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Appendix C
Technical Biological Report



LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

237 INDUSTRIAL CENTER PROJECT TECHNICAL BIOLOGICAL REPORT SAN JOSE, CALIFORNIA

Prepared by

LIVE OAK ASSOCIATES, INC.

Rick Hopkins, Ph.D., Principal/Senior Wildlife Ecologist
Katrina Krakow, M.S., Project Manager/Staff Ecologist
Nathan Hale, M.S., Project Manager/Staff Ecologist
Pam Peterson, Senior Project Manager/Plant & Wetland Ecologist

Prepared for

David J. Powers & Associates
1871 The Alameda, Suite 200
San Jose, California 95126

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PN 2041-01

Oakhurst: P.O. Box 2697 • 39930 Sierra Way, Suite B • Oakhurst, CA 93644 • Phone: (559) 642-4880 • (559) 642-4883
San Jose: 6840 Via Del Oro, Suite 220 • San Jose, CA 95119 • Phone: (408) 224-8300 • Fax: (408) 224-1411
Truckee: 11050 Pioneer Trail, Suite 203 • Truckee, CA 96161 • Phone: (530) 214-8947

www.loainc.com

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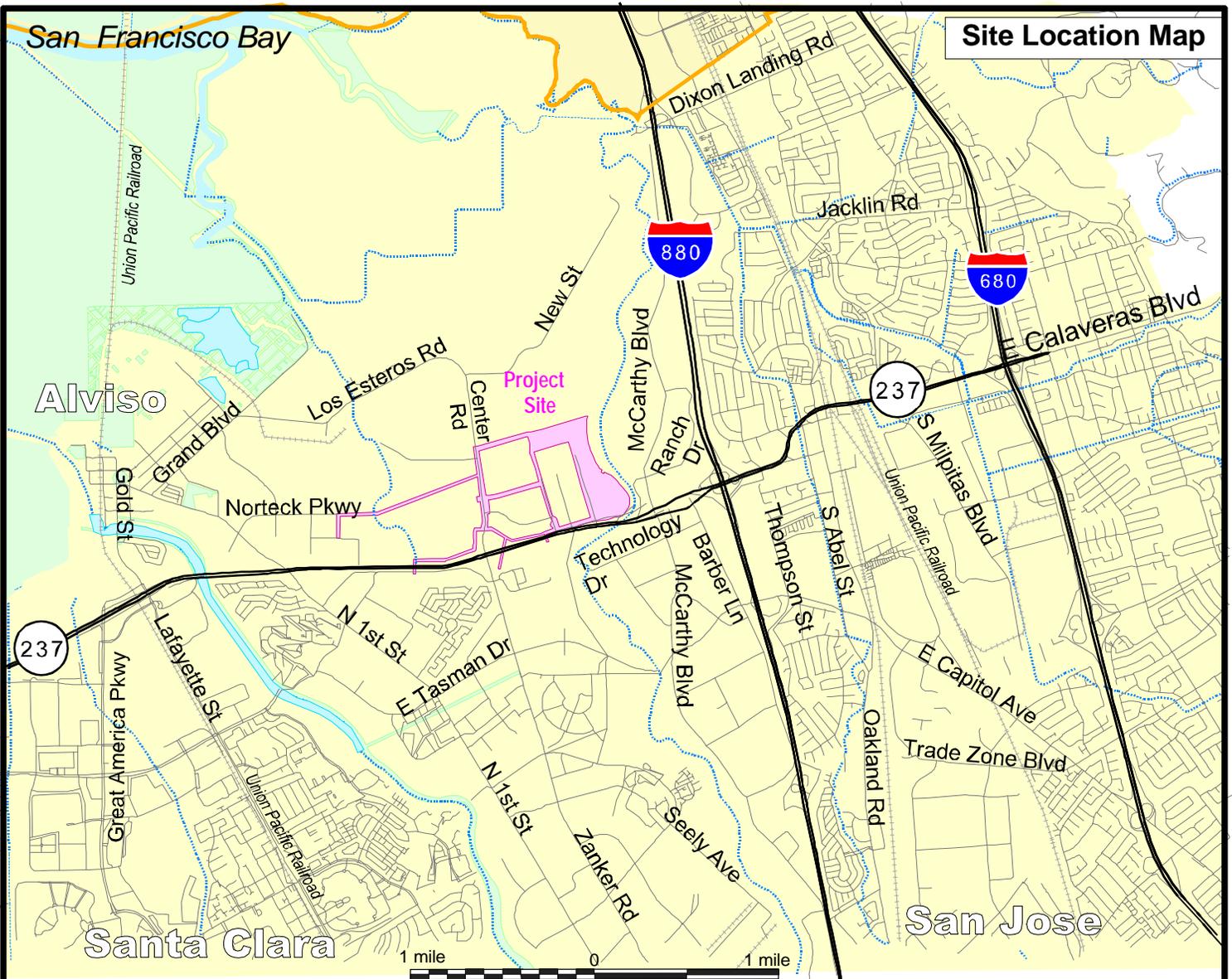
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1 INTRODUCTION

This site was evaluated by Live Oak Associates, Inc. (LOA) to ascertain whether or not build-out of the proposed project would have a significant impact (as defined by CEQA) on the biological resources of the site and region. This report describes the biotic resources of the approximately 66.5-acre (plus approximately 48.11 acres of off-site utility alignments) development of the Cilker Property in San Jose and evaluates potential impacts of the proposed land use changes upon these resources, including the project's conformance to the City of San Jose's *Riparian Corridor Policy* (1999), *Envision San Jose 2040 General Plan* (City of San Jose 2011) and *Santa Clara Valley Habitat Conservation Plan* (SCVHP; ICF International 2012). The site is bounded by Coyote Creek to the east, Highway 237 to the south, water treatment land to the north, and property owned by the City of San José to the west. The site can be found in the Milpitas U.S.G.S. 7.5' quadrangle in Sections 10, 11, and 12 of Township 6 South and Range 1 West (Figure 1).

The site is currently comprised of annual grassland and a residence with outbuildings as well as associated barn and shop, and is next to a Santa Clara Valley Water District (SCVWD) property as well as Coyote Creek to the east.

In general, the development of parcels can damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, site development may be regulated by state or federal agencies, subject to provisions of the California Environmental Quality Act (CEQA), and/or covered by policies and ordinances of the City of San Jose. Therefore, this report addresses issues related to: 1) sensitive biotic resources occurring in the study area; 2) the federal, state, and local laws regulating such resources, 3) evaluate whether or not the project results in any significant impacts to these resources; and if so, 4) includes mitigation measures to reduce these impacts to less-than-significant (as defined by CEQA).



Live Oak Associates, Inc.

237 Industrial Center
Site Vicinity Map

Date	Project #	Figure #
3/07/2017	2041-01	1

The analysis of impacts, as discussed in Section 3.0 of this report, was based on the known and potential biotic resources of the study area discussed in Section 2.0. Sources of information used in the preparation of this analysis included: 1) the *California Natural Diversity Data Base* (RareFind5, 2016); 2) the *California Rare Plant Rank* (CNPS 2016); 3) manuals and references related to plants and animals of the Santa Clara Valley region; 4) the City of San Jose policies and ordinances; and 5) the Santa Clara Valley Habitat Conservation Plan (ICF International 2012).

Field surveys of the study area were conducted on June 20, 2016 by LOA ecologists Katrina Krakow and Nathan Hale, on October 18, 2016 by Ms. Krakow, Sarah Piramoon, and Pam Peterson. Mr. Hale conducted a brief site visit to map habitat features associated with Coyote Creek on October 26, 2016, and Ms. Krakow conducted a site visit to assess a new utility alignment on March 36, 2017. A protocol-level burrowing owl survey was conducted by LOA on the dates listed above (June 20 and October 18, 2016).

1.1 PROJECT DESCRIPTION

The Cilker Project is bounded by Coyote Creek to the east, Highway 237 to the south, and water treatment land to the north, and City of San José property to the west. The project site is primarily fallow farmland with two single-family homes and some accessory structures located near the southern portion of the site. The site is currently supported by well water and a septic tank system. The project includes two development options. Option 1 proposes approximately 1.2 million square feet of light industrial development and Option 2 proposes a 436,880 square foot data center, a PG&E substation to support the data center, and approximately 728,000 square feet of light industrial development uses.

Option 1 would include seven two-story light industrial buildings with a maximum height of 45 feet and a floor area ratio (FAR) of 0.43. Approximately 2,621 parking spaces would be provided in surface lots surrounding the buildings. Types of uses could include warehousing, wholesaling, light industrial manufacturing, and associated service establishments.

Option 2 would include four main buildings for data center uses on approximately 26.5 acres of the 66.5-acre site. The tallest structure would not exceed a maximum height of 100 feet (Building B). The remaining three buildings would be a maximum of 55 feet tall and contain data center equipment, computers, and servers. The project includes cooling towers (700 kW/cell with 20

cells/10 packs) and 24, 2,000 kW emergency generators (Caterpillar 3516C). Approximately 151 parking spaces would be provided in two surface lots located adjacent to the main buildings. A new approximately 103,300 square foot electrical substation with a maximum height of 45 feet would be constructed along the northern boundary of the project site, west of the data center site.

Option 2 also includes the construction of up to 728,000 square feet of light industrial uses similar to what is proposed in Option 1 over the remaining approximately 40 acres of the project site. Heights would not exceed 45 feet and an FAR of 0.43 is expected. Parking per City code requirements would be provided per final designs for this portion of the site.

Access to the site would be provided by two new public streets from Zanker Road. Existing access from Ranch Drive near the southeast corner of the site would be maintained over Coyote Creek for trucks accessing the Los Esteros Critical Energy Facility (LECEF) site west of the project site, emergency vehicle access, and bicycles and pedestrians on the Coyote Creek Trail. Under Option 1, both streets would be public streets utilized to access the light industrial uses from Zanker Road. Under Option 2, the data center portion of the project site would be accessed through a secured entry adjacent to the substation on the northern side of the site.

There are very few existing utilities onsite; therefore, water, sanitary sewer, stormwater, electrical, natural gas, and telecom facilities would be extended onto the site. A new stormwater outfall to Coyote Creek would be constructed near the existing outfall near the center portion of the site, and is not included as a part of this document, as it is assessed in a separate document prepared by H.T. Harvey and Associates.

The project site is designated *LI – Light Industrial* under the City’s General Plan and zoned *A(PD) – Agricultural Planned Development*. Development of the project would be consistent with the City’s General Plan land use designation and the Alviso Master Plan. It is anticipated that the project would be rezoned to the conventional zoning designation of *Light Industrial*. Data Centers require a Special Use Permit (SUP) within this zoning district.

The development of the Cilker Project site will observe a setback of at least 100 feet from the riparian corridor of Coyote Creek which is adjacent to the project, except for where the outfall goes into Coyote Creek.

2 EXISTING CONDITIONS

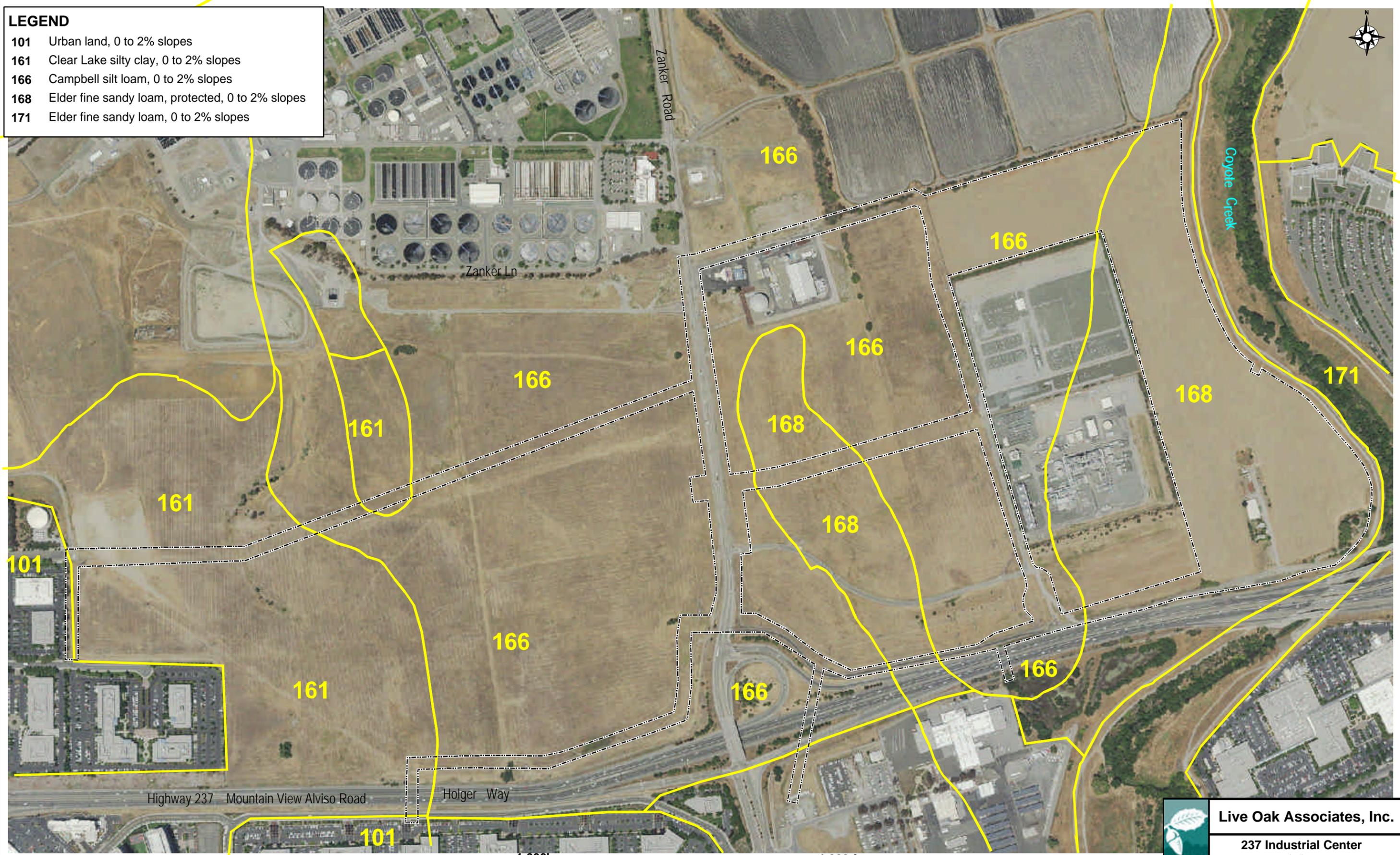
The approximately 66.5-acre project site is located just north of Ranch Road and Highway 237 in Alviso, San Jose, California. The site is bounded to the south by Ranch Road and Highway 237, to the west by PG&E and the LECEF, to the north by open annual grassland, and to the east by the levee and riparian habitat of the Coyote Creek channel. The site currently consists of mostly undeveloped habitat, however a few residences and agricultural-structures occur onsite and roadways occur along the utility alignments. The site has relatively flat topography between approximately 6 feet (2 m) and approximately 14 feet (3 m) National Geodetic Vertical Datum (NGVD).

Five soil types were identified per the Web Soil Survey (2016; Figure 2). Embarcadero silty clay loam, drained, 0 to 2 percent slopes, Clear Lake silty clay, 0 to 2 percent slopes, drained, Campbell silt loam, 0 to 2 percent slopes, protected, Elder fine sandy loam, protected, 0 to 2 percent slopes, Elder fine sandy loam, 0 to 2 percent slopes, rarely flooded. The Embarcadero Complex has poorly-drained soils and is alkaline. The Clear Lake Complex has poorly-drained soils and is alkaline. The Campbell Complex has moderately well-drained soils and is alkaline. The Elder Complex has well-drained soils and is alkaline. The Embarcadero, Clear Lake, and Campbell Complexes are considered to be hydric.

Annual precipitation in the general vicinity of the study area is about 15-20 inches, almost 85% of which falls between the months of October and March. Virtually all precipitation falls in the form of rain.

LEGEND

- 101 Urban land, 0 to 2% slopes
- 161 Clear Lake silty clay, 0 to 2% slopes
- 166 Campbell silt loam, 0 to 2% slopes
- 168 Elder fine sandy loam, protected, 0 to 2% slopes
- 171 Elder fine sandy loam, 0 to 2% slopes



Source:
U.S.D.A. Soil Conservation Service

	Live Oak Associates, Inc.	
	237 Industrial Center Soils	
Date	Project #	Figure #
3/07/2017	2041-01	2

2.2 BIOTIC HABITATS

Four general biotic habitat distinctions – agricultural fields (short-term fallowed), annual grassland, and developed – describe the habitat areas identified within the project area (Figure 3). The onsite portion is comprised of agricultural fields with two developed residential areas and a small wetland. The off-site utility alignment is comprised of annual grassland with some developed roads. All habitat areas of the project area are described below.

2.2.1 Agricultural fields

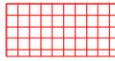
The core project area, the land located to the west of Coyote Creek and to the east and north of the LECEF and a PG&E station, is predominantly comprised of managed agricultural fields that are regularly disked and are currently fallowed (approximately 60 acres). These areas of the project site appear to have been annually disked and/or farmed for more than 20 years according to historical photography available from Google Earth (accessed June 20, 2016). At the time of LOA's surveys, these fields were mostly comprised of barren exposed soils and they supported scattered ruderal annual grassland species. Vegetation of the agricultural fields were dominated by typical grassland species such as wild oat (*Avena* spp.) and Italian rye grass (*Festuca perennis*) and forb species included cheeseweed mallow (*Malva parviflora*), black mustard (*Brassica nigra*), and summer mustard (*Hirschfeldia incana*). Other species observed in this habitat of the project area included Harding grass (*Phalaris aquatica*), poison hemlock (*Conium maculatum*), field bindweed (*Convolvulus arvensis*), bristly ox tongue (*Helminthotheca echioides*), prickly lettuce (*Lactuca serriola*), wild radish (*Raphanus sativus*), and milk thistle (*Silybum marianum*). Along the northern margin of the agricultural fields of the site, which was less managed than the majority of the field, a few woody plants occurred including the coyote brush (*Baccharis pilularis*), box elder (*Acer negundo*), Northern California black walnut (*Juglans hindsii*), and blue elderberry (*Sambucus nigra* ssp. *caerulea*). A linear low depression exists along the western edge of the site, however, with the exception of a couple individuals of wetland species like curly dock, this feature is dominated by upland species like cheeseweed (*Malva neglecta*) and wild radish (*Raphanus sativa*). Grasses dominating this feature appear to be undifferentiated from the adjacent field to the east and it has no real defined bed/bank.

LEGEND

 Project Boundary

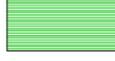
Biotic Habitats

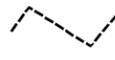
 Agricultural Fields (Short-term Fallowed)

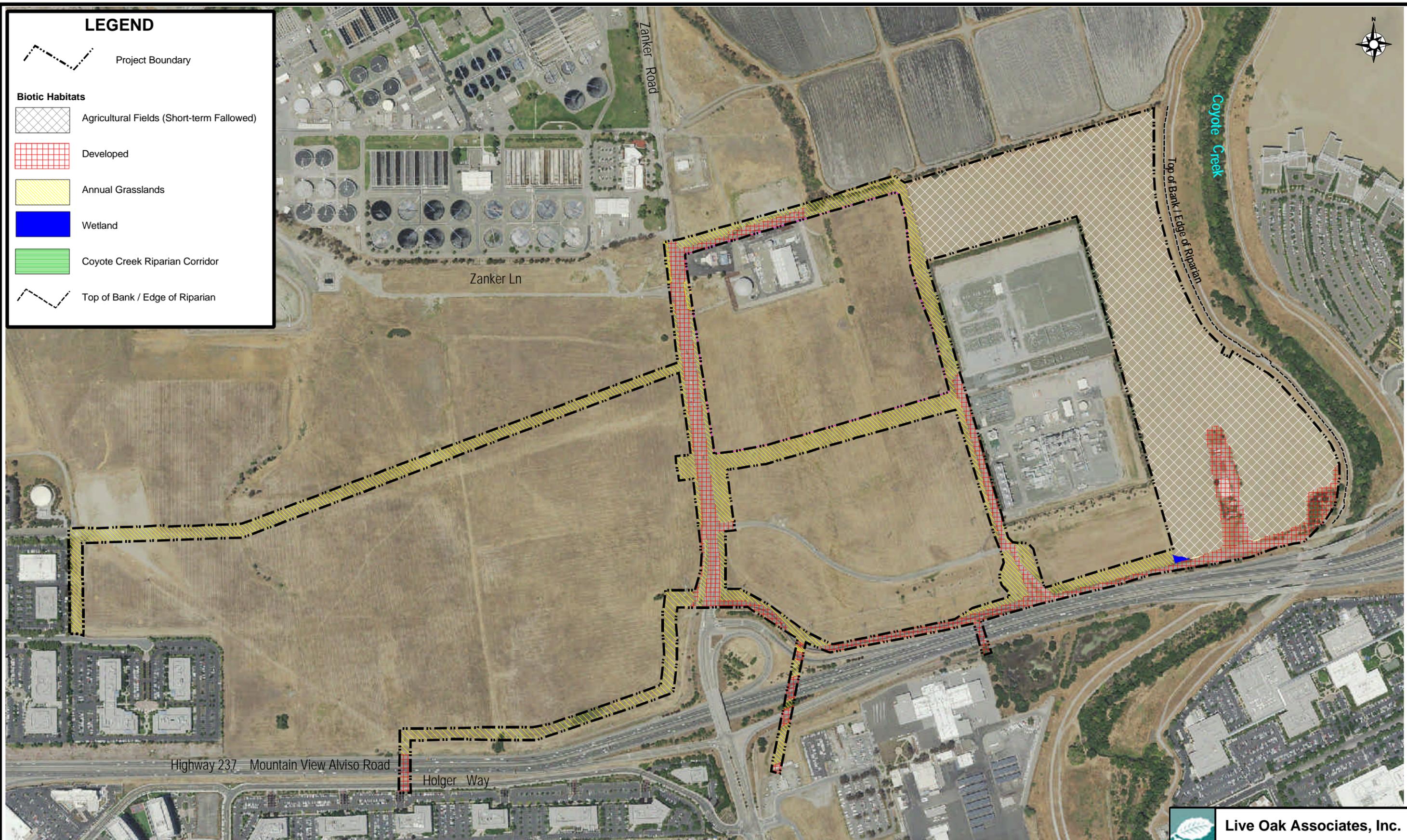
 Developed

 Annual Grasslands

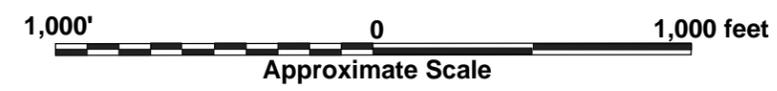
 Wetland

 Coyote Creek Riparian Corridor

 Top of Bank / Edge of Riparian



	Live Oak Associates, Inc.		
	237 Industrial Center Biotic Habitats		
Date	Project #	Figure #	
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Animals observed during the site visits include the double-crested cormorant (*Phalacrocorax auritus*), gull, Canada goose (*Branta canadensis*), mallard duck (*Anas platyrhynchos*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), barn owl (*Tyto alba*), killdeer (*Charadrius vociferus*), great egret (*Ardea alba*), American crow (*Corvus brachyrhynchos*), western scrub jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), rock dove (*Columba livia*), California towhee (*Melospiza crissalis*), yellow-rumped warbler (*Setophaga coronata*), western meadowlark (*Sturnella neglecta*), song sparrow (*Melospiza melodia*), house finch (*Haemorrhous mexicanus*), dead mouse, Botta's pocket gopher (*Thomomys bottae*) sign, California ground squirrel (*Otospermophilus beecheyi*), and black-tailed jackrabbit (*Lepus californicus*).

2.2.2 Annual Grassland

Annual grassland areas were observed along much of the off-site infrastructure alignment areas of the proposed project (i.e., roadways and potable water, recycled water, fiber optic, sewer, and gas lines; Figure 3). Annual grasslands range from managed fields to a more mesic and intact grasslands and total approximately 32.61 acres. A filled creek exits running north-south where the utility alignment is planned; this no longer functions as a creek and does not support a bed or bank. Man-made raised earthen berms exist within the annual grassland, which provide habitat for California ground squirrels, which have colonized many of the berms. One long skinny berm exits in the field east of Zanker Road and north of the bike path. This berm had several black corrugated pipes installed within the berm. These may have been installed to promote habitat suitability of the property for burrowing owls. Artificial burrows installed within mounds exist within the westernmost infrastructure alignment and adjacent to the other infrastructure alignments which have been installed to promote burrowing owl use. Burrowing owls were not observed during the site surveys, although the westernmost alignment area was flooded with mounds above the water level at the time of the March 3, 2017 site visit. This area is known to flood, which is one of the reasons for the man-made mounds to enhance burrowing owl habitat, however, wetlands were not observed.

Plants observed in this habitat and along the edges of this habitat includes ruderal plants generally found in annual grasslands such as wild oats (*Avena sp.*), black mustard (*Brassica nigra*), ripgut (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Italian thistle (*Carduus pycnocephalus*), barnyard barley (*Hordeum murinum ssp. leporinum*), prickly lettuce (*Lactuca serriola*), common

mallow (*Malva neglecta*), wild radish (*Raphanus sativus*), Russian-thistle (*Salsola tragus*), prickly sow-thistle (*Sonchus asper*), and common chickweed (*Stellaria media*). Borders of this habitat included landscaped trees and other landscaping.

Animals observed during the site visit in addition to species observed in the agricultural field include the white pelican (*Pelecanus sp.*), turkey vulture (*Cathartes aura*), American kestrel (*Falco sparverius*), European starling (*Sturnus vulgaris*), vole (*Microtus californicus*), and coyote scat (*Canis latrans*).

2.2.3 Developed

Several portions of the site are comprised of developed land uses. These include a landscaped margin along the western side of the Cilker property agricultural fields which is shared with the PG&E and LECEF properties (the margin to the west of the main property); a residential unit in the southeast corner of the site; two additional residential units, a warehouse storage building – likely associated with the agricultural uses of the agriculture fields – a tin and metal building; and a large gravel driveway. Approximately 4 acres of developed area exists within the main portion of the site, and approximately 15 acres of roadway and levee exist within the off-site utility alignment. Both roads are graded gravel roadways. No plants were observed within these roads. Within the infrastructure alignment areas of the site, developed land use areas include public and private roadways and a bike path that parallels Highway 237.

The landscaped margin of the site, which lies along the border of the site, supports pepper trees (*Schinus sp.*), sycamore, privet (*Ligustrum sp.*), and crimson bottlebrush (*Callistemon citrinus*) to name a few of the plantings. Some of these species overhang the property and some are likely off-site on the utility properties.

The residential properties of the site support a mix of horticultural plant species and weedy species. Plants observed in the developed areas include landscape plantings of jacaranda (*Jacaranda mimosifolia*), oleander (*Nerium oleander*), privet, pepper trees, and a row of various managed fruit trees and olives (*Olea europaea*). Weedy species around the residential properties include many of the same species observed in the agricultural fields of the site as well as spurge (*Euphorbia sp.*), stinkwort (*Dittrichia graveolens*), willow herb (*Epilobium brachycarpum*), serrated lettuce, mallow, and Russian thistle (*Salsola tragus*), to name a few of the observed species.

Animals in the adjacent habitats would be expected to occur in this habitat.

2.2.4 Wetland

A small wetland (approximately 0.066 acres) exists in the shape of a narrow triangular area near Ranch Drive in the southwestern corner of the main site. It is dominated by a dense stand of California blackberry and there is a pump station next to it.

Animals in the adjacent habitats would be expected to occur in this habitat.

2.3 MOVEMENT CORRIDORS

Ecologists and conservation biologists have expended a great deal of energy since the early 1980's advocating the protection and restoration of landscape linkages among suitable habitat patches. Movement corridors or landscape linkages are usually linear habitats that connect two or more habitat patches (Harris and Gallager 1989), providing assumed benefits to the species by reducing inbreeding depression, and increasing the potential for recolonization of habitat patches. Some researchers have even demonstrated that poor quality corridors can still provide some benefit to the species that use them (Beier 1996).

Beier and Noss (1998) evaluated the claims of the efficacy of wildlife corridors of 32 scientific papers. In general, these authors believed that the utility of corridors was demonstrated in fewer than half of the reviewed papers, and they believed that study design played a role in whether or not given corridors were successful. Examples of well-designed studies supported the value of corridors. They believed, however, that connectivity questions make sense only in terms "of a particular focal species and landscape." For example, volant (flying) species are less affected by barriers than small, slow moving species such as frogs or snakes (Beier and Noss 1998). In addition, large mammals such as carnivores that can move long distances in a single night (e.g., cougars) are more capable of making use of poor quality or inhospitable terrain than species that move more slowly and can easily fall prey to various predators or that are less able to avoid traffic or other anthropogenic effects (Beier 1996). Therefore, it is reasonable to conclude that landscape linkages, even poor ones, can be and are useful, especially for terrestrial species.

Therefore, while the importance of landscape linkages is well demonstrated in the scientific literature, the cautionary note of Beier and Noss (1998) that consideration of context and ecological scale are also of critical importance in evaluating linkages.

Habitat corridors are vital to terrestrial animals for connectivity between core habitat areas (i.e., larger intact habitat areas where species make their living). Connections between two or more core habitat areas help ensure that genetic diversity is maintained, thereby diminishing the probability of inbreeding depression and geographic extinctions. This is especially true in fragmented landscapes and the surrounding urbanized areas as found in the rural/urban matrix along the edges of the City of San Jose.

The quality of habitat within the corridors is important: “better” habitat consists of an area with a minimum of human interference (e.g., roads, homes, etc.) and is more desirable to more species than areas with sparse vegetation and high-density roads. Movement corridors in California are typically associated with valleys, rivers and creeks supporting riparian vegetation, and ridgelines. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages, or movement corridors, for animals to be able to access locations containing different biotic resources that are essential to maintaining their life cycles.

Healthy riparian areas (supporting structural diversity, i.e., understory species to saplings to mature riparian trees) have a high biological value as they not only support a rich and diverse wildlife community but have also been shown to facilitate regional wildlife movement. Riparian areas can vary from tributaries winding through scrubland to densely vegetated riparian forests.

A riparian zone can be defined as an area that has a source of fresh water (e.g., rill, stream, river), a defined bank, and upland areas consisting of moist soils (e.g., wetter than would be expected simply due to seasonal precipitation). These areas support a characteristic suite of vegetative species, many of which are woody, that are adapted to moister soils. Such vegetation in hills surrounding San Jose include California buckeye (*Aesculus californica*), dogwood (*Cornus* sp.), California hazelnut (*Corylus cornuta* var. *californica*), elderberry (*Sambucus* sp.), Oregon ash (*Fraxinus latifolia*), walnut (*Juglans* sp.), California laurel (*Umbellularia californica*), toyon (*Heteromeles arbutifolia*), oaks (*Quercus* sp.), and willow (*Salix* sp.).

Beier and Loe (1992) noted five functions of corridors (rather than physical traits) that are relevant when conducting an analysis regarding the value of linkages. The following five functions should be used to evaluate the suitability of a given tract of land for use as a habitat corridor:

1. Wide ranging mammals can migrate and find mates;
2. Plants can propagate within the corridor and beyond;
3. Genetic integrity can be maintained;
4. Animals can use the corridor in response to environmental changes or a catastrophic event;
5. Individuals can recolonize areas where local extinctions have occurred.

A corridor is “wide enough” when it meets these functions for the suite of animals in the area. It is important to note that landscape linkages are used differently by different species. For instance, medium to large mammals (or some bird species) may traverse a corridor in a matter of minutes or hours, while smaller mammals or other species may take a longer period of time to move through the same corridor (e.g., measured in days, weeks and even years). For example, an individual cougar may traverse the entire length of a long narrow corridor in an hour while travel of smaller species (such as rodent or rabbit species) may best be measured as gene flow within regional populations. These examples demonstrate that landscape linkages are not simply highways that animals use to move back and forth. While linkages may serve this purpose, they also allow for slower or more infrequent movement. Width and length must be considered in evaluating the value of a landscape linkage. A long narrow corridor would most likely only be useful to wide ranging animals such as cougars and coyotes when moving between core habitat areas.

To the extent practicable, conservation of linkages should address the needs of “passage species” (those species that typically use a corridor for the express purpose of moving from one intact area to another) *and* “corridor dwellers” (slow moving species such as plants and some amphibians and reptiles that require days or generations to move through the corridor).

Although the project site and Coyote Creek are not within a defined linkage in the Santa Clara Valley Habitat Conservation Plan, Coyote Creek is defined as an important regional habitat linkage. Coyote Creek is expected to act as a movement corridor for many common local species.

2.4 SPECIAL STATUS PLANTS AND ANIMALS

Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered “rare” and are vulnerable to extirpation as

the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2, state and federal laws have provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by the CDFW. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2001). Collectively, these plants and animals are referred to as "special status species."

A number of special status plants and animals occur in the vicinity of the study area. These species, and their potential to occur in the study area, are listed in Table 1. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1990), *California Natural Diversity Data Base* (CDFW 2016), *Endangered and Threatened Wildlife and Plants* (USFWS 2016), and the *Annual Report on the Status of California State Listed Threatened and Endangered Animals and Plants* (CDFW 2016).

A search of published accounts for all of the relevant special status plant and animal species was conducted for the Milpitas USGS 7.5 minute quadrangle in which the project site occurs, and for the eight surrounding quadrangles (Newark, Niles, La Costa Valley, Mountain View, Calaveras Reservoir, Cupertino, San Jose West, and San Jose East) using the California Natural Diversity Data Base Rarefind5 2016. All species listed as occurring in these quadrangles on CNPS Lists 1A, 1B, 2, or 4 were also reviewed (See Figure 4).

Serpentine soils are absent from the site; as such, those species that are uniquely adapted to serpentine conditions are considered absent from the site. These include the chaparral harebell (*Campanula exigua*), Mt. Hamilton fountain thistle (*Cirsium fontinale* var. *campylon*), San Francisco collinsia (*Collinsia multicolor*), Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*), fragrant fritillary (*Fritillaria liliacea*), Loma Prieta hoita (*Hoita strobilina*), smooth lessingia (*Lessingia micradenia* var. *glabrata*), woodland woollythreads (*Monolopia gracilens*), Metcalf Canyon jewel-flower (*Streptanthus albidus* ssp. *albidus*), and most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoenus*). Other plant species occur in habitats not present in the

study area (e.g., chaparral, broadleafed forest, coastal prairie, coastal scrub, etc.) or at elevations significantly above onsite elevations (i.e., above approximately 6 feet or 2 meters in elevation and below approximately 14 feet or 3 meters) and, therefore, are also considered absent from the site. These species include the Santa Clara red ribbons (*Clarkia concinna ssp. automixa*), arcuate bush-mallow (*Malacothamnus arcuatus*), Hall's bush-mallow (*Malacothamnus hallii*), and hairless popcornflower (*Plagiobothrys glaber*).

LEGEND

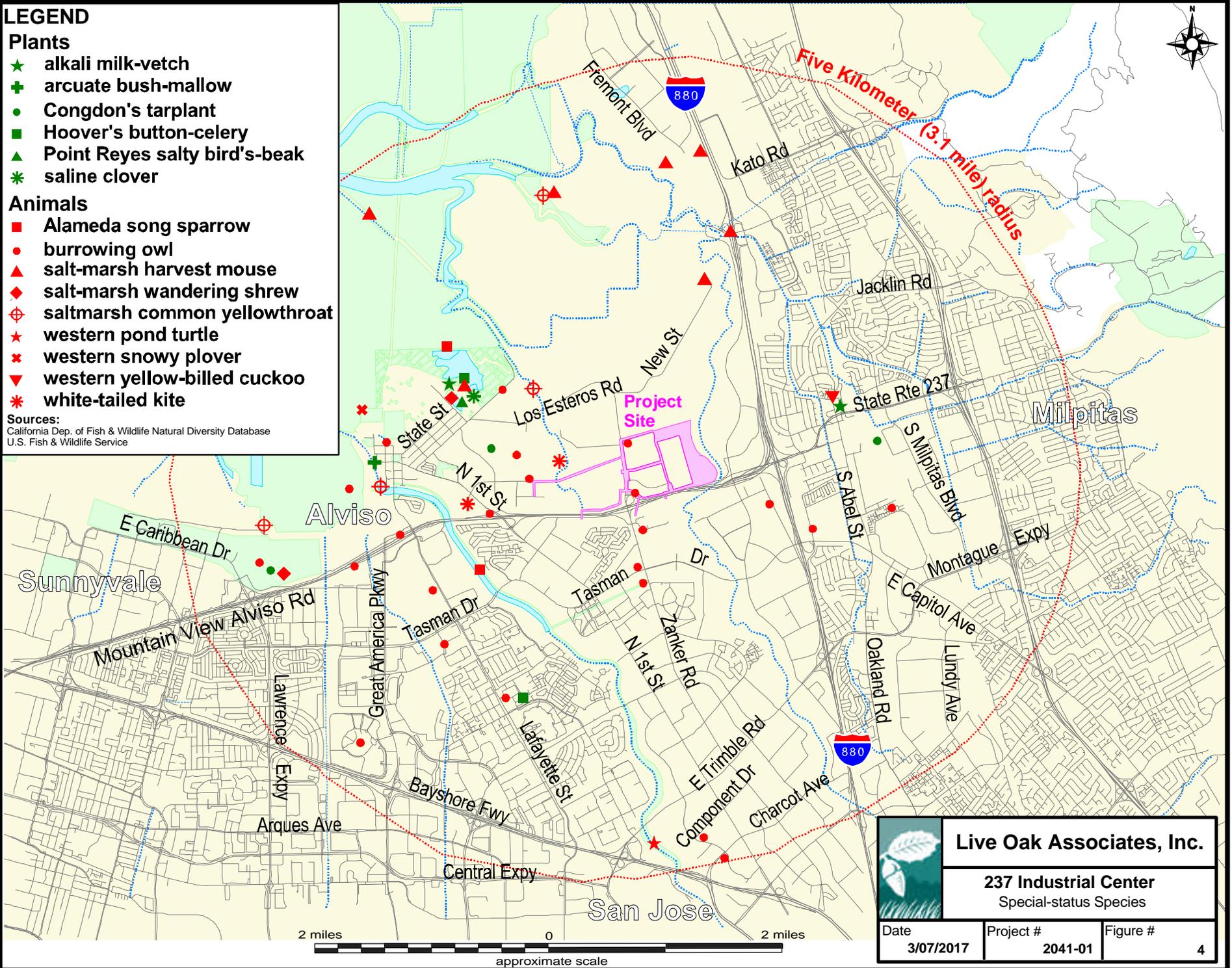
Plants

- ★ alkali milk-vetch
- + arcuate bush-mallow
- Congdon's tarplant
- Hoover's button-celery
- ▲ Point Reyes salty bird's-beak
- * saline clover

Animals

- Alameda song sparrow
- burrowing owl
- ▲ salt-marsh harvest mouse
- ◆ salt-marsh wandering shrew
- ⊕ saltmarsh common yellowthroat
- ★ western pond turtle
- ✕ western snowy plover
- ▼ western yellow-billed cuckoo
- * white-tailed kite

Sources:
 California Dep. of Fish & Wildlife Natural Diversity Database
 U.S. Fish & Wildlife Service



	Live Oak Associates, Inc.		
	237 Industrial Center Special-status Species		
Date	Project #	Figure #	
3/07/2017	2041-01	4	

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFW 2016 and CNPS 2016)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Robust Spineflower (<i>Chorizanthe robusta</i> var. <i>robusta</i>)	FE, CNPS 1B	<u>Habitat</u> : Occurs on sandy or gravelly soils in openings of cismontane woodlands, coastal dunes and coastal scrub. <u>Elevation</u> : 3-300 meters. <u>Blooms</u> : April – September.	Absent. No suitable habitat occurs on the site for this species.
Contra Costa goldfields (<i>Lasthenia conjugens</i>)	FE, CRPR 1B	<u>Habitat</u> : Occurs in vernal pools and mesic areas of valley and foothill grasslands, typically alkaline. <u>Elevation</u> : 0-470 meters. <u>Blooms</u> : Annual herb; March-June.	Absent. No suitable habitat occurs on the site for this species.
California Seablite (<i>Suaeda californica</i>)	FE, CNPS 1B	<u>Habitat</u> : Occurs in coastal salt marshes and swamps. <u>Elevation</u> : 0-15 meters. <u>Blooms</u> : July-October	Absent. No suitable habitat is present on the site for this species.

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Alkali Milk-vetch (<i>Astragalus tener</i> var. <i>tener</i>)	CNPS 1B	<u>Habitat</u> : Occurs in alkaline soils in valley and foothill grassland and in vernal pools. <u>Elevation</u> : 1-60 meters. <u>Blooms</u> : March-June.	Absent. Suitable habitat is absent on the site due to on-going human disturbance.
Brittlescale (<i>Atriplex depressa</i>)	CNPS 1B.2	<u>Habitat</u> : Occurs on alkaline clay soils in chenopod scrub, meadows and seeps, playas, valley and foothill grasslands, and vernal pools. <u>Elevation</u> : 1-320 meters. <u>Blooms</u> : Annual herb; April-October.	Absent. Suitable habitat is absent on the site due to on-going human disturbance.
Lesser saltscale (<i>Atriplex minuscula</i>)	CNPS 1B.1	<u>Habitat</u> : Occurs in alkaline and sandy soils in chenopod scrub, playas, and valley and foothill grasslands. <u>Elevation</u> : 15-200 meters <u>Blooms</u> : Annual herb; May-October.	Absent. Suitable habitat is absent on the site due to on-going human disturbance.
Big-scale balsamroot (<i>Balsamorhiza macrolepis</i>)	CRPR 1B	<u>Habitat</u> : Chaparral, cismontane woodland, and valley and foothill grasslands, often on serpentine soils. <u>Elevation</u> : 90-1555 meters. <u>Blooms</u> : March–June.	Absent. Suitable habitat is absent on the site due to on-going human disturbance. Additionally, this perennial herb would have been observable during site surveys if present and it was not observed.
Round-leaved filaree (<i>California macrophylla</i>)	CRPR 1B	<u>Habitat</u> : Occurs on clay soils in cismontane woodlands and valley and foothill grasslands. <u>Elevation</u> : 15-1200 meters. <u>Blooms</u> : March–May.	Absent. Suitable habitat is absent on the site due to on-going human disturbance.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY*Other special status plants listed by CNPS – cont'd*

Species	Status	Habitat	*Occurrence in the Study Area
Congdon's tarplant (<i>Centromadia parryi</i> ssp. <i>congdonii</i>)	CRPR 1B	<u>Habitat</u> : Occurs on valley and foothill grasslands on alkaline soils. Species is highly tolerant of disturbed habitats. <u>Elevation</u> : 0-230 meters. <u>Blooms</u> : Annual herb; May-November.	Absent. Although potential habitat is present within ruderal grasslands of the site, site surveys were conducted within the blooming season for this species and it was not observed. The closest known occurrence is approximately 1.5 miles southwest of the site (Occurrence #17; CNDDDB 2016).
Point Reyes bird's-beak (<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>)	CNPS 1B	<u>Habitats</u> : Found in coastal salt areas such as marshes and swamps. <u>Elevation</u> : 0-1900 meters. <u>Blooms</u> : June-October.	Absent. No suitable habitat occurs on the site for this species.
Hospital Canyon larkspur (<i>Delphinium californicum</i> ssp. <i>interius</i>)	CNPS 1B	<u>Habitat</u> : Occurs in chaparral openings and mesic cismontane woodlands. <u>Elevation</u> : 230-1095 meters. <u>Blooms</u> : April-June.	Absent. No suitable habitat occurs on the site for this species.
Western leatherwood (<i>Dirca occidentalis</i>)	CNPS 1B	<u>Habitats</u> : Found in mesic habitats such as broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland. <u>Elevation</u> : 30-395 meters. <u>Blooms</u> : January-April.	Absent. No suitable habitat occurs on the site for this species.
Prostrate Vernal Pool Navarretia (<i>Navarretia prostrate</i>)	CNPS 1B	<u>Habitat</u> : Occurs in coastal scrub, meadows and seeps, valley and foothill grasslands on alkaline soils, and vernal pools on mesic soils. <u>Elevation</u> : 15-700 meters. <u>Blooms</u> : April-July.	Absent. No suitable habitat occurs on the site for this species.
California Alkali Grass (<i>Puccinellia simplex</i>)	CNPS 1B	<u>Habitat</u> : Occurs in alkaline, vernal mesic, sinks, flats, and lake margins within chenopod scrub, meadows and seeps, Valley and foothill grasslands, and vernal pools. <u>Elevation</u> : 2-930 meters. <u>Blooms</u> : March-May.	Absent. No suitable habitat occurs on the site for this species.
Hoover's button-celery (<i>Eryngium aristulatum</i> var. <i>hooveri</i>)	CRPR 1B	<u>Habitat</u> : Occurs in vernal pools. <u>Elevation</u> : 3-45 meters. <u>Blooms</u> : July-August.	Absent. No suitable habitat occurs on the site for this species.
San Joaquin Spearscale (<i>Extriplex joaquiniana</i>)	CNPS 1B	<u>Habitat</u> : Occurs in chenopod scrub, meadows and seeps, playas, and valley and foothill grasslands on alkaline soils. <u>Elevation</u> : 1-835 meters. <u>Blooms</u> : April-October.	Absent. No suitable habitat occurs on the site for this species.
Chaparral ragwort (<i>Senecio aphanactis</i>)	CNPS 2.2	<u>Habitat</u> : Chaparral, cismontane woodland, and coastal scrub, sometimes alkaline soils. <u>Elevation</u> : 15-800 meters. <u>Blooms</u> : January-April.	Absent. No suitable habitat occurs on the site for this species.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Other special status plants listed by CNPS – cont’d

Species	Status	Habitat	*Occurrence in the Study Area
Maple-leaved checkerbloom (<i>Sidalcea malachroides</i>)	CNPS 1B	<u>Habitat</u> : Occurs in broadleaved upland forests, coastal prairie, coastal scrub, North Coast coniferous forests, and riparian woodland, often in disturbed areas. <u>Elevation</u> : 0-730 meters. <u>Blooms</u> : March-August.	Absent. No suitable habitat occurs on the site for this species.
Slender-leaved Pondweed (<i>Stuckenia filiformis</i>)	CNPS 2	Shallow freshwater marshes and swamps between 300 and 2150 meters.	Absent. No suitable habitat occurs on the site for this species.
Saline clover (<i>Trifolium hydrophilum</i>)	CRPR 1B	<u>Habitat</u> : Marshes and swamps, valley and foothill grasslands on mesic or alkaline soils, and vernal pools. <u>Elevation</u> : 0-300 meters. <u>Blooms</u> : April–June.	Absent. No suitable habitat occurs on the site for this species.

ANIMALS (adapted from CDFW 2016 and USFWS 2016)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	FE	Occurs in vernal pools of California. Vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.	Absent. Suitable habitat for vernal pool tadpole shrimp in the form of vernal pools is absent from the study area.
Steelhead - Central California Coast DPS (<i>Oncorhynchus mykiss irideus</i>)	FT, CSC	Spawn in freshwater rivers or streams in the spring and spend the remainder of their life in the ocean.	Present. Rivers and creeks are absent from the main part of the site.
Longfin smelt (<i>Spirinchus thaleichthys</i>)	CT, CSC	Andromous. In California, occurs in Sacramento-San Joaquin estuary and one record from Monterey Bay. Spawns in sandy to gravely substrates near the ocean November to June; some populations are landlocked.	Absent. Rivers and creeks are absent from the main part of the site, and therefore, suitable habitat is absent from the onsite portion of the project. The project site is outside of the known range for this species.
California Tiger Salamander (<i>Ambystoma californiense</i>)	FT, CT	Breeds in vernal pools and stock ponds of central California. Adults aestivate in grassland habitats adjacent to the breeding sites.	Absent. The site does not support breeding habitat, and although it does support potentially suitable upland habitat(California ground squirrel burrows onsite). There are no known breeding pools in the vicinity of the site. The nearest recorded observation is more than 3 miles from the site (CNDDDB 2016). Therefore, CTS are considered to be absent from the site.
California Red-legged Frog (<i>Rana draytonii</i>)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	Absent. The site does not support breeding habitat and supports moderately suitable upland habitat. The nearest recorded observation is more than 3 miles from the site (CNDDDB 2016). Therefore, CRLF are considered to be absent from the site.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (adapted from CDFW 2016 and USFWS 2016) – cont’d
Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

California Black Rail (<i>Laterallus jamaicensis coturniculus</i>)	CT, CP	Occurs in coastal and freshwater marshes, estuaries, and tidal slough areas.	Unlikely. Suitable habitat for this species is absent from the site, however, given the proximity of the site to suitable habitat for this species, and the tidal influence on Coyote Creek, this species may move onto or over the site from time to time.
California clapper rail (<i>Rallus longirostris obsoletus</i>)	FE, CE, CP	Occurs in tidal salt and brackish marshes of the San Francisco Bay and historically in tidal estuaries from Marin to San Luis Obispo Counties, CA.	Unlikely. Suitable habitat for this species is absent from the site, however, given the proximity of the site to suitable habitat for this species, and the tidal influence on Coyote Creek, this species may move onto or over the site from time to time.
California least tern (<i>Sterna antillarum browni</i>)	FE, CE, CP	Occurs in central to southern California April to November. Found in and near coastal habitat including coasts, beaches, bays, estuaries, lagoons, lakes, and rivers.	Unlikely. Suitable nesting habitat for this species is absent from the site, however, given the proximity of the site to suitable habitat for this species, this species may move onto or over the site from time to time during periods of migration.
Western snowy plover (nesting) (<i>Charadrius alexandrinus nivosus</i>)	FT, CSC	Uses man-made agricultural wastewater ponds and reservoir margins. Breeds on barren to sparsely vegetated ground at alkaline or saline lakes, reservoirs, ponds, and riverine sand bar.	Possible. Breeding and foraging habitat is available along Coyote Creek levee. The nearest recorded observation is more than 3 miles to the east of the study site (CNDDDB 2010).
Swainson’s hawk (nesting) (<i>Buteo swainsoni</i>)	CT	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.	Unlikely. The site is more than 18 miles to the north of the nearest recorded location (CNDDDB 2016), which is in Coyote Valley. Although the Swainson’s hawk’s range appears to be expanding in this region, and Swainson’s hawks are known to travel ten miles from a nest tree to forage, it is unlikely a Swainson’s hawk would forage as far as the site.
American Peregrine Falcon (nesting) (<i>Falco peregrines anatum</i>)	CP	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	Possible. Although nesting habitat is not present on the site, foraging habitat is present onsite. The nearest recorded observance of the American peregrine falcon is more than 3 miles from the site (CNDDDB 2016), however, the American peregrine falcon is known from the San Jose area therefore, this species could forage over the site from time to time.
White-tailed Kite (nesting) (<i>Elanus leucurus</i>)	CP	Open grasslands and agricultural areas throughout central California.	Possible. Suitable breeding habitat exists onsite for this species and foraging habitat is available in the agricultural field and annual grassland habitats onsite.
Saltmarsh Common Yellowthroat (<i>Geothlypis trichas sinuosa</i>)	CSC	Breeds in herbaceous wetlands and salt marshes of the San Francisco Bay area, can also be found in non-breeding along the California Coast. Nests in thick herbaceous vegetation up to one meter above the ground or over water.	Possible. This species is known to be in the area of the site, and may breed adjacent to the site in the Coyote Creek riparian corridor.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont’d.

California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
Bank Swallow (nesting) (<i>Riparia riparia</i>)	CT	Occurs in open areas near flowing water, nests in steep banks along inland water or coast. State-wide.	Absent. Suitable habitat for this species is absent from the site.
Western yellow-billed cuckoo (nesting) (<i>Coccyzus americanus occidentalis</i>)	FC, CE	Breed in large blocks of riparian habitats, particularly cottonwoods and willows.	Unlikely. Dense riparian habitat required by the western yellow-billed cuckoo is absent from the site and the area and suitable riparian habitat is limited to the area of the proposed off-site outfall work.
Townsend’s big-eared bat (<i>Corynorhinus townsendii</i>)	CPE	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats of the state.	Possible. Foraging habitat is present on the site; however, potential roosting habitat is absent from the site.
Salt-marsh Harvest Mouse (<i>Reithrodontomys raviventris</i>)	FE, CE, CP	Occurs in the salt and brackish marshes of Corte Madera, Richmond, and South San Francisco Bay, especially those with pickleweed and saltgrass.	Absent. Suitable habitat for this species is absent from the site.
Foothill Yellow-legged Frog (<i>Rana boylei</i>)	CSC	Occurs in swiftly flowing streams and rivers with rocky substrate with open, sunny banks in forest, chaparral, and woodland habitats, and can sometimes be found in isolated pools.	Unlikely. Suitable habitats required by this species are absent from the site. The only water feature on the site is Coyote Creek near where the off-site outfall is proposed, which is not ideal FYLF habitat.
Western Pond Turtle (<i>Actinemys marmorata</i>)	CSC	Intermittent and permanent waterways including streams, marshes, rivers, ponds and lakes. Open slow-moving water of rivers and creeks of central California with rocks and logs for basking.	Unlikely. Suitable habitat for the western pond turtle is present adjacent to the site within the Coyote Creek riparian corridor. The WPT may move onto the site from time to time, however, it is not expected to remain onsite.
Northern harrier (nesting) (<i>Circus cyaneus</i>)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	Possible. Harriers may forage over the site and may nest on or adjacent to the site.
Western Burrowing Owl (<i>Athene cunicularia</i>)	CSC	Open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. Often associated with California ground squirrels.	Possible. The site is within the burrowing owl fee area for the Santa Clara Valley Habitat Conservation Plan (SCVHP), and burrowing owls are known to occur adjacent to the site as well as artificial burrows specifically designed for burrowing owls near the off-site utility alignments to the west of the site. The site currently supports California ground squirrel burrows, and provides potential habitat for BUOW. Surveys for burrowing owl per the HCP protocol were conducted on the main portion of the site on June 20 and October 18, 2016 and the utility alignment was surveyed on October 18, 2016; BUOW were not observed onsite during the surveys.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont’d.
California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
Tricolored Blackbird (<i>Agelaius tricolor</i>)	CSC	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in grassland and cropland habitats.	Possible. Suitable tricolored blackbird habitat is absent from the main portion of the site, however, the riparian habitat along the Coyote Creek corridor supports suitable nesting habitat for the tricolored blackbird. The SCVHP identifies the eastern edge corner of this site to be within 250 feet of potentially suitable tricolored blackbird nesting habitat. Condition 17 of the SCVHP requires surveys for tricolored blackbirds, as potentially suitable habitat exists adjacent to (and within 250 feet of) the site within Coyote Creek.
Alameda song sparrow (<i>Melospiza melodia pusillula</i>)	CSC	Found in tidal salt marsh habitat with exposed ground for foraging with no more than 2-5 cm between bases of plants. Current range is generally only along the San Francisco Bay.	Possible. This species is known to be in the area of the site, and may breed adjacent to the site in the Coyote Creek riparian corridor.
California yellow warbler (<i>Dendroica petechia brewsteri</i>)	CSC	Migrants move through many habitats of Sierra and its foothills. This species breeds in riparian thickets of alder, willow and cottonwoods.	Possible. This species is known to be in the area of the site, and may breed adjacent to the site in the Coyote Creek riparian corridor.
Salt-marsh Wandering Shrew (<i>Sorex vagrans halicoetes</i>)	CSC	Found in salt marshes along the San Francisco Bay.	Absent. Suitable habitat for this species is absent from the site.
San Francisco Dusky-Footed Woodrat (<i>Neotoma fuscipes annectens</i>)	CSC	Found in hardwood forests, oak riparian and shrub habitats.	Possible. Riparian habitat along Coyote Creek provides potentially suitable habitat for the dusky-footed woodrat.
Ringtail (<i>Bassariscus astutus</i>)	CP	Occurs in riparian and heavily wooded habitats near water.	Possible. Riparian habitat along Coyote Creek provides potentially suitable habitat for the ringtail adjacent to the site, however, it is likely that any ringtail would not stray far from these riparian areas and would be considered to be unlikely to occur on the main portion of the site.

***Explanation of Occurrence Designations and Status Codes**

- Present: Species observed on the site at time of field surveys or during recent past.
- Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
- Possible: Species not observed on the site, but it could occur there from time to time.
- Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
- Absent: Species not observed on the site, and precluded from occurring there because habitat requirements not met.

***Explanation of Occurrence Designations and Status Codes (cont’d).**

STATUS CODES

- | | | | |
|-----|---------------------------------------|-----|----------------------------------|
| FE | Federally Endangered | CE | California Endangered |
| FT | Federally Threatened | CT | California Threatened |
| FPE | Federally Endangered (Proposed) | CR | California Rare |
| FC | Federal Candidate | CP | California Protected |
| CSC | California Species of Special Concern | CPE | California Endangered (Proposed) |

- | | | | |
|------|---|---|---------------------------------|
| CNPS | California Native Plant Society Listing | | |
| 1A | Plants Presumed Extinct in California | 3 | Plants about which we need more |

1B	Plants Rare, Threatened, or Endangered in California and elsewhere		information – a review list
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere	4	Plants of limited distribution – a watch list

2.5 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), and the California Regional Water Quality Control Board (RWQCB). See Section 3.2.4 of this report for additional information.

A wetland occurs in the southwestern portion of the main site which may be claimed by the USACE and/or RWQCB.

3 IMPACTS AND MITIGATIONS

3.1 SIGNIFICANCE CRITERIA

General plans, area plans, and specific projects are subject to the provisions of the California Environmental Quality Act (CEQA). The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are constructed. For example, site development may require the removal of some or all of its existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc., may replace those species formerly occurring on a site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. These impacts may be considered significant. According to *Guide to the California Environmental Quality Act* (Remy et al. 1996), “Significant effect on the environment” means 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 historic or aesthetic interest. Specific project impacts to biological resources may be considered “significant” if they will:

- 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 Game 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 Game 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.

- Reduce substantially the habitat of a fish or wildlife species, including causing a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate an animal community.
- 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.

For the purposes of this report, it is assumed that impacts will be buildout of the entire property outside of the proposed riparian setbacks.

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 Threatened and Endangered Species

State and federal “endangered species” legislation has provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal Endangered Species Acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as “species of special status.” Permits may be required from both the CDFW and USFWS if activities associated with a proposed project will result in the take of a listed species. To “take” a listed species, as defined by the state of California, is “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” said species (California Fish and Game Code, Section 86). “Take” is more broadly defined by the federal Endangered Species Act to include “harm” of a listed species (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFW and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 Migratory Birds

State and federal laws also protect most bird species. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory

birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

3.2.3 Birds of Prey

Birds of prey are protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is “unlawful to take, possess, or destroy any birds in the order *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”. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by the CDFW.

Additionally, the Bald and Golden Eagle Protection Act (16 U.S.C., sec. 668-668c) prohibits anyone from taking bald or golden eagles, including their parts, nests, or eggs, unless authorized under a federal permit. The act prohibits any disturbance that directly affects an eagle or an active eagle nest as well as any disturbance caused by humans around a previously used nest site during a time when eagles are not present such that it agitates or bothers an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

3.2.4 Bats

Section 2000 and 4150 of the California Fish and Game Code states that it is unlawful to take or possess a number of species, including bats, without a license or permit, as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as “an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering.” For these reasons, bat colonies in particular are considered to be sensitive and therefore, disturbances that cause harm to bat colonies are unlawful.

3.2.5 Wetlands and Other “Jurisdictional Waters”

Natural drainage channels and adjacent wetlands may be considered “Waters of the United States” (hereafter referred to as “jurisdictional waters”) subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE). The extent of jurisdiction has been defined in the Code of Federal

Regulations but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

- 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;
- All interstate waters including interstate wetlands;
- 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;
- All impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).

As determined by the United States Supreme Court in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision), channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds. However, the U.S Supreme Court decisions *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers* (referred together as the Rapanos decision) impose a "significant nexus" test for federal jurisdiction over wetlands. In June 2007, the USACE and Environmental Protection Agency (EPA) established guidelines for applying the significant nexus standard. This standard includes 1) a case-by-case analysis of the flow characteristics and functions of the tributary or wetland to determine if they significantly affect the chemical, physical, and biological integrity of downstream navigable waters and 2) consideration of hydrologic and ecologic factors (EPA and USACE 2007).

The USACE regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by "ordinary high water marks" on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or

permanently saturated by water), and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). Such permits are typically issued on the condition that the applicant agrees to provide mitigation that results in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction under the SWANCC decision, is regulated by the RWQCB. It is unlawful to fill isolated wetlands without filing a Notice of Intent with the RWQCB. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The California Department of Fish and Wildlife has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2003). Activities that would disturb these drainages are regulated by the CDFW via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question.

3.2.6 Ordinance Sized Trees

The City of San Jose has a Tree Ordinance (Chapter 13.32 of the Municipal Code), which regulates the removal of trees. The City's Tree Ordinance seeks to:

Promote the health, safety, and welfare of the city by controlling the removal of trees in the city, as trees enhance the scenic beauty of the city, significantly reduce the erosion of topsoil, contribute to increased storm water quality, reduce flood hazards and risks of landslides, increase property values, reduce the cost of construction and maintenance of draining systems through the reduction of flow and the need to divert surface waters, contribute to energy efficiency and the reduction of urban temperatures, serve as windbreaks and are prime oxygen producers and air purification systems.

An "ordinance-size tree" is defined as any native or non-native tree with a circumference of 56 inches (diameter of 18 inches) at 24 inches above the natural grade of slope. For multi-trunk trees,

the circumference is measured as the sum of the circumferences of all trunks at 24 inches above the natural grade of slope. The ordinance covers both native and non-native species. A tree removal permit is required from the City prior to the removal of any trees covered under the ordinance. Prior to the issuance of a removal permit, the City requires that a formal tree survey be conducted which indicates the number, species, trunk circumference and location of all trees which will be removed or impacted by the project.

3.2.7 Envision San Jose 2040 General Plan

The Envision San Jose 2040 General Plan (General Plan) aims to protect biological resources when properties are developed in San Jose. Generally, similar types of requirements occur in the General Plan as in the SCVHP. The General Plan includes several policies relevant to biological protections including, but are not limited to, the following:

- Policy MS-21.4: Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.
- Policy MS-21.5: As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effect on the health and longevity of protected or other significant trees through appropriate design measures and City of San José 33 Initial Study One South Market Street Residential Project December 2012 construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.
- Policy MS-21.6: As a condition of new development, require, where appropriate, the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.
- Policy MS-21.9: Where urban development occurs adjacent to natural plant communities (e.g., oak woodland, riparian forest), landscape plantings shall incorporate tree species native to the area and propagated from local sources (generally from within 5-10 miles and preferably from within the same watershed).

- Policy ER-1.4: Minimize the removal of ecologically valuable vegetation such as serpentine and non-serpentine grassland, oak woodland, chaparral, and coastal scrub during development and grading for projects within the City.
- Policy ER-1.5: Preserve and protect oak woodlands, and individual oak trees. Any loss of oak woodland and/or native oak trees must be fully mitigated.
- Policy ER-1.7: Prohibit planting of invasive non-native plant species in oak woodlands, grasslands, chaparral and coastal scrub habitats, and in hillside areas.
- Policy ER-4.1: Preserve and restore, to the greatest extent feasible, habitat areas that support special-status species. Avoid development in such habitats unless no feasible alternatives exist and mitigation is provided of equivalent value.
- Policy ER-4.2: Limit recreational uses in wildlife refuges, nature preserves and wilderness areas in parks to those activities which have minimal impact on sensitive habitats.
- Policy ER-4.3: Prohibit planting of invasive non-native plant species in natural habitats that support special-status species.
- Policy ER-4.4: Require that development projects incorporate mitigation measures to avoid and minimize impacts to individuals of special-status species.
- Policy ER-5.2: Require that development projects incorporate measures to avoid impacts to nesting migratory birds.
- Policy ER-6.3: Employ low-glare lighting in areas developed adjacent to natural areas, including riparian woodlands. Any high-intensity lighting used near natural areas will be placed as close to the ground as possible and directed downward or away from natural areas.
- Policy ER-6.6: Encourage the use of native plants in the landscaping of developed areas adjacent to natural lands.
- Policy ER-6.8: Design and construct development to avoid changes in drainage patterns across adjacent natural areas and for adjacent native trees, such as oaks.

Projects must be consistent with all measures (Goals) of the General Plan.

3.2.8 Santa Clara Valley Habitat Plan

Six local partners (i.e., County of Santa Clara, Santa Clara Valley Transportation Authority; Santa Clara Valley Water District; and the Cities of San Jose, Gilroy, and Morgan Hill) and two wildlife agencies (the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service)

prepared and adopted this multi-species habitat conservation plan, which primarily covers southern Santa Clara County, as well as the City of San Jose with the exception of the bayland areas. The SCVHP addresses listed species and species that are likely to become listed during the plan's 50-year permit term. The eighteen covered species include nine plants and nine animals. The animal species covered include, but are not limited to, the California tiger salamander, California red-legged frog, western pond turtle, and western burrowing owl. The SCVHP requires that the agencies comment on reportable interim projects and recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value. Funding sources for the SCVHP include development fees based on land cover types (natural, agricultural or small vacant sites surrounded by urban development). Additional fees are charged based on the occurrence of certain sensitive habitat types such as serpentine and wetlands.

The project is considered a covered project under the SCVHP. As a result, the project would be subject to conditions and fees of the SCVHP.

3.2.8.1 SCVHP Fees

Chapter 9 of the SCVHP identifies fees that would be required by this project. The following describes fees that are based on the 2016 fee schedule; however, fees are calculated at the time the project submits the SCVHP application, which corresponds to application timing of grading and/or building permits. Thus, the following numbers are provided for a sense of magnitude and should be considered approximate.

The onsite portion of the development area is within Fee Zone B “Mostly Cultivated Agricultural Lands” and the majority of the off-site utility alignments are within Fee Zone A “Ranchlands and Natural Lands.” The 2016 SCVHP fees for development of Zone A lands are \$19,159 per acre and Zone B lands are \$13,283 per acre. In addition, a Nitrogen Deposition Fee would also be required at \$4.47 per new vehicle trip. Temporary impact fees, of which much of the utility alignment is expected, are assessed at a fraction of these fees.

3.2.8.2 Conditions on Covered Activities

The SCVHP provides several conditions for covered activities under the SCVHP. These conditions can be found in Chapter 6 of the SCVHP and are summarized below. While all conditions are

summarized, Conditions 1, 3, 4, 5, 11, 12, 15, and 17 would apply to the proposed Winfield Residential Project:

- **Condition 1 (page 6-7). Avoid Direct Impacts on Legally Protected Plant and Wildlife Species-** Condition 1 instructs developers to avoid direct impacts on legally protected plant and wildlife species, including federally endangered Contra Costa goldfields and fully protected wildlife species including the golden eagle, bald eagle, American peregrine falcon, southern bald eagle, white-tailed kite, California condor, and ring-tailed cat. Several of these species are likely to occur on or forage over the site (golden eagle, bald eagle, white-tailed kite, and ringtail). Condition 1 also protects bird species and their nests that are protected under the Migratory Bird Treaty Act (MBTA); additionally, golden eagles and bald eagles are protected under the Bald and Golden Eagle Protection Act. Additionally, page 6-94 and Table 6-8 identify required surveys for breeding habitat of select covered wildlife species.
 - *Condition 1 would apply to project.*
- **Condition 2 (page 6-9). Incorporate Urban-Reserve System Interface Design Requirements-** Condition 2 provides design requirements for the urban-reserve system interface. Some of the design requirements included in Condition 2 are installing non-permeable fences between urban and reserve areas, fencing public roads that run adjacent to reserve areas, minimizing the length of shared boundaries between urban and reserve areas, outdoor lighting limitations, and landscaping requirements.
 - *Not applicable to the project.*
- **Condition 3 (page 6-12). Maintain Hydrologic Conditions and Protect Water Quality-(Condition applies to project)** Condition 3 is for all projects due to the fact that implementation of projects could result in impacts on watershed health, including impacts to aquatic habitat for species, through changes in hydrology and water quality. This condition incorporates all of the most important measures for water quality protection of the National Pollutant Discharge Elimination System (NPDES) Program of the Clean Water Act. Required measures of Condition 3 are located in Table 6-2 of the SCVHP, which is attached below (Appendix B); these measures relate to water quality and habitat protection during and after project construction. They include measures typically included in a Storm Water Pollution Prevention Plan (SWPPP) but may include measures that are in addition to such plans.
 - *Condition 3 would apply to the project.*
- **Condition 4 (page 6-14). Avoidance and Minimization for In-Stream Projects-** Condition 4 minimizes impacts on riparian and aquatic habitat through appropriate design requirements and construction practices and provides avoidance and minimization measures for in-stream projects that may impact stream morphology, aquatic and riparian habitat, flow conditions, covered species, natural communities, and wildlife movement.
 - *Condition 4 would apply to the project, however, this is described in the separate biology report for the outfall prepared by H.T. Harvey & Associates.*

- **Condition 5 (page 6-18). Avoidance and Minimization Measures for In-Stream Operations and Maintenance-** Condition 5 provides avoidance and minimization measures for in-stream operations and maintenance activities, which includes, but is not limited to trail, bridge, road, and culvert maintenance, bank stabilization, removal of debris, and vegetation management.
 - *Condition 5 would apply to the project, however, this is described in the separate biology report for the outfall prepared by H.T. Harvey & Associates.*
- **Condition 6 (Page 6-21). Design and Construction Requirements for Covered Transportation Projects-** Condition 6 provides requirements for rural development design, construction, and post-construction. Types of projects that Condition 6 includes highway projects, mass transit projects, roadway projects and interchange upgrades, road safety and operational improvements, and dirt road construction.
 - *Not applicable to the project.*
- **Condition 7 (page 6-28). Rural Development Design and Construction Requirements-** Condition 7 provides requirements for development design and construction of new development outside of the urban service area including requirements relating to site hydrology, vineyards, private rural roads, vegetation management, soils, and lighting.
 - *Not applicable to the project.*
- **Condition 8 (page 6-35). Implement Avoidance and Minimization Measures for Rural Road Maintenance-** Condition 8 provides requirements for rural roads, road median, and barrier maintenance including requirements regarding riparian setbacks, erosion measures, herbicide and pesticide use, seasonal restrictions, mower cleaning, revegetation, ground-disturbing road maintenance, and flow lines.
 - *Not applicable to the project.*
- **Condition 9 (page 6-37). Prepare and Implement a Recreation Plan-** Condition 9 requires providing public access to all reserve lands owned by a public entity; each reserve land must provide a recreation plan.
 - *Not applicable to the project.*
- **Condition 10 (page 6-42). Fuel Buffer-** Condition 10 provides requirements for fuel buffers between 30 and 100 feet of structures. Requirements include measures relating to fuel buffers near structures and on reserve lands; the most notable measure is the requirement for nesting bird surveys prior to any fuel buffer maintenance during the nesting season.
 - *Not applicable to the project.*
- **Condition 11 (page 6-44). Stream and Riparian Setbacks-** Condition 11 provides requirements for stream and riparian setbacks; as the development area is within the Urban Service Area, stream setbacks measured from the top of the stream bank should be 35 to 150 feet depending on the category rating of the stream and the slope class. Setbacks for Category 1 streams with 0-30% slopes should be at least 100 feet, and with >30% slopes should be at least 150 feet. Category 2 streams should have a setback of 35 feet.

- Condition 11 would apply to the project, *however, this is described in the separate biology report for the outfall prepared by H.T. Harvey & Associates.*
- **Condition 12 (page 6-56). Wetland and Pond Avoidance and Minimization-** Condition 12 provides measures to protect wetlands and ponds, including planning actions, design, and construction actions.
 - *Condition 12 would apply to the project.*
- **Condition 13 (page 6-58). Serpentine and Associated Covered Species Avoidance and Minimization-** Condition 13 requires surveys for special status plants and the Bay checkerspot butterfly as well as its larval host plant in areas that support serpentine bunchgrass grassland, serpentine rock outcrops, serpentine seeps, and serpentine chaparral. Fees apply for impacts to serpentine habitat.
 - *Not applicable to the project.*
- **Condition 14 (page 6-60). Valley Oak and Blue Oak Woodland Avoidance and Minimization-** Condition 14 provides requirements for project planning and project construction, including avoidance of large oaks, guidance on irrigation near oak trees, and a buffer around the root protection zone, roads and pathways within 25 feet of the dripline of an oak tree, trenching, and pruning activities.
 - *Not applicable to the project.*
- **Condition 15 (page 6-62). Western Burrowing Owl-** Condition 15 requires preconstruction surveys for burrowing owls in appropriate habitat prior to construction activities, provides avoidance measures for owls and nests in the breeding season and owls in the non-breeding season, and requirements for construction monitoring.
 - *Condition 15 would apply to the project.*
- **Condition 16 (page 6-68) Least Bell's Vireo-** Condition 16 requires preconstruction surveys in appropriate habitat for the least Bell's vireo prior to construction activities, and provides avoidance and construction monitoring measures.
 - *Not applicable to the project.*
- **Condition 17 (page 6-69) Tricolored Blackbird-** Condition 17 requires preconstruction surveys in appropriate habitat for the tricolored blackbird prior to construction activities, and provides avoidance and construction monitoring measures.
 - *Condition 17 would apply to the project.*
- **Condition 18 (page 6-71) San Joaquin Kit Fox-** Condition 18 requires preconstruction surveys in appropriate habitat for the San Joaquin kit fox prior to construction activities, and provides avoidance and construction monitoring measures.
 - *Not applicable to the project.*
- **Condition 19 (page 6-74). Plant Salvage when Impacts are Unavoidable-** Condition 19 provides salvage guidance and requirements for covered plants.
 - *Not applicable to the project.*

- **Condition 20 (page 6-76). Avoid and Minimize Impacts to Covered Plant Occurrences-** Condition 20 provides requirements for preconstruction surveys for appropriate covered plants (per habitat).
 - *Not applicable to the project.*

3.3 IMPACTS SPECIFIC TO THE PROJECT

The intended project is the development of approximately 66.5 acres of the main portion of the site, and off-site utility infrastructure areas. These impacts could include nest failure of breeding migratory birds, loss of ordinance-sized trees, and loss of potential habitat for sensitive species such as habitat for the western burrowing owl. As discussed above, activities resulting in impacts to biotic resources may be regulated by local, state, and federal laws. The natural resource issues specific to this project are discussed in detail below.

3.3.1 Loss of Habitat for Special Status Plants

Potential Impact. Of the 20 special status plant species that occur regionally within habitats that are broadly similar to those of the project site all are considered absent and/or unlikely to occur within the site due to the facts that they are not known to occur near the site or they occur within habitats that are subtly and importantly different from those of the site.

Mitigation. None warranted.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impact. Twenty-nine (29) special status animal species occur, or once occurred, regionally. Of these, sixteen species would be absent or unlikely to occur on the site due to a lack of suitable habitat for these species. The species that would be absent or unlikely to occur include the Bay checkerspot butterfly, vernal pool tadpole shrimp, longfin smelt, steelhead, California tiger salamander, California red-legged frog, foothill yellow-legged frog, western pond turtle, Alameda whipsnake, California black rail, California clapper rail, California least tern, Swainson's hawk, bank swallow, western yellow-billed cuckoo, salt-marsh wandering shrew, and salt-marsh harvest mouse.

The twelve remaining special status animal species from Table 1 potentially occur more frequently as potential foragers, transients, may be resident to the site, or they may occur within areas adjacent to the site. These include western snowy plover, American peregrine falcon, northern harrier,

white-tailed kite, western burrowing owl, saltmarsh common yellowthroat, tricolored blackbird, Alameda song sparrow, California yellow warbler, Townsend's big-eared bat, San Francisco dusky-footed woodrat, and ringtail. Several of these species may also roost or nest in trees or shrubs occurring within or adjacent to the site. These species are discussed below:

The western snowy plover, American peregrine falcon, northern harrier, white-tailed kite, western burrowing owl, saltmarsh common yellowthroat, tricolored blackbird, and Alameda song sparrow, and California yellow warbler may nest onsite or adjacent to the site, and the American peregrine falcon would be expected to forage on and over the site.

No evidence of bats was observed during reconnaissance surveys, and it is highly unlikely that the site supports roosting habitat for bats; however, individual Townsend's big-eared bats may forage within the site from time to time. Loss of the potential forage habitat for this bat species would be considered a less-than-significant impact due to the large areas of similar or higher quality bat forage habitat occurring within the vicinity of the project site.

While individuals and evidence of either were not observed, the San Francisco dusky-footed woodrat and ringtail are considered to be species that could occur within the Coyote Creek riparian corridor. The majority of the project site does not represent unique habitat for either species, but both could utilize the riparian habitat for foraging habitat and/or nesting/denning habitat.

Potential impacts to specific species are discussed further below.

Mitigation. No mitigation warranted.

3.3.3 Loss of Habitat for Native Wildlife

Potential Impact. The habitats of the site comprise only a small portion of the regionally available habitat for plant and animal species that are expected to use the habitat. The proposed project would result in the loss of an agricultural field and annual grassland habitat, both of which have been partially disturbed through introduction of non-native plants, historic use of the site, and development and use of a residential areas and roadways. The Coyote Creek riparian corridor habitat has a high degree of native species in the canopy and thus supports high quality habitat for local species. The loss of a small amount of riparian habitat is not expected to result in a significant

effect on local wildlife. Therefore, impacts due to the loss of these habitats for native wildlife resulting from the proposed project are considered less-than-significant.

In addition, the project would be a covered project under the SCVHP. Therefore, the project is subject to paying SCVHP fees, which provide funding into the regional conservation program of the SCVHP that seeks to preserve equal or higher quality habitat within the Habitat Plan Permit Area (generally the Santa Clara County).

Mitigation. No mitigation would be warranted for the loss of habitat for native wildlife.

3.3.4 Interference with the Movement of Native Wildlife

Potential Impact. Buildout of the site would not constrain native wildlife movement, as the only corridor is the Coyote Creek riparian corridor at the eastern edge of the project site, and the only impacts to this corridor is an outfall into Coyote Creek, which is assessed within a separate report prepared by H.T. Harvey and Associates. Animals currently using Coyote Creek as a corridor are expected to continue to use it at buildout of the project site. The project would therefore result in a less-than-significant interference on the movement of native wildlife.

In addition, the project would be a covered project under the SCVHP. Therefore, the project is subject to paying SCVHP fees, which provide funding into the regional conservation program of the SCVHP that seeks to preserve equal or higher quality habitat within the Habitat Plan Permit Area (generally the Santa Clara County).

Mitigation. No mitigation would be warranted for interference with the movement of native wildlife.

3.3.5 Impacts to Nesting Migratory Bird Including Nesting Raptors and Tri-Colored Blackbirds, and other Protected Birds

Potential Impacts. Trees and large shrubs of the site and adjacent Coyote Creek riparian corridor and landscaped areas may support nesting birds and raptors. Buildout of the project during the nesting period for migratory birds (i.e., typically between February 1 to August 31), including initial site grading, soil excavation, and/or tree and vegetation removal, poses a risk of nest abandonment and death of any live eggs or young that may be present within the nest within or near the site. Such an effect would be considered a significant impact. To ensure that any active nests will not be

disturbed and individual birds will not be harmed by construction activities, the following measures should be followed.

Additionally, although unlikely to occur on the main portion of the site itself, the SCVHP identifies this site to be within 250 feet of potentially suitable tricolored blackbird nesting habitat, thus requiring pre-construction surveys in accordance with the Condition 17 of the SCVHP. Measures to ensure compliance with this condition are included below as Mitigation Measure 3.3.5b.

Mitigation. The following measures will ensure that active migratory bird nests, including tricolored blackbirds, will not be disturbed and individual birds will not be harmed by construction activities, especially including tree removal. Completion of the following measures, including Mitigation Measure 3.3.5a and 3.3.5b, will reduce the potential impacts to nesting migratory birds, including tricolored blackbirds, to a less-than-significant level.

Mitigation Measure 3.3.5a. If initial site disturbance activities, including tree, shrub, or vegetation removal, are to occur during the breeding season (typically February 1 to August 31), a qualified biologist would conduct pre-construction surveys for nesting migratory birds onsite and within 250 feet (for raptors) of the site, where accessible. The survey should occur within 14-days of the onset of ground disturbance if disturbances are to commence between February 1 and June 30 and within 30-days prior to the onset of ground disturbance between July 1 and August 31. If a nesting migratory bird were to be detected, an appropriate construction-free buffer would be established. Actual size of buffer, which would be determined by the project biologist, would depend on species, topography, and type of activity that would occur in the vicinity of the nest. The project buffer would be monitored periodically by the project biologist to ensure compliance. After the nest is completed, as determined by the biologist, the buffer would no longer be required.

Mitigation Measure 3.3.5b. Tricolored Blackbird – The SCVHP identifies this site to be within 250 feet of potentially suitable tricolored blackbird nesting habitat occurring along Coyote Creek. Surveys for tricolored blackbirds within 250 feet of this habitat, where visual access is possible, would be required prior to start of construction following protocols in Condition 17 in Chapter 6 of the SCVHP. Such protocols include:

- Prior to any ground disturbance a qualified biologist would do a background assessment to determine if there has been nesting at the site or near the site in the past 5 years. This includes checking the CNDDDB, contacting local experts, and looking for evidence of historical nesting (i.e., old nests).
- If no nesting in the past 5 years is evident, the qualified biologist would conduct a preconstruction survey in areas identified in the habitat survey as supporting potential tricolored blackbird nesting habitat. Surveys would be made at the appropriate times of year when nesting use is expected to occur. The surveys would document the presence or absence of nesting colonies of tricolored blackbird. Surveys will conclude no more than two calendar days prior to construction, per Condition 17 of Chapter 6 in the SCVHP.
- Should a nesting colony of tricolored blackbirds be located, a 250-foot construction-free buffer would be established from the edge of all hydric vegetation associated with the nest site, and the nest site, the buffer would be avoided, and the CDFW and USFWS would be notified immediately.
- If construction occurs onsite during the nesting season and when the 250-foot buffer is in place around active nesting habitat, a qualified biologist would conduct periodic monitoring of the site to ensure the 250-foot buffer is enforced. The biologist would have authority to increase the buffer size if needed based on tricolored blackbird behavior at the active nesting area.
- If active tricolored blackbird nesting occurs within 250 feet of the project site, and construction occurs during the active nesting period resulting in the need for a buffer, the qualified biologist would also conduct training for construction personnel in avoidance procedures, buffer zones, and safety protocols to ensure no impacts to the nest.

3.3.6 Impacts to Western Burrowing Owls

Potential Impacts. The site is within the burrowing owl fee area for the SCVHP, and burrowing owls are known to occur adjacent to the site as well as artificial burrows specifically designed for burrowing owls near the off-site utility alignments to the west of the site. The site currently supports California ground squirrel burrows, and provides potential habitat for burrowing owls. Surveys for burrowing owl per the HCP protocol were conducted on the main portion of the site on June 20 and October 18, 2016 and the utility alignment was surveyed on October 18, 2016; burrowing owls were not observed onsite during the surveys. As the site is within the burrowing owl fee zone, the

project is required to conduct pre-construction surveys in accordance with the Condition 15 of the SCVHP. Measures to ensure compliance with this condition are included below as Mitigation Measure 3.3.6.

Should site grading occur during the nesting season for this species (February 1 through August 31), nests and nestlings that may be present would likely be destroyed. Overwintering burrowing owls may also be buried in their roost burrows outside of the nesting season (September 1 through January 31). Any actions related to site development that result in the mortality of burrowing owls would constitute a violation of the federal Migratory Bird Treaty Act and provisions of the California Fish and Game Code. Therefore, the mortality of burrowing owls would constitute a significant impact under CEQA.

Consistency with Envision San Jose 2040 General Plan- The proposed project will ensure consistency with Goal ER-4 and 5 as the project mitigation requires avoidance and minimization of impacts to individual burrowing owls, and, under the SCVHP, the project will be mitigating adequately for impacts to habitat of the site that supports breeding borrowing owls.

Mitigation. The following measures will ensure that burrowing owls will not be harmed by construction activities. Completion of the following measures will reduce the potential impacts to burrowing owls to a less-than-significant level.

Mitigation Measure 3.3.6a. The current SCVHP burrowing owl fee is \$54,781 per acre of impact to “occupied burrowing owl nesting habitat,” and would be charged on the area on which land cover fees of the SCVHP are levied (Section 3.2.7). LOA’s analysis of the property determined that the site is considered to be potential nesting and foraging habitat for burrowing owls and, thus, meets the criteria for occupied burrowing owl nesting habitat under the SCVHP. The onsite portion of agricultural fields (approximately 60 acres; Zone B fees) and the off-site annual grassland through which the utility alignment is planned to run (approximately 32.61 acres; Zone A fees) will incur burrowing owl fees in addition to the Zone fees. Temporary impact fees, of which much of the utility alignment is expected, are assessed at a fraction of these fees.

To mitigate for impacts to burrowing owl habitat, the applicant would pay the burrowing owl fee per acre of occupied burrowing owl nesting habitat impacted as a result of project buildout.

Payment of the SCVHP burrowing owl fee for impacts to burrowing owl habitat would reduce project impacts to burrowing owl habitat to a less-than-significant level.

Mitigation Measure 3.3.6b: Preconstruction surveys are required to ascertain whether or not burrowing owls occupy burrows on the site and off-site elements prior to construction. These surveys consist of a minimum of two surveys, with the first survey no more than 14 days prior to initial construction activities (i.e. vegetation removal, grading, excavation, etc.) and the second survey conducted no more than 2 days prior to initial construction activities. If no burrowing owls or fresh sign of burrowing owls are observed during pre-construction surveys, construction may continue; however, if a burrowing owl is observed during these surveys, occupied burrows will be identified by the monitoring biologist and a buffer, as described in Mitigation Measure 3.3.6c, will be established.

- If an active nest is found onsite, a 250-foot non-disturbance buffer will be established around all nest sites as identified and defined by a qualified biologist. If the biologist determines that the nest is vacant, the non-disturbance buffer zone may be removed. The SCVHP specifies that a vacation from the site for a week or more by a burrowing owl, as determined by a qualified biologist, would constitute a voluntary relocation by the owl, and the qualified biologist could then take measures to collapse suitable burrows of the site to discourage reoccupation. The biologist will supervise hand excavation of the burrow to prevent reoccupation only after receiving approval from the wildlife agencies (SCVHP, Chapter 6, Condition 15).

For permission to encroach within 250 feet of such burrows during the nesting season (February 1 through August 31), an Avoidance, Minimization, and Monitoring Plan would need to be prepared and approved by the Implementing Entity and the Wildlife Agencies prior to such encroachment (review Chapter 6, pp. 6-64 & 6-65, of the SCVHP for further detail).

- Should a burrowing owl be located onsite in the non-breeding season (September through January), construction activities would not be allowed within this 250-foot buffer of the active burrow(s) used by any burrowing owl unless the following avoidance measures are adhered to:

- A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
- If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities will cease within the 250-foot buffer.
- If the owls are gone for at least one week, the project proponent may request approval from the Implementing Entity that a qualified biologist excavates usable burrows to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue;

Mitigation Measure 3.3.6c: The SCVHP stipulates that passive relocation or exclusion of burrowing owls would not be allowed until a positive regional growth trend is achieved as defined in Section 5.4.6 of the SCVHP; however, a project may qualify for an exception to this prohibition. In the event that voluntary relocation of site burrowing owls does not occur (defined as owls of the site having vacated the site for 10 or more consecutive days), permission to engage in passive relocation during the non-breeding season would need to be requested through the standard application process (Section 6.8 of the SCVHP). Application for an exception would need additional information including a relocation plan/schedule and documentation by a qualified biologist that owls have occupied the site for the full year without vacating the site for 10 or more consecutive days. The application would need to be submitted to the Implementing Entity, and the Wildlife Agencies would then evaluate the application and make a determination for granting the exception. If passive relocation is granted, additional measures may be required by the Implementing Entity.

However, if the owls voluntarily vacate the site for 10 or more consecutive days, as documented by a qualified biologist, the applicant could seek permission to have the qualified biologist take measures to collapse vacated and other suitable burrows to ensure that owls do not recolonize the site.

3.3.7 Potential Impacts to San Francisco Dusky-Footed Woodrat and Ringtail Individuals

Potential Impacts. The Coyote Creek riparian corridor habitat provides potentially suitable forage and nesting/denning habitat for the San Francisco dusky-footed woodrat and the ringtail. An individual could occur within the project site prior to project grading and/or vegetation removal. Direct mortality or injury to an individual of these species would be considered a significant impact under CEQA. However, reasonable measures, described below, could be implemented that would avoid impacts to individual riparian species.

Mitigation. Implementation of the following mitigation measures would reduce impacts to the San Francisco dusky-footed woodrat and ringtail to a less-than-significant level.

Mitigation Measure 3.3.8a. Pre-construction survey. A qualified biologist should conduct a pre-construction survey for San Francisco dusky-footed woodrat nests and ringtail individuals no more than 30 days prior to the onset of construction activities within 50 feet of construction zones. This survey should be conducted prior to vegetation removal or initial grading activities.

Mitigation Measure 3.3.8b. Non-breeding season nest deconstruction for San Francisco dusky-footed woodrat. Identified nests of the San Francisco dusky-footed woodrat should be avoided, where possible. If avoidance is not possible, the nest(s) should be manually deconstructed under supervision of a qualified biologist when helpless young are not present, typically during the non-breeding season (October through January).

Mitigation Measure 3.3.8c. Breeding season temporary buffer for San Francisco dusky-footed woodrat. If it is determined that San Francisco dusky-footed woodrat young may be present during the pre-construction survey (e.g. during the breeding season), a suitable buffer should be established around the nest until the young are independent enough to successfully move from the nest (refer to Mitigation Measure 3.3.6b above).

Mitigation Measure 3.3.8d. Avoidance of ringtail. If an individual ringtail is identified within the project site during preconstruction surveys, a follow-up survey should be conducted within 12-hours of project initiation. If a ringtail is identified during the second survey, the project biologist should continue to monitor the ringtail to ensure that the individual has moved out of any areas of potential danger of its own volition. Project activities can only commence once the project biologist

has determined that the identified animal has moved outside of potential danger from project actions.

Implementation of the above measures would mitigate impacts to San Francisco dusky-footed woodrats and ringtail individuals to a less-than-significant level.

3.3.8 Potential Impacts to Riparian Habitat and Other Sensitive Natural Communities, Including Federally Protected Wetlands

Potential Impacts. Riparian habitat is absent from the site, however, a wetland occurs onsite. The only impacts to this community would be a small triangular wetland near Ranch Road in the southwestern corner of the agricultural field. The project complies with the riparian setback requirements of the City of San Jose and the SCVHP and will result in no significant adverse impacts to riparian habitat. The project may be required to apply for permits from the USACE and RWQCB should the small wetland be impacted. Therefore, development of the site would constitute a significant effect on sensitive and protected habitat communities.

Mitigation. Impacts to areas regulated by the USACE or RWQCB would be considered significant. The following avoidance, minimization measures, and compensation should be followed for impacts to riparian habitat and other sensitive natural communities including jurisdictional waters and wetlands.

Mitigation Measure 3.3.9a. Avoidance- The project has been designed to avoid impacts to riparian and aquatic habitat to the maximum extent practicable. The proposed project will completely impact a small wetland (approximately 0.066 acres).

The project will employ the best management practices incorporated into the SWPP issued for the project. Impacts may require permits from the USACE and RWQCB.

Mitigation Measure 3.3.9b. Minimization-

- Permanent and temporary construction disturbances and other types of project-related disturbances shall be confined to the project site. To ensure disturbances be contained within the predetermined work zone, all project-related vehicle traffic shall be restricted to established roads and construction areas; no work vehicles will be permitted outside the work zone. These areas also should be included in preconstruction surveys and, to the maximum extent possible, should be established in locations disturbed by previous activities to prevent further adverse effects. Sensitive habitat areas shall be delineated with high visibility flagging or fencing to prevent encroachment of construction personnel and

equipment into any sensitive areas during project work activities. At no time shall equipment or personnel be allowed to adversely affect areas outside the project site.

- No canine or feline pets or firearms (except for federal, state, or local law enforcement officers and security personnel) shall be permitted at the project site.
- A litter control program shall be instituted at the entire project site. All construction personnel should ensure that food scraps, paper wrappers, food containers, cans, bottles, and other trash from the project area are deposited in covered or closed trash containers. The trash containers should be removed from the project area at the end of each working day.

Mitigation Measure 3.3.9c. Compensation- Construction is likely to impact some small amount of Waters of the U.S. and state which may be regulated by the USACE and RWQCB. Therefore, the project should replace the lost habitat value resulting from this impact through the creation or restoration at a minimum of a 1:1 ratio for permanent acreage impacts (up to 1 acre created for each acre permanently impacted) as well as reseeding or replanting of vegetation in temporarily disturbed areas according to a site-specific mitigation plan. The final mitigation amounts will be based on actual impacts to be determined during the design phase. If impacts are lessened, then the amount of mitigation should be appropriately reduced.

An onsite habitat mitigation and monitoring plan (HMMP) would need to be developed with the goal of creating, restoring, and/or enhancing riparian habitats with habitat functions and values greater than or equal to those existing in the impact zone. As such, compensation measures should include, but would not be limited to reseeding or replanting of riparian or vegetation (i.e., a combination of trees, shrubs, and herbaceous vegetation) in temporarily and permanently impacted areas and designated habitat restoration areas.

At a minimum, the HMMP should include:

- The location of all enhancement and/or restoration activities;
- Evidence of a suitable water budget to support any created habitats;
- Planting specifications;
- Site maintenance and management requirements;
- Monitoring requirements;
- Final success criteria;
- Adaptive management procedures; and
- A long-term funding mechanism for site management into perpetuity.

The monitoring period should be a minimum of five years to ensure that the success criteria have been achieved.

3.3.9 Degradation of Water Quality in Seasonal Drainages, Stock Ponds and Downstream Waters

Potential Impact. Eventual site development and construction will require grading that leaves the soil of construction zones barren of vegetation and, therefore, vulnerable to sheet, rill, or gully erosion. Eroded soil is generally carried as sediment in surface runoff to be deposited in natural creek beds, canals, and adjacent wetlands. Furthermore, urban runoff is often polluted with grease, oil, pesticide and herbicide residues, heavy metals, etc. These pollutants may eventually be carried to sensitive wetland habitats used by a diversity of native wildlife species. The deposition of pollutants and sediments in sensitive riparian and wetland habitats would be considered a potentially significant adverse environmental impact. The project would comply with the City's grading requirements, City policies 6-29 and 8-14, and Condition 3 of the SCVHP (Appendix B), which are designed to protect water quality. Therefore, the project buildout would result in a less-than-significant impact to water quality.

Mitigation. No mitigation is warranted.

3.3.10 Conflict with Local Policies and Ordinances: City of San Jose Tree Ordinance

Potential Impacts. A tree survey was conducted by Lisa Harris, ISA Certified Arborist #WE-9977A with HMH on September 18, 2015. Twenty-four trees were found to be of ordinance-size onsite. No trees are located within the off-site utility alignment areas. Replacement ratios should be followed as listed in Table 2 below.

Mitigation. Should protected trees be found to occur onsite, compensatory mitigation for loss of trees of the site is described in the Mitigation Measures below. Successful completion of these measures, where they ultimately apply to the project design, will reduce impacts to trees to a less-than-significant level.

Mitigation Measure 3.3.11a. Minimization measures should be implemented to the maximum extent practicable to avoid impacts to trees. While it is currently unknown if trees of the site are planned for retention, if any trees are retained during the construction and operation phases of the project, including trees immediately adjacent to the project boundary but with canopy coverage onto the site, such trees should be protected from impacts by conforming to the following guidelines:

- An arborist should be consulted prior to any ground disturbance activities. The consulting arborist should develop a tree-protection plan outlining specific procedures to ensure that retained trees are protected during the construction phase.
- Prior to any ground disturbance activities, fencing should be installed at the drip-line of all retained trees occurring near the project development envelope. The fencing should remain in place throughout the construction phase of the project. The type of fencing and exact alignment to be utilized would be determined by the consulting arborist.
- Any limb or root pruning to be conducted on retained trees should be approved and supervised by the consulting arborist and should follow best management practices developed by the International Society of Arboriculture.
- Supplemental irrigation to retained trees should be applied as determined by the consulting arborist.
- If any of the retained trees should be damaged during the construction phase, they would need to be evaluated at the earliest possible time by the consulting arborist so that appropriate measures can be taken. Such measures could include monitoring of the tree to ensure the tree is not mortally wounded and/or replacement.

All mitigations for trees are subject to agreement with the Director of the Department of Planning, Building and Code Enforcement.

Mitigation Measure 3.3.11b. Tree removal as a result of the project will require mitigation at replacement-to-removal ratios set-forth by the City of San Jose and described more fully in Table 2. Mitigation trees should be ecologically equivalent species where native trees are impacted (e.g., Mexican elderberry, coast live oak, valley oak, blue oak, toyon, and buckeye). For non-native trees, native replacement trees are recommended, but at a minimum they should be species that are not considered to be invasive by the California Invasive Plant Council (Cal-IPC) and species that are generally drought tolerant and suited to the planting location. Street trees required for project planning do not count toward this tree mitigation. The exact number and species of trees to be utilized for the mitigation will be determined based on consultation with the City Arborist and with the Director of the Department of Planning, Building and Code Enforcement.

If it is determined that the site lacks sufficient areas to accommodate all of the replacement plantings, one or more of the following measures will be implemented:

- Replacement tree plantings may be accommodated at an alternative site(s). An alternative site may include local parks or schools, or an adjacent property where such plantings may be utilized for screening purposes. However, any alternatively proposed site will be pursuant to agreement with the Director of the Department of Planning, Building and Code Enforcement.
- A donation may be made to an appropriate program that focuses on preservation of the City of San Jose’s urban forest. Such donation will be equal to the cost of the required replacement trees, including associated installation costs, for off-site tree planting in the local community. A receipt for any such donation will be provided to the City of San Jose Planning Project Manager prior to the removal of the trees.

TABLE 2. TREE REPLACEMENT-TO-REMOVAL RATIOS (CITY OF SAN JOSE 2006).				
Diameter of Tree to be Removed	Native	Non-native	Orchard	Minimum Size of Replacement Trees
≥ 18”	5:1	4:1	3:1	24” box
≥ 12” but < 18”	3:1	2:1	none	24” box
< 12”	1:1	1:1	none	15-gallon container
x:x = tree replacement to tree loss ratio				
Note: Trees greater than 18” diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.				

Mitigation Measure 3.3.11c. Upon completion of avoidance measures (Mitigation Measure 3.3.11a) where trees are planned for retention; completion of any mitigation planting and/or donation in lieu of replacement (Mitigation Measure 3.3.11b), a final report should be prepared and submitted to the Environmental Principal Planner documenting satisfactory completion of required mitigation measures. The report should, at a minimum, state:

- The number of trees that were impacted during buildout (if possible, cross-referenced with the project tree report);
- If tree protection standards achieved the desired result for retained trees;

- If any retained trees were impacted during buildout and whether any long-term monitoring of retained and impacted trees is being conducted by the project arborist;
- How many mitigation trees were planted and where, and/or if and what money was donated and to which City Planning approved organization, including a receipt and contact information.

3.3.12 Conflict with Local Policies and Ordinances: San Jose 2040 General Plan

The Envision San Jose 2040 General Plan includes policies adopted by the City of San Jose that aim to protect biological resources during implementation of new projects. Failure to comply with the General Plan policies (Section 3.2.7) could constitute a significant impact under CEQA. However, the proposed project would ensure compliance with the General Plan which would ensure there is no project conflict with the General Plan.

Mitigation. No mitigation is warranted.

3.3.13 Conflict with Local Policies and Ordinances: Santa Clara Valley Habitat Conservation Plan

Proposed development on the approximately 66.5-acre project site and the associated off-site utility alignments would be considered a covered project under the SCVHP and, as such, would be subject to conditions and fees of the SCVHP. Failure to comply with the SCVHP would constitute a significant impact under CEQA.

Compliance with the SCVHP includes payment of fees according to the “Fee Zone” designation of the property, payment of nitrogen deposition fees related to the number of residential units and/or anticipated car trips (for non-residential projects) resulting from the development, and any surcharge fees that are required based on site-specific impacts to sensitive habitats or sensitive species (e.g. serpentine habitat, western burrowing owl habitat, aquatic habitats, etc.). The onsite portion of the proposed project would be subject to Zone B fees, which are currently \$13,283 per acre (2016 rates), and nitrogen deposition fees associated with the 16 residential units (\$4.47 for each new vehicle trip). The utility alignment is mainly in the Zone A fee zone, which is currently \$19,159 per acre (2016 rates). Specialty fees that may apply include seasonal wetland (\$407,119 per acre). In addition, the site is within the burrowing owl fee zone (\$54,781 per acre). The utility alignments are expected to consist mostly of temporary impacts, for which all the same fees are

applied, but at a fraction of the total cost depending on how long the project expects the temporary impact to last.

In addition to fees, the project would be required to comply with applicable conditions of the SCVHP. Conditions of the SCVHP, summarized above (Section 3.2.8.2), that would apply to the project include Conditions 1, 3, 4, 5, 11, 12, 15, and 17 (Table 3).

TABLE 3. Applicable Santa Clara Valley Habitat Plan (SCVHP) conditions of the proposed 237 Industrial (Cilker) Project, located in the City of San Jose, California.

Condition (page references ICF International 2012)	Applicable to project	Comments/Requirements
Condition 1 (page 6-7). Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	Applies	This condition requires actions conducted under the SCVHP to comply with existing laws protecting plant and wildlife species including those species not covered as part of the SCVHP. This requires compliance with Migratory Bird Treaty Act, which prohibits killing or possessing covered migratory birds, their young, nests, feathers, or eggs. Several species of nesting bird that could use the project site are protected by the MBTA. Project mitigations for pre-construction surveys for migratory birds, including for burrowing owls, ensures compliance with this condition.
Condition 2 (page 6-9). Incorporate Urban-Reserve System Interface Design Requirements	N/A	The project is not interfacing with the reserve system.
Condition 3 (page 6-12). Maintain Hydrologic Conditions and Protect Water Quality	Applies	This condition requires all projects to incorporate appropriate measures itemized in the SCVHP’s Table 6-2 (refer to ICF International 2012; Appendix B) to minimize indirect and direct effects to covered species and their aquatic habitat. This condition also requires the local jurisdiction (i.e. the City of San Jose) to verify that all appropriate measures from Table 6-2 are implemented. Measures from Table 6-2 should be incorporated into project engineering and SWPPP plans.
Condition 4 (page 6-14). Avoidance and Minimization for In-Stream Projects	Applies	The outfall is the only feature of the project site that this condition applies to, as the outfall is planned to go into Coyote Creek. This condition provides avoidance and minimization measures for projects that may impact streams, as described in the separate H.T. Harvey & Associates biology report for the outfall.
Condition 5 (page 6-18). Avoidance and Minimization Measures for In-Stream Operations and Maintenance	Applies	The outfall is the only feature of the project site that this condition applies to, as the outfall is planned to go into Coyote Creek. This condition provides avoidance and minimization measures for projects that may impact streams as described in the separate H.T. Harvey & Associates biology report for the outfall.
Condition 6 (Page 6-21). Design and Construction Requirements for Covered Transportation Projects	N/A	Project is within the planning limit of urban growth and is not a rural project.
Condition 7 (page 6-28). Rural Development Design and Construction Requirements	N/A	Not a rural development project.
Condition 8 (page 6-35). Implement Avoidance and Minimization Measures for Rural Road Maintenance	N/A	No rural road maintenance.

TABLE 3. Applicable Santa Clara Valley Habitat Plan (SCVHP) conditions of the proposed 237 Industrial (Cilker) Project, located in the City of San Jose, California.

Condition (page references ICF International 2012)	Applicable to project	Comments/Requirements
Condition 9 (page 6-37). Prepare and Implement a Recreation Plan	N/A	Project is not part of the Reserve System.
Condition 10 (page 6-42). Fuel Buffer	N/A	A fuel buffer is not required for this project.
Condition 11 (page 6-44). Stream and Riparian Setbacks	Applies	The outfall is the only feature of the project site that will be within the stream setback as described in the separate H.T. Harvey & Associates biology report for the outfall. The remainder of the project will observe appropriate setback buffers.
Condition 12 (page 6-56). Wetland and Pond Avoidance and Minimization	Applies	The outfall is the only feature of the project site that will be within the stream setback as described in the separate H.T. Harvey & Associates biology report for the outfall. The remainder of the project will observe appropriate setback buffers. A small wetland exists in the southwestern corner of the agricultural field of the site, should this wetland be impacted, appropriate permits from the USACE and RWQCB would be applied for. Should the wetland be avoided, avoidance and minimization measures in Condition 12 would be observed.
Condition 13 (page 6-58). Serpentine and Associated Covered Species Avoidance and Minimization	N/A	Serpentine habitat and species are absent.
Condition 14 (page 6-60). Valley Oak and Blue Oak Woodland Avoidance and Minimization	N/A	Valley and blue oak woodlands are absent.
Condition 15 (page 6-62). Western Burrowing Owl	Applies	The entire site is within the burrowing owl fee zone, and therefore, Condition 15 applies to this project, including preconstruction surveys and avoidance measures for owls and nests, and requirements for construction monitoring. Measure 3.3.6 (above) defines the required actions for compliance with this condition.
Condition 16 (page 6-68). Least Bell's Vireo	N/A	Project does not occur within the Pajaro Watershed—the only watershed currently associated with this species in the SCVHP coverage area.
Condition 17 (page 6-69). Tricolored Blackbird	Applies	The project occurs within 250 feet of area mapped in the SCVHP as tricolored blackbird habitat. And the outfall work is within the mapped habitat. Mitigation Measure 3.3.5 (above) defines the required actions for compliance with this condition.
Condition 18 (page 6-71). San Joaquin Kit Fox	N/A	Project outside of modeled habitat for the San Joaquin kit fox.

TABLE 3. Applicable Santa Clara Valley Habitat Plan (SCVHP) conditions of the proposed 237 Industrial (Cilker) Project, located in the City of San Jose, California.

Condition (page references ICF International 2012)	Applicable to project	Comments/Requirements
Condition 19 (page 6-74). Plant Salvage when Impacts are Unavoidable	N/A	Covered plants are absent.
Condition 20 (page 6-76). Avoid and Minimize Impacts to Covered Plant Occurrences	N/A	Covered plants are absent.

Implementation of the measures listed and described above, including payment of Land Zone A, Land Zone B, the burrowing owl fee, wetland mitigation fees, and nitrogen deposition fees and compliance with Conditions 1, 3, 4, 5, 11, 12, 15, and 17, the project would be in compliance with the SCVHP. The project would follow the required measures of the SCVHP; therefore, the project would not conflict with this local policy. To ensure compliance, it is recommended that the project proponent thoroughly review the identified sections of the SCVHP, including Table 6-2, which is attached below as Appendix B.

Mitigation. No mitigation is warranted.

4 LITERATURE CITED

- Beier, P 1996 Dispersal of juvenile cougars in fragmented habitat. [Abstract]. Fifth Mountain Lion Workshop. Organized by the California Department of Fish and Game and the Southern California Chapter of the Wildlife Society, San Diego, California, February 27 - March 1, 1996.
- Beier, P. and S. Loe. 1992. A Checklist for Evaluating Impacts to Wildlife Movement Corridors. *Wildlife Society Bulletin* 20(4):434-440.
- Beier, P. and R.F. Noss. 1998. Do Habitat Corridors Provide Connectivity? *Conservation Biology* 12(6):1241-1252. December.
- California Department of Fish and Wildlife. 2016. Annual Report on the Status of California State Listed Threatened and Endangered Animals and Plants. The Resources Agency, Sacramento, CA.
- California Department of Fish and Game. 2002. California Fish and Game code. Gould Publications. Binghamton, N.Y.
- California Department of Fish and Wildlife. 2016. California Natural Diversity Database, Rarefind5. The Resources Agency, Sacramento, CA.
- California Native Plant Society (CNPS). 2016. Inventory of Rare and Endangered Plants (online edition, v6-05c). California Native Plant Society. Sacramento, CA. Accessed on Jul. 18:46:10, 2016 from <http://www.cnps.org/inventory>.
- City of San Jose. 1999. Riparian Corridor Policy Study. Prepared by: The Habitat Restoration Group and Jones and Stokes Associates, Inc. San Jose, California.
- City of San Jose. 2011. Envision San Jose 2040 General Plan. Prepared by the City of San Jose. Approved November 1, 2011. Retrieved from www.sanjoseca.gov/index.aspx?nid=1737 on August 19, 2014.
- Harris, L.D., Gallagher, P.B., 1989. New initiatives for wildlife conservation: the need for movement corridors. In: Mackintosh, G. (Ed.), *Preserving Communities and Corridors*. Defenders of Wildlife, Washington DC, pp. 11–34.
- Holland, R.F. 1986. Preliminary Description of the Terrestrial Natural Communities of California. Resources Agency, Sacramento, CA. 156 pp.
- ICF International. 2012. Final Santa Clara Valley Habitat Plan.
- Mayer, K. E., and W. F. Laudenslayer, Jr. Ed. 1988. A guide to wildlife habitats of California. California Department of Forestry and Fire Protection. Sacramento, CA. 166 pp.
- Natural Resources Conservation Service. 2016. Santa Clara County, California. USDA. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

Remy, M. H., T. A. Thomas, J. G. Moose, and W. F. Manley. 1996. Guide to the California Environmental Quality Act.

USACE. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army.

U.S. Fish and Wildlife Service. 2016. Endangered and threatened wildlife and plants.

Wetland Training Institute, Inc. 1990. Federal Wetland Regulation Reference Manual. B.N. Goode and R.J. Pierce (eds.) WTI 90-1. 281pp.

Zeiner, D. C., W. F. Laudenslayer, K. E. Mayer, and M. White. (eds). 1988. California's Wildlife, Volume I, Amphibians and Reptiles. Department of Fish and Game. Sacramento, CA. 272 pp.

Zeiner, D. C., W. F. Laudenslayer, K. E. Mayer, and M. White. (eds). 1988. California's Wildlife, Volume II, Birds. Department of Fish and Game. Sacramento, CA. 731 pp.

Zeiner, D. C., W. F. Laudenslayer, K. E. Mayer, and M. White. (eds). 1988. California's Wildlife, Volume III, Mammals. Department of Fish and Game. Sacramento, CA. 407 pp.

APPENDIX A: VASCULAR PLANTS OF THE STUDY AREA

The plant species listed below have been observed on the Cilker Property study area during the surveys conducted by Live Oak Associates on June 20 and October 18, 2016. All plants have been named according to *The Jepson Manual Second Edition* (Baldwin et. al. 2012). The U.S. Fish and Wildlife Service indicator status of each plant has been shown following its common name.

OBL - Obligate
 FACW - Facultative Wetland
 FAC - Facultative
 FACU - Facultative Upland
 UPL - Upland
 +/- - Higher/lower end of category
 NR - No review
 NA - No agreement
 NI - No investigation

ADOXACEAE – ELDERBERRY FAMILY

Sambucus nigra ssp. *Caerulea* Blue Elderberry FAC

ANACARDIACEAE – SUMAC FAMILY

Schinus molle Peruvian Pepper Tree UPL

APIACEAE – CARROT FAMILY

Conium maculatum Poison Hemlock FACW

APOCYNACEAE – DOGBANE FAMILY

Nerium oleander Oleander UPL

ARECACEAE – PALM FAMILY

Pheonix sp. Palm UPL

Washingtonia robusta Fan Palm UPL

ASTERACEAE - SUNFLOWER FAMILY

Artemisia douglasiana Mugwort FACW

Baccharis pilularis Coyote Brush UPL

Carduus pycnocephalus Italian Thistle UPL

Centaurea calcitrapa Purple Star-thistle UPL

Centaurea solstitialis Yellow Star-thistle UPL

Chamomilla suaveolens Pineapple Weed FACU

Cirsium vulgare Bull Thistle FACU

Cirsium sp. Thistle -

Conyza canadensis Canadian Horseweed FAC

Dittrichia graveolens Stinkwort UPL

Helminthotheca echioides Bristly Ox Tongue FAC*

Hypochaeris glabra Smooth Cat's Ear UPL

<i>Hypochaeris radicata</i>	Rough Cat's Ear	UPL
<i>Lactuca saligna</i>	Willow Lettuce	NI
<i>Lactuca serriola</i>	Prickly Lettuce	FAC
<i>Silybum marianum</i>	Milk Thistle	UPL
<i>Sonchus asper</i>	Prickly Sow-thistle	FAC
<i>Sonchus oleraceus</i>	Common Sow-thistle	NI
<i>Tragopogon sp.</i>	Tragopogon	UPL
BIGNONIACEAE – CATALPA FAMILY		
<i>Jacaranda mimosifolia</i>	Black poul/Jacaranda	UPL
BRASSICACEAE – MUSTARD FAMILY		
<i>Brassica nigra</i>	Black Mustard	UPL
<i>Lepidium latifolium</i>	Broad-leaved Peppergrass	FACW
<i>Lepidium nitidum</i>	Common Peppergrass	FACW
<i>Raphanus sativus</i>	Wild Radish	UPL
CARYOPHYLLACEAE – PINK FAMILY		
<i>Stellaria media</i>	Common Chickweed	FACU
CHENOPODIACEAE – GOOSEFOOT FAMILY		
<i>Chenopodium album</i>	Goosefoot	UPL
<i>Salsola tragus</i>	Russian-thistle	FACU
CONVOLVULACEAE – MORNING GLORY FAMILY		
<i>Convolvulus arvensis</i>	Field Bindweed	UPL
<i>Cressa truxillensis</i>	Alkali Weed	FACW
DIPSACACEAE – TEASEL FAMILY		
<i>Dipsacus sp.</i>	Teasel	FAC
FABACEAE – LEGUME FAMILY		
<i>Lotus corniculatus</i>	Bird's Foot Trefoil	FAC
<i>Medicago polymorpha</i>	Bur Clover	FACU-
FAGACEAE – OAK FAMILY		
<i>Quercus agrifolia</i>	Coast Live Oak	UPL
GERANIACEAE – GERANIUM FAMILY		
<i>Erodium botrys</i>	Long-beaked Filaree	UPL
<i>Erodium cicutarium</i>	Redstem Filaree	UPL
JUGLANDACEAE – WALNUT FAMILY		
<i>Juglans hindsii</i>	Northern California black walnut	FAC

MALVACEAE – MALLOW FAMILY

<i>Malva neglecta</i>	Common Mallow, Cheeses	UPL
<i>Malvella leprosa</i>	Alkali Mallow	FAC

MYRTACEAE – MYRTLE FAMILY

<i>Callistemon citrinus</i>	Crimson Bottlebrush	UPL
<i>Eucalyptus sp.</i>	Gum	UPL

OLEACEAE – OLIVE FAMILY

<i>Olea europaea</i>	Olive	UPL
<i>Ligustrum sp.</i>	Privet	UPL/FAC

ONAGRACEAE – EVENING PRIMROSE FAMILY

<i>Epilobium brachycarpum</i>	Willow Herb	UPL
<i>Epilobium ciliatum</i>	California Willowherb	FACW

PLANTAGINACEAE – PLANTAGO FAMILY

<i>Plantago lanceolata</i>	English Plantain	FAC
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POACEAE - GRASS FAMILY

<i>Agrostis viridis</i>	Water Bent Grass	OBL
<i>Avena sp.</i>	Wild Oats	UPL
<i>Bromus diandrus</i>	Ripgut	UPL
<i>Bromus hordeaceus</i>	Soft Chess	FACU
<i>Cynodon dactylon</i>	Bermuda Grass	FACU
<i>Festuca perennis</i>	Perennial Wildrye	FAC
<i>Hordeum murinum ssp. leporinum</i>	Barnyard Barley	NI
<i>Phalaris aquatica</i>	Harding Grass	FAC+

POLYGONACEAE - BUCKWHEAT FAMILY

<i>Polygonum aviculare</i>	Yard Knotweed	FAC
<i>Rumex crispus</i>	Curly Dock	FACW

PINACEAE – PINE FAMILY

<i>Pinus radiata</i>	Monterey Pine	UPL
<i>Pinus sp.</i>	Pine	UPL

PRIMULACEAE – PRIMROSE FAMILY

<i>Anagallis arvensis</i>	Scarlet Pimpernel	FAC
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ROSACEAE – ROSE FAMILY

<i>Rubus ursinus</i>	California Blackberry	FACW
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SALICACEAE – WILLOW FAMILY

<i>Salix lasiolepis</i>	Arroyo Willow	FACW
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SAPINDACEAE – SOAPBERRY

<i>Acer negundo</i>	Box Elder	FACW
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TAXODIACEAE – BALD CYPRESS FAMILY

Sequoia sempervirens

Coast Redwood

UPL

ULMACEAE – ELM FAMILY

Ulmus Americana

American Elm

URTICACEAE – NETTLE FAMILY

Urtica dioica ssp. *holosericea*

Stinging Nettle

FACW

APPENDIX B: SCVHP Table 6-2

Table 6-2. Aquatic Avoidance and Minimization Measures

ID	Avoidance and Minimization Measure
	General
1	Minimize the potential impacts on covered species most likely to be affected by changes in hydrology and water quality.
2	Reduce stream pollution by removing pollutants from surface runoff before the polluted surface runoff reaches local streams.
3	Maintain the current hydrograph and, to the extent possible, restore the hydrograph to more closely resemble predevelopment conditions.
4	Reduce the potential for scour at stormwater outlets to streams by controlling the rate of flow into the streams.
5	Invasive plant species removed during maintenance will be handled and disposed of in such a manner as to prevent further spread of the invasive species.
6	Activities in the active (i.e., flowing) channel will be avoided. If activities must be conducted in the active channel, avoidance and minimization measures identified in this table will be applied.
7	Personnel shall prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water into channels.
8	Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations).
9	Personnel shall implement measures to ensure that hazardous materials are properly handled and the quality of water resources is protected by all reasonable means when removing sediments from the streams.
10	<p>If ground disturbing activities are planned for a stream channel that is known or suspected to contain elevated levels of mercury, the following steps should be taken.</p> <ol style="list-style-type: none"> 1. Avoid disturbing soils in streams known or suspected to contain high levels of mercury. 2. Soils that are likely to be disturbed or excavated shall be tested for mercury. Soils shall be remediated if: <ol style="list-style-type: none"> a. disturbed or excavated soils exposed to flood flows below the 2.33-year channel flow level exceed 1 ppm Hg, or b. disturbed or excavated soils above the 2.33-year flow level exceed 20 ppm Hg.
11	Vehicles shall be washed only at approved areas. No washing of vehicles shall occur at job sites.
12	No equipment servicing shall be done in the stream channel or immediate flood plain, unless equipment stationed in these locations cannot be readily relocated (i.e., pumps, generators).
13	Personnel shall use the appropriate equipment for the job that minimizes disturbance to the stream bottom. Appropriately-tired vehicles, either tracked or wheeled, shall be used depending on the situation
14	If high levels of groundwater in a work area are encountered, the water is pumped out of the work site. If necessary to protect water quality, the water shall be directed into specifically constructed infiltration basins, into holding ponds, or onto areas with vegetation to remove sediment prior to the water re-entering a creek.

ID	Avoidance and Minimization Measure
15	<p>If native fish or non-covered, native aquatic vertebrates are present when cofferdams, water bypass structures, and silt barriers are to be installed, a native fish and aquatic vertebrate relocation plan shall be implemented when ecologically appropriate as determined by a qualified biologist to ensure that significant numbers of native fish and aquatic vertebrates are not stranded.</p> <p>Prior to the start of work or during the installation of water diversion structures, native aquatic vertebrates shall be captured in the work area and transferred to another reach as determined by a qualified biologist. Timing of work in streams that supports a significant number of amphibians will be delayed until metamorphosis occurs to minimize impacts to the resource. Capture and relocation of aquatic native vertebrates is not required at individual project sites when site conditions preclude reasonably effective operation of capture gear and equipment, or when the safety of biologist conducting the capture may be compromised.</p> <p>Relocation of native fish or aquatic vertebrates may not always be ecologically appropriate. Prior to capturing native fish and/or vertebrates, the qualified biologist will use a number of factors, including site conditions, system carrying capacity for potential relocated fish, and flow regimes (e.g., if flows are managed) to determine whether a relocation effort is ecologically appropriate. If so, the following factors will be considered when selecting release site(s):</p> <ol style="list-style-type: none"> 1. similar water temperature as capture location; 2. ample habitat availability prior to release of captured individuals; 3. presence of other same species so that relocation of new individuals will not upset the existing prey/predation function; 4. carrying capacity of the relocation location; 5. potential for relocated individual to transport disease; and 6. low likelihood of fish reentering work site or becoming impinged on exclusion net or screen. <p>Proposals to translocate any covered species will be reviewed and approved by the Wildlife Agencies.</p>
16	<p>When work in a flowing stream is unavoidable, the entire streamflow shall be diverted around the work area by a barrier, except where it has been determined by a qualified biologist that the least environmentally disruptive approach is to work in a flowing stream. Where feasible, water diversion techniques shall allow stream flows to gravity flow around or through the work site.</p>
17	<p>Coffer dams shall be installed both upstream and downstream not more than 100 feet from the extent of the work areas. Coffer dam construction shall be adequate to prevent seepage into or from the work area. Stream flow will be pumped around the work site using pumps and screened intake hoses. All water shall be discharged in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic, on concrete, or in storm drains when equipped with filtering devices, etc.).</p>
18	<p>Small in-channel berms that deflect water to one side of the channel during project implementation may be constructed of channel material in channels with low flows.</p>
19	<p>Sumps or basins may also be used to collect water, where appropriate (e.g., in channels with low flows).</p>
20	<p>Diversions shall maintain ambient stream flows below the diversion, and waters discharged below the project site shall not be diminished or degraded by the diversion. All materials placed in the channel to dewater the channel shall be removed when the work is completed. Normal flows shall be restored to the affected stream as soon as is feasible and safe after completion of work at that location.</p>
21	<p>To the extent that stream bed design changes are not part of the project, the stream bed will be returned to as close to pre-project condition as appropriate.</p>
22	<p>To the extent feasible, all temporary diversion structures and the supportive material shall be removed no more than 48 hours after work is completed.</p>
23	<p>Temporary fills, such as for access ramps, diversion structures, or cofferdams, shall be completely removed upon finishing the work.</p>
24	<p>To prevent increases in temperature and decreases in dissolved oxygen (DO), if bypass pipes are used, they shall be properly sized (i.e., larger diameter pipes to better pass the flows). Use of bypass pipes may be avoided by creating a low-flow channel or using other methods to isolate the work area.</p>

ID	Avoidance and Minimization Measure
25	Diversions shall maintain fish passage when the project meets the following conditions: 1) the length of the area dewatered exceeds 500 feet, and/or 2) the length of time the stream is dewatered exceeds two weeks in length. Conditions for fish passage shall be met as long as the diversion 1) maintains contiguous flows through a low flow channel in the channel bed or an artificial open channel, 2) presents no vertical drops exceeding six (6) inches and follows the natural grade of the site, 3) maintains water velocities that shall not exceed eight feet per second (8 ft/sec), and 4) maintains adequate water depths consistent with normal conditions in the project reach. An artificial channel used for fish passage shall be lined with cobble/gravel. A closed conduit pipe shall not be used for fish passage. The inlets of diversions shall be checked daily to prevent accumulation of debris.
26	Any sediment removed from a project site shall be stored and transported in a manner that minimizes water quality impacts.
27	Sediment from the San Francisco Bay Watershed, including that for reuse, will not be removed to areas any farther south than Metcalf Road in south San Jose.
28	Where practical, the removed sediments and gravels will be re-used.
29	Existing native vegetation shall be retained by removing only as much vegetation as necessary to accommodate the trail clearing width. Maintenance roads should be used to avoid effects on riparian corridors.
30	Vegetation control and removal in channels, on stream banks, and along levees and maintenance roads shall be limited to removal necessary for facility inspection purposes, or to meet regulatory requirements or guidelines.
31	When conducting vegetation management, retain as much understory brush and as many trees as feasible, emphasizing shade producing and bank stabilizing vegetation. If riparian vegetation is to be removed with chainsaws, consider using saws currently available that operate with vegetable-based bar oil.
32	In-channel vegetation removal may result in increased local erosion due to increased flow velocity. To minimize the effect, the top of the bank shall be protected by leaving vegetation in place to the maximum extent possible.
33	Regional Board objectives for temperature change in receiving waters (measured 100 feet downstream of discharge point) shall not be exceeded. Receiving water and discharge water may be monitored for temperature changes after a comparison of ambient temperature to pipeline water temperature suggests the potential for change.
Project Design	
34	Use the minimum amount of impermeable surface (building footprint, paved driveway, etc.) as practicable.
35	Use pervious materials, such as gravel or turf pavers, in place of asphalt or concrete to the extent practicable.
36	Use flow control structures such as swales, retention/detention areas, and/or cisterns to maintain the existing (pre-project) peak runoff.
37	Direct downspouts to swales or gardens instead of storm drain inlets.
38	Use flow dissipaters at runoff inlets (e.g., culvert drop-inlets) to reduce the possibility of channel scour at the point of flow entry.
39	Minimize alterations to existing contours and slopes, including grading the minimum area necessary.
40	Maintain native shrubs, trees and groundcover whenever possible and revegetate disturbed areas with local native or non-invasive plants.
41	Combine flow-control with flood control and/or treatment facilities in the form of detention/retention basins, ponds, and/or constructed wetlands.
42	Use flow control structures, permeable pavement, cisterns, and other runoff management methods to ensure no change in post-construction peak runoff volume from pre-project conditions for all covered activities with more than 5,000 square feet of impervious surface.
43	Site characteristics will be evaluated in advance of project design to determine if non-traditional designs, such as bioengineered bank treatments that incorporate live vegetation, can be successfully utilized while meeting the requirements of the project.
44	Maintenance of natural stream characteristics, such as riffle-pool sequences, riparian canopy, sinuosity, floodplain, and a natural channel bed, will be incorporated into the project design.

ID	Avoidance and Minimization Measure
45	Stream crossings shall incorporate a free-span bridge unless infeasible due to engineering or cost constraints or unsuitable based on minimal size of stream (swale without bed and banks or a very small channel). If a bridge design cannot free-span a stream, bridge piers and footings will be designed to have minimum impact on the stream. A hydraulics analysis must be prepared and reviewed by the jurisdictional partner, including SCVWD as appropriate, demonstrating that piers or footings will not cause significant scour or channel erosion. Whenever possible, the span of bridges will also allow for upland habitat beneath the bridge to provide undercrossing areas for wildlife species that will not enter the creek. Native plantings, natural debris, or scattered rocks will be installed under bridges to provide wildlife cover and encourage the use of crossings.
46	Whenever possible, the span of bridges will also allow for upland habitat beneath the bridge to provide undercrossing areas for wildlife species that will not enter the creek.
47	If a culvert is used, up- and downstream ends of the culvert must be appropriately designed so that the stream cannot flow beneath the culvert or create a plunge pool at the downstream end. Preference will be given to designs that allow a natural bottom (arch culvert) and/or which do not alter natural grade.
48	Trails will be sited and designed with the smallest footprint necessary to cross through the in-stream area. Trails will be aligned perpendicular to the channel and be designed to avoid any potential for future erosion. New trails that follow stream courses will be sited outside the riparian corridor.
49	The project or activity must be designed to avoid the removal of riparian vegetation, if feasible. If the removal of riparian vegetation is necessary, the amount shall be minimized to the amount necessary to accomplish the required activity and comply with public health and safety directives.
50	If levee reconstruction requires the removal of vegetation that provides habitat value to the adjacent stream (e.g., shading, bank stabilization, food sources, etc.), then the project will include replacement of the vegetation/habitat that was removed during reconstruction unless it is determined to be inappropriate to do so by the relevant resource agencies (e.g., CDFG and USFWS).
51	All projects will be conducted in conformance with applicable County and/or city drainage policies.
52	Adhere to the siting criteria described for the borrow site covered activity (see Chapter 2 for details).
53	When possible, maintain a vegetated buffer strip between staging/excavation areas and receiving waters.
54	When not within the construction footprint, deep pools within stream reaches shall be maintained as refuge for fish and wildlife by constructing temporary fencing and/or barrier so as to avoid pool destruction and prevent access from the project site.
55	For stream maintenance projects that result in alteration of the stream bed during project implementation, its low flow channel shall be returned to its approximate prior location with appropriate depth for fish passage without creating a potential future bank erosion problem.
56	Increased water velocity at bank protection sites may increase erosion downstream. Therefore, bank stabilization site design shall consider hydraulic effects immediately upstream and downstream of the work area. Bank stabilization projects will be designed and implemented to provide similar roughness and characteristics that may affect flows as the surrounding areas just upstream and downstream of the project site.
57	When parallel to a stream or riparian zone and not located on top of a levee, new trails shall be located behind the top of bank or at the outside edge of the riparian zone except where topographic, resource management, or other constraints or management objectives make this not feasible or undesirable.
58	Existing access routes and levee roads shall be used if available to minimize impacts of new construction in special status species habitats and riparian zones.
59	Trails in areas of moderate or difficult terrain and adjacent to a riparian zone shall be composed of natural materials or shall be designed (e.g., a bridge or boardwalk) to minimize disturbance and need for drainage structures, and to protect water quality.
60	Trail crossings of freshwater stream zones and drainages shall be designed to minimize disturbance, through the use of bridges or culverts, whichever is least environmentally damaging. Structures over water courses shall be carefully placed to minimize disturbance. Erosion control measures shall be taken to prevent erosion at the outfalls of drainage structures.

ID	Avoidance and Minimization Measure
Construction	
61	Minimize ground disturbance to the smallest area feasible.
62	Use existing roads for access and disturbed area for staging as site constraints allow. Off-road travel will avoid sensitive communities such as wetlands and known occurrences of covered plants.
63	Prepare and implement sediment erosion control plans.
64	No winter grading unless approved by City Engineer and specific erosion control measures are incorporated.
65	Control exposed soil by stabilizing slopes (e.g., with erosion control blankets) and protecting channels (e.g., using silt fences or straw wattles).
66	Control sediment runoff using sandbag barriers or straw wattles.
67	No stockpiling or placement of erodible materials in waterways or along areas of natural stormwater flow where materials could be washed into waterways.
68	Stabilize stockpiled soil with geotextile or plastic covers.
69	Maintain construction activities within a defined project area to reduce the amount of disturbed area.
70	Only clear/prepare land which will be actively under construction in the near term.
71	Preserve existing vegetation to the extent possible.
72	Equipment storage, fueling and staging areas will be sited on disturbed areas or non-sensitive habitat outside of a stream channel.
73	Avoid wet season construction.
74	Stabilize site ingress/egress locations.
75	Dispose of all construction waste in designated areas and prevent stormwater from flowing onto or off of these areas.
76	Prevent spills and clean up spilled materials.
77	Sweep nearby streets at least once a day.
78	In-stream projects occurring while the stream is flowing must use appropriate measures to protect water quality, native fish and covered wildlife species at the project site and downstream of the project site.
79	If mercury contamination may be present, the channel must be dewatered prior to commencement of the activity.
80	All personnel working within or adjacent to the stream setback (i.e., those people operating ground-disturbing equipment) will be trained by a qualified biologist in these avoidance and minimization measures and the permit obligations of project proponents working under this Plan.
81	Temporary disturbance or removal of aquatic and riparian vegetation will not exceed the minimum necessary to complete the work.
82	Channel bed temporarily disturbed during construction activities will be returned to pre-project or ecologically improved conditions at the end of construction.
83	Sediments will be stored and transported in a manner that minimizes water quality impacts. If soil is stockpiled, no runoff will be allowed to flow back to the channel.
84	Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) will be used on site to reduce siltation and runoff of contaminants into wetlands, ponds, streams, or riparian vegetation. Fiber rolls used for erosion control will be certified as free of noxious weed seed. Filter fences and mesh will be of material that will not entrap reptiles and amphibians. Erosion control measures will be placed between the outer edge of the buffer and the project site.
85	Seed mixtures applied for erosion control will not contain invasive nonnative species and will be composed of native species or sterile nonnative species. If sterile nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives.
86	Topsoil removed during soil excavation will be preserved and used as topsoil during revegetation when it is necessary to conserve the natural seed bank and aid in revegetation of the site.
87	Vehicles operated within and adjacent to streams will be checked and maintained daily to prevent leaks of materials that, if introduced to the water, could be deleterious to aquatic life.

ID	Avoidance and Minimization Measure
88	Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas.
89	The potential for traffic impacts on terrestrial animal species will be minimized by adopting traffic speed limits.
90	All trash will be removed from the site daily to avoid attracting potential predators to the site. Personnel will clean the work site before leaving each day by removing all litter and construction-related materials.
91	To prevent the spread of exotic species and reduce the loss of native species, aquatic species will be netted at the drain outlet when draining reservoirs or ponds to surface waters. Captured native fish, native amphibians, and western pond turtles will be relocated if ecologically appropriate. Exotic species will be dispatched.
92	To minimize the spread of pathogens all staff working in aquatic systems (i.e., streams, ponds, and wetlands)—including site monitors, construction crews, and surveyors—will adhere to the most current guidance for equipment decontamination provided by the Wildlife Agencies at the time of activity implementation. Guidance may require that all materials that come in contact with water or potentially contaminated sediments, including boot and tire treads, be cleaned of all organic matter and scrubbed with an appropriate cleansing solution, and that disposable gloves be worn and changed between handling equipment or animals. Care should be taken so that all traces of the disinfectant are removed before entering the next aquatic habitat.
93	When accessing upland areas adjacent to riparian areas or streams, access routes on slopes of greater than 20% should generally be avoided. Subsequent to access, any sloped area should be examined for evidence of instability and either revegetated or filled as necessary to prevent future landslide or erosion.
94	Personnel shall use existing access ramps and roads if available. If temporary access points are necessary, they shall be constructed in a manner that minimizes impacts to streams.
95	To prevent inadvertent entrapment of animals during excavation, all excavated, steep-walled holes or trenches more than 2-feet deep will be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks.
96	Isolate the construction area from flowing water until project materials are installed and erosion protection is in place.
97	Erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales, silt fences, etc.) are in place downstream of project site.
98	When needed, utilize in-stream grade control structures to control channel scour, sediment routing, and headwall cutting.
Post-Construction	
99	Conduct street cleaning on a regular basis
100	Potential contaminating materials must be stored in covered storage areas or secondary containment that is impervious to leaks and spills
101	Runoff pathways shall be free of trash containers or trash storage areas. Trash storage areas shall be screened or walled
102	Immediately after project completion and before close of seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets .
103	All disturbed soils will be revegetated with native plants and/or grasses or sterile nonnative species suitable for the altered soil conditions upon completion of construction. Local watershed native plants will be used if available. If sterile nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives. All disturbed areas that have been compacted shall be de-compacted prior to planting or seeding. Cut-and-fill slopes will be planted with local native or non-invasive plants suitable for the altered soil conditions.
104	Measures will be utilized on site to prevent erosion along streams (e.g., from road cuts or other grading), including in streams that cross or are adjacent to the project proponent's property. Erosion control measures will utilize natural methods such as erosion control mats or fabric, contour wattling, brush mattresses, or brush layers. For more approaches and detail, please see the <i>Bank Protection/ Erosion Repair Design Guide</i> in the Santa Clara Valley Water Resources Protection Collaborative's <i>User Manual: Guidelines & Standards for Land Use Near Streams</i> (Santa Clara Valley Water Resources Protection Collaborative 2006).

ID	Avoidance and Minimization Measure
105	Vegetation and debris must be managed in and near culverts and under and near bridges to ensure that entryways remain open and visible to wildlife and that passage through the culvert or bridge remains clear.
106	Prior to undertaking stream maintenance activities, reach conditions will be assessed to identify tasks that are necessary to maintain the channel for the purpose for which it was designed and/or intended (e.g., flood control, groundwater recharge). Only in-stream work that is necessary to maintain the channel will be conducted.
107	On streams managed for flood control purposes, when stream reaches require extensive vegetation thinning or removal (e.g., when the channel has been fully occluded by willows or other vegetation), removal will be phased so that some riparian land cover remains and provides some habitat value. In addition, vegetation removal will be targeted and focused on removing the least amount of riparian vegetation as possible while still meeting the desired flood control needs. For example, vegetation removal should be focused on shrubby undergrowth at the toe-of-slope that is most likely to increase roughness and create a flooding hazard. Vegetation on the upper banks, particularly mature tree canopy, should be maintained to the extent possible to provide habitat for birds and small mammals and shading for the active channel.
108	When reaches require sediment removal, approaches will be considered that may reduce the impacts of the activity. Examples of potential approaches include phasing of removal activities or only removing sediment along one half of the channel bed, allowing the other half to remain relatively undisturbed.
109	In streams not managed for flood control purposes, woody material (including live leaning trees, dead trees, tree trunks, large limbs, and stumps) will be retained unless it is threatening a structure, impedes reasonable access, or is causing bank failure and sediment loading to the stream.
110	If debris blockages threaten bank stability and may increase sedimentation of downstream reaches, debris will be removed. When clearing natural debris blockages (e.g., branches, fallen trees, soil from landslides) from the channel, only remove the minimum amount of debris necessary to maintain flow conveyance (i.e., prevent significant backwatering or pooling). Non-natural debris (e.g., trash, shopping carts, etc.) will be fully removed from the channel.
111	If bank failure occurs due to debris blockages, bank repairs will only use compacted soil, and will be re-seeded with native grasses or sterile nonnative hybrids and stabilized with natural erosion control fabric. If sterile nonnative species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive nonnatives. If compacted soil is not sufficient to stabilize the slope, bioengineering techniques must be used. No hardscape (e.g., concrete or any sort of bare riprap) or rock gabions may be utilized in streams not managed for flood control except in cases where infrastructure or human safety is threatened (e.g., undercutting of existing roads). Rock riprap may only be used to stabilize channels experiencing extreme erosion, and boulders must be backfilled with soil and planted with willows or other native riparian species suitable for planting in such a manner. If available, local native species will be utilized as appropriate.
112	Pumps and generators shall be maintained and operated in a manner that minimizes impacts to water quality and aquatic species.
113	The channel bottom shall be re-graded at the end of the work project to as close to original conditions as possible.
114	Erosion control methods shall be used as appropriate during all phases of routine maintenance projects to control sediment and minimize water quality impacts.
115	All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods will be thoroughly inspected for wildlife by properly trained construction personnel before the pipe is subsequently buried, capped, or otherwise used or moved in anyway.