THE PROPOSED PROJECT

M&A originally prepared a preliminary wetland delineation map of the 35 acre parcel in 2006; however, this map was never submitted to the Corps. In 2011, a formal wetland delineation was conducted on July 14th and July 20th by M&A biologists Ms. Hope Kingma and Mr. Tim O’Donnell. The wetland delineation report and map were submitted to the Corps on August 22, 2011, requesting confirmation of the extent of Corps jurisdiction at the American Canyon Flat Lands site. In a letter dated January 31, 2012 the extent of Corps jurisdiction was confirmed, based on a field investigation on September 21, 2011. That jurisdictional determination expired five (5) years from the date of that letter.

M&A biologists Ms. Hope Kingma and Mr. Devin Jokerst conducted another wetland delineation of the entire 35.85-acre parcel (known as Lot 3), which includes this project site, on November 16, 2016 to re-verify the extent of jurisdictional areas on the site. M&A used the Corps’ 1987 *Wetlands Delineation Manual* in conjunction with the *Regional Supplement for the Arid West Region*. The jurisdictional determination request and the Draft Aquatic Resources Delineation Map (Sheet 2) were submitted to the Corps in December 2016. Mr. Bryan Matsumoto of the Corps conducted a site verification visit on May 18, 2017. On May 16, 2018 the Corps issued the jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the 35.43-acre parcel. The confirmed Jurisdictional Delineation Map (Sheet 2) and letter are attached. None of the jurisdictional features on that map occur on the 10-acre project site that is the subject of this report. *As such there will be no impacts to the waters of the U.S. for this project.*

## 9.2 State Water Resources Control Board (SWRCB) / California Regional Water Quality Control Board (RWQCB)

### 9.2.1 SECTION 401 OF THE CLEAN WATER ACT

The SWRCB and RWQCB regulate activities in "waters of the State" (which includes wetlands) through Section 401 of the Clean Water Act. While the Corps administers a permitting program that authorizes impacts to waters of the United States, including wetlands and other waters, any Corps permit authorized for a proposed project would be inoperative unless it is an NWP that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

certification of water quality. Certification of NWP requires a finding by the SWRCB that the activities permitted by the NWP will not violate water quality standards individually or cumulatively over the term of the permit (the term is typically for five years). Certification must be consistent with the requirements of the federal Clean Water Act, the California Environmental Quality Act, the California Endangered Species Act, and the SWRCB's mandate to protect beneficial uses of waters of the State. Any denied (i.e., not certified) NWPs, and all Individual Corps permits, would require a project specific RWQCB certification of water quality.

#### 9.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The Corps' Confirmed Reverification Aquatic Resources Delineation Map dated May 22, 2017 is provided as Sheet 2. The proposed project will not impact any waters of the State. *Therefore Section 401 of the Clean Water Act is not necessary for this project.*

### 9.3 California Department of Fish and Wildlife Protections

#### 9.3.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE

Pursuant to Section 1602 of the California Fish and Game Code: "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

- (1) CDFW receives written notification regarding the activity in the manner prescribed by CDFW. The notification shall include, but is not limited to, all of the following:
  - (A) A detailed description of the project's location and a map.
  - (B) The name, if any, of the river, stream, or lake affected.
  - (C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
  - (D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.
  - (E) A copy of any other applicable local, state, or federal permit or agreement already issued.
  - (F) Any other information required by CDFW" (Fish & Game Code 2014).

Please see Section 1602 of the current California Fish and Game Code for further details.

Please also note that while not stated in the regulations above, CDFW typically considers its jurisdiction to include riparian vegetation (that is, the trees and bushes growing along the stream). Thus, any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, including its riparian vegetation, would require entering into a Streambed Alteration Agreement (SBAA) with CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, CDFW typically reviews an analysis of the expected biological impacts, any proposed mitigation plans that would be implemented to offset biological impacts and engineering and erosion control plans.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### 9.3.2 APPLICABILITY TO THE PROPOSED PROJECT

There are no streams or drainages on the project site that would be regulated by CDFW. *Hence, an SBAA with CDFW would not be necessary for this project.*

## 10. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORM WATER MANAGEMENT

### 10.1 Construction General Permit

While federal Clean Water Act NPDES regulations allow two permitting options for construction related stormwater discharges (individual permits and General Permits), the State Water Resources Control Board (SWRCB) has elected to adopt only one statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except from those on Tribal Lands, in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (CalTrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than one acre of land or those sites less than one acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters.
2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively-defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the project's projected risk level.
3. Perform inspections of all BMPs.

This Construction General Permit is implemented and enforced by the nine California Regional Water Quality Control Boards (RWQCBs). It is also enforceable through citizens' suits and represents a dramatic shift in the State Water Board's approach to regulating new and redevelopment sites, imposing new affirmative duties and fixed standards on builders and developers.

#### Types of Construction Activity Covered by the Construction General Permit

- clearing,
- grading,
- disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of at least one acre or more of total land area.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

Construction activity that results in soil disturbances to a smaller area would still be subject to this General Permit if the construction activity is part of a larger common plan of development that encompasses greater than one acre of soil disturbance, or if there is significant water quality impairment resulting from the activity.

Construction activity does not include:

- routine maintenance to maintain original line and grade,
- hydraulic capacity, or original purpose of the facility,
- nor does it include emergency construction activities required to protect public health and safety.

The Construction General Permit includes several “post-construction” requirements. These requirements entail that site designs provide no net increase in overall site runoff and match pre-project hydrology by maintaining runoff volume and drainage concentrations. To achieve the required results where impervious surfaces such as roofs and paved surfaces are being increased, developers must implement non-structural off-setting BMPs, such as landform grading, site design BMPs, and distributed structural BMPs (bioretention cells, rain gardens, and rain cisterns). This “runoff reduction” approach is essentially a State Water Board-imposed regulatory requirement to implement Low Impact Development (“LID”) design features. Volume that cannot be addressed using non-structural BMPs must be captured in structural BMPs that are approved by the RWQCB.

Improving the quality of site runoff is necessary to improve water quality in impaired and threatened streams, rivers, and lakes (that is, water bodies on the EPA’s 303(d) list). The RWQCB prioritizes the water bodies on the 303(d) list according to potential impacts to beneficial uses. Beneficial uses can include a wide range of uses, such as nautical navigation; wildlife habitat; fish spawning and migration; commercial fishing, including shellfish harvesting; recreation, including swimming, surfing, fishing, boating, beachcombing, and more; water supply for domestic consumption or industrial processes; and groundwater recharge, among other uses. The State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these impaired water bodies. The TMDL is the quantity of a pollutant that can be safely assimilated by a water body without violating the applicable water quality standards.

Pursuant to the CWA, the RWQCB regulates construction discharges under the National Pollutant Discharge Elimination System (NPDES). The project sponsor of construction or other activities that disturb more than 1 acre of land must obtain coverage under NPDES Construction General Permit Order 2009-0009-DWQ, administered by the RWQCB<sup>1</sup>.

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<sup>1</sup> CGP Order 2009-0009-DWQ remains in effect, but has been amended by CGP Order 2009-0014-DWQ, effective February 14, 2011, and CGP Order 2009-0016-DWQ, effective July 17, 2012. The first amendment merely provided additional clarification to Order 2009-0009-DWQ, while Order 2009-0016-DWQ eliminated numeric effluent limits on pH and turbidity (except in the case of active treatment systems), in response to a legal challenge to the original order.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### 10.1.1 APPLICABILITY TO THE PROPOSED PROJECT

To obtain coverage under the SWRCB administered Construction General Permit, the applicant (typically through its civil engineer) must electronically file a number of permit-related compliance documents (Permit Registration Documents (PRDs), including a Notice of Intent (NOI), a risk assessment, site map, signed certification, Stormwater Pollution Prevention Plan (SWPPP), Notice of Termination (NOT), NAL exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). (QSDs are typically civil engineers, professional hydrologists, engineering geologists, or landscape architects.) Once filed, these documents become immediately available to the public for review and comment. At a minimum, the SWPPP shall identify Best Management Practices (BMPs) for implementation during project construction that are in accordance with the applicable guidance and procedures contained in the California Stormwater Quality Association's *California Stormwater Best Management Practices Handbook* (2015).

## 10.2 RWQCB Municipal Storm Water Permitting Programs

The federal Clean Water Act (CWA) was amended in 1987 to address urban stormwater runoff pollution of the nation's waters. In 1990, the U.S. Environmental Protection Agency (USEPA) promulgated rules establishing Phase 1 of the National Pollutant Discharge Elimination System (NPDES) stormwater program. The Phase 1 program for Municipal Separate Storm Sewer System (MS4s) requires operators that serve populations of 100,000 or greater to implement a stormwater management program to control polluted discharges from these MS4s. While Phase 1 of the municipal stormwater program has focused on large urban areas, Phase 2 of the municipal stormwater program was promulgated by the USEPA for smaller urban areas including non-traditional Small MS4s, which are governmental facilities such as military bases, public campuses, and prison and hospital complexes.

MS4 permits require the discharger (or dischargers that are permitted by the MS4 permittees) to develop and implement a Storm Water Management Plan/Program (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the Clean Water Act. The management programs specify what best management practices (BMPs) will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations. In general, medium and large municipalities are required to conduct chemical monitoring, though small municipalities are not.

### 10.2.1 NPDES C.3 REQUIREMENTS

The NPDES C.3 requirements went into effect for any project (public or private) that is "deemed complete" by the City or County (Lead Agency) on or after February 15, 2005, and which will result in the creation or replacement (other than normal maintenance) of at least 10,000 square feet of impervious surface area (roofs, streets, patios, parking lots, etc. Provision C.3 requires the onsite treatment of stormwater prior to its discharge into downstream receiving waters. Note that these requirements are in addition to the existing NPDES requirements for erosion and

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

sedimentation controls during project construction that are typically addressed through acquisition of coverage under the SWRCB administered Construction General Permit. The C.3 requirements are typically required to be implemented by MS4 permittees (and their constituencies).

Projects subject to Provision C3 must include the capture and onsite treatment of all stormwater from the site prior to its discharge, including rainwater falling on building rooftops. Project applicants are required to implement appropriate source control and site design measures and to design and implement stormwater treatment measures in order to reduce the discharge of stormwater pollutants to the *maximum extent practicable*. While the Clean Water Act does not define “maximum extent practicable,” the Stormwater Quality Management Plans required as a condition of the municipal NPDES permits identify control measures (known as Best Management Plans, or BMPs) and, where applicable, performance standards, to establish the level of effort required to satisfy the maximum extent practicable criterion. It is ultimately up to the professional judgment of the reviewing municipal staff in the individual jurisdictions to determine whether a project’s proposed stormwater controls will satisfy the maximum extent practicable criterion. However, there are numeric criteria used to ensure that treatment BMPs have been adequately sized to accommodate and treat a site’s stormwater. The C3 requirements are quite extensive, and their complete explanation is not provided here. However, the following are minimums that should be understood and adhered to:

- The applicant must provide a detailed and realistic site design *and impervious surface area calculations*. This site design *and calculations* will be used by the Lead Agency (County or City) to determine/*verify* the amount of impervious surface area that is being created or replaced. It should include all proposed buildings, roads, walkways, parking lots, landscape areas, etc., that are being created or redeveloped. If large (greater than 10,000 square feet) lots are being created an effort will need to be made to determine the total impervious surface area that could be created on that parcel. For example, if only a portion of the lot is shown as a “building envelope” then the lead agency will need to consider that a driveway will have to be constructed to access the envelope and that the envelope will then be developed as shown. If the C.3 thresholds are met (creation/redevelopment of 10,000 square feet of impervious surface area), a Stormwater Control Plan (SWCP) (if required by the Lead Agency, or whatever steps for compliance with Provision C3 are required locally) must accompany the application.
- If a SWCP is required by the Lead Agency for the project it must be stamped by a Licensed Civil Engineer, Architect, or Landscape Architect.

#### 10.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The Water Board issued county-wide municipal stormwater permits in the early 1990s to operators of MS4s. On November 19, 2015, the Water Board re-issued these county-wide municipal stormwater permits as one Municipal Regional Stormwater NPDES Permit to regulate stormwater discharges from municipalities and local agencies. Permittees in the San Francisco Bay area are included in a Municipal Regional Permit (MRP), issued to 76 cities, counties and

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

flood control districts in 2009 and revised in 2015. Each of the Permittee's must file an Annual Report that is comprised of three parts: regional, countywide, and individual. Some requirements of the MRP are being implemented by the Bay Area Stormwater Management Agencies Association (BASMAA) on behalf of all the MRP Permittees. Other elements are being implemented collaboratively by the Permittees through their respective countywide programs. As such, BASMAA and the countywide programs have submitted Annual Report elements on the regional and countywide collaborative tasks, respectively, on behalf of the MRP Permittees and the individual MRP Permittees have also submitted Annual Report elements on the Permit Provisions they have implemented individually.

It is the applicant's responsibility to ensure that the project civil engineer prepares all required Storm Water Planning documents for submittal to the City of American Canyon to comply with its MS4 permit requirements. In addition, if the project includes a requirement to obtain a Clean Water Act Section 401 permit from the RWQCB, the Storm Water Management Plan (or equivalent plan) must be submitted to the RWQCB with the application package submitted for acquisition of a Section 401 permit (aka "water quality certification").

The applicant is proposing to treat all stormwater falling on impervious surfaces in the detention/bioretention basin located on the western edge of the project site (see Sheet UP4). Once treated, stormwater would be conveyed to "level spreader outfalls" that will be installed along the western project site boundary. The level spreader outfalls consist of perforated pipe set on contour that will discharge flows uniformly across a gradual slope covered by riprap, which will mimic sheet flow conditions similar to current project site runoff (see Storm Drain Level Spreader Detail). Accordingly, the project will not violate any water quality standards.

## **11. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS**

A CEQA lead agency must determine if a proposed activity constitutes a project requiring further review pursuant to the CEQA. Pursuant to CEQA, a lead agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA lead agency. If a discretionary permit (i.e., conditional use permit) would be required for a project (e.g. an occupancy permit must be issued), the lead agency typically must determine if there could be significant environmental impacts. This is usually accomplished by an "Initial Study." If there could be significant environmental impacts, the lead agency must determine an appropriate level of environmental review prior to approving and/or otherwise permitting the impacts. In some cases, there are "Categorical Exemptions" that apply to the proposed activity; thus, the activity is exempt from CEQA. The Categorical Exemptions are provided in CEQA. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project. If the project is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the lead agency to prepare a "Negative Declaration." If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to the CEQA, then a "Mitigated Negative Declaration" is typically prepared by the lead agency. Finally, those projects that may have significant effects on the environment, or that have impacts that can't be mitigated to a level considered less than significant pursuant to the CEQA, typically must be reviewed via an Environmental Impact

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

Report (EIR). All CEQA review documents are subject to public circulation, and comment periods.

Section 15380 of CEQA defines “endangered” species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. “Rare” species are defined by CEQA as those who are in such low numbers that they could become endangered if their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will “substantially affect a rare or endangered species of animal or plant or the habitat of the species.” The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

This report has been prepared as a Biology section that is suitable for incorporation into a Mitigated Negative Declaration. This document addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA and can be incorporated by the CEQA lead agency (in this case City of American Canyon) into an initial study or higher levels of CEQA review including incorporation into the biology section of an Environmental Impact Report.

## **12. IMPACTS ANALYSIS**

Below the criteria used in assessing impacts to Biological Resources is presented.

### **12.1 Significance Criteria**

A significant impact is determined using CEQA and CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other Federal, State, and local agencies’ considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as “significant,” “potentially significant,” or “less than significant.” Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated “waters of the United States” and/or stream channels.

#### 12.1.1 THRESHOLDS OF SIGNIFICANCE

##### 12.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would:

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

- 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected “wetlands” as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### 12.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged or fill material into waters of the United States, which includes wetlands, as discussed in the bulleted item above, and also includes “other waters” (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the state. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

#### 12.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which CDFW typically considers including riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

### **13. IMPACT ASSESSMENT AND PROPOSED MITIGATION**

In this section we discuss potential impacts to sensitive biological resources, including special-status wildlife species. We follow each impact with a mitigation prescription that when

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

implemented would reduce impacts to the greatest extent possible. This impact analysis is based on the Preliminary Site Plan (Sheet A-1).

### **13.1 Impact BIO-1. Development of the Project Could Have a Potentially Significant Impact on Nesting Swainson's hawks (Potentially Significant)**

The Swainson's hawk is a state listed threatened species. While the Swainson's hawk has no special federal status, it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800).

No Swainson's hawk nests have been observed on the site or offsite in the vicinity of the project site during M&A's multiple project site surveys; however, the nesting population appears to be increasing throughout its nesting range in northern California and thus, it could conceivably nest in trees near the project site in the future.

If Swainson's hawks are found to be nesting adjacent to the project site, implementation of the proposed project could be viewed by CDFW as a project that could impact nesting Swainson's hawks. Nest site disturbance which results in: (1) nest abandonment; (2) loss of young; (3) reduced health and vigor of eggs and/or nestlings (resulting in reduced survival rates), may ultimately result in the take (killing) of nestling or fledgling Swainson's hawks incidental to otherwise lawful activities. The taking of Swainson's hawks in this manner can be viewed by CDFW as a violation of the Section 2080 of the Fish and Game Code. This interpretation of take has been judicially affirmed by the landmark appellate court decision pertaining to CESA (CDFG v. ACID, 8 CA App. 4, 41554) (CDFG 1994).

Typically, CDFW requires that any impact to a Swainson's hawk nest be permitted through a Fish and Game Section 2081 management authorization. If an active nest is found adjacent to the project site within an area of influence (which is generally considered to be within 1,000 feet of the project site) "to avoid potential violation of Fish and Game Code 2080 (i.e., killing of listed species), project-related disturbance at active Swainson's hawk nesting sites should be reduced or eliminated during critical phases of the nesting cycle (March 1- September 15 annually)" (CDFG 1994). If disturbance would occur, a Fish and Game Section 2081 management authorization would be required. As such, in the absence of survey results, it must be concluded that impacts to Swainson's hawk from the proposed project would be *potentially significant pursuant to CEQA*. This impact could be mitigated to a level considered less than significant pursuant to CEQA.

The closest known record for nesting Swainson's hawk is 2.6 miles north of the project site (CNDDDB Occurrence No. 2744). There are extensive foraging opportunities both around the closest nesting location and between this nesting location and the project site. Considering that the entire project site consisted of a eucalyptus grove until 2012, it did not historically provide potential foraging habitat. Also, as the project site is essentially surrounded by eucalyptus forest, it is not a foraging destination which would likely attract foraging Swainson's hawks. Furthermore, M&A has confirmed that the project site has a low rodent population, therefore development of the project site will not have a significant impact on Swainson's hawk foraging habitat. Therefore, no mitigation for the loss of foraging habitat is warranted for this project.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### **13.2 Mitigation Measure BIO-1. Mitigation for Potential Impacts to Nesting Swainson's Hawk**

Preconstruction surveys shall be conducted for a quarter-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to the project's initiation. The survey period timing and methodology shall be conducted in accordance with CDFW's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (CDFG 1994), which identifies different survey windows throughout the pre-nesting and nesting season (ranging from January 1 through July 30/post-fledging) that have different survey methodologies and requirements.

If Swainson's hawks are found to be nesting on the project site or within a ¼-mile of the project site, consultation with CDFW will be required. The size of the nest protection buffer will be determined during consultation with CDFW but at a minimum there will be a 300-foot non-disturbance buffer around the nest site.

Implementation of this mitigation measure would reduce potential impacts to nesting Swainson's hawk to a level considered less than significant pursuant to CEQA.

### **13.3 Impact BIO-2. Development of the Project Could Have a Potentially Significant Impact on Western Burrowing Owl (Potentially Significant)**

The western burrowing owl is a California Species of Special Concern. This raptor (that is, bird of prey) is also protected under the Migratory Bird Treaty Act (50 CFR 10.13) and its nest, eggs, and young are protected under California Fish and Game Code Sections 3503, 3503.5. While western burrowing owls have not been observed on the project site and their likelihood of presence on the project site is considered to be low, limited suitable nesting habitat occurs on the project site. Since the western burrowing owl is a mobile species that could move onto the project site prior to development, preconstruction surveys would be necessary to determine its presence. Thus, the project may result in impacts to the western burrowing owl; this would be a *potentially significant impact pursuant to CEQA*. This impact could be mitigated to a level considered less than significant pursuant to CEQA.

### **13.4 Mitigation Measure BIO-2. Mitigation for Potential Impacts to Western Burrowing Owl**

Based on the presence of this species in the project vicinity and the potential habitat found on the project site, a preconstruction survey for burrowing owls should be conducted 14 days prior or less to initiating ground disturbance. As burrowing owls may recolonize a site after only a few days, time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance to ensure absence. If no owls are found during these surveys, no further regard for the burrowing owl would be necessary.

- a. Burrowing owl surveys should be conducted by walking the entire project site. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be 7 meters to 20 meters and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

Poor weather may affect the surveyor's ability to detect burrowing owls thus, avoid conducting surveys when wind speed is greater than 20 kilometers per hour and there is precipitation or dense fog. To avoid impacts to owls from surveyors, owls and/or occupied burrows should be avoided by a minimum of 50 meters (approximately 160 ft.) wherever practical to avoid flushing occupied burrows. Disturbance to occupied burrows should be avoided during all seasons.

b. If burrowing owls are detected on the site, the following restricted activity dates and setback distances are recommended per CDFW's Staff Report (2012).

- From April 1 through October 15, low disturbance and medium disturbance activities should have a 200 meter buffer while high disturbance activities should have a 500 meter buffer from occupied nests.
- From October 16 through March 31, low disturbance activities should have a 50 meter buffer, medium disturbance activities should have a 100 meter buffer, and high disturbance activities should have a 500 meter buffer from occupied nests.
- No earth-moving activities or other disturbance should occur within the aforementioned buffer zones of occupied burrows. These buffer zones should be fenced as well. If burrowing owls were found in the project area, a qualified biologist would also need to delineate the extent of burrowing owl habitat on the site.

Implementation of these mitigation measures would reduce potential impacts to burrowing owls to a level considered less than significant pursuant to CEQA.

### **13.5 Impact BIO-3: Development of the Project Would Have a Potentially Significant Impact on Tree or Ground Nesting Raptors (Potentially Significant)**

Tree or ground nesting raptors that could be affected by the project include northern harrier, white-tailed kites, red-shouldered hawk and red-tailed hawk. Nesting raptors are protected by the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711 and 50 CFR 10.13). All nesting raptors, their eggs and young are protected pursuant to California Fish and Game Code §3503.5. Specific surveys for nesting raptors have not been conducted. In the absence of survey results indicating otherwise, it is conservatively assumed that implementation of the proposed project may impact nesting raptors which could result in nest abandonment and death of eggs or young. Therefore, impacts to nesting raptors are regarded as *potentially significant pursuant to CEQA*. This impact could be mitigated to a level considered less than significant pursuant to CEQA.

### **13.6 Mitigation Measure BIO-3: Mitigation for Potential Impacts to Tree or Ground Nesting Raptors**

To ensure that impacts to tree or ground nesting raptors are avoided or offset, the following mitigation measures will be implemented:

a. In order to avoid impacts to nesting raptors, a preconstruction nesting survey will be conducted by a qualified raptor biologist prior to commencing with earth-moving or construction work if this work would commence between February 1st and August 31st. The survey should be

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

conducted within the 30 day period prior to site disturbance. The raptor nesting surveys will include examination of all trees and ruderal habitat within 200 feet of the project site.

b. If nesting raptors are identified during the surveys, the dripline of the nest tree or ground-nesting site must be fenced with orange construction fencing (provided the nest site is on the project site), and a 200-foot radius around the nest tree or nest site must be staked with orange construction fencing. If the tree or nest site is located off the project site, then the buffer should be demarcated per above where the buffer occurs on the project site. The size of the buffer may be altered if a qualified raptor biologist conducts behavioral observations and determines the nesting raptors are well acclimated to disturbance. If this occurs, the raptor biologist should prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors. No construction or earth-moving activity should occur within the established buffer until it is determined by a qualified raptor biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by August 1st. This date may be earlier or later, and would have to be determined by a qualified raptor biologist. If a qualified biologist is not hired to watch the nesting raptors then the buffers should be maintained in place through the month of August and work within the buffer can commence on September 1st.

c. If the preconstruction nesting survey identifies a large stick or other type of raptor nest that appears inactive at the time of the survey, but there are territorial raptors evident in the nest site vicinity, a protection buffer (as described above) should be established around the potential nesting tree until the qualified raptor biologist determines that the nest is not being used. In the absence of conclusive observations indicating the nest site is not being used, the buffer should remain in place until a second follow-up nesting survey can be conducted to determine the status of the nest and eliminate the possibility that the nest is utilized by a late-spring nesting raptor (for example, red-tailed hawk). This second survey should be conducted even if construction has commenced. If during the follow-up late season nesting survey a nesting raptor is identified utilizing the nest, the protection buffer should remain until it is determined by a qualified raptor biologist that the young have fledged and have attained sufficient flight skills to avoid project construction zones. If the nest remains inactive, the protection buffer can be removed and construction and earth-moving activities can proceed unrestrained.

Implementation of these mitigation measures would reduce potential impacts to nesting raptors to a level considered less than significant pursuant to CEQA.

### **13.7 Impact BIO-4: Development of the Project Would Have a Potentially Significant Impact on Nesting Passerine Birds. (Potentially Significant)**

Nesting passerine birds (i.e., perching birds) are protected by the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711 and 50 CFR 10.13) and by California Fish and Game Code §3503 and §3503.5 which protects nesting birds, their eggs and young. These birds frequently change nesting locations from year to year and thus, past nesting histories are not necessarily indicative of future nesting activities. Accordingly, impacts to nesting passerine birds, their eggs, and/or young resulting from the proposed project are considered potentially significant. *This impact could be mitigated to a level considered less than significant pursuant to CEQA.*

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

### **13.8 Mitigation Measure BIO-4: Mitigation for Potential Impacts to Nesting Passerine Birds.**

To ensure that impacts to nesting passerine birds are avoided or offset, a nesting survey shall be conducted 15 days prior to commencing construction/ grading or tree removal activities if this work would commence between March 1 and September 1. If common passerine birds or special-status passerine birds are identified nesting on the project site, a non-disturbance buffer of 75 feet shall be established or as otherwise prescribed by a qualified ornithologist. The buffer shall be demarcated with orange construction fencing. Disturbance within the buffer shall be postponed until it is determined by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.

Typically, most passerine birds in the region of the project site are expected to complete nesting by August 1<sup>st</sup>. However, many species can complete nesting by the end of June or in early to mid-July. Regardless, nesting buffers shall be maintained until August 1<sup>st</sup> unless a qualified ornithologist determines that young have fledged and are independent of their nests at an earlier date. If buffers are removed prior to August 1<sup>st</sup>, the qualified biologist conducting the nesting surveys should prepare a report that provides details about the nesting outcome and the removal of buffers. This report shall be submitted to the City of American Canyon Planning Department prior to the time that nest protection buffers are removed if the date is before August 1<sup>st</sup>.

Implementation of this mitigation measure would reduce potential impacts nesting passerine birds to a level considered less than significant pursuant to CEQA.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

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Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

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Monk & Associates  
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Figure 1. SDG 217 Commerce Distribution Center  
Project Site Regional Map  
City of American Canyon, California

County: Napa  
Map Preparation Date: December 3, 2019



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(925) 947-4867

Figure 2. SDG 217 Commerce Distribution Center  
Project Site Location Map  
City of American Canyon, California

38.185626, -122.274079  
Section: 23, T4N R4W  
7.5-Minute Cuttings Wharf quadrangle  
HUC08 Watershed CA: San Pablo Bay  
Aerial Photograph Source: ESRI  
Map Preparation Date: December 3, 2019



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0 0.005 0.01 0.02 0.03 0.04 0.05 Miles

Figure 3. SDG 217 Commerce Project Site  
Aerial Photograph  
City of American Canyon, California

Aerial Photograph Source: ESRI  
Map Preparation Date: December 3, 2019

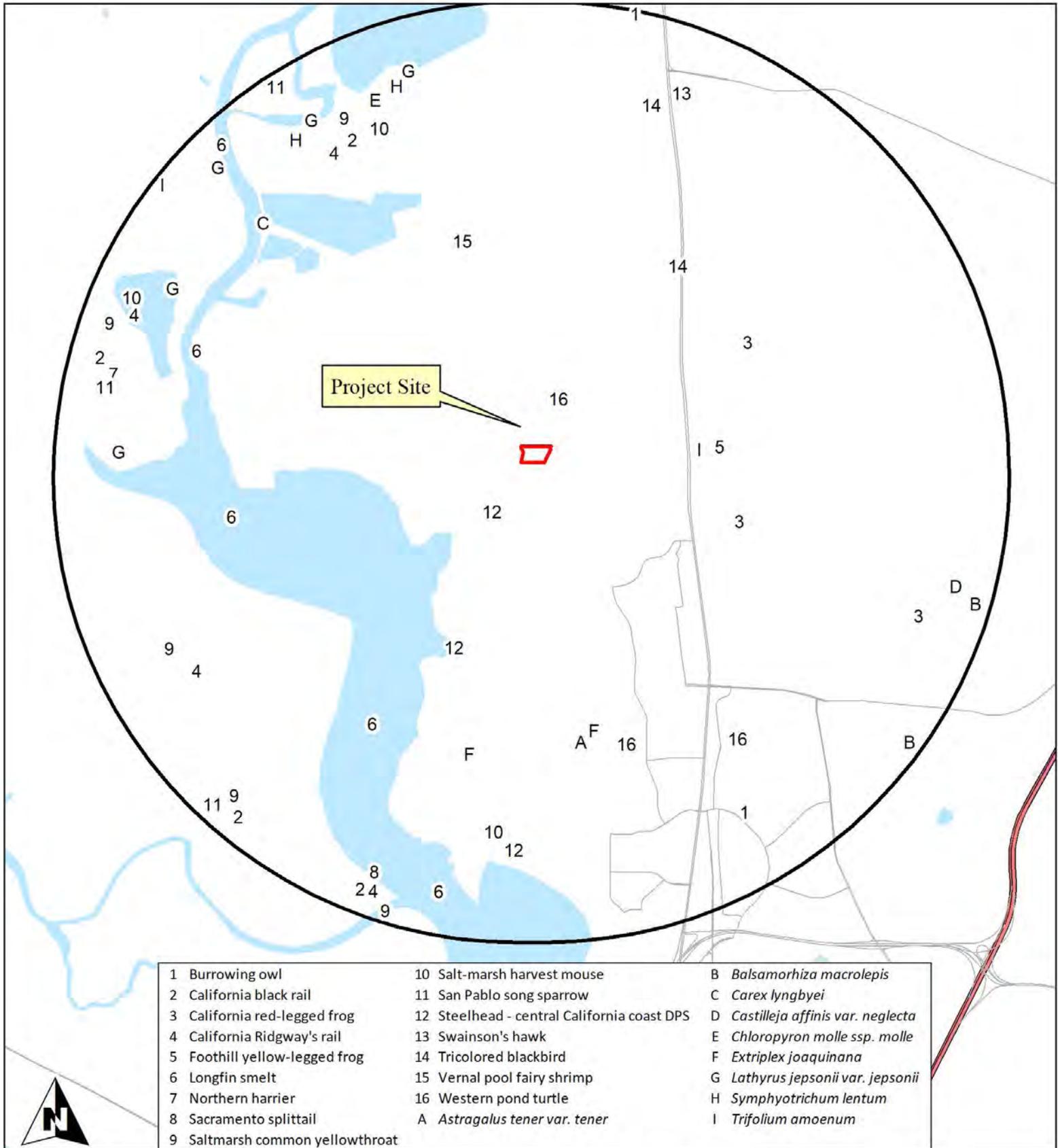


Figure 4. Known CNDDDB Records for Special-Status Species  
 Within 3 Miles of the  
 SDG 217 Commerce Project Site

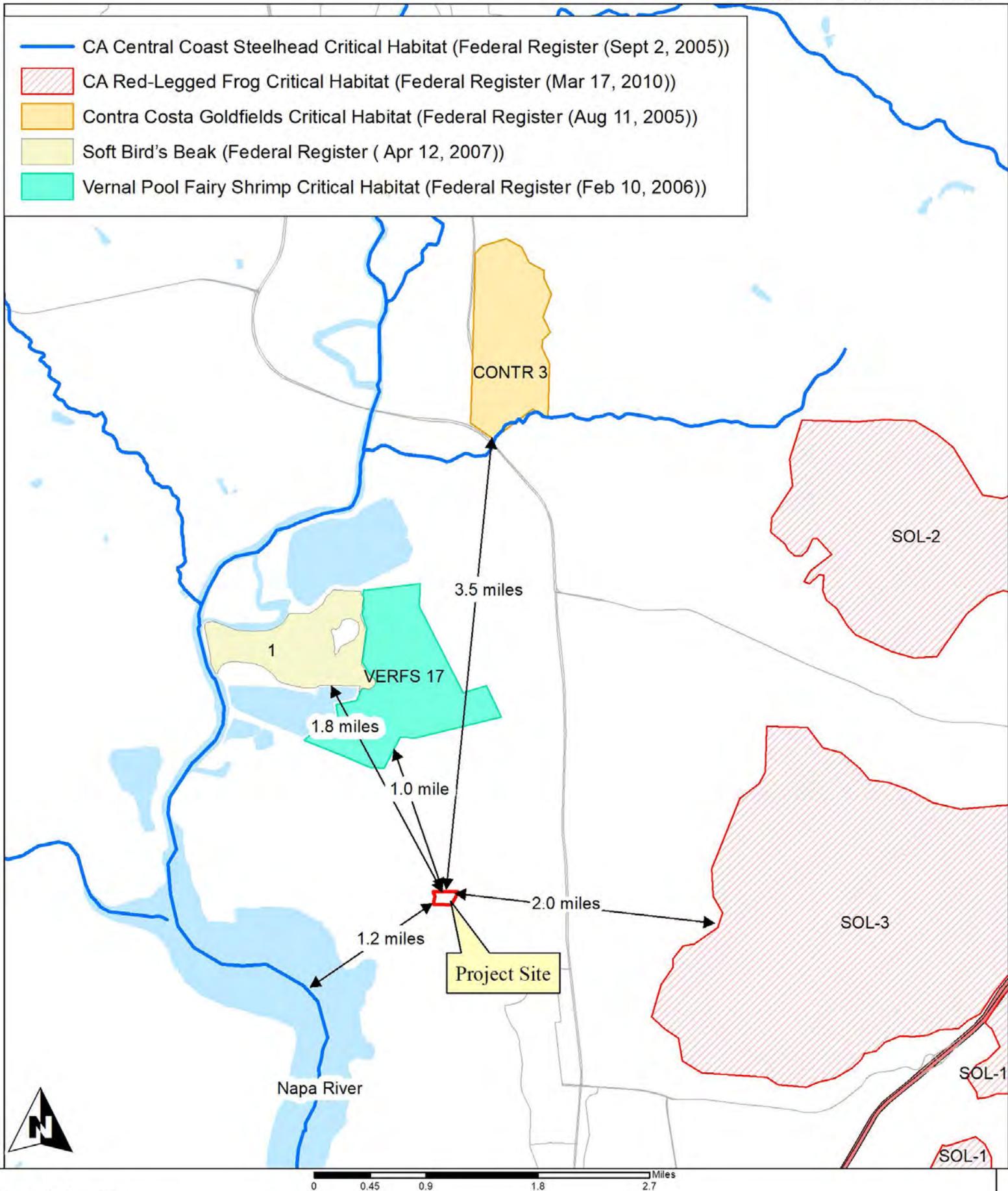


Figure 5. USFWS Critical Habitat  
in the Vicinity of the  
SDG 217 Commerce Distribution Center

Table 1

## Plant Species Observed on the SDG 217 Commerce Distribution Center Project Site

## Angiosperms - Dicots

**Apiaceae**

*Torilis sp.* sock destroyer

**Asteraceae**

*Baccharis pilularis subsp. pilularis* Baccharis

\**Carduus pycnocephalus subsp. pycnocephalus* Italian thistle

\**Cirsium vulgare* Bull thistle

\**Dittrichia graveolens* Stinkwort

\**Hypochaeris radicata* Rough cat's-ear

\**Sonchus asper subsp. asper* Prickly sow-thistle

**Brassicaceae**

\**Hirschfeldia incana* Short-podded mustard

\**Sinapis alba* White mustard

**Caryophyllaceae**

\**Stellaria media* Common chickweed

**Convolvulaceae**

\**Convolvulus arvensis* Bindweed

**Fabaceae**

\**Medicago polymorpha* California burclover

\**Trifolium repens* White clover

\**Vicia sativa* Common vetch

**Geraniaceae**

\**Erodium cicutarium* Red-stem filaree

\**Geranium dissectum* Cut-leaf geranium

**Montiaceae**

*Claytonia perfoliata* Miner's lettuce

**Myrsinaceae**

\**Lysimachia arvensis* Scarlet pimpernel

**Orobanchaceae**

\**Parentucellia viscosa* Yellow glandweed

**Papaveraceae**

\**Fumaria parviflora* Fumaria

**Plantaginaceae**

\**Plantago lanceolata* English plantain

**Polygonaceae**

\**Rumex crispus* Curly dock

**Ranunculaceae**

\**Ranunculus muricatus* Spiny-fruit buttercup

**Rubiaceae**

*Galium aparine* Goose grass

\* Indicates a non-native species

**Table 1**

**Plant Species Observed on the SDG 217 Commerce Distribution Center Project Site**

**Angiosperms -Monocots**

**Iridaceae**

*Sisyrinchium californicum* Golden-eyed-grass

**Juncaceae**

*Juncus occidentalis* Slender rush

**Poaceae**

\**Avena barbata* Slender wild oat  
\**Bromus diandrus* Ripgut grass  
\**Bromus hordeaceus* Soft chess  
*Elymus triticoides* Creeping wildrye  
\**Festuca perennis* perennial ryegrass  
\**Hordeum murinum* Wall barley  
*Phalaris angusta* Canary timothy grass

\* Indicates a non-native species

**Table 2**  
**Wildlife Observed on the ICC SDG 217 Commerce Distribution Center Project Site**

<b>Amphibians</b>	
Sierran treefrog	<i>Pseudacris sierra</i>
<b>Reptiles</b>	
Western fence lizard	<i>Sceloporus occidentalis</i>
<b>Birds</b>	
Northern flicker	<i>Colaptes auratus</i>
Great blue heron	<i>Ardea herodias</i>
Turkey vulture	<i>Cathartes aura</i>
Canada goose	<i>Branta canadensis</i>
Osprey	<i>Pandion haliaetus</i>
White-tailed kite	<i>Elanus leucurus</i>
Red-shouldered hawk	<i>Buteo lineatus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
American kestrel	<i>Falco sparverius</i>
Ring-necked pheasant	<i>Phasianus colchicus</i>
Wild turkey	<i>Meleagris gallopavo</i>
California quail	<i>Callipepla californica</i>
Virginia rail	<i>Rallus limicola</i>
Eurasian collared-dove	<i>Streptopelia decaocto</i>
Mourning dove	<i>Zenaida macroura</i>
Barn owl	<i>Tyto alba</i>
Anna's hummingbird	<i>Calypte anna</i>
Belted kingfisher	<i>Megaceryle alcyon</i>
Nuttall's woodpecker	<i>Picoides nuttallii</i>
Black phoebe	<i>Sayornis nigricans</i>
Say's phoebe	<i>Sayornis saya</i>
California scrub jay	<i>Aphelocoma californica</i>
American crow	<i>Corvus brachyrhynchos</i>
Common raven	<i>Corvus corax</i>
Tree swallow	<i>Tachycineta bicolor</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>
Barn swallow	<i>Hirundo rustica</i>
Chestnut-backed chickadee	<i>Poecile rufescens</i>
Bushtit	<i>Psaltriparus minimus</i>
Brown creeper	<i>Certhia americana</i>
Bewick's wren	<i>Thryomanes bewickii</i>
Marsh wren	<i>Cistothorus palustris</i>
Ruby-crowned kinglet	<i>Regulus calendula</i>
Western bluebird	<i>Sialia mexicana</i>
American robin	<i>Turdus migratorius</i>
Wrentit	<i>Chamaea fasciata</i>
Northern mockingbird	<i>Mimus polyglottos</i>
European starling	<i>Sturnus vulgaris</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
Spotted towhee	<i>Pipilo maculatus</i>

**Table 2****Wildlife Observed on the ICC SDG 217 Commerce Distribution Center Project Site**


---

California towhee	<i>Pipilo crissalis</i>
Savannah sparrow	<i>Passerculus sandwichensis</i>
Song sparrow	<i>Melospiza melodia</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed cowbird	<i>Molothrus ater</i>
Bullock's oriole	<i>Icterus bullockii</i>
House finch	<i>Haemorhous mexicanus</i>
Lesser goldfinch	<i>Spinus psaltria</i>
House sparrow	<i>Passer domesticus</i>

---

**Mammals**


---

Western gray squirrel	<i>Sciurus griseus</i>
Black-tailed jackrabbit	<i>Lepus californicus</i>
California ground squirrel	<i>Otospermophilus beecheyi</i>
Columbian black-tailed deer	<i>Odocoileus hemionus ssp. columbianus</i>
Coyote	<i>Canis latrans</i>
Raccoon	<i>Procyon lotor</i>
Feral cat	<i>Felis catus</i>

Table 3

## Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<b>Asteraceae</b>					
<i>Balsamorhiza macrolepis</i> Big-scale balsam-root	Fed: - State: - CNPS: Rank 1B.2	March-June	Cismontane woodland; chaparral; valley and foothill grassland; [sometimes serpentine]. 90 - 1555 meters	Closest record is from 2011 and is 3.0 miles east of the project site (Occurrence No. 7).	None. The project site is highly disturbed. No suitable habitat on the project site.
<i>Symphotrichum lentum</i> Suisun Marsh aster	Fed: - State: - CNPS: Rank 1B.2	August-November	Marshes and swamps (brackish and fresh water)	Closest record is from 1993 and is 2.5 miles northwest of the project site (Occurrence No. 128).	None. The project site is highly disturbed. No suitable habitat on the project site.
<b>Chenopodiaceae</b>					
<i>Extriplex joaquinana</i> San Joaquin spearscale	Fed: - State: - CNPS: Rank 1B.2	April-October	Chenopod scrub; meadows; valley and foothill grassland; [alkaline].	Closest record is from and is 1.8 miles south of the project site (Occurrence No. 58).	None. The project site is highly disturbed. No suitable habitat on the project site.
<b>Cyperaceae</b>					
<i>Carex lyngbyei</i> Lyngbye's sedge	Fed: - State: - CNPS: Rank 2	May-August	Marshes or swamps (brackish or freshwater)	Closest record is from 2008 and is 2.3 miles northwest of the project site (Occurrence No. 28).	None. The project site is highly disturbed. No suitable habitat on the project site.
<b>Fabaceae</b>					
<i>Astragalus tener tener</i> Alkali milkvetch	Fed: - State: - CNPS: Rank 1B.2	March-June	Playas; mesic grasslands (adobe clay), vernal pools (alkaline).	Closest record is from 1993 and is 1.8 miles south of the project site (Occurrence No. 50).	None. The project site is highly disturbed. No suitable habitat on the project site.

Table 3

## Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<i>Lathyrus jepsonii jepsonii</i> Delta tule pea	Fed: - State: - CNPS: Rank 1B.2	May-September	Marshes and swamps (freshwater and brackish).	Closest record is from 1978 and is 2.6 miles northwest of the project site (Occurrence No. 13).	None. The project site is highly disturbed. No suitable habitat on the project site.
<i>Trifolium amoenum</i> Showy Indian clover	Fed: FE State: - CNPS: Rank 1B.1	April-June	Valley and foothill grassland (sometimes serpentinite)	Closest record is from 1952 and is 1.2 miles east of the project site (Occurrence No. 23).	None. The project site is highly disturbed. No suitable habitat on the project site.
<b>Orobanchaceae</b>					
<i>Castilleja affinis neglecta</i> Tiburon paintbrush	Fed: FE State: CT CNPS: Rank 1B.2	April-June	Valley and foothill grassland [serpentinite]	Closest record is from 2013 and is 3.0 miles east of the project site (Occurrence No. 5).	None. The project site is highly disturbed. No suitable habitat on the project site.
<i>Chloropyron molle molle</i> Soft bird's-beak	Fed: FE State: CR CNPS: Rank 1B.2	July-September	Marshes and swamps (coastal salt).	Closest record is from 2010 and is 2.3 miles north of the project site (Occurrence No. 3).	None. The project site is highly disturbed. No suitable habitat on the project site.

**Table 3**

**Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Family	Taxon	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Common Name						

**\*Status**

**Federal:**

- FE - Federal Endangered
- FT - Federal Threatened
- FPE - Federal Proposed Endangered
- FPT - Federal Proposed Threatened
- FC - Federal Candidate

**State:**

- CE - California Endangered
- CT - California Threatened
- CR - California Rare
- CC - California Candidate
- CSC - California Species of Special Concern

**CNPS Continued:**

**CNPS:**

- Rank 1A - Presumed extinct in California
- Rank 1B - Plants rare, threatened, or endangered in California and elsewhere
- Rank 1B.1 - Seriously endangered in California (over 80% occurrences threatened/ high degree and immediacy of threat)
- Rank 1B.2 - Fairly endangered in California (20-80% occurrences threatened)
- Rank 1B.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

- Rank 2 - Plants rare, threatened, or endangered in California, but more common elsewhere
- Rank 2A - Extirpated in California, common elsewhere
- Rank 2B.1 - Seriously endangered in California, but more common elsewhere
- Rank 2B.2 - Fairly endangered in California, but more common elsewhere
- Rank 2B.3 - Not very endangered in California, but more common elsewhere
- Rank 3 - Plants about which we need more information (Review List)
- Rank 3.1 - Plants about which we need more information (Review List)  
Seriously endangered in California
- Rank 3.2 - Plants about which we need more information (Review List)  
Fairly endangered in California
- Rank 4 - Plants of limited distribution - a watch list

**Table 4**  
**Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
<b>Invertebrates</b>				
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Fed: FT State: - Other:	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains. Inhabit static rain-filled/vernal pools, small, clear water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression	Closest record is from 2003 and is 1.5 miles north of the project site (Occurrence No. 232).	None. No suitable habitat on the project site.
<b>Fish</b>				
Steelhead - Central California Coast DPS <i>Oncorhynchus mykiss irideus</i>	Fed: FT State: - Other:	From Russian River south to Soquel Creek, and to Pajaro River. Also found in San Francisco & San Pablo Bay Basins. Spawn in clear, cool, well oxygenated streams greater than 18 cm deep.	Closest record is from 2000 and is 0.39 miles southwest of the project site (Occurrence No. 4).	None. No suitable habitat on the project site.
Longfin smelt <i>Spirinichus thaleichthys</i>	Fed: -- State: CT Other:	Endemic to the Sacramento-San Joaquin River system. Inhabits open waters in the Delta and Suisun Bay. After spawning, larvae are carried downstream to brackish nursery areas.	Closest record is from 2012 and is 1.2 miles west of the project site (Occurrence No. 26).	None. No suitable habitat on the project site.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	Fed: State: CSC Other:	Endemic to the lakes and rivers of the Central Valley; now confined to the delta, Suisun Bay, and associated marshes. Inhabits slow moving river sections and dead-end sloughs. Needs flooded vegetation for spawning.	Closest record is from 2001 and is 2.9 miles southwest of the project site (Occurrence No. 12).	None. No suitable habitat on the project site.
<b>Amphibians</b>				
California red-legged frog <i>Rana draytonii</i>	Fed: FT State: CSC Other:	Occurs in lowlands and foothills in deeper pools and streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development.	Closest record is from 2006 and is 1.4 miles east of the project site (Occurrence No. 896).	None. No suitable habitat on the project site.

**Table 4**  
**Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Foothill yellow-legged frog <i>Rana boylei</i>	Fed: -- State: CC Other:	Found in partially shaded, shallow streams with rocky substrates. Requires perennial pools or flowing water. Needs some cobble-sized rocks as a substrate for egg laying. Requires water for 15 weeks for larval transformation.	Closest record is from 193X and is 1.2 miles east of the project site (Occurrence No. 2341).	None. No suitable habitat on the project site.
<b>Reptiles</b>				
Western pond turtle ** <i>Emys marmorata</i>	Fed: - State: CSC Other:	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying. Occurs in the Central Valley and Contra Costa County.	Closest record is from 2002 and is 0.45 miles northeast of the project site (Occurrence No. 552).	None. No suitable habitat on or adjacent to the project site.
<b>Birds</b>				
Northern harrier <i>Circus cyaneus</i>	Fed: - State: CSC Other:	Nests on the ground or in shrubby vegetation typically in grasslands, fallow farm lands, near freshwater and salt water marshes.	Closest record is from 2004 and is 2.8 miles west of the project site (Occurrence No. 29).	Unlikely to nest onsite. Preconstruction surveys will be conducted.
Swainson's hawk <i>Buteo swainsoni</i>	Fed: - State: CT Other:	Migratory and resident raptor that breeds in open areas with scattered trees. Prefers riparian and sparse oak woodland habitats for nesting. Requires nearby grasslands, grain fields, or alfalfa for foraging.	Closest record is from 2013 and is 2.6 miles northeast of the project site (Occurrence No. 2744).	Unlikely to nest adjacent to project site. Preconstruction surveys will be conducted.
Ferruginous hawk <i>Buteo regalis</i>	Fed: -- State: WL Other:	Winter migrant to California where they prefer grasslands, cultivated fields and arid areas with an abundance of prey species, such as pocket gophers, black-tailed hares, and cottontails.	Closest record is from 1988 and is 3.0 miles north of the project site (Occurrence No. 28).	None. Does not nest in California.

**Table 4**  
**Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Peregrine falcon <i>Falco peregrinus</i>	Fed: - State: - Other:	Nests on high cliffs near wetlands, lakes, rivers, or other water; also nests on human-made structures. Nest consists of a scrape on a depression or ledge in an open site. Was formerly state and federally listed but delisted due to species recovery.	Closest record is from 2015 and is 3.0 miles east of the project site (Occurrence No. 42).	None. No suitable nesting habitat on or near the project site.
California black rail <i>Laterallus jamaicensis coturniculus</i>	Fed: -- State: CT Other:	Inhabits salt marshes bordering larger bays. Prefers tidal salt marshes of pickleweed.	Closest record is from 2011 and is 2.5 miles northwest of the project site (Occurrence No. 31).	None. No suitable habitat on the project site.
California Ridgway's rail <i>Rallus obsoletus obsoletus</i>	Fed: FE State: CE Other:	Inhabits salt water and brackish marshes with tidal sloughs in San Francisco Bay. Prefers dense pickleweed for cover, but forages for invertebrates along mud-bottomed sloughs.	Closest record is from 1989 and is 2.4 miles northwest of the project site (Occurrence No. 16).	None. No suitable habitat on the project site.
Western burrowing owl <i>Athene cunicularia hypugaea</i>	Fed: -- State: CSC Other:	Found in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Closest record is from 1989 and is 2.6 miles southeast of the project site (Occurrence No. 109).	Unlikely to nest on the project site. Preconstruction surveys will be conducted.
Salt marsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	Fed: - State: CSC Other:	Resident of freshwater and salt water marshes in the San Francisco Bay region. Requires thick, continuous cover for foraging and tall grasses, tules, or willows for nesting.	Closest record is from 2004 and is 2.5 miles northwest of the project site (Occurrence No. 37).	None. No suitable habitat on the project site.
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	Fed: -- State: CSC Other:	More properly known as Samuels Song Sparrow. Resident of salt marshes along the north side of San Francisco and San Pablo Bays. Inhabits tidal sloughs in the California marshes; nests in grindelia bordering slough channels.	Closest record is from 2004 and is 2.8 miles west of the project site (Occurrence No. 17).	None. No suitable habitat on the project site.

**Table 4**  
**Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Tricolored blackbird <i>Agelaius tricolor</i>	Fed: - State: CC Other: CSC	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	Closest record is from 2014 and is 1.6 miles northeast of the project site (Occurrence No. 243).	None. No suitable nesting habitat on the project site.

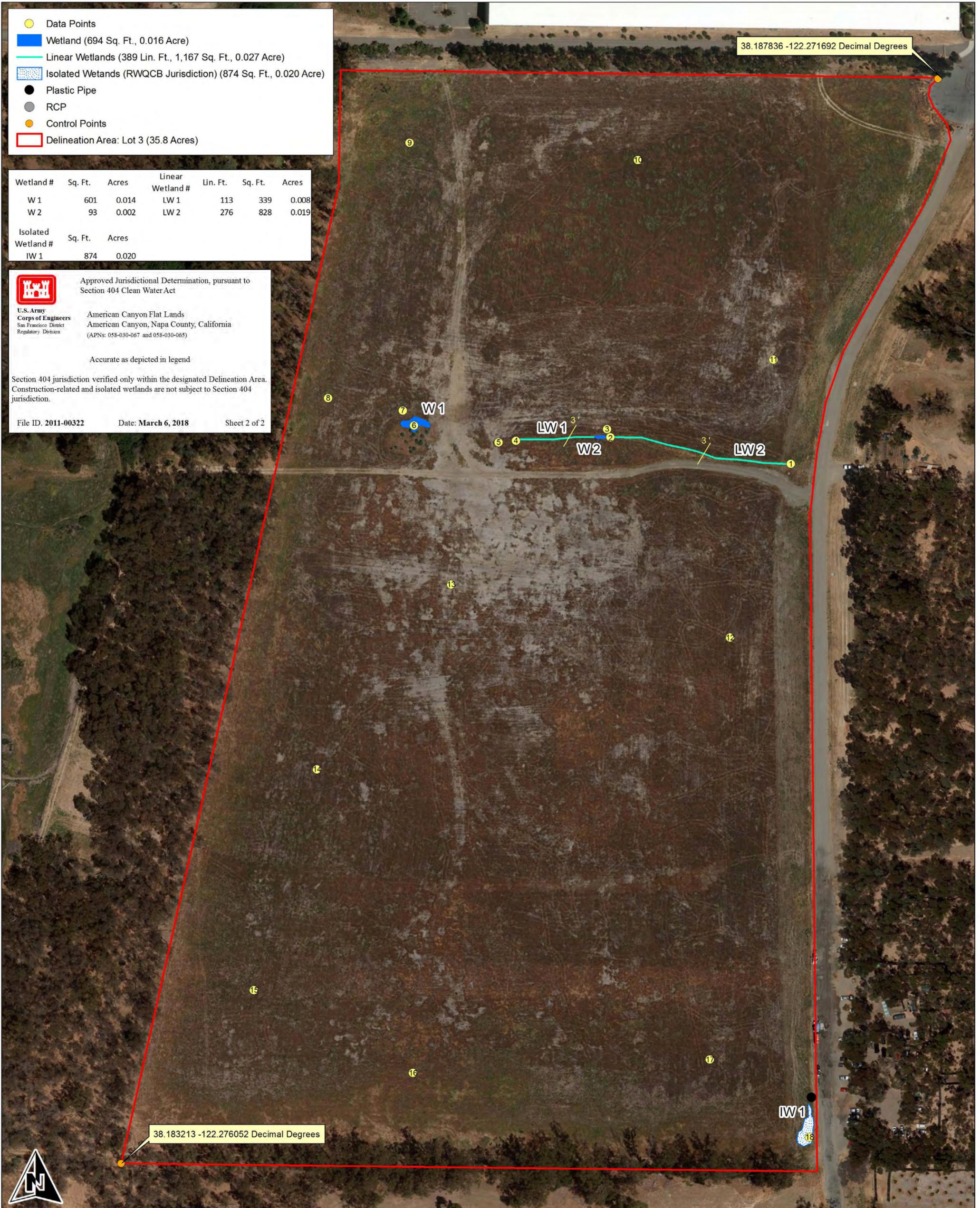
**Mammals**

Salt marsh harvest mouse <i>Reithrodontomys raviventris</i>	Fed: FE State: CE Other:	Inhabits saline marshes in the San Francisco Estuary. Prefers pickleweed marshes. Requires higher areas for escaping high water.	Closest record is from 1989 and is 2.4 miles south of the project site (Occurrence No. 150).	None. No suitable habitat on the project site.
--	--------------------------------	--	--	--

**\*Status**

- |  |   |
|--|---|
| Federal:                               | State:  |
| FE - Federal Endangered                | CE - California Endangered                      |
| FT - Federal Threatened                | CT - California Threatened                      |
| FPE - Federal Proposed Endangered      | CR - California Rare                            |
| FPT - Federal Proposed Threatened      | CC - California Candidate                       |
| FC - Federal Candidate                 | CSC - California Species of Special Concern     |
| FPD - Federally Proposed for delisting | FP - Fully Protected                            |
|  | WL - Watch List. Not protected pursuant to CEQA |

\*\*The USFWS hopes to finish a 12-month finding for western pond turtle in 2021 but until formally listed, it is not afforded the protections of FESA.



- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetlands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
- Plastic Pipe
- RCP
- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army  
Corps of Engineers  
San Francisco District  
Regulatory Division

American Canyon Flat Lands  
American Canyon, Napa County, California  
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID: 2011-00322      Date: March 6, 2018      Sheet 2 of 2

38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees



0 50 100 200 300 400 500 Feet Scale: 1 inch = 100 feet

September 3, 2020

Industrial and Commercial Contractors, LP  
403 W. Yosemite Avenue, Suite 105  
Madera, California 93637

Attention: Mr. Brian Doswald

**RE: Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site  
SDG Commerce 217 Distribution Center, Napa, California  
APN: 058-030-065-000**

Dear Mr. Doswald:

## 1. INTRODUCTION

Monk & Associates, Inc., (M&A) has prepared this Addendum to our March 2, 2020, *Revised Biological Resource Analysis* (biology report) for the SDG Commerce 217 Distribution Center located in the City of American Canyon, California (the “project site”). Since the time M&A prepared our biology report for the project site, it has been determined that it will be necessary to acquire soil from the adjacent parcel to the south (the “borrow area parcel”) and transport this soil for use as clean fill on the project site. M&A has prepared this Addendum to our biology report to address the transportation of soil from the offsite borrow area parcel onto the project site and to analyze any affects this activity could have on mapped jurisdictional waters of the United States/State that lie inbetween the project site and the adjacent borrow area parcel. Mapped waters of the United States are shown on the attached exhibits.

## 2. DESCRIPTION OF THE PROJECT SITE AND ADJACENT BORROW AREA PARCEL

The project site and the adjacent borrow area parcel were once part of a contiguous approximately 35-acre project site that M&A conducted surveys on over multiple years dating between 2006 and 2018. Both the project site and adjacent borrow area parcel are dominated by ruderal (weedy) vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). These non-native, weedy species provide little habitat value to wildlife and they do not constitute a native plant community. Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, is also common on the 35 acres. Ruderal vegetation is the only vegetation community found on the project site. The adjacent borrow area parcel, however, in addition to supporting a ruderal herbaceous community also supports waters of the United States, as described below.

On May 16, 2018, the U.S. Army Corps of Engineers issued a jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the approximately 35-acre

Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site  
SDG Commerce 217 Distribution Center, Napa, California  
APN: 058-030-065-000

Page 2

parcel that comprises the project site, the adjacent borrow area parcel, and another property now known as 330 Commerce Center (see attached exhibits). The entire 0.043-acre of waters of the U.S. confirmed by the Corps is found on the adjacent borrow area parcel as shown on the attached exhibit "Borrow Site Rough Grading," Sheet 1 prepared by RSA on August 21, 2020. There are no waters of the United States or State on the project site.

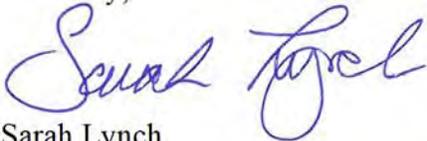
### **3. DISCUSSION OF PROPOSED ACTIVITIES AND AVOIDANCE OF IMPACTS TO MAPPED WATERS OF THE UNITED STATES**

The project applicant intends to rough grade the borrow area parcel and transport soil from that parcel onto the project site for use in development of the project site. In order to protect the waters of the United States/State that occur in between the project site and the borrow area parcel, a 25-foot buffer area around the outside edge of the wetlands will be staked and protected with fiber roll, silt fencing and high visibility orange construction fencing to prevent equipment from driving into the wetlands during hauling activities. See the attached exhibit.

With these protection measures in place, as shown on the attached Borrow Site Rough Grading exhibit, Sheet 1, attached, *there are no expected impacts to waters of the U.S./State from the transport of soil/materials from the borrow area parcel to the project site.*

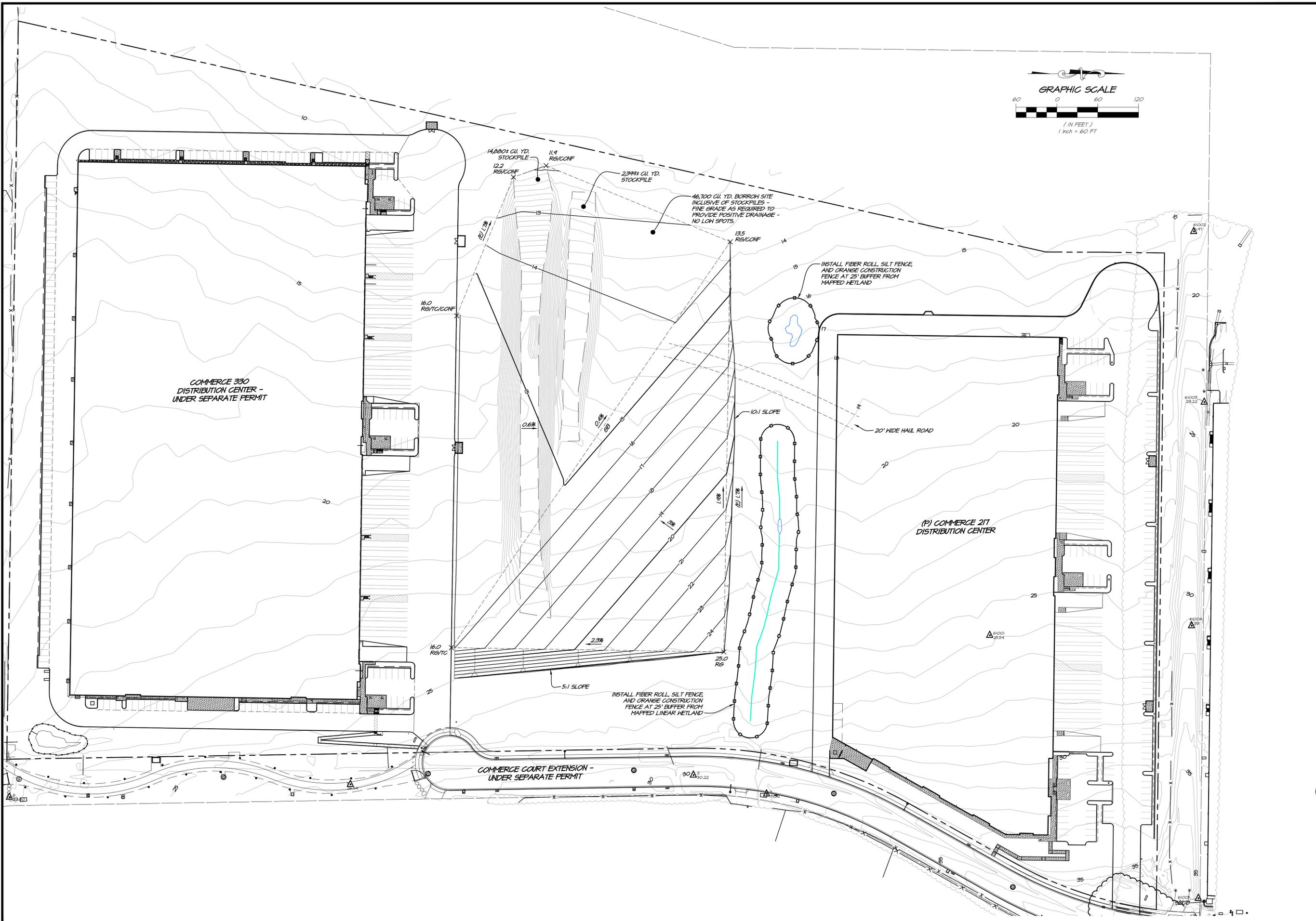
This concludes our addendum to our biology report. If you have any questions or require additional information, please do not hesitate to contact me at (925) 323-4850 or [Sarah@monkassociates.com](mailto:Sarah@monkassociates.com). Thank you.

Sincerely,



Sarah Lynch  
Senior Associate Biologist

Attachments: U.S. Army Corps of Engineers Confirmed Aquatic Resources Delineation Map;  
Sheet 1, Borrow Site Rough Grading prepared by RSA, August 21, 2020



COMMERCE 330  
 DISTRIBUTION CENTER -  
 UNDER SEPARATE PERMIT

(P) COMMERCE 217  
 DISTRIBUTION CENTER

COMMERCE COURT EXTENSION -  
 UNDER SEPARATE PERMIT

INSTALL FIBER ROLL, SILT FENCE,  
 AND ORANGE CONSTRUCTION  
 FENCE AT 25' BUFFER FROM  
 MAPPED LINEAR WETLAND

INSTALL FIBER ROLL, SILT FENCE,  
 AND ORANGE CONSTRUCTION  
 FENCE AT 25' BUFFER FROM  
 MAPPED WETLAND

46,700 CU. YD. BORROW SITE  
 INCLUSIVE OF STOCKPILES -  
 FINE GRADE AS REQUIRED TO  
 PROVIDE POSITIVE DRAINAGE -  
 NO LOW SPOTS.

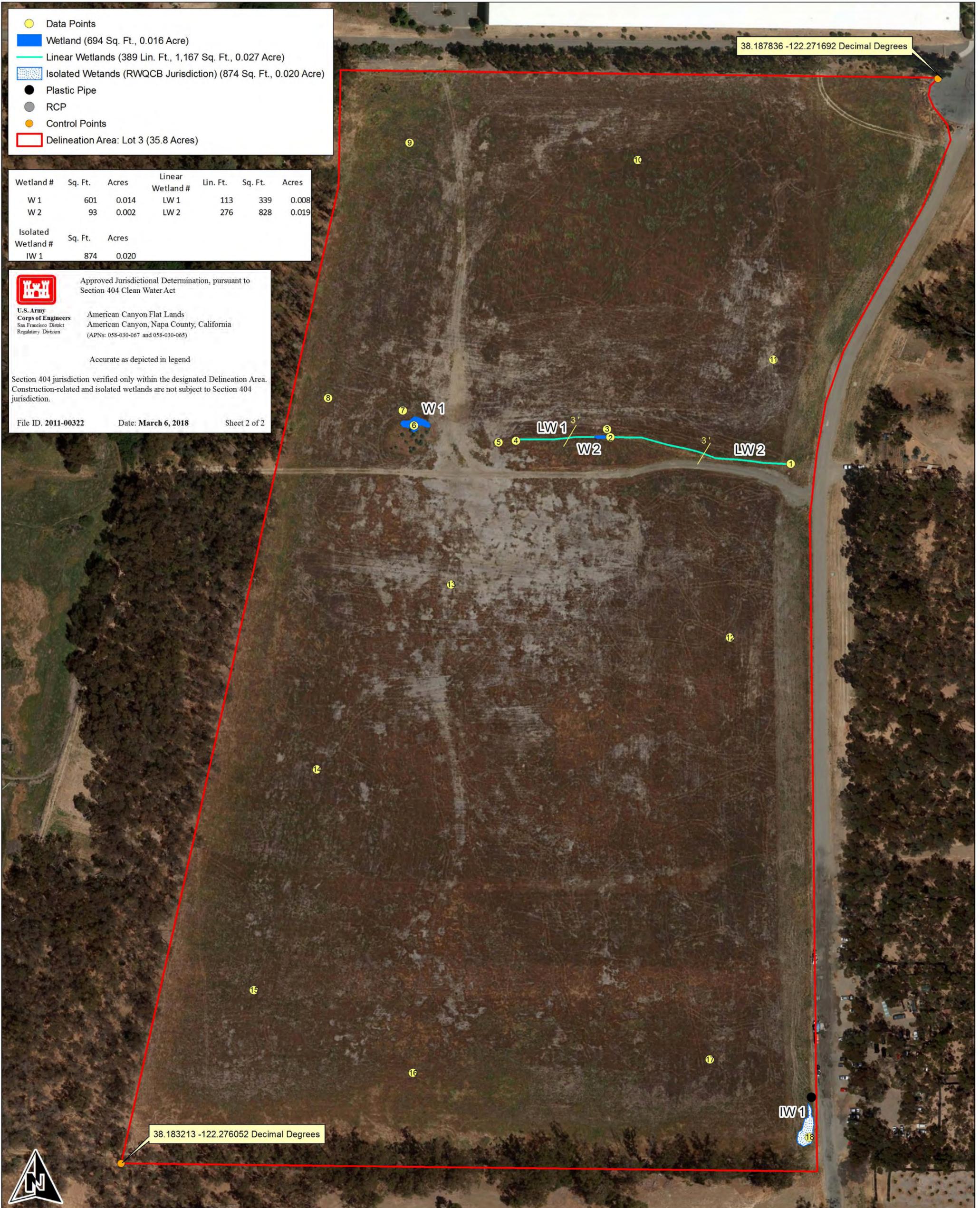
NO.	DATE	BY	APPD.

**RSA+**  
 RSA+ CONSULTING CIVIL ENGINEERS + SURVEYORS + [1950]  
 1515 FOURTH STREET  
 NAPA, CALIF. 94559  
 OFFICE 707.252.3301  
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**SDG COMMERCE 217 DISTRIBUTION CENTER  
 BORROW SITE ROUGH GRADING**  
 AMERICAN CANYON  
 CALIFORNIA



DATE	AUG. 21, 2020
DRAWN	DRL
DESIGNED	DRL
CHECKED	PSW
JOB NO.	411903710
SHEET NO.	1



- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetlands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
- Plastic Pipe
- RCP
- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army  
Corps of Engineers  
San Francisco District  
Regulatory Division

American Canyon Flat Lands  
American Canyon, Napa County, California  
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID: 2011-00322      Date: March 6, 2018      Sheet 2 of 2

38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees



0 50 100 200 300 400 500 Feet Scale: 1 inch = 100 feet



## **D.2 - SDG Commerce Site 220 Documents**

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PINECREST ENVIRONMENTAL CONSULTING  
6425 TELEGRAPH AVE. #8  
OAKLAND, CA 94609

510.881.3039 TEL  
INFO@PINECRESTENVIRONMENTAL.ORG  
WWW.PINECRESTENVIRONMENTAL.ORG

## SPECIAL - STATUS ANIMAL SURVEY REPORT

Date: August 8, 2023  
To: Robert Carroll, FCS International.  
From: Dr. Christopher T. DiVittorio, Pinecrest Research Corp., Inc.  
Subject: Results of special-status animal surveys at 220 Commerce Court, Napa County, CA (FCS Project 5639.0001)

Robert Carroll,

This special-status animal survey report (Report) details the findings of eleven (11) wildlife surveys conducted between January 18 and July 2 in 2023 at the above-referenced property located in the County of Napa. The site consists of one parcel measuring 10.2 acres and assigned APN 058-030-069. Surveys were conducted in order to determine the pre-construction presence or absence of the following special-status animals: burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), nesting raptors, nesting passerine birds, and Western pond turtle. Surveys were conducted by consulting biologist Dr. Christopher DiVittorio.

### Site Description

The entirety of the site is disked and mowed ruderal grassland, with the exception of a row of Eucalyptus trees along the northern property line. The ruderal grassland exhibits low cover of plants and low species diversity with very few native species (Figure 1). The habitat type of this area as determined by Sawyer et al. (2009) *Manual of California Vegetation 2nd Edition* (MCV) is *Bromus (diandrus, hordeaceous)-Brachypodium distachyon* Semi-Natural Herbaceous Stand. On the north side of the parcels is a row of bluegum Eucalyptus. The MCV classification of this habitat is *Eucalyptus (globulus, camaldulensis)* Semi-Natural Woodland Stands.

### Methods

Between January 18 and July 2, 2023, eleven (11) surveys were conducted for nesting passerine birds, raptors (including Swainson's hawk), burrowing owl, and Western pond turtle. During each survey, the entirety of the "Commerce 220" site as well as the adjacent "Commerce 217" site were examined. These surveys included the entirety of both legal parcels, as well all of the vegetated areas up to the concrete paved area on the developed parcel to the south. Relevant adjacent areas were also examined with binoculars where possible. A total of approximately 45 survey hours were completed across all survey dates. All of the aforementioned animal types were surveyed for at each of the eleven site visits. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, and the *Staff Report on*

*Burrowing Owl Mitigation.*<sup>1,2</sup> Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10 a.m.). Surveys were conducted on foot. Survey dates with the corresponding Swainson's hawk survey periods are shown below.

Date	Swainson's Hawk Survey Period
1/18/2023	1 <sup>st</sup> survey in Period I
3/20/2023	1 <sup>st</sup> survey in Period II
3/31/2023	2 <sup>nd</sup> survey in Period II
4/4/2023	3 <sup>rd</sup> survey in Period II
4/5/2023	1 <sup>st</sup> survey in Period III
4/6/2023	2 <sup>nd</sup> survey in Period III
4/7/2023	3 <sup>rd</sup> survey in Period III
4/24/2023	1 <sup>st</sup> survey in Period IV
4/28/2023	2 <sup>nd</sup> survey in Period IV
5/29/2023	3 <sup>rd</sup> survey in Period IV
7/2/2023	1 <sup>st</sup> survey in Period V

## Results & Recommendations

A total of 56 unique species of birds were observed across the eleven site visits. A total of 4 other species of animals were observed across the eleven site visits. Transcribed field notes from each of the eleven site visits are provided in Appendix A, below. A master list of all species of birds and other animals encountered across the eleven site visits is provided in Appendix B, below.

Due to the lack of suitable nesting habitat on the project site itself, no nesting birds were observed in the project area, although nesting birds were observed in the *Eucalyptus* stands offsite. Of the nesting birds in the offsite *Eucalyptus* stands, none of these were special-status including raptors. White tailed kites (*Elanus leucurus*) were observed foraging in the field, but they did not appear to be nesting nearby, as described below. No Swainson's hawk or burrowing owl were observed during any of the avian surveys. No adults or nests of Western pond turtle were observed (Appendix A & B).

---

<sup>1</sup> Swainson's Hawk Technical Advisory Committee. 2000. *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*. California Department of Fish and Wildlife, May 31, 2000.

<sup>2</sup> California Department of Fish and Wildlife 2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

### Swainson's hawk

No individuals of Swainson's hawk were observed during any of the surveys, and no raptor nests that could belong to Swainson's hawk were observed. The presence of other birds-of-prey utilizing territories onsite also indicates that Swainson's hawk are not utilizing this habitat currently since these species are antagonistic and do not typically share ranges. The negative survey results for Swainson's hawk despite approximately 45 survey hours satisfies the requirements of the survey protocol for this species, therefore it is reasonable to conclude Swainson's hawk are absent from the project site.

### Nesting Birds (Including Raptors)

No active raptor nests were observed within the vicinity of the project site. Several American crow were loitering around the *Eucalyptus* grove to the east of the parcel and harassing White-tail kites that approached the grove, however their nest could not be located. Several White-tail kites were observed each day foraging over the grassland habitat, however each time they flew off to the southwest out of sight and the location of their nest could not be determined. One juvenile red-shouldered hawk was observed within a large *Eucalyptus* tree along the north property line however this individual flew offsite after approximately 20 minutes. No other active nests were observed during any of the eleven site visits.

### Burrowing Owl

No evidence of burrowing owl activity was observed during any of the eleven field surveys. No California ground squirrel burrows were observed on-site, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl. Therefore, it is reasonable to conclude burrowing owl is absent from the project site.

### Western Pond Turtle

No evidence of Western pond turtle activity was observed during any of the eleven field surveys. There are some wetland features onsite, however there are no ponds or streams onsite that would be suitable for Western pond turtle foraging or breeding. No signs of adults or nests were observed onsite or in the accessible vicinity of the site. Therefore, it is reasonable to conclude Western pond turtle is absent from the project site.

Based on the results of these eleven surveys, we conclude that there are no special-status animal species currently occupying the project site, and no compensatory mitigation for impacts to special-status animal species is recommended at this time. These results do not however, preclude the future existence of the above-referenced species onsite as they may recolonize the site if sufficient time has passed between these surveys and site development.

Please let me know if you have any questions about this or any other studies we've performed for this project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris DiVittorio". The signature is fluid and cursive, with a prominent "C" at the beginning and a long, sweeping underline.

Christopher DiVittorio, PhD  
President, PEC  
(510) 881-3039  
[chris@pinecrestenvironmental.org](mailto:chris@pinecrestenvironmental.org)

**Figure 1: Ruderal Grassland**



SOURCES: PEC Inc.

APN 058-030-069-000  
220 Commerce Court, American Canyon, CA 94503

**Figure 2: Eucalyptus Stands**



SOURCES: PEC Inc.

APN 058-030-069-000  
220 Commerce Court, American Canyon, CA 94503

**Figure 3: Habitat Map**



## Appendix A: Animal Survey Field Notes

The following is a transcription of field notes for each of the eleven (11) protocol-level surveys conducted at the project site. Special-status species, if any, are denoted with an asterisk (\*).

### Site Visit: 1/18/23

Time: 12:00 PM (approx.)

Weather: clear, no wind, 56degF

Notes: started mid-day

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Birds: juvenile red-shouldered hawk (*Buteo lineatus*) sitting in Eucalyptus tree on N fenceline, Western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), American pelican (*Pelecanus erythrorhynchos*), black phoebe (*Sayornis nigricans*), white-crowned sparrow (*Zonotrichia leucophrys*), Northern flicker (*Colaptes auratus*), crow (*Corvus brachyrhynchos*)

Other Animals: None

### Site Visit: 3/20/23

Time: 6:35 AM

Weather: no wind, 49 degF, 46% RH

Notes: start at sunrise; park in SE corner

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; early season plant survey

Personnel: Dr. Christopher DiVittorio

Bird Species: wild turkey (*Meleagris gallopavo*), turkey vulture (*Cathartes aura*), Canada goose (*Branta canadensis*), crow (*Corvus brachyrhynchos*), raven (*Corvus corax*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), Western bluebird (*Sialia mexicana*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), red-shouldered hawk (*Buteo lineatus*) two individuals soaring over the Eucalyptus grove to the E of the site, house wren (*Troglodytes aedon*), American robin (*Turdus migratorius*), golden-crowned sparrow (*Zonotrichia atricapilla*), Nuttall's woodpecker (*Picoides nuttallii*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), purple finch (*Haemorhous purpureus*), tree swallow (*Tachycineta bicolor*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), California gull (*Larus californicus*), brown-headed cowbird (*Molothrus ater*), Anna's hummingbird (*Calypte anna*), chestnut-backed chickadee (*Poecile rufescens*), White-tailed kite (*Elanus leucurus*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 3/31/23

Time: 6:30 AM

Weather: clear, wind 0 mph, 44.5 degF, 76.5% RH

Notes: parked NE corner

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Bird species: American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida macroura*), Western scrub jay (*Aphelocoma californica*), lesser goldfinch (*Spinus psaltria*), house wren (*Troglodytes aedon*), Canada goose (*Branta canadensis*), American goldfinch (*Spinus tristis*), house sparrow (*Passer domesticus*), Allen's hummingbird (*Selasphorus sasin*), kildeer (*Charadrius vociferus*), raven (*Corvus corax*), unknown gull likely Western or California, American coot (*Fulica americana*), European starling (*Sturnus vulgaris*), ruby-crowned kinglet (*Regulus calendula*), black phoebe (*Sayornis nigricans*),

Other Animals: Mule deer (*Odocoileus hemionus*), domestic cat (*Felis catus*),

Site Visit: 4/4/23

Start time: 6:35 AM

Weather: clear, 49 degF, no wind, 81% RH

Notes: parked SW corner; 6:15 AM first light, 7:15 first direct sunlight

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; mid-season plant survey

Personnel: Dr. Christopher DiVittorio

Bird Species: red-shouldered hawk (*Buteo lineatus*) perched on Eucalyptus tree on N fenceline, wild turkey (*Meleagris gallopavo*) calling and all over parking area, White-tailed kite (*Elanus leucurus*) foraging and calling, house wren (*Troglodytes aedon*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), purple finch (*Haemorhous purpureus*), song sparrow (*Melospiza melodia*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), rock wren (*Salpinctes obsoletus*), black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), fox sparrow (*Passerella iliaca*), Northern mockingbird (*Mimus polyglottos*), tree swallow (*Tachycineta bicolor*), Canada goose (*Branta canadensis*), kildeer (*Charadrius vociferus*), Anna's hummingbird (*Calypte anna*), Western bluebird (*Sialia mexicana*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 4/5/23

Start time: 6:08 AM

Weather: 39 degF, 80% RH, no wind

Notes: met Jerry with Stravinsky onsite; parked SW corner

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Bird Species: red-shouldered hawk (*Buteo lineatus*) called from southwest corner of Eucalyptus grove once, wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melospiza crissalis*), raven (*Corvus corax*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), White-tailed kite (*Elanus leucurus*) 3 hovering various times over the field, Nuttall's woodpecker (*Picoides nuttallii*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*),

Other Animals: None

Site Visit: 4/6/23

Start time: 6:17 AM

Weather: clear, 44 degF, 80% RH, no wind

Notes: fewer wildlife than yesterday; met Jerry with Stravinsky onsite; parked SW corner

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Bird Species: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melospiza crissalis*), brown creeper (*Certhia americana*), raven (*Corvus corax*), American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), red-shouldered hawk (*Buteo lineatus*) called from southwest corner of Eucalyptus grove once similar to other mornings, White-tailed kite (*Elanus leucurus*) two individuals over east Eucalyptus grove being chased by crows, song sparrow (*Melospiza melodia*), great blue heron (*Ardea herodias*) soaring overhead, unknown gulls soaring, lesser goldfinch (*Spinus psaltria*), Anna's hummingbird (*Calypte anna*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*) runways, California vole (*Microtus californicus*) runways

Site Visit: 4/7/23

Start time: 6:30 AM

Weather: cloudy, 54.5 degF, 79% RH, wind 1-2 mph, fewer birds today

Notes: met Jerry with Stravinsky onsite

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Bird Species: Bewick's wren (*Thryomanes bewickii*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), hermit thrush (*Catharus guttatus*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), Nuttall's woodpecker (*Picoides nuttallii*), White-tailed kites (*Elanus leucurus*) being chased by crows then two foraging in field, cliff swallow (*Petrochelidon pyrrhonota*), cedar waxwing (*Bombycilla cedrorum*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 4/24/23

Start time: 6:30 AM

Weather: cloudy, then sunny; 61 degF, 64% RH, 1-3 mph wind

Notes: met Jerry with Stravinsky onsite for survey at 6:30, began preconstruction meeting 8:00 AM

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; preconstruction meeting with geotechnical engineer, Stravinsky, civil engineer, SWPP monitor, etc.

Personnel: Dr. Christopher DiVittorio

Birds: violet-green swallow (*Tachycineta thalassina*), Brewer's blackbird (*Euphagus cyanocephalus*), California towhee (*Melospiza crissalis*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), Nuttall's woodpecker (*Picoides nuttallii*), American goldfinch (*Spinus tristis*), Western bluebird (*Sialia mexicana*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaidura macroura*), White-tailed kite (*Elanus leucurus*) soaring and hovering over field, juvenile red-tailed hawk (*Buteo jamaicensis*) offsite to E flushed immediately out of site to the SE, peregrine falcon (*Falco peregrinus*) fly-through overhead, unidentified species of sparrow,

Other Animals: none

Other Notes: Red-tailed hawk nest on south side of existing warehouse to the south of project site is not active this year.

Site Visit: 4/28/23

Start time: 5:45 AM

Weather: cloudy, cold

Notes: met Jerry with Stravinsky onsite, Commerce 217 will be graded tomorrow; silt fencing installed and grass has been mowed since last visit; no burrows or other animal sign onsite; this counts towards the 24-hour BUOW preconstruction survey requirement

Purpose: preconstruction Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Birds: White-tailed kite (*Elanus leucurus*) hovering over field, turkey vulture (*Cathartes aura*), wild turkey (*Meleagris gallopavo*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 5/29/23

Start time: 8:30 AM

Weather: sunny

Notes: Commerce 220 site has been graded in addition to Commerce 217

Purpose: Swainson's hawk, other raptor, nesting passerine bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Birds: no sign of BUOW or Swainson's hawk; presence/absence survey only; no comprehensive bird list completed

Other Animals: none

Site Visit: 7/2/23

Start time: 1:00 PM

Weather: clear, sunny, 85 degF, 51% RH, 3-8 mph wind

Note: many species appear to have migrated offsite for the summer

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Bird Species:

house finch (*Haemorhous mexicanus*), Osprey (*Pandion haliaetus*), turkey vulture (*Cathartes aura*), lesser goldfinch (*Spinus psaltria*), red-tailed hawk (*Buteo jamaicensis*), Nuttall's woodpecker (*Picoides nuttallii*), kildeer (*Charadrius vociferus*), White-tailed kite (*Elanus leucurus*)

Other Animals: none

## Appendix B: Master Species List

The following is a list of animal species observed across the eleven (11) site visits at the project site. Special-status species, if any, are denoted with an asterisk (\*).

### MASTER BIRD LIST

Allen's hummingbird (*Selasphorus sasin*)  
 American coot (*Fulica americana*)  
 American goldfinch (*Spinus tristis*)  
 American pelican (*Pelecanus erythrorhynchos*)  
 American pipit (*Anthus rubescens*)  
 American robin (*Turdus migratorius*)  
 Anna's hummingbird (*Calypte anna*)  
 Bewick's wren (*Thryomanes bewickii*)  
 black phoebe (*Sayornis nigricans*)  
 Brewer's blackbird (*Euphagus cyanocephalus*)  
 brown creeper (*Certhia americana*)  
 brown-headed cowbird (*Molothrus ater*)  
 California gull (*Larus californicus*)  
 California towhee (*Melospiza crissalis*)  
 Canada goose (*Branta canadensis*)  
 cedar waxwing (*Bombycilla cedrorum*)  
 chestnut-backed chickadee (*Poecile rufescens*)  
 cliff swallow (*Petrochelidon pyrrhonota*)  
 crow (*Corvus brachyrhynchos*)  
 dark-eyed junco (*Junco hyemalis*)  
 European starling (*Sturnus vulgaris*)  
 fox sparrow (*Passerella iliaca*)  
 golden-crowned sparrow (*Zonotrichia atricapilla*)  
 great blue heron (*Ardea herodias*)  
 hermit thrush (*Catharus guttatus*)  
 house finch (*Haemorhous mexicanus*)  
 house sparrow (*Passer domesticus*)  
 house wren (*Troglodytes aedon*)  
 killdeer (*Charadrius vociferus*)  
 lesser goldfinch (*Spinus psaltria*)  
 mallard ducks (*Anas platyrhynchos*)  
 mourning dove (*Zenaidura macroura*)  
 Northern flicker (*Colaptes auratus*)  
 Northern mockingbird (*Mimus polyglottos*)  
 Nuttall's woodpecker (*Picoides nuttallii*)  
 Osprey (*Pandion haliaetus*)  
 peregrine falcon (*Falco peregrinus*)  
 purple finch (*Haemorhous purpureus*)  
 raven (*Corvus corax*)  
 red-shouldered blackbird (*Agelaius phoeniceus*)  
 red-shouldered hawk (*Buteo lineatus*)  
 red-tailed hawk (*Buteo jamaicensis*)

rock wren (*Salpinctes obsoletus*)  
ruby-crowned kinglet (*Regulus calendula*)  
song sparrow (*Melospiza melodia*)  
tree swallow (*Tachycineta bicolor*)  
turkey vulture (*Cathartes aura*)  
violet-green swallow (*Tachycineta thalassina*)  
Western bluebird (*Sialia mexicana*)  
Western scrub jay (*Aphelocoma californica*)  
white-crowned sparrow (*Zonotrichia leucophrys*)  
White-tailed kite (*Elanus leucurus*)  
wild turkey (*Meleagris gallopavo*)  
yellow-rumped warbler (*Setophaga coronata*)  
unidentified gull likely Western or California  
unidentified species of sparrow

#### MASTER OTHER ANIMALS LIST

black-tailed deer (*Odocoileus hemionus*)  
black-tailed jackrabbit (*Lepus californicus*)  
California vole (*Microtus californicus*) runways  
domestic cat (*Felis catus*)



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## SPECIAL - STATUS PLANT SURVEY REPORT

Date: July 21, 2023  
To: Jason Brandman, FCS International.  
From: Dr. Christopher T. DiVittorio, Pinecrest Research Corp., Inc.  
Subject: Results of special-status plant surveys at 220 Commerce Court, Napa County, CA (FCS Project 5639.0001)

To Whom It May Concern,

This rare plant survey report (Report) details the findings of three protocol-level special-status plant surveys conducted in 2023 at the above-referenced property located in the County of Napa. The site consists of one parcel measuring 10.2 acres and assigned APN 058-030-069.

### Site Description

The entirety of the site is disked and mowed ruderal grassland, with the exception of some emergent wetland along the north property line. A stand of non-native *Eucalyptus* spp. exists to the west but this is offsite and located on the adjacent parcel. The ruderal grassland exhibits low cover of plants and low species diversity with very few native species (Figure 1). The habitat type of this area as determined by Sawyer et al. (2009) *Manual of California Vegetation 2nd Edition* (MCV) is *Bromus (diandrus, hordeaceous)-Brachypodium distachyon* Semi-Natural Herbaceous Stand. There is also some disturbed/previously developed habitat in the southeast corner (Figure 3). The project will affect only the ruderal grassland portion of the site.

### Methods

Special-status plants are defined here to include: (1) all plants that are federal- or state-listed as rare, threatened or endangered, (2) all federal and state candidates for listing, (3) all plants included in Lists 1 through 4 of the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, section 15380. Background information searches were conducted prior to all site visits to identify potential rare plant species or sensitive plant communities recognized by the California Department of Fish and Wildlife (CDFW) that may occur in the Study Area vicinity.

A table of these species, and their protection status, habitat requirements, and likelihood to occur in the Study Area is provided below in Appendix A. Sources for this table include the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CDFW 2023), the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023), and the knowledge of PEC staff. CNDDDB searches were performed within a "9-quad" area encompassing the surrounding region.

Site visits were performed during the growing season of 2023. An early-season site visit was performed on March 20. Mid-season site visits were performed on April 6, April 7, and May 29. A late-season site visit was also performed on July 2. Between the mid-season and late-season site visits the site was graded thus the late-season site visit focused on remaining vegetation surrounding the areas of disturbance. Site visits were performed by PEC botanist Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by PEC botanist Dr. Zoya Akulova. During each site visit, Dr. DiVittorio surveyed the entirety of the project area using methods as specified in the California Department of Fish & Wildlife (CDFW) publication titled *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*, dated March 20, 2018.

During each survey, the entirety of the "Commerce 220" site as well as the adjacent "Commerce 217" site were examined. These surveys included the entirety of both legal parcels, as well all of the vegetated areas up to the concrete paved area on the developed parcel to the south. Field surveys were conducted by walking the entire project area on foot in parallel lines approximately 15 feet apart, identifying every species that was flowering, and making note of any species that were past flowering or that had not yet flowered. Voucher specimens were taken of any species that required identification in the laboratory. All terminology follows currently accepted nomenclature as described in *The Jepson Manual* (2012).

## Results & Recommendations

The project area is comprised of routinely disked ruderal *Bromus (diandrus, hordeaceous)* Semi-Natural Stands with some isolated individuals of *Baccharis pilularis* mostly near the edges of the site. A map of habitat types is shown in Figure 3. No special-status plant species or sensitive habitats were positively identified in the project area. A full list of the species encountered during the surveys is provided below in Appendix B. In total, 15 native species were observed onsite and 57 non-native species were observed. No special-status species were found thus we have no recommendations for mitigation or avoidance for this project.

Please let me know if you have any questions about this or any other studies we've performed for this project.

Sincerely,



Christopher DiVittorio, PhD  
President, PEC  
(510) 881-3039  
chris@pinecrestenvironmental.org

**Figure 1: Ruderal Grassland**



SOURCES: PEC Inc.

APN 058-030-069-000  
220 Commerce Court, American Canyon, CA 94503

**Figure 2: Eucalyptus Stands**



SOURCES: PEC Inc.

APN 058-030-069-000  
220 Commerce Court, American Canyon, CA 94503

**Figure 3: Habitat Map**



## Appendix A: Special-Status Species Considered

The following is a list of sensitive and/or rare plants and habitats generated based on knowledge of the species and habitats of Napa County by PEC staff, from various State and Federal databases, and from the California Natural Diversity Database (CNDDDB). Known occurrences within a "9-quadrant" region around the project site are shown in bold.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
PLANTS			
<b>Alkali milk-vetch</b> ( <i>Astragalus tener</i> var. <i>tener</i> )	—/—/ <b>1B.2</b>	<b>Alkali grassland</b>	<b>Very Low:</b> No alkali habitat exists in the project area.
Anthony peak lupine ( <i>Lupinus antoninus</i> )	—/—/1B.2	Coniferous forest	<u>None:</u> No coniferous forest habitat exists in the project area.
Baker's goldfields ( <i>Lasthenia californica</i> ssp. <i>bakeri</i> )	—/—/1B.2	Coastal grasslands	<u>Very Low:</u> Some grassland habitat exists in the project area.
Baker's larkspur ( <i>Delphinium bakeri</i> )	FE/SE/1B.1	Coastal scrub	<u>Very Low:</u> No coastal scrub habitat exists in the project area.
Baker's manzanita ( <i>Arctostaphylos bakeri</i> ssp. <i>bakeri</i> )	—/—/1B.1	Serpentine chaparral	<u>None:</u> No serpentine chaparral exists in the project area.
<b>Baker's navarretia</b> ( <i>Navarretia leucocephala</i> ssp. <i>bakeri</i> )	—/—/ <b>1B.1</b>	<b>Vernal pool</b>	<b>None:</b> No vernal pool habitat exists in the project area.
Beaked tracyina ( <i>Tracyina rostrata</i> )	—/—/1B.2	Grassland, foothill woodland	<u>Low:</u> Some grassland habitat exists in the project area.
Bent flowered fiddleneck ( <i>Amsinckia lunaris</i> )	—/—/1B.2	Grassland, foothill woodland	<u>Low:</u> Some grassland habitat exists in the project area.
<b>Big-scale balsamroot</b> ( <i>Balsamorhiza macrolepis</i> )	—/—/ <b>1B.2</b>	<b>Grassland</b>	<b>Low:</b> Some grassland habitat exists in the project area.
<b>Big tarplant</b> ( <i>Blepharizonia plumosa</i> )	—/—/ <b>1B.1</b>	<b>Chaparral, grassland</b>	<b>Low:</b> Some grassland habitat exists in the project area.
Blasdale's bent grass ( <i>Agrostis blasdalei</i> )	—/—/1B.2	Coastal grassland	<u>Very Low:</u> Some grassland habitat exists in the project area.
Blue coast gilia ( <i>Gilia capitata</i> ssp. <i>chamissonis</i> )	—/—/1B.1	Coastal sand dunes	<u>None:</u> No sand dune habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Bluff wallflower ( <i>Erysimum concinnum</i> )	—/—/1B.2	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Bogg's Lake hedge-hyssop ( <i>Gratiola heterosepala</i> )	—/—/1B.2	Vernal pool, pond	<u>None</u> : No vernal pool habitat exists in the project area.
Bolander's horkelia ( <i>Horkelia bolanderi</i> )	—/—/1B.2	Coniferous forest, grassland	<u>Low</u> : Some grassland exists in the project area.
<b>Bolander's water hemlock</b> ( <i>Cicuta maculata</i> var. <i>bolanderi</i> )	—/—/2B.1	<b>Salt marsh</b>	<b><u>None</u>: No salt marsh habitat exists in the project area.</b>
Brandegee's eriastrum ( <i>Eriastrum brandegeae</i> )	—/—/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
<b>Brewer's calandrinia</b> ( <i>Calandrinia breweri</i> )	—/—/4.2	<b>Coastal scrub</b>	<b><u>None</u>: No coastal scrub habitat exists in the project area.</b>
<b>Brewer's western flax</b> ( <i>Hesperolinon breweri</i> )	—/—/1B.2	<b>Chaparral, grassland</b>	<b><u>Low</u>: Some grassland habitat exists in the project area.</b>
<b>Bristly leptosiphon</b> ( <i>Leptosiphon aureus</i> )	—/—/4.2	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
Bristly sedge ( <i>Carex comosa</i> )	—/—/2B.1	Wetland, riparian	<u>None</u> : No potential wetland habitat exists in the project area.
Brownish beaked-rush ( <i>Rhynchospora capitellata</i> )	—/—/2B.2	Wetland, riparian	<u>None</u> : No potential wetland habitat exists in the project area.
Burke's goldfields ( <i>Lasthenia burkei</i> )	FE/SE/1B.1	Vernal pools, grassland	<u>Low</u> : Some grassland habitat exists in the project area.
California alkali grass ( <i>Puccinellia simplex</i> )	—/—/1B.2	Alkali grassland	<u>Very Low</u> : No alkali grassland habitat exists in the project area.
<b>California beaked-rush</b> ( <i>Rhynchospora californica</i> )	—/—/1B.1	<b>Freshwater wetlands</b>	<b><u>None</u>: No potential wetland habitat exists in the project area.</b>
California satintail ( <i>Imperata brevifolia</i> )	—/—/2B.1	Chaparral, coastal scrub	<u>None</u> : No chaparral habitat exists in the project area.
California sedge ( <i>Carex californica</i> )	—/—/2B.3	Wetlands	<u>None</u> : No wetland habitat exists in the project area.
Calistoga ceanothus ( <i>Ceanothus divergens</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Calistoga popcornflower ( <i>Plagiobothrys strictus</i> )	FE/ST/1B.1	Wetland, riparian	<u>None</u> : No wetland habitat exists in the project area.
<b>Carquinez goldenbrush</b> ( <i>Isocoma arguta</i> )	—/—/1B.1	<b>Grassland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
<b>Chaparral ragwort</b> ( <i>Senecio aphanactis</i> )	—/—/1B.1	<b>Coastal scrub, woodland</b>	<b><u>None</u></b> : No coastal scrub habitat exists in the project area.
Clara Hunt's milk vetch ( <i>Astragalus claranus</i> )	—/—/1B.1	Chaparral, grassland	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Coast iris</b> ( <i>Iris longipetala</i> )	—/—/4.2	<b>Coastal grassland, wetland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
Coast lily ( <i>Lilium maritimum</i> )	—/—/1B.1	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Coastal bluff morning glory ( <i>Calystegia purpurata</i> ssp. <i>saxicola</i> )	—/—/1B.2	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
<b>Cobb Mountain lupine</b> ( <i>Lupinus sericatus</i> )	—/—/1B.2	<b>Chaparral, coniferous forest</b>	<b><u>None</u></b> : No chaparral habitat exists in the project area.
Colusa layia ( <i>Layia septentrionalis</i> )	—/—/1B.2	Chaparral, valley grassland	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Congdon's tarplant</b> ( <i>Centromadia parryi</i> ssp. <i>congdonii</i> )	—/—/1B.1	<b>Grassland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
Congested-headed hayfield tarplant ( <i>Hemizonia congesta</i> ssp. <i>congesta</i> )	—/—/1B.2	Grassland, coastal scrub	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Contra Costa goldfields</b> ( <i>Lasthenia conjugens</i> )	FE/—/1B.1	<b>Vernal pool</b>	<b><u>None</u></b> : No vernal pool habitat exists in the project area.
Crystal Springs lessingia ( <i>Lessingia arachnoidea</i> )	—/—/1B.2	Serpentine grassland	<u>None</u> : No serpentine grassland habitat exists in the project area.
Cunningham Marsh cinquefoil ( <i>Potentilla uliginosa</i> )	—/—/1A	Wetland	<u>None</u> : No wetland habitat exists in the project area.
Dark-eyed gilia ( <i>Gilia millefoliata</i> )	—/—/1B.2	Coastal sand dunes	<u>None</u> : No coastal sand dune habitat exists in the project area.
<b>Dark-mouthed triteleia</b> ( <i>Triteleia lugens</i> )	—/—/4.3	<b>Grassland, chaparral</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Deceiving sedge ( <i>Carex saliniformis</i> )	—/—/1B.2	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Deep-scarred cryptantha ( <i>Cryptantha excavata</i> )	—/—/1B.2	Woodland	<u>None</u> : No woodland habitat exists in the project area.
<b>Delta tule pea</b> ( <i>Lathyrus jepsonii</i> var. <i>jepsonii</i> )	—/—/1B.2	<b>Freshwater and brackish marsh</b>	<b><u>None</u>: No marsh habitat exists in the project area.</b>
<b>Diablo helianthella</b> ( <i>Helianthella castanea</i> )	—/—/1B.2	<b>Chaparral, grassland</b>	<b><u>Low</u>: Some grassland habitat exists in the project area.</b>
Dimorphic snapdragon ( <i>Antirrhinum subcordatum</i> )	—/—/4.3	Serpentine chaparral	<u>None</u> : No serpentine chaparral exists in the project area.
<b>Dwarf downingia</b> ( <i>Downingia pusilla</i> )	—/—/2B.2	<b>Vernal pool, wetland</b>	<b><u>None</u>: No vernal pool habitat exists in the project area.</b>
Dwarf soaproot ( <i>Chlorogalum pomeridianum</i> var. <i>minus</i> )	—/—/1B.2	Serpentine chaparral	<u>None</u> : No serpentine chaparral exists in the project area.
Eel-grass pondweed ( <i>Potamogeton zosteriformis</i> )	—/—/2B.2	Wetland, pond	<u>None</u> : No wetland habitat exists in the project area.
<b>Fragrant fritillary</b> ( <i>Fritillaria liliacea</i> )	—/—/1B.2	<b>Grassland</b>	<b><u>Low</u>: Some grassland habitat exists in the project area.</b>
Few-flowered navaretia ( <i>Navaretia leucocephala</i> ssp. <i>pauciflora</i> )	FE/SE/1B.1	Vernal pool, wetland	<u>None</u> : No vernal pool habitat exists in the project area.
<b>Franciscan onion</b> ( <i>Allium peninsulare</i> var. <i>franciscanum</i> )	—/—/1B.2	<b>Coastal grassland</b>	<b><u>Very Low</u>: No coastal grassland habitat exists in the project area.</b>
Geysers panicum ( <i>Panicum acuminatum</i> var. <i>thermale</i> )	—/—/1B.2	Chaparral, wetland	<u>None</u> : No chaparral habitat exists in the project area.
Glandular western flax ( <i>Hesperolinon adenophyllum</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Golden larkspur ( <i>Delphinium luteum</i> )	FE/SR/1B.1	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Grassleaf water plantain ( <i>Alisma gramineum</i> )	—/—/2B.2	Wetland, pond	<u>None</u> : No wetland habitat exists in the project area.
<b>Green monardella</b> ( <i>Monardella viridis</i> )	—/—/4.3	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
<b>Greene's narrow-leaved daisy</b> ( <i>Erigeron greenei</i> )	—/—/1B.2	Serpentine chaparral	<b><u>None</u>: No serpentine chaparral habitat exists in the project area.</b>
Hall's harmonia ( <i>Harmonia hallii</i> )	—/—/1B.2	Serpentine chaparral	<u>None</u> : No chaparral habitat exists in the project area.
<b>Henderson's bent grass</b> ( <i>Agrostis hendersonii</i> )	—/—/3.2	<b>Vernal pool</b>	<b><u>None</u>: No vernal pool habitat exists in the project area.</b>
Hoffman's bristly jewelflower ( <i>Streptanthus glandulosus</i> spp. <i>hoffmanii</i> )	—/—/1B.3	Chaparral, woodland	<u>None</u> : No chaparral habitat exists in the project area.
<b>Holly-leaved ceanothus</b> ( <i>Ceanothus purpureus</i> )	—/—/1B.2	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
Hospital Canyon larkspur ( <i>Delphinium californicum</i> ssp. <i>interius</i> )	—/—/1B.2	Woodland	<u>None</u> : No woodland habitat exists in the project area.
Humboldt County milk vetch ( <i>Astragalus agnicidus</i> )	—/—/1B.1	Coniferous forest	<u>None</u> : No coniferous forest habitat exists in the project area.
<b>Jepson's coyote thistle</b> ( <i>Eryngium jepsonii</i> )	—/—/4.2	<b>Wetland, vernal pool</b>	<b><u>None</u>: No wetland habitat exists in the project area.</b>
<b>Jepson's leptosiphon</b> ( <i>Leptosiphon jepsonii</i> )	—/—/1B.2	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
Jepson's milk-vetch ( <i>Astragalus rattanii</i> var. <i>jepsonianus</i> )	—/—/1B.2	Chaparral, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
<b>Johnny-nip</b> ( <i>Castilleja ambigua</i> var. <i>ambigua</i> )	—/—/4.2	<b>Wetland, riparian</b>	<b><u>None</u>: No wetland habitat exists in the project area.</b>
Kenwood Marsh checkerbloom ( <i>Sidalcea oregana</i> ssp. <i>valida</i> )	FE/SE/1B.1	Wetland	<u>None</u> : No wetland habitat exists in the project area.
Konocti manzanita ( <i>Arctostaphylos manzanita</i> ssp. <i>elegans</i> )	—/—/1B.3	Chaparral, woodland	<u>None</u> : No chaparral habitat exists in the project area.
Lake County stonecrop ( <i>Sedella leiocarpa</i> )	—/—/1B.1	Wetland	<u>None</u> : No wetland habitat exists in the project area.
<b>Legenere</b> ( <i>Legenere limosa</i> )	—/—/1B.1	<b>Wetland, grassland</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
Loch Lomond button-celery ( <i>Eryngium constancei</i> )	FE/SE/1B.1	Vernal pool	<u>None</u> : No vernal pool habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
<b>Lobb's aquatic buttercup</b> ( <i>Ranunculus lobbii</i> )	—/—/4.2	Vernal pool	<b><u>None</u></b> : No vernal pool habitat exists in the project area.
<b>Long-styled sand-spurrey</b> ( <i>Spergularia macrotheca</i> var. <i>longistyla</i> )	—/—/1B.2	Wetland, grassland	<b><u>Very Low</u></b> : Some grassland habitat exists in the project area.
<b>Lyngbye's sedge</b> ( <i>Carex lyngbyei</i> )	—/—/2B.2	Salt marsh	<b><u>None</u></b> : No salt marsh habitat exists in the project area.
Many-flowered navarretia ( <i>Navarretia leucocephala</i> spp. <i>pliantha</i> )	FE/SE/1B.2	Vernal pool	<u>None</u> : No wetland habitat exists in the project area.
Maple-leaved checkerbloom ( <i>Sidalcea malachroides</i> )	—/—/4.2	Coastal grassland, coniferous forest	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Marin checker lily ( <i>Fritillaria lanceolata</i> var. <i>tristulis</i> )	—/—/1B.1	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Marin checkerbloom ( <i>Sidalcea hickmanii</i> spp. <i>viridis</i> )	—/—/1B.2	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Marin County navarretia ( <i>Navarretia rosulata</i> )	—/—/1B.2	Serpentine forest	<u>None</u> : No serpentine habitat exists in the project area.
<b>Marin knotweed</b> ( <i>Polygonum marinense</i> )	—/—/3.1	Coastal salt marsh	<b><u>None</u></b> : No coastal salt marsh habitat exists in the project area.
Marin manzanita ( <i>Arctostaphylos virgata</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Marin western flax ( <i>Hesperolinon congestum</i> )	FT/ST/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Marsh checkerbloom ( <i>Sidalcea oregana</i> ssp. <i>hydrophila</i> )	—/—/1B.2	Wetland, riparian	<u>None</u> : No wetland habitat exists in the project area.
Marsh microseris ( <i>Microseris paludosa</i> )	—/—/1B.2	Wetland, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Marsh pea ( <i>Lathyrus palustris</i> )	—/—/2B.1	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Mason's ceanothus ( <i>Ceanothus masonii</i> )	—/SR/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
<b>Mason's lilaeopsis</b> ( <i>Lilaeopsis masonii</i> )	—/SR/1B.1	Freshwater and brackish marsh	<b><u>None</u></b> : No marsh habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Milo Baker's lupine ( <i>Lupinus milo-bakeri</i> )	—/—/1B.1	Woodland, grassland	<u>None</u> : No woodland habitat exists in the project area.
<b>Modest rockcress</b> ( <i>Arabis modesta</i> )	—/—/4.3	<b>Chaparral, forest</b>	<b><u>None</u></b> : No chaparral habitat exists in the project area.
Morrison's jewelflower ( <i>Streptanthus morrisonii</i> ssp. <i>morrisonii</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
<b>Mt. Diablo fairy-lantern</b> ( <i>Calochortus pulchellus</i> )	—/—/1B.2	<b>Chaparral, grassland</b>	<b><u>Very Low</u></b> : Some grassland habitat exists in the project area.
Mt. St. Helena morning glory ( <i>Calystegia collina</i> ssp. <i>oxyphylla</i> )	—/—/4.2	Serpentine chaparral	<u>None</u> : No serpentine habitat exists in the project area.
Mt. Tamalpais bristly jewelflower ( <i>Streptanthus glandulosus</i> ssp. <i>pulchellus</i> )	—/—/1B.2	Chaparral, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Mt. Tamalpais manzanita ( <i>Arctostaphylos montana</i> ssp. <i>montana</i> )	—/—/1B.3	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Mt. Tamalpais thistle ( <i>Cirsium hydrophilum</i> var. <i>vaseyi</i> )	—/—/1B.2	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Napa bluecurls</b> ( <i>Trichostema ruygtii</i> )	—/—/1B.2	<b>Grassland</b>	<b><u>Medium</u></b> : Some grassland habitat exists in the project area.
Napa blue grass ( <i>Poa napensis</i> )	FE/SE/1B.1	Wetland, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
<b>Napa checkerbloom</b> ( <i>Sidalcea hickmanii</i> ssp. <i>napensis</i> )	—/—/1B.1	<b>Chaparral</b>	<b><u>None</u></b> : No chaparral habitat exists in the project area.
<b>Napa false indigo</b> ( <i>Amorpha californica</i> var. <i>napensis</i> )	—/—/1B.2	<b>Forest, woodland</b>	<b><u>None</u></b> : No woodland habitat exists in the project area.
<b>Napa lomatium</b> ( <i>Lomatium repostum</i> )	—/—/1B.2	<b>Woodland, chaparral</b>	<b><u>None</u></b> : No woodland habitat exists in the project area.
<b>Narrow-anthered brodiaea</b> ( <i>Brodiaea leptandra</i> )	—/—/1B.2	<b>Woodland, grassland</b>	<b><u>Very Low</u></b> : Some grassland habitat exists in the project area.
<b>Nodding harmonia</b> ( <i>Harmonia nutans</i> )	—/—/4.3	<b>Woodland, chaparral</b>	<b><u>None</u></b> : No chaparral habitat exists in the project area.
North Coast semaphore grass ( <i>Pleuropogon hooverianus</i> )	—/—/1B.1	Wetland, vernal pool	<u>None</u> : No wetland habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Nuttall's ribbon-leaved pondweed ( <i>Potamogeton epihydrus</i> )	—/—/2B.2	Pond	<u>None</u> : No pond habitat exists in the project area.
<b>Oval-leaved viburnum</b> ( <i>Viburnum ellipticum</i> )	—/—/2B.3	<b>Chaparral</b>	<b><u>None</u></b> : No chaparral habitat exists in the project area.
Pacific gilia ( <i>Gilia capitata</i> ssp. <i>pacifica</i> )	—/—/1B.2	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Pacific Grove clover ( <i>Trifolium polyodon</i> )	—/—/1B.1	Grassland, wetland	<u>Very Low</u> : Some grassland habitat exists in the project area.
<b>Pappose tarplant</b> ( <i>Centromadia parryi</i> ssp. <i>parryi</i> )	—/—/1B.2	<b>Grassland, wetland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
<b>Parry's rough tarplant</b> ( <i>Centromadia parryi</i> ssp. <i>rudisi</i> )	—/—/4.2	<b>Grassland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
Pennell's bird's beak ( <i>Cordylanthus tenuis</i> ssp. <i>capillaris</i> )	FE/SR/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Perennial goldfields ( <i>Lasthenia californica</i> ssp. <i>macrantha</i> )	—/—/1B.2	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Peruvian dodder ( <i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> )	—/—/1B.2	Parasitic plant, grassland, chaparral	<u>Low</u> : Some grassland habitat exists in the project area.
Petaluma popcornflower ( <i>Plagiobothrys mollis</i> var. <i>vestitus</i> )	—/—/1A	Coastal salt marsh	<u>None</u> : No coastal salt marsh habitat exists in the project area.
Pink sand verbena ( <i>Abronia umbellata</i> var. <i>breviflora</i> )	—/—/1B.1	Coastal sand dune	<u>None</u> : No sand dune habitat exists in the project area.
Pitkin Marsh lily ( <i>Lilium pardalinum</i> ssp. <i>pitkinense</i> )	FE/SE/1B.1	Wetland	<u>None</u> : No wetland habitat exists in the project area.
Pitkin Marsh paintbrush ( <i>Castilleja uliginosa</i> )	FE/SE/1A	Wetland	<u>None</u> : No wetland habitat exists in the project area.
Point Reyes checkerbloom ( <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i> )	—/—/1B.2	Coastal salt marsh	<u>None</u> : No salt marsh habitat exists in the project area.
Point Reyes salty bird's beak ( <i>Chloropyron maritimum</i> ssp. <i>palustre</i> )	—/—/1B.2	Coastal salt marsh	<u>None</u> : No salt marsh habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Purple-stemmed checkerbloom ( <i>Sidalcea malviflora</i> spp. <i>purpurea</i> )	—/—/1B.2	Wetland	<u>None</u> : No wetland habitat exists in the project area.
Pygmy cypress ( <i>Hesperocyparis pygmaea</i> )	—/—/1B.2	Hardpan soil	<u>None</u> : No hardpan forest habitat exists in the project area.
Raiche's manzanita ( <i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i> )	—/—/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Raiche's red ribbons ( <i>Clarkia concinna</i> spp. <i>raichei</i> )	—/—/1B.1	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
<b>Redwood lily</b> ( <i>Lilium rubescens</i> )	—/—/4.2	<b>Chaparral, forest</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
<b>Rincon Ridge ceanothus</b> ( <i>Ceanothus confusus</i> )	—/—/1B.1	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
Rincon Ridge manzanita ( <i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i> )	—/—/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Rose leptosiphon ( <i>Leptosiphon rosaceus</i> )	—/—/1B.1	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Round-headed beaked rush ( <i>Rhynchospora globularis</i> )	—/—/2B.1	Wetland, riparian	<u>None</u> : No wetland habitat exists in the project area.
Round-headed Chinese houses ( <i>Collinsia corymbosa</i> )	—/—/1B.2	Coastal grassland	<u>None</u> : No coastal grassland habitat exists in the project area.
Round-leaved filaree ( <i>California macrophylla</i> )	—/—/1B.2	Foothill grassland	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Saline clover</b> ( <i>Trifolium hydrophilum</i> )	—/—/1B.2	<b>Wetland, riparian</b>	<b><u>None</u>: No potential wetland habitat exists in the project area.</b>
<b>San Antonio Hills monardella</b> ( <i>Monardella antonina</i> ssp. <i>antonina</i> )	—/—/3.0	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
San Francisco spineflower ( <i>Chorizanthe cuspidata</i> var. <i>cuspidata</i> )	—/—/1B.2	Coastal sand dunes	<u>None</u> : No coastal sand dune habitat exists in the project area.
<b>San Joaquin spearscale</b> ( <i>Extriplex joaquinana</i> )	—/—/1B.2	<b>Alkali scrub, grassland</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
Santa Cruz clover ( <i>Trifolium buckwestiorum</i> )	—/—/1B.1	Wetland, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Santa Cruz microseris ( <i>Stebbinsoseris decipiens</i> )	—/—/1B.2	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Santa Cruz tarplant ( <i>Holocarpha macradenia</i> )	FT/SE/1B.1	Coastal grassland	<u>None</u> : No coastal grassland habitat exists in the project area.
Santa Rosa horkelia ( <i>Horkelia tenuiloba</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Seaside bittercress ( <i>Cardamine angulata</i> )	—/—/2B.2	Forest, riparian	<u>None</u> : No forest habitat exists in the project area.
Sebastopol meadowfoam ( <i>Limnanthes vinculans</i> )	FE/SE/1B.1	Wetland, vernal pool	<u>None</u> : No wetland habitat exists in the project area.
Serpentine cryptantha ( <i>Cryptantha dissita</i> )	—/—/1B.2	Serpentine chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Serpentine daisy ( <i>Erigeron serpentinus</i> )	—/—/1B.3	Serpentine chaparral	<u>None</u> : No serpentine chaparral exists in the project area.
Short-leaved evax ( <i>Hesperevax sparsiflora</i> var. <i>brevifolia</i> )	—/—/1B.2	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Slender Orcutt grass ( <i>Orcuttia tenuis</i> )	FT/SE/1B.1	Vernal pool	<u>None</u> : No vernal pool habitat exists in the project area.
Small-flowered calycadenia ( <i>Calycadenia micrantha</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Small groundcone ( <i>Kopsiopsis hookeri</i> )	—/—/2B.3	Redwood forest	<u>None</u> : No redwood forest habitat exists in the project area.
<b>Small spikerush</b> ( <i>Eleocharis parvula</i> )	—/—/3.0	<b>Woodland, chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
<b>Soft salty bird's beak</b> ( <i>Chloropyron molle</i> ssp. <i>molle</i> )	<b>FE/ST/1B.2</b>	<b>Coastal salt marsh</b>	<b><u>None</u>: No salt marsh habitat exists in the project area.</b>
Sonoma alopecurus ( <i>Alopecurus aequalis</i> var. <i>sonomensis</i> )	FE/—/1B.1	Wetland, vernal pool	<u>None</u> : No wetland habitat exists in the project area.
Sonoma beardtongue ( <i>Penstemon newberryi</i> var. <i>sonomensis</i> )	—/—/1B.3	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
<b>Sonoma ceanothus</b> ( <i>Ceanothus sonomensis</i> )	—/—/1B.2	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Sonoma spineflower ( <i>Chorizanthe valida</i> )	FE/SE/1B.1	Coastal grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
<b>Sonoma sunshine</b> ( <i>Blennosperma bakeri</i> )	<b>FE/SE/1B.1</b>	<b>Grassland, wetland</b>	<b><u>Very Low</u></b> : Some grassland habitat exists in the project area.
<b>St. Helena fawn lily</b> ( <i>Erythronium helena</i> )	—/—/4.2	<b>Grassland, chaparral</b>	<b><u>Very Low</u></b> : Some grassland habitat exists in the project area.
<b>Streamside daisy</b> ( <i>Erigeron biolettii</i> )	—/—/4.2	<b>Grassland, chaparral</b>	<b><u>Very Low</u></b> : Some grassland habitat exists in the project area.
<b>Suisun marsh aster</b> ( <i>Symphotrichum lentum</i> )	—/—/1B.2	<b>Freshwater and brackish marsh</b>	<b><u>None</u></b> : No marsh habitat exists in the project area.
Supple daisy ( <i>Erigeron supplex</i> )	—/—/1B.2	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Swamp harebell ( <i>Campanula californica</i> )	—/—/1B.2	Coastal grassland, wetland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Tamalpais jewelflower ( <i>Streptanthus batrachopus</i> )	—/—/1B.3	Serpentine	<u>None</u> : No serpentine habitat exists in the project area.
Tamalpais lessingia ( <i>Lessingia micradenia</i> var. <i>micradenia</i> )	—/—/1B.2	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Tamalpais oak ( <i>Quercus parvula</i> var. <i>tamalpaisensis</i> )	—/—/1B.3	Woodland	<u>None</u> : No woodland habitat exists in the project area.
The Cedars fairy lantern ( <i>Calochortus raichei</i> )	—/—/1B.2	Hardpan chaparral	<u>None</u> : No chaparral habitat exists in the project area.
The Cedars manzanita ( <i>Arctostaphylos bakeri</i> ssp. <i>sublaevis</i> )	—/—/1B.2	Hardpan chaparral	<u>None</u> : No chaparral habitat exists in the project area.
<b>Thin-lobed horkelia</b> ( <i>Horkelia tenuiloba</i> )	<b>—/—/1B.2</b>	<b>Chaparral</b>	<b><u>None</u></b> : No chaparral habitat exists in the project area.
Thurber's reed grass ( <i>Calamagrostis crassiglumis</i> )	—/—/2B.1	Coastal scrub, wetland	<u>None</u> : No wetland habitat exists in the project area.
Tiburon buckwheat ( <i>Eriogonum luteolum</i> var. <i>caninum</i> )	—/—/1B.2	Serpentine grassland	<u>Very Low</u> : No serpentine grassland exists in the project area.
<b>Tiburon paintbrush</b> ( <i>Castilleja affinis</i> var. <i>neglecta</i> )	<b>FE/ST/1B.2</b>	<b>Serpentine grassland</b>	<b><u>Very Low</u></b> : No serpentine grassland exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
<b>Tracy's clarkia</b> ( <i>Clarkia gracilis ssp. tracyi</i> )	—/—/4.2	Serpentine chaparral	<b><u>None</u>: No serpentine grassland exists in the project area.</b>
Two-carpellate western flax ( <i>Hesperolinon bicarpellatum</i> )	—/—/1B.2	Serpentine chaparral	<u>None</u> : No serpentine chaparral exists in the project area.
<b>Twig-like snapdragon</b> ( <i>Antirrhinum virga</i> )	—/—/1B.1	Serpentine chaparral	<b><u>None</u>: No serpentine habitat exists in the project area.</b>
<b>Two-carpellate western flax</b> ( <i>Hesperolinon bicarpellatum</i> )	—/—/1B.2	Chaparral	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
<b>Two-fork clover</b> ( <i>Trifolium amoenum</i> )	FE/—/1B.1	Grassland, wetland	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
Vine Hill ceanothus ( <i>Ceanothus foliosus</i> var. <i>vineatus</i> )	—/—/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Vine Hill clarkia ( <i>Clarkia imbricata</i> )	FE/SE/1B.1	Chaparral, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Vine Hill manzanita ( <i>Arctostaphylos densiflora</i> )	—/SE/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Watershield ( <i>Brasenia schreberi</i> )	—/—/2B.3	Pond	<u>None</u> : No pond habitat exists in the project area.
<b>Western leatherwood</b> ( <i>Dirca occidentalis</i> )	—/—/1B.2	Woodland, chaparral	<b><u>None</u>: No woodland habitat exists in the project area.</b>
White-beaked rush ( <i>Rhynchospora alba</i> )	—/—/2B.2	Wetland, riparian	<u>None</u> : No wetland habitat exists in the project area.
White-flowered rein orchid ( <i>Piperia candida</i> )	—/—/1B.2	Coniferous forest	<u>None</u> : No coniferous forest habitat exists in the project area.
White-rayed pentachaeta ( <i>Pentachaeta bellidiflora</i> )	FE/SE/1B.1	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Wolly-headed gilia ( <i>Gilia capitata</i> ssp. <i>tomentosa</i> )	—/—/1B.1	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
<b>Wolly-headed lessingia</b> ( <i>Lessingia hololeuca</i> )	—/—/3.0	Forest, grassland	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
Wolly meadowfoam ( <i>Limnanthes floccosa</i> ssp. <i>floccosa</i> )	—/—/4.2	Vernal pool	<u>None</u> : No wetland habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Wolly spineflower ( <i>Chorizanthe cuspidata</i> var. <i>villosa</i> )	—/—/1B.2	Coastal sand dunes	<u>None</u> : No sand dune habitat exists in the project area.
MOSSES, LICHENS & LIVERWORTS			
Angel's hair lichen ( <i>Ramalina thrausta</i> )	—/—/2B.1	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
Coastal triquetrella ( <i>Triquetrella californica</i> )	—/—/1B.2	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
Elongate copper moss ( <i>Mielichhoferia elongata</i> )	—/—/4.3	Rock outcrops	<u>None</u> : No rock outcrop habitat exists in the project area.
Koch's cord moss ( <i>Entosthodon kochii</i> )	—/—/1B.3	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
Methuselah's beard lichen ( <i>Dolichousnea longissima</i> )	—/—/4.2	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
Slender silver moss ( <i>Anomobryum julaceum</i> )	—/—/4.2	Rocky substrates in forests	<u>None</u> : No forest habitat exists in the project area.
Torren's grimmia ( <i>Grimmia torenii</i> )	—/—/1B.3	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
HABITATS			
Coastal & Valley Freshwater Marsh (CVFM)	—	—	<u>None</u> : No marsh habitat exists in the project area.
<b>Coastal Brackish Marsh (CVFM)</b>	—	—	<b><u>None</u>: No brackish marshes exist in the project area.</b>
<b>Northern Coastal Salt Marsh (NCSM)</b>	—	—	<b><u>None</u>: No salt marsh habitat exists in the project area.</b>
Northern Hardpan Vernal Pool (NHVP)	—	—	<u>None</u> : No hardpan vernal pool habitat exists in the project area.
<b>Northern Vernal Pool (NVP)</b>	—	—	<b><u>None</u>: No vernal pool habitat exists in the project area.</b>
<b>Serpentine Bunchgrass (SBG)</b>	—	—	<b><u>None</u>: No serpentine bunchgrass habitat exists in the project area.</b>

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Sycamore Alluvial Woodland (SAW)	—	—	<u>None</u> : No woodland habitat exists in the project area.
Valley Needlegrass Grassland (VNG)	—	—	<u>Low</u> : Some grassland habitat exists in the project area.
Valley Oak Woodland (VOW)	—	—	<u>None</u> : No valley oaks exist in the project area.
Valley Sink Scrub (VSS)	—	—	<u>None</u> : No sink scrub habitat exists in the project area.

<sup>1</sup> Status:

Federal

FE = Federally Endangered Species

FT = Federally Threatened Species

State

SE = State Endangered Species

ST = State Threatened Species

SSC = California Species of Special Concern

CFP = California Fully Protected Species

CNPS (applies to plants only)

List 1B = plants considered rare, threatened, or endangered in California and elsewhere

List 2B = plants rare, threatened or endangered in California, but more common elsewhere

List 3 = plant is likely rare but more information is required

List 4 = plants of limited distribution

## Appendix B: Plant Species Observed Onsite

The following is a list of plant species generated based on knowledge of the species and habitats of Napa County by PEC staff, and from various State and Federal databases, as described in the *Methods* section, above. Special-status species, if any, are denoted with an asterisk (\*).

### Non-Native Plant Species:

bird's foot trefoil (*Lotus corniculatus*)  
 bishop's weed (*Ammi majus*)  
 black mustard (*Brassica nigra*)  
 bluegum (*Eucalyptus globulus*)  
 bristly ox-tongue (*Helminthotheca echioides*)  
 bull thistle (*Cirsium vulgare*)  
 bur clover (*Medicago polymorpha*)  
 cheeseweed (*Malva parviflora*)  
 chicory (*Cichorium intybus*)  
 common dandelion (*Taraxacum officinale*)  
 common groundsel (*Senecio vulgaris*)  
 crane's bill filaree (*Erodium botrys*)  
 curly dock (*Rumex crispus*)  
 false brome (*Brachypodium distachyon*)  
 fennel (*Foeniculum vulgare*)  
 field bindweed (*Convolvulus arvensis*)  
 field marigold (*Calendula arvensis*)  
 foxtail barley (*Hordeum murinum*)  
 Fuller's teasel (*Dipsacus fullonum*)  
 hairgrass (*Aira caryophylla*)  
 hairy vetch (*Vicia villosa*)  
 Harding grass (*Phalaris aquatica*)  
 hedge parsley (*Torilis arvensis*)  
 Himalayan blackberry (*Rubus armeniacus*)  
 Italian ryegrass (*Festuca perennis*)  
 Italian thistle (*Cirsium pycnocephalus*)  
 Jersey cudweed (*Pseudognaphalium luteoalbum*)  
 narrowleaf cottonrose (*Logfia gallica*)  
 New Zealand flax (*Phormium colensoi*)  
 pennyroyal (*Mentha pulegium*)  
 pineapple weed (*Matricaria discoidea*)  
 poison hemlock (*Conium maculatum*)  
 prickly lettuce (*Lactuca serriola*)  
 purple star thistle (*Centaurea calcitrapa*)  
 red brome (*Bromus madritensis*)  
 reed fescue (*Festuca arundinacea*)  
 ribwort (*Plantago lanceolata*)  
 riggut brome (*Bromus diandrus*)  
 rose clover (*Trifolium hirtum*)  
 scarlet pimpernel (*Lysimachia arvensis*)  
 seaside barley (*Hordeum marinum*)

sheep sorrel (*Rumex acetocella*)  
shortpod mustard (*Hirschfeldia incana*)  
shrubby germander (*Teucrium fruticans*)  
smooth cat's ear (*Hypochaeris glabra*)  
soft chess (*Bromus hordeaceus*)  
spring vetch (*Vicia sativa*)  
sweet pea (*Lathyrus latifolius*)  
tall flatsedge (*Cyperus eragrostis*)  
weedy brome (*Bromus caroli-henrici*)  
wild geranium (*Geranium dissectum*)  
wild lettuce (*Lactuca saligna*)  
wild oatgrass (*Avena barbata*)  
wild radish (*Raphanus sativa*)  
woolly grevillea (*Grevillea lanigera*)  
yellow star thistle (*Centaurea solstitialis*)  
Zorro fescue (*Festuca myuros*)

Native Plant Species:

blue-eyed grass (*Sisyrinchium bellum*)  
bog rush (*Juncus patens*)  
California poppy (*Eschscholzia californica*)  
common madia (*Madia elegans*)  
common yarrow (*Achillea millefolium*)  
coyote brush (*Baccharis pilularis*)  
hairy gumweed (*Grindelia hirsutula*)  
ladies' tobacco (*Pseudognaphalium californicum*)  
meadow barley (*Hordeum brachyantherum*)  
mountain dandelion (*Agoseris heterophylla*)  
narrow-leaved miner's lettuce (*Claytonia parviflora*)  
poison oak (*Toxicodendron diversilobum*)  
saltgrass (*Distichlis spicata*)  
slender tarweed (*Madia gracilis*)  
toyon (*Heteromeles arbutifolia*)



**U.S. Army  
Corps of  
Engineers**  
San Francisco District  
Regulatory Division

Preliminary Jurisdictional Determination  
pursuant to Section 404 Clean Water Act

American Canyon Flatlands  
American Canyon, Napa County  
(38.18459°, Longitude -122.27262°)

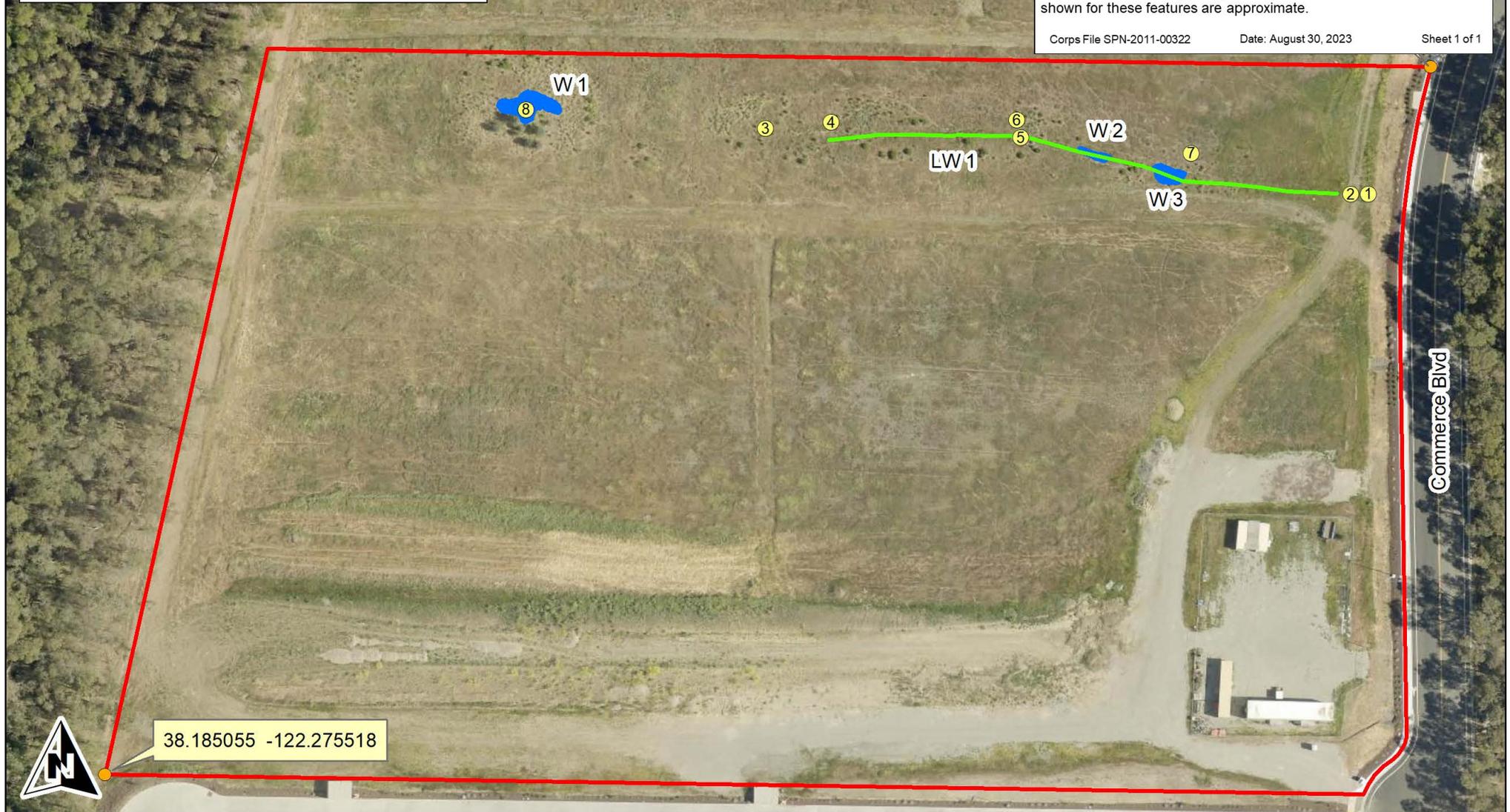
Accurate as depicted in legend

Preliminary Jurisdictional Determination verified only within the  
designated Limits of Delineation. All wetlands, as depicted in the  
legend and on the map, are potential waters of the U.S. All boundaries  
shown for these features are approximate.

Corps File SPN-2011-00322 Date: August 30, 2023 Sheet 1 of 1

- Control Point
- Data Point
- Linear Wetland (364 Lin. Ft., 1,820 Sq. Ft., 0.042 Acre)
- Wetland (988 Sq. Ft., 0.023 Acre)
- Limits of Delineation (~10.2 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland	Length (Ft.)	Width (Ft.)	Sq. Ft.	Acres
W 1	601	0.014	LW 1	364	5	1,820	0.042
W 2	132	0.003					
W 3	255	0.006					



38.185055 -122.275518

0 25 50 100 150 200 250 Feet Scale: 1 inch = 100 feet

Monk & Associates  
Environmental Consultants  
1136 Saranap Avenue, Suite Q  
Walnut Creek, California 94595  
(925) 947-4867

Sheet 1. Draft Aquatic Resources Delineation Map  
SDG Commerce 220 Project Site  
City of American Canyon, California

Delineation Conducted on: May 2, 2023  
Delineation Conducted by: Sarah Lynch and Zarina Sheikh  
Aerial Photograph Source: ESRI  
Map Preparation Date: May 10, 2023

**Appendix E:  
Plant and Wildlife List**

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## WILDLIFE AND PLANT SPECIES LIST

**Table 1: Wildlife Species List**

Wildlife Species	
Scientific Name	Common Name
<i>Agelaius phoeniceus</i>	red-shouldered blackbird
<i>Anas platyrhynchos</i>	mallard ducks
<i>Anthus rubescens</i>	American pipit
<i>Aphelocoma californica</i>	western scrub jay
<i>Ardea herodias</i>	great blue heron
<i>Bombycilla cedrorum</i>	cedar waxwing
<i>Branta canadensis</i>	Canada goose
<i>Buteo lineatus</i>	red-shouldered hawk
<i>Calypte anna</i>	Anna's hummingbird
<i>Cathartes aura</i>	turkey vulture
<i>Catharus guttatus</i>	hermit thrush
<i>Colaptes auratus</i>	northern flicker
<i>Corvus brachyrhynchos</i>	crow
<i>Corvus corax</i>	raven
<i>Elanus leucurus</i>	white-tailed kite
<i>Felis catus</i>	domestic cat
<i>Fulica americana</i>	American coot
<i>Haemorhous mexicanus</i>	house finch
<i>Haemorhous purpureus</i>	purple finch
<i>Junco hyemalis</i>	dark-eyed junco
<i>Larus californicus</i>	California gull
<i>Lepus californicus</i>	black-tailed jackrabbit
<i>Meleagris gallopavo</i>	wild turkey
<i>Melospiza melodia</i>	song sparrow
<i>Melospiza crissalis</i>	California towhee
<i>Microtus californicus</i>	California vole
<i>Molothrus ater</i>	brown-headed cowbird
<i>Odocoileus hemionus</i>	mule deer
<i>Passerella iliaca</i>	fox sparrow
<i>Pelecanus erythrorhynchos</i>	American pelican

Wildlife Species	
Scientific Name	Common Name
<i>Petrochelidon pyrrhonota</i>	cliff swallow
<i>Picoides nuttallii</i>	Nuttal's woodpecker
<i>Poecile rufescens</i>	chestnut-backed chickadee
<i>Regulus calendula</i>	ruby-crowned kinglet
<i>Salpinctes obsoletus</i>	rock wren
<i>Sayornis nigricans</i>	black phoebe
<i>Setophaga coronata</i>	yellow-rumped warbler
<i>Sialia mexicana</i>	western bluebird
<i>Spinus psaltria</i>	lesser goldfinch
<i>Spinus tristis</i>	American goldfinch
<i>Sturnus vulgaris</i>	European starling
<i>Tachycineta bicolor</i>	tree swallow
<i>Thryomanes bewickii</i>	Bewick's wren
<i>Troglodytes aedon</i>	house wren
<i>Turdus migratorius</i>	American robin
<i>Zenaida macroura</i>	mourning dove
<i>Zonotrichia atricapilla</i>	golden-crowned sparrow
<i>Zonotrichia leucophrys</i>	white-crowned sparrow

**Table 2: Plant Species List**

Plant Species	
Scientific Name	Common Name
<i>Achillea millefolium</i>	common yarrow
<i>Agoseris heterophylla</i>	mountain dandelion
<i>Aira caryophyllea</i>	hairgrass
<i>Ammi majus</i>	bishop's weed
<i>Avena barbata</i>	wild oatgrass
<i>Baccharis pilularis</i>	coyote brush
<i>Brachypodium distachyon</i>	false brome
<i>Brassica nigra</i>	black mustard
<i>Bromus caroli-henrici</i>	weedy brome
<i>Bromus diandrus</i>	rippgut brome
<i>Bromus hordeaceus</i>	soft chess

Plant Species	
Scientific Name	Common Name
<i>Bromus madritensis</i>	red brome
<i>Calendula arvensis</i>	field marigold
<i>Centaurea calcitrapa</i>	purple star thistle
<i>Centaurea solstitialis</i>	yellow star thistle
<i>Cichorium intybus</i>	chicory
<i>Cirsium pycnocephalus</i>	Italian thistle
<i>Cirsium sp.</i>	upland thistle
<i>Cirsium vulgare</i>	bull thistle
<i>Claytonia parviflora</i>	narrow-leaved miner's lettuce
<i>Conium maculatum</i>	poison hemlock
<i>Convolvulus arvensis</i>	field bindweed
<i>Cyperus eragrostis</i>	tall flatsedge
<i>Diatoms sp.</i>	algal mats
<i>Dipsacus fullonum</i>	Fuller's teasel
<i>Distichlis spicata</i>	saltgrass
<i>Erodium botrys</i>	crane's bill filaree
<i>Erodium cicutarium</i>	coastal heron's bill
<i>Eschscholzia californica</i>	California poppy
<i>Eucalyptus globulus)</i>	bluegum
<i>Festuca arundinacea</i>	reed fescue
<i>Festuca myuros</i>	Zorro fescue
<i>Festuca perennis</i>	Italian ryegrass
<i>Foeniculum vulgare</i>	fennel
<i>Geranium dissectum</i>	wild geranium
<i>Grevillea lanigera</i>	woolly grevillea
<i>Grindelia hirsutula</i>	hairy gumweed
<i>Helminthotheca echioides</i>	bristly ox-tongue
<i>Heteromeles arbutifolia</i>	toyon
<i>Hirschfeldia incana</i>	shortpod mustard
<i>Hordeum brachyantherum</i>	meadow barley
<i>Hordeum marinum</i>	seaside barley
<i>Hordeum murinum</i>	foxtail barley
<i>Hypochaeris glabra</i>	smooth cat's ear
<i>Juncus patens</i>	bog rush

Plant Species	
Scientific Name	Common Name
<i>Lactuca saligna</i>	wild lettuce
<i>Lactuca serriola</i>	prickly lettuce
<i>Lathyrus latifolius</i>	sweet pea
<i>Logfia gallica</i>	narrowleaf cottonrose
<i>Lotus corniculatus</i>	bird's foot trefoil
<i>Lysimachia arvensis</i>	scarlet pimpernel
<i>Madia elegans</i>	common madia
<i>Madia gracilis</i>	slender tarweed
<i>Malva parviflora</i>	cheeseweed
<i>Matricaria discoidea</i>	pineapple weed
<i>Medicago polymorpha</i>	bur clover
<i>Mentha pulegium</i>	pennyroyal
<i>Phalaris aquatica</i>	harding grass
<i>Phormium colensoi</i>	New Zealand flax
<i>Plantago lanceolata</i>	ribwort
<i>Pseudognaphalium californicum</i>	ladies' tobacco
<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed
<i>Raphanus sativa</i>	wild radish
<i>Rubus armeniacus</i>	Himalayan blackberry
<i>Rumex acetocella</i>	sheep sorrel
<i>Rumex crispus</i>	curly dock
<i>Rumex sp.</i>	docks
<i>Senecio vulgaris</i>	common groundsel
<i>Sisyrinchium bellum</i>	blue-eyed grass
<i>Taraxacum officinale</i>	common dandelion
<i>Teucrium fruticans</i>	shrubby germander
<i>Torilis arvensis</i>	hedge parsley
<i>Toxicodendron diversilobum</i>	poison oak
<i>Trifolium hirtum</i>	rose clover
<i>Vicia sativa</i>	spring vetch
<i>Vicia villosa</i>	hairy vetch

**C.2 - Commerce 217 Documents**

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April 20, 2023

John Wojtas  
Industrial and Commercial Contractors, LP  
413 W. Yosemite Avenue, Suite 105  
Madera, CA 93637

**Subject: Pre-construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 per the Mitigation Monitoring and Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California**

Dear John:

This letter summarizes results of pre-construction burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), nesting raptor, nesting passerine bird, and western pond turtle (*Actinemys marmorata*) surveys conducted to-date by FirstCarbon Solutions (FCS) consulting Biologists Dr. Christopher DiVittorio and Bernhard Warzecha as they relate to compliance with CEQA Mitigation Measures (MM) BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, and MM BIO-5 from the January 2021 Mitigation, Monitoring, and Reporting Program (MMRP) for the Commerce 217 Warehouse Project located in American Canyon, California.

The project site comprises a single parcel measuring 10.8 acres in size and consists of non-native annual and perennial grassland with several small, mapped wetland features. The site is bounded by Commerce Court to the east, a developed warehouse to the north, an open field to the south beyond which is another developed warehouse, and a eucalyptus grove to the west.

## Methods

Between January 18 and April 7, 2023, FCS conducted seven nesting bird and burrowing owl detection surveys (including for Swainson's hawk) on the project site and relevant adjacent areas (where accessible), for a total of approximately 30 survey hours. Surveys for western pond turtle adults and nests were also performed simultaneously while walking the site.

Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Protocol) and the *Staff Report on Burrowing Owl Mitigation*.<sup>1,2</sup> Survey equipment included high-quality binoculars and a high-quality spotting scope.

<sup>1</sup> Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. California Department of Fish and Wildlife, May 31, 2000.

<sup>2</sup> California Department of Fish and Wildlife 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

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### CANADA

### UNITED KINGDOM

### PORTUGAL

### FRANCE

### KENYA

### AUSTRALIA

### PHILIPPINES

### CHINA

### MALAYSIA

### SINGAPORE

Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Surveys were conducted on foot. Survey dates conducted by FCS are shown below in Table 1.

**Table 1: Survey Dates**

Date	Swainson’s Hawk	Burrowing Owl	Nesting Birds including Raptors
1/18/2023	First survey in Period I	Burrowing owl breeding season survey	Nesting bird surveys–All Species
3/20/2023	First survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
3/31/2023	Second survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/4/2023	Third survey in Period II	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/5/2023	First survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/6/2023	Second survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/7/2023	Third survey in Period III	Burrowing owl breeding season survey	Nesting bird surveys–All Species
4/24/2023 (planned)	Swainson’s hawk presence/absence survey	Burrowing owl breeding season survey	Nesting bird surveys–All Species

Surveys were conducted by FCS consulting Biologists Dr. Christopher DiVittorio and Bernhard Warzecha, both of whom are experienced in conducting surveys for all of the aforementioned special-status species and have been previously approved by the California Department of Fish and Wildlife (CDFW).

Additionally Mr. Warzecha and Dr. DiVittorio have previous experience and training in the monitoring of Swainson’s hawk nesting, including Swainson’s hawk identification and behavioral patterns.

## Results

A list of all species of birds observed at the different time points is provided below. No nesting birds were observed on the project site itself, and no nests of any protected species were observed off-site in the areas that could be accessed. White-tailed kites (*Elanus leucurus*) were observed foraging in the field, but they did not appear to be nesting nearby, as described below. No Swainson’s hawk or burrowing owl were observed during any of the avian surveys to-date. No adults or nests of western pond turtle were observed. All observed animal species are listed in Attachment A: Animal Species Observed.

### **Swainson's Hawk**

No individuals of Swainson's hawk were observed during any of the surveys, and no raptor nests that could belong to Swainson's hawk were observed. The presence of other birds-of-prey utilizing territories on-site also indicates that Swainson's hawk are not utilizing this habitat currently. The negative survey results for Swainson's hawk despite approximately 30 survey hours satisfies the requirements of the survey protocol for this species, therefore it is reasonable to conclude Swainson's hawk are absent from the project site.

### **Nesting Birds (Including Raptors)**

FCS Biologists observed no active nests within the vicinity of the project site. Several American crow were loitering around the eucalyptus grove to the east of the parcel and harassing white-tail kites that approached the grove; however, their nest could not be located. Several white-tail kites were observed each day foraging over the grassland habitat; however, each time they flew off to the southwest out of sight and the location of their nest could not be determined. One juvenile red-tailed hawk was observed within the large eucalyptus tree along the north property line; however, this individual flew off-site after approximately 20 minutes. No other active nests were observed as of April 7.

### **Burrowing Owl**

No evidence of burrowing owl activity was observed during any of the field surveys. No California ground squirrel burrows were observed on-site, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl. Therefore, it is reasonable to conclude burrowing owl is absent from the project site.

### **Western Pond Turtle**

No evidence of western pond turtle activity was observed during any of the field surveys. There are some wetland features on-site, however no ponds or streams suitable for western pond turtle exist on-site and no signs of adults or nests were observed. Therefore, it is reasonable to conclude western pond turtle is absent from the project site.

### **Compliance**

With implementation of the pre-construction surveys, and implementation of the recommendations for Swainson's hawk, burrowing owl, nesting birds, and western pond turtle, the project is in compliance with MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4 and MM BIO-5.

FCS appreciates the opportunity to assist you on this project. If you have any questions concerning this letter report, please contact me at [jwaligorski@fcs-intl.com](mailto:jwaligorski@fcs-intl.com).

Sincerely,



Janna Waligorski  
Senior Project Manager  
**FirstCarbon Solutions**  
2999 Oak Road, Suite 250  
Walnut Creek, CA 94597  
530.519.9736

**Attachment A:** Animal Species Observed List



**Attachment A:**  
**Animal Species Observed**



## Commerce 217/220 Species List

### Site Visit: 1/18/23

**Birds:** juvenile red-shouldered hawk (*Buteo lineatus*) sitting in eucalyptus tree on N fenceline, Western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), American pelican (*Pelecanus erythrorhynchos*), black phoebe (*Sayornis nigricans*), white-crowned sparrow (*Zonotrichia leucophrys*), Northern flicker (*Colaptes auratus*), crow (*Corvus brachyrhynchos*)

### Site Visit: 3/20/23

Start Time: 6:35 AM

Weather: no wind, 49 degF, 46% RH

Note: start at sunrise; park in SE corner

**Bird Species:** wild turkey (*Meleagris gallopavo*), turkey vulture (*Cathartes aura*), Canada goose (*Branta canadensis*), crow (*Corvus brachyrhynchos*), raven (*Corvus corax*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), Western bluebird (*Sialia mexicana*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), red-shouldered hawk (*Buteo lineatus*) two individuals soaring over the eucalyptus grove to the E of the site, house wren (*Troglodytes aedon*), American robin (*Turdus migratorius*), golden-crowned sparrow (*Zonotrichia atricapilla*), Nuttall's woodpecker (*Picoides nuttallii*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), purple finch (*Haemorhous purpureus*), tree swallow (*Tachycineta bicolor*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), California gull (*Larus californicus*), brown-headed cowbird (*Molothrus ater*), Anna's hummingbird (*Calypte anna*), chestnut-backed chickadee (*Poecile rufescens*), White-tailed kite (*Elanus leucurus*)

**Other Animals:** black-tailed jackrabbit (*Lepus californicus*)

**Flowering Plants:** California poppy (*Eschscholzia californica*), coastal heron's bill (*Erodium cicutarium*), common groundsel (*Senecio vulgaris*), field marigold (*Calendula arvensis*)

### Site Visit: 3/31/23

Start time: 6:30 AM

Weather: clear, wind 0 mph, 44.5 degF, 76.5% RH

Notes: parked NE corner

**Bird species:** American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida macroura*), Western scrub jay (*Aphelocoma californica*), lesser goldfinch (*Spinus psaltria*), house wren (*Troglodytes aedon*), Canada goose (*Branta canadensis*), American goldfinch (*Spinus tristis*), house sparrow (*Passer domesticus*),

Allen's hummingbird (*Selasphorus sasin*), killedeer (*Charadrius vociferus*), raven (*Corvus corax*), unknown gull likely Western or California, American coot (*Fulica americana*), European starling (*Sturnus vulgaris*), ruby-crowned kinglet (*Regulus calendula*), black phoebe (*Sayornis nigricans*)

**Other Animals:** Mule deer (*Odocoileus hemionus*), domestic cat (*Felis catus*)

### Site Visit: 4/4/23

Start time: 6:35 AM

Weather: clear, 49 degF, no wind, 81% RH, 6:15 AM first light, 7:15 first direct sunlight

Notes: parked SW corner

**Bird Species:** red-shouldered hawk (*Buteo lineatus*) perched on eucalyptus tree on N fenceline, wild turkey (*Meleagris gallopavo*) calling and all over parking area, White-tailed kite (*Elanus leucurus*) foraging and calling, house wren (*Troglodytes aedon*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaidura macroura*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), purple finch (*Haemorhous purpureus*), song sparrow (*Melospiza melodia*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), rock wren (*Salpinctes obsoletus*), black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), fox sparrow (*Passerella iliaca*), Northern mockingbird (*Mimus polyglottos*), tree swallow (*Tachycineta bicolor*), Canada goose (*Branta canadensis*), killedeer (*Charadrius vociferus*), Anna's hummingbird (*Calypte anna*), Western bluebird (*Sialia mexicana*)

**Other Animals:** black-tailed jackrabbit (*Lepus californicus*)

### Site Visit: 4/5/23

Start time: 6:08 AM

Weather: 39 degF, 80% RH, no wind

Notes: met Jerry with Stravinsky on-site; parked SW corner

**Bird Species:** red-shouldered hawk (*Buteo lineatus*) called from southwest corner of eucalyptus grove once, wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melospiza crissalis*), raven (*Corvus corax*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), White-tailed kite (*Elanus leucurus*) 3 hovering various times over the field, Nuttall's woodpecker (*Picoides nuttallii*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*)

### Site Visit: 4/6/23

Start time: 6:17 AM

Weather: clear, 44 degF, 80% RH, no wind

Notes: fewer wildlife than yesterday; met Jerry with Stravinsky on-site; parked SW corner

**Bird Species:** wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melospiza crissalis*), brown creeper (*Certhia americana*), raven (*Corvus corax*), American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), red-shouldered hawk (*Buteo lineatus*) called from southwest corner of eucalyptus grove once similar to other mornings, White-tailed kite (*Elanus leucurus*) two individuals over east eucalyptus grove being chased by crows, song sparrow (*Melospiza melodia*), great blue heron (*Ardea herodias*) soaring overhead, unknown gulls soaring, lesser goldfinch (*Spinus psaltria*), Anna's hummingbird (*Calypte anna*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*)

**Other Animals:** runways of black-tailed jackrabbit (*Lepus californicus*) and California vole (*Microtus californicus*)

**Site Visit: 4/7/23**

Start time: 6:30 AM

Weather: cloudy, 54.5 degF, 79% RH, wind 1-2 mph

Notes: fewer birds today, met Jerry on-site

**Bird Species:** Bewick's wren (*Thryomanes bewickii*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), hermit thrush (*Catharus guttatus*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), Nuttall's woodpecker (*Picoides nuttallii*), White-tailed kites (*Elanus leucurus*) being chased by crows then two foraging in field, cliff swallow (*Petrochelidon pyrrhonota*), cedar waxwing (*Bombycilla cedrorum*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*)

**Other Animals:** black-tailed jackrabbit (*Lepus californicus*)

September 3, 2020

Industrial and Commercial Contractors, LP  
403 W. Yosemite Avenue, Suite 105  
Madera, California 93637

Attention: Mr. Brian Doswald

**RE: Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site  
SDG Commerce 217 Distribution Center, Napa, California  
APN: 058-030-065-000**

Dear Mr. Doswald:

## 1. INTRODUCTION

Monk & Associates, Inc., (M&A) has prepared this Addendum to our March 2, 2020, *Revised Biological Resource Analysis* (biology report) for the SDG Commerce 217 Distribution Center located in the City of American Canyon, California (the “project site”). Since the time M&A prepared our biology report for the project site, it has been determined that it will be necessary to acquire soil from the adjacent parcel to the south (the “borrow area parcel”) and transport this soil for use as clean fill on the project site. M&A has prepared this Addendum to our biology report to address the transportation of soil from the offsite borrow area parcel onto the project site and to analyze any affects this activity could have on mapped jurisdictional waters of the United States/State that lie inbetween the project site and the adjacent borrow area parcel. Mapped waters of the United States are shown on the attached exhibits.

## 2. DESCRIPTION OF THE PROJECT SITE AND ADJACENT BORROW AREA PARCEL

The project site and the adjacent borrow area parcel were once part of a contiguous approximately 35-acre project site that M&A conducted surveys on over multiple years dating between 2006 and 2018. Both the project site and adjacent borrow area parcel are dominated by ruderal (weedy) vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). These non-native, weedy species provide little habitat value to wildlife and they do not constitute a native plant community. Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, is also common on the 35 acres. Ruderal vegetation is the only vegetation community found on the project site. The adjacent borrow area parcel, however, in addition to supporting a ruderal herbaceous community also supports waters of the United States, as described below.

On May 16, 2018, the U.S. Army Corps of Engineers issued a jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the approximately 35-acre

Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site  
SDG Commerce 217 Distribution Center, Napa, California  
APN: 058-030-065-000

Page 2

parcel that comprises the project site, the adjacent borrow area parcel, and another property now known as 330 Commerce Center (see attached exhibits). The entire 0.043-acre of waters of the U.S. confirmed by the Corps is found on the adjacent borrow area parcel as shown on the attached exhibit "Borrow Site Rough Grading," Sheet 1 prepared by RSA on August 21, 2020. There are no waters of the United States or State on the project site.

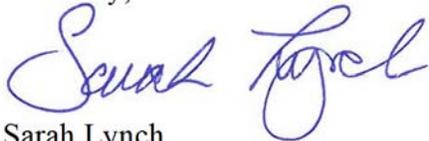
### **3. DISCUSSION OF PROPOSED ACTIVITIES AND AVOIDANCE OF IMPACTS TO MAPPED WATERS OF THE UNITED STATES**

The project applicant intends to rough grade the borrow area parcel and transport soil from that parcel onto the project site for use in development of the project site. In order to protect the waters of the United States/State that occur in between the project site and the borrow area parcel, a 25-foot buffer area around the outside edge of the wetlands will be staked and protected with fiber roll, silt fencing and high visibility orange construction fencing to prevent equipment from driving into the wetlands during hauling activities. See the attached exhibit.

With these protection measures in place, as shown on the attached Borrow Site Rough Grading exhibit, Sheet 1, attached, *there are no expected impacts to waters of the U.S./State from the transport of soil/materials from the borrow area parcel to the project site.*

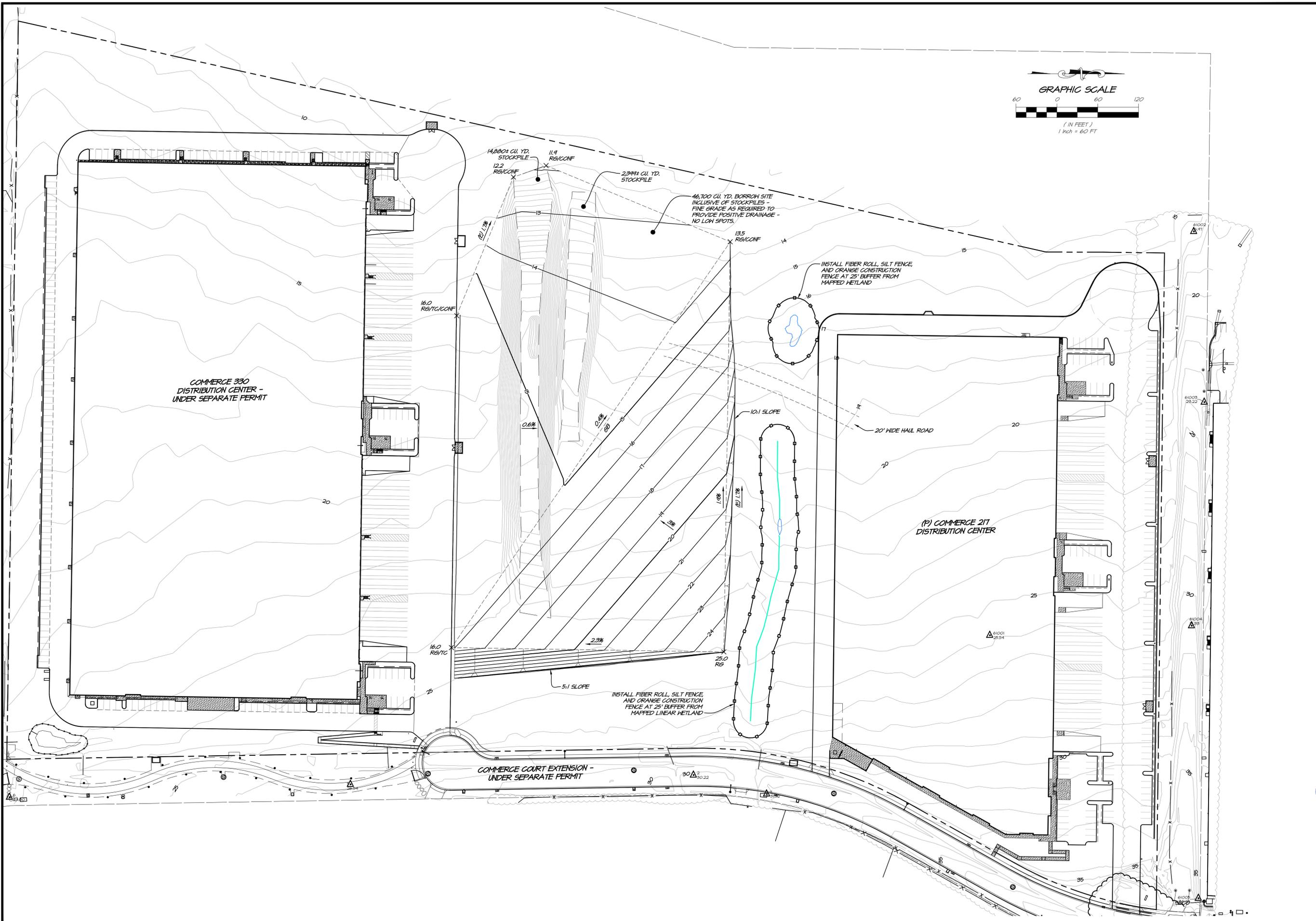
This concludes our addendum to our biology report. If you have any questions or require additional information, please do not hesitate to contact me at (925) 323-4850 or [Sarah@monkassociates.com](mailto:Sarah@monkassociates.com). Thank you.

Sincerely,



Sarah Lynch  
Senior Associate Biologist

Attachments: U.S. Army Corps of Engineers Confirmed Aquatic Resources Delineation Map;  
Sheet 1, Borrow Site Rough Grading prepared by RSA, August 21, 2020



NO.	DATE	BY	APPD.

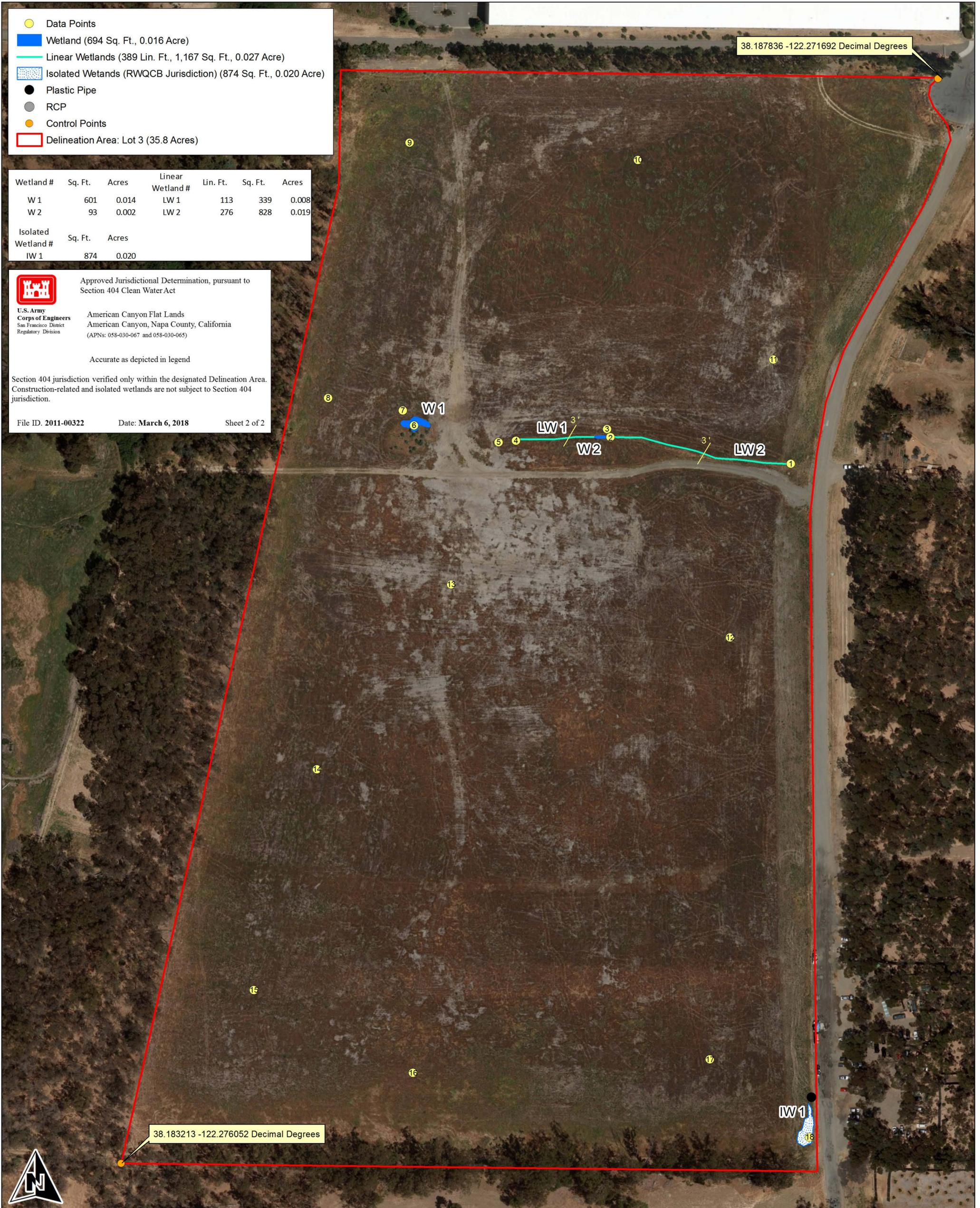
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**SDG COMMERCE 217 DISTRIBUTION CENTER  
 BORROW SITE ROUGH GRADING**  
 AMERICAN CANYON  
 CALIFORNIA



DATE	AUG. 21, 2020
DRAWN	DRL
DESIGNED	DRL
CHECKED	PSW
JOB NO.	411903710
SHEET NO.	1



38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees

- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetlands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
- Plastic Pipe
- RCP
- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army  
Corps of Engineers  
San Francisco District  
Regulatory Division

American Canyon Flat Lands  
American Canyon, Napa County, California  
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID: 2011-00322      Date: March 6, 2018      Sheet 2 of 2



**Revised**  
**BIOLOGICAL RESOURCE ANALYSIS**  
**SDG COMMERCE 217 DISTRIBUTION CENTER**  
**CITY OF AMERICAN CANYON, CALIFORNIA**

**March 2, 2020**

**Prepared for**

SDG Commerce 217, LLC  
413 W. Yosemite Ave. Suite 105  
Madera, California 93637

**Prepared by**

Monk & Associates, Inc.  
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Walnut Creek, California 94595

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

**TABLE OF CONTENTS**

**1. INTRODUCTION..... 4**

**2. PROPERTY LOCATION AND SETTING ..... 4**

**3. PROPOSED PROJECT ..... 5**

**4. ANALYSIS METHODS..... 5**

**5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES..... 5**

    5.1 Topography ..... 5

    5.2 Hydrology ..... 5

    5.3 Plant Communities and Associated Wildlife Habitats ..... 6

        5.3.1 RUDERAL HERBACEOUS VEGETATION ..... 6

    5.4 Wildlife Corridors..... 6

**6. SPECIAL-STATUS SPECIES DEFINITION ..... 7**

    6.1 Definitions..... 7

    6.2 Potential Special-Status Plants on the Project Site ..... 9

    6.3 Potential Special-Status Animals in the Project Site ..... 10

        6.3.1 CALIFORNIA RED-LEGGED FROG ..... 10

        6.3.2 SWAINSON’S HAWK..... 12

        6.3.3 WESTERN BURROWING OWL..... 13

        6.3.4 NORTHERN HARRIER ..... 14

**7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS..... 14**

    7.1 Federal Endangered Species Act..... 14

        7.1.1 RESPONSIBLE AGENCY ..... 16

        7.1.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 16

    7.2 Federal Migratory Bird Treaty Act ..... 17

        7.2.1 APPLICABILITY TO THE PROPOSED PROJECT ..... 17

    7.3 California Endangered Species Act ..... 17

        7.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT ..... 17

        7.3.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 19

    7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513 ..... 19

        7.4.1 APPLICABILITY TO THE PROPOSED PROJECT ..... 19

    7.5 City of American Canyon General Plan ..... 20

        7.5.1 GOAL 8, OBJECTIVE 8.1 AND POLICIES 8.1.1 AND 8.1.4 ..... 20

        7.5.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 20

        7.5.3 OBJECTIVE 8.2 AND POLICY 8.2.1..... 20

        7.5.4 APPLICABILITY TO THE PROPOSED PROJECT ..... 21

        7.5.5 OBJECTIVE 8.3 AND POLICY 8.3.1..... 21

        7.5.6 APPLICABILITY TO THE PROPOSED PROJECT ..... 21

        7.5.7 POLICY 8.3.1 B..... 21

        7.5.8 APPLICABILITY TO THE PROPOSED PROJECT ..... 21

        7.5.9 POLICY 8.3.1 E..... 21

        7.5.10 APPLICABILITY TO THE PROPOSED PROJECT ..... 21

        7.5.11 POLICY 8.3.1 F ..... 21

        7.5.12 APPLICABILITY TO THE PROPOSED PROJECT ..... 22

        7.5.13 POLICY 8.3.1 G ..... 22

        7.5.14 POLICIES 8.3.5 AND 8.3.6 ..... 22

        7.5.15 APPLICABILITY TO THE PROPOSED PROJECT ..... 22

**8. CITY OF AMERICAN CANYON –ORDINANCES..... 22**

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

8.1 Trees (Ord. 18.40.110) ..... 22  
 8.1.1 APPLICABILITY TO THE PROPOSED PROJECT ..... 22

**9. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE ..... 22**

9.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting ..... 23  
 9.1.1 SECTION 404 OF THE CLEAN WATER ACT ..... 23  
 9.1.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 26

9.2 State Water Resources Control Board (SWRCB) / California Regional Water Quality Control Board (RWQCB)..... 26  
 9.2.1 SECTION 401 OF THE CLEAN WATER ACT ..... 26  
 9.2.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 27

9.3 California Department of Fish and Wildlife Protections..... 27  
 9.3.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE..... 27  
 9.3.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 28

**10. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORM WATER MANAGEMENT ..... 28**

10.1 Construction General Permit..... 28  
 10.1.1 APPLICABILITY TO THE PROPOSED PROJECT ..... 30

10.2 RWQCB Municipal Storm Water Permitting Programs ..... 30  
 10.2.1 NPDES C.3 REQUIREMENTS ..... 30  
 10.2.2 APPLICABILITY TO THE PROPOSED PROJECT ..... 31

**11. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS ..... 32**

**12. IMPACTS ANALYSIS..... 33**

12.1 Significance Criteria ..... 33  
 12.1.1 THRESHOLDS OF SIGNIFICANCE ..... 33

**13. IMPACT ASSESSMENT AND PROPOSED MITIGATION..... 34**

13.1 Impact BIO-1. Development of the Project Could Have a Potentially Significant Impact on Nesting Swainson’s hawks (Potentially Significant)..... 35

13.2 Mitigation Measure BIO-1. Mitigation for Potential Impacts to Nesting Swainson’s Hawk ..... 36

13.3 Impact BIO-2. Development of the Project Could Have a Potentially Significant Impact on Western Burrowing Owl (Potentially Significant) ..... 36

13.4 Mitigation Measure BIO-2. Mitigation for Potential Impacts to Western Burrowing Owl ..... 36

13.5 Impact BIO-3: Development of the Project Would Have a Potentially Significant Impact on Tree or Ground Nesting Raptors (Potentially Significant)..... 37

13.6 Mitigation Measure BIO-3: Mitigation for Potential Impacts to Tree or Ground Nesting Raptors ..... 37

13.7 Impact BIO-4: Development of the Project Would Have a Potentially Significant Impact on Nesting Passerine Birds. (Potentially Significant)..... 38

13.8 Mitigation Measure BIO-4: Mitigation for Potential Impacts to Nesting Passerine Birds. .... 39

**14. LITERATURE CITED ..... 40**

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

**FIGURES**  
(At Back of Report)

Figure 1. SDG Commerce 217 Distribution Center Project Site Regional Map.

Figure 2. SDG Commerce 217 Distribution Center Project Site Location Map.

Figure 3. SDG Commerce 217 Distribution Center Project Site Aerial Photograph.

Figure 4. Known Special-Status CNDDDB Records Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

Figure 5. USFWS Critical Habitat in the Vicinity of the SDG 217 Commerce Distribution Center Project Site.

**TABLES**  
(At Back of Report)

Table 1. Plant Species Observed on the SDG Commerce 217 Distribution Center Project Site.

Table 2. Wildlife Species Observed on the SDG Commerce 217 Distribution Center Project Site.

Table 3. Special-Status Plant Species Known to Occur Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

Table 4. Special-Status Wildlife Species Known to Occur Within 3 Miles of the SDG Commerce 217 Distribution Center Project Site.

**ATTACHMENTS**  
(At Back of Report)

Sheet A1. Preliminary Site Plan for the SDG Commerce 217 Distribution Center, prepared by WAI (Ward Architects, Inc.) dated January 15, 2020.

Sheet 2. Confirmed Reverification Aquatic Resources Delineation Map, dated May 22, 2017.

Sheet UP4. Utility Plan for the SDG Commerce 217 Distribution Center, prepared by RSA, dated January 2020.

Storm Drain Level Spreader Detail, prepared by RSA, dated January 7, 2020.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

## 1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this biological resource analysis for the proposed SDG Commerce 217 Distribution Center project site (herein referred to as the project site) located in the City of American Canyon, California (Figures 1 and 2). The purpose of our analysis is to provide a description of existing biological resources on the project site and to identify potentially significant impacts that could occur to sensitive biological resources from the construction of a distribution center and associated parking on the project site.

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations, including the California Native Plant Society (CNPS). Biological resources also include waters of the United States and State, as regulated by the U.S. Army Corps of Engineers (Corps), California Regional Water Quality Control Board (RWQCB), and CDFW. Our analysis includes a formal delineation of “waters of the U.S.” that was confirmed in 2012 and reverified by the Corps in 2017.

This biological resources analysis also provides mitigation measures for “potentially significant” impacts that could occur to biological resources. Whenever possible, upon implementation, the prescribed mitigation measures would reduce impacts to levels considered less than significant pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code §§ 21000 et seq.; 14 Cal. Code Regs §§ 15000 et seq). Accordingly, this report is suitable for review and inclusion in any review being conducted by the City of American Canyon for the proposed project pursuant to the CEQA.

## 2. PROPERTY LOCATION AND SETTING

The approximately 10-acre project site is located at 1075 Commerce Court, American Canyon, Napa County, California (Figures 1 and 2). The project site is bordered to the southeast by Jungle Paintball, a 40-acre paintball park. To the east is located a large eucalyptus grove with scattered mobile homes. Further to the east is Oat Hill, a geographically prominent hill west of Highway 29. A mix of open space, large warehouses and distribution centers occurs north of the project site. The American Canyon Wastewater Treatment Plant and treatment ponds is located west of the project site. The Napa River and associated marshes occur greater than 300 feet west of the project site. A large distribution center, known as the SDG Commerce 330 Distribution Center, is currently under construction occurs immediately to the south of the project site. Clark Ranch, Wetlands Edge Park, and salt marsh and mudflat habitats associated with the Napa River, occur further to the south of the project site. The Napa Valley Unified School District is constructing the Napa Junction Elementary School to the southeast, along Eucalyptus Drive. Figure 3 provides an aerial photograph that shows the project site features and the surrounding land use.

The 10.39-acre project site is part of a larger 35.85-acre parcel (formerly known as Lot 3) that is comprised of a highly disturbed, ruderal (weedy) plant community, that was recently graded and leveled. This site formerly was occupied by a grove of blue gum eucalyptus (*Eucalyptus globulus*) trees that were removed in 2012.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

### **3. PROPOSED PROJECT**

The applicant proposes to construct a 217,294-square foot distribution center with associated parking areas and a detention/bioretenion pond on the 10.39-acre project site. Access to the distribution center will be provided by the Commerce Court extension, as illustrated on the Preliminary Site Plan (see attached Sheet A1).

### **4. ANALYSIS METHODS**

Prior to preparing this biological resources analysis report, M&A researched the most recent version of CDFW's Natural Diversity Database, RareFind 5 application (CNDDDB 2018) for historic and recent records of special-status plant and animal species (that is, threatened, endangered, rare) known to occur in the region of the project site. All special-status species records were compiled in tables. M&A examined all known record locations for special-status species to determine if special-status species could occur on the project site or within an area of affect.

M&A biologists have a long history of field surveys associated with the approximately 35-acre parcel. M&A biologists conducted site surveys on the parcel on March 1 and April 27, 2006, June 14, 2011, February 14, March 21, and June 12, 2012, May 18, 2017, and on March 30, 2018, December 19 and December 27, 2019. In 2006, and again in 2011, M&A conducted a wetland delineation on the entire parcel. This delineation of "waters of the U.S." was confirmed by the Corps in 2012 and reverified by this agency in 2017. The Corps Confirmed Reverification of Aquatic Resources Delineation Map is provided as Sheet 2.

During the site surveys and wetland delineations, M&A biologists recorded biological resources and assessed the likelihood of resource regulated areas on the project site. In addition to the wetland delineations, the survey involved searching all habitats on the site and recording all plant and wildlife species observed. M&A cross-referenced the habitats found on the project site against the habitat requirements of local or regionally known special-status species to determine if the proposed project could directly or indirectly impact such species. The results of our literature research and field reconnaissance are provided in the sections below.

### **5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES**

#### **5.1 Topography**

The project site is relatively flat with elevations ranging from 8 to 20 feet above sea level. The ground is undulating due to past land use disturbances including eucalyptus tree removal in 2012. The site slopes gently to the west towards North Slough and the Napa River.

#### **5.2 Hydrology**

There are no drainages on the project site. There are no indicators of hydrology on the 10-acre project site (Sheet 2).

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### 5.3 Plant Communities and Associated Wildlife Habitats

A complete list of plant species observed on the project site is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual* Second Edition (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (<http://ucjeps.berkeley.edu/interchange/index.html>). Table 2 is a list of wildlife species observed on the project site during multiple years of surveys at the project site. Nomenclature for wildlife follows CDFW's *Complete list of amphibian, reptile, bird, and mammal species in California* (CDFW 2016) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW's list.

#### 5.3.1 RUDERAL HERBACEOUS VEGETATION

A complete list of plant species observed within the project site is presented in Table 1. The project site is dominated by ruderal vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, such as is found on the project site, is also common on this parcel.

Typically, ruderal communities provide habitat for those animal species adapted to humans. Examples of animals associated with these communities include wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), California ground squirrel (*Otospermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), California meadow vole (*Microtus californicus*), and Botta's pocket gopher (*Thomomys bottae*), among others, all of which have been observed on the project site. Red-shouldered hawk (*Buteo lineatus*), tree swallows (*Tachycineta bicolor*), Nuttall's woodpecker (*Picoides nuttallii*), and northern flicker (*Colaptes auratus*), among others, likely nest in the eucalyptus trees that surround the project site to the west, north and south. Chestnut-backed chickadee (*Poecile rufescens*), brown creeper (*Certhia americana*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), Bullock's oriole (*Icterus bullockii*) and western gray squirrel (*Sciurus griseus*) were also observed in the immediate project vicinity.

### 5.4 Wildlife Corridors

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: 1) they provide avenues along which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; 2) populations can move in response to environmental changes and natural disasters; and 3) individuals can recolonize habitats from which populations have been locally extirpated (Beier and Loe 1992). All three of these functions can be met if both regional and local wildlife corridors are accessible

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Local wildlife corridors also provide access routes to food, cover, and water resources within restricted habitats.

The proposed project will not interfere with the movement of native wildlife. The project site has a history of disturbance associated with eucalyptus tree removal in 2012, and continued disturbance associated with the paintball facility located immediately to the southeast and construction of the SDG Commerce 330 Distribution Center distribution center to the south. The eucalyptus grove and the marshes associated with the Napa River to the west of the project site provide a more valuable wildlife corridor for terrestrial wildlife.

## 6. SPECIAL-STATUS SPECIES DEFINITION

### 6.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq.*; 14 CCR §670.1 *et seq.*) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);
- plants and animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;
- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS' electronic *Inventory* (CNPS 2017). The California Department of Fish and Wildlife (CDFW) recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in EIRs. Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001) (CNPS 2017). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information (more on CNPS Rank species below);
- migratory nongame birds of management concern listed by U.S. Fish and Wildlife Service (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

- animals that are designated as "species of special concern" by CDFW (2018);
- Animal species that are “fully protected” in California (Fish and Game Codes 3511, 4700, 5050, and 5515).
- Bat Species that are designated on the Western Bat Working Group’s (WBWG) Regional Bat Species Priority Matrix as: “RED OR HIGH.” This priority is justified by the WBWG as follows: “Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.”

In the paragraphs below we provide further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as Endangered or Threatened under the FESA is protected from unauthorized “take” (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a Federal listed Endangered or Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

State Threatened Species. A species listed as Threatened under the state Endangered Species Act (§2050 of California Fish and Game Code) is protected from unauthorized “take” (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to “take” a state listed Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from CDFW prior to initiating the “take.”

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered “rare.” Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a “significant effect on the environment” (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an “Inventory” of special status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federal listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the Fish and Game Code, and are eligible for state listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern, and are reviewed by CDFW and maintained on “watch lists.”

Additionally, in 2006 CNPS updated their lists to include “threat code extensions” for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered “seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)”;
- .2 is “fairly endangered in California (20-80% of occurrences threatened)”;
- .3 is “not very endangered in California (less than 20% of occurrences threatened or no current threats known).”

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA’s definition of “rare” or “endangered.” Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the white-tailed kite and golden eagle, are protected under California Fish and Game Code (§3511). Fully protected birds may not be “taken” or possessed (i.e., kept in captivity) at any time.

## **6.2 Potential Special-Status Plants on the Project Site**

Figure 4 provides a graphical illustration of the known records for special-status species within 3 miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status plants have been mapped on or adjacent to the project site. However, according to the CDFW’s CNDDDB, a total of eight special-status plant species are known to occur in the region of the project site (Table 3). Most of these plants occur in specialized habitats such as marshes, foothill grasslands, and vernal pools, none of which occur onsite. In the recent past, blue gum eucalyptus trees covered the majority of the project site dating back for several decades; these trees emit allelopathic (growth inhibiting) chemicals from their leaves, acorns and bark that prevent other plants from growing under them. Once bark and leaf debris accumulate on the ground beneath the trees, nearly nothing will grow there. Based on the negative findings during the multiple surveys conducted on this site in 2006, 2011, 2012, 2017, 2018 and 2019, special-status plants are not likely to be found onsite and mitigation for special-status plants should not be warranted.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### 6.3 Potential Special-Status Animals in the Project Site

Figure 4 provides a graphical illustration of the known records for special-status species within three miles of the project site and helps readers visually understand the number of sensitive species that occur in the vicinity of the project site. No special-status animal records have ever been mapped on or adjacent to the project site. However, a total of 18 special-status animal species are known to occur in the region of the project site (Table 4). Due to the disturbed nature of the project site and its history as a eucalyptus grove, there is a very low likelihood of special-status species occurring onsite. Regardless, due to the sensitivity of four of the special-status wildlife species known to occur in the area, we further discuss these species below.

#### 6.3.1 CALIFORNIA RED-LEGGED FROG

The California red-legged frog (*Rana draytonii*) was federally-listed as threatened on May 23, 1996 (Federal Register 61: 25813-25833) and as such is protected pursuant to the Federal Endangered Species Act. On March 16, 2010 the USFWS issued the final designation for California red-legged frog Critical Habitat (USFWS 2010). *The project site does not fall within mapped critical habitat, although it is adjacent* (see Figure 5).

The California red-legged frog is also a state “species of special concern.” While the state designation “species of special concern” does not provide any legally mandated protection, species of special concern must be considered in any project undergoing a CEQA review.

The California red-legged frog is typically found in ponds, slow-flowing portions of perennial and intermittent streams that maintain water in the summer months. This frog is also found in hillside seeps that maintain pool environments or saturated soils throughout the summer months. Populations probably cannot be maintained if all surface water disappears (i.e., no available surface water for egg laying and larval development habitat). Larval California red-legged frogs require 11-20 weeks of permanent water to reach metamorphosis (i.e., to change from a tadpole into a frog), in water depths of 10 to 20 inches (USFWS 2002). Riparian vegetation such as willows and emergent vegetation such as cattails are preferred red-legged frog habitats, though not necessary for this species to be present. Populations of California red-legged frog will be reduced in size or eliminated from ponds supporting non-native species such as bullfrog, Centrarchid fish species (such as sunfish, bluegill, or large-mouth bass), and signal and red swamp crayfish (*Pacifastacus leniusculus* and *Procambarus clarkii*, respectively), all of which are known California red-legged frog predators. However, the presence of these non-native species does not preclude the presence of the California red-legged frog.

California red-legged frogs also use upland habitats for migration and dispersal. The USFWS *Recovery Plan for the California Red-Legged Frog* states that frog overland excursions via uplands can vary between 0.25-mile up to 3 miles during the wet season, and that frogs “have been observed to make long-distance movements that are straight-line, point to point migrations rather than using corridors for moving in between habitats” (USFWS 2002). The information presented in the USFWS’ Recovery Plan was taken from a publication by Bulger et al. (2003) that recounts a study in coastal redwoods in Santa Cruz area. M&A believes that such overland straight-line migrations are primarily limited to periods of heavy rainfall or during periods when ambient conditions exhibit high moisture levels such as in fog belts along the coast. Working in

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

Point Reyes National Seashore on the coast of California, Fellers and Kleeman (2007) found approximately 31 percent of California red-legged frogs moved more than 30 meters from their breeding sites and about 69 percent moved less than 30 meters from their breeding site during seasonal movement periods. Similarly, Bulger et al. (2003) found that 60 percent of their radio tagged frogs stayed within 30 meters of their breeding sites.

In locations that are characterized by hot and seasonally dry climates, the California red-legged frog is inclined to stay closer to its aquatic environments or will not migrate. Tatarian (2005) who studied an inland population of California red-legged frogs in eastern Contra Costa County where the climate is far drier than the coastal environment, found that all movements started after the first 0.5 cm of rain in the fall, with more terrestrial movements being made in the fall pre-breeding season (57%) than in the winter breeding season (32%) or spring post-breeding season (11%). Tatarian (op. cit.) also found that California red-legged frogs moved greater average distances aquatically (84.6 m) than terrestrially (27.7 m). Greater terrestrial distances were moved in the pre-breeding season (35.2 m) than in the breeding season (15.5 m) or post-breeding season (16.3 m) with the majority of movements occurring for only one of the 3-4 day survey periods. The majority of frogs (57%) were position faithful within a pool, indicating they did not migrate at all. These data suggest that long forays across the landscape found in coastal populations are less likely in dry inland locations.

The USFWS *Recovery Plan for the California Red-Legged Frog* states that populations are “most likely to persist where multiple breeding areas are embedded within a matrix of habitats used for dispersal.” “The primary constituent elements for California red-legged frogs are aquatic and upland areas where suitable breeding and non-breeding habitat is interspersed throughout the landscape and is interconnected by unfragmented dispersal habitat” (USFWS 2002).

In the American Canyon/Napa area, there are no records for the California red-legged frog west of State Route 29 where the project site is located. The closest known California red-legged frog occurrence is 1.4 miles east of the project site (CNDDDB Occurrence No. 896). The California red-legged frog at this location was found in a dry cement tank adjacent to a large quarry pond that supported bullfrogs (*Lithobates catesbeiana*). State Route 29 is located between this closest California red-legged frog record and the project site and constitutes an effective geographic barrier to overland California red-legged frog movements to/from the known record location and other extant California red-legged frog populations to the project site. There is no hydrologic connectivity over any undeveloped migration route between the known records for this species and the project site. Finally, the project site does not provide suitable habitat for the California red-legged frog. Based on all the available information, it can be concluded that the project site does not provide suitable habitat for the California red-legged frog. Similarly, the surrounding parcels with dense eucalyptus groves do not provide suitable habitat. Owing to the excessively disturbed conditions on the project site due to prior grading and tree removal activities, this species is not expected to occur on the project site. *Therefore, the proposed project will not impact the California red-legged frog and mitigation should not be warranted.*

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### 6.3.2 SWAINSON'S HAWK

The Swainson's hawk (*Buteo swainsoni*) is a state-listed threatened species, protected pursuant to the California Endangered Species Act (CESA), and Title 14 of the California Code of Regulations. While it has no special federal status, it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their active nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800).

Swainson's hawk inhabits open to semi-open areas at low to middle elevations in valleys, dry meadows, foothills, and level uplands (Kochert 1986). It nests almost exclusively in trees and will nest in almost any tree species that is at least 10 feet tall (Schmutz et. al. 1984). Nests are constructed in isolated trees that are dead or alive along drainages and in wetlands, or in windbreaks in fields and around farmsteads (Palmer 1988). Swainson's hawks occasionally nest in shrubs, on telephone poles, and on the ground. In the Central Valley of California, the majority of Swainson's hawk nests and territories are associated with riparian systems and nests are commonly found in cottonwoods and oaks (Schlorff et. al. 1984). They have also been documented nesting in eucalyptus (*Eucalyptus* spp.), black walnut (*Juglans hindsii*), black locust (*Robinia pseudoacacia*), almond (*Prunus dulcis*), Osage orange (*Maclura pomifera*), Arizona cypress (*Cupressus arizonica*), and pine (*Pinus* spp.).

Foraging habitats include grasslands, alfalfa fields, fallow fields, beet, tomato, and other low-growing row or field crops, dry-land and irrigated pasture, and rice land when not flooded (CDFG 1994). The Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Its primary prey in the Central Valley is California meadow vole (*Microtus californicus*). Agricultural areas are often preferred over more natural grassland habitats due to larger prey populations. In addition, agricultural practices (planting, maintenance, harvesting, disking) allow for access to prey, and very likely increase foraging success of Swainson's hawks by flushing prey (personal observations of G. Monk). During the nesting season Swainson's hawks usually forage within two miles of the nest. Swainson's hawk does not require habitats that contain many perches because it most often searches for prey aerially, therefore it can occupy habitats with few or no perches except the nest tree (James 1992).

Swainson's hawks are regular summer visitors and breeders throughout the western states. In the fall months, most Swainson's hawks migrate to Argentina before returning to the United States to breed in the late-spring (typically April). For decades, Argentina farmers were spraying insecticides over habitats that included gregarious night roosts of the Swainson's hawk, killing many thousands of these hawks. This practice was halted in the last 10 years and the Swainson's hawk population appears to be dramatically responding in California. While in the 1970s through 1990s there were only two relatively small populations of Swainson's hawks that remained resident in California year-round in the Davis area and in the Sacramento River Delta, resident and migrant populations of the Swainson's hawks are now dramatically expanding their nesting distribution in California since insecticide use over Argentinian wintering grounds was halted (G. Monk, personal observations). For example, Swainson's hawks were never recorded nesting in the Napa County area until relatively recently.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

The closest known record for nesting Swainson's hawk is 2.6 miles northeast of the project site (CNDDDB Occurrence No. 2744). No Swainson's hawk nests have been observed on the site or offsite in the vicinity of the project site during M&A's project site surveys. However, the nesting population appears to be increasing throughout its nesting range in northern California (recent CNDDDB records and G. Monk general observations) and the eucalyptus trees growing adjacent to the project site provide suitable nesting habitat. Therefore, there is the possibility that Swainson's hawks could nest near this project site in future years. *Hence, prior to earth-disturbance or construction, nesting surveys must be conducted that confirm or negate this species' presence as a nesting bird on or adjacent to the project site. Accordingly, impacts to Swainson's hawk are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

### 6.3.3 WESTERN BURROWING OWL

The western burrowing owl (*Athene cunicularia hypugaea*) is a California "species of special concern." Its nest, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, and §3800). The burrowing owl is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Finally, based upon this species' rarity status, any unmitigated impacts to rare species would be considered a "significant effect on the environment" pursuant to §21068 of the CEQA Statutes and §15382 of the CEQA Guidelines. Thus, this owl species must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency. When these owls occur on project sites, typically, mitigation requirements are mandated in the conditions of project approval from the CEQA lead agency.

Burrowing owl habitat is usually found in annual and perennial grasslands, characterized by low-growing vegetation. Often, the burrowing owl utilizes rodent burrows, typically California ground squirrel (*Otospermophilus beecheyi*) burrows, for nesting and cover. They may also on occasion dig their own burrows or use man-made objects such as concrete culverts or rip-rap piles for cover. They exhibit high site fidelity, reusing burrows year after year. Occupancy of suitable burrowing owl habitat can be verified at a site by observation of these owls during the spring and summer months or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement (white wash) at or near a burrow. Burrowing owls typically are not observed in grasslands with tall vegetation or wooded areas because the vegetation obscures their ability to detect avian and terrestrial predators. Since burrowing owls spend the majority of their time sitting at the entrances of their burrows, grazed grasslands seem to be their preferred habitat because it allows them to view the world at 360 degrees without obstructions.

The closest CNDDDB record was documented 2.6 miles southeast of the project site in an area that has since been developed (CNDDDB Occurrence No. 109). The project site was severely disturbed during the eucalyptus removal in 2012; thus, ground squirrel burrows are few and of recent origin. The mobility of the western burrowing owl enables the species to colonize the recent burrows. M&A did not observe western burrowing owls or any indirect evidence that burrowing owls are using or residing on the project site during any of the site surveys.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

Regardless, the project site provides marginal nesting habitat for the western burrowing owl. *In order to confirm or negate the presence of western burrowing owls on site, surveys must be conducted prior to the commencement of earth-moving or construction. Accordingly, impacts to western burrowing owl are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

#### 6.3.4 NORTHERN HARRIER

The northern harrier (*Circus cyaneus*) is a California species of special concern. This raptor is protected under California Fish and Game Code §3503.5 that protects nesting raptors and their eggs/young and is also protected from direct take under the Migratory Bird Treaty Act (50 CFR 10.13). Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland or marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators such as coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), and various snake species. Ground nesting birds in general are also subject to disturbance by agricultural practices. Northern harriers may forage over the project site and may nest in the open ruderal habitats onsite that provide suitable nesting habitat for this species. Hence, the proposed project could result in impacts to nesting northern harriers.

The closest CNDDDB record was documented 2.8 miles west of the project site (CNDDDB Occurrence No. 29). The project site was severely disturbed during the eucalyptus removal in 2012. Regardless, the project site provides marginal nesting habitat for the northern harrier. *In order to confirm or negate the presence of northern harriers on site, surveys must be conducted prior to the commencement of earth-moving or construction. Accordingly, impacts to northern harrier are regarded as potentially significant pursuant to the CEQA.* Mitigation could be implemented to reduce these impacts to levels regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation Measures that follow in the sections below address these impacts.

## 7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH, AND PLANTS

This section provides a discussion of those laws and regulations that are in place to protect native wildlife, fish, and plants. Under each law we discuss their pertinence to the proposed development.

### 7.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) forms the basis for the federal protection of threatened or endangered plants, insects, fish and wildlife. FESA contains four main elements, they are as follows:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit through approval of a Habitat Conservation Plan.

In the case of salt water fish and other marine organisms, the requirements of FESA are enforced by the National Marine Fisheries Service (NMFS). The USFWS enforces all other cases. Below, Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the proposed project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under Federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (*Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity*) ruled that the USFWS must show that a threatened or endangered species is present on a project site and that it would be taken by the project activities. According to this ruling, the USFWS can no longer require mitigation based on the probability that the species could use the site. Rather they must show that it is actually present.

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species is necessary to complete an otherwise lawful activity, this triggers the need to obtain an incidental take permit either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency), or requires preparation of a Habitat Conservation Plan (HCP) pursuant to Section 10 of FESA (for state and local agencies, or individuals, and projects without a federal "nexus").

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean: (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

geographical area occupied by a listed species that are determined essential for the conservation of the species.

The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing discretionary projects. Section 7 is by and between the NMFS and/or the USFWS and the federal agency contemplating a discretionary approval (that is, the “federal nexus agency,” for example, the Corps or the Federal Highway Administration). Private parties, cities, counties, etc. (i.e., applicants) may participate in the Section 7 consultation *at the discretion of the federal agencies conducting the Section 7 consultation*. The Section 7 consultation process is triggered by a determination of the “action agency” – that is, the federal agency that is carrying out, funding, or approving a project - that the project “may affect” a listed species or critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation between the nexus agency and the USFWS/NMFS is required. As part of the formal consultation, the USFWS/NMFS may resolve any issues informally with the nexus agency or may prepare a formal Biological Opinion assessing whether the proposed action would be likely to result in “jeopardy” to a listed species or if it could adversely modify designated critical habitat. If the USFWS/NMFS prepares a Biological Opinion, it will contain either a “jeopardy” or “non-jeopardy” decision. If the USFWS/NMFS concludes that a proposed project would result in adverse modification of critical habitat or would jeopardize the continued existence of a federal listed species (that is, it will issue a jeopardy decision), the nexus federal agency would be most unlikely to authorize its discretionary permit. If the USFWS/NMFS prepares a “non-jeopardy” Biological Opinion, the nexus federal agency may authorize the discretionary permit making all conditions of the Biological Opinion conditions of its discretionary permit. A non-jeopardy Biological Opinion constitutes an “incidental take” permit that allows applicants to “take” federally-listed species while otherwise carrying out legally sanctioned projects.

For non-federal entities, for example private parties, cities, counties that are considering a discretionary permit, Section 10 provides the mechanism for obtaining take authorization. Under Section 10 of FESA, for the applicant to obtain an "incidental take permit," the applicant is required to submit a "conservation plan" to the USFWS or NMFS that specifies the impacts that are likely to result to federally-listed species, and the measures the applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by the USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an incidental take permit can be issued.

#### 7.1.1 RESPONSIBLE AGENCY

FESA gives regulatory authority to the USFWS for federally-listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally-listed marine mammals and anadromous fish.

#### 7.1.2 APPLICABILITY TO THE PROPOSED PROJECT

The closest known California red-legged frog occurrence is 1.4 miles east of the project site (CNDDDB Occurrence No. 896). The California red-legged frog was found in a dry cement tank

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

adjacent to a large quarry pond that supported bullfrogs. State Route 29 is located between the closest California red-legged frog record and the project site and constitutes an effective geographic barrier to overland California red-legged frog movements to/from the known record location and other extant California red-legged frog populations to the project site. There is no hydrologic connectivity along any undeveloped migration route between the known records for this species and the project site. Finally, the project site does not provide suitable habitat for the California red-legged frog. Based on all the available information, it can be concluded that the project site does not provide suitable habitat for the California red-legged frog. Owing to the excessively disturbed conditions on the project site due to prior grading and tree removal activities, this species is not expected to occur on the project site. Therefore, the proposed project will not impact the California red-legged frog.

No other federally listed species are expected to occur on the project site. The project site does not provide fisheries habitat as it consists entirely of upland communities. *Therefore, it can be stated with confidence that the proposed project would not impact federally listed plant, animal, or fish species.*

## **7.2 Federal Migratory Bird Treaty Act**

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to “take” (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

### **7.2.1 APPLICABILITY TO THE PROPOSED PROJECT**

Western burrowing owl, northern harrier, Swainson’s hawk, red-shouldered hawk, and red-tailed hawk (*Buteo jamaicensis*), among other raptors (birds of prey) could nest in the eucalyptus grove in the immediate vicinity of the project site. These raptors would be protected by the Migratory Bird Treaty Act. Also, the common songbirds that could forage on the site would be protected pursuant to this Act. As long as there is no direct mortality of species protected pursuant to this Act caused by development of the site, there should be no constraints to development of the site. To comply with the Migratory Bird Treaty Act, all active nest sites would have to be avoided while such birds were nesting. Upon completion of nesting, the project could commence as otherwise planned. Please review specific requirements for avoidance of nest sites for potentially occurring species in the Impacts and Mitigations section below.

## **7.3 California Endangered Species Act**

### **7.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT**

In 1984, the state legislated the California Endangered Species Act (CESA) (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for "harm" (see discussion of FESA, above),

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If CDFW determines that a proposed project could impact a state-listed threatened or endangered species, CDFW will provide recommendations for "reasonable and prudent" project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project's benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no "irreversible or irretrievable" commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be impacts to threatened or endangered species, the lead agency typically requires project applicants to demonstrate that they have acquired "incidental take" permits from CDFW and/or USFWS (if it is a Federal listed species) prior to allowing/permitting impacts to such species.

If proposed projects would result in impacts to a state-listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a Federal incidental take permit for Federal listed species). CDFW will issue an incidental take permit only if:

- 1) The authorized take is incidental to an otherwise lawful activity;
- 2) the impacts of the authorized take are minimized and fully mitigated;
- 3) measures required to minimize and fully mitigate the impacts of the authorized take:
  - a) are roughly proportional in extent to the impact of the taking on the species;
  - b) maintain the project applicant's objectives to the greatest extent possible; and,
  - c) capable of successful implementation; and,
- 4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing a habitat conservation plan (HCP) as part of the federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should involve CDFW staff in development of the HCP. If a final Biological Opinion (federal action) has been issued for the project pursuant to Section 7 of the federal Endangered Species Act, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of "take." These species are listed in several statutes that identify "fully protected" species and "specified birds." See Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a "fully protected" species or a "specified bird" occurs, an applicant must design the project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a "non-jeopardy" federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal incidental take permit) pursuant to the FESA, to submit the federal opinion or permit to CDFW for a determination as to whether the federal document is "consistent" with CESA. If after 30 days CDFW determines that the federal incidental take permit is consistent

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

with state law, and that all state-listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the project. However, if CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are state-listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a state CESA permit under Section 2081(b). Section 2081(b) is of no use if an affected species is state-listed, but not federally-listed.

State and federal incidental take permits are issued on a discretionary basis, and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the incidental take permit(s). The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

#### 7.3.2 APPLICABILITY TO THE PROPOSED PROJECT

No state-listed plant species would likely occur on the project site due to an absence of habitat. The project site does not support any trees and does not provide nesting habitat for the Swainson's hawk. Suitable nesting habitat for this hawk exists in the eucalyptus trees on the adjacent properties; thus, preconstruction nesting surveys will be necessary to ensure that earth-work or construction does not occur while this raptor is nesting nearby or that if it does, it does not disturb the nesting birds. If the proposed project follows the proposed mitigation measures as detailed in the Impacts and Mitigation section below, *an Incidental Take Permit (ITP) from the CDFW should not be necessary for this project.*

#### 7.4 California Fish and Game Code § 3503, 3503.5, 3511, and 3513

California Fish and Game Code §3503, 3503.5, 3511, and 3513 prohibit the “take, possession, or destruction of birds, their nests or eggs.” Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered “take.” Such a take would also violate federal law protecting migratory birds (Migratory Bird Treaty Act).

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, “fully protected” birds, such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). “Fully protected” birds may not be taken or possessed (that is, kept in captivity) at any time.

#### 7.4.1 APPLICABILITY TO THE PROPOSED PROJECT

Raptors that could be affected by the project include western burrowing owl, northern harrier, Swainson's hawk, red-shouldered hawk and red-tailed hawk. Preconstruction surveys would have to be conducted for these species to ensure that there is no direct take of these birds including their eggs, or young. Any active nests that were found during preconstruction surveys

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

would have to be avoided by the project. Suitable non-disturbance buffers would have to be established around nest sites until the nesting cycle is complete. More specifics on the size of buffers are provided below in the Impacts and Mitigations section.

## 7.5 City of American Canyon General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site. Only those applicable to the proposed project are discussed herein:

### 7.5.1 GOAL 8, OBJECTIVE 8.1 AND POLICIES 8.1.1 AND 8.1.4

- **Goal 8:** Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.
- **Objective 8.1:** Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.
- **Policy 8.1.1:** Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.
- **Policy 8.1.4:** Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.

### 7.5.2 APPLICABILITY TO THE PROPOSED PROJECT

Consistent with General Plan Policies 8.1.1 and 8.1.4, this report provides a detailed assessment of the biological resources present on the project site.

### 7.5.3 OBJECTIVE 8.2 AND POLICY 8.2.1

- **Objective 8.2:** Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savannah, and wetland and riparian habitats, with new development in the City.
- **Policy 8.2.1:** Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savannah, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified biologist to determine if sensitive habitats exist on-site. In instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

#### 7.5.4 APPLICABILITY TO THE PROPOSED PROJECT

Consistent with General Plan Policy 8.2.1, the project site has been evaluated for the presence of sensitive biological resources. This report represents a Biological Assessment Report documenting findings from background research, and presents the current habitats and species present on the project site.

#### 7.5.5 OBJECTIVE 8.3 AND POLICY 8.3.1

- **Objective 8.3:** Protect natural drainages and riparian corridors within the American Canyon Planning Area.
- **Policy 8.3.1:** Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:
  - a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.

#### 7.5.6 APPLICABILITY TO THE PROPOSED PROJECT

No wetland, natural drainages or riparian habitats are proposed to be impacted, as there are none present on the 10-acre project site.

#### 7.5.7 POLICY 8.3.1 B

- **Policy 8.3.1 b:** Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection "g" (below).

#### 7.5.8 APPLICABILITY TO THE PROPOSED PROJECT

Proposed development on the project site does not impact watercourses, riparian habitat, vernal pools or wetlands.

#### 7.5.9 POLICY 8.3.1 E

- **Policy 8.3.1 e:** Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages or corridors from built environment.

#### 7.5.10 APPLICABILITY TO THE PROPOSED PROJECT

Previous disturbance on the project site prohibits presence of land linkages, corridors, or habitat areas. Similarly, because creation of a mitigation site is not necessary for this site, there will be no habitat area or otherwise natural space in need of buffering.

#### 7.5.11 POLICY 8.3.1 F

- **Policy 8.3.1 f:** Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

#### 7.5.12 APPLICABILITY TO THE PROPOSED PROJECT

Consistent with Policy 8.3.1.f, and Policy 8.3.1.g roads and utilities have been designed to avoid conflicts with biological resources on the project site.

#### 7.5.13 POLICY 8.3.1 G

- **Policy 8.3.1 g:** Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.

#### 7.5.14 POLICIES 8.3.5 AND 8.3.6

- **Policy 8.3.5:** Establish a network of open spaces along the City's natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.
- **Policy 8.3.6:** Preserve and integrate the City's natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

#### 7.5.15 APPLICABILITY TO THE PROPOSED PROJECT

There are no drainages on the project site or significant biological habitats onsite; hence, these policies do not apply to the proposed project.

## 8. CITY OF AMERICAN CANYON –ORDINANCES

### 8.1 Trees (Ord. 18.40.110)

- A. Existing trees shall be preserved on the site unless otherwise approved by the city council as a part of the site development plans.
- B. Unless specifically approved by the city council, any tree removed shall be replaced on the site. Replacement trees shall be a minimum size of a twenty-four-inch box of the same species unless specifically approved by the city council. (Ord. 98-10 § 1 (part), 1998).

#### 8.1.1 APPLICABILITY TO THE PROPOSED PROJECT

The project site does not support any trees.

## 9. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE

This section presents an overview of the criteria used by the U.S. Army Corps of Engineers, the California Regional Water Quality Control Board, the State Water Resources Control Board, and CDFW to determine those areas within a project area that would be subject to their regulation.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

## 9.1 U.S. Army Corps of Engineers Jurisdiction and General Permitting

### 9.1.1 SECTION 404 OF THE CLEAN WATER ACT

Congress enacted the Clean Water Act “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” (33 U.S.C. §1251(a)). Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or fill materials into any water of the United States.

In the Federal Register "waters of the United States" are defined as, “...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce...” (33 CFR Section 328.3).

Limits of Corps’ jurisdiction:

(a) Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)

(b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:

- (1) Extends to the mean high tide line, or
- (2) When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.

(c) Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:

- (1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
- (2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
- (3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the ordinary high water mark (OHWM) or the upward extent of any adjacent wetland. The OHWM on a non-tidal water is:

- the "line on 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 soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

Wetlands are defined as: "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

#### 9.1.1.1 Significant Nexus of Tributaries

On December 2, 2008, the Corps and the Environmental Protection Agency (EPA) issued joint guidance on implementing the U.S. Supreme Court decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (herein referred to simply as "Rapanos") which address the jurisdiction over waters of the United States under the Clean Water Act. In this joint guidance these agencies provide guidance on where they will assert jurisdiction over waters of the U.S.

The EPA and Corps will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (for example, typically three months).
- Wetlands that directly abut such tributaries.

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and
- Significant nexus includes consideration of hydrologic and ecologic factors.

#### 9.1.1.2 Isolated Areas Excluded from Section 404 Jurisdiction

In addition to areas that may be exempt from Section 404 jurisdiction, some isolated wetlands and waters may also be considered outside of Corps jurisdiction as a result of the Supreme Court's decision in *Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers* (531 U.S. 159 [2001]). Isolated wetlands and waters are those areas

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

that do not have a surface or groundwater connection to, and are not adjacent to a navigable “Waters of the U.S.,” and do not otherwise exhibit an interstate commerce connection.

### 9.1.1.3 Permitting Corps Jurisdictional Areas

To remain in compliance with Section 404 of the Clean Water Act, project proponents and property owners (applicants) are required to be permitted by the Corps prior to discharging or otherwise impacting waters of the United States. In many cases, the Corps must visit a proposed project area (to conduct a “jurisdictional determination”) to confirm the extent of area falling under their jurisdiction prior to authorizing any permit for that project area. Typically, at the time the jurisdictional determination is conducted, applicants (or their representative) will discuss the appropriate permit application that would be filed with the Corps for permitting the proposed impact(s) to “waters of the United States.”

Pursuant to Section 404 of the Clean Water Act, the Corps normally provides two alternatives for permitting impacts to the type of “waters of the United States” found in the project area. The first alternative would be to use Nationwide Permit(s) (NWP). The second alternative is to apply to the Corps for an Individual Permit (33 CFR Section 235.5(2)(b)). The application process for Individual Permits is extensive and includes public interest review procedures (i.e., public notice and receipt of public comments) and must contain an “alternatives analysis” that is prepared pursuant to Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). The alternatives analysis is also typically reviewed by the federal EPA and thus brings another resource agency into the permitting framework. Both the Corps and EPA take the initial viewpoint that there are practical alternatives to the proposed project if there would be impacts to waters of the U.S., and the proposed permitted action is not a water dependent project (e.g. a pier or a dredging project). Alternative analyses therefore must provide convincing reasons that the proposed permitted impacts are unavoidable. Individual Permits may be available for use in the event that discharges into regulated waters fail to meet conditions of NWP(s).

NWPs are a type of general permit administered by the Corps and issued on a nationwide basis that authorize minor activities that affect Corps regulated waters. Under NWP, if certain conditions are met, the specified activities can take place without the need for an individual or regional permit from the Corps (33 CFR, Section 235.5[c][2]). In order to use NWP(s), a project must meet 27 general nationwide permit conditions, and all specific conditions pertaining to the NWP being used (as presented at 33 CFR Section 330, Appendices A and C). It is also important to note that pursuant to 33 CFR Section 330.4(e), there may be special regional conditions or modifications to NWPs that could have relevance to individual proposed projects. Finally, pursuant to 33 CFR Section 330.6(a), Nationwide permittees may, and in some cases must, request from the Corps confirmation that an activity complies with the terms and conditions of the NWP intended for use (i.e., must receive “verification” from the Corps).

Prior to finalizing design plans, the applicant needs to be aware that the Corps maintains a policy of “no net loss” of wetlands (waters of the United States) from project area development. Therefore, it is incumbent upon applicants that propose to impact Corps regulated areas to submit a mitigation plan that demonstrates that impacted regulated areas would be recreated (i.e., impacts would be mitigated). Typically, the Corps requires mitigation to be “in-kind” (i.e., if a

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

stream channel would be filled, mitigation would include replacing it with a new stream channel), and at a minimum of a 1:1 replacement ratio (i.e., one acre or fraction thereof recreated for each acre or fraction thereof lost). Often a 2:1 replacement ratio is required. Usually the 2:1 ratio is met by recreation or enhancement of an equivalent amount of wetland as is impacted, in addition to a requirement to preserve an equivalent amount of wetland as is impacted by the project. In some cases, the Corps allows “out-of-kind” mitigation if the compensation site has greater value than the impacted site. For example, if project designs call for filling an intermittent drainage, mitigation should include recreating the same approximate jurisdictional area (same drainage widths) at an offsite location or on a set-aside portion of the project area. Finally, there are many Corps approved wetland mitigation banks where wetland mitigation credits can be purchased by applicants to meet mitigation compensation requirements. Mitigation banks have defined service areas and the Corps may only allow their use when a project would have minimal impacts to wetlands.

#### 9.1.2 APPLICABILITY TO THE PROPOSED PROJECT

M&A originally prepared a preliminary wetland delineation map of the 35 acre parcel in 2006; however, this map was never submitted to the Corps. In 2011, a formal wetland delineation was conducted on July 14th and July 20th by M&A biologists Ms. Hope Kingma and Mr. Tim O’Donnell. The wetland delineation report and map were submitted to the Corps on August 22, 2011, requesting confirmation of the extent of Corps jurisdiction at the American Canyon Flat Lands site. In a letter dated January 31, 2012 the extent of Corps jurisdiction was confirmed, based on a field investigation on September 21, 2011. That jurisdictional determination expired five (5) years from the date of that letter.

M&A biologists Ms. Hope Kingma and Mr. Devin Jokerst conducted another wetland delineation of the entire 35.85-acre parcel (known as Lot 3), which includes this project site, on November 16, 2016 to re-verify the extent of jurisdictional areas on the site. M&A used the Corps’ 1987 *Wetlands Delineation Manual* in conjunction with the *Regional Supplement for the Arid West Region*. The jurisdictional determination request and the Draft Aquatic Resources Delineation Map (Sheet 2) were submitted to the Corps in December 2016. Mr. Bryan Matsumoto of the Corps conducted a site verification visit on May 18, 2017. On May 16, 2018 the Corps issued the jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the 35.43-acre parcel. The confirmed Jurisdictional Delineation Map (Sheet 2) and letter are attached. None of the jurisdictional features on that map occur on the 10-acre project site that is the subject of this report. *As such there will be no impacts to the waters of the U.S. for this project.*

## 9.2 State Water Resources Control Board (SWRCB) / California Regional Water Quality Control Board (RWQCB)

### 9.2.1 SECTION 401 OF THE CLEAN WATER ACT

The SWRCB and RWQCB regulate activities in "waters of the State" (which includes wetlands) through Section 401 of the Clean Water Act. While the Corps administers a permitting program that authorizes impacts to waters of the United States, including wetlands and other waters, any Corps permit authorized for a proposed project would be inoperative unless it is an NWP that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

certification of water quality. Certification of NWP requires a finding by the SWRCB that the activities permitted by the NWP will not violate water quality standards individually or cumulatively over the term of the permit (the term is typically for five years). Certification must be consistent with the requirements of the federal Clean Water Act, the California Environmental Quality Act, the California Endangered Species Act, and the SWRCB's mandate to protect beneficial uses of waters of the State. Any denied (i.e., not certified) NWPs, and all Individual Corps permits, would require a project specific RWQCB certification of water quality.

#### 9.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The Corps' Confirmed Reverification Aquatic Resources Delineation Map dated May 22, 2017 is provided as Sheet 2. The proposed project will not impact any waters of the State. *Therefore Section 401 of the Clean Water Act is not necessary for this project.*

### 9.3 California Department of Fish and Wildlife Protections

#### 9.3.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE

Pursuant to Section 1602 of the California Fish and Game Code: "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

- (1) CDFW receives written notification regarding the activity in the manner prescribed by CDFW. The notification shall include, but is not limited to, all of the following:
  - (A) A detailed description of the project's location and a map.
  - (B) The name, if any, of the river, stream, or lake affected.
  - (C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
  - (D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.
  - (E) A copy of any other applicable local, state, or federal permit or agreement already issued.
  - (F) Any other information required by CDFW" (Fish & Game Code 2014).

Please see Section 1602 of the current California Fish and Game Code for further details.

Please also note that while not stated in the regulations above, CDFW typically considers its jurisdiction to include riparian vegetation (that is, the trees and bushes growing along the stream). Thus, any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, including its riparian vegetation, would require entering into a Streambed Alteration Agreement (SBAA) with CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, CDFW typically reviews an analysis of the expected biological impacts, any proposed mitigation plans that would be implemented to offset biological impacts and engineering and erosion control plans.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### 9.3.2 APPLICABILITY TO THE PROPOSED PROJECT

There are no streams or drainages on the project site that would be regulated by CDFW. *Hence, an SBAA with CDFW would not be necessary for this project.*

## 10. STATE WATER RESOURCES CONTROL BOARD (SWRCB)/RWQCB – STORM WATER MANAGEMENT

### 10.1 Construction General Permit

While federal Clean Water Act NPDES regulations allow two permitting options for construction related stormwater discharges (individual permits and General Permits), the State Water Resources Control Board (SWRCB) has elected to adopt only one statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except from those on Tribal Lands, in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (CalTrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than one acre of land or those sites less than one acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters.
2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively-defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the project's projected risk level.
3. Perform inspections of all BMPs.

This Construction General Permit is implemented and enforced by the nine California Regional Water Quality Control Boards (RWQCBs). It is also enforceable through citizens' suits and represents a dramatic shift in the State Water Board's approach to regulating new and redevelopment sites, imposing new affirmative duties and fixed standards on builders and developers.

#### Types of Construction Activity Covered by the Construction General Permit

- clearing,
- grading,
- disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of at least one acre or more of total land area.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

Construction activity that results in soil disturbances to a smaller area would still be subject to this General Permit if the construction activity is part of a larger common plan of development that encompasses greater than one acre of soil disturbance, or if there is significant water quality impairment resulting from the activity.

Construction activity does not include:

- routine maintenance to maintain original line and grade,
- hydraulic capacity, or original purpose of the facility,
- nor does it include emergency construction activities required to protect public health and safety.

The Construction General Permit includes several “post-construction” requirements. These requirements entail that site designs provide no net increase in overall site runoff and match pre-project hydrology by maintaining runoff volume and drainage concentrations. To achieve the required results where impervious surfaces such as roofs and paved surfaces are being increased, developers must implement non-structural off-setting BMPs, such as landform grading, site design BMPs, and distributed structural BMPs (bioretention cells, rain gardens, and rain cisterns). This “runoff reduction” approach is essentially a State Water Board-imposed regulatory requirement to implement Low Impact Development (“LID”) design features. Volume that cannot be addressed using non-structural BMPs must be captured in structural BMPs that are approved by the RWQCB.

Improving the quality of site runoff is necessary to improve water quality in impaired and threatened streams, rivers, and lakes (that is, water bodies on the EPA’s 303(d) list). The RWQCB prioritizes the water bodies on the 303(d) list according to potential impacts to beneficial uses. Beneficial uses can include a wide range of uses, such as nautical navigation; wildlife habitat; fish spawning and migration; commercial fishing, including shellfish harvesting; recreation, including swimming, surfing, fishing, boating, beachcombing, and more; water supply for domestic consumption or industrial processes; and groundwater recharge, among other uses. The State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these impaired water bodies. The TMDL is the quantity of a pollutant that can be safely assimilated by a water body without violating the applicable water quality standards.

Pursuant to the CWA, the RWQCB regulates construction discharges under the National Pollutant Discharge Elimination System (NPDES). The project sponsor of construction or other activities that disturb more than 1 acre of land must obtain coverage under NPDES Construction General Permit Order 2009-0009-DWQ, administered by the RWQCB<sup>1</sup>.

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<sup>1</sup> CGP Order 2009-0009-DWQ remains in effect, but has been amended by CGP Order 2009-0014-DWQ, effective February 14, 2011, and CGP Order 2009-0016-DWQ, effective July 17, 2012. The first amendment merely provided additional clarification to Order 2009-0009-DWQ, while Order 2009-0016-DWQ eliminated numeric effluent limits on pH and turbidity (except in the case of active treatment systems), in response to a legal challenge to the original order.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

### 10.1.1 APPLICABILITY TO THE PROPOSED PROJECT

To obtain coverage under the SWRCB administered Construction General Permit, the applicant (typically through its civil engineer) must electronically file a number of permit-related compliance documents (Permit Registration Documents (PRDs), including a Notice of Intent (NOI), a risk assessment, site map, signed certification, Stormwater Pollution Prevention Plan (SWPPP), Notice of Termination (NOT), NAL exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). (QSDs are typically civil engineers, professional hydrologists, engineering geologists, or landscape architects.) Once filed, these documents become immediately available to the public for review and comment. At a minimum, the SWPPP shall identify Best Management Practices (BMPs) for implementation during project construction that are in accordance with the applicable guidance and procedures contained in the California Stormwater Quality Association's *California Stormwater Best Management Practices Handbook* (2015).

## 10.2 RWQCB Municipal Storm Water Permitting Programs

The federal Clean Water Act (CWA) was amended in 1987 to address urban stormwater runoff pollution of the nation's waters. In 1990, the U.S. Environmental Protection Agency (USEPA) promulgated rules establishing Phase 1 of the National Pollutant Discharge Elimination System (NPDES) stormwater program. The Phase 1 program for Municipal Separate Storm Sewer System (MS4s) requires operators that serve populations of 100,000 or greater to implement a stormwater management program to control polluted discharges from these MS4s. While Phase 1 of the municipal stormwater program has focused on large urban areas, Phase 2 of the municipal stormwater program was promulgated by the USEPA for smaller urban areas including non-traditional Small MS4s, which are governmental facilities such as military bases, public campuses, and prison and hospital complexes.

MS4 permits require the discharger (or dischargers that are permitted by the MS4 permittees) to develop and implement a Storm Water Management Plan/Program (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the Clean Water Act. The management programs specify what best management practices (BMPs) will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations. In general, medium and large municipalities are required to conduct chemical monitoring, though small municipalities are not.

### 10.2.1 NPDES C.3 REQUIREMENTS

The NPDES C.3 requirements went into effect for any project (public or private) that is "deemed complete" by the City or County (Lead Agency) on or after February 15, 2005, and which will result in the creation or replacement (other than normal maintenance) of at least 10,000 square feet of impervious surface area (roofs, streets, patios, parking lots, etc. Provision C.3 requires the onsite treatment of stormwater prior to its discharge into downstream receiving waters. Note that these requirements are in addition to the existing NPDES requirements for erosion and

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

sedimentation controls during project construction that are typically addressed through acquisition of coverage under the SWRCB administered Construction General Permit. The C.3 requirements are typically required to be implemented by MS4 permittees (and their constituencies).

Projects subject to Provision C3 must include the capture and onsite treatment of all stormwater from the site prior to its discharge, including rainwater falling on building rooftops. Project applicants are required to implement appropriate source control and site design measures and to design and implement stormwater treatment measures in order to reduce the discharge of stormwater pollutants to the *maximum extent practicable*. While the Clean Water Act does not define “maximum extent practicable,” the Stormwater Quality Management Plans required as a condition of the municipal NPDES permits identify control measures (known as Best Management Plans, or BMPs) and, where applicable, performance standards, to establish the level of effort required to satisfy the maximum extent practicable criterion. It is ultimately up to the professional judgment of the reviewing municipal staff in the individual jurisdictions to determine whether a project’s proposed stormwater controls will satisfy the maximum extent practicable criterion. However, there are numeric criteria used to ensure that treatment BMPs have been adequately sized to accommodate and treat a site’s stormwater. The C3 requirements are quite extensive, and their complete explanation is not provided here. However, the following are minimums that should be understood and adhered to:

- The applicant must provide a detailed and realistic site design *and impervious surface area calculations*. This site design *and calculations* will be used by the Lead Agency (County or City) to determine/*verify* the amount of impervious surface area that is being created or replaced. It should include all proposed buildings, roads, walkways, parking lots, landscape areas, etc., that are being created or redeveloped. If large (greater than 10,000 square feet) lots are being created an effort will need to be made to determine the total impervious surface area that could be created on that parcel. For example, if only a portion of the lot is shown as a “building envelope” then the lead agency will need to consider that a driveway will have to be constructed to access the envelope and that the envelope will then be developed as shown. If the C.3 thresholds are met (creation/redevelopment of 10,000 square feet of impervious surface area), a Stormwater Control Plan (SWCP) (if required by the Lead Agency, or whatever steps for compliance with Provision C3 are required locally) must accompany the application.
- If a SWCP is required by the Lead Agency for the project it must be stamped by a Licensed Civil Engineer, Architect, or Landscape Architect.

#### 10.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The Water Board issued county-wide municipal stormwater permits in the early 1990s to operators of MS4s. On November 19, 2015, the Water Board re-issued these county-wide municipal stormwater permits as one Municipal Regional Stormwater NPDES Permit to regulate stormwater discharges from municipalities and local agencies. Permittees in the San Francisco Bay area are included in a Municipal Regional Permit (MRP), issued to 76 cities, counties and

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

flood control districts in 2009 and revised in 2015. Each of the Permittee's must file an Annual Report that is comprised of three parts: regional, countywide, and individual. Some requirements of the MRP are being implemented by the Bay Area Stormwater Management Agencies Association (BASMAA) on behalf of all the MRP Permittees. Other elements are being implemented collaboratively by the Permittees through their respective countywide programs. As such, BASMAA and the countywide programs have submitted Annual Report elements on the regional and countywide collaborative tasks, respectively, on behalf of the MRP Permittees and the individual MRP Permittees have also submitted Annual Report elements on the Permit Provisions they have implemented individually.

It is the applicant's responsibility to ensure that the project civil engineer prepares all required Storm Water Planning documents for submittal to the City of American Canyon to comply with its MS4 permit requirements. In addition, if the project includes a requirement to obtain a Clean Water Act Section 401 permit from the RWQCB, the Storm Water Management Plan (or equivalent plan) must be submitted to the RWQCB with the application package submitted for acquisition of a Section 401 permit (aka "water quality certification").

The applicant is proposing to treat all stormwater falling on impervious surfaces in the detention/bioretention basin located on the western edge of the project site (see Sheet UP4). Once treated, stormwater would be conveyed to "level spreader outfalls" that will be installed along the western project site boundary. The level spreader outfalls consist of perforated pipe set on contour that will discharge flows uniformly across a gradual slope covered by riprap, which will mimic sheet flow conditions similar to current project site runoff (see Storm Drain Level Spreader Detail). Accordingly, the project will not violate any water quality standards.

## **11. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS**

A CEQA lead agency must determine if a proposed activity constitutes a project requiring further review pursuant to the CEQA. Pursuant to CEQA, a lead agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA lead agency. If a discretionary permit (i.e., conditional use permit) would be required for a project (e.g. an occupancy permit must be issued), the lead agency typically must determine if there could be significant environmental impacts. This is usually accomplished by an "Initial Study." If there could be significant environmental impacts, the lead agency must determine an appropriate level of environmental review prior to approving and/or otherwise permitting the impacts. In some cases, there are "Categorical Exemptions" that apply to the proposed activity; thus, the activity is exempt from CEQA. The Categorical Exemptions are provided in CEQA. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project. If the project is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the lead agency to prepare a "Negative Declaration." If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to the CEQA, then a "Mitigated Negative Declaration" is typically prepared by the lead agency. Finally, those projects that may have significant effects on the environment, or that have impacts that can't be mitigated to a level considered less than significant pursuant to the CEQA, typically must be reviewed via an Environmental Impact

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

Report (EIR). All CEQA review documents are subject to public circulation, and comment periods.

Section 15380 of CEQA defines “endangered” species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. “Rare” species are defined by CEQA as those who are in such low numbers that they could become endangered if their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will “substantially affect a rare or endangered species of animal or plant or the habitat of the species.” The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

This report has been prepared as a Biology section that is suitable for incorporation into a Mitigated Negative Declaration. This document addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA and can be incorporated by the CEQA lead agency (in this case City of American Canyon) into an initial study or higher levels of CEQA review including incorporation into the biology section of an Environmental Impact Report.

## **12. IMPACTS ANALYSIS**

Below the criteria used in assessing impacts to Biological Resources is presented.

### **12.1 Significance Criteria**

A significant impact is determined using CEQA and CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other Federal, State, and local agencies’ considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as “significant,” “potentially significant,” or “less than significant.” Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated “waters of the United States” and/or stream channels.

#### 12.1.1 THRESHOLDS OF SIGNIFICANCE

##### 12.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would:

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

- 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected “wetlands” as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### 12.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged or fill material into waters of the United States, which includes wetlands, as discussed in the bulleted item above, and also includes “other waters” (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the state. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

#### 12.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which CDFW typically considers including riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

### **13. IMPACT ASSESSMENT AND PROPOSED MITIGATION**

In this section we discuss potential impacts to sensitive biological resources, including special-status wildlife species. We follow each impact with a mitigation prescription that when

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

implemented would reduce impacts to the greatest extent possible. This impact analysis is based on the Preliminary Site Plan (Sheet A-1).

### **13.1 Impact BIO-1. Development of the Project Could Have a Potentially Significant Impact on Nesting Swainson's hawks (Potentially Significant)**

The Swainson's hawk is a state listed threatened species. While the Swainson's hawk has no special federal status, it is protected from direct take under the Federal Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711). Swainson's hawks, their nests, eggs, and young are also protected under California Fish and Game Code (§3503, §3503.5, §3513, and §3800).

No Swainson's hawk nests have been observed on the site or offsite in the vicinity of the project site during M&A's multiple project site surveys; however, the nesting population appears to be increasing throughout its nesting range in northern California and thus, it could conceivably nest in trees near the project site in the future.

If Swainson's hawks are found to be nesting adjacent to the project site, implementation of the proposed project could be viewed by CDFW as a project that could impact nesting Swainson's hawks. Nest site disturbance which results in: (1) nest abandonment; (2) loss of young; (3) reduced health and vigor of eggs and/or nestlings (resulting in reduced survival rates), may ultimately result in the take (killing) of nestling or fledgling Swainson's hawks incidental to otherwise lawful activities. The taking of Swainson's hawks in this manner can be viewed by CDFW as a violation of the Section 2080 of the Fish and Game Code. This interpretation of take has been judicially affirmed by the landmark appellate court decision pertaining to CESA (CDFG v. ACID, 8 CA App. 4, 41554) (CDFG 1994).

Typically, CDFW requires that any impact to a Swainson's hawk nest be permitted through a Fish and Game Section 2081 management authorization. If an active nest is found adjacent to the project site within an area of influence (which is generally considered to be within 1,000 feet of the project site) "to avoid potential violation of Fish and Game Code 2080 (i.e., killing of listed species), project-related disturbance at active Swainson's hawk nesting sites should be reduced or eliminated during critical phases of the nesting cycle (March 1- September 15 annually)" (CDFG 1994). If disturbance would occur, a Fish and Game Section 2081 management authorization would be required. As such, in the absence of survey results, it must be concluded that impacts to Swainson's hawk from the proposed project would be *potentially significant pursuant to CEQA*. This impact could be mitigated to a level considered less than significant pursuant to CEQA.

The closest known record for nesting Swainson's hawk is 2.6 miles north of the project site (CNDDDB Occurrence No. 2744). There are extensive foraging opportunities both around the closest nesting location and between this nesting location and the project site. Considering that the entire project site consisted of a eucalyptus grove until 2012, it did not historically provide potential foraging habitat. Also, as the project site is essentially surrounded by eucalyptus forest, it is not a foraging destination which would likely attract foraging Swainson's hawks. Furthermore, M&A has confirmed that the project site has a low rodent population, therefore development of the project site will not have a significant impact on Swainson's hawk foraging habitat. Therefore, no mitigation for the loss of foraging habitat is warranted for this project.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

### **13.2 Mitigation Measure BIO-1. Mitigation for Potential Impacts to Nesting Swainson's Hawk**

Preconstruction surveys shall be conducted for a quarter-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to the project's initiation. The survey period timing and methodology shall be conducted in accordance with CDFW's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (CDFG 1994), which identifies different survey windows throughout the pre-nesting and nesting season (ranging from January 1 through July 30/post-fledging) that have different survey methodologies and requirements.

If Swainson's hawks are found to be nesting on the project site or within a ¼-mile of the project site, consultation with CDFW will be required. The size of the nest protection buffer will be determined during consultation with CDFW but at a minimum there will be a 300-foot non-disturbance buffer around the nest site.

Implementation of this mitigation measure would reduce potential impacts to nesting Swainson's hawk to a level considered less than significant pursuant to CEQA.

### **13.3 Impact BIO-2. Development of the Project Could Have a Potentially Significant Impact on Western Burrowing Owl (Potentially Significant)**

The western burrowing owl is a California Species of Special Concern. This raptor (that is, bird of prey) is also protected under the Migratory Bird Treaty Act (50 CFR 10.13) and its nest, eggs, and young are protected under California Fish and Game Code Sections 3503, 3503.5. While western burrowing owls have not been observed on the project site and their likelihood of presence on the project site is considered to be low, limited suitable nesting habitat occurs on the project site. Since the western burrowing owl is a mobile species that could move onto the project site prior to development, preconstruction surveys would be necessary to determine its presence. Thus, the project may result in impacts to the western burrowing owl; this would be a *potentially significant impact pursuant to CEQA*. This impact could be mitigated to a level considered less than significant pursuant to CEQA.

### **13.4 Mitigation Measure BIO-2. Mitigation for Potential Impacts to Western Burrowing Owl**

Based on the presence of this species in the project vicinity and the potential habitat found on the project site, a preconstruction survey for burrowing owls should be conducted 14 days prior or less to initiating ground disturbance. As burrowing owls may recolonize a site after only a few days, time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance to ensure absence. If no owls are found during these surveys, no further regard for the burrowing owl would be necessary.

a. Burrowing owl surveys should be conducted by walking the entire project site. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be 7 meters to 20 meters and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility.

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

Poor weather may affect the surveyor's ability to detect burrowing owls thus, avoid conducting surveys when wind speed is greater than 20 kilometers per hour and there is precipitation or dense fog. To avoid impacts to owls from surveyors, owls and/or occupied burrows should be avoided by a minimum of 50 meters (approximately 160 ft.) wherever practical to avoid flushing occupied burrows. Disturbance to occupied burrows should be avoided during all seasons.

b. If burrowing owls are detected on the site, the following restricted activity dates and setback distances are recommended per CDFW's Staff Report (2012).

- From April 1 through October 15, low disturbance and medium disturbance activities should have a 200 meter buffer while high disturbance activities should have a 500 meter buffer from occupied nests.
- From October 16 through March 31, low disturbance activities should have a 50 meter buffer, medium disturbance activities should have a 100 meter buffer, and high disturbance activities should have a 500 meter buffer from occupied nests.
- No earth-moving activities or other disturbance should occur within the aforementioned buffer zones of occupied burrows. These buffer zones should be fenced as well. If burrowing owls were found in the project area, a qualified biologist would also need to delineate the extent of burrowing owl habitat on the site.

Implementation of these mitigation measures would reduce potential impacts to burrowing owls to a level considered less than significant pursuant to CEQA.

### **13.5 Impact BIO-3: Development of the Project Would Have a Potentially Significant Impact on Tree or Ground Nesting Raptors (Potentially Significant)**

Tree or ground nesting raptors that could be affected by the project include northern harrier, white-tailed kites, red-shouldered hawk and red-tailed hawk. Nesting raptors are protected by the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711 and 50 CFR 10.13). All nesting raptors, their eggs and young are protected pursuant to California Fish and Game Code §3503.5. Specific surveys for nesting raptors have not been conducted. In the absence of survey results indicating otherwise, it is conservatively assumed that implementation of the proposed project may impact nesting raptors which could result in nest abandonment and death of eggs or young. Therefore, impacts to nesting raptors are regarded as *potentially significant pursuant to CEQA*. This impact could be mitigated to a level considered less than significant pursuant to CEQA.

### **13.6 Mitigation Measure BIO-3: Mitigation for Potential Impacts to Tree or Ground Nesting Raptors**

To ensure that impacts to tree or ground nesting raptors are avoided or offset, the following mitigation measures will be implemented:

a. In order to avoid impacts to nesting raptors, a preconstruction nesting survey will be conducted by a qualified raptor biologist prior to commencing with earth-moving or construction work if this work would commence between February 1st and August 31st. The survey should be

Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

conducted within the 30 day period prior to site disturbance. The raptor nesting surveys will include examination of all trees and ruderal habitat within 200 feet of the project site.

b. If nesting raptors are identified during the surveys, the dripline of the nest tree or ground-nesting site must be fenced with orange construction fencing (provided the nest site is on the project site), and a 200-foot radius around the nest tree or nest site must be staked with orange construction fencing. If the tree or nest site is located off the project site, then the buffer should be demarcated per above where the buffer occurs on the project site. The size of the buffer may be altered if a qualified raptor biologist conducts behavioral observations and determines the nesting raptors are well acclimated to disturbance. If this occurs, the raptor biologist should prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors. No construction or earth-moving activity should occur within the established buffer until it is determined by a qualified raptor biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by August 1st. This date may be earlier or later, and would have to be determined by a qualified raptor biologist. If a qualified biologist is not hired to watch the nesting raptors then the buffers should be maintained in place through the month of August and work within the buffer can commence on September 1st.

c. If the preconstruction nesting survey identifies a large stick or other type of raptor nest that appears inactive at the time of the survey, but there are territorial raptors evident in the nest site vicinity, a protection buffer (as described above) should be established around the potential nesting tree until the qualified raptor biologist determines that the nest is not being used. In the absence of conclusive observations indicating the nest site is not being used, the buffer should remain in place until a second follow-up nesting survey can be conducted to determine the status of the nest and eliminate the possibility that the nest is utilized by a late-spring nesting raptor (for example, red-tailed hawk). This second survey should be conducted even if construction has commenced. If during the follow-up late season nesting survey a nesting raptor is identified utilizing the nest, the protection buffer should remain until it is determined by a qualified raptor biologist that the young have fledged and have attained sufficient flight skills to avoid project construction zones. If the nest remains inactive, the protection buffer can be removed and construction and earth-moving activities can proceed unrestrained.

Implementation of these mitigation measures would reduce potential impacts to nesting raptors to a level considered less than significant pursuant to CEQA.

### **13.7 Impact BIO-4: Development of the Project Would Have a Potentially Significant Impact on Nesting Passerine Birds. (Potentially Significant)**

Nesting passerine birds (i.e., perching birds) are protected by the federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711 and 50 CFR 10.13) and by California Fish and Game Code §3503 and §3503.5 which protects nesting birds, their eggs and young. These birds frequently change nesting locations from year to year and thus, past nesting histories are not necessarily indicative of future nesting activities. Accordingly, impacts to nesting passerine birds, their eggs, and/or young resulting from the proposed project are considered potentially significant. *This impact could be mitigated to a level considered less than significant pursuant to CEQA.*

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

### **13.8 Mitigation Measure BIO-4: Mitigation for Potential Impacts to Nesting Passerine Birds.**

To ensure that impacts to nesting passerine birds are avoided or offset, a nesting survey shall be conducted 15 days prior to commencing construction/ grading or tree removal activities if this work would commence between March 1 and September 1. If common passerine birds or special-status passerine birds are identified nesting on the project site, a non-disturbance buffer of 75 feet shall be established or as otherwise prescribed by a qualified ornithologist. The buffer shall be demarcated with orange construction fencing. Disturbance within the buffer shall be postponed until it is determined by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.

Typically, most passerine birds in the region of the project site are expected to complete nesting by August 1<sup>st</sup>. However, many species can complete nesting by the end of June or in early to mid-July. Regardless, nesting buffers shall be maintained until August 1<sup>st</sup> unless a qualified ornithologist determines that young have fledged and are independent of their nests at an earlier date. If buffers are removed prior to August 1<sup>st</sup>, the qualified biologist conducting the nesting surveys should prepare a report that provides details about the nesting outcome and the removal of buffers. This report shall be submitted to the City of American Canyon Planning Department prior to the time that nest protection buffers are removed if the date is before August 1<sup>st</sup>.

Implementation of this mitigation measure would reduce potential impacts nesting passerine birds to a level considered less than significant pursuant to CEQA.

Biological Resources Analysis  
SDG Commerce 217 Distribution Center  
City of American Canyon, California

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Biological Resources Analysis  
 SDG Commerce 217 Distribution Center  
 City of American Canyon, California

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Figure 1. SDG 217 Commerce Distribution Center  
Project Site Regional Map  
City of American Canyon, California

County: Napa  
Map Preparation Date: December 3, 2019



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Figure 2. SDG 217 Commerce Distribution Center  
Project Site Location Map  
City of American Canyon, California

38.185626, -122.274079  
Section: 23, T4N R4W  
7.5-Minute Cuttings Wharf quadrangle  
HUC08 Watershed CA: San Pablo Bay  
Aerial Photograph Source: ESRI  
Map Preparation Date: December 3, 2019



0 0.005 0.01 0.02 0.03 0.04 0.05 Miles

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Figure 3. SDG 217 Commerce Project Site  
Aerial Photograph  
City of American Canyon, California

Aerial Photograph Source: ESRI  
Map Preparation Date: December 3, 2019

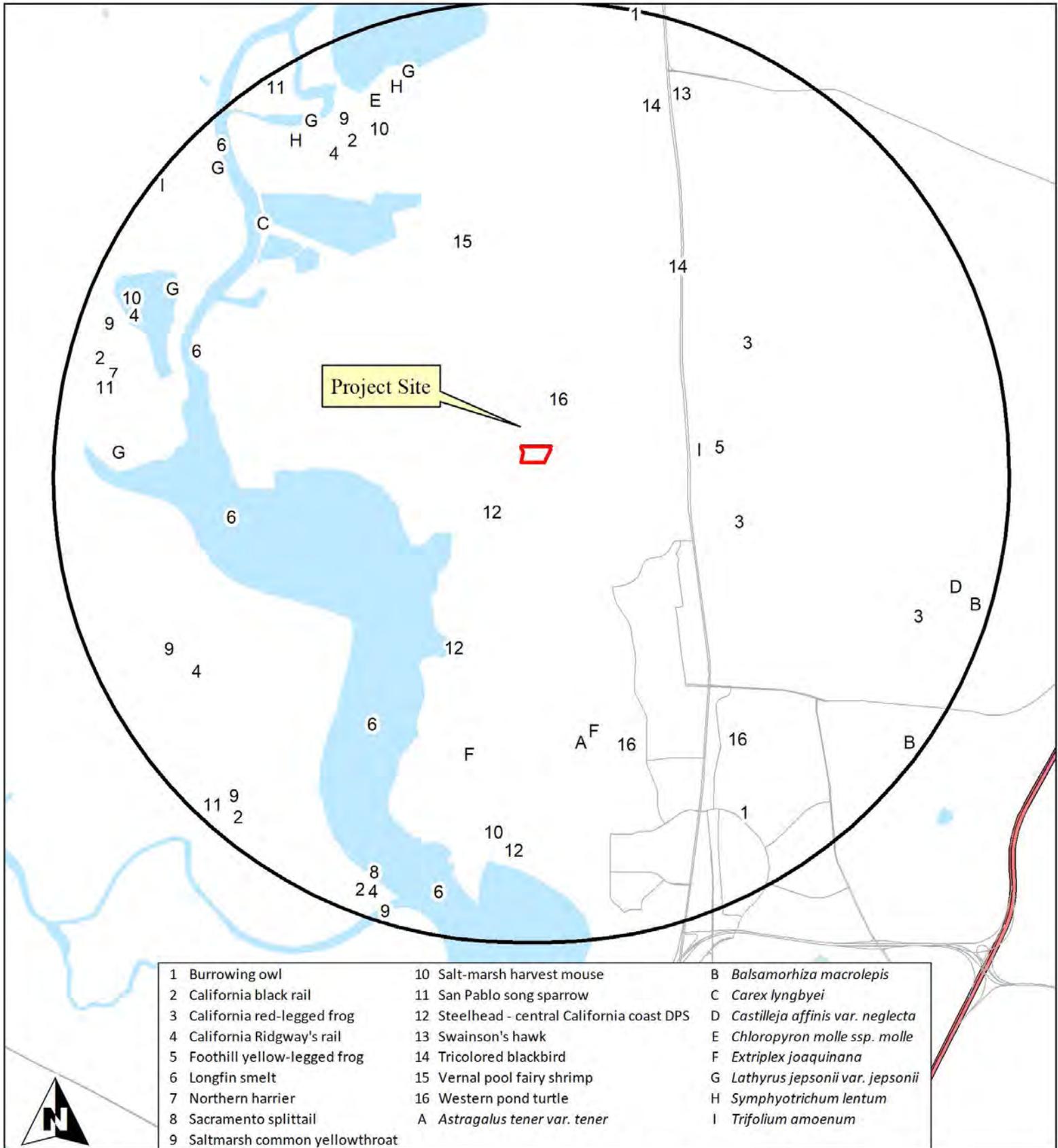


Figure 4. Known CNDDDB Records for Special-Status Species  
 Within 3 Miles of the  
 SDG 217 Commerce Project Site

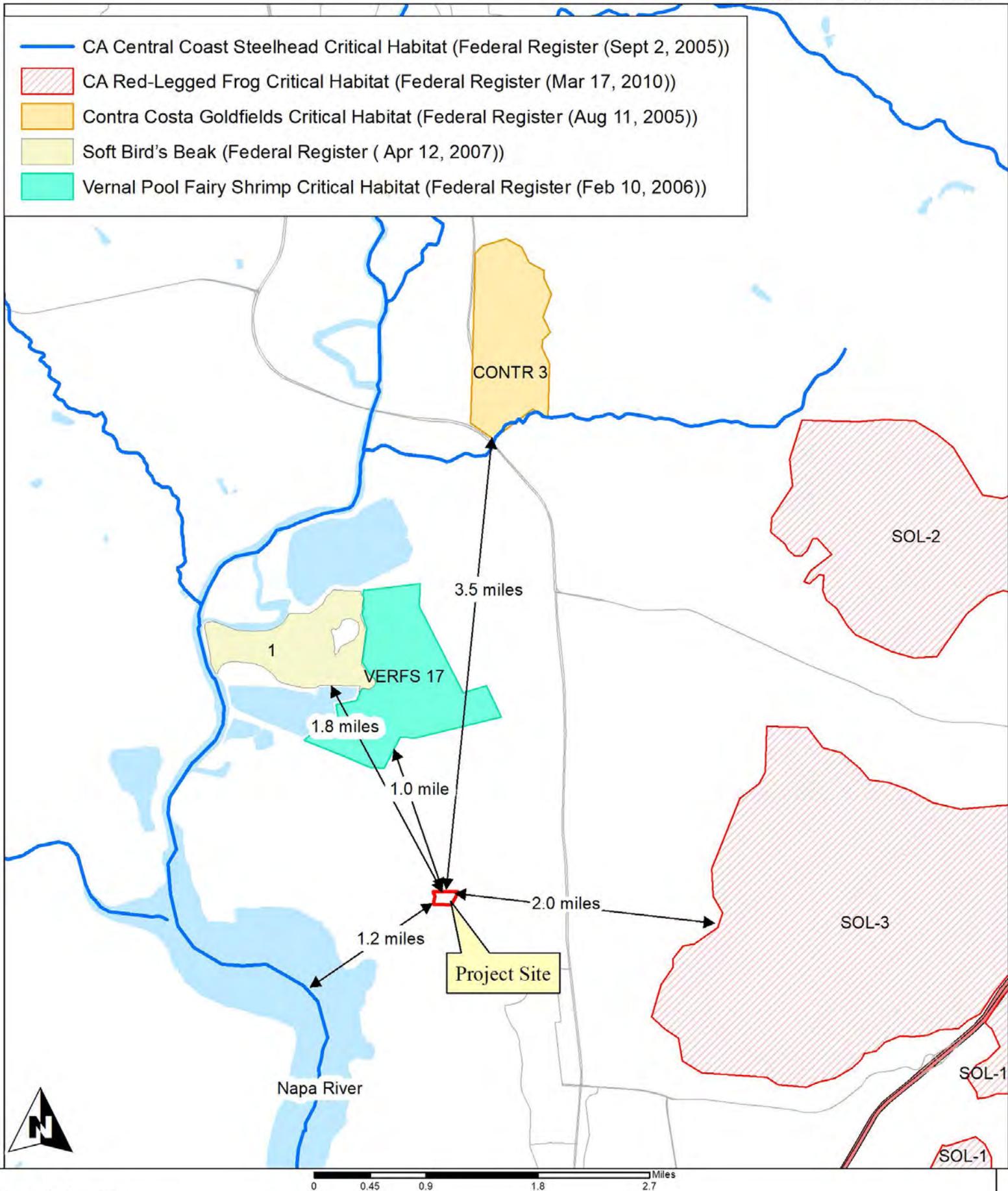


Figure 5. USFWS Critical Habitat  
in the Vicinity of the  
SDG 217 Commerce Distribution Center

Table 1

## Plant Species Observed on the SDG 217 Commerce Distribution Center Project Site

## Angiosperms - Dicots

**Apiaceae**

*Torilis sp.* sock destroyer

**Asteraceae**

*Baccharis pilularis subsp. pilularis* Baccharis

\**Carduus pycnocephalus subsp. pycnocephalus* Italian thistle

\**Cirsium vulgare* Bull thistle

\**Dittrichia graveolens* Stinkwort

\**Hypochaeris radicata* Rough cat's-ear

\**Sonchus asper subsp. asper* Prickly sow-thistle

**Brassicaceae**

\**Hirschfeldia incana* Short-podded mustard

\**Sinapis alba* White mustard

**Caryophyllaceae**

\**Stellaria media* Common chickweed

**Convolvulaceae**

\**Convolvulus arvensis* Bindweed

**Fabaceae**

\**Medicago polymorpha* California burclover

\**Trifolium repens* White clover

\**Vicia sativa* Common vetch

**Geraniaceae**

\**Erodium cicutarium* Red-stem filaree

\**Geranium dissectum* Cut-leaf geranium

**Montiaceae**

*Claytonia perfoliata* Miner's lettuce

**Myrsinaceae**

\**Lysimachia arvensis* Scarlet pimpernel

**Orobanchaceae**

\**Parentucellia viscosa* Yellow glandweed

**Papaveraceae**

\**Fumaria parviflora* Fumaria

**Plantaginaceae**

\**Plantago lanceolata* English plantain

**Polygonaceae**

\**Rumex crispus* Curly dock

**Ranunculaceae**

\**Ranunculus muricatus* Spiny-fruit buttercup

**Rubiaceae**

*Galium aparine* Goose grass

\* Indicates a non-native species

**Table 1****Plant Species Observed on the SDG 217 Commerce Distribution Center Project Site****Angiosperms -Monocots****Iridaceae**

<i>Sisyrinchium californicum</i>	Golden-eyed-grass
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**Juncaceae**

<i>Juncus occidentalis</i>	Slender rush
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**Poaceae**

* <i>Avena barbata</i>	Slender wild oat
* <i>Bromus diandrus</i>	Ripgut grass
* <i>Bromus hordeaceus</i>	Soft chess
<i>Elymus triticoides</i>	Creeping wildrye
* <i>Festuca perennis</i>	perennial ryegrass
* <i>Hordeum murinum</i>	Wall barley
<i>Phalaris angusta</i>	Canary timothy grass

\* Indicates a non-native species

**Table 2**  
**Wildlife Observed on the ICC SDG 217 Commerce Distribution Center Project Site**

<b>Amphibians</b>	
Sierran treefrog	<i>Pseudacris sierra</i>
<b>Reptiles</b>	
Western fence lizard	<i>Sceloporus occidentalis</i>
<b>Birds</b>	
Northern flicker	<i>Colaptes auratus</i>
Great blue heron	<i>Ardea herodias</i>
Turkey vulture	<i>Cathartes aura</i>
Canada goose	<i>Branta canadensis</i>
Osprey	<i>Pandion haliaetus</i>
White-tailed kite	<i>Elanus leucurus</i>
Red-shouldered hawk	<i>Buteo lineatus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
American kestrel	<i>Falco sparverius</i>
Ring-necked pheasant	<i>Phasianus colchicus</i>
Wild turkey	<i>Meleagris gallopavo</i>
California quail	<i>Callipepla californica</i>
Virginia rail	<i>Rallus limicola</i>
Eurasian collared-dove	<i>Streptopelia decaocto</i>
Mourning dove	<i>Zenaida macroura</i>
Barn owl	<i>Tyto alba</i>
Anna's hummingbird	<i>Calypte anna</i>
Belted kingfisher	<i>Megaceryle alcyon</i>
Nuttall's woodpecker	<i>Picoides nuttallii</i>
Black phoebe	<i>Sayornis nigricans</i>
Say's phoebe	<i>Sayornis saya</i>
California scrub jay	<i>Aphelocoma californica</i>
American crow	<i>Corvus brachyrhynchos</i>
Common raven	<i>Corvus corax</i>
Tree swallow	<i>Tachycineta bicolor</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>
Barn swallow	<i>Hirundo rustica</i>
Chestnut-backed chickadee	<i>Poecile rufescens</i>
Bushtit	<i>Psaltriparus minimus</i>
Brown creeper	<i>Certhia americana</i>
Bewick's wren	<i>Thryomanes bewickii</i>
Marsh wren	<i>Cistothorus palustris</i>
Ruby-crowned kinglet	<i>Regulus calendula</i>
Western bluebird	<i>Sialia mexicana</i>
American robin	<i>Turdus migratorius</i>
Wrentit	<i>Chamaea fasciata</i>
Northern mockingbird	<i>Mimus polyglottos</i>
European starling	<i>Sturnus vulgaris</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
Spotted towhee	<i>Pipilo maculatus</i>

**Table 2****Wildlife Observed on the ICC SDG 217 Commerce Distribution Center Project Site**


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California towhee	<i>Pipilo crissalis</i>
Savannah sparrow	<i>Passerculus sandwichensis</i>
Song sparrow	<i>Melospiza melodia</i>
White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed cowbird	<i>Molothrus ater</i>
Bullock's oriole	<i>Icterus bullockii</i>
House finch	<i>Haemorhous mexicanus</i>
Lesser goldfinch	<i>Spinus psaltria</i>
House sparrow	<i>Passer domesticus</i>

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**Mammals**


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Western gray squirrel	<i>Sciurus griseus</i>
Black-tailed jackrabbit	<i>Lepus californicus</i>
California ground squirrel	<i>Otospermophilus beecheyi</i>
Columbian black-tailed deer	<i>Odocoileus hemionus ssp. columbianus</i>
Coyote	<i>Canis latrans</i>
Raccoon	<i>Procyon lotor</i>
Feral cat	<i>Felis catus</i>

Table 3

## Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<b>Asteraceae</b>					
<i>Balsamorhiza macrolepis</i> Big-scale balsam-root	Fed: - State: - CNPS: Rank 1B.2	March-June	Cismontane woodland; chaparral; valley and foothill grassland; [sometimes serpentine]. 90 - 1555 meters	Closest record is from 2011 and is 3.0 miles east of the project site (Occurrence No. 7).	None. The project site is highly disturbed. No suitable habitat on the project site.
<i>Symphotrichum lentum</i> Suisun Marsh aster	Fed: - State: - CNPS: Rank 1B.2	August-November	Marshes and swamps (brackish and fresh water)	Closest record is from 1993 and is 2.5 miles northwest of the project site (Occurrence No. 128).	None. The project site is highly disturbed. No suitable habitat on the project site.
<b>Chenopodiaceae</b>					
<i>Extriplex joaquinana</i> San Joaquin spearscale	Fed: - State: - CNPS: Rank 1B.2	April-October	Chenopod scrub; meadows; valley and foothill grassland; [alkaline].	Closest record is from and is 1.8 miles south of the project site (Occurrence No. 58).	None. The project site is highly disturbed. No suitable habitat on the project site.
<b>Cyperaceae</b>					
<i>Carex lyngbyei</i> Lyngbye's sedge	Fed: - State: - CNPS: Rank 2	May-August	Marshes or swamps (brackish or freshwater)	Closest record is from 2008 and is 2.3 miles northwest of the project site (Occurrence No. 28).	None. The project site is highly disturbed. No suitable habitat on the project site.
<b>Fabaceae</b>					
<i>Astragalus tener tener</i> Alkali milkvetch	Fed: - State: - CNPS: Rank 1B.2	March-June	Playas; mesic grasslands (adobe clay), vernal pools (alkaline).	Closest record is from 1993 and is 1.8 miles south of the project site (Occurrence No. 50).	None. The project site is highly disturbed. No suitable habitat on the project site.

Table 3

## Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<i>Lathyrus jepsonii jepsonii</i> Delta tule pea	Fed: - State: - CNPS: Rank 1B.2	May-September	Marshes and swamps (freshwater and brackish).	Closest record is from 1978 and is 2.6 miles northwest of the project site (Occurrence No. 13).	None. The project site is highly disturbed. No suitable habitat on the project site.
<i>Trifolium amoenum</i> Showy Indian clover	Fed: FE State: - CNPS: Rank 1B.1	April-June	Valley and foothill grassland (sometimes serpentinite)	Closest record is from 1952 and is 1.2 miles east of the project site (Occurrence No. 23).	None. The project site is highly disturbed. No suitable habitat on the project site.
<b>Orobanchaceae</b>					
<i>Castilleja affinis neglecta</i> Tiburon paintbrush	Fed: FE State: CT CNPS: Rank 1B.2	April-June	Valley and foothill grassland [serpentinite]	Closest record is from 2013 and is 3.0 miles east of the project site (Occurrence No. 5).	None. The project site is highly disturbed. No suitable habitat on the project site.
<i>Chloropyron molle molle</i> Soft bird's-beak	Fed: FE State: CR CNPS: Rank 1B.2	July-September	Marshes and swamps (coastal salt).	Closest record is from 2010 and is 2.3 miles north of the project site (Occurrence No. 3).	None. The project site is highly disturbed. No suitable habitat on the project site.

**Table 3**

**Special-Status Plant Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Family	Taxon	Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
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**\*Status**

**Federal:**

- FE - Federal Endangered
- FT - Federal Threatened
- FPE - Federal Proposed Endangered
- FPT - Federal Proposed Threatened
- FC - Federal Candidate

**State:**

- CE - California Endangered
- CT - California Threatened
- CR - California Rare
- CC - California Candidate
- CSC - California Species of Special Concern

**CNPS Continued:**

- Rank 2 - Plants rare, threatened, or endangered in California, but more common elsewhere
- Rank 2A - Extirpated in California, common elsewhere
- Rank 2B.1 - Seriously endangered in California, but more common elsewhere
- Rank 2B.2 - Fairly endangered in California, but more common elsewhere
- Rank 2B.3 - Not very endangered in California, but more common elsewhere
- Rank 3 - Plants about which we need more information (Review List)
- Rank 3.1 - Plants about which we need more information (Review List)  
Seriously endangered in California
- Rank 3.2 - Plants about which we need more information (Review List)  
Fairly endangered in California
- Rank 4 - Plants of limited distribution - a watch list

**CNPS:**

- Rank 1A - Presumed extinct in California
- Rank 1B - Plants rare, threatened, or endangered in California and elsewhere
- Rank 1B.1 - Seriously endangered in California (over 80% occurrences threatened/  
high degree and immediacy of threat)
- Rank 1B.2 - Fairly endangered in California (20-80% occurrences threatened)
- Rank 1B.3 - Not very endangered in California (<20% of occurrences threatened or no  
current threats known)

**Table 4**  
**Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
<b>Invertebrates</b>				
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Fed: FT State: - Other:	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains. Inhabit static rain-filled/vernal pools, small, clear water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression	Closest record is from 2003 and is 1.5 miles north of the project site (Occurrence No. 232).	None. No suitable habitat on the project site.
<b>Fish</b>				
Steelhead - Central California Coast DPS <i>Oncorhynchus mykiss irideus</i>	Fed: FT State: - Other:	From Russian River south to Soquel Creek, and to Pajaro River. Also found in San Francisco & San Pablo Bay Basins. Spawn in clear, cool, well oxygenated streams greater than 18 cm deep.	Closest record is from 2000 and is 0.39 miles southwest of the project site (Occurrence No. 4).	None. No suitable habitat on the project site.
Longfin smelt <i>Spirinichus thaleichthys</i>	Fed: -- State: CT Other:	Endemic to the Sacramento-San Joaquin River system. Inhabits open waters in the Delta and Suisun Bay. After spawning, larvae are carried downstream to brackish nursery areas.	Closest record is from 2012 and is 1.2 miles west of the project site (Occurrence No. 26).	None. No suitable habitat on the project site.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	Fed: State: CSC Other:	Endemic to the lakes and rivers of the Central Valley; now confined to the delta, Suisun Bay, and associated marshes. Inhabits slow moving river sections and dead-end sloughs. Needs flooded vegetation for spawning.	Closest record is from 2001 and is 2.9 miles southwest of the project site (Occurrence No. 12).	None. No suitable habitat on the project site.
<b>Amphibians</b>				
California red-legged frog <i>Rana draytonii</i>	Fed: FT State: CSC Other:	Occurs in lowlands and foothills in deeper pools and streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development.	Closest record is from 2006 and is 1.4 miles east of the project site (Occurrence No. 896).	None. No suitable habitat on the project site.

**Table 4**  
**Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Foothill yellow-legged frog <i>Rana boylei</i>	Fed: -- State: CC Other:	Found in partially shaded, shallow streams with rocky substrates. Requires perennial pools or flowing water. Needs some cobble-sized rocks as a substrate for egg laying. Requires water for 15 weeks for larval transformation.	Closest record is from 193X and is 1.2 miles east of the project site (Occurrence No. 2341).	None. No suitable habitat on the project site.
<b>Reptiles</b>				
Western pond turtle ** <i>Emys marmorata</i>	Fed: - State: CSC Other:	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying. Occurs in the Central Valley and Contra Costa County.	Closest record is from 2002 and is 0.45 miles northeast of the project site (Occurrence No. 552).	None. No suitable habitat on or adjacent to the project site.
<b>Birds</b>				
Northern harrier <i>Circus cyaneus</i>	Fed: - State: CSC Other:	Nests on the ground or in shrubby vegetation typically in grasslands, fallow farm lands, near freshwater and salt water marshes.	Closest record is from 2004 and is 2.8 miles west of the project site (Occurrence No. 29).	Unlikely to nest onsite. Preconstruction surveys will be conducted.
Swainson's hawk <i>Buteo swainsoni</i>	Fed: - State: CT Other:	Migratory and resident raptor that breeds in open areas with scattered trees. Prefers riparian and sparse oak woodland habitats for nesting. Requires nearby grasslands, grain fields, or alfalfa for foraging.	Closest record is from 2013 and is 2.6 miles northeast of the project site (Occurrence No. 2744).	Unlikely to nest adjacent to project site. Preconstruction surveys will be conducted.
Ferruginous hawk <i>Buteo regalis</i>	Fed: -- State: WL Other:	Winter migrant to California where they prefer grasslands, cultivated fields and arid areas with an abundance of prey species, such as pocket gophers, black-tailed hares, and cottontails.	Closest record is from 1988 and is 3.0 miles north of the project site (Occurrence No. 28).	None. Does not nest in California.

**Table 4**  
**Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Peregrine falcon <i>Falco peregrinus</i>	Fed: - State: - Other:	Nests on high cliffs near wetlands, lakes, rivers, or other water; also nests on human-made structures. Nest consists of a scrape on a depression or ledge in an open site. Was formerly state and federally listed but delisted due to species recovery.	Closest record is from 2015 and is 3.0 miles east of the project site (Occurrence No. 42).	None. No suitable nesting habitat on or near the project site.
California black rail <i>Laterallus jamaicensis coturniculus</i>	Fed: -- State: CT Other:	Inhabits salt marshes bordering larger bays. Prefers tidal salt marshes of pickleweed.	Closest record is from 2011 and is 2.5 miles northwest of the project site (Occurrence No. 31).	None. No suitable habitat on the project site.
California Ridgway's rail <i>Rallus obsoletus obsoletus</i>	Fed: FE State: CE Other:	Inhabits salt water and brackish marshes with tidal sloughs in San Francisco Bay. Prefers dense pickleweed for cover, but forages for invertebrates along mud-bottomed sloughs.	Closest record is from 1989 and is 2.4 miles northwest of the project site (Occurrence No. 16).	None. No suitable habitat on the project site.
Western burrowing owl <i>Athene cunicularia hypugaea</i>	Fed: -- State: CSC Other:	Found in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Closest record is from 1989 and is 2.6 miles southeast of the project site (Occurrence No. 109).	Unlikely to nest on the project site. Preconstruction surveys will be conducted.
Salt marsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	Fed: - State: CSC Other:	Resident of freshwater and salt water marshes in the San Francisco Bay region. Requires thick, continuous cover for foraging and tall grasses, tules, or willows for nesting.	Closest record is from 2004 and is 2.5 miles northwest of the project site (Occurrence No. 37).	None. No suitable habitat on the project site.
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	Fed: -- State: CSC Other:	More properly known as Samuels Song Sparrow. Resident of salt marshes along the north side of San Francisco and San Pablo Bays. Inhabits tidal sloughs in the California marshes; nests in grindelia bordering slough channels.	Closest record is from 2004 and is 2.8 miles west of the project site (Occurrence No. 17).	None. No suitable habitat on the project site.

**Table 4**  
**Special-Status Wildlife Species Known Within 3 Miles of the SDG 217 Commerce Distribution Center Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Tricolored blackbird <i>Agelaius tricolor</i>	Fed: - State: CC Other: CSC	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	Closest record is from 2014 and is 1.6 miles northeast of the project site (Occurrence No. 243).	None. No suitable nesting habitat on the project site.

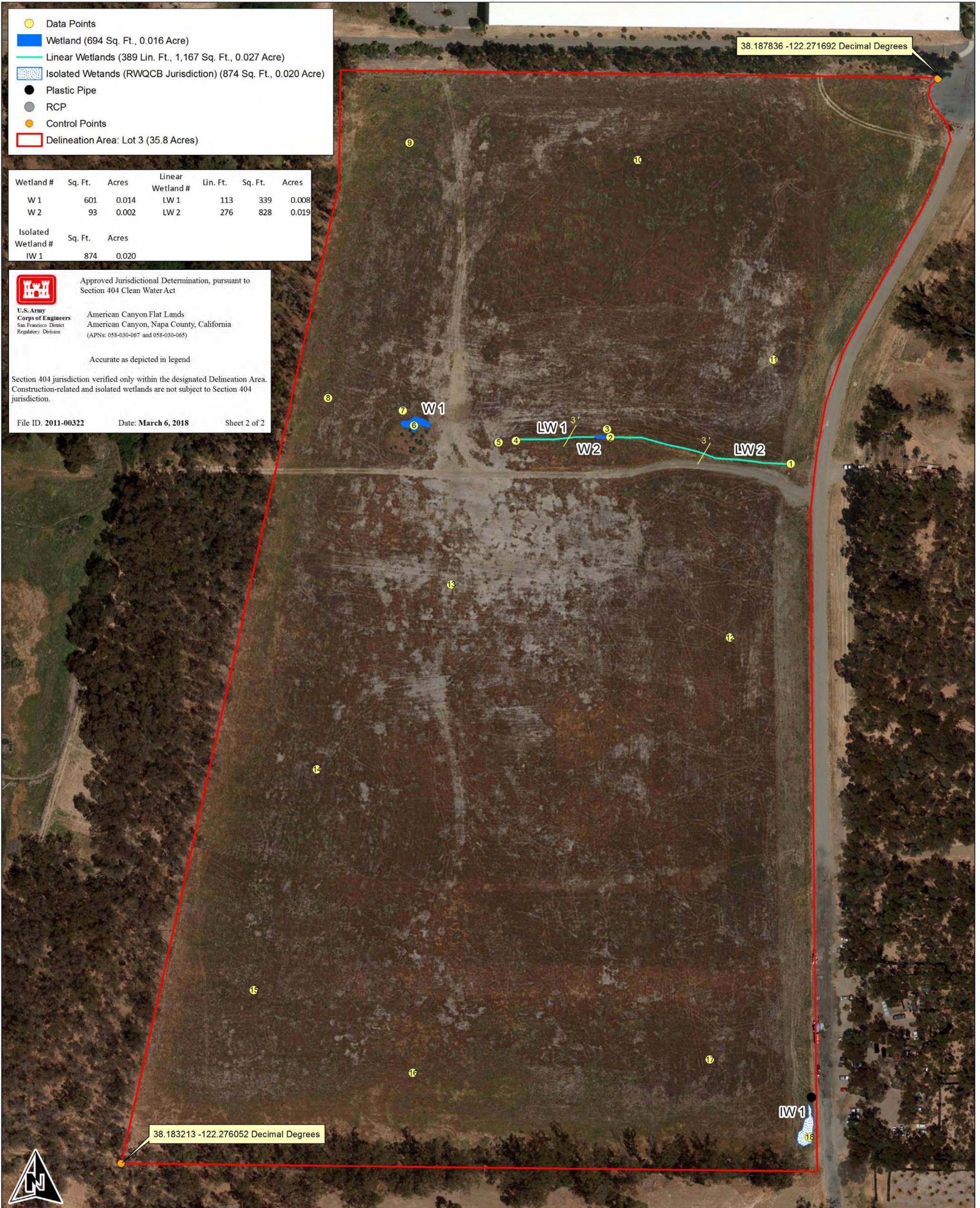
**Mammals**

Salt marsh harvest mouse <i>Reithrodontomys raviventris</i>	Fed: FE State: CE Other:	Inhabits saline marshes in the San Francisco Estuary. Prefers pickleweed marshes. Requires higher areas for escaping high water.	Closest record is from 1989 and is 2.4 miles south of the project site (Occurrence No. 150).	None. No suitable habitat on the project site.
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**\*Status**

- |  |   |
|--|---|
| Federal:                               | State:  |
| FE - Federal Endangered                | CE - California Endangered                      |
| FT - Federal Threatened                | CT - California Threatened                      |
| FPE - Federal Proposed Endangered      | CR - California Rare                            |
| FPT - Federal Proposed Threatened      | CC - California Candidate                       |
| FC - Federal Candidate                 | CSC - California Species of Special Concern     |
| FPD - Federally Proposed for delisting | FP - Fully Protected                            |
|  | WL - Watch List. Not protected pursuant to CEQA |

\*\*The USFWS hopes to finish a 12-month finding for western pond turtle in 2021 but until formally listed, it is not afforded the protections of FESA.



- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetlands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
- Plastic Pipe
- RCP
- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army  
Corps of Engineers  
San Francisco District  
Regulatory Division

American Canyon Flat Lands  
American Canyon, Napa County, California  
(APNs: 058-030-067 and 058-030-065)

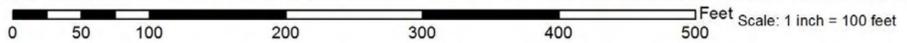
Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

File ID: 2011-00322      Date: March 6, 2018      Sheet 2 of 2

38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees



September 3, 2020

Industrial and Commercial Contractors, LP  
403 W. Yosemite Avenue, Suite 105  
Madera, California 93637

Attention: Mr. Brian Doswald

**RE: Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site  
SDG Commerce 217 Distribution Center, Napa, California  
APN: 058-030-065-000**

Dear Mr. Doswald:

## 1. INTRODUCTION

Monk & Associates, Inc., (M&A) has prepared this Addendum to our March 2, 2020, *Revised Biological Resource Analysis* (biology report) for the SDG Commerce 217 Distribution Center located in the City of American Canyon, California (the “project site”). Since the time M&A prepared our biology report for the project site, it has been determined that it will be necessary to acquire soil from the adjacent parcel to the south (the “borrow area parcel”) and transport this soil for use as clean fill on the project site. M&A has prepared this Addendum to our biology report to address the transportation of soil from the offsite borrow area parcel onto the project site and to analyze any affects this activity could have on mapped jurisdictional waters of the United States/State that lie inbetween the project site and the adjacent borrow area parcel. Mapped waters of the United States are shown on the attached exhibits.

## 2. DESCRIPTION OF THE PROJECT SITE AND ADJACENT BORROW AREA PARCEL

The project site and the adjacent borrow area parcel were once part of a contiguous approximately 35-acre project site that M&A conducted surveys on over multiple years dating between 2006 and 2018. Both the project site and adjacent borrow area parcel are dominated by ruderal (weedy) vegetation including stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*). These non-native, weedy species provide little habitat value to wildlife and they do not constitute a native plant community. Native, coyote brush (*Baccharis pilularis* subsp. *consanguinea*), a plant that responds to land disturbances, is also common on the 35 acres. Ruderal vegetation is the only vegetation community found on the project site. The adjacent borrow area parcel, however, in addition to supporting a ruderal herbaceous community also supports waters of the United States, as described below.

On May 16, 2018, the U.S. Army Corps of Engineers issued a jurisdictional determination confirming their jurisdiction over 0.043-acre of waters of the U.S. on the approximately 35-acre

Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site  
SDG Commerce 217 Distribution Center, Napa, California  
APN: 058-030-065-000

Page 2

parcel that comprises the project site, the adjacent borrow area parcel, and another property now known as 330 Commerce Center (see attached exhibits). The entire 0.043-acre of waters of the U.S. confirmed by the Corps is found on the adjacent borrow area parcel as shown on the attached exhibit "Borrow Site Rough Grading," Sheet 1 prepared by RSA on August 21, 2020. There are no waters of the United States or State on the project site.

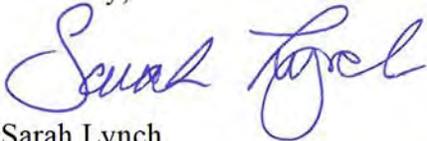
### **3. DISCUSSION OF PROPOSED ACTIVITIES AND AVOIDANCE OF IMPACTS TO MAPPED WATERS OF THE UNITED STATES**

The project applicant intends to rough grade the borrow area parcel and transport soil from that parcel onto the project site for use in development of the project site. In order to protect the waters of the United States/State that occur in between the project site and the borrow area parcel, a 25-foot buffer area around the outside edge of the wetlands will be staked and protected with fiber roll, silt fencing and high visibility orange construction fencing to prevent equipment from driving into the wetlands during hauling activities. See the attached exhibit.

With these protection measures in place, as shown on the attached Borrow Site Rough Grading exhibit, Sheet 1, attached, *there are no expected impacts to waters of the U.S./State from the transport of soil/materials from the borrow area parcel to the project site.*

This concludes our addendum to our biology report. If you have any questions or require additional information, please do not hesitate to contact me at (925) 323-4850 or [Sarah@monkassociates.com](mailto:Sarah@monkassociates.com). Thank you.

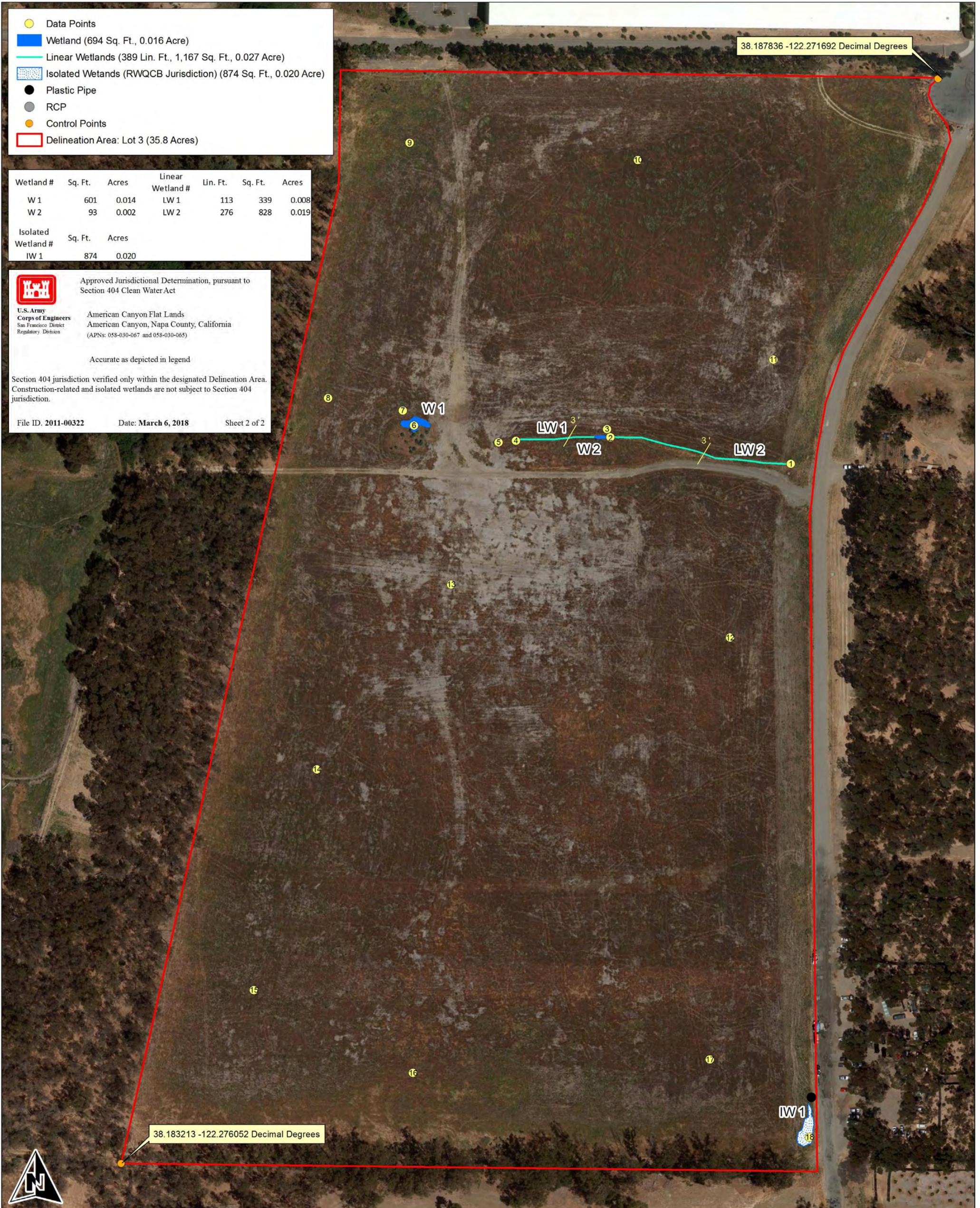
Sincerely,



Sarah Lynch  
Senior Associate Biologist

Attachments: U.S. Army Corps of Engineers Confirmed Aquatic Resources Delineation Map;  
Sheet 1, Borrow Site Rough Grading prepared by RSA, August 21, 2020





- Data Points
- Wetland (694 Sq. Ft., 0.016 Acre)
- Linear Wetlands (389 Lin. Ft., 1,167 Sq. Ft., 0.027 Acre)
- Isolated Wetlands (RWQCB Jurisdiction) (874 Sq. Ft., 0.020 Acre)
- Plastic Pipe
- RCP
- Control Points
- Delineation Area: Lot 3 (35.8 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland #	Lin. Ft.	Sq. Ft.	Acres
W 1	601	0.014	LW 1	113	339	0.008
W 2	93	0.002	LW 2	276	828	0.019

Isolated Wetland #	Sq. Ft.	Acres
IW 1	874	0.020

Approved Jurisdictional Determination, pursuant to Section 404 Clean Water Act

U.S. Army  
Corps of Engineers  
San Francisco District  
Regulatory Division

American Canyon Flat Lands  
American Canyon, Napa County, California  
(APNs: 058-030-067 and 058-030-065)

Accurate as depicted in legend

Section 404 jurisdiction verified only within the designated Delineation Area. Construction-related and isolated wetlands are not subject to Section 404 jurisdiction.

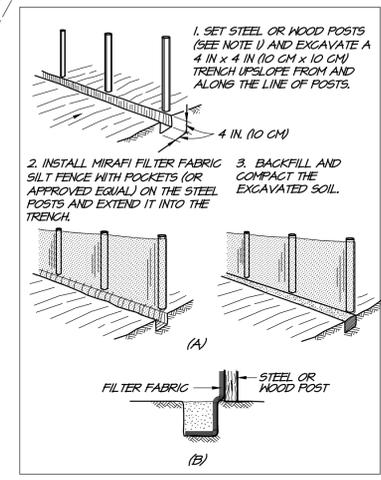
File ID: 2011-00322      Date: March 6, 2018      Sheet 2 of 2

38.187836 -122.271692 Decimal Degrees

38.183213 -122.276052 Decimal Degrees



NOTE: SEE SHEET C3.0 FOR ADDITIONAL GRADING.



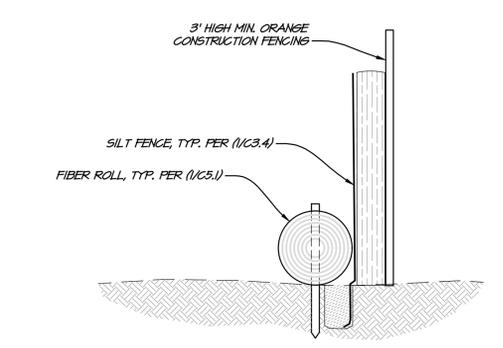
CONSTRUCTION OF A SILT FENCE:  
 (A) INSTALLATION SEQUENCE  
 (B) EXTENSION OF FABRIC INTO THE TRENCH

**INSTALLATION OF SILT FENCE SEDIMENT BARRIER**

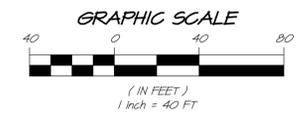
- LAY OUT A SUITABLE FENCE LINE AND SET POSTS ALONG IT. ON SLOPES, ALIGN THE FENCE ALONG THE CONTOUR AS CLOSELY AS POSSIBLE. IN SMALL SWALES, CURVE THE FENCE LINE UPSTREAM AT THE SIDES TO DIRECT THE FLOW TOWARD THE MIDDLE OF THE FENCE. THE SIDES SHOULD BE HIGHER THAN THE CENTER AS ILLUSTRATED AT RIGHT. SPACE POSTS ON 6' CENTERS AND DRIVE THEM A MINIMUM OF 12 IN (30 CM) INTO THE GROUND. POSTS FOR SILT FENCES CAN BE EITHER 1 1/2" (3.8 CM) MIN DIA. HARD WOOD OR 1.33 LB/FT (1.97 KG/M) STEEL WITH A MINIMUM LENGTH OF 5 FT (1.5 M). STEEL POSTS MUST HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
- FASTEN THE FILTER FABRIC TO THE UPHILL SIDE OF THE FENCE POSTS, AND EXTEND TO 6 TO 8 IN (15 TO 20 CM) INTO THE TRENCH. THE HEIGHT OF THE FENCE SHOULD NOT EXCEED 36 IN (0.9 M). DO NOT STAPLE FABRIC ONTO TREES. CUT THE FILTER FABRIC FROM A CONTINUOUS ROLL TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, SPLICE THE FILTER CLOTH AT A SUPPORT POST, WITH A MINIMUM 6 IN (15 CM) OVERLAP, AND SECURELY FASTEN BOTH ENDS TO THE POST.
- BACKFILL THE TRENCH OVER THE TOE OF THE FABRIC AND COMPACT THE SOIL.
- PREFABRICATED SILT FENCE WITH POSTS MAY BE USED AS AN ALTERNATE TO SETTING STEEL OR WOOD POSTS.

**1 SILT FENCE SEDIMENT BARRIER**  
 RSA EC0000-13 NOT TO SCALE

NOTE:  
 1. PRIOR TO START OF ANY GRADING WORK, CONTRACTOR SHALL INSTALL WETLAND PROTECTION MEASURES (FIBER ROLL, SILT FENCE, AND DRAINAGE CONSTRUCTION FENCE.)



**2 WETLANDS PROTECTION DETAIL**  
 NOT TO SCALE



NO.	DATE	REVISIONS	BY	APPD

**RSA+**  
 CONSULTING CIVIL ENGINEERS + SURVEYORS + (1980)  
 155 FOURTH STREET  
 NAPA, CALIF. 94559  
 OFFICE (707) 252-3301  
 + www.rsacivil.com +

**SDG COMMERCE 217 DISTRIBUTION CENTER  
 BORROW SITE GRADING PLAN**  
 CALIFORNIA  
 AMERICAN CANYON



DATE	MAR. 16, 2023
DRAWN	LMM
DESIGNED	NAPV
CHECKED	PSW
JOB NO.	41103710
SHEET NO.	C3.5

City of American Canyon  
 Public Works  
 Job Site Copy  
 03/28/2023

**C.3 - Commerce 220 Documents**

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## SPECIAL - STATUS ANIMAL SURVEY REPORT

Date: August 8, 2023  
To: Robert Carroll, FCS International.  
From: Dr. Christopher T. DiVittorio, Pinecrest Research Corp., Inc.  
Subject: Results of special-status animal surveys at 220 Commerce Court, Napa County, CA (FCS Project 5639.0001)

Robert Carroll,

This special-status animal survey report (Report) details the findings of eleven (11) wildlife surveys conducted between January 18 and July 2 in 2023 at the above-referenced property located in the County of Napa. The site consists of one parcel measuring 10.2 acres and assigned APN 058-030-069. Surveys were conducted in order to determine the pre-construction presence or absence of the following special-status animals: burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), nesting raptors, nesting passerine birds, and Western pond turtle. Surveys were conducted by consulting biologist Dr. Christopher DiVittorio.

### Site Description

The entirety of the site is disked and mowed ruderal grassland, with the exception of a row of Eucalyptus trees along the northern property line. The ruderal grassland exhibits low cover of plants and low species diversity with very few native species (Figure 1). The habitat type of this area as determined by Sawyer et al. (2009) *Manual of California Vegetation 2nd Edition* (MCV) is *Bromus (diandrus, hordeaceous)-Brachypodium distachyon* Semi-Natural Herbaceous Stand. On the north side of the parcels is a row of bluegum Eucalyptus. The MCV classification of this habitat is *Eucalyptus (globulus, camaldulensis)* Semi-Natural Woodland Stands.

### Methods

Between January 18 and July 2, 2023, eleven (11) surveys were conducted for nesting passerine birds, raptors (including Swainson's hawk), burrowing owl, and Western pond turtle. During each survey, the entirety of the "Commerce 220" site as well as the adjacent "Commerce 217" site were examined. These surveys included the entirety of both legal parcels, as well all of the vegetated areas up to the concrete paved area on the developed parcel to the south. Relevant adjacent areas were also examined with binoculars where possible. A total of approximately 45 survey hours were completed across all survey dates. All of the aforementioned animal types were surveyed for at each of the eleven site visits. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, and the *Staff Report on*

*Burrowing Owl Mitigation.*<sup>1,2</sup> Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10 a.m.). Surveys were conducted on foot. Survey dates with the corresponding Swainson's hawk survey periods are shown below.

Date	Swainson's Hawk Survey Period
1/18/2023	1 <sup>st</sup> survey in Period I
3/20/2023	1 <sup>st</sup> survey in Period II
3/31/2023	2 <sup>nd</sup> survey in Period II
4/4/2023	3 <sup>rd</sup> survey in Period II
4/5/2023	1 <sup>st</sup> survey in Period III
4/6/2023	2 <sup>nd</sup> survey in Period III
4/7/2023	3 <sup>rd</sup> survey in Period III
4/24/2023	1 <sup>st</sup> survey in Period IV
4/28/2023	2 <sup>nd</sup> survey in Period IV
5/29/2023	3 <sup>rd</sup> survey in Period IV
7/2/2023	1 <sup>st</sup> survey in Period V

## Results & Recommendations

A total of 56 unique species of birds were observed across the eleven site visits. A total of 4 other species of animals were observed across the eleven site visits. Transcribed field notes from each of the eleven site visits are provided in Appendix A, below. A master list of all species of birds and other animals encountered across the eleven site visits is provided in Appendix B, below.

Due to the lack of suitable nesting habitat on the project site itself, no nesting birds were observed in the project area, although nesting birds were observed in the *Eucalyptus* stands offsite. Of the nesting birds in the offsite *Eucalyptus* stands, none of these were special-status including raptors. White tailed kites (*Elanus leucurus*) were observed foraging in the field, but they did not appear to be nesting nearby, as described below. No Swainson's hawk or burrowing owl were observed during any of the avian surveys. No adults or nests of Western pond turtle were observed (Appendix A & B).

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<sup>1</sup> Swainson's Hawk Technical Advisory Committee. 2000. *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*. California Department of Fish and Wildlife, May 31, 2000.

<sup>2</sup> California Department of Fish and Wildlife 2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

### Swainson's hawk

No individuals of Swainson's hawk were observed during any of the surveys, and no raptor nests that could belong to Swainson's hawk were observed. The presence of other birds-of-prey utilizing territories onsite also indicates that Swainson's hawk are not utilizing this habitat currently since these species are antagonistic and do not typically share ranges. The negative survey results for Swainson's hawk despite approximately 45 survey hours satisfies the requirements of the survey protocol for this species, therefore it is reasonable to conclude Swainson's hawk are absent from the project site.

### Nesting Birds (Including Raptors)

No active raptor nests were observed within the vicinity of the project site. Several American crow were loitering around the *Eucalyptus* grove to the east of the parcel and harassing White-tail kites that approached the grove, however their nest could not be located. Several White-tail kites were observed each day foraging over the grassland habitat, however each time they flew off to the southwest out of sight and the location of their nest could not be determined. One juvenile red-shouldered hawk was observed within a large *Eucalyptus* tree along the north property line however this individual flew offsite after approximately 20 minutes. No other active nests were observed during any of the eleven site visits.

### Burrowing Owl

No evidence of burrowing owl activity was observed during any of the eleven field surveys. No California ground squirrel burrows were observed on-site, and no other burrows or dens were observed that would provide suitable nesting habitat for burrowing owl. Therefore, it is reasonable to conclude burrowing owl is absent from the project site.

### Western Pond Turtle

No evidence of Western pond turtle activity was observed during any of the eleven field surveys. There are some wetland features onsite, however there are no ponds or streams onsite that would be suitable for Western pond turtle foraging or breeding. No signs of adults or nests were observed onsite or in the accessible vicinity of the site. Therefore, it is reasonable to conclude Western pond turtle is absent from the project site.

Based on the results of these eleven surveys, we conclude that there are no special-status animal species currently occupying the project site, and no compensatory mitigation for impacts to special-status animal species is recommended at this time. These results do not however, preclude the future existence of the above-referenced species onsite as they may recolonize the site if sufficient time has passed between these surveys and site development.

Please let me know if you have any questions about this or any other studies we've performed for this project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris DiVittorio". The signature is fluid and cursive, with a prominent "C" at the start and a long, sweeping underline.

Christopher DiVittorio, PhD  
President, PEC  
(510) 881-3039  
[chris@pinecrestenvironmental.org](mailto:chris@pinecrestenvironmental.org)

**Figure 1: Ruderal Grassland**



SOURCES: PEC Inc.

APN 058-030-069-000  
220 Commerce Court, American Canyon, CA 94503

**Figure 2: Eucalyptus Stands**



SOURCES: PEC Inc.

APN 058-030-069-000  
220 Commerce Court, American Canyon, CA 94503

**Figure 3: Habitat Map**



## Appendix A: Animal Survey Field Notes

The following is a transcription of field notes for each of the eleven (11) protocol-level surveys conducted at the project site. Special-status species, if any, are denoted with an asterisk (\*).

### Site Visit: 1/18/23

Time: 12:00 PM (approx.)

Weather: clear, no wind, 56degF

Notes: started mid-day

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Birds: juvenile red-shouldered hawk (*Buteo lineatus*) sitting in Eucalyptus tree on N fenceline, Western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), American pelican (*Pelecanus erythrorhynchos*), black phoebe (*Sayornis nigricans*), white-crowned sparrow (*Zonotrichia leucophrys*), Northern flicker (*Colaptes auratus*), crow (*Corvus brachyrhynchos*)

Other Animals: None

### Site Visit: 3/20/23

Time: 6:35 AM

Weather: no wind, 49 degF, 46% RH

Notes: start at sunrise; park in SE corner

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; early season plant survey

Personnel: Dr. Christopher DiVittorio

Bird Species: wild turkey (*Meleagris gallopavo*), turkey vulture (*Cathartes aura*), Canada goose (*Branta canadensis*), crow (*Corvus brachyrhynchos*), raven (*Corvus corax*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), Western bluebird (*Sialia mexicana*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorrhous mexicanus*), red-shouldered hawk (*Buteo lineatus*) two individuals soaring over the Eucalyptus grove to the E of the site, house wren (*Troglodytes aedon*), American robin (*Turdus migratorius*), golden-crowned sparrow (*Zonotrichia atricapilla*), Nuttall's woodpecker (*Picoides nuttallii*), white-crowned sparrow (*Zonotrichia leucophrys*), American robin (*Turdus migratorius*), purple finch (*Haemorrhous purpureus*), tree swallow (*Tachycineta bicolor*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), ruby-crowned kinglet (*Regulus calendula*), American pipit (*Anthus rubescens*), California gull (*Larus californicus*), brown-headed cowbird (*Molothrus ater*), Anna's hummingbird (*Calypte anna*), chestnut-backed chickadee (*Poecile rufescens*), White-tailed kite (*Elanus leucurus*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 3/31/23

Time: 6:30 AM

Weather: clear, wind 0 mph, 44.5 degF, 76.5% RH

Notes: parked NE corner

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Bird species: American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida macroura*), Western scrub jay (*Aphelocoma californica*), lesser goldfinch (*Spinus psaltria*), house wren (*Troglodytes aedon*), Canada goose (*Branta canadensis*), American goldfinch (*Spinus tristis*), house sparrow (*Passer domesticus*), Allen's hummingbird (*Selasphorus sasin*), kildeer (*Charadrius vociferus*), raven (*Corvus corax*), unknown gull likely Western or California, American coot (*Fulica americana*), European starling (*Sturnus vulgaris*), ruby-crowned kinglet (*Regulus calendula*), black phoebe (*Sayornis nigricans*),

Other Animals: Mule deer (*Odocoileus hemionus*), domestic cat (*Felis catus*),

Site Visit: 4/4/23

Start time: 6:35 AM

Weather: clear, 49 degF, no wind, 81% RH

Notes: parked SW corner; 6:15 AM first light, 7:15 first direct sunlight

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; mid-season plant survey

Personnel: Dr. Christopher DiVittorio

Bird Species: red-shouldered hawk (*Buteo lineatus*) perched on Eucalyptus tree on N fenceline, wild turkey (*Meleagris gallopavo*) calling and all over parking area, White-tailed kite (*Elanus leucurus*) foraging and calling, house wren (*Troglodytes aedon*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), purple finch (*Haemorhous purpureus*), song sparrow (*Melospiza melodia*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), rock wren (*Salpinctes obsoletus*), black phoebe (*Sayornis nigricans*), European starling (*Sturnus vulgaris*), fox sparrow (*Passerella iliaca*), Northern mockingbird (*Mimus polyglottos*), tree swallow (*Tachycineta bicolor*), Canada goose (*Branta canadensis*), kildeer (*Charadrius vociferus*), Anna's hummingbird (*Calypte anna*), Western bluebird (*Sialia mexicana*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 4/5/23

Start time: 6:08 AM

Weather: 39 degF, 80% RH, no wind

Notes: met Jerry with Stravinsky onsite; parked SW corner

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Bird Species: red-shouldered hawk (*Buteo lineatus*) called from southwest corner of Eucalyptus grove once, wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melospiza crissalis*), raven (*Corvus corax*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*), White-tailed kite (*Elanus leucurus*) 3 hovering various times over the field, Nuttall's woodpecker (*Picoides nuttallii*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*),

Other Animals: None

Site Visit: 4/6/23

Start time: 6:17 AM

Weather: clear, 44 degF, 80% RH, no wind

Notes: fewer wildlife than yesterday; met Jerry with Stravinsky onsite; parked SW corner

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Bird Species: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), California towhee (*Melospiza crissalis*), brown creeper (*Certhia americana*), raven (*Corvus corax*), American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), red-shouldered hawk (*Buteo lineatus*) called from southwest corner of Eucalyptus grove once similar to other mornings, White-tailed kite (*Elanus leucurus*) two individuals over east Eucalyptus grove being chased by crows, song sparrow (*Melospiza melodia*), great blue heron (*Ardea herodias*) soaring overhead, unknown gulls soaring, lesser goldfinch (*Spinus psaltria*), Anna's hummingbird (*Calypte anna*), mallard ducks (*Anas platyrhynchos*), red-shouldered blackbird (*Agelaius phoeniceus*)

Other Animals: black-tailed jackrabbit (*Lepus californicus*) runways, California vole (*Microtus californicus*) runways

Site Visit: 4/7/23

Start time: 6:30 AM

Weather: cloudy, 54.5 degF, 79% RH, wind 1-2 mph, fewer birds today

Notes: met Jerry with Stravinsky onsite

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Bird Species: Bewick's wren (*Thryomanes bewickii*), crow (*Corvus brachyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), wild turkey (*Meleagris gallopavo*), hermit thrush (*Catharus guttatus*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), Nuttall's woodpecker (*Picoides nuttallii*), White-tailed kites (*Elanus leucurus*) being chased by crows then two foraging in field, cliff swallow (*Petrochelidon pyrrhonota*), cedar waxwing (*Bombycilla cedrorum*), American goldfinch (*Spinus tristis*), mallard ducks (*Anas platyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 4/24/23

Start time: 6:30 AM

Weather: cloudy, then sunny; 61 degF, 64% RH, 1-3 mph wind

Notes: met Jerry with Stravinsky onsite for survey at 6:30, began preconstruction meeting 8:00 AM

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey; preconstruction meeting with geotechnical engineer, Stravinsky, civil engineer, SWPP monitor, etc.

Personnel: Dr. Christopher DiVittorio

Birds: violet-green swallow (*Tachycineta thalassina*), Brewer's blackbird (*Euphagus cyanocephalus*), California towhee (*Melospiza crissalis*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), European starling (*Sturnus vulgaris*), white-crowned sparrow (*Zonotrichia leucophrys*), Nuttall's woodpecker (*Picoides nuttallii*), American goldfinch (*Spinus tristis*), Western bluebird (*Sialia mexicana*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaidura macroura*), White-tailed kite (*Elanus leucurus*) soaring and hovering over field, juvenile red-tailed hawk (*Buteo jamaicensis*) offsite to E flushed immediately out of site to the SE, peregrine falcon (*Falco peregrinus*) fly-through overhead, unidentified species of sparrow,

Other Animals: none

Other Notes: Red-tailed hawk nest on south side of existing warehouse to the south of project site is not active this year.

Site Visit: 4/28/23

Start time: 5:45 AM

Weather: cloudy, cold

Notes: met Jerry with Stravinsky onsite, Commerce 217 will be graded tomorrow; silt fencing installed and grass has been mowed since last visit; no burrows or other animal sign onsite; this counts towards the 24-hour BUOW preconstruction survey requirement

Purpose: preconstruction Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Birds: White-tailed kite (*Elanus leucurus*) hovering over field, turkey vulture (*Cathartes aura*), wild turkey (*Meleagris gallopavo*),

Other Animals: black-tailed jackrabbit (*Lepus californicus*),

Site Visit: 5/29/23

Start time: 8:30 AM

Weather: sunny

Notes: Commerce 220 site has been graded in addition to Commerce 217

Purpose: Swainson's hawk, other raptor, nesting passerine bird, BUOW, western pond turtle survey

Personnel: Dr. Christopher DiVittorio

Birds: no sign of BUOW or Swainson's hawk; presence/absence survey only; no comprehensive bird list completed

Other Animals: none

Site Visit: 7/2/23

Start time: 1:00 PM

Weather: clear, sunny, 85 degF, 51% RH, 3-8 mph wind

Note: many species appear to have migrated offsite for the summer

Purpose: Swainson's hawk, other raptor, nesting bird, BUOW, western pond turtle survey

Bird Species:

house finch (*Haemorhous mexicanus*), Osprey (*Pandion haliaetus*), turkey vulture (*Cathartes aura*), lesser goldfinch (*Spinus psaltria*), red-tailed hawk (*Buteo jamaicensis*), Nuttall's woodpecker (*Picoides nuttallii*), killdeer (*Charadrius vociferus*), White-tailed kite (*Elanus leucurus*)

Other Animals: none

## Appendix B: Master Species List

The following is a list of animal species observed across the eleven (11) site visits at the project site. Special-status species, if any, are denoted with an asterisk (\*).

### MASTER BIRD LIST

Allen's hummingbird (*Selasphorus sasin*)  
 American coot (*Fulica americana*)  
 American goldfinch (*Spinus tristis*)  
 American pelican (*Pelecanus erythrorhynchos*)  
 American pipit (*Anthus rubescens*)  
 American robin (*Turdus migratorius*)  
 Anna's hummingbird (*Calypte anna*)  
 Bewick's wren (*Thryomanes bewickii*)  
 black phoebe (*Sayornis nigricans*)  
 Brewer's blackbird (*Euphagus cyanocephalus*)  
 brown creeper (*Certhia americana*)  
 brown-headed cowbird (*Molothrus ater*)  
 California gull (*Larus californicus*)  
 California towhee (*Melospiza crissalis*)  
 Canada goose (*Branta canadensis*)  
 cedar waxwing (*Bombycilla cedrorum*)  
 chestnut-backed chickadee (*Poecile rufescens*)  
 cliff swallow (*Petrochelidon pyrrhonota*)  
 crow (*Corvus brachyrhynchos*)  
 dark-eyed junco (*Junco hyemalis*)  
 European starling (*Sturnus vulgaris*)  
 fox sparrow (*Passerella iliaca*)  
 golden-crowned sparrow (*Zonotrichia atricapilla*)  
 great blue heron (*Ardea herodias*)  
 hermit thrush (*Catharus guttatus*)  
 house finch (*Haemorhous mexicanus*)  
 house sparrow (*Passer domesticus*)  
 house wren (*Troglodytes aedon*)  
 killdeer (*Charadrius vociferus*)  
 lesser goldfinch (*Spinus psaltria*)  
 mallard ducks (*Anas platyrhynchos*)  
 mourning dove (*Zenaidura macroura*)  
 Northern flicker (*Colaptes auratus*)  
 Northern mockingbird (*Mimus polyglottos*)  
 Nuttall's woodpecker (*Picoides nuttallii*)  
 Osprey (*Pandion haliaetus*)  
 peregrine falcon (*Falco peregrinus*)  
 purple finch (*Haemorhous purpureus*)  
 raven (*Corvus corax*)  
 red-shouldered blackbird (*Agelaius phoeniceus*)  
 red-shouldered hawk (*Buteo lineatus*)  
 red-tailed hawk (*Buteo jamaicensis*)

rock wren (*Salpinctes obsoletus*)  
ruby-crowned kinglet (*Regulus calendula*)  
song sparrow (*Melospiza melodia*)  
tree swallow (*Tachycineta bicolor*)  
turkey vulture (*Cathartes aura*)  
violet-green swallow (*Tachycineta thalassina*)  
Western bluebird (*Sialia mexicana*)  
Western scrub jay (*Aphelocoma californica*)  
white-crowned sparrow (*Zonotrichia leucophrys*)  
White-tailed kite (*Elanus leucurus*)  
wild turkey (*Meleagris gallopavo*)  
yellow-rumped warbler (*Setophaga coronata*)  
unidentified gull likely Western or California  
unidentified species of sparrow

#### MASTER OTHER ANIMALS LIST

black-tailed deer (*Odocoileus hemionus*)  
black-tailed jackrabbit (*Lepus californicus*)  
California vole (*Microtus californicus*) runways  
domestic cat (*Felis catus*)



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## SPECIAL - STATUS PLANT SURVEY REPORT

Date: July 21, 2023  
To: Jason Brandman, FCS International.  
From: Dr. Christopher T. DiVittorio, Pinecrest Research Corp., Inc.  
Subject: Results of special-status plant surveys at 220 Commerce Court, Napa County, CA (FCS Project 5639.0001)

To Whom It May Concern,

This rare plant survey report (Report) details the findings of three protocol-level special-status plant surveys conducted in 2023 at the above-referenced property located in the County of Napa. The site consists of one parcel measuring 10.2 acres and assigned APN 058-030-069.

### Site Description

The entirety of the site is disked and mowed ruderal grassland, with the exception of some emergent wetland along the north property line. A stand of non-native *Eucalyptus* spp. exists to the west but this is offsite and located on the adjacent parcel. The ruderal grassland exhibits low cover of plants and low species diversity with very few native species (Figure 1). The habitat type of this area as determined by Sawyer et al. (2009) *Manual of California Vegetation 2nd Edition* (MCV) is *Bromus (diandrus, hordeaceous)-Brachypodium distachyon* Semi-Natural Herbaceous Stand. There is also some disturbed/previously developed habitat in the southeast corner (Figure 3). The project will affect only the ruderal grassland portion of the site.

### Methods

Special-status plants are defined here to include: (1) all plants that are federal- or state-listed as rare, threatened or endangered, (2) all federal and state candidates for listing, (3) all plants included in Lists 1 through 4 of the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, section 15380. Background information searches were conducted prior to all site visits to identify potential rare plant species or sensitive plant communities recognized by the California Department of Fish and Wildlife (CDFW) that may occur in the Study Area vicinity.

A table of these species, and their protection status, habitat requirements, and likelihood to occur in the Study Area is provided below in Appendix A. Sources for this table include the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CDFW 2023), the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023), and the knowledge of PEC staff. CNDDDB searches were performed within a "9-quad" area encompassing the surrounding region.

Site visits were performed during the growing season of 2023. An early-season site visit was performed on March 20. Mid-season site visits were performed on April 6, April 7, and May 29. A late-season site visit was also performed on July 2. Between the mid-season and late-season site visits the site was graded thus the late-season site visit focused on remaining vegetation surrounding the areas of disturbance. Site visits were performed by PEC botanist Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by PEC botanist Dr. Zoya Akulova. During each site visit, Dr. DiVittorio surveyed the entirety of the project area using methods as specified in the California Department of Fish & Wildlife (CDFW) publication titled *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*, dated March 20, 2018.

During each survey, the entirety of the "Commerce 220" site as well as the adjacent "Commerce 217" site were examined. These surveys included the entirety of both legal parcels, as well all of the vegetated areas up to the concrete paved area on the developed parcel to the south. Field surveys were conducted by walking the entire project area on foot in parallel lines approximately 15 feet apart, identifying every species that was flowering, and making note of any species that were past flowering or that had not yet flowered. Voucher specimens were taken of any species that required identification in the laboratory. All terminology follows currently accepted nomenclature as described in *The Jepson Manual* (2012).

## Results & Recommendations

The project area is comprised of routinely disked ruderal *Bromus (diandrus, hordeaceous)* Semi-Natural Stands with some isolated individuals of *Baccharis pilularis* mostly near the edges of the site. A map of habitat types is shown in Figure 3. No special-status plant species or sensitive habitats were positively identified in the project area. A full list of the species encountered during the surveys is provided below in Appendix B. In total, 15 native species were observed onsite and 57 non-native species were observed. No special-status species were found thus we have no recommendations for mitigation or avoidance for this project.

Please let me know if you have any questions about this or any other studies we've performed for this project.

Sincerely,



Christopher DiVittorio, PhD  
President, PEC  
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**Figure 1: Ruderal Grassland**



SOURCES: PEC Inc.

APN 058-030-069-000  
220 Commerce Court, American Canyon, CA 94503

**Figure 2: Eucalyptus Stands**



SOURCES: PEC Inc.

APN 058-030-069-000  
220 Commerce Court, American Canyon, CA 94503

**Figure 3: Habitat Map**



## Appendix A: Special-Status Species Considered

The following is a list of sensitive and/or rare plants and habitats generated based on knowledge of the species and habitats of Napa County by PEC staff, from various State and Federal databases, and from the California Natural Diversity Database (CNDDDB). Known occurrences within a "9-quad" region around the project site are shown in bold.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
PLANTS			
<b>Alkali milk-vetch</b> <i>(Astragalus tener var. tener)</i>	—/—/1B.2	Alkali grassland	<b>Very Low: No alkali habitat exists in the project area.</b>
Anthony peak lupine <i>(Lupinus antoninus)</i>	—/—/1B.2	Coniferous forest	<u>None</u> : No coniferous forest habitat exists in the project area.
Baker's goldfields <i>(Lasthenia californica ssp. bakeri)</i>	—/—/1B.2	Coastal grasslands	<u>Very Low</u> : Some grassland habitat exists in the project area.
Baker's larkspur <i>(Delphinium bakeri)</i>	FE/SE/1B.1	Coastal scrub	<u>Very Low</u> : No coastal scrub habitat exists in the project area.
Baker's manzanita <i>(Arctostaphylos bakeri ssp. bakeri)</i>	—/—/1B.1	Serpentine chaparral	<u>None</u> : No serpentine chaparral exists in the project area.
<b>Baker's navarretia</b> <i>(Navarretia leucocephala ssp. bakeri)</i>	—/—/1B.1	Vernal pool	<b>None: No vernal pool habitat exists in the project area.</b>
Beaked tracyina <i>(Tracyina rostrata)</i>	—/—/1B.2	Grassland, foothill woodland	<u>Low</u> : Some grassland habitat exists in the project area.
Bent flowered fiddleneck <i>(Amsinckia lunaris)</i>	—/—/1B.2	Grassland, foothill woodland	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Big-scale balsamroot</b> <i>(Balsamorhiza macrolepis)</i>	—/—/1B.2	Grassland	<b>Low: Some grassland habitat exists in the project area.</b>
<b>Big tarplant</b> <i>(Blepharizonia plumosa)</i>	—/—/1B.1	Chaparral, grassland	<b>Low: Some grassland habitat exists in the project area.</b>
Blasdale's bent grass <i>(Agrostis blasdalei)</i>	—/—/1B.2	Coastal grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Blue coast gilia <i>(Gilia capitata ssp. chamissonis)</i>	—/—/1B.1	Coastal sand dunes	<u>None</u> : No sand dune habitat exists in the project area.
Bluff wallflower <i>(Erysimum concinnum)</i>	—/—/1B.2	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Bogg's Lake hedge-hyssop <i>(Gratiola heterosepala)</i>	—/—/1B.2	Vernal pool, pond	<u>None</u> : No vernal pool habitat exists in the project area.
Bolander's horkelia <i>(Horkelia bolanderi)</i>	—/—/1B.2	Coniferous forest, grassland	<u>Low</u> : Some grassland exists in the project area.

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<b>Bolander's water hemlock</b> ( <i>Cicuta maculata</i> var. <i>bolanderi</i> )	—/—/2B.1	Salt marsh	<b>None:</b> No salt marsh habitat exists in the project area.
Brandegee's eriastrum ( <i>Eriastrum brandegeae</i> )	—/—/1B.1	Chaparral	<b>None:</b> No chaparral habitat exists in the project area.
<b>Brewer's calandrinia</b> ( <i>Calandrinia breweri</i> )	—/—/4.2	Coastal scrub	<b>None:</b> No coastal scrub habitat exists in the project area.
<b>Brewer's western flax</b> ( <i>Hesperolinon breweri</i> )	—/—/1B.2	Chaparral, grassland	<b>Low:</b> Some grassland habitat exists in the project area.
<b>Bristly leptosiphon</b> ( <i>Leptosiphon aureus</i> )	—/—/4.2	Chaparral	<b>None:</b> No chaparral habitat exists in the project area.
Bristly sedge ( <i>Carex comosa</i> )	—/—/2B.1	Wetland, riparian	<b>None:</b> No potential wetland habitat exists in the project area.
Brownish beaked-rush ( <i>Rhynchospora capitellata</i> )	—/—/2B.2	Wetland, riparian	<b>None:</b> No potential wetland habitat exists in the project area.
Burke's goldfields ( <i>Lasthenia burkei</i> )	FE/SE/1B.1	Vernal pools, grassland	<b>Low:</b> Some grassland habitat exists in the project area.
California alkali grass ( <i>Puccinellia simplex</i> )	—/—/1B.2	Alkali grassland	<b>Very Low:</b> No alkali grassland habitat exists in the project area.
<b>California beaked-rush</b> ( <i>Rhynchospora californica</i> )	—/—/1B.1	Freshwater wetlands	<b>None:</b> No potential wetland habitat exists in the project area.
California satintail ( <i>Imperata brevifolia</i> )	—/—/2B.1	Chaparral, coastal scrub	<b>None:</b> No chaparral habitat exists in the project area.
California sedge ( <i>Carex californica</i> )	—/—/2B.3	Wetlands	<b>None:</b> No wetland habitat exists in the project area.
Calistoga ceanothus ( <i>Ceanothus divergens</i> )	—/—/1B.2	Chaparral	<b>None:</b> No chaparral habitat exists in the project area.
Calistoga popcornflower ( <i>Plagiobothrys strictus</i> )	FE/ST/1B.1	Wetland, riparian	<b>None:</b> No wetland habitat exists in the project area.
<b>Carquinez goldenbrush</b> ( <i>Isocoma arguta</i> )	—/—/1B.1	Grassland	<b>Low:</b> Some grassland habitat exists in the project area.
<b>Chaparral ragwort</b> ( <i>Senecio aphanactis</i> )	—/—/1B.1	Coastal scrub, woodland	<b>None:</b> No coastal scrub habitat exists in the project area.
Clara Hunt's milk vetch ( <i>Astragalus claranus</i> )	—/—/1B.1	Chaparral, grassland	<b>Low:</b> Some grassland habitat exists in the project area.
<b>Coast iris</b> ( <i>Iris longipetala</i> )	—/—/4.2	Coastal grassland, wetland	<b>Low:</b> Some grassland habitat exists in the project area.
Coast lily ( <i>Lilium maritimum</i> )	—/—/1B.1	Coastal grassland	<b>Very Low:</b> No coastal grassland habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Coastal bluff morning glory ( <i>Calystegia purpurata</i> ssp. <i>saxicola</i> )	—/—/1B.2	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
<b>Cobb Mountain lupine</b> ( <i>Lupinus sericatus</i> )	—/—/1B.2	<b>Chaparral, coniferous forest</b>	<b><u>None</u></b> : No chaparral habitat exists in the project area.
Colusa layia ( <i>Layia septentrionalis</i> )	—/—/1B.2	Chaparral, valley grassland	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Congdon's tarplant</b> ( <i>Centromadia parryi</i> ssp. <i>congdonii</i> )	—/—/1B.1	<b>Grassland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
Congested-headed hayfield tarplant ( <i>Hemizonia congesta</i> ssp. <i>congesta</i> )	—/—/1B.2	Grassland, coastal scrub	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Contra Costa goldfields</b> ( <i>Lasthenia conjugens</i> )	<b>FE/—/1B.1</b>	<b>Vernal pool</b>	<b><u>None</u></b> : No vernal pool habitat exists in the project area.
Crystal Springs lessingia ( <i>Lessingia arachnoidea</i> )	—/—/1B.2	Serpentine grassland	<u>None</u> : No serpentine grassland habitat exists in the project area.
Cunningham Marsh cinquefoil ( <i>Potentilla uliginosa</i> )	—/—/1A	Wetland	<u>None</u> : No wetland habitat exists in the project area.
Dark-eyed gilia ( <i>Gilia millefoliata</i> )	—/—/1B.2	Coastal sand dunes	<u>None</u> : No coastal sand dune habitat exists in the project area.
<b>Dark-mouthed triteleia</b> ( <i>Triteleia lugens</i> )	—/—/4.3	<b>Grassland, chaparral</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
Deceiving sedge ( <i>Carex saliniformis</i> )	—/—/1B.2	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Deep-scarred cryptantha ( <i>Cryptantha excavata</i> )	—/—/1B.2	Woodland	<u>None</u> : No woodland habitat exists in the project area.
<b>Delta tule pea</b> ( <i>Lathyrus jepsonii</i> var. <i>jepsonii</i> )	—/—/1B.2	<b>Freshwater and brackish marsh</b>	<b><u>None</u></b> : No marsh habitat exists in the project area.
<b>Diablo helianthella</b> ( <i>Helianthella castanea</i> )	—/—/1B.2	<b>Chaparral, grassland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
Dimorphic snapdragon ( <i>Antirrhinum subcordatum</i> )	—/—/4.3	Serpentine chaparral	<u>None</u> : No serpentine chaparral exists in the project area.
<b>Dwarf downingia</b> ( <i>Downingia pusilla</i> )	—/—/2B.2	<b>Vernal pool, wetland</b>	<b><u>None</u></b> : No vernal pool habitat exists in the project area.
Dwarf soaproot ( <i>Chlorogalum pomeridianum</i> var. <i>minus</i> )	—/—/1B.2	Serpentine chaparral	<u>None</u> : No serpentine chaparral exists in the project area.
Eel-grass pondweed ( <i>Potamogeton zosteriformis</i> )	—/—/2B.2	Wetland, pond	<u>None</u> : No wetland habitat exists in the project area.
<b>Fragrant fritillary</b> ( <i>Fritillaria liliacea</i> )	—/—/1B.2	<b>Grassland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.

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Few-flowered navarretia ( <i>Navarretia leucocephala</i> ssp. <i>pauciflora</i> )	FE/SE/1B.1	Vernal pool, wetland	<u>None</u> : No vernal pool habitat exists in the project area.
<b>Franciscan onion</b> ( <i>Allium peninsulare</i> var. <i>franciscanum</i> )	—/—/1B.2	<b>Coastal grassland</b>	<b><u>Very Low</u>: No coastal grassland habitat exists in the project area.</b>
Geysers panicum ( <i>Panicum acuminatum</i> var. <i>thermale</i> )	—/—/1B.2	Chaparral, wetland	<u>None</u> : No chaparral habitat exists in the project area.
Glandular western flax ( <i>Hesperolinon adenophyllum</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Golden larkspur ( <i>Delphinium luteum</i> )	FE/SR/1B.1	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Grassleaf water plantain ( <i>Alisma gramineum</i> )	—/—/2B.2	Wetland, pond	<u>None</u> : No wetland habitat exists in the project area.
<b>Green monardella</b> ( <i>Monardella viridis</i> )	—/—/4.3	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
<b>Greene's narrow-leaved daisy</b> ( <i>Erigeron greenei</i> )	—/—/1B.2	<b>Serpentine chaparral</b>	<b><u>None</u>: No serpentine chaparral habitat exists in the project area.</b>
Hall's harmonia ( <i>Harmonia hallii</i> )	—/—/1B.2	Serpentine chaparral	<u>None</u> : No chaparral habitat exists in the project area.
<b>Henderson's bent grass</b> ( <i>Agrostis hendersonii</i> )	—/—/3.2	<b>Vernal pool</b>	<b><u>None</u>: No vernal pool habitat exists in the project area.</b>
Hoffman's bristly jewelflower ( <i>Streptanthus glandulosus</i> ssp. <i>hoffmanii</i> )	—/—/1B.3	Chaparral, woodland	<u>None</u> : No chaparral habitat exists in the project area.
<b>Holly-leaved ceanothus</b> ( <i>Ceanothus purpureus</i> )	—/—/1B.2	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
Hospital Canyon larkspur ( <i>Delphinium californicum</i> ssp. <i>interius</i> )	—/—/1B.2	Woodland	<u>None</u> : No woodland habitat exists in the project area.
Humboldt County milk vetch ( <i>Astragalus agnicidus</i> )	—/—/1B.1	Coniferous forest	<u>None</u> : No coniferous forest habitat exists in the project area.
<b>Jepson's coyote thistle</b> ( <i>Eryngium jepsonii</i> )	—/—/4.2	<b>Wetland, vernal pool</b>	<b><u>None</u>: No wetland habitat exists in the project area.</b>
<b>Jepson's leptosiphon</b> ( <i>Leptosiphon jepsonii</i> )	—/—/1B.2	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
Jepson's milk-vetch ( <i>Astragalus rattanii</i> var. <i>jepsonianus</i> )	—/—/1B.2	Chaparral, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
<b>Johnny-nip</b> ( <i>Castilleja ambigua</i> var. <i>ambigua</i> )	—/—/4.2	<b>Wetland, riparian</b>	<b><u>None</u>: No wetland habitat exists in the project area.</b>
Kenwood Marsh checkerbloom ( <i>Sidalcea oregana</i> ssp. <i>valida</i> )	FE/SE/1B.1	Wetland	<u>None</u> : No wetland habitat exists in the project area.

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Konocti manzanita ( <i>Arctostaphylos manzanita</i> ssp. <i>elegans</i> )	—/—/1B.3	Chaparral, woodland	<u>None</u> : No chaparral habitat exists in the project area.
Lake County stonecrop ( <i>Sedella leiocarpa</i> )	—/—/1B.1	Wetland	<u>None</u> : No wetland habitat exists in the project area.
<b>Legenere</b> ( <i>Legenere limosa</i> )	—/—/1B.1	<b>Wetland, grassland</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
Loch Lomond button-celery ( <i>Eryngium constancei</i> )	FE/SE/1B.1	Vernal pool	<u>None</u> : No vernal pool habitat exists in the project area.
<b>Lobb's aquatic buttercup</b> ( <i>Ranunculus lobbii</i> )	—/—/4.2	<b>Vernal pool</b>	<b><u>None</u>: No vernal pool habitat exists in the project area.</b>
<b>Long-styled sand-spurrey</b> ( <i>Spergularia macrotheca</i> var. <i>longistyla</i> )	—/—/1B.2	<b>Wetland, grassland</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
<b>Lyngbye's sedge</b> ( <i>Carex lyngbyei</i> )	—/—/2B.2	<b>Salt marsh</b>	<b><u>None</u>: No salt marsh habitat exists in the project area.</b>
Many-flowered navarretia ( <i>Navarretia leucocephala</i> spp. <i>plieantha</i> )	FE/SE/1B.2	Vernal pool	<u>None</u> : No wetland habitat exists in the project area.
Maple-leaved checkerbloom ( <i>Sidalcea malachroides</i> )	—/—/4.2	Coastal grassland, coniferous forest	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Marin checker lily ( <i>Fritillaria lanceolata</i> var. <i>tristulis</i> )	—/—/1B.1	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Marin checkerbloom ( <i>Sidalcea hickmanii</i> spp. <i>viridis</i> )	—/—/1B.2	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Marin County navarretia ( <i>Navarretia rosulata</i> )	—/—/1B.2	Serpentine forest	<u>None</u> : No serpentine habitat exists in the project area.
<b>Marin knotweed</b> ( <i>Polygonum marinense</i> )	—/—/3.1	<b>Coastal salt marsh</b>	<b><u>None</u>: No coastal salt marsh habitat exists in the project area.</b>
Marin manzanita ( <i>Arctostaphylos virgata</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Marin western flax ( <i>Hesperolinon congestum</i> )	FT/ST/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Marsh checkerbloom ( <i>Sidalcea oregana</i> ssp. <i>hydrophila</i> )	—/—/1B.2	Wetland, riparian	<u>None</u> : No wetland habitat exists in the project area.
Marsh microseris ( <i>Microseris paludosa</i> )	—/—/1B.2	Wetland, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Marsh pea ( <i>Lathyrus palustris</i> )	—/—/2B.1	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Mason's ceanothus ( <i>Ceanothus masonii</i> )	—/SR/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.

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<b>Mason's lilaepsis</b> ( <i>Lilaeopsis masonii</i> )	—/—/1B.1	<b>Freshwater and brackish marsh</b>	<b><u>None</u>: No marsh habitat exists in the project area.</b>
Milo Baker's lupine ( <i>Lupinus milo-bakeri</i> )	—/—/1B.1	Woodland, grassland	<u>None</u> : No woodland habitat exists in the project area.
<b>Modest rockcress</b> ( <i>Arabis modesta</i> )	—/—/4.3	<b>Chaparral, forest</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
Morrison's jewelflower ( <i>Streptanthus morrisonii</i> ssp. <i>morrisonii</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
<b>Mt. Diablo fairy-lantern</b> ( <i>Calochortus pulchellus</i> )	—/—/1B.2	<b>Chaparral, grassland</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
Mt. St. Helena morning glory ( <i>Calystegia collina</i> ssp. <i>oxyphylla</i> )	—/—/4.2	Serpentine chaparral	<u>None</u> : No serpentine habitat exists in the project area.
Mt. Tamalpais bristly jewelflower ( <i>Streptanthus glandulosus</i> spp. <i>pulchellus</i> )	—/—/1B.2	Chaparral, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Mt. Tamalpais manzanita ( <i>Arctostaphylos montana</i> spp. <i>montana</i> )	—/—/1B.3	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Mt. Tamalpais thistle ( <i>Cirsium hydrophilum</i> var. <i>vaseyi</i> )	—/—/1B.2	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Napa bluecurls</b> ( <i>Trichostema ruygüi</i> )	—/—/1B.2	<b>Grassland</b>	<b><u>Medium</u>: Some grassland habitat exists in the project area.</b>
Napa blue grass ( <i>Poa napensis</i> )	FE/SE/1B.1	Wetland, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
<b>Napa checkerbloom</b> ( <i>Sidalcea hickmanii</i> ssp. <i>napensis</i> )	—/—/1B.1	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
<b>Napa false indigo</b> ( <i>Amorpha californica</i> var. <i>napensis</i> )	—/—/1B.2	<b>Forest, woodland</b>	<b><u>None</u>: No woodland habitat exists in the project area.</b>
<b>Napa lomatium</b> ( <i>Lomatium repostum</i> )	—/—/1B.2	<b>Woodland, chaparral</b>	<b><u>None</u>: No woodland habitat exists in the project area.</b>
<b>Narrow-anthered brodiaea</b> ( <i>Brodiaea leptandra</i> )	—/—/1B.2	<b>Woodland, grassland</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
<b>Nodding harmonia</b> ( <i>Harmonia nutans</i> )	—/—/4.3	<b>Woodland, chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
North Coast semaphore grass ( <i>Pleuropogon hooverianus</i> )	—/—/1B.1	Wetland, vernal pool	<u>None</u> : No wetland habitat exists in the project area.
Nuttall's ribbon-leaved pondweed ( <i>Potamogeton epihydrus</i> )	—/—/2B.2	Pond	<u>None</u> : No pond habitat exists in the project area.
<b>Oval-leaved viburnum</b> ( <i>Viburnum ellipticum</i> )	—/—/2B.3	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Pacific gilia ( <i>Gilia capitata</i> ssp. <i>pacifica</i> )	—/—/1B.2	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Pacific Grove clover ( <i>Trifolium polyodon</i> )	—/—/1B.1	Grassland, wetland	<u>Very Low</u> : Some grassland habitat exists in the project area.
<b>Pappose tarplant</b> ( <i>Centromadia parryi</i> ssp. <i>parryi</i> )	—/—/1B.2	<b>Grassland, wetland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
<b>Parry's rough tarplant</b> ( <i>Centromadia parryi</i> ssp. <i>rudisi</i> )	—/—/4.2	<b>Grassland</b>	<b><u>Low</u></b> : Some grassland habitat exists in the project area.
Pennell's bird's beak ( <i>Cordylanthus tenuis</i> ssp. <i>capillaris</i> )	FE/SR/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Perennial goldfields ( <i>Lasthenia californica</i> ssp. <i>macrantha</i> )	—/—/1B.2	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Peruvian dodder ( <i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> )	—/—/1B.2	Parasitic plant, grassland, chaparral	<u>Low</u> : Some grassland habitat exists in the project area.
Petaluma popcornflower ( <i>Plagiobothrys mollis</i> var. <i>vestitus</i> )	—/—/1A	Coastal salt marsh	<u>None</u> : No coastal salt marsh habitat exists in the project area.
Pink sand verbena ( <i>Abronia umbellata</i> var. <i>breviflora</i> )	—/—/1B.1	Coastal sand dune	<u>None</u> : No sand dune habitat exists in the project area.
Pitkin Marsh lily ( <i>Lilium pardalinum</i> ssp. <i>pitkinense</i> )	FE/SE/1B.1	Wetland	<u>None</u> : No wetland habitat exists in the project area.
Pitkin Marsh paintbrush ( <i>Castilleja uliginosa</i> )	FE/SE/1A	Wetland	<u>None</u> : No wetland habitat exists in the project area.
Point Reyes checkerbloom ( <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i> )	—/—/1B.2	Coastal salt marsh	<u>None</u> : No salt marsh habitat exists in the project area.
Point Reyes salty bird's beak ( <i>Chloropyron maritimum</i> ssp. <i>palustre</i> )	—/—/1B.2	Coastal salt marsh	<u>None</u> : No salt marsh habitat exists in the project area.
Purple-stemmed checkerbloom ( <i>Sidalcea malviflora</i> ssp. <i>purpurea</i> )	—/—/1B.2	Wetland	<u>None</u> : No wetland habitat exists in the project area.
Pygmy cypress ( <i>Hesperocyparis pygmaea</i> )	—/—/1B.2	Hardpan soil	<u>None</u> : No hardpan forest habitat exists in the project area.
Raiche's manzanita ( <i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i> )	—/—/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Raiche's red ribbons ( <i>Clarkia concinna</i> ssp. <i>raichei</i> )	—/—/1B.1	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
<b>Redwood lily</b> ( <i>Lilium rubescens</i> )	—/—/4.2	<b>Chaparral, forest</b>	<b><u>None</u></b> : No chaparral habitat exists in the project area.
<b>Rincon Ridge ceanothus</b> ( <i>Ceanothus confusus</i> )	—/—/1B.1	<b>Chaparral</b>	<b><u>None</u></b> : No chaparral habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Rincon Ridge manzanita ( <i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i> )	—/—/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Rose leptosiphon ( <i>Leptosiphon rosaceus</i> )	—/—/1B.1	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Round-headed beaked rush ( <i>Rhynchospora globularis</i> )	—/—/2B.1	Wetland, riparian	<u>None</u> : No wetland habitat exists in the project area.
Round-headed Chinese houses ( <i>Collinsia corymbosa</i> )	—/—/1B.2	Coastal grassland	<u>None</u> : No coastal grassland habitat exists in the project area.
Round-leaved filaree ( <i>California macrophylla</i> )	—/—/1B.2	Foothill grassland	<u>Low</u> : Some grassland habitat exists in the project area.
<b>Saline clover</b> ( <i>Trifolium hydrophilum</i> )	—/—/1B.2	<b>Wetland, riparian</b>	<b><u>None</u>: No potential wetland habitat exists in the project area.</b>
<b>San Antonio Hills monardella</b> ( <i>Monardella antonina</i> ssp. <i>antonina</i> )	—/—/3.0	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
San Francisco spineflower ( <i>Chorizanthe cuspidata</i> var. <i>cuspidata</i> )	—/—/1B.2	Coastal sand dunes	<u>None</u> : No coastal sand dune habitat exists in the project area.
<b>San Joaquin spearscale</b> ( <i>Extriplex joaquinana</i> )	—/—/1B.2	<b>Alkali scrub, grassland</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
Santa Cruz clover ( <i>Trifolium buckwestiorum</i> )	—/—/1B.1	Wetland, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Santa Cruz microseris ( <i>Stebbinsoseris decipiens</i> )	—/—/1B.2	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Santa Cruz tarplant ( <i>Holocarpha macradenia</i> )	FT/SE/1B.1	Coastal grassland	<u>None</u> : No coastal grassland habitat exists in the project area.
Santa Rosa horkelia ( <i>Horkelia tenuiloba</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Seaside bittercress ( <i>Cardamine angulata</i> )	—/—/2B.2	Forest, riparian	<u>None</u> : No forest habitat exists in the project area.
Sebastopol meadowfoam ( <i>Limnanthes vinculans</i> )	FE/SE/1B.1	Wetland, vernal pool	<u>None</u> : No wetland habitat exists in the project area.
Serpentine cryptantha ( <i>Cryptantha dissita</i> )	—/—/1B.2	Serpentine chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Serpentine daisy ( <i>Erigeron serpentinus</i> )	—/—/1B.3	Serpentine chaparral	<u>None</u> : No serpentine chaparral exists in the project area.
Short-leaved evax ( <i>Hesperovax sparsiflora</i> var. <i>brevifolia</i> )	—/—/1B.2	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
Slender Orcutt grass ( <i>Orcuttia tenuis</i> )	FT/SE/1B.1	Vernal pool	<u>None</u> : No vernal pool habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Small-flowered calycadenia ( <i>Calycadenia micrantha</i> )	—/—/1B.2	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Small groundcone ( <i>Kopsiopsis hookeri</i> )	—/—/2B.3	Redwood forest	<u>None</u> : No redwood forest habitat exists in the project area.
<b>Small spikerush</b> ( <i>Eleocharis parvula</i> )	—/—/3.0	<b>Woodland, chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
<b>Soft salty bird's beak</b> ( <i>Chloropyron molle</i> ssp. <i>molle</i> )	<b>FE/ST/1B.2</b>	<b>Coastal salt marsh</b>	<b><u>None</u>: No salt marsh habitat exists in the project area.</b>
Sonoma alopecurus ( <i>Alopecurus aequalis</i> var. <i>sonomensis</i> )	FE/—/1B.1	Wetland, vernal pool	<u>None</u> : No wetland habitat exists in the project area.
Sonoma beardtongue ( <i>Penstemon newberryi</i> var. <i>sonomensis</i> )	—/—/1B.3	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
<b>Sonoma ceanothus</b> ( <i>Ceanothus sonomensis</i> )	—/—/1B.2	<b>Chaparral</b>	<b><u>None</u>: No chaparral habitat exists in the project area.</b>
Sonoma spineflower ( <i>Chorizanthe valida</i> )	FE/SE/1B.1	Coastal grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
<b>Sonoma sunshine</b> ( <i>Blennosperma bakeri</i> )	<b>FE/SE/1B.1</b>	<b>Grassland, wetland</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
<b>St. Helena fawn lily</b> ( <i>Erythronium helenae</i> )	—/—/4.2	<b>Grassland, chaparral</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
<b>Streamside daisy</b> ( <i>Erigeron biolettii</i> )	—/—/4.2	<b>Grassland, chaparral</b>	<b><u>Very Low</u>: Some grassland habitat exists in the project area.</b>
<b>Suisun marsh aster</b> ( <i>Symphotrichum lentum</i> )	—/—/1B.2	<b>Freshwater and brackish marsh</b>	<b><u>None</u>: No marsh habitat exists in the project area.</b>
Supple daisy ( <i>Erigeron supplex</i> )	—/—/1B.2	Coastal scrub	<u>None</u> : No coastal scrub habitat exists in the project area.
Swamp harebell ( <i>Campanula californica</i> )	—/—/1B.2	Coastal grassland, wetland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Tamalpais jewelflower ( <i>Streptanthus batrachopus</i> )	—/—/1B.3	Serpentine	<u>None</u> : No serpentine habitat exists in the project area.
Tamalpais lessingia ( <i>Lessingia micradenia</i> var. <i>micradenia</i> )	—/—/1B.2	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Tamalpais oak ( <i>Quercus parvula</i> var. <i>tamalpaisensis</i> )	—/—/1B.3	Woodland	<u>None</u> : No woodland habitat exists in the project area.
The Cedars fairy lantern ( <i>Calochortus raichei</i> )	—/—/1B.2	Hardpan chaparral	<u>None</u> : No chaparral habitat exists in the project area.
The Cedars manzanita ( <i>Arctostaphylos bakeri</i> ssp. <i>sublaevis</i> )	—/—/1B.2	Hardpan chaparral	<u>None</u> : No chaparral habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
<b>Thin-lobed horkelia</b> <i>(Horkelia tenuiloba)</i>	—/—/1B.2	Chaparral	<b><u>None</u></b> : No chaparral habitat exists in the project area.
Thurber's reed grass <i>(Calamagrostis crassiglumis)</i>	—/—/2B.1	Coastal scrub, wetland	<u>None</u> : No wetland habitat exists in the project area.
Tiburon buckwheat <i>(Eriogonum luteolum</i> var. <i>caninum)</i>	—/—/1B.2	Serpentine grassland	<u>Very Low</u> : No serpentine grassland exists in the project area.
<b>Tiburon paintbrush</b> <i>(Castilleja affinis</i> ssp. <i>neglecta)</i>	FE/ST/1B.2	Serpentine grassland	<b><u>Very Low</u></b> : No serpentine grassland exists in the project area.
<b>Tracy's clarkia</b> <i>(Clarkia gracilis</i> ssp. <i>tracyi)</i>	—/—/4.2	Serpentine chaparral	<b><u>None</u></b> : No serpentine grassland exists in the project area.
Two-carpellate western flax <i>(Hesperolinon bicarpellatum)</i>	—/—/1B.2	Serpentine chaparral	<u>None</u> : No serpentine chaparral exists in the project area.
<b>Twig-like snapdragon</b> <i>(Antirrhinum virga)</i>	—/—/1B.1	Serpentine chaparral	<b><u>None</u></b> : No serpentine habitat exists in the project area.
<b>Two-carpellate western flax</b> <i>(Hesperolinon bicarpellatum)</i>	—/—/1B.2	Chaparral	<b><u>None</u></b> : No chaparral habitat exists in the project area.
<b>Two-fork clover</b> <i>(Trifolium amoenum)</i>	FE/—/1B.1	Grassland, wetland	<b><u>Very Low</u></b> : Some grassland habitat exists in the project area.
Vine Hill ceanothus <i>(Ceanothus foliosus</i> var. <i>vineatus)</i>	—/—/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Vine Hill clarkia <i>(Clarkia imbricata)</i>	FE/SE/1B.1	Chaparral, grassland	<u>Very Low</u> : Some grassland habitat exists in the project area.
Vine Hill manzanita <i>(Arctostaphylos densiflora)</i>	—/SE/1B.1	Chaparral	<u>None</u> : No chaparral habitat exists in the project area.
Watershield <i>(Brasenia schreberi)</i>	—/—/2B.3	Pond	<u>None</u> : No pond habitat exists in the project area.
<b>Western leatherwood</b> <i>(Dirca occidentalis)</i>	—/—/1B.2	Woodland, chaparral	<b><u>None</u></b> : No woodland habitat exists in the project area.
White-beaked rush <i>(Rhynchospora alba)</i>	—/—/2B.2	Wetland, riparian	<u>None</u> : No wetland habitat exists in the project area.
White-flowered rein orchid <i>(Piperia candida)</i>	—/—/1B.2	Coniferous forest	<u>None</u> : No coniferous forest habitat exists in the project area.
White-rayed pentachaeta <i>(Pentachaeta bellidiflora)</i>	FE/SE/1B.1	Grassland	<u>Low</u> : Some grassland habitat exists in the project area.
Wolly-headed gilia <i>(Gilia capitata</i> ssp. <i>tomentosa)</i>	—/—/1B.1	Coastal grassland	<u>Very Low</u> : No coastal grassland habitat exists in the project area.
<b>Wolly-headed lessingia</b> <i>(Lessingia hololeuca)</i>	—/—/3.0	Forest, grassland	<b><u>Very Low</u></b> : Some grassland habitat exists in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Wolly meadowfoam ( <i>Limnanthes floccosa</i> ssp. <i>floccosa</i> )	—/—/4.2	Vernal pool	<u>None</u> : No wetland habitat exists in the project area.
Wolly spineflower ( <i>Chorizanthe cuspidata</i> var. <i>villosa</i> )	—/—/1B.2	Coastal sand dunes	<u>None</u> : No sand dune habitat exists in the project area.
MOSESSES, LICHENS & LIVERWORTS			
Angel's hair lichen ( <i>Ramalina thrausta</i> )	—/—/2B.1	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
Coastal triquetrella ( <i>Triquetrella californica</i> )	—/—/1B.2	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
Elongate copper moss ( <i>Mielichhoferia elongata</i> )	—/—/4.3	Rock outcrops	<u>None</u> : No rock outcrop habitat exists in the project area.
Koch's cord moss ( <i>Entosthodon kochii</i> )	—/—/1B.3	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
Methuselah's beard lichen ( <i>Dolichousnea longissima</i> )	—/—/4.2	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
Slender silver moss ( <i>Anomobryum julaceum</i> )	—/—/4.2	Rocky substrates in forests	<u>None</u> : No forest habitat exists in the project area.
Torren's grimmia ( <i>Grimmia torenii</i> )	—/—/1B.3	Forest, woodland	<u>None</u> : No forest habitat exists in the project area.
HABITATS			
Coastal & Valley Freshwater Marsh (CVFM)	—	—	<u>None</u> : No marsh habitat exists in the project area.
<b>Coastal Brackish Marsh (CVFM)</b>	—	—	<b><u>None</u>: No brackish marshes exist in the project area.</b>
<b>Northern Coastal Salt Marsh (NCSM)</b>	—	—	<b><u>None</u>: No salt marsh habitat exists in the project area.</b>
Northern Hardpan Vernal Pool (NHVP)	—	—	<u>None</u> : No hardpan vernal pool habitat exists in the project area.
<b>Northern Vernal Pool (NVP)</b>	—	—	<b><u>None</u>: No vernal pool habitat exists in the project area.</b>
<b>Serpentine Bunchgrass (SBG)</b>	—	—	<b><u>None</u>: No serpentine bunchgrass habitat exists in the project area.</b>
Sycamore Alluvial Woodland (SAW)	—	—	<u>None</u> : No woodland habitat exists in the project area.
Valley Needlegrass Grassland (VNG)	—	—	<u>Low</u> : Some grassland habitat exists in the project area.
Valley Oak Woodland (VOW)	—	—	<u>None</u> : No valley oaks exist in the project area.

Taxon	Status <sup>1</sup> Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Valley Sink Scrub (VSS)	—	—	<u>None</u> : No sink scrub habitat exists in the project area.

<sup>1</sup> Status:

Federal

FE = Federally Endangered Species

FT = Federally Threatened Species

State

SE = State Endangered Species

ST = State Threatened Species

SSC = California Species of Special Concern

CFP = California Fully Protected Species

CNPS (applies to plants only)

List 1B = plants considered rare, threatened, or endangered in California and elsewhere

List 2B = plants rare, threatened or endangered in California, but more common elsewhere

List 3 = plant is likely rare but more information is required

List 4 = plants of limited distribution

## Appendix B: Plant Species Observed Onsite

The following is a list of plant species generated based on knowledge of the species and habitats of Napa County by PEC staff, and from various State and Federal databases, as described in the *Methods* section, above. Special-status species, if any, are denoted with an asterisk (\*).

### Non-Native Plant Species:

bird's foot trefoil (*Lotus corniculatus*)  
 bishop's weed (*Ammi majus*)  
 black mustard (*Brassica nigra*)  
 bluegum (*Eucalyptus globulus*)  
 bristly ox-tongue (*Helminthotheca echioides*)  
 bull thistle (*Cirsium vulgare*)  
 bur clover (*Medicago polymorpha*)  
 cheeseweed (*Malva parviflora*)  
 chicory (*Cichorium intybus*)  
 common dandelion (*Taraxacum officinale*)  
 common groundsel (*Senecio vulgaris*)  
 crane's bill filaree (*Erodium botrys*)  
 curly dock (*Rumex crispus*)  
 false brome (*Brachypodium distachyon*)  
 fennel (*Foeniculum vulgare*)  
 field bindweed (*Convolvulus arvensis*)  
 field marigold (*Calendula arvensis*)  
 foxtail barley (*Hordeum murinum*)  
 Fuller's teasel (*Dipsacus fullonum*)  
 hairgrass (*Aira caryophylla*)  
 hairy vetch (*Vicia villosa*)  
 Harding grass (*Phalaris aquatica*)  
 hedge parsley (*Torilis arvensis*)  
 Himalayan blackberry (*Rubus armeniacus*)  
 Italian ryegrass (*Festuca perennis*)  
 Italian thistle (*Cirsium pycnocephalus*)  
 Jersey cudweed (*Pseudognaphalium luteoalbum*)  
 narrowleaf cottonrose (*Logfia gallica*)  
 New Zealand flax (*Phormium colensoi*)  
 pennyroyal (*Mentha pulegium*)  
 pineapple weed (*Matricaria discoidea*)  
 poison hemlock (*Conium maculatum*)  
 prickly lettuce (*Lactuca serriola*)  
 purple star thistle (*Centaurea calcitrapa*)  
 red brome (*Bromus madritensis*)  
 reed fescue (*Festuca arundinacea*)  
 ribwort (*Plantago lanceolata*)  
 riggut brome (*Bromus diandrus*)  
 rose clover (*Trifolium hirtum*)  
 scarlet pimpernel (*Lysimachia arvensis*)  
 seaside barley (*Hordeum marinum*)

sheep sorrel (*Rumex acetocella*)  
shortpod mustard (*Hirschfeldia incana*)  
shrubby germander (*Teucrium fruticans*)  
smooth cat's ear (*Hypochaeris glabra*)  
soft chess (*Bromus hordeaceus*)  
spring vetch (*Vicia sativa*)  
sweet pea (*Lathyrus latifolius*)  
tall flatsedge (*Cyperus eragrostis*)  
weedy brome (*Bromus caroli-henrici*)  
wild geranium (*Geranium dissectum*)  
wild lettuce (*Lactuca saligna*)  
wild oatgrass (*Avena barbata*)  
wild radish (*Raphanus sativa*)  
woolly grevillea (*Grevillea lanigera*)  
yellow star thistle (*Centaurea solstitialis*)  
Zorro fescue (*Festuca myuros*)

Native Plant Species:

blue-eyed grass (*Sisyrinchium bellum*)  
bog rush (*Juncus patens*)  
California poppy (*Eschscholzia californica*)  
common madia (*Madia elegans*)  
common yarrow (*Achillea millefolium*)  
coyote brush (*Baccharis pilularis*)  
hairy gumweed (*Grindelia hirsutula*)  
ladies' tobacco (*Pseudognaphalium californicum*)  
meadow barley (*Hordeum brachyantherum*)  
mountain dandelion (*Agoseris heterophylla*)  
narrow-leaved miner's lettuce (*Claytonia parviflora*)  
poison oak (*Toxicodendron diversilobum*)  
saltgrass (*Distichlis spicata*)  
slender tarweed (*Madia gracilis*)  
toyon (*Heteromeles arbutifolia*)

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**U.S. Army  
Corps of  
Engineers**  
San Francisco District  
Regulatory Division

Preliminary Jurisdictional Determination  
pursuant to Section 404 Clean Water Act

American Canyon Flatlands  
American Canyon, Napa County  
(38.18459°, Longitude -122.27262°)

Accurate as depicted in legend

Preliminary Jurisdictional Determination verified only within the  
designated Limits of Delineation. All wetlands, as depicted in the  
legend and on the map, are potential waters of the U.S. All boundaries  
shown for these features are approximate.

Corps File SPN-2011-00322 Date: August 30, 2023 Sheet 1 of 1

- Control Point
- Data Point
- Linear Wetland (364 Lin. Ft., 1,820 Sq. Ft., 0.042 Acre)
- Wetland (988 Sq. Ft., 0.023 Acre)
- Limits of Delineation (~10.2 Acres)

Wetland #	Sq. Ft.	Acres	Linear Wetland	Length (Ft.)	Width (Ft.)	Sq. Ft.	Acres
W 1	601	0.014	LW 1	364	5	1,820	0.042
W 2	132	0.003					
W 3	255	0.006					



38.185055 -122.275518

0 25 50 100 150 200 250 Feet Scale: 1 inch = 100 feet

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Sheet 1. Draft Aquatic Resources Delineation Map  
SDG Commerce 220 Project Site  
City of American Canyon, California

Delineation Conducted on: May 2, 2023  
Delineation Conducted by: Sarah Lynch and Zarina Sheikh  
Aerial Photograph Source: ESRI  
Map Preparation Date: May 10, 2023

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