RETURN

EVERGREEN • EAST HILLS VISION STRATEGY

SAN JOSÉ, CALIFORNIA

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EIR

APPENDIX

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BIOLOGY REPORTS

BIOTIC ASSESSMENT
FOR
THE ARCADIA HOMES SITE

Prepared by

Live Oak Associates, Inc.

Rick A. Hopkins, Ph.D., Principal, Senior Biologist
Pamela Peterson, M.S. Candidate, Assistant Project Manager, Plant and Wetland Ecologist
Davinna Ohlson, M.S., Wildlife Biologist

Prepared for

John Hesler
David J. Powers and Associates
1885 The Alameda
San Jose, CA 95126

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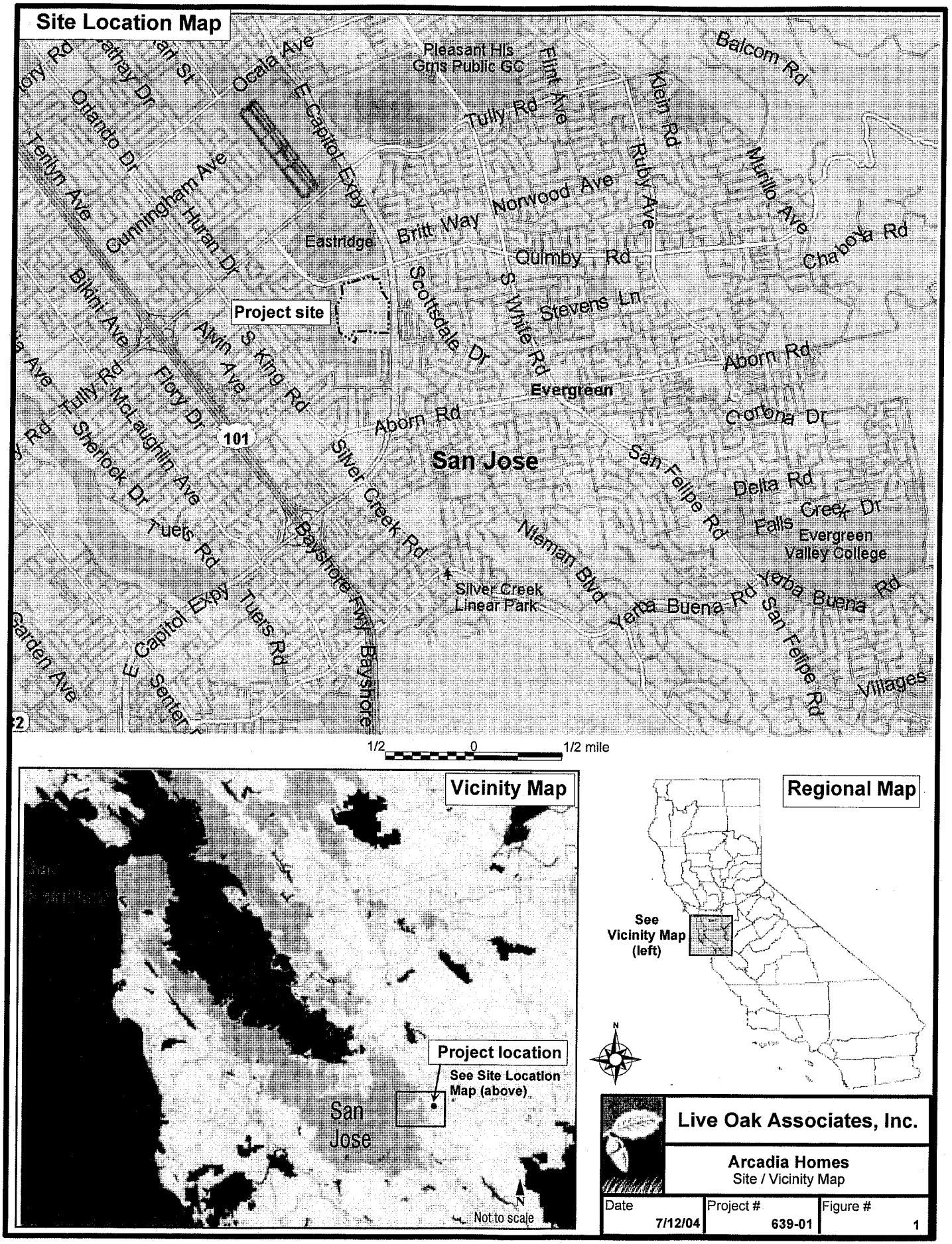
1.0 INTRODUCTION

The technical report that follows describes the biotic resources of an approximately 81-acre site in the City of San Jose in Santa Clara County, California, and evaluates possible constraints such resources may pose for eventual site development. This biotic assessment is being conducted in support of the Evergreen Smart Growth Plan EIR. The study area (hereafter referred to as "the site") is located just southwest of the intersection of Capitol Expressway and Quimby Road in the Evergreen area of east San Jose (Figure 1). Ruderal non-native grassland, coyote brush scrub and man-made seasonal wetland habitats occur on the site. The location of the site can be found on the San Jose East U.S.G.S. 7.5' quadrangles at Township 7 south, Range 1 east, SE corner of Section 13.

Site development of open space 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), covered by policies and ordinances of the City of San Jose, or some combination of these four conditions. This report addresses issues related to sensitive biotic resources occurring on the site, along with the federal, state, and local laws related to such resources and mitigation measures that may be required to reduce the magnitude of anticipated impacts. 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* (CDFG 2004) and (2) the *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001) and (3) manuals and references related to plants and animals of the Santa Clara Valley region. Reconnaissance level field surveys were conducted within the study area on June 22, 2004 by Pamela Peterson, biologist with Live Oak Associates, Inc., at which time the principal biotic habitats of the site were identified and the constituent plants and animals of each were noted. Additional surveys to assess potential impacts to burrowing owls occurring on the site were conducted by LOA biologists Pamela Peterson and Davinna Ohlson on June 29, July 9, and September 13, 2004. Additional burrowing owl surveys were conducted on the site by Davinna Ohlson on May 2-5, 2005, to assess any changes since the September 2004 survey.


Site Location Map
Pleasant Hls Grns Public GC
Balcom Rd
Flint Ave
Tully Rd
Klein Rd
Ruby Ave
Murillo Ave
Chaboya Rd
Norwood Ave
Britt Way
Eastridge
Quimby Rd
Project site
Scottsdale Dr
S White Rd
Stevens Ln
Aborn Rd
Evergreen
Cortona Dr
San Jose
San Felipe Rd
Delta Rd
Creek Dr
Falls
Evergreen Valley College
Yerba Buena Rd
Silver Creek Linear Park
Nieman Blvd
Silver Creek Rd
Baysnore Fwy
Tuers Rd
Capitol Expy
Senter
Garden Ave
Ocala Ave
E Capitol Expy
Ortando Dr
Tenlyn Ave
Cunningham Ave
Huran Dr
Bikini Ave
Alvin Ave
S King Rd
Flory Dr
Kelly Rd
Mcl-aughlin Ave
Sherlock Dr
101
1/2
0
1/2 mile
Vicinity Map
Project location
See Site Location Map (above)
San Jose
N
Not to scale
Regional Map
See Vicinity Map (left)
N
Live Oak Associates, Inc.
Arcadia Homes
Site / Vicinity Map
Date
7/12/04
Project #
639-01
Figure #
1

1.1 PROJECT DESCRIPTION

The proposed project would develop the 81-acre site with a mix of residential and commercial uses. It is also anticipated that some acreage would be designated for park/open space purposes, which could include a sports complex and a community center. The size and locations for these various uses on the site have not yet been determined. Therefore, for purposes of this Biotic Assessment, it is assumed that the entire site would be affected by the proposed project.

2.0 EXISTING CONDITIONS

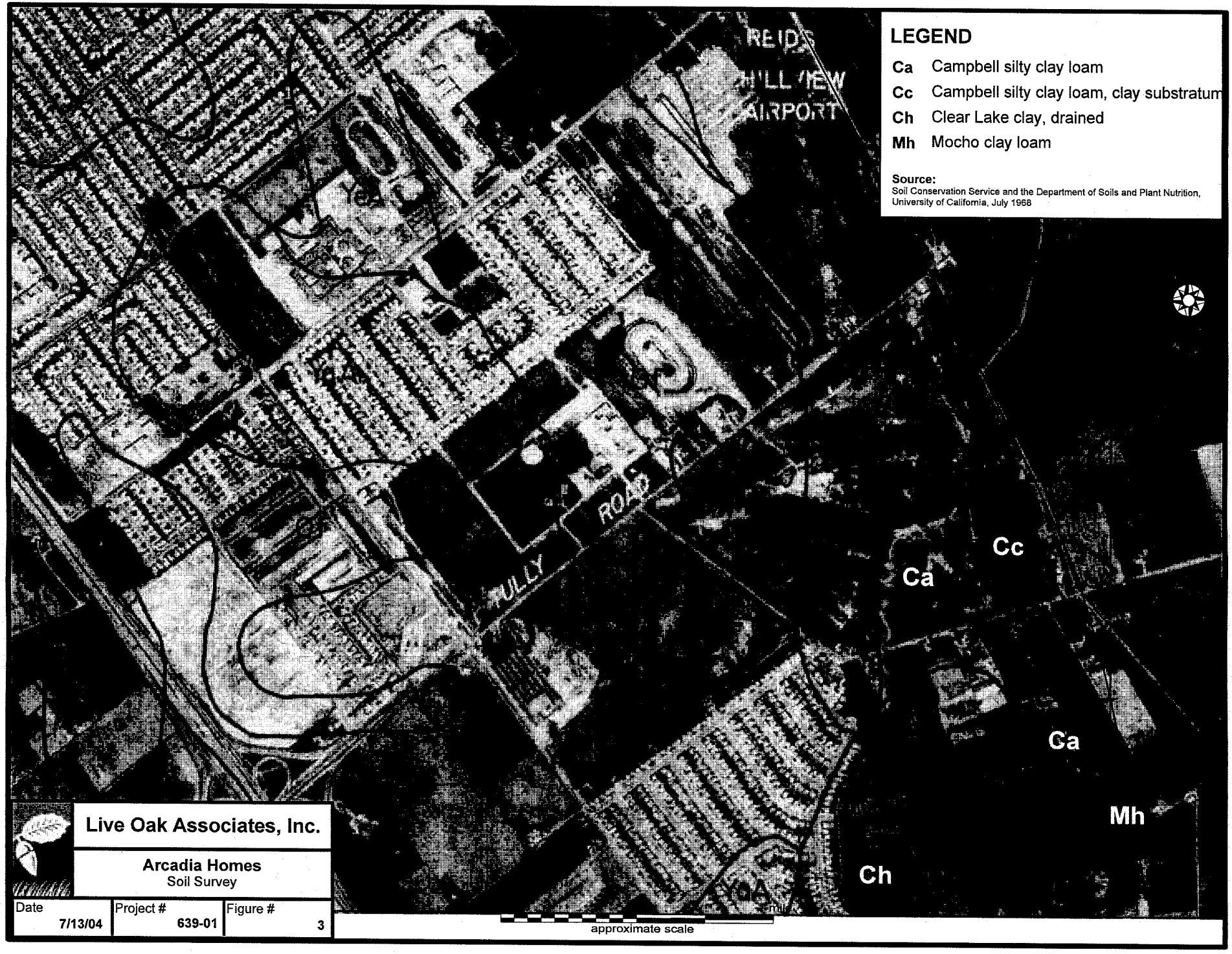
The approximately 81-acre study area is located in the City of San Jose in Santa Clara County. The site is bounded to the north by Quimby Road and commercial businesses (including the Eastridge Shopping Mall); to the east by Capitol Expressway; to the south by Moss Creek Mobile Home Park and Leyva Middle School; and to the west by single-family residential development. Existing development is currently absent from the study area. The site is topographically level at an elevation of approximately 125 feet National Geodetic Vertical Datum (NGVD). Habitats occurring on the study area include ruderal non-native grassland, coyote brush scrub, and seasonal wetland.

Four soil-mapping units have been identified on the site and these soils are described in greater detail in Table 1 and depicted in Figure 3. None of the soils occurring on the site are considered to be hydric, although hydric soil inclusions may occur. None of the soils are considered to be of a type, such as serpentine or alkaline soils, that are known to support certain populations of special status plant species.

Table 1. Descriptions of soil mapping units of the 81-acre study area (NRCS 1968).

Soil Mapping Unit	Drainage Class	Parent Material
Ca	Poorly Drained	Campbell Silty Clay Loam
Cc	Poorly Drained	Campbell Silty Clay Loam, Clay Substratum
Ch	Poorly Drained	Clear Lake Clay, Drained
Mh	Moderately Well Drained	Mocho Clay Loam

Annual precipitation in the general vicinity of the study area averages approximately 14 inches, almost 82% of which falls between October and May. Virtually all of this precipitation falls in the form of rain. Stormwater runoff readily infiltrates the soils of the site, but when field capacity has been reached, gravitational water flows off of the site into storm drains which empty into creeks and rivers in the vicinity of the site.



Live Oak Associates, Inc.

Arcadia Homes
Soil Survey

Date	Project #	Figure #
7/13/04	639-01	3

2.1 BIOTIC HABITATS

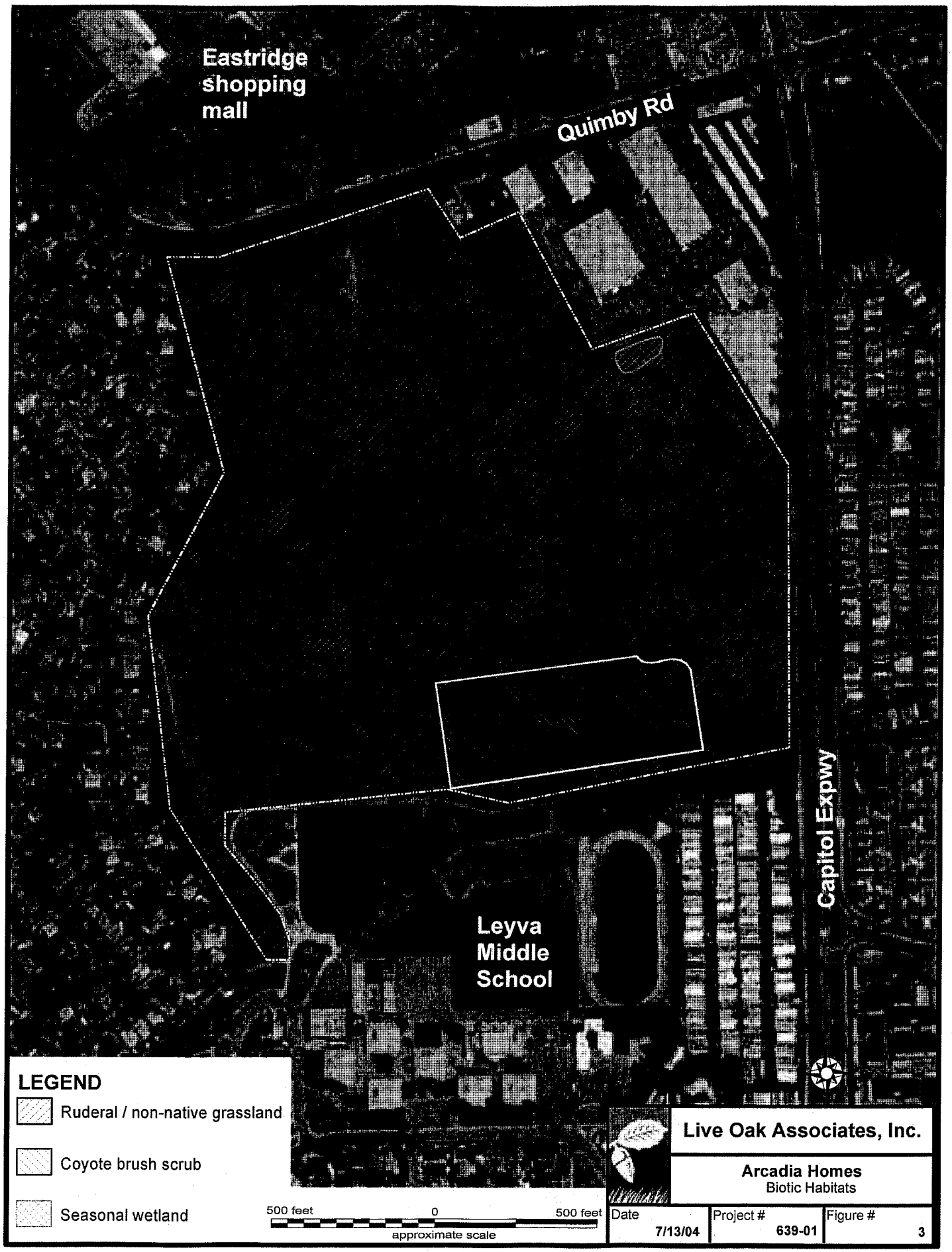
Three biotic habitats have been identified on the study area (Figure 3). For the purposes of this study, these natural terrestrial communities are identified as follows: ruderal non-native grassland, coyote brush scrub and seasonal wetland. Biotic habitats of the study area are discussed in greater detail below.

2.1.1 Ruderal Non-native Grassland

Ruderal non-native grassland habitat is the dominant habitat on the site. The term "ruderal" refers to habitats that have been heavily disturbed by human factors. The grasslands of the site are disced on a regular basis and, at the time of the June 2004 surveys, they had been disced within the past 30 days (Pers. comm. Lamon Hunt, Arcadia Homes). The site appears to have once been used as agricultural lands, but appeared to now be fallow. In addition to regular discing, the site is impacted by other human disturbance. For instance, trash and large debris such as piles of cement, grocery carts, tires, wood pallets and old furniture are scattered throughout the site and the site is apparently often used by homeless persons, with some homeless persons observed camping on the site during the surveys. Additionally, there was evidence of a recent grass fire in the western portion of the site.

This grassland habitat of the site is dominated by annual grasses and forbs of European origin. Non-native grasses observed here include slender wild oats (*Avena barbata*), soft chess (*Bromus hordaceus*), barnyard barley (*Hordeum murinum* ssp. *leporinum*), ripgut brome (*Bromus diandrus*) and Italian wild rye (*Lolium multiflorum*); while common non-native forbs include black mustard (*Brassica nigra*), wild radish (*Raphanus sativa*), yellow star thistle (*Centauria solstitialis*), Italian thistle (*Carduus pycnocephalus*), perennial pepperweed (*Lepidium latifolium*), jimson weed (*Datura stramonium*), and milk thistle (*Silybum marianum*). With the exception of occasional patches of narrow-leaved milkweed (*Asclepias fascicularis*), very little native vegetation was found growing within this habitat.

Non-native grasslands can provide important habitat to many terrestrial vertebrates. As many as 25 species of reptiles and amphibians, 100 species of birds, and 50 species of mammals are known to use grassland habitats of central California (Mayer and Laudenslayer 1988). A number of these species are expected to utilize grasslands occurring on the site throughout all or part of


Eastridge
shopping
mall
Quimby Rd
Capitol Expwy
Leyva
Middle
School
LEGEND
Ruderal / non-native grassland
Coyote brush scrub
Seasonal wetland
500 feet
0
500 feet
approximate scale
Live Oak Associates, Inc.
Arcadia Homes
Biotic Habitats
Date
7/13/04
Project #
639-01
Figure #
3

the year as breeding and foraging habitat. However, a particular habitat's importance to the wildlife of a region can be affected by many factors including the proximity of suitable nesting sites, the amount of available escape cover, the availability of water and food, as well as the amount of human disturbance. Because the site has been disced on a regular basis, is surrounded on all sides by urban development, is located adjacent to a major six-lane expressway, and lacks a source of year-round water, the site's value as habitat for many wildlife species occurring in the local region is greatly diminished. Nonetheless, some wildlife was observed using the site during the June surveys, and still other species which were not directly observed would be expected to use this habitat year-round or seasonally. Wildlife which were observed on the site or which would be expected to occur there are described in more detail below.

The brush piles and occasional piles of broken cement found throughout the grassland area may provide habitat for several reptile species including western fence lizards (*Sceloporus occidentalis*) which were observed during the surveys as well as the California alligator lizard (*Elgaria multicarinatus*) and the gopher snake (*Pituophis melanoleucus*). All of these species would be expected to forage in the grasslands of the site for prey which may include insects, small mammals and birds.

Resident and migratory birds breed and forage in grassland habitats. Birds observed in the grasslands of the site include northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), and rock dove (*Columba livia*). Additionally, several species of raptor were observed using this habitat during the survey. Raptors which were observed foraging over the grasslands include red-tailed hawks (*Buteo jamaicensis*), American kestrels (*Falco sparverius*) and turkey vultures (*Cathartes aura*), while burrowing owls (*Athene cunicularia*) were observed utilizing ground squirrel burrows within the grassland habitat. Although not observed during the surveys, other raptors would be expected to forage in this habitat including sharp-shinned hawk (*Accipiter striatus*) and white-tailed kite (*Elanus leucurus*). In addition to the raptors, other resident bird species would be expected to use the non-native grasslands of the site including the western meadowlark (*Sturnella neglecta*) and red-winged blackbird (*Agelaius phoeniceus*).

Several species of mammals were either observed in the grasslands of the site or would be expected to occur there from time to time. Hundreds of California ground squirrels (*Spermophilus beecheyi*) and several black-tailed jackrabbits (*Lepus californicus*) were observed during the surveys. Other small mammals not observed during the survey but likely to occur here include Botta's pocket gopher (*Thomonys bottae*), western harvest mouse (*Reithrodontomys megalotis*), and California meadow vole (*Microtus californicus*). Small mammals often attract predators, including the reptiles and birds previously discussed, as well as mammalian predators. Small mammalian predators that are well-adapted to human disturbance, such as Virginia opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*), would be expected to forage for prey here. However, because of the urban surroundings, larger mammalian predators such as the coyote (*Canis latrans*), bobcat (*Felis rufus*) and mountain lion (*Puma concolor*) are presumed absent from the site.

2.1.2 Coyote Brush Scrub

Coyote brush scrub habitat occurs on the southern portion of the site in a large rectangular area which is raised approximately three feet from the surrounding grasslands. This habitat is dominated by coyote brush (*Baccharis pilularis*), but it appears that it may at one time have been an orchard as cultivated pear (*Prunus* sp.), almond (*Amygdalis communis*), and black walnut (*Juglans hindsii*) trees were observed in this area. Other plant species occurring within the scrub habitat include blue elderberry (*Sambucus mexicanus*), arroyo willow (*Salix lasiolepus*), toyon (*Heteromeles arbutifolia*), and one large Fremont cottonwood (*Populus fremontii*). Because this area had not been disced, the herbaceous understory was relatively tall and consisted primarily of the same annual grasses and non-native forbs such as those found in the surrounding non-native grasslands.

Reptiles expected to occur in the coyote brush scrub habitat would be similar to those which occur in the grassland habitats of the site.

Resident birds observed in the scrub habitat during the June 2004 survey include mourning dove, bushtit (*Psaltriparus minimus*), California towhee (*Pipilo crissalis*), and house finch (*Carpodacus mexicanus*), all of which find cover and suitable foraging habitat in the shrub and

understory vegetation. Additionally, a pair of red-tailed hawks was observed perching in the large cottonwood tree at the edge of the habitat.

A variety of mammals, including the brush rabbit, California pocket mouse (*Perognathus californicus*), and deer mouse (*Peromyscus maniculatus*), may occur in this habitat as they favor the denser brush this habitat provides, feeding largely on grasses and forbs or on insects. In addition to these, the same mammals utilizing the surrounding grasslands would be expected to occur here.

2.1.3 Seasonal Wetland

A large man-made pit occurs in the northeastern portion of the parcel. This feature is approximately 100 feet long by 50 feet wide, and about six feet deep. According to Mr. Hunt, this pit was excavated approximately ten to twelve years ago, during the time period that Arcadia has owned the site. It is uncertain what the intention of excavating the pit was, however, it may have been excavated for dirt fill to be used on another Arcadia Homes development site. Although the pit was completely dry at the time of the survey, it apparently does collect water during the winter rainy season and hydrophytic vegetation was observed within the pit during the June surveys. Hydrophytic species observed, including their USFWS wetland indicator status, included dried stands of cattails (*Typha* sp.)(OBL), perennial pepperweed (FACW), and curly dock (*Rumex crispus*)(FACW). As with the adjacent grasslands, the excavated pit is heavily impacted by discarded rubbish.

Seasonal wetlands may provide breeding habitat for amphibians such as pacific treefrog (*Hyla regilla*) and western toad (*Bufo boreas*), while birds such as black phoebes (*Sayornis nigricans*) may forage for insects that are attracted to these wetlands. Additionally, these wetlands would provide a seasonal source of water for species occurring in the surrounding habitats. However, because of the degraded nature of the seasonal wetland, it would be generally of low biotic value for most native wildlife.

2.2 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 Game (CDFG) 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 CDFG. 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 2 on the following pages. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988-1990), *California Natural Diversity Data Base* (CDFG 2004), *Endangered and Threatened Wildlife and Plants* (USFWS 2003), *Annual Report on the Status of California State Listed Threatened and Endangered Animals and Plants* (CDFG 2002), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001). This information was used to evaluate the potential for special-status plant and animal species to occur on site. Figure 4 shows the location of special status species found by the California Natural Diversity Data Base (CNDDB) within a three-mile radius of the project site. It is important to note that CNDDB is a volunteer database and, therefore, it may not contain all known or gray literature records of special status species occurrences.

A search of published accounts for all of the relevant special status plant and animal species was conducted for the San Jose East U.S.G.S 7.5 minute quadrangle in which the project site occurs, and for the eight surrounding quadrangles (Calavaras Reservoir, Mount Day, Lick Observatory, Morgan Hill, Santa Teresa Hills, Los Gatos, San Jose West and Milpitas) using the California Natural Diversity Data Base Rarefind 2004. Plant species reviewed for these quadrangles included those on CNPS List 1A, 1B, 2, and 4.

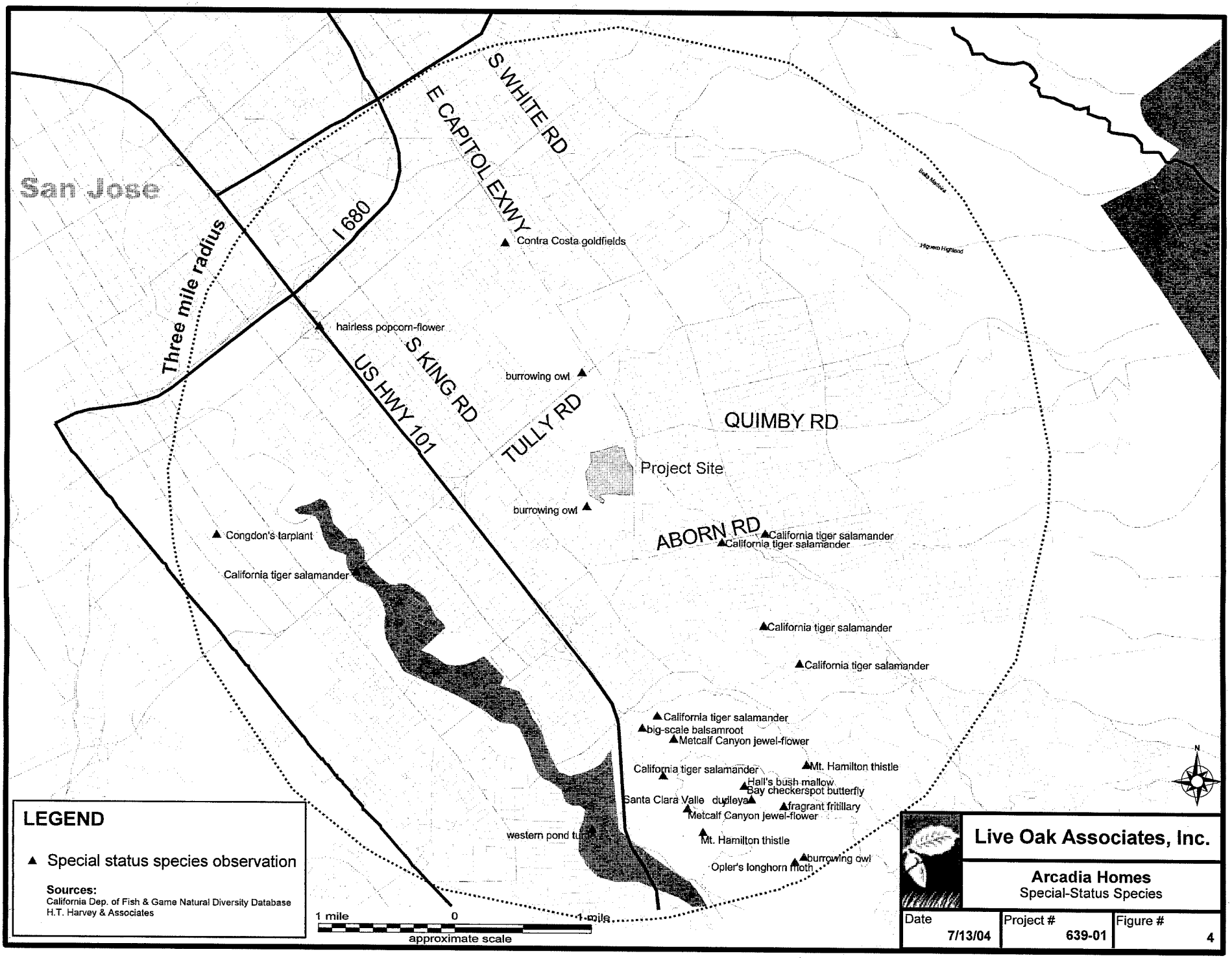

San Jose
Three mile radius
I 680
S WHITE RD
E CAPITOL EXWY
Contra Costa goldfields
hairless popcorn-flower
S KING RD
US HWY 101
burrowing owl
TULLY RD
QUIMBY RD
Project Site
burrowing owl
ABORN RD
Congdon's tarplant
California tiger salamander
California tiger salamander
California tiger salamander
California tiger salamander
California tiger salamander
California tiger salamander
big-scale balsamroot
Metcalf Canyon jewel-flower
California tiger salamander
Mt. Hamilton thistle
Hall's bush mallow
Bay checkerspot butterfly
Santa Clara Valle dudleya
fragrant fritillary
Metcalf Canyon jewel-flower
western pond tu
Mt. Hamilton thistle
burrowing owl
Opler's longhorn moth
LEGEND
Special status species observation
Sources:
California Dep. of Fish & Game Natural Diversity Database
H.T. Harvey & Associates
1 mile
0
1 mile
approximate scale
N
Live Oak Associates, Inc.
Arcadia Homes
Special-Status Species
Date
7/13/04
Project #
639-01
Figure #
4

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS

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

Species	Status	Habitat	*Occurrence in the Study Area
Contra Costa Goldfields (*Lasthenia conjugens*)	FE	Occurs in vernal pools and mesic areas of valley and foothill grasslands, typically alkaline, at elevations between 0 and 470 meters.	**Absent.** Vernal pools and alkaline soils are absent from the study area.
Coyote Ceanothus (*Ceanothus ferrisae*)	FE	Occurs in chaparral, coastal scrub, valley and foothill grassland on serpentine, at elevations between 120 and 460 meters.	**Absent.** Serpentine soils are absent from the study area.
Metcalf Canyon Jewel Flower (*Streptanthus albidus* ssp. *albidus*)	FE	Occurs in valley and foothill grasslands on serpentine soils, at elevations between 45 and 800 meters.	**Absent.** Serpentine soils are absent from the study area.
Robust Spineflower (*Chorizanthe robusta* var. *robusta*)	FE	Occurs in sandy or gravelly soils of cismontane woodland openings, coastal scrub or coastal dunes, at elevations between 3 and 300 meters.	**Absent.** No suitable habitat occurs within the study area.
Santa Clara Valley Dudleya (*Dudleya setchellii*)	FE	Occurs on serpentine outcrops in valley and foothill grasslands, at elevations between 60 and 365 meters.	**Absent.** Serpentine soils are absent from the study area.
Tiburon Indian Paintbrush (*Castilleja affinis* ssp. *neglecta*)	FE, CT	Occurs in valley and foothill grassland on serpentine, at elevations between 60 and 400 meters.	**Absent.** Serpentine soils are absent from the study area.

PLANTS

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Alkali Milk-vetch (*Astragalus tener* var. *tener*)	CNPS 1B	Occurs in alkaline soils within playas, valley and foothill grasslands and in vernal pools.	**Absent.** No suitable habitat occurs on the study area.
Big-scale Balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)	CNPS 1B	Occurs in chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentine, at elevations between 90 and 1400 meters.	**Absent.** No suitable habitat occurs on the study area.
Caper-fruited Tropidocarpum (*Tropidocarpum capparideum*)	CNPS 1A	Occurs in alkaline soils of valley and foothill grassland, at elevations between 1 and 455 meters.	**Absent.** No alkaline soils occur within the study area. Species last documented in our area in 1957.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS – cont'd.

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*)	CNPS 1B	Occurs in alkaline soils of valley and foothill grasslands, at elevations between 0 and 425 meters.	**Absent.** No alkaline soils occur within the study area.
Fragrant Fritillary (*Fritillaria liliacea*)	CNPS 1B	Occurs in coastal prairie, and scrub, and valley and foothill grasslands, often on serpentine soils, at elevations between 3 and 410 meters.	**Absent.** No suitable habitat occurs within the study area..
Hairless Popcorn Flower (*Plagiobothrys glaber*)	CNPS 1A	Occurs in clay soils of alkaline meadows, at elevations between 15 and 180 meters.	**Absent.** No suitable habitat occurs within the study area. Last confirmed observance of species was in 1954.
Hall's Bush Mallow (*Malacothamnus hallii*)	CNPS 1B	Occurs in chaparral and coastal scrub, at elevations between 10 and 760 meters.	**Absent.** No suitable habitat occurs within the study area.
Loma Prieta Hoita (*Hoita strobilina*)	CNPS 1B	Occurs in grassland, chaparral, and woodland, often on serpentine, at elevations between 30 and 600 meters.	**Absent.** No suitable habitat occurs within the study area.
Mt. Hamilton Coreopsis (*Coreopsis hamiltonii*)	CNPS 1B	Occurs in rocky soils of cisomontaine woodland, at elevations between 550 and 1300 meters.	**Absent.** No suitable habitat occurs on the study area.
Mt. Hamilton Thistle (*Cirsium fontinale* var. *campylon*	CNPS 1B	Occurs in wetlands on serpentine soils, at elevations between 95 and 890 meters.	**Absent.** Serpentine soils are absent from the study area.
Most Beautiful Jewelflower (*Streptanthus albidus* ssp. *peramoenus*)	CNPS 1B	Occurs in chaparral and valley and foothill grasslands on serpentine soils, at elevations between 120 and 1000 meters.	**Absent.** Serpentine soils are absent from the study area.
Prostrate Navarretia (*Navarretia prostrata*)	CNPS 1B	Occurs in alkaline soils of vernal pools, coastal scrub, valley and foothill grassland, at elevations between 15 and 700 meters.	**Absent.** No suitable habitat occurs on the study area.
San Joaquin Saltbush (*Atriplex joaquiniana*)	CNPS 1B	Occurs in alkaline soils of chenopod scrub, grassland and vernal pools, at elevations between 1 and 320 meters.	**Absent.** No suitable habitat occurs on the study area.
Santa Cruz Mountains Beardtongue (*Penstemon rattanii* var. *kleei*)	CNPS 1B	Occurs in chaparral and lower montane coniferous forest, at elevations between 400 and 1100 meters.	**Absent.** Elevations of the study area are well below the range for this species.
Smooth Lessingia (*Lessingia micradenia* ssp. *glabrata*)	CNPS 1B	Occurs in serpentine grassland and chaparral, at elevations between 120 and 420 meters.	**Absent.** Serpentine soils are absent from the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (adapted from CDFG 2003 and USFWS 2003)

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

Species	Status	Habitat	*Occurrence in the Study Area
Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)	FE	Native grasslands on serpentine soils. Host plant is *Plantago erecta.*	**Absent.** Serpentine soils are absent from the site.
California Red-legged Frog (*Rana aurora draytonii*)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	**Absent.** No suitable habitat occurs on the study area.
Peregrine Falcon (*Falco peregrinus*)	CE	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	**Unlikely**. No suitable nesting habitat occurs on the study area, however, the site may provide foraging habitat for the rare migrant.
Willow Flycatcher (*Empidonax trailii*)	FE (*extimus*) CE (while nesting)	Breeds in the Sierra Nevada mountains and in Southern California.	**Absent.** No suitable habitat occurs on the study area.

ANIMALS
Federal Candidate Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
California Tiger Salamander (*Ambystoma californiense*)	FC, CSC	Breeds in vernal pools and stock ponds of central California; adults aestivate in grassland habitats adjacent to the breeding sites.	**Absent.** While potentially suitable aestivation habitat occurs on the site, no suitable breeding habitat is present. The manmade wetland occurring on the site does not support appropriate hydrology (i.e. is not ponded for four months or more) to support breeding habitat.
Foothill Yellow-legged Frog (*Rana boylii*)	CSC	Found primarily in swiftly flowing creeks.	**Absent.** No suitable habitat occurs on the study area for this species.
Western Pond Turtle (*Clemmys marmorata*)	CSC	Open slow-moving water of rivers and creeks of central California with rocks and logs for basking.	**Absent.** No suitable habitat occurs on the study area for this species.
Cooper's Hawk (*Accipiter cooperii*)	CSC	Breeds in oak woodlands, riparian forests and mixed conifer forest of the Sierra Nevada, but winters in a variety of lowland habitats.	**Unlikely.** Suitable breeding habitat is absent from the site and the site provides marginal foraging habitat.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont'd
Federal Candidate Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Sharp-shinned Hawk (*Accipiter striatus*)	CSC	Breeds in the mixed conifer forests of the northern Sierra Nevada. This species winters in a variety of habitats of the state.	**Possible**. No suitable breeding habitat occurs on the study area, but the site may provide suitable foraging habitat.
Golden Eagle (*Aquila chrysaetos*)	CSC	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	**Absent.** No suitable breeding habitat or foraging habitat occurs on the study area.
Northern Harrier (*Circus cyaneus*)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Possible** No suitable breeding habitat occurs on the study area, but the site may provide suitable foraging habitat.
White-tailed Kite (*Elanus leucurus*)	CP	Open grasslands and agricultural areas throughout central California.	**Possible.** Suitable breeding and foraging habitat occurs on the study area for this species.
Merlin (*Falco columbarius*)	CSC	This falcon, which breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	**Possible.** The site provides suitable wintering habitat for migrants of this species.
Prairie Falcon (*Falco mexicanus*)	CSC	Distributed from annual grasslands to alpine meadows; requires cliffs or rock outcroppings for nesting.	**Possible.** No suitable nesting habitat exists onsite. However, the site does provide suitable foraging habitat for the occasional winter migrant.
Burrowing Owl (*Athene cunicularia*)	CSC	Found in open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. This species is often associated with California ground squirrels.	**Present.** This species was observed nesting in the ruderal non-native grassland habitats of the study area.
Vaux's Swift (*Chaetura vauxi*)	CSC	Migrants and transients move through the foothills of the western Sierra in spring and late summer. Breeds in coniferous forests.	**Unlikely.** Migrants and transients may forage on the site, however, suitable breeding habitat is absent from the study area.
Black Swift (*Cypseloides niger*)	CSC	Migrants and transients found throughout many habitats of state. Breed on steep cliffs or ocean bluffs, or in cracks and crevasses of inland deep canyons.	**Unlikely.** Migrants and transients may forage on the site, however, suitable breeding habitat is absent from the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – cont'd

Federal Candidate Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Loggerhead Shrike (*Lanius ludovicianus*)	CSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	**Possible.** The site provides suitable foraging and marginal breeding habitat for this species.
California Horned Lark (*Eremophila alpestris actia*)	CSC	Short-grass prairie, annual grasslands, coastal plains, open fields.	**Possible.** The site provides marginal foraging and marginal breeding habitat for this species.
Tricolored blackbird (*Agelaius tricolor*)	CSC	Breeds near fresh water in dense emergent vegetation.	**Absent.** No suitable habitat occurs on the study area for this species.
Pallid Bat (*Antrozous pallidus*)	CSC	Grasslands, chaparral, woodlands, and forests, most common in dry rocky open areas providing roosting opportunities.	**Possible.** The site provides foraging habitat for this species, however, roosting habitat is absent from the site.
California Mastiff Bat (*Eumops perotis californicus*)	CSC	Forages over many habitats, requires tall cliffs or buildings for roosting.	**Possible.** The site provides foraging habitat for this species, however, roosting habitat is absent from the site.
San Francisco Dusky-Footed Woodrat (*Neotoma fuscipes annectens*)	CSC	Found in hardwood forests, oak riparian and shrub habitats.	**Absent.** Woodlands and dense shrub habitat favored by the species are absent from the study area.
Townsend's Big-eared Bat (*Plecotus townsendii townsendii*)	CSC	Primarily a cave-dwelling bat, but may also roost in buildings. Occurs in a variety of habitats..	**Possible.** The site provides foraging habitat for this species, however, roosting habitat is absent from the site.
Ringtail (*Bassariscus astutus*)	CP	Occurs in riparian and heavily wooded habitats near water.	**Absent.** No suitable habitat exists onsite for this species.

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

STATUS CODES

FE	Federally Endangered
FT	Federally Threatened
FPE	Federally Endangered (Proposed)
FC	Federal Candidate

CE	California Endangered
CT	California Threatened
CR	California Rare
CP	California Protected
CSC	California Species of Special Concern

CNPS	California Native Plant Society Listing
1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened, or Endangered in California and elsewhere
2	Plants Rare, Threatened, or Endangered in
3	Plants about which we need more information – a review list
4	Plants of limited distribution – a watch list

California, but more common elsewhere

2.3 THREATENED, ENDANGERED OR SPECIAL STATUS PLANTS AND ANIMALS THAT DESERVE FURTHER DISCUSSION

Most of the special status plant and animal species listed in Table 2 are either absent or may occur only rarely or occasionally on the study area and sufficient information exists to evaluate the potential impacts the project may or may not have on them. One special status species, the burrowing owl, has been determined to be present on the site and, therefore, warrants additional discussion. Below is a detailed discussion that includes an analysis of its legal status and ecology.

2.3.1 Burrowing Owl (*Athene cunicularia*) Federal listing status: None; State listing status: Species of special concern.

The burrowing owl is a small, long-legged, semi-fossorial bird that averages a height of 9.5 inches, has an average wingspan of 23 inches, and weighs an average of 5.25 ounces. Burrowing owls are unique,in that they are the only owl that regularly lives and breeds in underground nests. In California, these birds typically occur in the Central and Imperial Valleys, primarily utilizing ground squirrel burrows (or the burrows of other animals, e.g., badgers, prairie dogs and kangaroo rats) found in grasslands, open shrub lands, deserts, and, to a lesser extent, grazed and agricultural lands. Burrowing owls in this region are typically found at elevations below 250 ft., and have strong site fidelity. Pairs have been known to return to the same area year after year, and some pairs are known to utilize the same burrow as the previous year.

Burrowing owls feed on various small mammals including deer mice, voles, and rats. They also prey on various invertebrates including crickets, beetles, grasshoppers, spiders, centipedes, scorpions and crayfish. Peak hunting periods occur around dusk and dawn.

The breeding season for the burrowing owl runs from February to August, with a peak between April and July. Clutch size varies from six to 12 eggs, with an average of seven to nine eggs. Females generally produce only one clutch per year. The female incubates the eggs for a month, while the male provides her food. The male continues to provide food during the brooding period. The young remain in their burrow for approximately two weeks after hatching, and

become fully independent of their parents between eight to ten weeks of age. Burrowing owls are a fairly short-lived species, with an average life expectancy of 4.8 years. The oldest known wild burrowing owl was 8 years and 8 months old at the time of its death.

Burrowing owls are subject to predation by larger mammals (e.g., feral cats, bobcats, fox and coyotes). They are also susceptible to anthropogenic effects such as collisions with automobiles, and destruction or disruption of their nests, especially during the breeding season. The burrowing owl may also be affected by ground squirrel eradication efforts.

Burrowing owl numbers have been in decline over the past 30 to 40 years, in California. The decline in numbers is due mainly to habitat destruction by way of development and agricultural practices (BUOW Habitat Conservation Plan, 1998).

Prior to the observance of owls on the project site during the 2004 nesting season, there are no documented occurrences of owls on the site. There are three occurrences of burrowing owls documented by the CNDDB within a three-mile radius of the project site (Figure 4). One of these occurrences is immediately to the southwest of the project site while of these occurrences encompasses an established population of owls located approximately one half mile north of the site at the Reid Hillview Airport. In addition to occurrences in the CNDDB, LOA biologist Melissa Denena has observed burrowing owls near Lake Cunningham Park, located within one-mile of the site. Therefore, there are several known occurrences of burrowing owls in the immediate project vicinity.

During the 2004 nesting season, three pairs of adult owls and three individual owls were observed utilizing ground squirrel burrows on the site. Two of the pairs were successful at nesting, with one pair producing four to five chicks and the other producing at least one chick. Surveys conducted by LOA during the 2005 nesting season indicated that only one pair of owls was nesting on the site during that nesting season. Conditions over the site had changed somewhat over the prior year that may have resulted in the site being less suitable for nesting owls. Vegetation was not disked or mowed prior to the 2005 nesting season and therefore vegetation was observed to be as much as four feet high over the site. However, regardless of the change in conditions on the site, it would not be unusual for owl populations to fluctuate from

year to year on the site. The site generally appears to provide good nesting and foraging habitat for owls.

2.4 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 Game (CDFG) and the California Regional Water Quality Control Board (RWQCB) (see Section 3.2.4 of this report for additional information).

No areas potentially under the jurisdiction of the CDFG were identified on the site, and, although a manmade pit supporting hydrophytic vegetation occurs on the site that potentially may meet the technical criteria of jurisdictional wetlands, it is unlikely that the USACE would claim jurisdiction over this feature under the recent SWANCC decision as this feature is hydrologically isolated from other Waters of the U.S. (see Section 3.2.4 of this report for additional information).

2.5 ORDINANCE-SIZED TREES

A formal tree survey has been conducted on the site by HortScience. Sixty trees occur on the site that would be considered protected trees under the City of San Jose's tree ordinance (see Section 3.2.5 of this report for additional information).

3.0 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.

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 Game (CDFG) 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 CDFG 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 CDFG 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 law also protect most bird species. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., scc. 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, (1992), 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 CDFG.

3.2.4 Wetlands and Other "Jurisdictional Waters"

Natural drainage channels and wetlands are considered "Waters of the United States" (hereafter referred to as "jurisdictional waters"). The U.S. Army Corps of Engineers (USACE) regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act (Wetland Training Institute, Inc. 1991). 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 either intermittently or permanently), 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 will result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The RWCQB 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 Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code (California Department of Fish and Game 1995). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the drainage in question.

3.2.5 Ordinance-Size Trees

The City of San Jose has a Tree Ordinance (Chapter 13.32 of the Municipal Code) that regulates the removal of covered trees. According to the City, it is the purpose of the ordinance 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 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. 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 that indicates the number, species, trunk circumference and location of all trees which will be removed or impacted by the project.

3.3 IMPACTS SPECIFIC TO THE PROJECT SITE

The proposed project consists of the development of a currently undeveloped, approximately 81-acre site with 1500 apartment and senior housing units and necessary infrastructure, however, specific site plans for this proposed development had not yet been created at the time this report was prepared. In addition to the foregoing development, the project also calls for approximately 12 acres of the site to be turned over to the City of San Jose for park land. Grading will be required to accommodate this new development and, as a result, potentially all of the ruderal non-native grassland, coyote brush scrub and seasonal wetland habitats occurring on the site may be disturbed or destroyed within the proposed footprint of future construction zones. Secondary impacts to areas outside of construction zones could occur as well. These impacts could include nest failure of breeding raptors, gully erosion as a result of cut-and-fill grading, and sedimentation of natural drainages. 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 21 special status plant species potentially occurring in the project vicinity, 18 can be ruled out as occurring on the site because the site does not contain suitable habitat (i.e. woodlands, vernal pools, coastal scrub, etc.), or because the site lacks serpentine and alkaline soils. The remaining three species include fragrant fritillary (*Fritillaria liliacea*), Loma Prieta hoita (*Hoita strobilina*) and Hall's bush mallow (*Malacothamnus hallii*) which may occur regionally in grasslands and/or scrub habitats. None of these three species are federally or state listed as threatened or endangered, however, all appear on the CNPS List 1B ("Plants rare, threatened or endangered in California and elsewhere") and impacts to these species may be considered significant under CEQA. The ruderal nature of the grasslands and scrub habitats of the site, including the regular discing of the grasslands; the prior use of the site for agricultural purposes; and the fact that the site is isolated by development from other natural areas where

populations of these three species are known to occur would result in the grassland and scrub habitats of the site not providing suitable habitat for these three species and they also are presumed to be absent from the site.

Mitigation. As the site has been determined to provide no suitable habitat for special status plant species, project impacts to special status plants would be less-than-significant and no additional surveys or mitigation for special status plant species is warranted.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impact. Of the 25 special status animal species that occur, or once occurred, regionally (see Table 2), 15 species would be absent from or unlikely to occur on the site because appropriate habitat for these species is absent from the site. These include the Bay checkerspot butterfly, California tiger salamander, California red-legged frog, foothill yellow-legged frog, western pond turtle, Cooper's hawk, golden eagle, prairie falcon, peregrine falcon, black swift, Vaux's swift, willow flycatcher, tricolored blackbird, San Francisco dusky-footed woodrat and ringtail.

Nine of the remaining special status animal species from Table 2 may occur more frequently as regular foragers or may be resident on the site although they were not observed during the site surveys. These include the sharp-shinned hawk, northern harrier, white-tailed kite, merlin, loggerhead shrike, California horned lark, pallid bat, Townsend's big-eared bat, and California mastiff bat. The ruderal and scrub habitats of the site are regionally abundant, therefore, the loss or fragmentation of nesting and foraging habitats for the foregoing species would be considered a less-than-significant impact, with the possible exception of impacts to nesting raptors (see *Section 3.3.10 Disturbance to Active Raptor nests from Construction Activities during Project Implementation*) and to burrowing owls (see *Section 3.3.3 Impacts to Burrowing Owl Habitat* and *Section 3.3.4 Impacts to Individual Burrowing Owls*).

Mitigation. No mitigation would be required for potential impacts related to loss of habitat for nine of the special status animal species that may be resident or forage on the site (i.e. sharp-shinned hawk, northern harrier, white-tailed kite, merlin, loggerhead shrike, California horned lark, pallid bat, Townsend's big-eared bat, and California mastiff bat), however, see *Section*

3.3.10 Disturbance to Active Raptor nests from Construction Activities during Project Implementation, Section 3.3.3 Impacts to Burrowing Owl Habitat, and *Section 3.3.4 Impacts to Individual Burrowing Owls.*

3.3.3 Impacts to Burrowing Owl Habitat

Burrowing owls, a California species of special concern, were confirmed to be resident on the site during the June 2004 site surveys. The results of these surveys indicated that during the 2004 breeding season there were three pairs of adult owls and three single adult owls residing on the site. It was further observed that at least two of the pairs had nested successfully, with one of these pairs producing at least one chick and the other pair producing four to five chicks. The total number of owls documented on the site during the 2004 breeding season therefore was between 14 and 15 owls, with nine of these being adults. Additional surveys conducted during the 2005 breeding season confirmed that one pair of owls was resident on the site. The fluctuation in population numbers from year to year such as that observed on the site would be expected. Although the occupied burrows during the 2004 breeding season were limited to two discrete areas of the site, with one owl pair using burrows located near the eastern boundary of the parcel and all other owls occupying burrows located in an area approximately one acre in size in the central portion of the parcel, the entire 81-acre site should be viewed as nesting and foraging habitat for burrowing owls. The loss of 81 acres of nesting habitat, or the regional cumulative loss of this amount of foraging habitat, would be considered a significant impact under CEQA.

Mitigations discussed below are designed to reduce impacts to burrowing owl habitat to a less-than-significant level.

Mitigation. Mitigation for burrowing owls usually takes the form of compensating for impacts as a result of a loss of breeding habitat, as well as measures to assure the project does not violate the provisions of Section 3503.5 of the Fish and Game Code and the federal Migratory Bird Treaty Act that protect both individuals and their active nests. The mitigation alternatives discussed below are designed to reduce project impacts to burrowing owl habitat to a less-than-significant level, while mitigations contained in Section 3.3.4 will assure that the project does not violate provisions of the state and federal laws previously mentioned.

Mitigation Alternatives Fully Compensating for Loss of Habitat

Mitigation 1: *Avoidance*. Compensation for the loss of burrowing owl habitat typically requires that 6.5 acres be set aside per resident pair or per resident individual. Based on the observance of three nesting pairs and three individual adult owls occurring on the site during the 2004 surveys, complete avoidance of impacts resulting from a loss of burrowing owl nesting habitat would require setting aside a conservation easement totaling 39 acres, with deed restrictions that guarantee preservation of the easement as burrowing owl habitat into perpetuity.

If mitigation will be undertaken on-site as per above, a Mitigation and Monitoring Plan will be developed and implemented in consultation with the City of San Jose and CDFG to manage the easement site for owls.

By following the above mitigation, the project will result in a less-than-significant impact to burrowing owl habitat.

Mitigation 2: Off-site Mitigation Within the Region. Full or partial compensation for impacts to burrowing owl habitat can also occur in the form of purchasing sufficient credits at a mitigation bank that services the area, or purchasing and setting aside 39 acres of lands in the City of San Jose, or some combination of on-site and off-site mitigation that equals 39 acres. If the mitigation is to be done partially on-site and partially off-site, however, it should be noted that relatively small habitat areas left on-site (i.e., less than 13 acres), would be considered insufficient mitigation unless they are contiguous with suitably protected open space areas. In the case of the study area, which is surrounded by development, there are no contiguous open space areas. Additionally, although it would lessen impacts to owls overall, complete or partial mitigation that occurs off-site and outside of the local area (i.e., outside of Santa Clara County) would result in a significant unavoidable loss of burrowing owl nesting and foraging habitat in the local area. At this time, there are no known mitigation banks within Santa Clara County that offers credits for burrowing owl habitat. There may, however, be vacant land available that is suitable as burrowing owl habitat elsewhere in Santa Clara County.

Either Mitigation 1 or 2 (if lands were purchased locally) would fully and adequately offset impacts to burrowing owl habitat to a less-than-significant level.

Mitigation Alternatives Partially Compensating for Loss of Habitat

Mitigation 3: Funding of a Burrowing Owl Habitat Management Plan at Reid Hillview Airport. Partial compensation for impacts to burrowing owl habitat may take the form of the funding of a Burrowing Owl Management Plan for established populations of burrowing owls occurring at Reid Hillview Airport. Reid Hillview Airport occurs within a quarter mile to the north of the study area. Airfields are known to provide excellent habitat for burrowing owls as evidenced by the success of the CDFG-approved Burrowing Owl Management Plan developed and implemented for the nearby San Jose International Airport (BioSystems Analysis, Inc. 1996). Elements of this proposed mitigation alternative are described in greater detail below.

Pursuant to consultation between the City of San Jose, CDFG and Reid Hillview Airport, the project proponent could fund the development and implementation of a Burrowing Owl Management Plan at the Reid Hillview Airport site. The objectives of such a Plan would include:

- Reducing the number of aircraft strikes on burrowing owls.
- Providing for ongoing maintenance and management of an existing burrowing owl population.

As such, the Plan would include the following elements:

- Development of a plan to ensure safety areas such as runways are kept free of nesting owls.
- Establishment of management areas in non-safety locations that will be managed to maintain breeding owl populations.
- The development and implementation of a plan to monitor owl populations on the site.

Mitigation 4: Active Relocation. Prior to construction, during the non-nesting season, any owls occupying burrows within the construction zones can be actively relocated as partial compensation for impacts to onsite burrowing owl habitat. An active relocation would be preferred over passive relocation in the event that any off-site mitigation alternative for impacts to burrowing owl habitat is chosen. Although the CDFG has generally recommended only passive relocation, communications with Dave Johnston of CDFG have indicated that CDFG may consider active relocations if sufficient information can be provided that such active

relocations have been successful. Researchers such as Pete Bloom in Southern California and Greg Clark in Arizona have reported success with active relocations of burrowing owls in those areas (Burrowing Owl Consortium, 2004 and pers. comm. Pete Bloom). Additionally, H.T. Harvey has successfully conducted an active relocation of burrowing owls locally (pers. comm. Scott Terrill, H.T. Harvey). Any active relocation effort would need to be undertaken under consultation with CDFG and under the guidance of a qualified biologist who is experienced with active relocation techniques and that possesses the proper permits to conduct active relocations. Funding for any active relocation effort would be provided by the project proponent.

Active relocation would require the trapping and physical relocation of owls to established preserve areas that have been set aside in perpetuity for the conservation of burrowing owls and that have been determined by CDFG to provide suitable habitat for burrowing owls. Possible reserve sites include 11.3 acres that have been set aside as mitigation for burrowing owls by Summerhill Homes on the Dairy Hill site in San Jose, and communications with Tony Eulo at the City of Morgan Hill indicate that Morgan Hill would be willing to have owls actively relocated to areas that the City has set aside for burrowing owls under their Citywide Burrowing Owl Habitat Mitigation Plan (2003).

Mitigation 5: Off-site Mitigation Outside of Region. Impacts to burrowing owl habitat may be partially compensated through off-site mitigation outside of the region (i.e., outside of Santa Clara County), either by purchasing sufficient credits at an established mitigation bank or by purchasing and setting aside sufficient acreage of lands outside of the region for burrowing owl habitat management. If this mitigation were combined with either Mitigation 3 or Mitigation 4 above, then sufficient acreage to compensate for impacts would be reduced to half of the requisite 39 acres, or 19.5 acres.

Mitigations 3, 4, and 5 all represent alternatives that, individually, would partially reduce project impacts to burrowing owl habitat, but not to a less-than-significant level. In order to fully offset project impacts any two of these three alternatives must be implemented together. If no owls are detected on the site just prior to the initial construction phase, then Mitigation 4 would no longer be a viable mitigation alternative, in which case the project proponent would need to implement Mitigations 3 and 5.

3.3.4 Impacts to Individual Burrowing Owls

Potential Impact. Should burrowing owls be occupying burrows on the site at the time of project development, construction activities occurring on the site could result in the abandonment of active burrowing owl nests or in direct mortality to individual burrowing owls. This would constitute a violation of federal and state laws (see discussion in *Section 3.2.3*). Such nest abandonment or direct mortality would be considered a significant adverse impact.

Mitigation. Mitigation 1 combined with Mitigation 2, discussed below, would reduce project impacts to individual burrowing owls to a less-than-significant level and would bring the project into compliance with federal and state law.

Mitigation 1: Construction During the Nesting Season. Pursuant to the CDFG (1995) burrowing owl mitigation guidelines, burrows occupied by owls should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies that either the owls have not begun laying and incubating eggs, or that juvenile owls have fledged and are able to live independently of their parents. If construction will occur during the breeding season, the project proponent would need to establish and maintain a minimum of a 250-foot buffer around any active nest. Any activities that would result in breeding owls abandoning an active nest, or would result in the killing of any individual owls, would be considered a "take" by the CDFG.

Mitigation 2: Passive Relocation. Prior to construction, during the non-nesting season, any owls occupying burrows within construction zones can be passively relocated. Passive relocation is an intensive process that involves the installation of one-way doors in all ground squirrel burrows occurring on the site. The one-way doors allow owls to leave their burrows but do not allow them to return, thereby forcing owls to move to a different area. Owl doors will be monitored by a qualified biologist daily for a period of no less than three days and after that period, burrows will be destroyed to preclude owls from returning to the burrows, and grading of these areas will commence within seven days. The passive relocation will be repeated if owls move back to the development areas.

3.3.5 Loss of Habitat for Native Wildlife

Potential Impact. The proposed project will primarily result in the loss of ruderal non-native grassland as well as a small amount of coyote brush scrub and seasonal wetland, all of which are heavily impacted by human disturbance and isolated by development from other natural areas. This site would comprise a portion of the wildlife's entire home range or territory. As such, some species may disperse through the site, but most wildlife presently using the site do so as part of their normal movements for foraging, mating, and caring for young. Individuals of the various vertebrate species presently occupying the site would be displaced or lost from the development area.

While they provide habitat for a number of native wildlife species, non-native grasslands and scrub habitats are relatively common in the region. Therefore, aside from the impacts already identified for burrowing owls (see Section 3.3.2), impacts due to the loss of these habitats for native wildlife resulting from the proposed project are considered less than significant.

Impacts to seasonal wetland habitats, however, may be considered significant. Appropriate mitigations, if required, for these impacts are discussed in other sections (see *Section 3.3.5 Disturbance to Waters of the U.S. or Riparian Habitats*). The proposed mitigations are expected to reduce impacts in these habitats to a less-than-significant level and, therefore, do not need to be considered in this section.

Mitigation. The loss of some habitat due to development is not expected to affect the persistence and presence of native wildlife. Project impacts on wildlife habitat would be less than significant, and mitigation measures would not be warranted.

3.3.6 Interference with the Movement of Native Wildlife

Potential Impact. The area proposed for development on the site consists of three biotic habitats, all of which support some native wildlife species. The movements of various species on- and off-site vary depending on the species in question.

One must differentiate between animals' consistent use patterns in order to assess the importance of an area as a "movement corridor." Wildlife movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species occurring onsite permits sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements.

As it is completely surrounded by development, the study site does not constitute a major movement corridor between other natural areas of habitat for most native species. Project development, therefore, is expected to have a less-than-significant impact on corridor-type movements of native wildlife.

Mitigation. Project impacts to wildlife movements would be less than significant, and no mitigation measures are warranted.

3.3.7 Disturbance to Waters of the U.S. or Riparian Habitats

Potential Impact. At the time this report was prepared, no formal wetland delineation had been completed on the study area, however, based on our surveys, most of the site consists of upland habitats and there is no evidence to suggest that the site has ever had any natural, historic drainages or other wetlands. A man-made pit, approximately 50 feet wide by 100 feet long, occurs in the northeastern portion of the parcel. This pit may have been excavated in order to provide fill for another Arcadia Homes development site about ten years ago (pers. comm. Lamon Hunt). The pit was completely dry during June and July surveys, but it does apparently hold some water during the winter rainy season and did have hydrophytic vegetation associated with it. This excavated, seasonally-inundated pit, would likely be exempt from the jurisdiction of the USACE and CDFG due to the fact that it is man-made and appears to be isolated from any other naturally occurring waterways.

The loss of a small amount of artificially created wetland (i.e. less than 0.01 acres) that does not fall under the jurisdiction of the USACE or CDFG, would be considered a less-than-significant impact under CEQA.

Mitigation. No mitigation would be required under CEQA.

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

Potential Impact. Eventual site development, including soil and slope stabilization, may 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 wetland habitats would be considered a potentially significant adverse environmental impact.

Mitigation. The applicant must comply with the provisions of a City grading permit, including standard erosion control measures that employ best management practices (BMPs). Such compliance will result in no impact to water quality in seasonal creeks, reservoirs, and downstream waters from the proposed project.

3.3.9 Disturbance to Active Raptor Nests from Construction Activities During Project Implementation

Potential Impacts. Burrowing owls were confirmed to be present on the site during the June surveys, utilizing ground squirrel burrows within the ruderal habitat of the site. Although, no raptor stick nests were observed on the site during the June and July 2004 surveys, large trees occurring on the site such as red gum eucalyptus (*Eucalyptus camaldulensis*), coast redwood (*Sequoia sempervirens*), Fremont cottonwood, black locust (*Robinia psedoacacia*), and American elm (*Ulmus americana*) provide potential nesting habitat for tree-nesting raptors. As such, construction or tree-removal activities occurring on the site could result in the abandonment of active raptor nests or in direct mortality to individual raptors and this would

constitute a violation of federal and state laws (see discussion in *Section 3.2.3*). Such nest abandonment or direct mortality would be considered a significant adverse impact.

Mitigation. The following mitigation measure shall be implemented to ensure that raptors (hawks and owls) are not disturbed during the breeding season.

- A qualified ornithologist will conduct a protocol-level, pre-construction survey for nesting raptors (including both tree- and ground-nesting raptors) onsite within 30 days of the onset of ground disturbance or tree removal, if disturbance is to occur during the breeding season (February 1 to August 31). If a nesting raptor were to be detected, an appropriate construction buffer shall be established. Actual size of buffer will depend on species, topography, and type of construction activity that would occur in the vicinity of the nest but would be a minimum of 250 feet.

Implementation of the above measures will fully mitigate impacts to tree-nesting raptors, however, to fully mitigate potential impacts to burrowing owls see *Section 3.3.2 Loss of Habitat for Special Status Animals.*

3.3.10 Disturbance to Ordinance-Size and Heritage Trees

Impacts. A formal tree survey was conducted on the site by HortScience (2004). Their survey determined that a total of 112 trees occur on the site that may be impacted or removed as a result of the project and another four trees occur immediately off-site and overhang the site that also could be potentially impacted by the project (Table 3). The exact number of trees to be preserved and removed would be determined at the PD permit stage.

Table 3. Summary of Tree Survey (HortScience, Inc. 2004)

Diameter	Tree Type			Total
	Orchard	Non-Native	Native	
<12"	0	26	7	33
12"-17"	2	16	5	23
≥18"	0	30	30	60
Total	2	72	42	**116**

Of the 116 trees occurring either on the site or immediately adjacent to the site that may be impacted or removed as a result of the project, 60 have a trunk diameter of 18 inches or more and would therefore meet the definition of a covered tree under the City's tree ordinance. Thirty of these trees are native species including California black walnut, blue elderberry, and Fremont cottonwood. The remaining ordinance-size trees are cultivated or landscape varieties that would not occur naturally in the region.

The loss of ordinance-sized trees, or more than six non-ordinance-sized trees, would constitute a significant impact under CEQA. It is assumed that the project will be unable to avoid the removal of at least some ordinance-size trees, therefore, the loss of trees under the current development proposal would constitute a significant impact.

Mitigation. As indicated in the project description, a detailed site development plan has not yet been completed for the site, and, as such, it is currently unknown which trees occurring on the site will be removed or otherwise impacted by the project. Potentially, sixty ordinance-size trees and 149 non-ordinance-size trees will be removed or impacted by the project. All trees removed as a result of the project, regardless of their size, will require mitigation at replacement:removal ratios set-forth by the City of San Jose and described more fully below. During the PD permit stage, the site design will incorporate preservation of existing trees to the maximum extent practicable, with emphasis on those tress that the tree survey has labeled as suitable for preservation. Trees to be removed by the project will be replaced at the following ratios:

- The replacement of all ordinance-size trees at a 4:1 replacement:removal ratio with 24-inch box specimens or greater.

- The replacement of all trees having a trunk diameter between 12 and 18 inches will occur at a 2:1 replacement: removal ratio with 24-inch box specimens or greater.

- The replacement of all trees having a trunk diameter of 12 inches or less will occur at a 1:1 replacement: removal ratio with 15-gallon specimens.

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 the *San Jose Beautiful* or *Our City Forest* programs. 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 Planning Project Manager prior to the removal of the trees.

Impacts to any retained trees during the construction and operation phases of the project can be reduced to a less-than-significant level by conforming to the following guidelines:

- The project proponent shall retain a consulting arborist prior to any ground disturbance activities. The consulting arborist will 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 will be installed around the drip-line of all retained trees occurring within the development envelopes, and the fencing will remain in place throughout the construction phase of the project. The type of fencing to be utilized will be at the direction of the consulting arborist.

- Any limb or root pruning to be conducted on retained trees shall be approved and supervised by the consulting arborist and shall follow best management practices developed by the International Society of Arboriculture.

- Supplemental irrigation to retained trees shall be applied as determined by the consulting arborist.

- If any of the retained trees should be damaged during the construction phase, they will be evaluated at the earliest possible time by the consulting arborist so that appropriate measures can be taken.

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PERSONAL COMMUNICATIONS

Eulo, Tony. August 2, 2004. Environmental Programs Manager, City of Morgan Hill.

Hunt, Lamon. June 22, 2004. Superintendant for Arcadia Homes.

Johnston, Dave. September 7, 2004. CDFG.

Terrill, Scott. July 14, 2005. H.T. Harvey.

APPENDIX A:
VASCULAR PLANTS OF THE STUDY AREA

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VASCULAR PLANTS OF THE STUDY AREA

The plant species listed below have been observed on the Arcadia study area during the surveys conducted by Live Oak Associates in June 2004. All plants have been named according to *The Jepson Manual* (Hickman 1993). 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

ANACARDIACEAE – Sumac Family		
Pistacia chinensis	Chinese Pistache	UPL
Schinus molle	Peruvian Pepper	UPL
APIACEAE – Carrot Family		
Conium maculatum	Poison Hemlock	FACW
Foeniculum vulgare	Fennel	FACU
ARECACEAE – Palm Family		
Washingtonia sp.	Fan Palm	-
ASCLEPIADACEAE – Milkweed Family		
Asclepias fascicularis	Narrow-leaved Milkweed	FAC
ASTERACEAE - Sunflower Family		
Baccharis pilularis	Coyote Brush	UPL
Carduus pycnocephalus	Italian Thistle	UPL
Centauria solstitialis	Yellow Star Thistle	UPL
Chamomilla suaveolens	Pineapple Weed	UPL
Hemizona congesta ssp. *luzulifolia*	Hayfield Tarweed	UPL
Lactuca serriola	Prickly Lettuce	FAC
Picris echioides	Bristly Ox Tongue	FAC*
Silybum marianum	Milk Thistle	UPL
BRASSICACEAE – Mustard Family		
Brassica nigra	Black Mustard	UPL
Brassica rapa	Field Mustard	UPL
Capsella bursa-pastoris	Shepherd's-purse	FAC-
Lepidium latifolium		
Lepidium nitidum	Common Peppergrass	FACW
Raphanus sativus	Wild Radish	UPL
CAPRIFOLIACEAE – Honeysuckle Family		
Sambucus mexicana	Blue Elderberry	FAC
CARYOPHYLLACEAE – Pink Family		
Stellaria media	Common Chickweed	FACU
CONVOLVULACEAE – Morning Glory Family		
Convolvulus arvensis	Field Bindweed	UPL

FABACEAE – Legume Family		
Medicago polymorpha	Bur Clover	FACU-
Melilotus indica	Yellow Sweetclover	FAC
Robinia psedoacacia	Black Locust	FAC*
Trifolium hirtum	Rose Clover	UPL
Vicia sativa	Spring Vetch	FACU
FAGACEAE – Oak Family		
GERANIACEAE – Geranium Family		
Erodium botrys	Long-beaked Filaree	UPL
Erodium cicutarium	Redstem Filaree	UPL
JUGLANDACEAE – Walnut Family		
Juglans californica var. *hindsii*	California Black Walnut	FAC
Juglans regia	English Walnut	UPL
MALVACEAE – Mallow Family		
Malvella leprosa	Alkali Mallow	FAC*
MYRTACEAE- Myrtle Family		
Eucalyptus camaldulensis	Red Gum	UPL
Eucalyptus globulus	Blue Gum	UPL
OLAEACEAE – Olive Family		
Fraxinus sp.	Ash	-
POACEAE - Grass Family		
Arundo donax	Giant Reed	FACW
Avena barbata	Slender Wild Oats	UPL
Bromus diandrus	Ripgut	UPL
Bromus hordeaceus	Soft Chess	FACU
Hordeum murinum ssp. *leporinum*	Barnyard Barley	NI
Leymus triticoides	Creeping Wild Rye	FAC+
Lolium multiflorum	Italian Ryegrass	UPL
POLYGONACEAE - Buckwheat Family		
Polygonum arenastrum	Common Knotweed	*FAC*
Rumex crispus	Curly Dock	FACW
PRIMULACEAE – Primrose Family		
Anagallis arvensis	Scarlet Pimpernel	FAC
ROSACEAE – Rose Family		
Heteromeles arbutifolia	Toyon	UPL
Prunus amygdalis	Almond	UPL
Prunus sp.	Pear	UPL
Rubus discolor	Himalayan Blackberry	FACW*
Rubus ursinus	California Blackberry	FACW*
SALICACEAE – Willow Family		
Populus fremontii	Fremont Cottonwood	FACW
Salix lasiolepis	Arroyo Willow	-
SOLANACEAE – Nightshade Family		
Datura stramonium	Jimson Weed	UPL
TAXODIACEAE – Bald Cypress Family		
Sequoia sempervirens	Coast Redwood	UPL
TYPHACEAE – Cattail Family		
Typa latifolia	Broad-leaved Cattail	OBL
ULMACEAE – Elm Family		
Ulmus americana	American Elm	UPL
Ulmus parvifolia	Chinese Elm	UPL

APPENDIX B:
TERRESTRIAL VERTEBRATES THAT POTENTIALLY OCCUR ON THE STUDY AREA

Listed below are those species that may reasonably be expected to use the habitats of the project site routinely during some or all of the year. The list is not intended to include birds that are vagrants or occasional transients. Species observed during the June and July 2004 field surveys have been noted with an asterisk.

CLASS AMPHIBIA (Amphibians)
ORDER SALIENTIA(Frogs and Toads)
FAMILY BUFONIDAE (True Toads)
Western Toad — *Bufo boreas*
FAMILY HYLIDAE (Treefrogs and Relatives)
Pacific Treefrog — *Hylla regilla*

CLASS REPTILIA (Reptiles)
ORDER SQUAMATA (Lizards and Snakes)
SUBORDER SAURIA (Lizards)
FAMILY PHRYNOSOMATIDAE
Western fence lizard* — *Sceloporus occidentalis*
FAMILY ANGUIDAE (Alligator Lizards and Relatives)
California alligator lizard — *Elgaria multicarinata*
SUBORDER SERPENTES (Snakes)
FAMILY COLUBRIDAE (Colubrids)
Gopher snake — *Pituophis catenifer*
Common kingsnake — *Lampropeltis getula*

CLASS AVES (Birds)
ORDER CICONIIFORMES (Herons, Storks, Ibises and Relatives)
FAMILY CATHARTIDAE (New World Vultures)
Turkey vulture — *Cathartes aura*
ORDER FALCONIFORMES (Vultures, Hawks and Falcons)
FAMILY ACCIPITRIDAE (Hawks, Old World Vultures and Harriers)
White-tailed kite — *Elanus leucurus*
Sharp-shinned hawk — *Accipiter striatus*
Cooper's hawk — *Accipiter cooperii*
Red-shouldered hawk — *Buteo lineatus*
Red-tailed hawk* — *Buteo jamaicensis*
FAMILY FALCONIDAE (Caracaras and Falcons)
American kestrel — *Falco sparverius*
Merlin — *Falco columbarius*
Prairie falcon — *Falco mexicanus*
ORDER GALLIFORMES (Magapodes, Curassows, Pheasants and Relatives)
FAMILY PHASIANIDAE (Quails, Pheasants and Relatives)
Ring-necked pheasant — *Phasianus colchicus*
FAMILY ODONTOPHORIDAE (New World Quail)
California quail — *Callipepla californica*
ORDER COLUMBIFORMES (Pigeons and Doves)
FAMILY COLUMBIDAE (Pigeons and Doves)
Rock dove — *Columba livia*

Band-tailed pigeon	*Columba fasciata*
Mourning dove*	*Zenaida macroura*
ORDER STRIGIFORMES (Owls)	
FAMILY TYTONIDAE (Barn Owls)	
Barn owl	*Tyto alba*
FAMILY STRIGIDAE (Typical Owls)	
Burrowing owl*	*Athene cunicularia*
Western screech owl	*Otus kennicottii*
Great horned owl	*Bubo virginianus*
ORDER APODIFORMES (Swifts and Hummingbirds)	
FAMILY APODIDAE (Swifts)	
Vaux's swift	*Chaetura vauxi*
FAMILY TROCHILIDAE (Hummingbirds)	
Anna's hummingbird*	*Calypte anna*
Allen's hummingbird	*Selasphorus sasin*
ORDER PICIFORMES (Woodpeckers and Relatives)	
FAMILY PICIDAE (Woodpeckers and Wrynecks)	
Nuttall's woodpecker	*Picoides nuttallii*
Downy woodpecker	*Picoides pubescens*
Hairy woodpecker	*Picoides villosus*
Northern flicker	*Colaptes auratus*
ORDER PASSERIFORMES (Perching Birds)	
FAMILY TYRANNIDAE (Tyrant Flycatchers)	
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
FAMILY LANIIDAE (Shrikes)	
Loggerhead shrike	*Lanius ludovicianus*
FAMILY CORVIDAE (Jays, Magpies and Crows)	
Western scrub-jay*	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Common raven	*Corvus corax*
FAMILY HIRUNDINIDAE (Swallows)	
Tree swallow	*Tachycineta bicolor*
Violet-green swallow	*Tachycineta thalassina*
Bank swallow	*Riparia riparia*
Cliff swallow	*Petrochelidon pyrrhonota*
Barn swallow	*Hirundo rustica*
FAMILY PARIDAE (Titmice and Relatives)	
Oak titmouse	*Baeolophus inornatus*
FAMILY AEGITHALIDAE (Bushtit)	
Bushtit*	*Psaltriparus minimus*
FAMILY SITTIDAE (Nuthatches)	
White-breasted nuthatch	*Sitta carolinensis*
FAMILY TROGLODYTIDAE (Wrens)	
Bewick's wren	*Thryomanes bewickii*
House wren	*Troglodytes aedon*
Winter wren	*Troglodytes troglodytes*
FAMILY REGULIDAE (Kinglets)	
Ruby-crowned kinglet	*Regulus calendula*

FAMILY TURDIDAE (Thrushes)

Western bluebird	*Sialia mexicana*
Hermit thrush	*Catharus guttatus*
American robin	*Turdus migratorius*

FAMILY TIMALIIDAE (Babblers)

Wrentit	*Chamaea fasciata*

FAMILY MIMIDAE (Mockingbirds and Thrashers)

Northern mockingbird*	*Mimus polyglottos*
California thrasher	*Toxostoma redivivum*

FAMILY STURNIDAE (Starlings and Allies)

European starling	*Sturnus vulgaris*

FAMILY PARULIDAE (Wood Warblers and Relatives)

Orange-crowned warbler	*Vermivora celata*

FAMILY EMBERIZIDAE (Emberizines)

Spotted towhee	*Pipilo maculatus*
California towehee	*Pipilo crissalis*
Fox sparrow	*Passerella iliaca*
Song sparrow	*Melospiza melodia*
White-throated sparrow	*Zonotrichia albicollis*
White-crowned sparrow	*Zonotrichia leucophrys*
Golden-crowned sparrow	*Zonotrichia atricapilla*
Dark-eyed junco	*Junco hyemalis*

FAMILY CARDINALIDAE (Cardinals, Grosbeaks and Allies)

Black-headed grosbeak	*Pheucticus melanocephalus*
Lazuli bunting	*Passerina amoena*

FAMILY ICTERIDAE (Blackbirds, Orioles and Allies)

Red-winged blackbird	*Gelaius phoeniceus*
Western meadowlark	*Sturnella neglecta*
Brewer's blackbird	*Euphagus cyanocephalus*
Brown-headed cowbird	*Molothrus ater*

FAMILY FRINGILLIDAE (Finches)

House finch	*Carpodacus mexicanus*
Lesser goldfinch	*Carduelis psaltria*
American goldfinch	*Carduelis tristis*

FAMILY PASSERIDAE (Old World Sparrows)

House sparrow	*Passer domesticus*

CLASS MAMMALIA (Mammals)

ORDER DIDELPHIMORPHIA (Marsupials)

FAMILY DIDELPHIDAE (Opossums)

Virginia opossum	*Didelphis virginiana*

ORDER INSECTIVORA (Insectivores)

FAMILY SORICIDAE (Shrews)

Ornate shrew	*Sorex ornatus*

FAMILY TALPIDAE (Moles)

Broad-footed mole	Scapanus latimanus

ORDER CHIROPTERA (Bats)

FAMILY VESPERTILIONIDAE (Evening Bats)

Little brown myotis	*Myotis lucifugus*
Yuma myotis	*Myotis yumanensis*
California myotis	*Myotis californicus*

Western pipistrelle	*Pipistrellus hesperus*
Big brown bat	*Eptesicus fuscus*
Western red bat	*Lasiurus blossevillii*
Hoary bat	*Lasiurus cinereus*
Townsend's big-eared bat	Corynorhinus townsendii
Pallid bat	Antrozous pallidus
FAMILY MOLOSSIDAE (Free-tailed Bats)	
Western mastiff bat	Eumops perotis
ORDER LAGOMORPHA (Rabbits, Hares and Pika)	
FAMILY LEPORIDAE (Rabbits and Hares)	
Brush rabbit	*Sylvilagus bachmani*
Black-tailed jackrabbit*	*Lepus californicus*
ORDER RODENTIA (Rodents)	
FAMILY SCIURIDAE (Squirrels, Chipmunks and Marmots)	
California ground squirrel*	*Spermophilus beecheyi*
Western gray squirrel	*Sciurus griseus*
FAMILY GEOMYIDAE (Pocket Gophers)	
Botta's pocket gopher	*Thomomys bottae*
FAMILY HETEROMYIDAE (Pocket Mice and Kangaroo Rats)	
California pocket mouse	*Chaetodipus californicus*
FAMILY MURIDAE (Mice, Rats and Voles)	
Western harvest mouse	*Reithrodontomys megalotis*
California mouse	*Peromyscus californicus*
Deer mouse	*Peromyscus maniculatus*
Dusky-footed woodrat	*Neotoma fuscipes*
California vole	*Microtus californicus*
ORDER CARNIVORA (Carnivores)	
FAMILY PROCYONIDAE (Raccoons and Relatives)	
Raccoon	*Procyon lotor*
FAMILY MEPHITIDAE (Skunks)	
Western spotted skunk	*Spilogale gracilis*
Striped skunk	*Mephitis mephitis*
FAMILY FELIDAE (Cats)	
Feral cat	*Felis catus*

LIVE OAK ASSOCIATES, INC.
an Ecological Consulting Firm

BIOTIC ASSESSMENT
PLEASANT HILLS GOLF COURSE SITE

Prepared by

Live Oak Associates, Inc.

Rick A. Hopkins, Ph.D., Principal, Senior Biologist
Melissa Denena, M.S., Project Manager, Wildlife/Wetland/Plant Ecologist

Prepared for

John Hesler
David J. Powers and Associates
1885 The Alameda
San Jose, CA 95126

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Project No. 642-01

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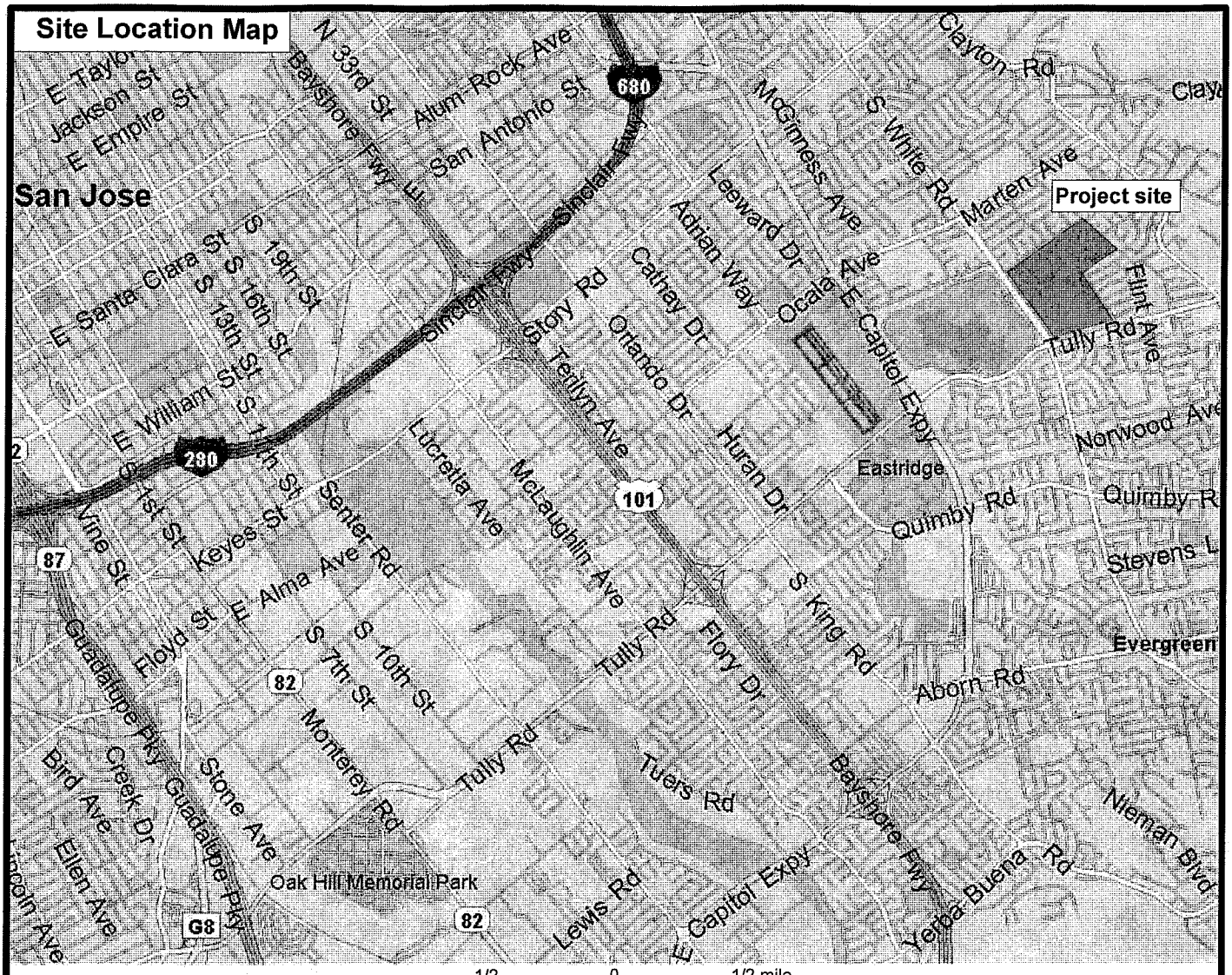
1.0 INTRODUCTION

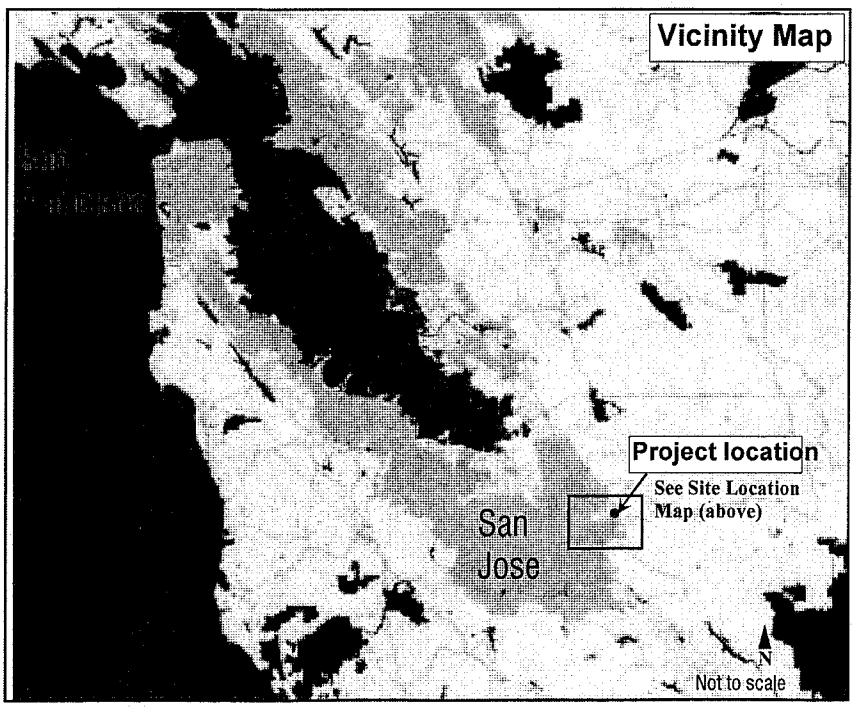
This report describes the biotic resources of an approximately 115-acre site in the City of San Jose in Santa Clara County, California, and evaluates possible constraints such resources may pose for eventual site development. This biotic assessment is being conducted in support of the Evergreen Smart Growth Plan EIR. The study area (also referred to as "the site") is located just northeast of the intersection of Tully Road and South White Road in the Evergreen area of east San Jose (Figure 1). Almost the entirety of the site is developed/landscaped in the form of a golf course. There are a few, scattered ruderal areas that are not regularly managed (with the exception of mowing) along the boundaries of the site and between the greens. The location of the site can be found on the San Jose East U.S.G.S. 7.5' quadrangles at Township 7 south, Range 2 east, western half of Section 7.

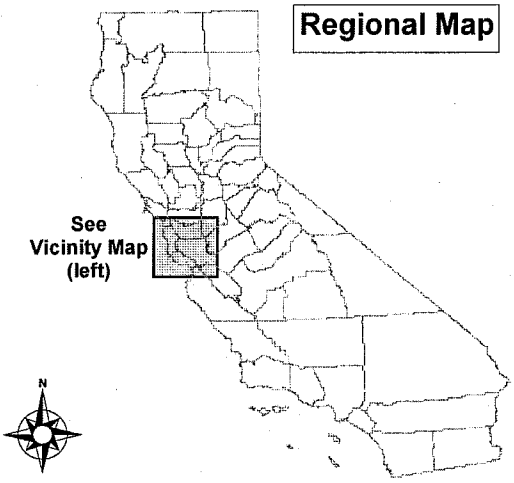
The proposed project is the development of the existing site into residential development. Proposed construction includes single-family residences (34-6,000 ft^2 lots, 183-3,600 ft^2 lots, and 224-3,000 ft^2 lots), town homes (189-detached town homes and 208-flats), and open space. There is also the possibility that a portion of the land designated for detached town homes and open space would be developed into a school site. The school site would be located in the southwest corner of the property, immediately northeast of the intersection of South White Road and Tully Road.

Site development of open space 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), covered by policies and ordinances of the City of San Jose, or some combination of these four conditions. This report addresses issues related to sensitive biotic resources occurring on the site, along with the federal, state, and local laws related to such resources and mitigation measures that may be required to reduce the magnitude of anticipated impacts.

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







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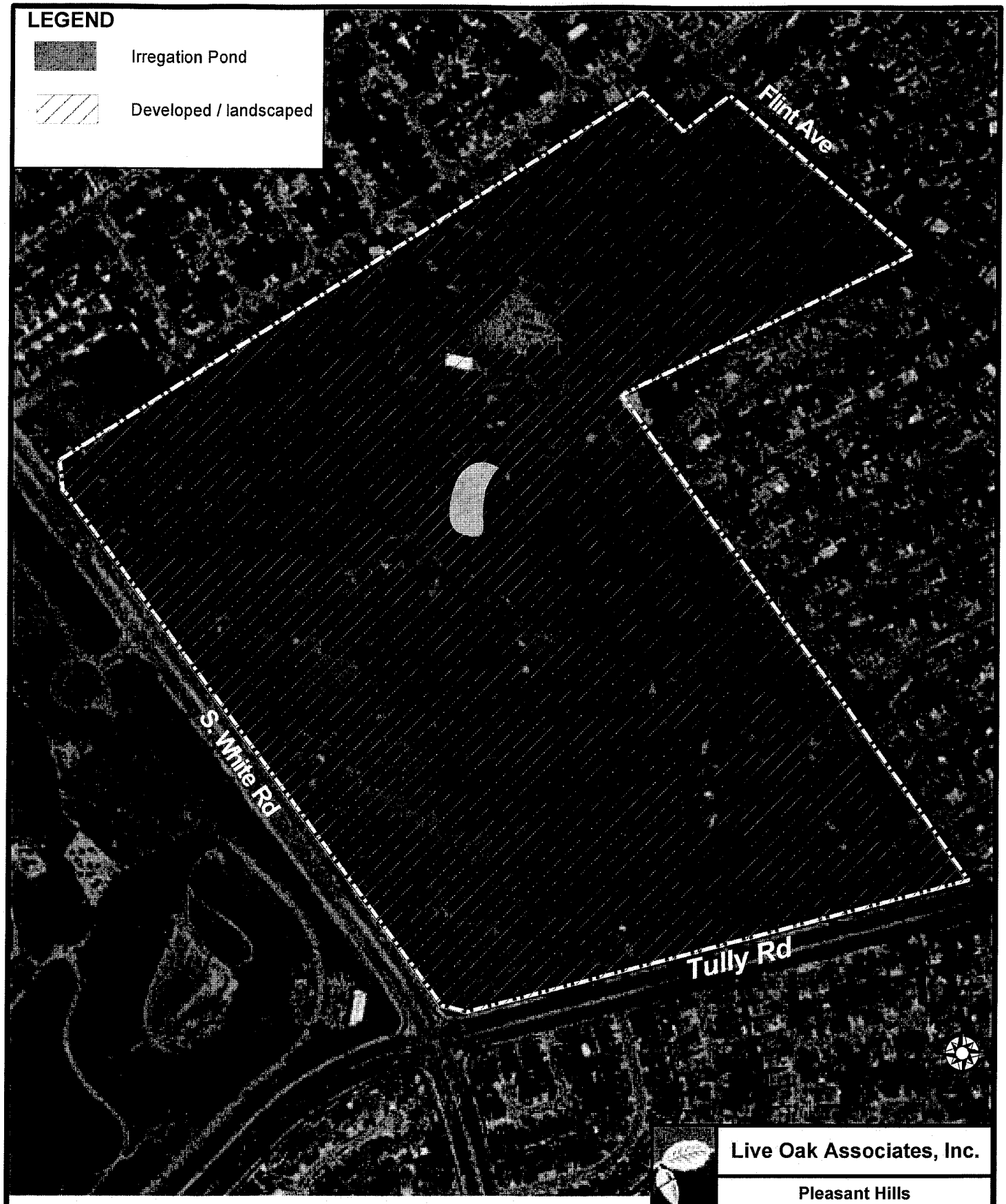
Pleasant Hills
Site / Vicinity Map

Date	Project #	Figure #
7/8/04	642-01	1

used in the preparation of this analysis included: (1) the *California Natural Diversity Data Base* (CDFG 2003) and (2) the *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001) and (3) manuals and references related to plants and animals of the Santa Clara Valley region. Reconnaissance level field surveys were conducted within the study area on July 5, 2004 by Melissa Denena, ecologist with Live Oak Associates, Inc., at which time the principal biotic habitats of the site were identified and the constituent plants and animals of each were noted (Figure 2). Ms. Denena also conducted protocol-level burrowing owl surveys on the site July 5, 13, 14, and 15 of 2004.



Live Oak Associates, Inc.

Pleasant Hills
Biotic Habitats

Date	Project #	Figure #
7/8/04	642-01	3

2.0 EXISTING CONDITIONS

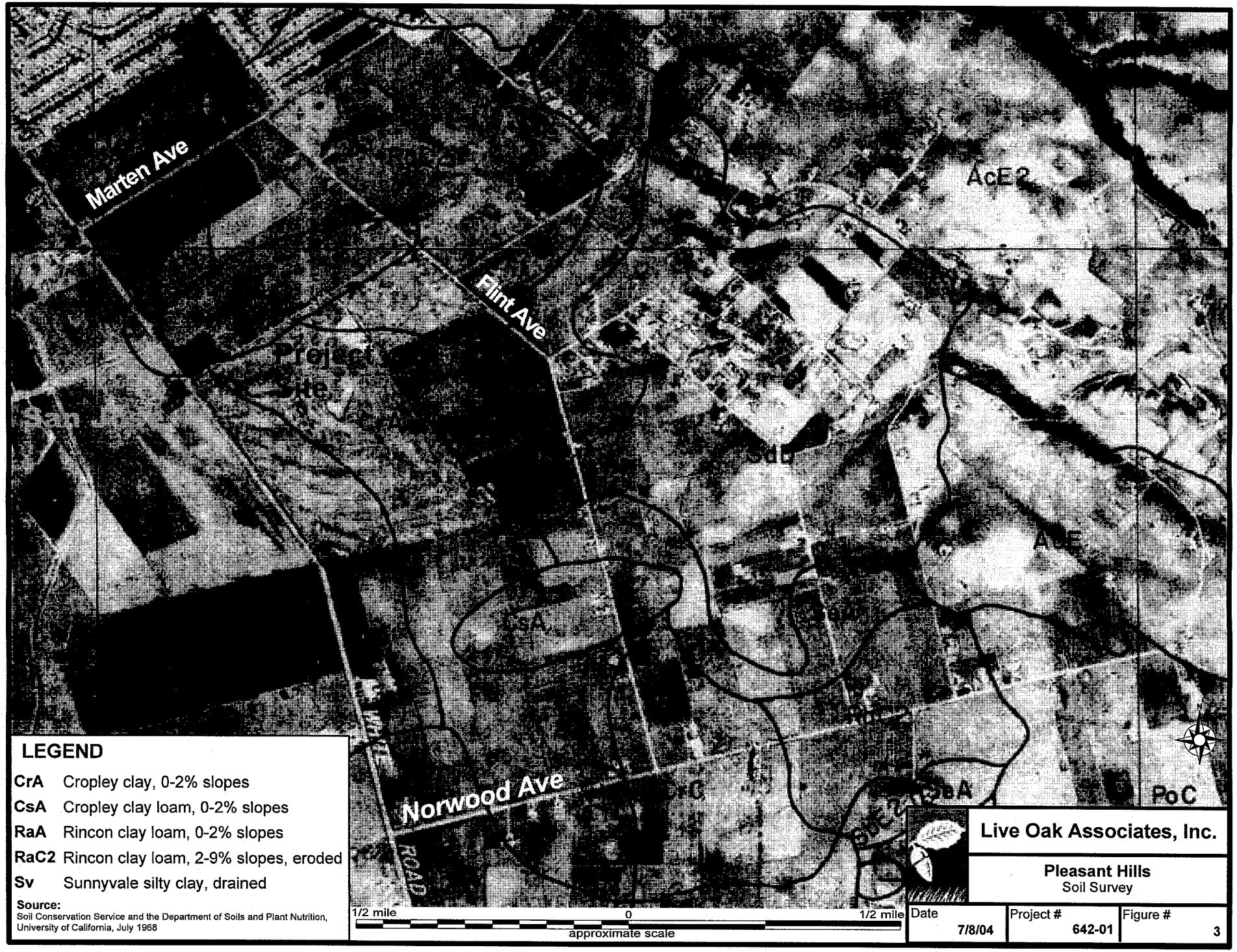
The approximately 115-acre study site is located in the City of San Jose in Santa Clara County. The site is bound by single-family residential developments to the north, east, and south and Lake Cunningham Park to the west. The site is topographically level at an elevation of approximately 130 to 190 feet National Geodetic Vertical Datum (NGVD). The entirety of the site is developed as Pleasant Hills Golf Course. The golf course includes a full 18-hole course and an 18-hole short-course. There is an irrigation pond in the center of the golf course, which appears to stay inundated year round. Additionally, there are a few areas along the boundaries and scattered within the greens that consists of non-native ruderal vegetation. These areas are highly influenced by golf course activities and mowed routinely.

Five soil-mapping units have been identified on the site and these soils are described in greater detail in Table 1 and depicted in Figure 2. None of the soils occurring on the site are considered to be hydric, although hydric soil inclusions may occur.

Table 1. Descriptions of soil mapping units of the 115-acre study area (NRCS 1968).

Soil Mapping Unit	Drainage Class	Parent Material
Cropley Clay, 0-2% Slopes	Well Drained	Mixed, Mostly Sedimentary Alluvium
Cropley Clay Loam, 0-2% Slopes	Well Drained	Mixed, Mostly Sedimentary Alluvium
Rincon Clay Loam, 0-2% Slopes	Well Drained	Old Sedimentary Alluvium
Rincon Clay Loam, 2-9% Slopes, Eroded	Well Drained	Old Sedimentary Alluvium
Sunnyvale Silty Clay, Drained	Poorly Drained	Gleyed Sedimentary Alluvium

Annual precipitation in the general vicinity of the study area averages 16 to 25 inches, almost 85% of which falls between October and March. Virtually all precipitation falls in the form of rain. Stormwater runoff readily infiltrates the soils of the site, but when field capacity has been reached, gravitational water flows off of the site into storm drains, which empty into creeks in the vicinity of the site.



LEGEND

CrA	Cropley clay, 0-2% slopes
CsA	Cropley clay loam, 0-2% slopes
RaA	Rincon clay loam, 0-2% slopes
RaC2	Rincon clay loam, 2-9% slopes, eroded
Sv	Sunnyvale silty clay, drained

Source:
Soil Conservation Service and the Department of Soils and Plant Nutrition, University of California, July 1968

Live Oak Associates, Inc.

Pleasant Hills
Soil Survey

Date	Project #	Figure #
7/8/04	642-01	3

2.1 BIOTIC HABITATS

One man-altered habitat has been identified on the study area, developed/landscaped (Figure 2). Naturally occurring biotic habitats were determined to be absent from the site. A list of the animal species that are known to occur in the vicinity of the site is listed in Appendix A. A list of plant species is not included in this report due to the low diversity. Plant species observed on-site are included in the habitat descriptions below.

The 115-acre developed golf course consists primarily of tees, fairways, and greens, which are closely mowed and separated by rows of trees. There are scattered patches of non-native ruderal vegetation, particularly around the outer edges of the site. The term "ruderal" refers to areas that are periodically disturbed by anthropogenic influences. There are also a few areas supporting hydrophytic vegetation; however, these have formed as result of maintenance practices (i.e. the artificial pond in the central portion of the site provides irrigation water and other areas receive run-off irrigation water). None of these areas are considered to be jurisdictional wetlands (see *Section 2.3*; Olberding 2004).

The golf course provides limited habitat for the plant and animal species of the area. The majority of the habitat for local plant species has been converted to manicured habitat (i.e. tees, fairways, greens, and landscaping). As for locally occurring wildlife species, the trees of the site provide perching and possibly breeding habitat for avian species and the scattered ruderal habitat provides marginal habitat for terrestrial species.

With the exception of tuft grass, which nominated the site, plant species observed consisted of non-native grass and forb species of European descent. Grass species observed during the July 2004 surveys include slender oats (*Avena barbata*), soft chess (*Bromus hordaceus*), barnyard barley (*Hordeum murinum* ssp. *leporinum*), ripgut brome (*Bromus diandrus*), rattail fescue (*Vulpia myuros*), Bermuda grass (*Cynodon dactylon*), dallisgrass (*Paspalum dilatatum*), and Italian wild rye (*Lolium multiflorum*). Common non-native forbs observed included black mustard (*Brassica nigra*), puncture weed (*Tribulus terrestris*), cheeseweed (*Malva parviflora*), fireweed (*Epilobium brachycarpum*), clover (*Trifolium* sp.), narrow-leaf plantain (*Plantago* lanceolata), prickly sow thistle (*Sonchus asper*), common sow thistle (*Sonchus oleraceus*), fennel

(*Foeniculum vulgare*), bull thistle (*Circium vulgare*), bristly ox-tongue (*Picris echioides*), and curly dock (*Rumex crispus*). A number of trees and shrubs were planted in the landscaped areas of the golf course. A full list of these species is included in the arborist report compiled by David J. Powers and Associates (September 2004).

As stated above, the golf course provides habitat for a few avian and terrestrial vertebrates. However, a particular habitat's importance to the wildlife of a region can be affected by many factors including the proximity of nesting sites, the amount of available escape cover, the availability of water and food, as well as levels of human disturbance. Due to the existing onsite development of the site and frequent disturbance by golfers and maintenance crews, , the site's value as habitat for many wildlife species occurring in the local region is greatly diminished. Nonetheless, some wildlife was observed using the site during the July surveys, and still other species not directly observed, would be expected to utilize this habitat. These are described in more detail below.

Amphibian would be restricted on the site; however, it is possible that western toads (*Bufo boreas*), bullfrogs (*Rana catesbeiana*), and pacific treefrogs (*Pseudacris regilla*) could occur in the irrigation pond. Reptiles that may occasionally occur on the site include the western fence lizard (*Sceloporus occidentalis*), common kingsnake (*Lampropeltis getula*), and gopher snake (*Pituophis melanoleucus*).

Resident and migratory birds forage, and potentially breed, within the golf course habitat of the site. Birds observed onsite during the July 2004 surveys include California towhees (*Pipilo crissalis*), black phoebes (*Sayornis nigricans*), American robins (*Turdus migratorius*), Anna's hummingbirds (*Calypte anna*), Red-tailed hawks (*Buteo jamaicensis*), and turkey vultures (*Cathartes aura*). Other avian species expect to occur on the site from time to time include mourning doves (*Zenaida macroura*), killdeers (*Charadrius vociferus*), western scrub jays (*Aphelocoma californica*), dark-eyed juncos (*Junco hyemalis*), and Nuttall's woodpecker (*Picoides nuttallii*)

Several species of mammals were either observed on the site or would be expected to occur there from time to time. California ground squirrels (*Spermophilus beecheyi*), eastern gray squirrels (*Sciurus niger*), Botta's pocket gophers (*Thomonys bottae*), and black-tailed jackrabbits (*Lepus californicus*) were observed during the surveys. Other small mammals not observed during the survey but likely to occur here include western harvest mouse (*Reithrodontomys megalotis*) and California meadow vole (*Microtus californicus*). The opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*) would be expected to forage for prey onsite, however, because of the urban surroundings, it is unlikely that larger mammalian predators such as the coyote (*Canis latrans*), bobcat (*Felis rufus*) or cougar (*Puma concolor*) occur on the site with any regularity.

2.2 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 Game (CDFG) 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 CDFG. 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 2 on the following pages. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988-1990), *California Natural Diversity Data Base* (CDFG 2003), *Endangered and Threatened Wildlife and Plants* (USFWS 2003), *Annual Report on the Status of California State Listed Threatened and Endangered Animals and Plants* (CDFG 2002), and *The California*

Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001). This information was used to evaluate the potential for special-status plant and animal species to occur on site. Figure 4 shows the location of special status species found by the California Natural Diversity Data Base (CNDDB) within a three-mile radius of the project site. It is important to note that CNDDB is a volunteer database and, therefore, it may not contain all known or gray literature records of special status species occurrences.

A search of published accounts for all of the relevant special status plant and animal species was conducted for the San Jose East U.S.G.S 7.5 minute quadrangle in which the project site occurs, and for the eight surrounding quadrangles (Calavaras Reservoir, Mount Day, Lick Observatory, Morgan Hill, Santa Teresa Hills, Los Gatos, San Jose West and Milpitas) using the California Natural Diversity Data Base Rarefind 2003. Plant species reviewed for these quadrangles included those on CNPS List 1A, 1B, 2, and 4.

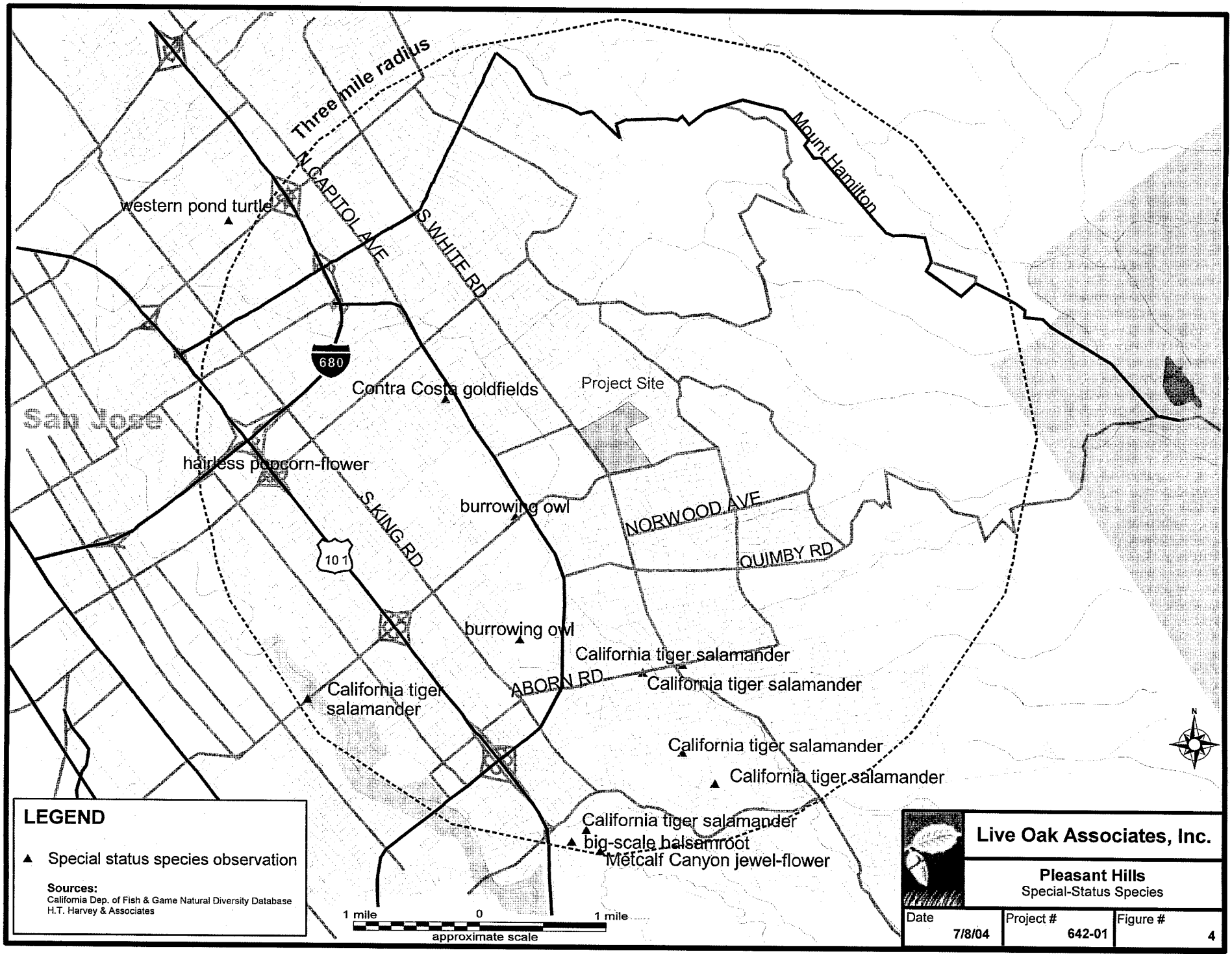

Three mile radius
N. CAPITOL AVE
S. WHITE RD
Mount Hamilton
western pond turtle
680
Contra Costa goldfields
Project Site
San Jose
hairless popcorn-flower
S. KING RD
burrowing owl
NORWOOD AVE
QUIMBY RD
101
burrowing owl
California tiger salamander
ABORN RD
California tiger salamander
California tiger salamander
California tiger salamander
California tiger salamander
California tiger salamander
big-scale balsamroot
Metcalf Canyon jewel-flower
N
LEGEND
Special status species observation
Sources:
California Dep. of Fish & Game Natural Diversity Database
H.T. Harvey & Associates
1 mile
0
1 mile
approximate scale
Live Oak Associates, Inc.
Pleasant Hills
Special-Status Species
Date
7/8/04
Project #
642-01
Figure #
4

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFG 2003 and CNPS 2001)

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

Species	Status	Habitat	*Occurrence in the Study Area
Contra Costa Goldfields (*Lasthenia conjugens*)	FE	Occurs in vernal pools and mesic areas of valley and foothill grasslands, typically alkaline, at elevations between 0 and 470 meters.	**Absent.** Vernal pools and alkaline soils are absent from the study area.
Coyote Ceanothus (*Ceanothus ferrisae*)	FE	Occurs in chaparral, coastal scrub, valley and foothill grassland on serpentine, at elevations between 120 and 460 meters.	**Absent.** Serpentine soils are absent from the study area.
Metcalf Canyon Jewel Flower (*Streptanthus albidus* ssp. *albidus*)	FE	Valley and foothill grasslands on serpentine, at elevations between 45 and 800 meters.	**Absent.** Serpentine soils are absent from the study area.
Robust Spineflower (*Chorizanthe robusta* var. *robusta*)	FE	Occurs within cismontane woodlands and coastal dunes/scrub.	**Absent.** Suitable habitat is absent from the study area.
Santa Clara Valley Dudleya (*Dudleya setchellii*)	FE	Occurs on serpentine outcrops in valley and foothill grasslands, at elevations between 60 and 365 meters.	**Absent.** Serpentine soils are absent from the study area.
Tiburon Indian Paintbrush (*Castilleja affinis* ssp. *neglecta*)	FE, CT	Occurs in valley and foothill grassland on serpentine, at elevations between 60 and 400 meters.	**Absent.** Serpentine soils are absent from the study area.

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Alkali Milk-vetch (*Astragalus tener* var. *tener*)	CNPS 1B	Occurs on playas, alkaline vernal pools, and adobe clay valley and foothill grasslands below 60 meters in elevation.	**Absent.** Suitable habitat is absent from the study area.
Big-scale Balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)	CNPS 1B	Chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentine, at elevations between 90 and 1400 meters.	**Absent.** Suitable habitat is absent from the study area. The grasslands of the site are either routinely disced (within the orchard area) or in very poor condition (ruderal).
Caper-fruited Tropidocarpum (*Tropidocarpum capparideum*)	CNPS 1A	Occurs in alkaline soils of valley and foothill grassland, at elevations between 1 and 455 meters.	**Absent.** Suitable habitat is absent. Alkaline soils do not occur within the study area. Species last documented in the area in 1957.
Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*)	CNPS 1B	Occurs in alkaline soils of valley and foothill grasslands, at elevations between 0 and 425 meters.	**Absent.** Suitable habitat is absent. Alkaline soils do not occur within the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Other special status plants listed by CNPS (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Fragrant Fritillary (*Fritillaria liliacea*)	CNPS 1B	Occurs in coastal prairie, coastal scrub, and valley and foothill grasslands, often on serpentine soils, at elevations between 3 and 410 meters.	**Absent.** Suitable habitat is absent from the study area.
Hairless Popcorn Flower (*Plagiobothrys glaber*)	CNPS 1A	Occurs in heavy clay soils of alkaline meadows, at elevations between 15 and 180 meters.	**Absent**. Suitable habitat is absent. Alkaline soils do not occur within the study area. Last confirmed observance of species was in 1954.
Hall's Bush Mallow (*Malacothamnus hallii*)	CNPS 1B	Occurs in chaparral and coastal scrub, at elevations between 10 and 760 meters.	**Absent.** Suitable habitat is absent from the study area.
Loma Prieta Hoita (*Hoita strobilina*)	CNPS 1B	Occurs in chaparral and cismontane and riparian woodlands, often on serpentine, at elevations between 30 and 600 meters.	**Absent.** Suitable habitat is absent from the study area.
Mt. Hamilton Coreopsis (*Coreopsis hamiltonii*)	CNPS 1B	Occurs in rocky cismontane woodlands.	**Absent.** Suitable habitat is absent from the study area.
Mt. Hamilton Thistle (*Cirsium fontinale* var. *campylon*	CNPS 1B	Occurs in seasonal and perennial drainages on serpentine soils, at elevations between 95 and 890 meters.	**Absent.** Serpentine soils are absent from the study area.
Most Beautiful Jewelflower (*Streptanthus albidus* ssp. *peramoenus*)	CNPS 1B	Occurs in chaparral and valley and foothill grasslands on serpentine soils, at elevations between 120 and 1000 meters.	**Absent.** Serpentine soils are absent from the study area.
Point Reyes Bird's-beak (*Cordylanthus maritimus* ssp. *palustris*)	CNPS 1B	Occurs in coastal salt marshes and swamps.	**Absent.** Suitable habitat is absent from the study area.
Prostrate Navarretia (*Navarretia prostrata*)	CNPS 1B	Occurs in coastal scrub, alkaline valley and foothill grasslands, and mesic vernal pools.	**Absent.** Suitable habitat is absent from the study area. The grasslands of the site are not alkaline.
San Joaquin Saltbush (*Atriplex joaquiniana*)	CNPS 1B	Occurs in chenopod scrub, meadows and seeps, playas, and alkaline valley and foothill grasslands.	**Absent.** Suitable habitat is absent from the study area. The grasslands of the site are not alkaline.
Santa Cruz Mountains Beardtongue (*Penstemon rattanii* var. *kleei*)	CNPS 1B	Chaparral, lower montane coniferous forest, at elevations between 400-1100 meters.	**Absent.** Suitable habitat is absent from the study area.
Smooth Lessingia (*Lessingia micradenia* ssp. *glabrata*)	CNPS 1B	Occurs in serpentine grassland and chaparral, at elevations between 120 and 420 meters.	**Absent.** Serpentine soils are absent from the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (adapted from CDFG 2003 and USFWS 2003)

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

Species	Status	Habitat	*Occurrence in the Study Area
Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)	FE	Native grasslands on serpentine soils. Host plant is *Plantago erecta.*	**Absent.** Serpentine soils are absent from the site.
California Tiger Salamander (*Ambystoma californiense*)	FT, CSC	Breeds in vernal pools and stock ponds of central California; adults aestivate in grassland habitats adjacent to the breeding sites.	**Absent.** Suitable habitat for this species was absent from the site. The only wetland areas onsite are associated with the golf course, which are isolated and influenced by maintenance practices.
California Red-legged Frog (*Rana aurora draytonii*)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	**Absent.** Suitable habitat for this species was absent from the site. The only wetland areas onsite are associated with the golf course, which are isolated and influenced by maintenance practices.
Peregrine Falcon (*Falco peregrinus*)	CE	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	**Unlikely.** Suitable nesting habitat does not occur on the golf course; however, the site provides marginal foraging habitat for the rare migrant.
Willow Flycatcher (*Empidonax trailii*)	CE (while nesting) FE (*extimus*)	Species breeds in the Sierras and Southern California.	**Absent.** Suitable nesting habitat does not occur on the golf course; however, the site provides marginal foraging habitat for the rare migrant.

Federal Candidate Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Foothill Yellow-legged Frog (*Rana boylii*)	CSC	Found primarily in swiftly flowing creeks.	**Absent.** Suitable habitat for this species was absent from the site. The only wetland areas onsite are associated with the golf course, which are isolated and influenced by maintenance practices.
Western Pond Turtle (*Clemmys marmorata*)	CSC	Open slow-moving water of rivers and creeks of central California with rocks and logs for basking.	**Absent.** Suitable habitat for this species was absent from the site. The only wetland areas onsite are associated with the golf course, which are isolated and influenced by maintenance practices.
Cooper's Hawk (*Accipiter cooperii*)	CSC	Breeds in oak woodlands, riparian forests and mixed conifer forest of the Sierra Nevada, but winters in a variety of lowland habitats.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
Sharp-shinned Hawk (*Accipiter striatus*)	CSC	Breeds in the mixed conifer forests of the northern Sierra Nevada. This species winters in a variety of habitats of the state.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Federal Candidate Species and State Species of Special Concern (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Golden Eagle (*Aquila chrysaetos*)	CSC, CP	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	**Absent.** Suitable breeding and foraging habitat is absent from the study area.
Northern Harrier (*Circus cyaneus*)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Unlikely.** The site provides marginal foraging habitat for this species. Breeding habitat is absent.
White-tailed Kite (*Elanus leucurus*)	CP	Open grasslands and agricultural areas throughout central California.	**Possible.** This species may forage on the golf course from time to time. Additionally, the onsite trees provide suitable nesting habitat for this species.
Merlin (*Falco columbarius*)	CSC	This falcon, which breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
Prairie Falcon (*Falco mexicanus*)	CSC	Distributed from annual grasslands to alpine meadows; requires cliffs or rock outcroppings for nesting.	**Unlikely.** The site provides marginal foraging habitat for this species. Breeding habitat is absent.
Burrowing Owl (*Athene cunicularia*)	CSC	Found in open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. This species is often associated with California ground squirrels.	**Possible.** Suitable habitat was present on the site for this species (i.e. ground squirrel burrows). However, the protocol level surveys conducted in July 2004 determined that this species was absent. Nonetheless, due to the fact that the owl is volant, individuals could move onto the site at a later date.
Vaux's Swift (*Chaetura vauxi*)	CSC	Migrants and transients move through the foothills of the western Sierra in spring and late summer. Breeds in coniferous forests.	**Unlikely.** Suitable nesting habitat does not occur on the golf course; however, the site provides marginal foraging habitat for the rare migrant.
Black Swift (*Cypseloides niger*)	CSC	Migrants and transients found throughout many habitats of state. Breed on steep cliffs or ocean bluffs, or in cracks and crevasses of inland deep canyons.	**Unlikely.** Suitable nesting habitat does not occur on the golf course; however, the site provides marginal foraging habitat for the rare migrant.
Loggerhead Shrike (*Lanius ludovicianus*)	CSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	**Possible.** The site provides suitable foraging and marginal breeding habitat for this species.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Federal Candidate Species and State Species of Special Concern (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
California Horned Lark (*Eremophila alpestris actia*)	CSC	Short-grass prairie, annual grasslands, coastal plains, open fields.	**Unlikely.** The site provides marginal foraging and breeding habitat for this species.
Tricolored blackbird (*Agelaius tricolor*)	CSC	Breeds near fresh water in dense emergent vegetation.	**Absent.** Suitable habitat for this species was absent from the site. The only wetland areas onsite are associated with the golf course, which are isolated and influenced by maintenance practices.
Pallid Bat (*Antrozous pallidus*)	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas providing roosting opportunities.	**Possible.** This species may occasionally forage on the study area and marginal roosting habitat is present in the buildings and sheds.
California Mastiff Bat (*Eumops perotis californicus*)	CSC	Forages over many habitats, requires tall cliffs or buildings for roosting.	**Possible.** This species may occasionally forage on the study area and marginal roosting habitat is present in the buildings and sheds.
Townsend's Big-eared Bat (*Plecotus townsendii townsendii*)	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats of the state.	**Possible.** This species may occasionally forage on the study area and marginal roosting habitat is present in the buildings and sheds.
San Francisco Dusky-Footed Woodrat (*Neotoma fuscipes annectens*)	CSC	Found in hardwood forests, oak riparian and shrub habitats.	**Absent.** Woodlands and dense shrub habitat favored by the species are absent from the study area.
Ringtail (*Bassariscus astutus*)	CP	Occurs in riparian and heavily wooded habitats near water.	**Absent.** Suitable habitat for this species is absent from the site.

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

STATUS CODES

FE	Federally Endangered
FT	Federally Threatened
FPE	Federally Endangered (Proposed)
FC	Federal Candidate

CE	California Endangered
CT	California Threatened
CR	California Rare
CP	California Protected
CSC	California Species of Special Concern

CNPS	California Native Plant Society Listing
1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened, or Endangered in California and elsewhere
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere
3	Plants about which we need more information – a review list
4	Plants of limited distribution – a watch list

2.3 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 Game (CDFG) and the California Regional Water Quality Control Board (RWQCB) (see Section 3.2.4 of this report for additional information).

A Waters of the U.S. report was completed by Olberding Environmental, Inc. in June of 2004. Olberding identified a number of features, including a seasonal wetland swale, an irrigation pond, and artificial wetlands, all of which were not natural features. On November 18, 2004, the USACE visited the site and determined that the delineated areas present on the site were not subject to USACE jurisdiction. Therefore, jurisdictional waters were absent from the project site.

2.4 ORDINANCE-SIZED TREES

According to a tree survey conducted by David J. Powers & Associates in September of 2004, there are a total of 2,492 trees on the site (Table 3).

Table 3. Summary of Tree Survey (David Powers & Associates 2004)

Diameter	Tree Type		Total
	Non-Native	Native	
<12"	639	33	672
12"-17"	680	14	694
>/=18"	1,095	31	1,126
Total	2,414	78	**2,492**

Native trees include box elder, California black walnut, coast live oak, cottonwood, elderberry, toyon, yellow willow, and valley oak trees, with non-native trees consisting of all other species. Non-native trees include not only trees not native to California, but those species not naturally occurring in the project vicinity as well. For instance there are trees species that occur in the Santa Cruz Mountains a few miles west of the site (such as the coast redwood) or central coast

species (such as the Monterey pine and Monterey cypress) that could not occur on the valley floor naturally.

The City of San Jose's has a Tree Ordinance (Chapter 13.32 of the Municipal Code), which requires permitting and mitigation for the loss of trees (see *Sections 3.2.5* and *3.3.7* of this report for additional information). Some or all of these trees may fall under this ordinance.

3.0 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. "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 focused with the proposed buildings, access roads and other infrastructure. Some minor modifications of the locations of this development would not require a reassessment of project impacts. However, any proposal that results in substantial revisions as to the scope and/or relative location of the roads, residences and associated infrastructure would need to be accompanied by a subsequent assessment to ensure that the project would not result in significant impacts to biotic resources which are not anticipated by the current proposal.

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 Game (CDFG) 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 CDFG 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 CDFG 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 law also protect most bird species. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., scc. 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, (2003), 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 CDFG.

3.2.4 Wetlands and Other "Jurisdictional Waters"

Natural drainage channels and wetlands are considered "Waters of the United States" (hereafter referred to as "jurisdictional waters"). The U.S. Army Corps of Engineers (USACE) regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act (Wetland Training Institute, Inc. 1991). 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 either intermittently or permanently), 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 will result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The RWCQB 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 Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code (California Department of Fish and Game 2003). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the drainage in question.

3.2.5 Local Policies or Ordinances

The City of San Jose has a Tree Ordinance (Chapter 13.32 of the Municipal Code) that regulates the removal of certain trees. It is the purpose of the ordinance 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 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. 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.

3.3 IMPACTS SPECIFIC TO THE PROJECT SITE

The proposed project consists of the construction of residential development on the 115-acre project site. This development would include not only the building footprints, but also all necessary infrastructures (roadways, etc.). The project also calls for the designation of a portion of the site as open space. Nonetheless, the mass majority of the site will be converted to a developed land use. 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 22 special status plant species potentially occurring in the project vicinity, all have been ruled out as occurring on the site due to the absence of suitable habitat for these species. The site is continually managed as a golf course and the few areas that consist of naturally occurring species are extremely disturbed. The grassland species that are known to occur in the vicinity of the site either occur on serpentine or alkaline soils or within wetlands habitats, all of which are absent from the site.

Mitigation. None required.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impact. Twenty-five special status animal species occur, or once occurred, regionally (see Table 2). Of these, 16 species would be absent from or unlikely to occur on the site. These include the Bay checkerspot butterfly, California tiger salamander, California red-legged frog,

foothill yellow-legged frog, western pond turtle, golden eagle, peregrine falcon, northern harrier, prairie falcon, willow flycatcher, Vaux's swift, black swift, California horned lark, tricolored blackbird, San Francisco dusky-footed woodrat, and ringtail.

Other species might rarely or occasionally occur on the site as transients, migrants, or foragers, but are not expected to nest/breed on the site. These include the Cooper's hawk, sharp-shinned hawk, merlin, pallid bat, Townsend's big-eared bat, and California mastiff bat.

The remaining special status animal species from Table 2 may occur more frequently as regular foragers or may be resident to the site. These include the white-tailed kite, burrowing owl, and loggerhead shrike. However, no stick nests were observed on the project site, and there does not appear to be historic evidence of raptors or shrikes nesting on-site. All of the above species are relatively common regionally and the small amount of habitat loss would result in a less-than-significant impact to habitat available to these species regionally (see however, *Section 3.3.7 Disturbance to Active Raptor Nests*, below).

Mitigation. None required.

3.3.3 Loss of Habitat for Native Wildlife

Potential Impact. The property proposed for residential development consists of a golf course, which currently supports a low diversity of native wildlife species due to the continued maintenance and minimal amount of un-manicured habitat. Nonetheless, the site comprises of a portion of some locally occurring, native wildlife species' home range or territory. As such, some species, particularly avian species that may utilize the trees of the site, may disperse through the site, but most wildlife presently using the site do so as part of their normal movements for foraging, mating, and caring for young. Individuals of the various vertebrate species presently occupying the site would be displaced or lost from the conversion of the golf course into a residential community. Due to the existing conditions of the site (i.e. a developed golf course), impacts from the loss of habitat for native wildlife resulting from the conversion of the property into a residential community is considered less-than-significant.

However, while the previous section (3.3.2) concludes that project impacts would result in less-than-significant impacts to loss of habitat for special status animals, project development could potentially result in harm or injury to individual raptors. There are approximately 2,500 trees scattered throughout the property, which provide breeding habitat for tree-nesting raptors; however no stick nests were observed within these trees in 2004. Suitable habitat for the burrowing owl (i.e. ground squirrel burrows) was present during the July 2004 surveys along the driveway leading into the golf course on the northern boundary of the site. Protocol-level burrowing owl surveys were conducted in the mornings of July 5 and 15 and evenings of July 13 and 14. No individuals or signs (i.e. white wash, pellets, feathers) of burrowing owls were observed during these surveys.

Therefore, as of July 2004, tree nesting raptors and burrowing owls were not currently nesting on the site, but as a volant species, owls could move onto the site prior to site development. If a raptor were to nest on the site in the future prior to construction, such activities could result in the abandonment of active nests or direct mortality to these birds. Future construction activities that would adversely affect future nesting activity or result in the mortality of individual birds constitute a violation of federal and state laws (see discussion in *Section 3.2.3*) and are considered significant adverse impacts.

Mitigation. The implementation of the following measures is to ensure that raptors (hawks and owls) are not disturbed during the breeding season.

- A qualified ornithologist will conduct a pre-construction survey for nesting raptors (including both tree and ground nesting raptors) on site within 30 days of the onset of ground disturbance, if ground disturbance is to occur during the breeding season (February 1 to August 31). These surveys will be based on the accepted protocols (e.g., as for the burrowing owl) for the target species. These surveys will explicitly consider the burrowing owl as a potential target species and pre-construction efforts will be conducted according to the most recent protocol. If a nesting raptor were to be detected, an appropriate construction buffer would be established. Actual size of buffer would depend on species,

topography, and type of construction activity that would occur in the vicinity of the nest.

- ❖ A qualified ornithologist will conduct pre-construction surveys for burrowing owls during the non-breeding season. Pre-construction surveys during the non-breeding season are not necessary for tree nesting raptors, as they are expected to abandon their roosts during construction. If pre-construction surveys (conducted either during the breeding or non-breeding season) determine that burrowing owls occupy the site just prior to construction, then a passive relocation effort (blocking burrows with one-way doors) maybe necessary to ensure that the owl is not harmed or injured during construction.

Implementation of the above measures will fully mitigate impacts to nesting and burrowing raptors.

3.3.4 Interference with the Movement of Native Wildlife

Potential Impact. The property proposed for residential development consists of a golf course, which currently supports a low diversity native wildlife species. Nonetheless, local wildlife species may move through the site from time to time. The movements of various species on- and off-site vary depending on the species in question. One must differentiate between animals' consistent use patterns in order to assess the importance of an area as a "movement corridor." Wildlife movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species occurring onsite permits sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements. Not only is the site already developed in a sense, it is almost entirely surrounded by development and is considered

an infill property. The nearest natural habitat in the immediate vicinity of the site is Lake Cunningham Park, which itself is disturbed by anthropogenic influences. Therefore, due to the existing conditions of the site, the infill nature of the proposed development, and the site's close proximity to densely populated areas, this property is not believed to be a significant movement corridor for native wildlife. Project development is expected to have a less-than-significant impact on corridor-type movements of native wildlife.

Mitigation. None required.

3.3.5 Disturbance to Waters of the U.S. or Riparian Habitats

Potential Impact. Waters of the U.S. and riparian habitats are absent from the project site. The U.S. Army Corps of Engineers has determined that the areas delineated by Olberding Environmental in 2004, are not jurisdictional.

Mitigation. None required.

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

Potential Impact. Eventual site development may 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 wetland habitats would be considered a potentially significant adverse environmental impact.

Mitigation. The applicant must comply with the provisions of a City of San Jose's grading permit, including standard erosion control measures that employ best management practices (BMPs). Such compliance will result in no impact to water quality in seasonal creeks, reservoirs, and downstream waters from the proposed project.

3.3.7 Local Policies or Ordinance Protecting Biological Resources

Potential Impact. The only policy or ordinance that this project will need to abide by is the City of San Jose Tree Ordinance. A formal tree survey was completed by David J. Powers & Associates in September of 2004. At the time of this survey, 2,492 trees were identified on the property. The removal of any or all of the onsite trees may require a permit from the City, along with appropriate mitigation measures for the removal of trees. Therefore, the loss of ordinance trees would constitute a significant impact under CEQA.

Mitigation. Project build out will result in the loss of the majority of the existing onsite trees. The City of San Jose requires that prior to the removal of any sized tree, a permit application be submitted, including the proposed mitigation for the loss of trees. The project site is unique in that all of the existing onsite trees were planted as landscaping for the golf course, thereby not occurring naturally. Nonetheless, all 2,492 trees, 78 if which are of native species, may fall under the City's tree ordinance.

Typically, the City requires that mitigation for the loss of all trees be implemented with ratios ranging from 1:1 (replacement planting: tree loss) to 4:1 depending on the size of the individual tree. The mitigation for the 78 native trees should follow the typical requirements, with appropriate compensation ratios and the replacement with native trees. However, due to the fact that the remaining trees are not only non-native species, but also part of landscaping, the required mitigation should be lessened.

Implementation of the below measures will mitigate for the loss of onsite trees:

Native Replacement Plantings	*NUMBER OF TREES*
• The 31 large sized native trees will be compensated at a 4:1 ratio	124
• The 14 medium sized native trees will be compensated at a 2:1 ratio	28
• The 33 small sized native trees will be compensated at a 1:1 ratio	33
Replacement Plantings	
• The 2,414 non-native trees will be compensated at a 1.5:1 ratio	3,621
TOTAL	**3,806**

Where possible, this mitigation can be compensated for through an onsite Landscape Plan. However, if the mitigation obligations cannot be fulfilled onsite, the applicant can either plant offsite or donate money to *San Jose Beautiful* or *Our City Forest* to be used towards tree plantings.

Onsite plantings will be required to be irrigated for a period of not less than three years and will be maintained during that period, including protection from invasive species and wildlife browsing. For any trees retained in the immediate vicinity of construction or demolition areas, problems of soil compaction within the root zone resulting from heavy construction equipment needs to be prevented. In order to minimize construction and demolition impacts to remaining trees, barrier fencing will be installed around the dripline of all retained trees or at the edge of construction areas. Any construction or demolition activities taking place within the dripline of retained trees will be done by hand or with light equipment that does not cause soil compaction.

3.3.8 Confliction with Provisions of an Adopted Conservation Plan

Potential Impact. An adopted or a Draft Habitat Conservation Plan does not exist for the area in which the project is proposed. Therefore, this significance criterion does not apply.

Migiation. None required.

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APPENDIX A
TERRESTRIAL VERTEBRATES OF THE STUDY AREA

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TERRESTRIAL VERTEBRATES OF THE STUDY AREA

Listed below are those species that may reasonably be expected to use the habitats of the project site routinely during some or all of the year. The list is not intended to include birds that are vagrants or occasional transients. Species observed during the July 5, 13, 14, and 15 of 2004 field surveys have been noted with an asterisk.

CLASS AMPHIBIA (Amphibians)	
ORDER CAUDATA (Salamanders)	
FAMILY SALAMANDRIDAE (Newts)	
California newt	*Taricha torosa*
FAMILY PLETHODONTIDAE (Lungless Salamanders)	
Ensatina	*Ensatina eschscholtzii*
Black salamander	*Aneides flavipunctatus*
Arboreal salamander	*Aneides lugubris*
California slender salamander	*Batrachoseps attenuatus*
Pacific slender salamander	*Batrachoseps pacificus*
CLASS REPTILIA (Reptiles)	
ORDER SQUAMATA (Lizards and Snakes)	
SUBORDER SAURIA (Lizards)	
FAMILY PHRYNOSOMATIDAE	
*Western fence lizard	*Sceloporus occidentalis*
FAMILY SCINCIDAE (Skinks)	
Skilton skink	*Eumeces skiltonianus skiltonianus*
Gilbert's skink	*Eumeces gilberti*
FAMILY ANGUIDAE (Alligator Lizards and Relatives)	
California alligator lizard	*Elgaria multicarinata*
SUBORDER SERPENTES (Snakes)	
FAMILY COLUBRIDAE (Colubrids)	
Ringneck snake	*Diadophis punctatus*
Sharp-tailed snake	*Contia tenuis*
Racer	*Coluber constrictor*
Coachwhip	*Masticophis flagellum*
Gopher snake	*Pituophis catenifer*
Common kingsnake	*Lampropeltis getula*
California black-headed snake	*Tantilla planiceps*
Night snake	*Hypsiglena torquata*
FAMILY VIPERIDAE (Vipers)	
Western rattlesnake	*Crotalus viridis*
CLASS AVES (Birds)	
ORDER CICONIIFORMES (Herons, Storks, Ibises and Relatives)	
FAMILY CATHARTIDAE (New World Vultures)	
*Turkey vulture	*Cathartes aura*
ORDER FALCONIFORMES (Vultures, Hawks and Falcons)	
FAMILY ACCIPITRIDAE (Hawks, Old World Vultures and Harriers)	
White-tailed kite	*Elanus leucurus*
Sharp-shinned hawk	*Accipiter striatus*
Cooper's hawk	*Accipiter cooperii*

Red-shouldered hawk	*Buteo lineatus*
*Red-tailed hawk	*Buteo jamaicensis*
Ferruginous hawk	*Buteo regalis*
Rough-legged hawk	*Buteo lagopus*
FAMILY FALCONIDAE (Caracaras and Falcons)	
American kestrel	*Falco sparverius*
Merlin	*Falco columbarius*
Praire falcon	*Falco mexicanus*
ORDER GALLIFORMES (Magapodes, Curassows, Pheasants and Relatives)	
FAMILY PHASIANIDAE (Quails, Pheasants and Relatives)	
Ring-necked pheasant	*Phasianus colchicus*
FAMILY ODONTOPHORIDAE (New World Quail)	
California quail	*Callipepla californica*
ORDER CHARADRIIFORMES (Shorebirds, Gulls and Relatives)	
FAMILY CHARADRILDAE (Lapwings and Plovers)	
Killdeer	*Charadrius vociferus*
ORDER COLUMBIFORMES (Pigeons and Doves)	
FAMILY COLUMBIDAE (Pigeons and Doves)	
Rock dove	*Columba livia*
Band-tailed pigeon	*Columba fasciata*
Mourning dove	*Zenaida macroura*
ORDER STRIGIFORMES (Owls)	
FAMILY TYTONIDAE (Barn Owls)	
Barn owl	*Tyto alba*
FAMILY STRIGIDAE (Typical Owls)	
Western screech owl	*Otus kennicottii*
Great horned owl	*Bubo virginianus*
ORDER CAPRIMULGIFORME (Goatsuckers and Relatives)	
FAMILY CAPRIMULGIDAE (Goatsuckers)	
Common poorwill	*Phalaenoptilus nuttallii*
ORDER APODIFORMES (Swifts and Hummingbirds)	
FAMILY APODIDAE (Swifts)	
Vaux's swift	*Chaetura vauxi*
FAMILY TROCHILIDAE (Hummingbirds)	
*Anna's hummingbird	*Calypte anna*
Allen's hummingbird	*Selasphorus sasin*
ORDER PICIFORMES (Woodpeckers and Relatives)	
FAMILY PICIDAE (Woodpeckers and Wrynecks)	
Acorn woodpecker	*Melanerpes formicivorus*
Red-breasted sapsucker	*Sphyrapicus ruber*
Nuttall's woodpecker	*Picoides nuttallii*
Downy woodpecker	*Picoides pubescens*
Hairy woodpecker	*Picoides villosus*
Northern flicker	*Colaptes auratus*
ORDER PASSERIFORMES (Perching Birds)	
FAMILY TYRANNIDAE (Tyrant Flycatchers)	
Western wood-pewee	*Contopus sordidulus*
*Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
Ash-throated flycatcher	*Myiarchus cinerascens*
FAMILY LANIIDAE (Shrikes)	

Loggerhead shrike	*Lanius ludovicianus*
FAMILY VIREONIDAE (Typical Vireos)	
Cassin's vireo	*Vireo cassinii*
Hutton's vireo	*Vireo huttoni*
Warbling vireo	*Vireo gilvus*
FAMILY CORVIDAE (Jays, Magpies and Crows)	
Western scrub-jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Common raven	*Corvus corax*
FAMILY HIRUNDINIDAE (Swallows)	
Tree swallow	*Tachycineta bicolor*
Violet-green swallow	*Tachycineta thalassina*
Bank swallow	*Riparia riparia*
Cliff swallow	*Petrochelidon pyrrhonota*
Barn swallow	*Hirundo rustica*
FAMILY PARIDAE (Titmice and Relatives)	
Oak titmouse	*Baeolophus inornatus*
FAMILY AEGITHALIDAE (Bushtit)	
Bushtit	*Psaltriparus minimus*
FAMILY SITTIDAE (Nuthatches)	
White-breasted nuthatch	*Sitta carolinensis*
FAMILY TROGLODYTIDAE (Wrens)	
Bewick's wren	*Thryomanes bewickii*
House wren	*Troglodytes aedon*
Winter wren	*Troglodytes troglodytes*
FAMILY REGULIDAE (Kinglets)	
Ruby-crowned kinglet	*Regulus calendula*
FAMILY SYLVIIDAE (Old World Warblers and Gnatcatchers)	
Blue-gray gnatcatcher	*Polioptila caerulea*
FAMILY TURDIDAE (Thrushes)	
Western bluebird	*Sialia mexicana*
Hermit thrush	*Catharus guttatus*
*American robin	*Turdus migratorius*
FAMILY TIMALIIDAE (Babblers)	
Wrentit	*Chamaea fasciata*
FAMILY MIMIDAE (Mockingbirds and Thrashers)	
Northern mockingbird	*Mimus polyglottos*
California thrasher	*Toxostoma redivivum*
FAMILY STURNIDAE (Starlings and Allies)	
European starling	*Sturnus vulgaris*
FAMILY PARULIDAE (Wood Warblers and Relatives)	
Orange-crowned warbler	*Vermivora celata*
Common yellowthroat	*Geothlypis trichas*
FAMILY EMBERIZIDAE (Emberizines)	
Spotted towhee	*Pipilo maculatus*
*California towhee	*Pipilo crissalis*
Lark sparrow	*Chondestes grammacus*
Sage sparrow	*Amphispiza belli*
Savannah sparrow	*Passerculus sandwichensis*
Fox sparrow	*Passerella iliaca*
Song sparrow	*Melospiza melodia*

White-throated sparrow	*Zonotrichia albicollis*
White-crowned sparrow	*Zonotrichia leucophrys*
Golden-crowned sparrow	*Zonotrichia atricapilla*
Dark-eyed junco	*Junco hyemalis*
FAMILY CARDINALIDAE (Cardinals, Grosbeaks and Allies)	
Black-headed grosbeak	*Pheucticus melanocephalus*
Lazuli bunting	*Passerina amoena*
FAMILY ICTERIDAE (Blackbirds, Orioles and Allies)	
Red-winged blackbird	gelaius phoeniceus
Western meadowlark	*Sturnella neglecta*
Brewer's blackbird	*Euphagus cyanocephalus*
Brown-headed cowbird	*Molothrus ater*
FAMILY FRINGILLIDAE (Finches)	
Purple finch	*Carpodacus purpureus*
House finch	*Carpodacus mexicanus*
Lesser goldfinch	*Carduelis psaltria*
American goldfinch	*Carduelis tristis*
FAMILY PASSERIDAE (Old World Sparrows)	
House sparrow	*Passer domesticus*
CLASS MAMMALIA (Mammals)	
ORDER DIDELPHIMORPHIA (Marsupials)	
FAMILY DIDELPHIDAE (Opossums)	
Virginia opossum	*Didelphis virginiana*
ORDER INSECTIVORA (Insectivores)	
FAMILY SORICIDAE (Shrews)	
Ornate shrew	Sorex ornatus
FAMILY TALPIDAE (Moles)	
Broad-footed mole	Scapanus latimanus
ORDER CHIROPTERA (Bats)	
FAMILY VESPERTILIONIDAE (Evening Bats)	
Little brown myotis	*Myotis lucifugus*
Yuma myotis	*Myotis yumanensis*
California myotis	*Myotis californicus*
Western pipistrelle	*Pipistrellus hesperus*
Big brown bat	*Eptesicus fuscus*
Western red bat	*Lasiurus blossevillii*
Hoary bat	*Lasiurus cinereus*
Townsend's big-eared bat	Corynorhinus townsendii
Pallid bat	Antrozous pallidus
FAMILY MOLOSSIDAE (Free-tailed Bats)	
Western mastiff bat	Eumops perotis
ORDER LAGOMORPHA (Rabbits, Hares and Pika)	
FAMILY LEPORIDAE (Rabbits and Hares)	
Brush rabbit	*Sylvilagus bachmani*
*Black-tailed jackrabbit	*Lepus californicus*
ORDER RODENTIA (Rodents)	
FAMILY SCIURIDAE (Squirrels, Chipmunks and Marmots)	
*California ground squirrel	*Spermophilus beecheyi*
Western gray squirrel	*Sciurus griseus*
*Eastern fox squirrel	*Sciurus niger*

FAMILY GEOMYIDAE (Pocket Gophers)

*Botta's pocket gopher	*Thomomys bottae*

FAMILY HETEROMYIDAE (Pocket Mice and Kangaroo Rats)

California pocket mouse	*Chaetodipus californicus*

FAMILY MURIDAE (Mice, Rats and Voles)

Western harvest mouse	*Reithrodontomys megalotis*
California mouse	*Peromyscus californicus*
Deer mouse	*Peromyscus maniculatus*
Dusky-footed woodrat	*Neotoma fuscipes*
California vole	*Microtus californicus*

ORDER CARNIVORA (Carnivores)

FAMILY CANIDAE (Foxes, Wolves and Relatives)

Gray fox	*Urocyon cinereoargenteus*

FAMILY PROCYONIDAE (Raccoons and Relatives)

Ringtail	*Bassariscus astutus*
Raccoon	*Procyon lotor*

FAMILY MUSTELIDAE (Weasels and Relatives)

Long-tailed weasel	*Mustela frenata*
American badger	*Taxidea taxus*

FAMILY MEPHITIDAE (Skunks)

Striped skunk	*Mephitis mephitis*

FAMILY FELIDAE (Cats)

Feral cat	*Felis catus*

ORDER ARTIODACTYLA (Even-toed Ungulates)

FAMILY CERVIDAE (Deer, Elk and Relatives)

Black-tailed deer	*Odocoileus hemionus*

Biological Report for the Berg/IDS Property

prepared by
WRA, Inc.

July 2005

BIOLOGICAL RESOURCES

1.0 SETTING

1.1 Overview

The Berg/IDS property is located in the Evergreen Valley area of San Jose, Santa Clara County, California, at the foot of the Mount Hamilton area of the Diablo Range. The site is approximately 178 acres in size. Presently zoned for campus industrial development, the site is proposed to be rezoned for residential development. The site is bounded by moderate density residential communities along Aborn Road to the north and Yerba Buena Road to the west. The eastern side of the site is bounded by the foothills of the Mount Hamilton area which is relatively undeveloped. Two riparian corridors are present east of the site, ending at the property line. The southern portion of the site is bounded by campus industrial development. The Berg/IDS property is bisected by Fowler Road which runs east to west through the middle portion of the site. Fowler Road is a paved, lightly traveled two lane road leading from the residential community associated with Yerba Buena Road on the west to private property on the east.

Elevation on the project site ranges from 330 to 675 feet NGVD (National Geodetic Vertical Datum, which, in the Bay Area, is equivalent to mean sea level). The climate is characterized as a Mediterranean Type climate, with sharply contrasting wet and dry seasons. The wet season runs from November through March, with 82 percent of the annual precipitation occurring during this period. The dry season runs from April through October. Average annual precipitation is 15 inches. The summer months of June, July, and August average only 0.2 inches of precipitation and the average annual temperature is 60 degrees Fahrenheit.

1.2 Biotic Habitats: Flora

1.2.1 Non-native Annual Grassland. Non-native annual grassland is the dominant plant community throughout the site. This community consists of annual grasses, native wildflowers, and native and non-native forbs. The growing season for plants in the non-native grassland generally occurs from late autumn or early winter through the spring; the annual grasses are normally dead by late spring. Dominant species include Italian ryegrass (*Lolium multiflorum*), wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordaceus*), and barley (*Hordeum murinum* ssp. *gussoneanum*) (H.T. Harvey & Associates 1999). Herbaceous species occurring on the site include yellow star-thistle (*Centaurea solstitialis*), California poppy (*Eschscholzia californica*), Italian thistle (*Carduus pycnocephalus*) and mustards (*Brassica* spp., *Hirschfeldia incana*). Light cattle grazing occurs on the site. The grassland contains a few widely scattered valley oak (*Quercus lobata*) and coast live oak (*Quercus agrifolia*) trees, primarily on the northern portion of the site. A large portion of the northern site is mostly unvegetated with widely scattered grasses. Historic records indicate that an orchard had been present on the southern portion of the site. A disturbed landmass of raised mounds covered with non-native weedy species, primarily yellow star-thistle and Italian thistle, is present where the orchard had existed. No remnant orchard tree species are present.

1.2.2 Wetlands and Streams. Wetlands are those areas inundated or saturated with water for sufficient duration to support predominantly hydrophytic vegetation. Wetlands typically consist

of topographic depressions in the landscape and are identified based on the presence of 1) predominance by hydrophytic vegetation, 2) hydric soils, and 3) wetland hydrology. Prior to the wetland determination site visit, the Santa Clara Area Soil Survey (NRCS 1958) was reviewed to determine the presence/absence of hydric soils within the property. No hydric soils are mapped within the project site; none were observed during the site visit. While on site, the property was investigated for evidence of hydrophytic vegetation and wetland hydrology. A shallow ditch feature located in the southwest corner of the property was closely investigated for evidence of wetland characteristics; however, the entire length of the feature was determined to lack wetland indicators. No additional areas that could be considered wetlands based on these criteria were located within the Berg/IDS property.

Areas that are inundated for sufficient duration and depth to mostly exclude growth of hydrophytic vegetation are considered streams and are often characterized by a defined drainage course and an ordinary high water line (OHW). Fowler Creek, located in the northeast portion of the Study Area is the only drainage located on site. The drainage enters the property from the east and quickly gives way to ruderal grassland dominated by Italian thistle, bull thistle (*Cirsium vulgare*), and poison oak (*Toxicodendron diversilobum*). Further to the west, the remnant Fowler Creek channel forms a ditch that is completely dry with only minimal evidence of seasonal flows. A defined bed and bank exists within portions of the ditch; however, most of the feature is completely vegetated by non-native weedy grasses and forbs such as Italian ryegrass, wild oat, ripgut brome, and yellow star-thistle. A few, isolated, small trees and shrubs including valley oak, coast live oak and coyote brush are sparsely scattered along the channel embankments.

1.3 Biotic Habitats: Fauna

1.3.1 Non-native Annual Grassland. The non-native annual grassland provides foraging and nesting habitat for a variety of mammals, birds, and reptiles.

Mammal species such as, black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), and black-tailed deer (*Odocioleus hemionus*) were observed in this habitat during a reconnaissance level survey conducted by two qualified biologists on May 27, 2004. Signs of Botta's pocket gopher (*Thomomys bottae*) and coyote (*Canis latrans*) were also present. Other mammal species expected to occur in this habitat include raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), deer mouse (*Peromyscus maniculatus*), western harvest mouse (*Reithrodontomys megalotis*), and red fox (*Vulpes vulpes*). Several bat species, possibly including species of special concern, probably forage over the grassland community. Reptiles such as gopher snakes (*Pituophis melanoleucus*), western fence lizards (*Sceloporus occidentalis*), and common garter snakes (*Thamnophis sirtalis*) are likely to occur in non-native annual grassland habitats. Signs of barn owl (*Tyto alba*), such as feathers and pellets, were found during the site visit. Birds nesting in these grasslands include western meadowlark (*Sturnella neglecta*), red-winged blackbird (*Agelaius phoeniceus*), and house finch (*Carpodacus mexicanus*) (H.T. Harvey & Associates 1999). Suitable habitat exists on the site for burrowing owl (*Athene cunicularia*), though no burrowing owls or signs of burrowing owls were observed during the site visit.

1.3.3 Wetlands and Streams. Aquatic habitat is largely absent from the Fowler Creek drainage for most of the year. Most wildlife species associated with aquatic habitat are not present in the project area.

1.4 Definition of Special Status Species

For the purposes of this analysis, special status species are those plants and animals that are legally protected under the state and federal Endangered Species Acts or other regulations, and species that are considered rare by the scientific community. Rare, endangered, or threatened species are protected by the federal Endangered Species Act of 1973 (as updated in 50 CFR § 17.11 and 17.12, December 1999), the California Native Plant Protection Act of 1997, and the California Endangered Species Act of 1970 (California Administrative Code Title 14, sections 670.2 and 670.51). The California Environmental Quality Act (CEQA) provides additional protection for unlisted species that meet the rare or endangered criteria defined in section 15380.

1.4.1 Federal Threatened Species. A species listed as threatened under the federal Endangered Species Act is protected by federal law from unauthorized "take" (i.e., harass, harm, pursue, hunt, shoot, trap). A take of a federally listed threatened species as part of an otherwise lawful activity requires permission from the United States Fish and Wildlife Service (USFWS) prior to initiating the take. (For further discussion of federal threatened species and the federal Endangered Species Act, see subsection 11.2.1).

1.4.2 Federal Candidate Species. "Federal Candidate" species are those species for which enough data have been collected to support a proposal to list the species as either threatened or endangered under the federal Endangered Species Act. Federal Candidate species are not protected under the federal Endangered Species Act.

1.4.3 California Species of Special Concern. "California Species of Special Concern" are species for which California breeding populations are seriously declining and elimination from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines, some species of special concern would be considered rare. Pursuant to its rarity status, any unmitigated impact to rare species would be considered a significant effect on the environment. Thus, species of special concern must be considered in any project that will or is currently undergoing CEQA review, and/or an environmental permit(s) must be obtained from one or more public agencies for actions affecting these species.

1.4.4 CNPS List Species. The California Native Plant Society (CNPS) maintains an inventory of special-status species. The CNPS maintains four lists of species of varying rarity. Although plants on these lists have no formal legal protection (unless they are also listed state or federal species), the California Department of Fish and Game (CDFG) requests the inclusion of List 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists. List 1 species have the highest priority, List 1A species are thought to be extinct, and List 1B species are known to still exist. List 2 contains species that are rare in California, but more common elsewhere. Lists 3 and 4 contain species about which there is some concern; these are review and watch lists, respectively.

1.4.5 Fully Protected Birds. A total of 13 birds are fully protected under California Fish and Game Code section 3511. Those species that may occur in the San Francisco Bay region include American peregrine falcon (*Falco peregrinus*), brown pelican (*Pelecanus occidentalis californicus*), California black rail, California clapper rail, California least tern (*Sterna antillarum*), golden eagle (*Aquila chrysaetos*), and white-tailed kite. Fully protected birds or parts thereof

may not be taken or possessed at any time except for the following cases: (1) authorized collecting of such species for necessary scientific research and authorized live capture and relocation for the protection of livestock, and (2) legally imported fully protected birds or parts thereof may be possessed under a permit issued by the CDFG.

1.4.6 Fully Protected Mammals. A total of nine mammals are listed as fully protected under California Fish and Game Code section 4700. Fully protected mammals or parts thereof may not be taken or possessed at any time except for the following cases: (1) the California Fish and Game Commission may authorize the collecting of those species for necessary scientific research, and (2) legally imported fully protected mammals or parts thereof may be possessed under a permit issued by the CDFG.

1.4.7 Protected Amphibians. A total of 41 amphibians are protected under California Fish and Game Code section 5050 as species of special concern. As described above, this designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines, some species of special concern would be considered rare.

1.5 Methodology for Determining Occurrence or Potential Occurrence of Special Status Species on the Project Site

1.5.1 California Natural Diversity Database (CNDDB) Listing. The CDFG maintains records for the distribution and known occurrences of sensitive species and habitats in the California Natural Diversity Database (CNDDB). As defined in subsection d. above, sensitive species include those listed by the federal and state governments as endangered, threatened, or rare, or candidate species for these lists. The CNDDB is organized into map areas based on 7.5-minute topographic maps produced by the United States Geological Survey (USGS). All known occurrences of sensitive species and important natural communities are shown on the quadrangle map. The database gives further detailed information on each occurrence, including specific location of the individual, population, or habitat (if possible) and the presumed current state of the population or habitat.

The project site is located in the eastern portion of the San Jose East 7.5-minute USGS quadrangle near its border with the Lick Observatory quadrangle. A search of CNDDB records for all quads bordering the San Jose East quad (12 quads total) was conducted in order to determine wildlife and plant species present in the project vicinity. The absence of a special status animal, plant, or habitat from the report does not necessarily mean that it is absent from the area in question, only that no occurrence data exists in the CNDDB inventory. Therefore a search of the San Jose East quadrangle in the USFWS Quad Species Lists was conducted to determine additional species that may be affected by projects in the area. The recorded occurrence of special status species in the project vicinity may be an indication that they may also occur on the project site. In addition, a reconnaissance level field survey of the site was conducted on May 27, 2004 under fair weather conditions by two qualified biologists employed by Wetlands Research Associates, Inc. The site was traversed on foot and observational data was collected for present species composition and potential habitats for additional species.

1.5.2 Habitat Suitability Evaluation. A total of 52 special status wildlife and plant species have been reported or have been identified as potentially occurring in the San Jose East, San Jose West, Lick Observatory, Los Gatos, Santa Teresa Hills, Morgan Hill, Milpitas, Calaveras

Reservoir, and Mt. Day quadrangles according to the CNDDB (Table 1). Species associated with salt marsh habitat found in quadrangles west of the site were omitted from the table as salt marsh habitat is not found in proximity to the study site. Additional potential species from the San Jose East quadrangle search of the USFWS Quad Species Lists were added to the species table. The resulting species table includes 56 animal and 27 plant special status species known or potentially occurring on or adjacent to the project site. Habitat suitability was evaluated for each of these special status species by classifying its potential for occurrence using the following criteria:

- *Not Present.* Habitat on or adjacent to the site is clearly unsuitable for the species requirements (foraging, nesting, cover, area). The species has an extremely low probability of being found on the site.

- *Low Potential.* Some habitat components meeting the species requirements are present; however, the majority of habitat on and adjacent to the site is unsuitable. The species has a low probability of being found on the site.

- *Moderate Potential.* Habitat components meeting the species requirements are present; however, some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

- *High Potential.* Habitat components for meeting the species requirements are present and most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

- *Present.* Species has been observed or is known to be present on or adjacent to the site.

Table 1. Special status plant and animal species that may occur, or are known to occur in habitats similar to those found on the Study Area. List compiled from USFWS Species lists (USFWS 2004), and CNDDB Santa Clara County lists (2004)

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Mammals			
Townsend's western big-eared bat *Corynorhinus townsendii townsendii*	CSC	Primarily found in rural settings in a wide variety of habitats including oak woodlands and mixed coniferous-deciduous forest. Day roosts highly associated with caves and mines. Very sensitive to human disturbance.	**Low Potential.** May rarely forage over site, but cavern-like roost habitat is not present. Species extremely sensitive to human disturbance.
greater western mastiff bat *Eumops perotis californicus*	CSC	Found in a wide variety of habitat. Distribution appears to be tied to large rock structures which provide suitable roosting sites, including cliff crevices and cracks in boulders.	**Low Potential.** May rarely forage over site, but suitable roost habitat is not present.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	CSC	Occurs in forest habitats of moderate canopy and moderate to dense understory. Also found in chaparral habitats. Feeds mainly on woody plants: live oak, maple, coffeeberry, alder, and elderberry.	**Not Present.** Suitable woodland and scrub habitats are not present.
San Joaquin kit fox *Vulpes macrotis mutica*	FE, ST	Found in annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing and suitable prey base.	**Low Potential.** Site located at extreme of species range. Loose-textured sandy soils not present.
Birds			
white-tailed kite *Elanus leucurus*	CFP	Year-long resident of coastal and valley lowlands; rarely found away from agricultural areas. Preys on small diurnal mammals and occasional birds, insects, reptiles, and amphibians.	**High Potential.** Kites forage over grassland and nest in riparian, woodland, and scrub habitat. Trees located on the site provide suitable nesting habitat.
northern harrier *Circus cyaneus*	CSC	Found in open grasslands, prairies, and marshes. Tend to nest near water.	**High Potential.** Grasslands provide suitable foraging habitat; however, poor cover precludes nesting attempts.
ferruginous hawk *Buteo regalis*	CSC	Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys and fringes of pinyon-juniper habitats.	**Low Potential.** This winter visitor may rarely forage on the site.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
golden eagle *Aquila chrysaetos*	CSC, CFP	Found in rolling foothill and mountain areas, sage-juniper flats, dessert. Cliff-walled canyons provide nesting habitat in most parts of range.	**Low Potential.** Diablo Range east of the site provides suitable habitat. May rarely forage over the site.
American peregrine falcon *Falco peregrinus anatum*	FD, SE, CFP	Winters throughout Central Valley. Requires protected cliffs and ledges for cover. Feeds on a variety of birds, and some mammals, insects, and fish.	**Low Potential.** May rarely forage on the site. Nesting habitat is not present. Food sources are limited.
prairie falcon *Falco mexicanus*	CSC	Inhabits dry, open terrain. Breeding sites located on cliffs. Forages widely.	**Low Potential.** May rarely forage on the site. Nesting habitat is not present.
long-billed curlew *Numenius americanus*	CSC	Winters in large coastal estuaries, upland herbaceous areas, and croplands. Breeds in northeastern California in wet meadow habitat.	**Low Potential.** Species may rarely forage on site in winter.
western burrowing owl *Athene cunicularia hypugea*	CSC	Frequents open grasslands and shrublands with perches and burrows. Preys upon insects, small mammals, reptiles, birds, and carrion. Nests and roosts in old burrows of small mammals.	**Low Potential.** No evidence of owls in area during previous protocol-level surveys (WRA 2000; 2001). No evidence of owl occupancy observed in or near ground squirrel burrows found on site.
long-eared owl *Asio otus*	CSC	Inhabit open woodlands, forest edges, riparian stripsalong rivers, hedgerows, juniper thickets, woodlots, and wooded ravines and gullies. Breeding habitat must include thickly wooded areas for nesting and roosting with nearby open spaces for hunting.	**Low Potential.** Typical woodland habitat is not present. Suitable nesting habitat is not present.
short-eared owl *Asio flammeus*	CSC	Found in open, treeless areas with elevated sites for perches and dense vegetation for roosting and nesting. Tule patches/tall grass needed for nesting and daytime seclusion.	**Low Potential.** Species may rarely forage on site. Suitable nesting habitat is not present.
Vaux's swift *Chaetura vauxi*	CSC	Forages high in the air over most terrain and habitats but prefers rivers/lakes. Requires large hollow trees for nesting.	**Low Potential.** May forage over site during migration. Suitable nesting trees not present on the site.
black swift *Cypseloides niger*	CSC	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above surf. Forages widely.	**Not Present.** Suitable habitat is not present on the site.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
little willow flycatcher *Empidonax traillii brewsteri*	SE	Most numerous where extensive thickets of low, dense willows edge on wet meadows, ponds, or backwaters. Winter migrant.	**Not Present.** Suitable habitat is not available on or adjacent to site.
Least Bell's vireo *Vireo bellii pusillus*	FE, SE	Summer resident of southern California. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis, mesquite. Found in low riparian in vicinity of water.	**Not Present.** Site is located north of known breeding range.
bank swallow *Riparia riparia*	ST	Migrant in riparian and other lowland habitats in western California. Nests in riparian areas with vertical cliffs and bands with fine-textured or sandy soils in which to nest.	**Not Present.** Suitable riverbank habitat is not present on site.
loggerhead shrike *Lanius ludovicianus*	CSC	Prefers open habitats with scattered shrubs, trees, pots, utility lines from which to forage for large insects. Nest well concealed above ground in densely-foliaged shrub or tree.	**Present.** Species was observed throughout site during visit. Shrikes were more abundant north of Fowler Road. Species is likely nesting in oak trees on northern portion of site.
yellow warbler *Dendroica petechia brewsteri*	CSC	Nests in riparian stands of willows, cottonwoods, aspens, sycamores, and alders. Also nests in montane shrubbery in open conifer forests.	**Low Potential.** Suitable riparian habitat is not present.
saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	CSC	Frequents low, dense vegetation near water including fresh to saline emergent wetlands. Brushy habitats used in migration. Forages among wetland herbs and shrubs for insects primarily.	**Not Present.** Suitable wetland habitat is not present.
Bell's sage sparrow *Amphispiza belli*	CSC	Prefers dense chaparral and scrub habitats in breeding season. Found in more open habitats in winter.	**Not Present.** Suitable chaparral habitat is not present on or adjacent to site.
tricolored blackbird *Agelaius tricolor*	CSC	Usually nests over or near freshwater in dense cattails, tules, or thickets of willow, blackberry, wild rose or other tall herbs.	**Low Potential.** Emergent wetlands are absent from the site. Species may rarely forage on site in winter.
Reptiles and Amphibians			

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
western pond turtle *Clemmys marmorata*	CSC	Occurs in perennial ponds, lakes, rivers and streams with suitable basking habitat (mud banks, mats of floating vegetation, partially submerged logs) and submerged shelter.	**Not Present.** Aquatic habitats are not present on the site.
California horned lizard *Phrynosoma coronatum frontale*	CSC	Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress juniper and annual grass habitats. Prefers sand areas, washes, flood plains and wind-blown deposits.	**Low Potential.** Sub-optimal habitat exists on site. Only two reported occurrences in Santa Clara Country, each at elevations exceeding 2,500 feet (CNDDB 2004).
silvery legless lizard *Anniella pulchra pulchra*	CSC	Burrowing species found in loose, friable soils or sand.	**Not Present.** Suitable habitat does not exist on site. No reported occurrences for Santa Clara County (CNDDB 2004, Jennings and Hayes 1994).
San Francisco garter snake *Thamnophis sirtalis tetrataenia*	FE, SE	Found in the vicinity of freshwater marshes, ponds and slow moving streams. Pref dense cover and water depths of at least one foot. Upland areas important.	**Not Present.** No aquatic habitats occur on site. Not within known distribution.
Alameda whipsnake *Masticophis lateralis euryzanthus*	FT, ST	Prefers a chaparral habitat with rock outcroppings and small mammal burrows for basking and refuge. Can occur in adjacent communities, including grassland and oak savanna. Found in the east bay hills.	**Not Present.** Suitable scrub and rock outcrop habitat is not present on site.
western spadefoot toad *Spea hammondii*	CSC	It prefers areas of open vegetation and short grasses where the soil is sandy or gravelly in grassland, scrub, chaparral and woodland	**Not Present.** Suitable habitat is not present on site. No documented occurrences in Santa Clara County (Jennings and Hayes 1994).
California tiger salamander *Ambystoma californiense*	FPT, CSC	Inhabits annual grass habitat and mammal burrows. Seasonal ponds and vernal pools crucial to breeding	**Not Present.** No vernal pools or seasonal ponds occur on or adjacent to site.
California red-legged frog *Rana aurora draytonii*	FT, CSC	Associated with quiet perennial to intermittent ponds, stream pools and wetlands. Prefers shorelines with extensive vegetation. Documented to disperse through upland habitats after rains.	**Low Potential.** Past surveys and assessments adjacent to site did not find this species. Perennial aquatic habitats are not present in the proposed development area.
foothill yellow-legged frog *Rana boylii*	CSC	Found in or near rocky streams in a variety of habitats. Feed on both aquatic and terrestrial invertebrates.	**Not Present.** Suitable stream habitat is not present on the site.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
Invertebrates			
longhorn fairy shrimp *Branchinecta longiantenna*	FE	Inhabit small, clear-water depressions in sandstone and clear-to-turbid clay-grass-bottomed pools in shallow swales.	**Not Present.** Vernal pools are not present on the site.
vernal pool fairy shrimp *Branchinecta lynchi*	FT	Inhabit small, clear-water sandstone-depression pools, grassy swales, slumps, or basalt-flow depression pools.	**Not Present.** Vernal pools are not present on the site.
vernal pool tadpole shrimp *Lepidurus packardi*	FE	Pools commonly found in grass bottomed swales of unplowed grasslands. Som pools are mud-bottomed and highly turbid.	**Not Present.** Vernal pools are not present on the site.
Opler's longhorn moth *Adela oplerella*	FSC	Inhabit serpentine grassland. Larval foodplant is *Platystemon californicus.*	**Not Present.** Serpentine soils not present on site.
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. Plantago erecta is the primary host plant.	**Not Present.** Serpentine soils and associated larval host plants not present on site.
Callippe silverspot butterfly *Speyeria callippe callippe*	FE	Restricted to northern coastal scrub of the San Francisco peninsula. Hostplant is *Viola pedunculata.*	**Not Present.** Suitable habitat is not present. No reported occurrences in Santa Clara County (CNDDB 1994). Host plant is unlikely to occur.
Plants			
alkali milk-vetch *Astragalus tener tener*	List 1B	Playas, valley and foothill grassland (adobe clay), vernal pools/ alkaline; 1 to 60m elevation.	**Low Potential.** Vernal pools and alkaline habitats are not present. Site is above typical elevation range for this species.
San Joaquin saltbush *Atriplex joaquiniana*	List 1B	Chenopod scrub, meadows, playas, valley and foothill grassland/ alkaline soils; 1 to 320m elevation.	**Low Potential.** Typical habitat conditions are not present for this species.
big-scale balsamroot *Balsamorhiza macrolepis macrolepis*	List 1B	Chaparral, cismontane woodland, valley and foothill grassland/ sometimes serpentine; 90 to 1400m elevation.	**Not Present.** Not balsamroot-like plants were observed during site visit.
Tiburon Indian paintbrush *Castilleja affinis neglecta*	FE, ST, List 1B	Valley and foothill grassland (serpentine); 60 to 400m elevation.	**Not Present.** Serpentine soils are not present.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
coyote ceanothus *Ceonothus ferrisiae*	FE, List 1B	Chaparral, coastal scrub, valley and foothill grassland/ serpentine; 120 to 460m elevation.	**Not Present.** Serpentine soils are not present. Site is below typical elevation for this species.
Congdon's tarplant *Centromadia parryi congdonii*	List 1B	Valley and foothill grassland/ alkaline; 1 to 230m elevation.	**Low Potential.** Alkaline soils do not appear to be present on the site.
robust spineflower *Chorizanthe robusta robusta*	FE, List 1B	Coastal dunes/scrub, sandy terraces and bluffs in loose sand; 1 to 120m elevation.	**Not Present.** Typical habitat conditions are not present.
Mt. Hamilton thistle *Cirsium fontinale campylon*	List 1B	Chapparral, cismontane woodland, valley and foothill grassland/ serpentine seeps; 100 to 890m elevation.	**Not Present.** Serpentine soils are not present. Plant not observed during site visit.
San Francisco collinsia *Collinsia multicolor*	List 1B	Closed cone coniferous forest, coastal scrub/ sometimes serpentine; 30 to 250m elevation.	**Not Present.** Typical habitat for this species is not present on site.
Mt. Hamilton coreopsis *Coreopsis hamiltonii*	List 1B	Cismontane woodland, steep talus with open southwest exposure; 530 to 1300m elevation.	**Not Present.** Site is below typical elevation range for this species.
Santa Clara Valley dudleya *Dudleya setchellii*	FE, List 1B	Cismontane woodland, valley and foothill grassland/ rocky serpentine outcrops; 60 to 455m elevation.	**Not Present.** Serpentine soils are not present.
fragrant fritillary *Fritillaria liliacea*	List 1B	Cismontane woodland, coastal prairie and scrub, valley and foothill grassland/ often serpentine; 3 to 410m elevation.	**Low Potential.** Long term habitat disturbance of grasslands likely precludes presence.
Loma Prieta hoita *Hoita strobilina*	List 1B	Chaparral, cismontane woodland, riparian woodland/ usually serpentine; 30 to 600m elevation.	**Not Present.** Typical habitats for this species are not present.
Contra Costa goldfields *Lasthenia conjugens*	FE, List 1B	Cismontane woodland, alkaline playas, valley and foothill grassland, vernal pools/ mesic; 0 to 470m elevation.	**Not Present.** Seasonal wetlands typical of this species are not present on this site.
smooth lessingia *Lessingia micradenia glabrata*	List 1B	Chaparral, cismontane woodland/ serpentine, often roadsides; 120 to 420m elevation.	**Not Present.** Serpentine soils are not present. Site is below typical elevation for this species.
Mt. Hamilton lomantium *Lomantium observatorium*	List 1B	Cismontane woodland, mostly around Mt. Hamilton itself in open rocky terrain; 1219 to 1330m elevation.	**Not Present.** Site is below elevation range for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE
arcuate bush mallow *Malacothamnus arcuatus*	List 1B	Chaparral; 15 to 355m elevation.	**Not Present.** Chaparral habitats are not found on the site.
Hall's bush mallow *Malacothamnus hallii*	List 1B	Chaparral, coast scrub; 10 to 550m elevation.	**Not Present.** Typical habitat for this species is not present on the site.
prostrate navarretia *Navarretia prostrata*	List 1B	Coastal scrub, valley and foothill grassland (alkaline), vernal pools/ mesic; 15 to 700m elevation.	**Not Present.** Seasonal wetlands typical of this species are not present on this site.
Santa Cruz Mountains beardtongue *Penstemon rattanii kleei*	List 1B	Chaparral, lower montane coniferous forest, North Coast coniferous forest; 400 to 1100m elevation.	**Not Present.** Site is below elevation range for this species.
Mt. Diablo phacelia *Phacelia phacelioides*	List 1B	Chaparral, cismontane woodland/ rocky outcrops and talus slopes; 500 to 1370m elevation.	**Not Present.** Site is below elevation range for this species.
hairless popcorn-flower *Plagiobothrys glaber*	List 1A	Alkaline meadows, marshes and swamps (coastal salt), presumed extirpated from California; 15 to 180m elevation.	**Not Present.** Typical habitat for this species is not present on the site. Presumed extirpated.
rock sanicle *Sanicula saxatilis*	List 1B	Broadleaf upland forest, chaparral, valley and foothill grassland, bedrock outcrops and talus slopes; 615 to 1215m elevation.	**Not Present.** Site is below elevation range for this species.
maple-leaved checkerbloom *Sidalcea malachroides*	List 1B	Broadleaved upland forest, coastal prairie, coastal scrub, North Coast coniferous forest/ often in undisturbed areas; 2 to 700m elevation.	**Not Present.** Typical habitat for this species is not present. Disturbed habitat.
Metcalf Canyon jewel-flower *Streptanthus albidus albidus*	FE, List 1B	Valley and foothill grassland, relatively open areas with serpentine soils; 45 to 800m elevation.	**Not Present.** Serpentine soils are not present.
most beautiful jewel-flower *Streptanthus albidus peramoenus*	List 1B	Chaparral, cismontane woodland, valley and foothill grassland/ serpentine soils; 110 to 1100m elevation.	**Not Present.** Serpentine soils are not present.
caper-fruited tropidocarpum *Tropidocarpum capparideum*	List 1A	Valley and foothill grassland (alkaline hills); 1 to 455m elevation.	**Not Present.** Typical habitat for this species is not present. Presumed extirpated.

*** Key to status codes:**
Status codes used above are:
FE - Federal Endangered
FT - Federal Threatened
FC - Federal Candidate
FPD - Federal Proposed Delisted
NMFS - Species under the Jurisdiction of the National Marine Fisheries Service
SE - State Endangered CFP - CDFG Fully Protected Animal
CSC - CDFG Species of Special Concern, CSC (Draft) - 4 April 2001 Draft
CDFG Species of Special Concern
CFP - CDFG Fully Protected Animal
SLC - Species of Local Concern
None - No status given but rookery sites are monitored by CDFG
List 1B - CNPS 1B List, Endangered, Threatened, or Rare in California

1.6 Determination: Special Status Species Occurring or with the Potential to Occur on the Project Site

1.6.1 Special Status Species Potentially Occurring On Site. The species table lists special status animals and plants that have been reported in the project vicinity. Based on this CNDDB (2004) search, field surveys, a review of geographical ranges for sensitive species, the habitat requirements for special status species, a review of previous biological assessments performed for this site, and the EIR biologist's site reconnaissance and peer review of the applicant's biological assessment, it was determined that three special status animal species have a moderate to high potential to occur on the project site or are present: white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), and loggerhead shrike (*Lanius ludovicianus*). These species and their potential use of the site are discussed below.

- **White-tailed Kite (CDFG Fully Protected Animal).** White-tailed kites are associated with annual grasslands, agricultural areas, scrub habitats, wet meadows, and emergent wetlands throughout the lower elevations of California. Nesting generally occurs in shrubs or small trees. The species is frequently observed in the San Francisco Bay region. Individuals are likely to forage over open areas of the project site throughout the year, and suitable nesting trees and shrubs are present, particularly in the oak trees located in the northern portion of the site and along the eastern boundary of the site.

- **Northern Harrier (CDFG Species of Special Concern).** Found throughout California, this species frequents grasslands, marshes, sloughs, and prairies. They forage for small mammals, snakes, frogs, insects, carrion, and small birds. Nests are build on elevated ground in dense vegetation. CDFG species of special concern due to habitat loss. Optimal foraging habitat exists on the project site. Species is not likely to nest on the site.

- **Loggerhead Shrike (CDFG Species of Special Concern).** This small bird of prey forages primarily on insects, though it will occasionally feed on lizards, mice, and small birds. Loggerhead shrikes are generally associated with open fields with scattered trees. Many loggerhead shrikes were observed during the May, 27, 2004 field survey and they have been reported as present in previous reports (H.T. Harvey and Associates 1999). The scattered oak trees on the northern portion of the project site provides suitable nesting habitat for this species.

2.0 PERTINENT PLANS AND POLICIES

2.1 San Jose General Plan

The San Jose 2020 General Plan contains the following objectives, policies, and programs relevant to consideration of the potential biological resource impacts of the proposed project:

Goals and Policies (Chapter 5)

Natural Resources-Woodlands, Grasslands, Chaparral, and Scrub Goal: Protect the biological diversity of grasslands, woodlands, chaparral and scrub in hillside areas.

Woodlands, Grasslands, Chaparral, and Scrub Policies:

- 1. The nature and amount of public access to wooded areas and grasslands, when allowed, should be consistent with the environmental characteristics of these areas.

- 4. Grading should be designed to minimize the removal of significant vegetation.

- 5. The City should preserve and protect oak woodlands, and individual oak trees, to the greatest extent feasible.

Natural Resources- Species of Concern Goal: Preserve habitat suitable for Species of Concern, including threatened and endangered species.

Species of Concern Policies:

- 1. Consideration should be given to setting aside conservation areas in the Bay and baylands, along riparian corridors, upland wetlands, and hillside areas to protect habitats of unique, threatened and endangered species of plants and animals, and to provide areas for education and research purposes.

- 2. Habitat areas that support Species of Concern should be retained to the greatest extent feasible.

- 3. New development and undeveloped properties throughout the City contribute to the regional loss of Burrowing Owl habitat. To offset this loss of habitat, the City should require either habitat preservation on or off site or other appropriate measures for habitat acquisition, habitat enhancement and maintenance of local habitat bank.

Riparian Corridor Policies:

In May 1994, the City of San Jose adopted the *Riparian Corridor Policy Study* (RCPS) as City policy and directed the implementation of RCPS guidelines to both public and private project approvals. The RCPS broadly defines a Riparian Corridor by the following definition:

> "*(A) riparian corridor includes any defined stream channels including the area up to the bank full-flow line, as well as all riparian (streamside) vegetation in contiguous adjacent uplands...Stream channels include all perennial and intermittent streams shown as a solid or dashed blue line on USGS topographic maps, and ephemeral streams or "arroyos" with well defined channels and some evidence of scour or deposition.*"(RCPS 1994)

The RCPS maintains that for all development and urban activities, a Riparian Corridor setback of at least 100 feet with specified exceptions, must be maintained from the existing edges of riparian corridors (or top of bank, whichever is greater). The "riparian edge" is the outer boundary of existing riparian vegetation; for trees the dripline is the outer boundary. The following circumstances may warrant setbacks of less than 100 feet.

- 1. Locations in or near downtown San Jose.

- 2. Urban infill locations where most properties are already developed and parcels are generally small (less than one acre).

- 3. Sites adjacent to small lower order tributaries whose riparian influence does not extend to 100 feet.

- 4. Sites with unusual geometric characteristics and/or unusually long riparian frontages

- 5. Pre-existing one or two family lots, or usable yard areas, but only where a frontage road is infeasible and the building setbacks are consistent with all riparian setback requirements.

- 6. Sites which are being redeveloped with uses that are similar to the existing use or are more compatible with the riparian corridor than the existing use and the intensity of the new development will have significantly less impact on the corridor than the existing development. "Impact" should be measured by relative compatibility of use as well as setback, height, site coverage, mass, noise, etc.

- 7. Instances where implementation of the project includes measures which can protect and enhance riparian habitat more than could a 100-foot setback.

- 8. Recreation facilities deemed to be a critical need and for which an alternative site locations are limited.

- 9. Utility or equipment installations, or replacement of existing ones, which involve no significant disturbance to the riparian corridor during construction and operation, and generate only incidental human activity.

Tree removal policies:

For multi-family residences and for commercial and industrial properties, a Tree Removal Permit is required for the removal of trees of any size. For removal of trees that are 56 inches in circumference or more at a height of 24 inches above the natural grade of the slope, a public hearing is required and the applicable fees can be found in the Tree Removal section of the current fee schedule. A multi-trunk tree is considered a single tree and measurement of that tree shall include the sum of the circumference of the trunks of that tree. For removal of trees less than 56 inches in circumference, no public hearing is required and a fee equivalent to that for a Permit Adjustment will be assessed.

In the case of heritage trees, any tree located on private property which, because of factors including but not limited to its history, girth, height, species or unique quality, has been found by the city council to have a special significance to the community shall be designated a heritage tree. These trees will be placed on a heritage tree list which shall be adopted by the city council by resolution, which may be amended to add or delete certain trees therefrom. Any person that unlawfully vandalizes, grievously mutilates, removes or destroys a heritage tree shall be subject to any appropriate enforcement by the city.

2.2 Regulatory Requirements Pertaining to Biological Resources

Those sections of the federal and state Endangered Species Acts, the federal Migratory Bird Treaty Act, and the California Fish and Game Code that are most relevant to consideration of

the project's potential biological resource impacts are summarized below.

2.2.1 Federal Endangered Species Act. The U.S. Fish and Wildlife Service (USFWS) is responsible for implementing the federal Endangered Species Act (ESA). The purpose of the ESA is "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved" (16 USC 1531). The ESA establishes an official listing process for plants and animals considered to be in danger of extinction, requires development of specific plans of action for the recovery of listed species, and restricts activities perceived to harm or kill listed species or affect critical habitat (16 USC 1532, 1536).

The ESA also requires federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or destroy or adversely modify critical habitat (16 USC 1536). Therefore, the ESA is invoked when a property contains a federally listed threatened or endangered species that may be affected by a permit decision. In the event that listed species are involved and a United States Army Corps of Engineers (Corps) permit is required for impacts to jurisdictional waters, the Corps must initiate consultation with the USFWS (or the National Marine Fisheries Service [NMFS]) pursuant to section 7 of the ESA (16 USC 1536; 40 CFR Sec. 402). If formal consultation is required, the USFWS or NMFS will issue a biological opinion stating whether the permit action is likely to jeopardize the continued existence of the listed species, recommending reasonable and prudent measures to ensure the continued existence of the species, establishing terms and conditions under which the project may proceed, and authorizing incidental take of the species.

The USFWS also has the responsibility for project review under the Fish and Wildlife Coordination Act. This statute requires that all federal agencies consult with the USFWS, NMFS, and the state's wildlife agency (California Department of Fish and Game [CDFG]) for activities that affect, control, or modify streams and other water bodies. Under the authority of the Fish and Wildlife Coordination Act, the USFWS, NMFS, and CDFG review applications for permits issued under Section 404 (Clean Water Act) and provide comments to the Corps about potential environmental impacts. Because the project site may support federally listed species and will require Corps authorization for impacts to jurisdictional waters, ESA Section 7 consultations likely will be required with the USFWS and NMFS. The Corps likely will serve as the lead federal agency in these consultations.

2.2.2 California Endangered Species Act. In 1984, the State legislated the California Endangered Species Act (CESA) (Fish and Game Code section 2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would jeopardize threatened or endangered species if reasonable and prudent alternatives are available.

CESA requires that all state lead agencies (as defined under CEQA) conduct an endangered species consultation with the CDFG if their actions could affect a state-listed species. The state lead agency and/or project applicants must provide information to the CDFG on the project and its likely impacts. The CDFG must then prepare written findings on whether the proposed action would jeopardize a listed species or would result in the direct take of a listed species. Because CESA does not have a provision for "harm," CDFG considerations pursuant to CESA are limited to those actions that would result in the *direct take* of a listed species.

If the CDFG determines that a proposed project could affect a state-listed threatened or

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

CESA allows for take incidental to otherwise lawful development projects. CESA emphasizes early consultation to avoid potential impacts on rare, endangered, and threatened species, and to develop appropriate mitigation planning to offset project-caused losses of listed species populations and their essential habitats. The CDFG may authorize, through permits and memoranda of understanding, the take and possession of state-listed species for scientific, educational, and management purposes. The Habitat Conservation Planning Branch (HCPB) administers this permitting process. Permits are required on both public and private lands.

2.2.3 Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, and swallows).

2.2.4 California Fish and Game Code Sections 3503, 3503.5, and 3800. These sections of the Fish and Game Code prohibit the "take, possession, or destruction of birds, their nests or eggs." Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a "take." Such a take would violate the Migratory Bird Treaty Act.

2.2.5 Wetlands and Other "Jurisdictional Waters" Wetlands and natural drainage channels and streams may be considered jurisdictional "waters of the United States" (hereafter referred to as "jurisdictional waters"). The filling or grading of such jurisdictional waters are regulated by the USACOE by authority of section 404 of the Clean Water Act.[1] The extent of jurisdiction within drainage channels is characterized by a defined bed and bank, and by "ordinary high water marks"(OHW) on opposing channel banks. The Corps defines and ordinary high water mark by the following definition:

> *The term "ordinary high water mark" means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impresses on the bank, shelving, changes in the characteristics of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

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[1]United States Army Corps of Engineers (USACOE), *Corps of Engineers Wetlands Delineation Manual*, Department of the Army, 1987.

(Federal Register Vol. 51, No. 219
Part 328.3 (d). November 13, 1986.)

Wetlands are areas with soils that are seasonally or permanently saturated, or inundated for a least five percent of the growing season (18 consecutive days in California). The resulting conditions support hydrophytic vegetation that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils, and wetland hydrology, according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACOE. Such permits are typically issued on the condition that the applicant agree to provide mitigation which results in "no-net-loss" of wetland functions or values. No permit will be issued until the Regional Water Quality Control Board (RWQBC) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The RWQBC is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits.

The CDFG has jurisdiction over the bed and bank of natural steams and drainages according to provisions of Section 1601 and 1603 of the California Department of Fish and Game Code[2]. Activities which would disturb these drainages are regulated by the CDFG 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.

2.2.6 Santa Clara Valley Water District. The Santa Clara Valley Water District (SCVWD) is a special district empowered to protect public health, safety, and welfare by protecting water quality; provide flood control facilities and floodway maintenance services; and regulate construction, deposition, excavation, and vegetation planting activities within watercourses throughout the County and incorporated cities. A SCVWD permit is required for construction activities within 50 feet of the top of bank of watercourses throughout the County.

3.0 IMPACTS AND MITIGATION MEASURES

This section assesses environmental impacts and proposes mitigation measures related to biological resources for the proposed project. The section initially provides an overview of the definition and use of significance criteria related to biological resources. Subsequently, the section identifies impacts, assigns a level of significance to each, and proposes specific mitigation measures that should be taken to avoid or minimize significant impacts on biological resources.

3.1 Significance Criteria

Significance criteria for impacts to biological resources were developed based on Section 15065 and Appendices G and I of the CEQA Guidelines, and Section 21083 of the Public Resources Code. According to these guidelines, a project will have a significant effect on biological resources if it would:

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[2]California Department of Fish and Game, *California Fish and Game Code*, 1995

- Substantially affect, reduce the number of, or restrict the range of a unique, rare, or endangered species of animal or plant, or the habitat of the species (Section 15065, Appendix G, Appendix I)

- Interfere substantially with the movement of any resident or migratory fish or wildlife species (Appendix G)

- Threaten to eliminate a plant or animal community (Section 15065a)

- Substantially diminish or reduce habitat for fish, wildlife, or plants (Appendix G)

- Change the diversity of species, or number of any species of plants or animals (Appendix I)

- Cause a fish or wildlife population to drop below self-sustaining levels (Section 15065)

- Introduce new species of plants or animals into an area, or in a barrier to the normal replenishment of existing species (Appendix I)

- Deteriorate existing fish or wildlife habitat (Appendix I)

For the purposes of this EIR, three principal components of the guidelines outlined above were considered:

- Magnitude of the impact (e.g., substantial/not substantial)
- Uniqueness of the affected resource (rarity)
- Susceptibility of the affected resource to perturbation (sensitivity)

The evaluation of significance must consider the interrelationship of these three components. For example, a relatively small magnitude impact to breeding burrowing owls (*Athene cunicularia*) would be considered significant because the species is increasingly rare in the San Francisco Bay region and is believed to be very susceptible to burrow disturbance. On the other hand, a plant community such as Non-Native Annual Grassland is not rare or as sensitive to disturbance. Therefore, a much larger magnitude of impact would be required to result in a significant impact.

3.1.1 Vegetation Resources. The following significance criteria were used to assess the significance of potential project impacts to affected vegetation resources. References to CEQA Guidelines are included in parentheses. Significant impacts are those that would result in:

- Substantial disturbance of a special status plant species[3] or its habitat (Section 15065, Appendix G, Appendix I)

[3] Special status species are defined here to include all species listed, proposed for listing, or candidates for listing under the federal endangered species act; the california endangered species act; the cdfg's list of species of special concern; plant species included on cnps lists 1a, 1b, and 2; as well as species that would qualify for inclusion into any one of these lists (ceqa guidelines, section 15380). The final eir incorporates recently finalized changes to the cnps inventory. These changes reflect the current state of knowledge on the rarity and endangerment of these species.

- A substantial reduction in the numbers of a special status plant species (Section 15065)
- Indirect loss of a special status plant species or its habitat (Section 15065a)
- Filling or degradation of wetlands and waters subject to the jurisdiction of the USACE pursuant to the Federal Clean Water Act (no net loss of wetlands) (Appendix G and Appendix I)
- Creation of substantial barriers for dispersal of plant species (Appendix G)
- Compaction of soils, clearing of vegetation, or other activities that substantially increase erosion and sedimentation (Appendix G)
- Introduction of non-native plant species or facilitating the dispersal of existing populations of non-native plants (Appendix I)

3.1.2 Wildlife Resources. Evaluation of impacts to wildlife resources considers the magnitude of impact, the rarity of the resource, and susceptibility of the resource to impacts. All impacts that are defined in Section 15065 of the CEQA Guidelines as significant have been designated as significant in this EIR. A project is considered to have potentially significant biological impacts if it would:

- Substantially diminish habitat for fish or wildlife
- Cause a fish or wildlife population to drop below self-sustaining levels
- Interfere substantially with the movement of any resident or migratory fish or wildlife species
- Reduce the number or restrict the range of a rare or endangered species
- Adversely affect species under the protection of the Migratory Bird Treaty Act (burrowing owls, nesting raptors, passerines)
- Threaten to eliminate a plant or animal community
- Substantially affect a rare or endangered wildlife species or the habitat of that species

Significant impacts to biological resources are not limited to projects affecting only federal or state listed endangered species. A species that is listed will also be considered rare or endangered if it can be shown to meet the following criteria (CEQA Guidelines 15380):

- When its survival and reproduction in the wild are in immediate jeopardy from one or more causes
- It is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens
- It is likely to become endangered within the foreseeable future throughout all or a significant portion of its range

3.2 Impact Assessment Methodology

3.2.1 Vegetation Resources. Vegetation resources within the project area were determined using literature review and field surveys. Proposed locations and impacting parameters were compared with the locations of identified biological resources to determine the following:

- Type of affected resource
- Area, population, and status of the affected resource
- Nature of the potential impact (e.g., construction vs. maintenance, short-term vs. long-term, and direct vs. indirect)

3.2.2 Wildlife Resources. The significance criteria were applied to the wildlife species and habitats within the project area to evaluate the significance of impacts associated with the construction of the proposed project. An example of a significant impact is substantial disturbance or habitat removal of a white-tailed kite nest site. In this example, a substantial impact may be construction activity in the vicinity of a nest which would disrupt normal breeding behavior or result in the abandonment of a nest.

3.3 Project Impacts

3.3.1 Impacts to Special Status Plant Species. No special status plant species have been observed on the project site, and, based on the lack of suitable habitat and/or the degraded condition of the habitat, none are likely to occur. Therefore, no impacts to special species plant populations are expected from the proposed project.

3.3.2 General Vegetation Impacts. Impacts to approximately 178 acres of non-native Grassland and urban landscape are expected to result from the project. This area does not contain any sensitive plant communities or provide habitat for special status plants. Therefore, the impacts are considered less than significant and do not require mitigation.

Project landscaping is expected to introduce exotic, non-native vegetation. However, the undeveloped portions of the site are already dominated by non-native vegetation, and landscaping on adjacent properties and past horticultural activities on the project site have already provided a source for introducing exotics. Due to the lack of sensitive native plant communities in the vicinity of the proposed project, this impact is considered less than significant and does not require mitigation.

3.3.3 Impacts to Jurisdictional Wetlands and "Other Waters".

Wetlands and "other waters" are considered sensitive resources by the State and Federal policies established by the USACOE and CDFG. The CDFG requires notification under the Fish and Game Code section 1600 for any work within a 100-year flood plain of natural watercourses. A permit is also required by the Corps for the filling of jurisdictional wetlands and "other waters".

Fowler Creek has a poorly-defined channel in the Project area. This drainage does not support

riparian vegetation, and has very low habitat value for wildlife. Although fill placement associated with a road crossing will require regulatory agency permits, this action will not.result in the loss of significant wildlife or plant habitat. Due to the lack of riparian vegetation, and the existing degraded nature of the channel, potential impacts to biological resources resulting from filling a small portion of the channel are considered less than significant and do not require mitigation in excess of that required in regulatory permits.

3.3.4 Riparian Impacts.

The Riparian Corridor Policy Study (City of San Jose 1999) defines riparian corridor as follows:

> "For the purposes of this study, a riparian corridor includes any defined stream channels including the area up to the bank full-flow line, as well as all riparian (streamside) vegetation in contiguous adjacent uplands. Characteristic woody riparian vegetation species could include (but are not limited to): willow, *Salix* sp.; alder, *Alnus* sp.; box elder, *Acer negundo*; Fremont cottonwood, *Populus fremontii*; bigleaf maple, *Acer macrophyllum*; western sycamore, *Platanus racemosa*; and oaks, *Quercus* sp. Stream channels include all perennial and intermittent streams shown as a solid or dashed blue line on USGS topographic maps, and ephemeral streams or "arroyos" with well-defined channels and some evidence of scour and deposition."

The ephemeral reach of Fowler Creek where it crosses the project area (between the proposed debris basin and Alta Avenue) does not support riparian vegetation. This portion of the ephemeral channel is not well-defined and has been degraded due to cattle grazing and human impacts (dumping, orchard farming, etc.). The project proposes a 50-foot setback from the centerline of the channel (in some areas the top of bank is indistinct). Typically, the CDFG requires a setback of at least 50 feet from the top of bank or riparian dripline, whichever is greatest. The Riparian Corridor Policy Study maintains that for all development and urban activities, a riparian corridor setback of at least 100 feet with specified exceptions, must be maintained from the existing edges of riparian corridors (or top of bank, whichever is greater). The "riparian edge" is the outer boundary of existing riparian vegetation; for trees the dripline is the outer boundary. A setback of less than 100 feet is warranted because Fowler Creek downstream of the proposed debris basin is an ephemeral channel supporting no riparian vegetation. According to the Riparian Corridor Policy Study, sites adjacent to small lower order tributaries whose riparian influence does not extend to 100 feet may warrant setbacks of less than 100 feet. The 50-foot setback proposed by the applicant is consistent with CDFG and SCVWD standards, and adequately protects the ephemeral channel. Due to the lack of riparian vegetation, and the existing degraded nature of the Fowler Creek channel downstream of the proposed debris basin, potential impacts associated with a setback of 50 feet are considered less than significant and do not require mitigation.

3.3.5 Tree Removal Impacts. One or more trees will be likely removed by the proposed project.

Impact Tree removal would represent a potentially significant impact.

Mitigation Mitigation will be determined on a case by case basis as a condition of a Tree Removal permit. Planting of supplemental trees at a minimum 1:1 (replacement:loss) will likely be required elsewhere on site.

3.3.5 Special Status Wildlife Impacts. Potential impacts to the three special status wildlife species with a moderate to high potential to occur on the project site are discussed below.

3.3.5.1 White-tailed Kite and Northern Harrier. Coast live oaks, eucalyptus, and other trees in the project area provide potential nesting habitat for white-tailed kite, Cooper's hawk, and other common raptors. The northern harrier is typically a ground-nesting species. Impacts to these species during project construction may include indirect impacts as a result of noise and construction on breeding and nesting in locations outside the grading areas or the potential for destruction of individual birds, if nesting in trees within the grading areas.

Impact Construction activities could adversely affect nesting raptors during the breeding season. Removal of trees and shrubs that provide nesting habitat for special-status birds could result in direct mortality of birds. Construction noise and human disturbance could cause nest abandonment, death of young, or loss of reproductive potential at active nests located near the project site. Potential impacts to nesting raptors are considered significant.

Mitigation To avoid potential adverse effects on nesting special-status raptors and other birds, a no-disturbance buffer zone would be established around active nests during the breeding season. If construction activities (i.e., ground cleaning and grading, including removal of trees or shrubs) are scheduled to occur during the breeding season (February 1 through August 31), a qualified wildlife biologist will conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction activities. If active raptor nests are found, a 500-foot no-disturbance buffer will be created around active raptor nests during the breeding season or until it is determined that young have fledged. If surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation would be required. Trees and shrubs that have been determined to be unoccupied by special-status birds or that are located more than 500 feet from active nests may be removed. If construction activities are scheduled to occur during the non-nesting season, then no surveys would be required. Implementation of these measures will reduce impacts to nesting raptors to a less than significant level.

3.3.5.2 Loggerhead Shrike. Coast live oaks, eucalyptus and other trees, and residential landscaping in the project area provide potential nesting habitat for Allen's hummingbird and loggerhead shrike. Impacts to these species, and common bird species, during project construction may include indirect impacts as a result of noise and construction on breeding and nesting in locations outside the grading areas or the potential for destruction of individual birds, if nesting within the grading areas.

Impact Construction activities could adversely affect nesting Allen's hummingbirds and loggerhead shrikes during the breeding season. Removal of trees and shrubs that provide nesting habitat for special-status birds could result in direct mortality of birds. Construction noise and human disturbance could cause nest abandonment, death of young, or loss of reproductive potential at active nests located near the project site. Potential impacts to nesting Allen's hummingbirds and loggerhead shrikes are considered significant.

Mitigation To avoid potential adverse effects on nesting special status birds, a no-disturbance buffer zone would be established around active nests during the breeding

season. If construction activities (i.e., ground cleaning and grading, including removal of trees or shrubs) are scheduled to occur during the breeding season (February 1 through July 31), a qualified wildlife biologist will conduct preconstruction surveys of all potential nesting habitat within 50 feet of construction activities. If active nests are found, a 50-foot no-disturbance buffer will be created around active nests during the breeding season or until it is determined that young have fledged. If surveys indicate that potential habitat is unoccupied during the construction period, no further mitigation would be required. Trees and shrubs that have been determined to be unoccupied by breeding birds or that are located more than 50 feet from active nests (except active raptor nests as described in Mitigation 3.3.3.5.2) may be removed. If construction activities are scheduled to occur during the non-nesting season, then no surveys would be required. Implementation of these measures will reduce impacts to nesting Allen's hummingbirds to a less than significant level.

3.3.6 General Wildlife Impacts. Along with potential impacts to special status wildlife species, potential impacts to common wildlife species and to wildlife habitat need to be considered.

Impact A potential long-term impact of the proposed project on terrestrial wildlife would be the general removal and disturbance of biotic habitat. The construction of the project would eliminate any species not able to emigrate to adjacent habitat, such as reptiles, amphibians, and some burrowing mammals. Other mobile species would be expected to attempt to colonize nearby habitat. Emigration to other habitat areas, presuming they are available at the time of construction, often leads to decreased survivorship due to lower quality habitat and unsuccessful competition for resources. Project-related noise and lighting would also contribute to the general disturbance of wildlife, both during construction and when the project is complete. In sum, all local wildlife species would be disturbed by the construction of the project.

Coupled with this decrease in natural species diversity would be an increase in disturbance-related species diversity. Species which are attracted to human development and presence, would be expected to increase substantially. Such species are typically attracted to disturbed open spaces, lack of natural predators, and resources (food and cover) provided by human presence.

Impacts to less sensitive wildlife habitat would be considered adverse but not significant. Widespread habitat that does not have concentrated wildlife populations or critical resources is considered less sensitive. For example, impacts to most Non-Native Grassland and Urban Landscape would not be considered significant. Because of the existing poor upland habitat conditions on the proposed site, the project's general impacts to terrestrial wildlife are considered to be less than significant.

Mitigation The loss of terrestrial habitat discussed above is considered less-than-significant; no mitigation is required.

3.3.7 Cumulative Impacts

3.3.7.1 Vegetation. Cumulative impacts to vegetation resources include all impacts by projects that are planned or projected to be built during the life of the proposed project. Projects were considered in the cumulative analyses if their potential impacts considered

together with the impacts of the proposed project would be additive and compound or increase the vegetation impacts assessed above.

There are no special status plants or sensitive plant communities on the proposed project site and, therefore, no cumulative impacts on these resources would occur. The project would have a less-than-significant cumulative impact on vegetation resources. No significant impact has been identified; no mitigation is required.

3.3.7.2 Wildlife. Cumulative impacts to wildlife resources include all impacts that are planned or projected to be built during the life of the proposed project. Although planned or proposed projects in San Jose will not impact the same wildlife species at the same levels or in the same way; cumulatively, wildlife habitat is degraded or lost as a result of these activities.

Mitigations 3.3.5.1 and 3.3.5.2 would reduce project impacts on special status wildlife species to a less-than-significant level. The project site contains no designated critical habitat areas, and therefore the project would not contribute to cumulative impacts on critical habitat. The project would contribute to degradation of general wildlife habitat in the region. The site contains low-value habitat, however, since it is agricultural land and adjacent to existing development. As a result, the cumulative loss of wildlife habitat is considered a less-than-significant cumulative impact.

BIOTIC ASSESSMENT
FOR
THE LEGACY PARNERS SITE

Prepared by

Live Oak Associates, Inc.

Rick A. Hopkins, Ph.D., Principal, Senior Biologist
Pamela Peterson, M.S. Candidate, Assistant Project Manager, Plant and Wetland Ecologist
Davinna Ohlson, M.S., Wildlife Biologist
Lindsay Pecoraro, M.S. Candidate, Wildlife Biologist

Prepared for

John Hesler
David J. Powers and Associates
1885 The Alameda
San Jose, CA 95126

July 19, 2005

Project No. 641-01

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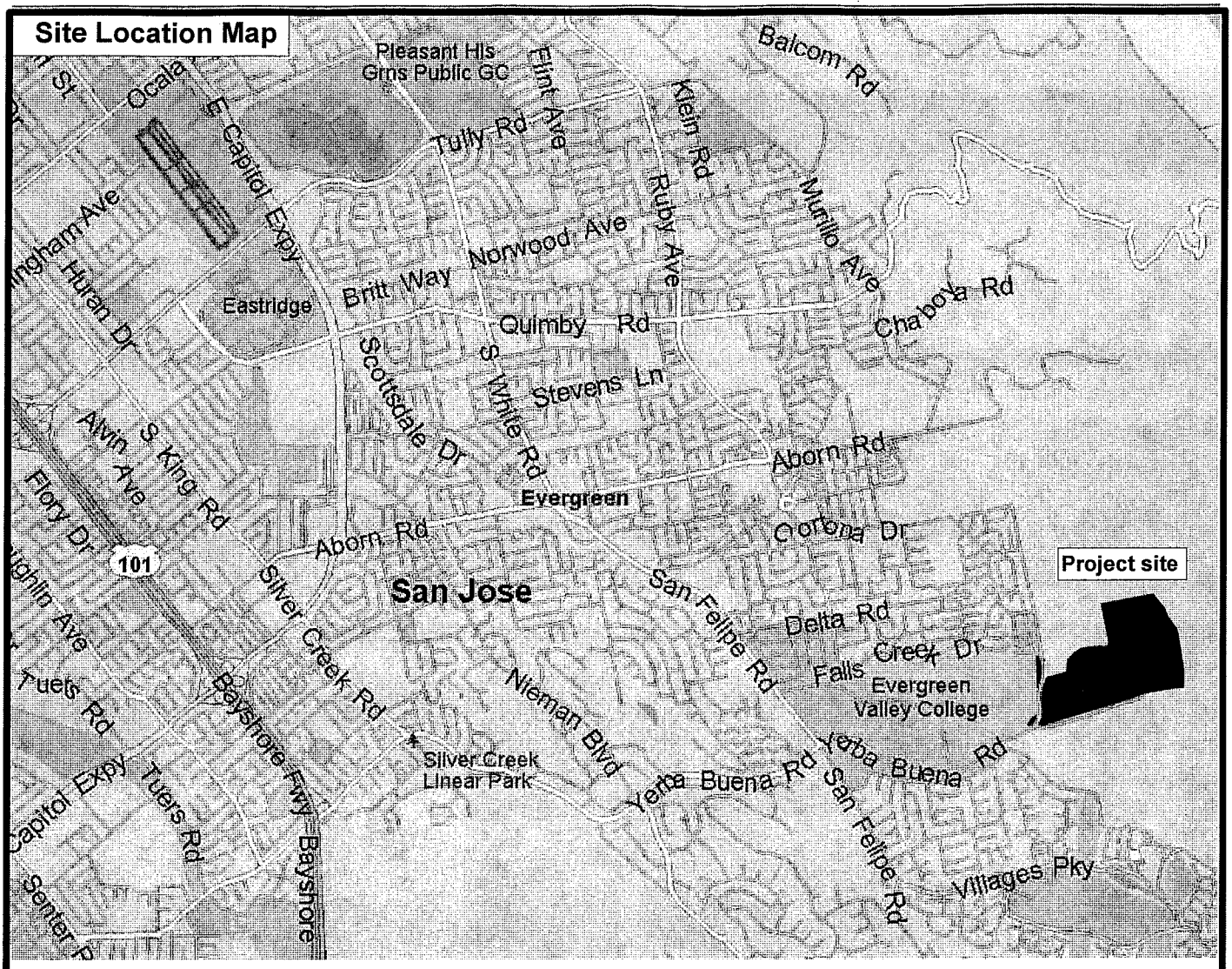
1.0 INTRODUCTION

This report describes the biotic resources of the approximately 120-acre Legacy project site in the City of San Jose, Santa Clara County, California, and evaluates possible constraints such resources may pose for eventual site development. This biotic assessment is being conducted in support of the Evergreen Smart Growth Plan EIR. The study area (hereafter referred to as "the site") is located just northwest of the intersection of Yerba Buena Road and Old Yerba Buena Road at the eastern edge of the Santa Clara Valley (Figure 1). Ruderal grassland, non-native grassland, valley oak savanna, sagebrush chaparral, seasonal wetland, and riparian woodland habitats occur on the site. The location of the site can be found on the Lick Observatory U.S.G.S. 7.5' quadrangle at Township 7 South, Range 2 East.

Site development of open space 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), covered by policies and ordinances of the City of San Jose, or some combination of these four conditions. This report addresses issues related to sensitive biotic resources occurring on the site, along with the federal, state, and local laws related to such resources and mitigation measures that may be required to reduce the magnitude of anticipated impacts. 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* (CDFG 2004); (2) the *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001); and (3) manuals and references related to plants and animals of the Santa Clara Valley region. Reconnaissance-level field surveys were conducted within the study area on June 25, 2004, by Pamela Peterson and Davinna Ohlson, biologists with Live Oak Associates, Inc. (LOA), at which time the principal biotic habitats of the site were identified and the constituent plants and animals of each were noted (Figure 2). As potential habitat for burrowing owls was identified on the site during the reconnaissance survey, protocol-level surveys for burrowing owls were conducted by LOA wildlife biologists Davinna Ohlson and Lindsay Pecoraro on June 28 and 29, 2004; and by Davinna Ohlson and Deanna Dawn on March 7, 9, 10 and 11, 2005. An additional survey was conducted on July 21, 2005 by Davinna Ohlson to confirm the absence of late blooming special

status plants having potential to occur on the site that would not have been identifiable during earlier surveys.



Live Oak Associates, Inc.	
Legacy Site / Vicinity Map	
Date: 7/12/04	Project #: 641-01
Figure #: 1	

1.1 PROJECT DESCRIPTION

The project proposes the development of attached town homes and single-family homes on lots of varying sizes but no greater than 6,000 square feet. Vehicular access to the site will be via Old Yerba Buena Road.

As part of the necessary infrastructure accompanying proposed developments such as this, several new roads on the site will also be constructed to access the home sites. One road will span Evergreen Creek at the northern boundary of the site. This road and its associated crossing of the creek will be constructed to the west of an existing dirt road and bridge that appear to have been constructed on the site for agricultural activities.

The project also proposes that portions of the site, along Evergreen Creek and at the east and west ends of the site, be set aside as open space with a pedestrian trail to be incorporated into the open space area. The proposed project also includes a riparian setback of at least 100 feet from Evergreen Creek's riparian corridor, as defined by either the riparian dripline or the top of the creek bank, whichever is greater, as recommended by the City of San Jose's Riparian Policy (1999).

2.0 EXISTING CONDITIONS

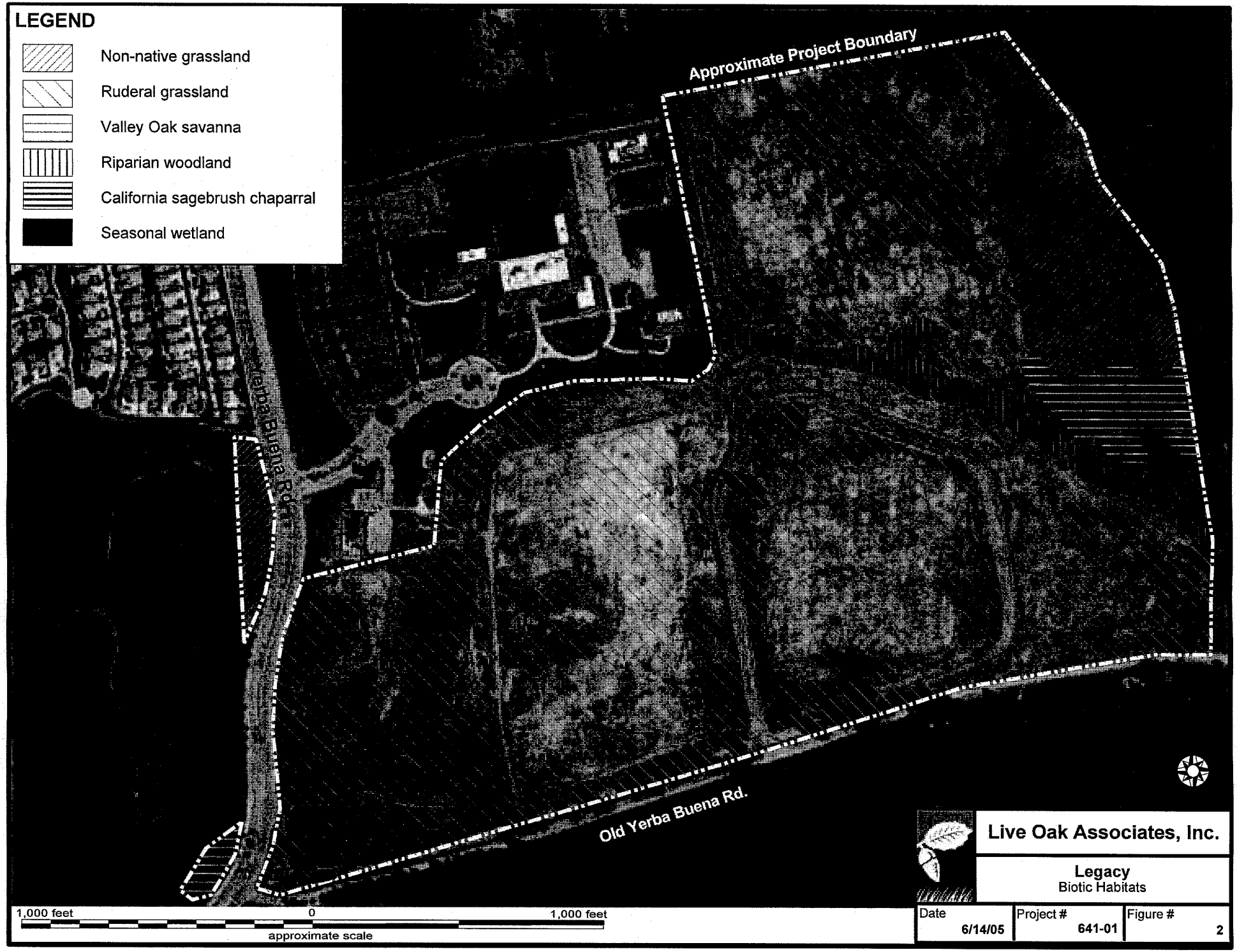
The L-shaped, approximately 120-acre study area is located in the City of San Jose within Santa Clara County. The site is bound to the northwest by a light industrial facility, to the northeast and east by private rangeland, to the south by Old Yerba Buena Road, and to the west by Yerba Buena Road. Aside from a large cement tank in the southeastern corner of the site, development is currently absent from the site. Evergreen Creek, a seasonal creek, flows diagonally in a northwesterly direction across the eastern portion of the site. The site is located on a gentle slope at the base of foothills of the Diablo range, with elevations ranging from a low of approximately 530 feet National Geodetic Vertical Datum (NGVD) in the western portion of the site to approximately 680 feet NGVD in the eastern portion. The most dominant habitat occurring on the site is ruderal grassland that is disced. Other habitats identified on the study area include non-native grassland, valley oak savanna, riparian woodland, seasonal wetland, and California sagebrush chaparral (Figure 2).

Five soil-mapping units have been identified on the site and these soils are described in greater detail in Table 1 and depicted in Figure 4. None of the soils occurring on the site are considered to be hydric, although hydric soil inclusions may occur. Soils of the site are not of a type, such as serpentine, known to support populations of edaphic-endemic special status plants.

Table 1. Descriptions of soil mapping units of the study area (NRCS 1968).

Soil Mapping Unit	Drainage Class	Parent Material
AcE	Well drained	Altamont clay, 15 to 30% slopes
AcE2	Well drained	Altamont clay, 15 to 30% slopes, eroded
PoC	Well drained	Pleasanton loam, 2 to 9% slopes
SgD	Well drained	Saratoga-Positas loams, 9 to 15% slopes
SgE	Well drained	Saratoga-Positas loams, 15 to 30% slopes

Annual precipitation in the general vicinity of the study area averages 16 to 25 inches, almost 85% of which falls between October and March. Virtually all precipitation falls in the form of rain. Stormwater runoff readily infiltrates the soils of the site, but when field capacity has been reached, gravitational water flows off of the site into local creeks and rivers.


LEGEND
Non-native grassland
Ruderal grassland
Valley Oak savanna
Riparian woodland
California sagebrush chaparral
Seasonal wetland
Approximate Project Boundary
Old Yerba Buena Rd.
1,000 feet
0
1,000 feet
approximate scale
Live Oak Associates, Inc.
Legacy
Biotic Habitats
Date
6/14/05
Project #
641-01
Figure #
2

LEGEND

AcE Altamont clay, 15-30% slopes
AcE2 Altamont clay, 15-30% slopes, eroded
PoC Pleasanton loam, 2-9% slopes
SgD Saratoga-Positas loams, 9-15% slopes
SgE Saratoga-Positas loams, 15-30% slopes

Source:
Soil Conservation Service and the Department of Soils and Plant Nutrition, University of California, July 1968

1/2 mile 0 1/2 mile
approximate scale

Live Oak Associates, Inc.

Legacy
Soil Survey

Date	Project #	Figure #
7/12/04	641-01	3

2.1 BIOTIC HABITATS

Six biotic habitats have been identified on the study area (Figure 2). For the purposes of this study, these natural terrestrial communities are identified as follows: non-native grassland, ruderal grassland, riparian woodland, valley oak savanna, seasonal wetland, and California sagebrush chaparral.

2.1.1 Ruderal Grassland

Ruderal grassland habitat occurring on fallow agricultural land is the dominant habitat on the site. The term "ruderal" refers to habitats that have been heavily disturbed by human factors. The grasslands of the site appear to be disced on a regular basis and were, in fact observed to be disced on one of our site visits of June 30, 2004. The grasslands of the site were also known to be disced in March or April, 2005 as LOA conducted protocol-level pre-discing burrowing owl surveys on the site in March 2005. As a result of regular discing, many areas of the ruderal grassland were almost barren of vegetation during the 2004 reconnaisance-level surveys. Where vegetation did occur, it was dominated by annual grasses and forbs of European origin. Alien grasses observed here include slender and fat wild oats (*Avena barbata* and *A. fatua*), soft chess (*Bromus hordaceus*), barnyard barley (*Hordeum murinum* ssp. *leporinum*), ripgut brome (*Bromus diandrus*) and Italian wild rye (*Lolium multiflorum*); while common non-native forbs observed here include black mustard (*Brassica nigra*), wild radish (*Raphanus sativa*), yellow star thistle (*Centauria solstitialis*), Italian thistle (*Carduus pycnocephalus*), Canada horseweed (*Conyza canadensis*) and curly dock (*Rumex crispus*). Native vegetation was generally absent from the ruderal areas with the exception of an occasional coyote brush shrub (*Baccharis pilularis*). A windrow of eucalyptus (*Eucalyptus globulus*) borders the ruderal grasslands along a portion of the southern boundary of the site adjacent to Old Yerba Buena Road.

Grasslands, such as the ruderal and non-native grasslands of the site, can provide important habitat to many terrestrial vertebrates. As many as 25 species of reptiles and amphibians, 100 species of birds, and 50 species of mammals are known to use grassland habitats of central California (Mayer and Laudenslayer 1988). However, the ruderal grasslands of the site are highly disturbed and provide minimal cover and, therefore, possess limited habitat value for terrestrial vertebrates. Nonetheless, during the June 2004 surveys, prior to the discing that

occurred on June 30th, several wildlife species were observed to be using the ruderal areas of the site, and several more species, while not directly observed, may be expected to occur here from time to time. These are discussed in more detail below.

A large brush pile on the north side of the creek channel, and abandoned ground squirrel burrows scattered throughout grasslands of the site, provide habitat for several reptile species, including western fence lizards (*Sceloporus occidentalis*), which were observed during the June surveys. Other reptile species, including the southern alligator lizard (*Elgaria multicarinatus*), gopher snake (*Pituophis melanoleucus*), and common kingsnake (*Lampropeltis getulus*) may also seek cover in grasslands on the site, where they eat insects, spiders, small mammals, and birds.

Numerous resident and migratory bird species breed and forage in grassland habitats. Bird species observed in grasslands of the site include the California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), western scrub-jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), red-winged blackbird (*Agelaius phoeniceus*), and a flock of wild turkeys (*Meleagris gallopavo*). Raptors forage in grassland habitats for insects, songbirds, rodents, and other small mammals. Turkey vultures (*Cathartes aura*) and American kestrels (*Falco sparverius*) were observed foraging over the site. A large stick nest, likely for red-tailed hawks (*Buteo jamaicensis*), was observed in a eucalyptus tree along the site's south perimeter. Several adult and juvenile red-tailed hawks were also observed foraging over grasslands of the site. Other raptors likely to forage in this habitat include the white-tailed kite (*Elanus leucurus*) and Cooper's hawk (*Accipiter cooperii*).

A diversity of mammals were observed or are expected to occur in grasslands on the site. Several black-tailed jackrabbits (*Lepus californicus*) and California ground squirrels (*Spermophilus beecheyi*) were observed during the surveys. Other small mammals likely to occur on the site include the ornate shrew (*Sorex ornatus*), Botta's pocket gopher (*Thomonys bottae*), western harvest mouse (*Reithrodontomys megalotis*), and California meadow vole (*Microtus californicus*). Small mammals often attract reptilian and avian predators (discussed above) as well as other mammalian predators. One adult and two juvenile coyotes (*Canis latrans*) were observed several times on the site during the June surveys. Coyotes prey extensively on jackrabbits and supplement their diets with small rodents, fruits, and insects.

Other mammalian predators expected to occur on the site include the cougar (*Puma concolor*) and bobcat (*Lynx rufus*). These predators may also prey on large mammals expected to occur in this habitat from time to time, such as the wild boar (*Sus scrofa*) or black-tailed deer (*Odocoileus hemionus columbianus*).

2.1.2 Non-native Grassland

A small area of non-native grassland habitat occurs along the eastern boundary of the site, north of the channel of Evergreen Creek. This area appeared to be used for rangeland, although no cattle were observed in the area during the surveys. Plant and wildlife species occurring in this habitat would be similar to those found in the ruderal grassland habitats of the site.

2.1.3 Riparian Woodland

Riparian woodland habitat is associated with Evergreen Creek, which enters the site on the southeastern boundary, flowing first in a northerly direction and then westerly along the site's northern boundary. In the eastern portion of the site, this habitat consists of riparian woodland with a relatively dense closed canopy dominated by coast live oak (*Quercus agrifolia*) and California buckeye (*Aesculus californicus*), although valley oak (*Quercus lobata*), California bay (*Umbellularia californica*), toyon (*Heteromeles arbutifolia*) and western sycamore (*Platanus racemosa*) are also present. In addition to the trees, several shrubs and vines were also present including poison oak (*Toxicodendron diversilobum*), Mexican elderberry (*Sambucus mexicanus*), snowberry (*Symphoricarpos albus* var. *laevigatus*), California blackberry (*Rubus ursinus*) and manroot (*Marah fabaceous*). Because of the dense canopy and leaf litter, an herb layer was generally absent along this portion of the creek, however, where present, it was dominated by the same non-native forb and grass species found in the adjacent ruderal and grassland habitats. Where the creek flows along the northern boundary of the site, riparian trees give way to more herbaceous and shrubby riparian vegetation.

Because of the diversity of vegetation layers in riparian habitats, generally these habitats support a diverse array of native wildlife, as well as provide movement corridors for some animal species between other habitat types. For this reason, riparian habitats tend to provide high biotic value. Wildlife that were observed in the riparian woodland of the site, or that would be expected to occur there are discussed in more detail below.

Riparian systems serve as dispersal corridors and islands of habitat for an estimated 83% of amphibians and 40% of reptiles in California (Brode and Bury 1984). Leaf litter and decaying logs provide a moist microclimate suitable for amphibians such as the ensatina (*Ensatina eschscholtzii*), arboreal salamander (*Aneides lugubris*), California slender salamander (*Batrachoseps attenuatus*), and western toad (*Bufo boreas*). Reptiles that may utilize riparian systems include the western fence lizard, western skink (*Eumeces skiltonianus*), southern alligator lizard, California legless lizard (*Anniella pulchra*), gopher snake, common kingsnake, night snake (*Hypsiglena torquata*), and western rattlesnake (*Crotalus viridis*).

Many bird species, both residents and winter migrants, depend on riparian plant communities. Bird species observed in the site's riparian habitat include the red-shouldered hawk (*Buteo lineatus*), Anna's hummingbird (*Calypte anna*), acorn woodpecker (*Melanerpes formicivorus*), black phoebe (*Sayornis nigricans*), white-breasted nuthatch (*Sitta carolinensis*), Cassin's vireo (*Vireo cassinii*), Steller's jay (*Cyanocitta stelleri*), western scrub-jay, northern mockingbird and wild turkey (*Meleagris gallopavo*). Resident species that may be found in this habitat include the Cooper's hawk, great horned owl (*Bubo virginianus*), Hutton's vireo (*Vireo huttoni*), bushtit (*Psaltriparus minimus*) and Nuttall's woodpecker (*Picoides nuttallii*). Winter migrants may include the sharp-shinned hawk (*Accipiter striatus*) and ruby-crowned kinglet (*Regulus calendula*). Summer migrants may include the ash-throated flycatcher (*Myiarchus cinerascens*) and black-headed grosbeak (*Pheucticus melanocephalus*).

The structural and faunal diversity of riparian zones provide an abundant food source for and attract a variety of mammalian species. The parasitic mouse (*Peromyscus californicus*) feeds heavily on seeds of the California bay laurel, and the deer mouse feeds on soil-dwelling larvae as well as a variety of seeds and leaves. Other constituent mammals of riparian woodlands include the brush rabbit (*Sylvilagus bachmani*) and western gray squirrel (*Sciurus griseus*). Further mammals that may occur in the area include the coyote, gray fox (*Urocyon cinereoargenteus*), ringtail (*Bassariscus astutus*), raccoon (*Procyon lotor*), bobcat, wild boar, and black-tailed deer.

2.1.4 Valley Oak Savanna

A small amount of savanna habitat dominated by widely scattered valley oaks occurs contiguous with the riparian woodland and non-native grassland habitats of the site to the north of Evergreen

Creek. No shrub layer is present in this habitat and the herb layer is dominated by the same non-native forbs and grasses that dominate the ruderal and non-native grassland habitats of the site.

Steller's jays and western scrub-jays were observed in this habitat. Species occurring in adjacent habitats discussed above are also likely to occur in the valley oak savanna.

2.1.5 Seasonal Wetland

Four small seasonal wetlands were observed on the site within the ruderal grassland habitat. Three of these were completely dry during the June 2004 surveys, however, the fourth wetland, occurring in the southwestern corner of the site was still inundated during these surveys. All four of these wetlands were observed to be either saturated or inundated during the March 2005 burrowing owl surveys. All of the wetlands were observed to support some hydrophytic vegetation

Seasonal wetlands may provide breeding habitat for amphibians such as pacific treefrog (*Hyla regilla*) and western toad (*Bufo boreas*), while birds such as black phoebes (*Sayornis nigricans*) may forage for insects that are attracted to these wetlands. Additionally, these wetlands would provide a seasonal source of water for species occurring in the surrounding habitats.

2.1.6 California Sagebrush Chaparral

Chaparral dominated by California sagebrush (*Artemisia californica*) occurs north of Evergreen Creek in the eastern portion of the site.

Chaparral communities provide habitat for a variety of reptiles, including the western fence lizard, western skink, southern alligator lizard, California legless lizard, night snake, and western rattlesnake.

Resident birds commonly found in chaparral communities include the California quail, bushtit, wrentit (*Chamaea fasciata*), California thrasher (*Toxostoma redivivum*), and California towhee (*Pipilo crissalis*), all of which find cover and suitable foraging habitat in the dense shrubs and understory vegetation.

A variety of mammals, including the brush rabbit, California pocket mouse (*Perognathus californicus*), and deer mouse, favor the dense chaparral brush and feed largely on grasses and

forbs or insects. Black-tailed deer and wild boar also forage on forbs and grasses in the sagebrush chaparral. Other mammals likely utilizing this habitat on the site include coyote and bobcat.

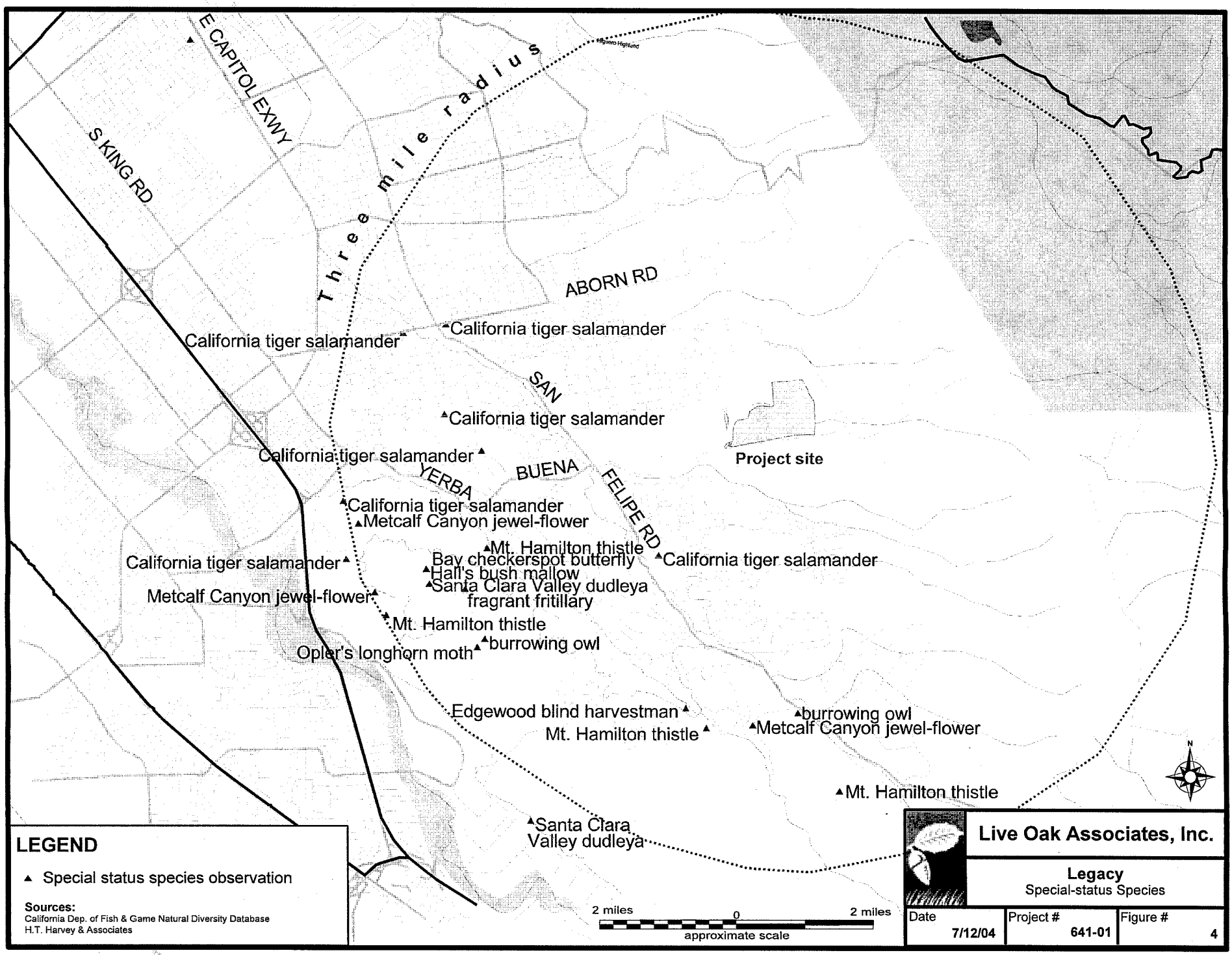
2.2 SPECIAL STATUS PLANTS AND ANIMALS

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 Game (CDFG) 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 CDFG. 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 3 on the following pages. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988-1990), *California Natural Diversity Data Base* (CDFG 2004), *Endangered and Threatened Wildlife and Plants* (USFWS 2003), *Annual Report on the Status of California State Listed Threatened and Endangered Animals and Plants* (CDFG 2004), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001). This information was used to evaluate the potential for special-status plant and animal species to occur on site. Figure 4 shows the location of special status species found by the California Natural Diversity Data Base (CNDDB) within a three-mile radius of the project site. It is important to note that CNDDB is a volunteer database and, therefore, it may not contain all known or gray literature records of special status species occurrences.

A search of published accounts for all of the relevant special status plant and animal species was conducted for the Lick Observatory U.S.G.S 7.5 minute quadrangle in which the project site

occurs, and for the eight surrounding quadrangles (Calavaras Reservoir, Mount Day, Eylar Mountain, Isabel Valley, Mount Sizer, Morgan Hill, Santa Teresa Hills, and San Jose East) using the California Natural Diversity Data Base Rarefind 2004. Plant species reviewed for these quadrangles included those on CNPS List 1A, 1B, 2, and 4. These special status species and their potential to occur on the site is detailed in Table 2.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California tiger salamander
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Mt. Hamilton thistle
Bay checkerspot butterfly
Hall's bush mallow
Santa Clara Valley dudleya
fragrant fritillary
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Mt. Hamilton thistle
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TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS

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

Species	Status	Habitat	*Occurrence in the Study Area
Contra Costa Goldfields (*Lasthenia conjugens*)	FE	Occurs in vernal pools and mesic areas of valley and foothill grasslands, typically alkaline, at elevations between 0 and 470 meters.	**Absent.** Vernal pools and alkaline soils are absent from the study area.
Coyote Ceanothus (*Ceanothus ferrisae*)	FE	Occurs in chaparral, coastal scrub, valley and foothill grassland on serpentine, at elevations between 120 and 460 meters.	**Absent.** Serpentine soils are absent from the study area.
Metcalf Canyon Jewel Flower (*Streptanthus albidus* ssp. *albidus*)	FE	Occurs in valley and foothill grasslands on serpentine, at elevations between 45 and 800 meters.	**Absent.** Serpentine soils are absent from the study area.
Santa Clara Valley Dudleya (*Dudleya setchellii*)	FE	Occurs on serpentine outcrops in valley and foothill grasslands, at elevations between 60 and 365 meters.	**Absent.** Serpentine soils are absent from the study area.
Tiburon Indian Paintbrush (*Castilleja affinis* ssp. *neglecta*)	FE, CT	Occurs in valley and foothill grassland on serpentine, at elevations between 60 and 400 meters.	**Absent.** Serpentine soils are absent from the study area.

PLANTS

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Alkali Milk-vetch (*Astragalus tener* var. *tener*)	CNPS 1B	Occurs in alkaline soils in valley and foothill grassland and in vernal pools, at elevations between 1 and 60 meters.	**Absent.** Alkaline soils are absent from the study area.
Big-scale Balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)	CNPS 1B	Occurs in chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentine, at elevations between 90 and 1400 meters.	**Possible.** Marginal habitat occurs in the chaparral and riparian woodland habitats of the study area.
Caper-fruited Tropidocarpum (*Tropidocarpum capparideum*)	CNPS 1A	Occurs in alkaline soils of valley and foothill grassland, at elevations between 1 and 455 meters.	**Absent**. No alkaline soils occur within the study area. Species last documented in our area in 1957.
Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*)	CNPS 1B	Occurs in alkaline soils of valley and foothill grasslands, at elevations between 0 and 425 meters.	**Absent.** No alkaline soils occur within the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS – cont'd.

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Fragrant Fritillary (*Fritillaria liliacea*)	CNPS 1B	Occurs in coastal prairie, coastal scrub, and valley and foothill grasslands, often on serpentine soils, at elevations between 3 and 410 meters.	**Absent.** Grasslands of the study area are too heavily disturbed to provide habitat for this species.
Hairless Popcorn Flower (*Plagiobothrys glaber*)	CNPS 1A	Occurs in heavy clay soils of alkaline meadows, at elevations between 15 and 180 meters.	**Absent.** No suitable habitat occurs within the study area. Last confirmed observance of species was in 1954.
Hall's Bush Mallow (*Malacothamnus hallii*)	CNPS 1B	Occurs in chaparral and coastal scrub, at elevations between 10 and 760 meters.	**Absent.** While marginal suitable habitat occurs in the chaparral habitat of the study area, this perennial shrub, if present, would have been observed during the June surveys.
Loma Prieta Hoita (*Hoita strobilina*)	CNPS 1B	Occurs in grassland, chaparral, cismontane woodland, riparian woodland, often on serpentine, at elevations between 30 and 600 meters.	**Possible.** Marginal suitable habitat occurs in the riparian woodland habitat of the study area, however, the grasslands of the site are too highly disturbed to provide habitat for this species.
Mt. Hamilton Thistle (*Cirsium fontinale* var. *campylon*	CNPS 1B	Occurs in seasonal and perennial drainages on serpentine soils, at elevations between 95 and 890 meters.	**Absent.** Serpentine soils are absent from the study area.
Most Beautiful Jewelflower (*Streptanthus albidus* ssp. *peramoenus*)	CNPS 1B	Occurs in chaparral and valley and foothill grasslands on serpentine soils, at elevations between 120 and 1000 meters.	**Absent.** Serpentine soils are absent from the study area.
Smooth Lessingia (*Lessingia micradenia* ssp. *glabrata*)	CNPS 1B	Occurs in serpentine grassland and chaparral, at elevations between 120 and 420 meters.	**Absent.** Serpentine soils are absent from the study area.

ANIMALS (adapted from CDFG 2004 and USFWS 2004)

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

Species	Status	Habitat	*Occurrence in the Study Area
Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)	FE	Native grasslands on serpentine soils. Host plant is *Plantago erecta.*	**Absent.** This species is known to occur in this part of the county. However, serpentine soils are absent from the site.
Callippe Silverspot Butterfly (*Speyeria callippe callippe*)	FE	Native grasslands. Host plant is *Viola pedunculata.*	**Unlikely.** This species is not known to occur in this part of the county.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (adapted from CDFG 2004 and USFWS 2004)

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 (*Lepidurus packardi*)	FE	Vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.	**Absent.** No suitable habitat exists onsite for this species.
California Tiger Salamander (*Ambystoma californiense*)	FT	Breeds in vernal pools and stock ponds of central California; adults estivate in grassland habitats adjacent to the breeding sites.	**Absent.** No suitable habitat exists onsite for this species. Seasonal wetlands of the site do not support suitable hydrology to provide breeding habitat for this species.
California Red-legged Frog (*Rana aurora draytonii*)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	**Absent.** No suitable habitat exists onsite for this species.
Peregrine Falcon (*Falco peregrinus*)	CE	Individuals typically breed on cliff ledges in wetlands and forested or coastal habitats; occurs in many habitats of the state during migration and winter.	**Unlikely**. While no suitable nesting habitat exists onsite, the site may support foraging habitat for this species.
Willow Flycatcher (*Empidonax trailii*)	FE (*extimus*) FT (*brewsteri*)	Breeds in the Sierras and southern California. Occurs in low brushy vegetation in wet areas, especially riparian willow thickets.	**Unlikely**. Uncommon migrant; this species would not breed on the study area. Individuals that may pass through the study area are probably not of the federally listed subspecies.

ANIMALS
Federal Candidate Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Foothill Yellow-legged Frog (*Rana boylii*)	CSC	Found primarily in swiftly flowing creeks.	**Absent.** No suitable habitat exists onsite for this species.
Western Pond Turtle (*Clemmys marmorata*)	CSC	Open, slow-moving water of rivers and creeks of central California with rocks and logs for basking.	**Absent.** No suitable habitat exists onsite for this species.
California Horned Lizard (*Phrynosoma coronatum frontale*)	CSC	Frequents a wide variety of habitats. Most common in lowlands along sandy washes with scattered low shrubs.	**Unlikely.** Open habitats preferred by this species are absent from the study area.
Cooper's Hawk (*Accipiter cooperii*)	CSC	Breeds in oak woodlands, riparian forests and mixed conifer forests of the Sierra Nevada, but winters in a variety of lowland habitats.	**Possible.** Suitable foraging habitat exists onsite for this species, however, the species is not known to breed in the region.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS
Federal Candidate Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Sharp-shinned Hawk (*Accipiter striatus*)	CSC	Breeds in the mixed conifer forests of the northern Sierra Nevada. This species winters in a variety of habitats of the state.	**Possible.** The site provides foraging habitat for winter migrants, however, the species is not known to breed in the region.
Golden Eagle (*Aquila chrysaetos*)	CSC	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	**Possible.** Marginally suitable breeding and foraging habitat exists onsite for this species. Golden eagles are likely foragers in this region; however, no nests have been reported in this part of the county
Northern Harrier (*Circus cyaneus*)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Possible.** Suitable foraging habitat exists onsite for this species, however, suitable breeding habitat is absent.
White-tailed Kite (*Elanus leucurus*)	CP	Open grasslands and agricultural areas throughout central California.	**Possible.** Suitable breeding and foraging habitat exists onsite for this species.
Merlin (*Falco columbarius*)	CSC	This falcon, which breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	**Possible.** The site provides suitable wintering habitat for migrants of this species.
Prairie Falcon (*Falco mexicanus*)	CSC	Distributed from annual grasslands to alpine meadows; requires cliffs or rock outcroppings for nesting.	**Possible.** Suitable foraging habitat exists onsite for the occasional winter migrant, however, breeding habitat is absent from the site.
Burrowing Owl (*Athene cunicularia*)	CSC	Found in open, dry grasslands, deserts, and ruderal areas. Requires suitable burrows. This species is often associated with California ground squirrels.	**Unlikely.** Although marginally suitable habitat (e.g., ground squirrel burrows) exists onsite, several protocol-level surveys conducted on the site during 1999, 2004 and 2005 have failed to detect this species on the site and there are no known occurrences of burrowing in the immediate vicinity. Additionally, the burrowing owls appear to prefer sites at lower elevations than that of the site.
Vaux's Swift (*Chaetura vauxi*)	CSC	Migrants and transients move through the foothills of the western Sierra in spring and late summer. Breeds in coniferous forests.	**Unlikely.** Migrants and transients may forage on the site. However, breeding habitat is absent from the site.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS
Federal Candidate Species and State Species of Special Concern

Black Swift (*Cypseloides niger*)	CSC	Migrants and transients found throughout many habitats of state. Breeds on steep cliffs or ocean bluffs, or in cracks and crevasses of inland deep canyons.	**Unlikely.** Migrants and transients may forage on the site. However, breeding habitat is absent from the site.
Loggerhead Shrike (*Lanius ludovicianus*)	CSC	Nests in tall shrubs and dense trees. Forages in grasslands, marshes, and ruderal habitats.	**Possible.** The site provides suitable breeding and foraging habitat for this species.
California Horned Lark (*Eremophila alpestris actia*)	CSC	Short-grass prairie, annual grasslands, coastal plains, open fields.	**Possible.** The site provides suitable breeding and foraging habitat for this species.
Tricolored Blackbird (*Agelaius tricolor*)	CSC	Breeds near fresh water in dense emergent vegetation. Forages in grassland and cropland habitats.	**Possible.** Suitable foraging habitat exists onsite for this species. However, breeding habitat is absent from the site.
Pallid Bat (*Antrozous pallidus*)	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry, rocky, open areas providing roosting opportunities.	**Possible.** Suitable foraging habitat exists onsite for this species. Potential roosting habitat exists immediately adjacent to the site.
Townsend's Big-eared Bat (*Plecotus townsendii townsendii*)	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats of the state.	**Possible.** Suitable foraging habitat exists onsite for this species. Potential roosting habitat exists immediately adjacent to the site.
California Mastiff Bat (*Eumops perotis californicus*)	CSC	Forages over many habitats, requires tall cliffs or buildings for roosting.	**Possible.** Suitable foraging habitat exists onsite for this species. Potential roosting habitat exists immediately adjacent to the site.
San Francisco Dusky-Footed Woodrat (*Neotoma fuscipes annectens*)	CSC	Found in hardwood forests, oak riparian and shrub habitats.	**Possible.** Suitable habitat exists in the riparian woodland for this species.
Ringtail (*Bassariscus astutus*)	CP	Occurs in riparian and heavily wooded habitats near water.	**Possible.** Suitable habitat exists onsite for this species.

Present: Species observed on the sites at time of field surveys or during recent past.
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.

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

CNPS	California Native Plant Society Listing		
1A	Plants Presumed Extinct in California	3	Plants about which we need more information – a review list
1B	Plants Rare, Threatened, or Endangered in California and elsewhere	4	Plants of limited distribution – a watch list
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere		

2.3 SPECIAL STATUS ANIMALS THAT MERIT FURTHER DISCUSSION

2.3.1 Burrowing owl (*Athene cunicularia*). Federal listing status: none. State listing status: Species of Special Concern.

The burrowing owl is a long-legged, semi-fossorial bird with an average height of 9.5 inches, an average wingspan of 23 inches, and an average weight of 5.25 ounces. Throughout California, burrowing owls inhabit flat, dry, open grasslands in prairie and arid habitats typified by tree or shrub canopies that cover less than 30% of the habitat. Burrowing owls are most abundant in wide, low, interior valley bottoms and in flat coastal lowlands, generally below 60 to 300 meters in elevation. Once a widely distributed and relatively common grassland bird, the burrowing owl has declined from a substantial portion of its former range in California for at least the past 40 years (Grinnell and Miller 1944).

Habitat loss, roadside nesting (which makes the species vulnerable to human interference), and agricultural practices (i.e., ground squirrel poisoning) aimed at eradicating burrowing mammals upon which burrowing owls depend for nesting habitat are the primary suspected causes of this decline. In California, the burrowing owl has been designated as a Species of Special Concern since 1979 due to diminishing habitat and concurrent population declines (CDFG 2002).

Burrowing owls are migratory throughout much of their North American range and generally leave their breeding grounds in the fall. Owls exhibit extreme site fidelity, typically returning to the same or nearby burrows in successive years (Martin 1973; Green 1983). In most parts of its range in the Central and Imperial Valleys, the burrowing owl is a year-round resident, most likely due to the mild Mediterranean climate and abundant resources.

The burrowing owl is the only owl that routinely lives and nests underground. In California, burrowing owls primarily utilize California ground squirrel burrows (or the burrows of other animals, e.g., badgers, prairie dogs, and kangaroo rats) for shelter, roosting, and nesting.

Burrowing owls are mid-trophic-level carnivores preying primarily on large insects, small rodents, and amphibians, but they will take a wide variety of prey. Important food items include voles (*Lagurus* spp. and *Microtus* spp.), mice (*Peromyscus* spp., *Mus* spp., *Reithrodontomys* spp., and *Zapus* spp.), pocket mice (*Perognathus* spp.), pocket gophers (*Thomomys* spp.), and young ground squirrels (*Spermophilus* spp.) as well as various invertebrates, including crickets, beetles, grasshoppers, spiders, centipedes, scorpions, and crayfish. Peak hunting periods occur around dawn and dusk.

The burrowing owl breeding season runs from February to August, with a peak between April and July. Clutch size varies from six to twelve eggs, with an average of seven to nine eggs. Females generally produce only one clutch per year. The female incubates the eggs for one month while the male provides her food. The male continues to provide food during the brooding period. The young remain in their burrow for approximately two weeks after hatching and become fully independent of their parents between eight and ten weeks of age. Burrowing owls are a fairly short-lived species, having an average life expectancy of 4.8 years. The oldest known wild burrowing owl was eight years eight months old at the time of its death.

Burrowing owls are subject to predation by larger mammals (e.g., feral cats, bobcats, fox, and coyotes). They are also susceptible to anthropogenic effects such as collisions with automobiles and destruction or disruption of their nests, especially during the breeding season. Burrowing owls may also be affected by ground squirrel eradication efforts.

Potential to occur onsite. The site contained ground squirrel burrows primarily concentrated north of the riparian woodland and along the southern margin of the site that provided suitable nesting habitat for this species. Protocol-level burrowing owl surveys were conducted on 28 and 29 June 2004, as well as on 7, 9, 10 and 11 March 2005. During these surveys, neither burrowing owls nor burrowing owl sign (e.g., pellets, whitewash, and feathers) was observed on the site. Four protocol-level surveys as recommended by CDFG (CDFG 1995) could not be completed during June 2004 due to the discing of the entire site that occurred beginning 30 June 2004. Although four protocol-level surveys could not be completed on the site during June 2004, LOA can be reasonably certain that burrowing owls were not using the site prior to the discing activities based on our reconnaissance-level survey and the two protocol-level surveys

that were completed, as none of these surveys detected any evidence of owls. Additionally, prior protocol-level surveys conducted by H.T. Harvey (H.T. Harvey 1999) in May 1999 failed to detect the species on the site and protocol-level surveys conducted by LOA in March 2005 similarly failed to detect burrowing owls on the site. Lastly, there are no known occurrences of burrowing owls in the immediate vicinity of the site, and burrowing owls appear to favor sites at a lower elevation than that of the study area. Based on the foregoing, burrowing owls are currently absent from the site and it is considered unlikely that they would colonize the site in the future. Therefore, no further protocol-level surveys for the species appear warranted.

2.4 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 Game (CDFG) and the California Regional Water Quality Control Board (RWQCB) (see Section 3.2.4 of this report for additional information).

Evergreen Creek would likely be considered jurisdictional by USACE, CDFG and/or RWQCB. The Creek was not observed to support hydrophytic vegetation, and, therefore, it is unlikely that any areas associated with the Creek would meet the USACE technical criteria of jurisdictional wetlands. However, the Creek is hydrologically connected to other Waters of the U.S. and therefore would likely be considered a jurisdictional tributary water.

The four small wetlands occurring on the site are not associated with Evergreen Creek and appear to be isolated from other Waters of the U.S. These features would not be considered jurisdictional by CDFG and it is also likely that the USACE would disclaim jurisdiction over these features under the recent SWANCC decision (see Section 3.2.4 of this report for additional information).

2.5 ORDINANCE-SIZED TREES

Many trees occur throughout the site that may be considered protected trees under the City of San Jose's tree ordinance (see Section 3.2.5 of this report for additional information). A formal

tree survey was conducted on the site by HortScience. Results of the tree survey are discussed in more detail in Section 3.3.8. Species of trees occurring on the site that meet the definition of a protected tree under the ordinance include blue gum eucalyptus (*Eucalyptus globulus*), coast live oak, valley oak, California bay, and western sycamore. Most of these trees occur along Evergreen Creek, however, mature blue gum eucalyptus trees occur along the eastern boundary of the site.

2.6 CITY OF SAN JOSE RIPARIAN POLICY

The City of San Jose has developed a riparian policy, that is relevant to planning and development under the City's General Plan (see Section 3.2.6 of this report for additional information).

Areas of the site covered under this policy include the riparian woodland habitat along Evergreen Creek.

3.0 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 focused with the proposed buildings, access roads and other infrastructure. Some minor modifications of the locations of this development would not require a reassessment of project impacts. However, any proposal that results in substantial revisions as to the scope and/or relative location of the roads, residences and associated infrastructure would need to be accompanied by a subsequent assessment to ensure that the project would not result in significant impacts to biotic resources which are not anticipated by the current proposal.

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 Game (CDFG) 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 CDFG 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 CDFG 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 law also protect most bird species. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., scc. 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, (1992), 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 CDFG.

3.2.4 Wetlands and Other "Jurisdictional Waters"

Natural drainage channels and wetlands are considered "Waters of the United States" (hereafter referred to as "jurisdictional waters"). The U.S. Army Corps of Engineers (USACE) regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act (Wetland Training Institute, Inc. 1991). 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 either intermittently or permanently), 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 will result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The RWCQB 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 Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code (California Department of Fish and Game 1995). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the drainage in question.

3.2.5 Ordinance-Size Trees

The City of San Jose has a Tree Ordinance (Chapter 13.32 of the Municipal Code), which regulates the removal of covered 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. 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.

3.2.6 City of San Jose Riparian Policy

The City of San Jose has developed a riparian policy, which addresses several issues that relate to the identification, management, and protection of riparian resources within the City's Urban Service Area (USA). The City has assumed that riparian corridors outside the USA are substantially protected by the General Plan Policy's that govern these areas. This policy has noted that areas "outside the USA and not subject to specific General Plan direction regarding riparian protection, should be subject, at a minimum, to the development guidelines in this document" (City of San Jose, 1999).

Riparian corridors are defined as:

> Any defined stream channels including the area up to the bank full-flow line, as well as all riparian (streamside) vegetation in contiguous adjacent uplands. Characteristic wood riparian vegetation species could include (but are not limited to): willow, *Salix* sp.; alder, *Alnus* sp.; box elder, *Acer negundo*; Fremont cottonwood, *Populus fremontii*; bigleaf maple, *Acer macrophyllum*; western sycamore, *Platanus racemosa*; and oaks, *Quercus* sp. Stream channels include all perennial and intermittent streams shown as a solid or dashed blue line on USGS topographic maps, and ephemeral streams or "arroyos" with well-defined channels and some evidence of scour or deposition (City of San Jose 1999, 3).

The City's Riparian Policy recommends the following riparian setback dimensions:

> All buildings, other structures (with the exception of bridges and minor interpretative node structures), impervious surfaces, outdoor activity areas (except for passive or intermittent activities) and ornamental landscaped areas should be separated a minimum of 100 feet from the edge of the riparian corridor (or top of bank, whichever is greater) (City of San Jose 1999, 31).

While the policy does recommend a 100-foot setback along riparian systems within the Urban Service Area, it also provides for exceptions to the 100 ft. setback guideline. Exceptions include:

- Locations in or near downtown San Jose;
- Urban infill locations where most properties are already developed and parcels are generally small;
- Sites adjacent to small lower order tributaries whose riparian influence does not extend 100 feet;
- Sites with unusual geometric characteristics and/or disproportionately long riparian frontages;
- Instances where implementation of the project includes measures which can protect and enhance the riparian value of the corridor more than could a 100 foot setback;
- Recreation facilities deemed to be a critical need and for which alternative site locations are limited; and
- Utility or equipment installations, or replacements of existing ones, which involve no significant disturbance to the riparian corridor during construction and operation, and generate only incidental human activity.

During the CEQA process, the City evaluates an applicant's claim that their project meets the conditions of the relevant exceptions.

Established setbacks or buffers are designed to reduce anthropogenic effects on riparian systems. Usually, the resource agencies have asserted that buffers of 100 feet or more are necessary to reduce adverse affects on riparian systems. While reasonable evidence exists to support the notion that larger buffers provide significant additional benefit to riparian systems, there is a paucity of empirical data that allows for the establishment of a precise estimate. Therefore, the 100-ft. riparian buffer that is often adopted is a historically-accepted value rather than an empirically-derived one. While not empirically driven, a buffer of 100 ft. provides a useful starting point to evaluate the potential affects from a proposed project. For the purposes of this document, the primary purpose of the buffer is to minimize the effect of human development on the riparian system occurring onsite. Therefore, the existing condition of the riparian zone,

including proximity of roads, development, and trails, is critical for understanding the potential effects of any future development.

3.3 IMPACTS SPECIFIC TO THE PROJECT SITE

The proposed project consists of the subdivision of an approximately 120-acre parcel into a mixed-density residential development with necessary infrastructure (i.e., roads). The project also calls for the designation of open space and parks along Evergreen Creek and along the site's eastern and western perimeters. It is assumed for the purpose of this analysis that any future proposal by the individual applicants will be consistent with the general locations of the building sites and access roads as currently represented in the tentative maps provided by HMH Engineers (December 22, 2004). Any appreciable difference in either scope or general location of the residences and infrastructure would require an additional impact assessment to ensure that unanticipated impacts to the biotic resources are not likely to occur. Grading will be required to accommodate these facilities, and some non-native annual grassland, ruderal habitat, seasonal wetland and mixed oak woodland may be disturbed or destroyed within the proposed footprint of future construction zones. Additionally, the location of the proposed vehicle bridge spanning Evergreen Creek may result in impacts to the creek, which is potentially under the jurisdiction of the USACE, RWQCB and CDFG. Secondary impacts to areas outside of construction zones could occur as well. These impacts could include nest failure of breeding raptors, gully erosion down slope of cut-and-fill grading, and sedimentation of natural drainages. Activities resulting in impacts to biotic resources may be regulated by local, state, and federal laws. The biotic 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 16 special status plant species potentially occurring in the project vicinity, 12 were ruled out as occurring on the site because the site supports no suitable habitat for these species (i.e. no serpentine soils, alkaline soils, or vernal pool habitats). These species include Contra Costa goldfields, coyote ceanothus, Metcalf Canyon jewel-flower, Santa Clara Valley dudleya, Tiburon Indian paintbrush, alkali milk-vetch, caper-fruited tropidocarpum, Congdon's tarplant, hairless popcorn flower, Mt. Hamilton thistle, most beautiful jewel-flower and smooth lessingia. The grassland, chaparral and riparian woodland habitats of the site were

determined to provide potential habitat for the remaining four species. However, these four species have been determined to be absent from the site as these species would have been identifiable if present on the site during the 2004 or 2005 surveys either because the surveys were conducted during the appropriate blooming season for the species, or because they are perennial species that would have been identifiable even outside the blooming season, and they were not observed on the site. These latter four species include Hall's bush mallow, fragrant fritillary, Loma Prieta hoita, and big-scale balsamroot.

Mitigation. Special status plants have been determined to be absent from the study area, therefore, the project is expected to result in no impacts to special status plants and no mitigation is warranted.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impact. Twenty-nine special status animal species occur, or once occurred, regionally (Table 3). Of these, thirteen species would be absent from or unlikely to occur on the site. These include the Bay checkerspot butterfly, callippe silverspot butterfly, vernal pool tadpole shrimp, California tiger salamander, California red-legged frog, foothill yellow-legged frog, California horned lizard, western pond turtle, peregrine falcon, burrowing owl, Vaux's swift, black swift, and willow flycatcher.

Species that might rarely or occasionally occur on the site include the sharp-shinned hawk, golden eagle, merlin, prairie falcon, pallid bat, Townsend's big-eared bat, California mastiff bat, San Francisco dusky-footed woodrat, and ringtail. Project buildout would have no effect on the breeding success of these species and would, at most, result in a small reduction of foraging and/or roosting habitat available regionally. Therefore, project buildout would result in a less-than-significant impact to these species.

The remaining special status animal species may occur more frequently as regular foragers or may be resident to the site. These include the Cooper's hawk, northern harrier, white-tailed kite, loggerhead shrike, and California horned lark. The sparsely vegetated, ruderal grasslands onsite serve as suitable nesting habitat for the California horned lark. A stick nest, likely that of a red-tailed hawk, was observed in a eucalyptus tree along the site's southern boundary. While the

California horned lark is presently absent (i.e., lack of direct observation or secondary evidence) from the site, this species could breed on the site in future years.

Both state and federal laws provide protection measures designed to ensure that human activities do not harm, injure, or kill raptors. Therefore, pre-construction surveys during the should be conducted prior to any ground disturbance activities to ensure that raptors are not nesting on the site, should such activities occur during the raptor nesting season from February 1st through August 31st (see *Section 3.3.7 Disturbance to Active Raptor Nests from Construction Activities During Project Implementation*). Surveys shall also be conducted to ensure that the California horned lark, a migratory songbird protected under the Migratory Bird Treaty Act, is absent from the site prior to the start of construction activities.

Mitigation. With the exception of potential impacts to nesting raptors and California horned larks (see *Section 3.3.7 Disturbance to Active Raptor Nests from Construction Activities During Project Implementation*) project buildout will have a less-than-significant impact on special status wildlife species. Therefore, aside from conducting pre-construction breeding season surveys for nesting raptors and California horned larks, no mitigation is required.

3.3.3 Loss of Habitat for Native Wildlife

Potential Impact. The habitats of the site are likely to comprise only a portion of most wildlife's entire home range or territory. As such, some species may disperse through the site, but most wildlife presently using the site do so as part of their normal movements for foraging, mating, and caring for young. Individuals of the various vertebrate species presently occupying the site would be displaced or lost from the development area.

The proposed project will primarily result in the loss of non-native and ruderal grassland habitats that are heavily disturbed, dominated by non-native plants, and that, therefore, provide little biotic value for most native wildlife. Additionally, a small amount of California sagebrush chaparral, oak savanna, and seasonal wetland will be impacted. While they provide habitat for a number of native wildlife species, oak savanna, non-native grassland, and California sagebrush chaparral are relatively common in the region. Therefore, impacts due to the loss of these habitats for native wildlife resulting from the proposed project is considered less-than-

significant. Additionally, the loss of four small seasonal wetlands that are isolated from more extensive wetland habitat, and that occur within regularly disced ruderal habitat, would constitute a less-than-significant impact under CEQA.

The extensive loss of riparian woodland habitat, because of its high biotic value for native wildlife, would be considered a significant impact. However, except for the northern access road and its associated bridge, both of which will traverse the riparian woodland habitat, this habitat will be protected by a 100-foot setback from the riparian dripline or top of bank, whichever is greater. Additionally, the bridge is proposed to be a clear span structure that will span the creek from top of bank to top of bank, and will only minimally disturb riparian vegetation consisting of herbaceous and woody shrub species at the proposed location. Therefore, the loss of riparian habitat as a result of the road and bridge would be considered less-than-significant under CEQA.

Mitigation. The loss of approximately 100 acres of ruderal and non-native grassland habitats, and a small amount of oak woodland, seasonal wetland, and chaparral habitat, due to development is not expected to affect the persistence and presence of native wildlife. Project impacts on wildlife habitat would be less than significant, and mitigation measures would not be warranted. Additionally, the northern access road and bridge have been designed and located in such a way as to result in a less-than-significant impact on riparian habitat, therefore, mitigation measures for a loss or riparian habitat would not be warranted (see, however, Section 3.3.9 regarding mitigations for encroachments into the City's recommended 100-foot riparian setback.

3.3.4 Interference with the Movement of Native Wildlife

Potential Impact. The area proposed for development on the site consists of five biotic habitats, all of which support a diverse assemblage of native wildlife species. The movements of various species on- and off-site vary depending on the species in question.

One must differentiate between animals' consistent use patterns in order to assess the importance of an area as a "movement corridor." Wildlife movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species occurring onsite permits sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements.

The habitats most heavily impacted by the proposed development consist of ruderal and non-native grasslands. While native wildlife may move through these habitats, they do not represent a significant movement corridor for native wildlife and their loss would result in a less-than-significant impact on the movements of native wildlife. While Evergreen Creek may function as a corridor for native wildlife, project impacts to the corridor will be minimal as the project will conform to the City's Riparian Policy, therefore, the project will have a less-than-significant impact on the use of Evergreen Creek as a movement corridor. Construction activities within the site and subsequent project build-out may result in a temporary disruption of local wildlife movements during daylight hours but is not expected to result in any permanent or substantial changes in use or movement patterns once construction is complete. Wildlife species presently using the site are expected to continue moving through the open areas of the site and within the Evergreen Creek riparian corridor after project buildout. Project development, therefore, is expected to have a less-than-significant impact on the movements of native wildlife.

Mitigation. Project impacts to wildlife movements would be less than significant, and no mitigation measures are warranted.

3.3.5 Disturbance to Waters of the U.S. or Riparian Habitats

Potential Impact. At the time this report was prepared, no formal wetland delineation had been conducted on the study area, however, it is likely that the USACE, RWQCB and CDFG would claim jurisdiction over Evergreen Creek. Evergreen Creek would not be likely to meet the technical criteria for wetlands as there was very little hydrophytic vegetation observed to be associated with it, however it has a defined bed and bank and is hydrologically connected to other Waters of the U.S., and therefore, is likely to be claimed by the USACE as a jurisdictional tributary water. In the absence of adjacent wetlands, the limit of USACE jurisdiction would be the Ordinary High Water mark within the channel, while the entire bed and bank of the channel would be considered jurisdictional by CDFG. Impacts to jurisdictional areas of the creek would

likely require permits from these agencies. The project proposes the construction of a vehicle bridge at the northern boundary of the site. This bridge has been proposed as a clear span structure that would span the creek from bank to bank, and, therefore is designed to avoid sensitive aquatic habitat and areas under USACE and RWQCB jurisdiction. At the location of this proposed bridge, vegetation associated with the creek consists predominantly of herbaceous and woody shrub species within the channel with very little riparian vegetation extending beyond the top of the bank. Therefore, the clear span structure would not likely impact riparian trees and would be expected to only minimally impact other woody riparian vegetation. The use of a clear span bridge structure would result in the project having a less-than-significant impact on jurisdictional waters and riparian habitats under CEQA, however, the CDFG may still require a 1602 Streambed Alteration Agreement for bridge impacts within the riparian corridor, and the applicant would need to comply with the conditions of any such Agreement.

The seasonal wetlands occurring on the site appear to be isolated from other Waters of the U.S. Because they are isolated, it is likely that the USACE would disclaim jurisdiction over these wetlands under the recent SWANCC ruling.

Under CEQA, project impacts to the seasonal wetlands of the site would be considered less-than-significant due to the small amount of area being impacted (probably less than 0.01 acre) and the fact that these areas are isolated from more extensive wetland habitat and are surrounded by ruderal habitat that is disced on a regular basis.

Mitigation. No mitigation would be required under CEQA for project impacts to jurisdictional waters or to riparian habitats. However, bridge impacts occurring within the riparian corridor may require that the project proponent obtain a 1602 Streambed Alteration Agreement from the CDFG and comply the conditions of the Agreement. The City of San Jose may also require mitigation due to encroachment into the 100-foot riparian setback (see Section 3.3.9 below for additional information).

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

Potential Impact. Eventual site development, including soil and slope stabilization, may 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 wetland habitats would be considered a potentially significant adverse environmental impact.

Mitigation. The applicant must comply with the provisions of a County grading permit, including standard erosion control measures that employ best management practices (BMPs). Such compliance will result in no impact to water quality in seasonal creeks, reservoirs, and downstream waters from the proposed project.

3.3.7 Disturbance to Active Raptor and California Horned Lark Nests from Construction Activities During Project Implementation

Potential Impacts. As indicated previously, burrowing owls have been determined to be absent from the site and it is considered unlikely that they would colonize the site in the future, however, the site has been determined to provide habitat for tree-nesting raptors and potential habitat for the California horned lark. No horned lark nests have been observed on the site during any of the surveys but this species could establish a nest on the site prior to project construction. A raptor stick nest was observed on the site, located in a blue gum eucalyptus along the site's southern boundary during the June 2004 survey. Additionally, large trees such as coast live oak, valley oak, and western sycamore occurring along Evergreen Creek provide potential nesting habitat for raptors. If a raptor or horned lark were to nest on the site in the future prior to construction, such activities could result in the abandonment of active nests or direct mortality to these birds. Future construction activities that would adversely affect future nesting activity or

result in the mortality of individual birds would constitute a violation of federal and state laws (see discussion in *Section 3.2.3*) and are considered significant adverse impacts.

Mitigation. The following mitigation measure shall be implemented to ensure that raptors (hawks and owls) are not disturbed during the breeding season.

- A qualified ornithologist will conduct a pre-construction survey for tree-nesting raptors and California horned larks onsite within 30 days of the onset of ground disturbance or tree removal, if disturbance is to occur during the breeding season (February 1 to August 31). If a nesting raptor or horned lark were to be detected, an appropriate construction buffer shall be established. The actual size of buffer will depend on species, topography, and type of construction activity that would occur in the vicinity of the nest. The buffer shall be fenced and such fencing shall remain in place either until the end of the breeding season, or until a qualified biologist determines that all young have fledged and are completely independent of their parents.

Implementation of the above measures will fully mitigate impacts to nesting raptors and California horned larks.

3.3.8 Disturbance to Ordinance-Size and Heritage Trees

Impacts. A formal tree survey was conducted on the site by HortScience in October 2004, at which time the species, trunk diameter at 24 inches above the ground, condition (i.e., health and vigor), and suitability for preservation of all trees occurring within the project boundaries were recorded.

According to the survey, 388 trees were formally surveyed on the site (Table 3). Of these trees, 181 trees met the criterion for an ordinance-size tree (i.e., trunk diameter of at least 18 inches) under the City's Tree Ordinance. Tree species meeting this criterion were primarily coast live oak, valley oak, blue gum eucalyptus, California bay, and elderberry.

Table 3. Summary of Tree Survey (HortScience, Inc. 2004)

Diameter	Tree Type			Total
	Orchard	Non-Native	Native	
<12"	0	0	137	137
12"-17"	0	1	69	70
≥18"	0	25	156	181
Total	0	26	362	**388**

Most of the trees onsite occur along Evergreen Creek's riparian corridor, outside of the project footprint. Therefore, with the possible exception of tree removal associated with the construction of a vehicle bridge and a trail spanning Evergreen Creek, trees along Evergreen Creek will not be impacted through removal if the City of San Jose's riparian policy is honored. Trees occurring outside of the riparian corridor may require removal subject to proposed development plans.

The loss of any ordinance-sized trees or more than six non-ordinance-sized trees would constitute a significant impact under CEQA. The following mitigation is designed to reduce project impacts due to a loss of ordinance-size trees to a less-than-significant level.

Mitigation. Potentially, a few ordinance-size trees consisting of blue gum eucalyptus along the southern boundary of the site, and trees that may occur within the riparian corridor in the vicinity of the proposed bridge and trail, may be removed or impacted by the project. All trees removed as a result of the project, regardless of their size, will require mitigation at replacement:removal ratios set-forth by the City of San Jose and described more fully below. During the PD permit stage, the site design will incorporate preservation of existing trees to the maximum extent practicable, with emphasis on those tress that the tree survey has labeled as suitable for preservation. Trees to be removed by the project will be replaced at the following ratios:

- The replacement of all ordinance-size trees at a 4:1 replacement:removal ratio with 24-inch box specimens or greater.

- The replacement of all trees having a trunk diameter between 12 and 18 inches will occur at a 2:1 replacement: removal ratio with 24-inch box specimens or greater.

- The replacement of all trees having a trunk diameter of 12 inches or less will occur at a 1:1 replacement: removal ratio with 15-gallon specimens.

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 the *San Jose Beautiful* or *Our City Forest* programs. 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 Planning Project Manager prior to the removal of the trees.

Impacts to any retained trees during the construction and operation phases of the project can be reduced to a less-than-significant level by conforming to the following guidelines:

- The project proponent shall retain a consulting arborist prior to any ground disturbance activities. The consulting arborist will 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 will be installed around the drip-line of all retained trees occurring within the development envelopes, and the fencing will

remain in place throughout the construction phase of the project. The type of fencing to be utilized will be at the direction of the consulting arborist.

- Any limb or root pruning to be conducted on retained trees shall be approved and supervised by the consulting arborist and shall follow best management practices developed by the International Society of Arboriculture.

- Supplemental irrigation to retained trees shall be applied as determined by the consulting arborist.

- If any of the retained trees should be damaged during the construction phase, they will be evaluated at the earliest possible time by the consulting arborist so that appropriate measures can be taken.

3.3.9 City of San Jose's Riparian Policy

Impacts. The City of San Jose's Riparian Corridor Policy (1999) recommends that a 100-foot setback be established from the edge of the riparian corridor or top of bank, whichever is greater, and proposed development. With the exception of the vehicle road and bridge at the northern boundary of the site which will minimally encroach into the riparian setback, the project proposes to honor the City's 100-foot setback recommendation. The new vehicle road and bridge will occur to the west of an existing dirt access road and bridge that appears to have been constructed for agricultural purposes. The project proposes to remove the existing structure. The construction of the bridge crossing may result in the minimal removal of some woody riparian vegetation. However, impacts related to the potential removal of some woody vegetation and the related loss of riparian habitat in that location would be at least partially offset by the natural recruitment of similar riparian vegetation in the location where the existing bridge will be removed.

Mitigation. The majority of the project has been designed to conform to the City of San Jose's riparian policy by establishing a 100-foot riparian setback. There will, however, be a minimal amount of encroachment into the setback as a result of the construction of the vehicle road and bridge at the northern boundary of the site. The extent of this encroachment is estimated at less than 0.01 acre. However, the project also proposes to remove an existing bridge located to the

east of the proposed bridge. Once the bridge has been removed, it is likely that similar herbaceous and woody riparian vegetation will naturally recruit from the surrounding area and at least partially offset impacts to riparian habitat as a result of the new structure. Therefore, the new bridge is expected to have a less-than-significant impact on riparian habitat.

Although the encroachment would be considered less-than-significant under CEQA, should the City determine that mitigation for riparian encroachments is necessary, adequate opportunities exist within the riparian habitat of the site in the immediate vicinity of the proposed creek crossing, or in the location of the existing bridge to be removed, to mitigate for any encroachment impacts. Mitigation for encroachment impacts would take the form of the enhancement of native riparian vegetation at a 1:1 enhancement:encroachment ratio. If such mitigation is required by the City, then a Mitigation and Monitoring Plan will be developed by a qualified restoration ecologist and such Plan will be subject to approval by the Director of Planning. Elements of the Plan will include:

- A detailed planting plan including a list of plant species to be used in the enhancement effort.
- A monitoring plan indicating the monitoring duration, monitoring schedule, and specific success criteria.
- A detailed maintenance plan including information on irrigation, herbivore protection, and weed abatement for the enhancement area.

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APPENDIX A
VASCULAR PLANTS OF THE STUDY AREA

The plant species listed below have been observed on the Legacy study area during the surveys conducted by Live Oak Associates on June 25, 2004. All plants have been named according to *The Jepson Manual* (Hickman 1993). 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

ANACARDIACEAE – Sumac Family		
Toxicodendron diversilobum	Poison Oak	UPL
APIACEAE – Carrot Family		
Conium maculatum	Poison Hemlock	FACW
Torilis arvensis	Field Hedge Parsley	UPL
ASTERACEAE - Sunflower Family		
Artemisia californica	California Sagebrush	UPL
Artemisia douglasiana	Mugwort	FAC+
Baccharis pilularis	Coyote Brush	UPL
Carduus pycnocephalus	Italian Thistle	UPL
Centauria solstitialis	Yellow Star Thistle	UPL
Conyza canadensis	Canadian Horseweed	
Hemizona congesta ssp. *luzulifolia*	Hayfield Tarweed	UPL
Lactuca serriola	Prickly Lettuce	FAC
Picris echioides	Bristly Ox Tongue	FAC*
Silybum marianum	Milk Thistle	UPL
BORAGINACEAE – Borage Family		
Amsinckia sp.	Fiddleneck	UPL
BRASSICACEAE – Mustard Family		
Brassica nigra	Black Mustard	UPL
Brassica rapa	Field Mustard	UPL

CAPRIFOLIACEAE – Honeysuckle Family		
Sambucus mexicana	Blue Elderberry	FAC
Symphoricarpos albus var. *laevigatus*	Snowberry	FACU
CARYOPHYLLACEAE – Pink Family		
Stellaria media	Common Chickweed	FACU
CONVOLVULACEAE – Morning Glory Family		
Convolvulus arvensis	Field Bindweed	UPL
CUCURBITACEAE – Gourd Family		
Marah fabaceus	California Man-Root	UPL
EUPHORBIACEAE – Spurge Family		
Eremocarpus setigerus	Doveweed	UPL
FABACEAE – Legume Family		
Vicia sativa	Spring Vetch	FACU
FAGACEAE – Oak Family		
Quercus agrifolia	Coast Live Oak	UPL
Quercus dumosa	Scrub Oak	UPL
Quercus lobata	Valley Oak	UPL
GERANIACEAE – Geranium Family		
Erodium botrys	Long-beaked Filaree	UPL
Erodium cicutarium	Redstem Filaree	UPL
HIPPOCASTANACEAE – Buckeye Family		
Aesculus californica	California Buckeye	UPL
LAURACEAE – Laurel Family		
Umbellularia californica	California Bay	FAC
MALVACEAE – Mallow Family		
Malva parviflora	Cheeseweed	UPL
MYRTACEAE- Myrtle Family		
Eucalyptus globulus	Blue Gum	UPL
ONAGRACEAE – Evening Primrose Family		
Epilobium brachycarpum	Willow Herb	UPL
PLATANACEAE – Plane Tree Family		
Platanus racemosa	Western Sycamore	FACW
POACEAE - Grass Family		
Avena barbata	Slender Wild Oats	UPL
Bromus diandrus	Ripgut	UPL
Bromus hordeaceus	Soft Chess	FACU
Bromus madritensis ssp. *rubens*	Red Brome	NI
Hordeum murinum ssp. *leporinum*	Barnyard Barley	NI
Lolium multiflorum	Italian Ryegrass	UPL
Lolium perenne	Perennial Ryegrass	FAC
Nassella pulchra	Purple Needle Grass	UPL
Polypogon monspeliensis	Rabbit's-foot Grass	FACW+
POLYGONACEAE - Buckwheat Family		
Polygonum arenastrum	Common Knotweed	FAC
Rumex crispus	Curly Dock	FACW
Rumex pulcher	Willow Dock	FAC+
ROSACEAE – Rose Family		
Heteromeles arbutifolia	Toyon	UPL
Rosa californica	California Rose	FAC+
Rubus ursinus	California Blackberry	FACW*

URTICACEAE – Nettle Family		
Urtica dioica	Stinging Nettle	FACW

APPENDIX B

TERRESTRIAL VERTEBRATES THAT POTENTIALLY OCCUR ON THE SITE

Listed below are those species that may reasonably be expected to use the habitats of the project site routinely during some or all of the year. The list is not intended to include birds that are vagrants or occasional transients. Species observed during the June 2004 and March 2005 field surveys have been noted with an asterisk.

CLASS AMPHIBIA (Amphibians)	
ORDER CAUDATA (Salamanders)	
FAMILY PLETHODONTIDAE (Lungless Salamanders)	
Ensatina	*Ensatina eschscholtzii*
Black salamander	*Aneides flavipunctatus*
Arboreal salamander	*Aneides lugubris*
California slender salamander	*Batrachoseps attenuatus*
Pacific slender salamander	*Batrachoseps pacificus*
ORDER ANURA (Frogs and Toads)	
FAMILY BUFONIDAE (True Toads)	
Western toad	*Bufo boreas*
CLASS REPTILIA (Reptiles)	
ORDER SQUAMATA (Lizards and Snakes)	
SUBORDER SAURIA (Lizards)	
FAMILY PHRYNOSOMATIDAE	
*Western fence lizard	*Sceloporus occidentalis*
California horned lizard	*Phrynosoma coronatum frontale*
FAMILY SCINCIDAE (Skinks)	
Skilton skink	*Eumeces skiltonianus skiltonianus*
Gilbert's skink	*Eumeces gilberti*
FAMILY ANGUIDAE (Alligator Lizards and Relatives)	
Southern alligator lizard	*Elgaria multicarinata*
FAMILY ANNIELLIDAE (California Legless Lizards)	
California legless lizard	*Anniella pulchra*
SUBORDER SERPENTES (Snakes)	
FAMILY COLUBRIDAE (Colubrids)	
Ringneck snake	*Diadophis punctatus*
Sharp-tailed snake	*Contia tenuis*
Racer	*Coluber constrictor*
Coachwhip	*Masticophis flagellum*
Gopher snake	*Pituophis catenifer*
Common kingsnake	*Lampropeltis getula*
California black-headed snake	*Tantilla planiceps*
Night snake	*Hypsiglena torquata*
FAMILY VIPERIDAE (Vipers)	
Western rattlesnake	*Crotalus viridis*

CLASS AVES (Birds)

ORDER CICONIIFORMES (Herons, Storks, Ibises and Relatives)

FAMILY CATHARTIDAE (New World Vultures)

*Turkey vulture	*Cathartes aura*

ORDER FALCONIFORMES (Vultures, Hawks and Falcons)

FAMILY ACCIPITRIDAE (Hawks, Old World Vultures and Harriers)

White-tailed kite	*Elanus leucurus*
Northern harrier	*Circus cyaneus*
Sharp-shinned hawk	*Accipiter striatus*
Cooper's hawk	*Accipiter cooperii*
*Red-shouldered hawk	*Buteo lineatus*
*Red-tailed hawk	*Buteo jamaicensis*
Ferruginous hawk	*Buteo regalis*
Rough-legged hawk	*Buteo lagopus*
Golden eagle	*Aquila chrysaetos*

FAMILY FALCONIDAE (Caracaras and Falcons)

*American kestrel	*Falco sparverius*
Merlin	*Falco columbarius*
Prairie falcon	*Falco mexicanus*

ORDER GALLIFORMES (Magapodes, Curassows, Pheasants and Relatives)

FAMILY PHASIANIDAE (Quails, Pheasants and Relatives)

Ring-necked pheasant	*Phasianus colchicus*
*Wild turkey	*Meleagris gallopavo*

FAMILY ODONTOPHORIDAE (New World Quail)

*California quail	*Callipepla californica*

ORDER CHARADRIIFORMES (Shorebirds, Gulls and Relatives)

FAMILY CHARADRIIDAE (Plovers and Relatives)

*Killdeer	*Charadrius vociferus*

ORDER COLUMBIFORMES (Pigeons and Doves)

FAMILY COLUMBIDAE (Pigeons and Doves)

*Rock dove	*Columba livia*
Band-tailed pigeon	*Columba fasciata*
*Mourning dove	*Zenaida macroura*

ORDER STRIGIFORMES (Owls)

FAMILY TYTONIDAE (Barn Owls)

Barn owl	*Tyto alba*

FAMILY STRIGIDAE (Typical Owls)

Western screech owl	*Otus kennicottii*
Great horned owl	*Bubo virginianus*

ORDER CAPRIMULGIFORME (Goatsuckers and Relatives)

FAMILY CAPRIMULGIDAE (Goatsuckers)

Common poorwill	*Phalaenoptilus nuttallii*

ORDER APODIFORMES (Swifts and Hummingbirds)

FAMILY TROCHILIDAE (Hummingbirds)

*Anna's hummingbird	*Calypte anna*
Allen's hummingbird	*Selasphorus sasin*

ORDER PICIFORMES (Woodpeckers and Relatives)

FAMILY PICIDAE (Woodpeckers and Wrynecks)

*Acorn woodpecker	*Melanerpes formicivorus*
Red-breasted sapsucker	*Sphyrapicus ruber*
*Nuttall's woodpecker	*Picoides nuttallii*

Downy woodpecker	*Picoides pubescens*
Hairy woodpecker	*Picoides villosus*
Northern flicker	*Colaptes auratus*
ORDER PASSERIFORMES (Perching Birds)	
FAMILY TYRANNIDAE (Tyrant Flycatchers)	
Western wood-pewee	*Contopus sordidulus*
*Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
Ash-throated flycatcher	*Myiarchus cinerascens*
FAMILY LANIIDAE (Shrikes)	
Loggerhead shrike	*Lanius ludovicianus*
FAMILY VIREONIDAE (Typical Vireos)	
*Cassin's vireo	*Vireo cassinii*
Hutton's vireo	*Vireo huttoni*
Warbling vireo	*Vireo gilvus*
FAMILY CORVIDAE (Jays, Magpies and Crows)	
*Steller's jay	
*Western scrub-jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Common raven	*Corvus corax*
FAMILY ALAUDIDAE (Larks)	
California horned lark	*Eremophila alpestris actia*
FAMILY HIRUNDINIDAE (Swallows)	
Tree swallow	*Tachycineta bicolor*
*Violet-green swallow	*Tachycineta thalassina*
Bank swallow	*Riparia riparia*
Cliff swallow	*Petrochelidon pyrrhonota*
*Barn swallow	*Hirundo rustica*
FAMILY PARIDAE (Titmice and Relatives)	
Oak titmouse	*Baeolophus inornatus*
FAMILY AEGITHALIDAE (Bushtit)	
Bushtit	*Psaltriparus minimus*
FAMILY SITTIDAE (Nuthatches)	
*White-breasted nuthatch	*Sitta carolinensis*
FAMILY TROGLODYTIDAE (Wrens)	
Bewick's wren	*Thryomanes bewickii*
House wren	*Troglodytes aedon*
Winter wren	*Troglodytes troglodytes*
FAMILY REGULIDAE (Kinglets)	
Ruby-crowned kinglet	*Regulus calendula*
FAMILY SYLVIIDAE (Old World Warblers and Gnatcatchers)	
Blue-gray gnatcatcher	*Polioptila caerulea*
FAMILY TURDIDAE (Thrushes)	
Western bluebird	*Sialia mexicana*
Hermit thrush	*Catharus guttatus*
American robin	*Turdus migratorius*
FAMILY TIMALIIDAE (Babblers)	
Wrentit	*Chamaea fasciata*
FAMILY MIMIDAE (Mockingbirds and Thrashers)	
*Northern mockingbird	*Mimus polyglottos*
California thrasher	*Toxostoma redivivum*

FAMILY STURNIDAE (Starlings and Allies)

European starling	*Sturnus vulgaris*

FAMILY PARULIDAE (Wood Warblers and Relatives)

Orange-crowned warbler	*Vermivora celata*
Yellow warbler	*Dendroica petechia*

FAMILY EMBERIZIDAE (Emberizines)

Spotted towhee	*Pipilo maculatus*
California towhee	*Pipilo crissalis*
Lark sparrow	*Chondestes grammacus*
Sage sparrow	*Amphispiza belli*
Grasshopper sparrow	*Ammodramus savannarum*
Savannah sparrow	*Passerculus sandwichensis*
Fox sparrow	*Passerella iliaca*
Song sparrow	*Melospiza melodia*
White-throated sparrow	*Zonotrichia albicollis*
White-crowned sparrow	*Zonotrichia leucophrys*
Dark-eyed junco	*Junco hyemalis*

FAMILY CARDINALIDAE (Cardinals, Grosbeaks and Allies)

Black-headed grosbeak	*Pheucticus melanocephalus*
Lazuli bunting	*Passerina amoena*

FAMILY ICTERIDAE (Blackbirds, Orioles and Allies)

*Red-winged blackbird	*Gelaius phoeniceus*
Western meadowlark	*Sturnella neglecta*
Brewer's blackbird	*Euphagus cyanocephalus*
Brown-headed cowbird	*Molothrus ater*

FAMILY FRINGILLIDAE (Finches)

Purple finch	*Carpodacus purpureus*
House finch	*Carpodacus mexicanus*
Lesser goldfinch	*Carduelis psaltria*
American goldfinch	*Carduelis tristis*

FAMILY PASSERIDAE (Old World Sparrows)

House sparrow	*Passer domesticus*

CLASS MAMMALIA (Mammals)

ORDER DIDELPHIMORPHIA (Marsupials)

FAMILY DIDELPHIDAE (Opossums)

Virginia opossum	*Didelphis virginiana*

ORDER INSECTIVORA (Insectivores)

FAMILY SORICIDAE (Shrews)

Ornate shrew	*Sorex ornatus*

FAMILY TALPIDAE (Moles)

Broad-footed mole	*Scapanus latimanus*

ORDER CHIROPTERA (Bats)

FAMILY VESPERTILIONIDAE (Evening Bats)

Little brown myotis	*Myotis lucifugus*
Yuma myotis	*Myotis yumanensis*
California myotis	*Myotis californicus*
Western pipistrelle	*Pipistrellus hesperus*
Big brown bat	*Eptesicus fuscus*
Western red bat	*Lasiurus blossevillii*
Hoary bat	*Lasiurus cinereus*

Townsend's big-eared bat	*Corynorhinus townsendii*
Pallid bat	*Antrozous pallidus*
FAMILY MOLOSSIDAE (Free-tailed Bats)	
California mastiff bat	*Eumops perotis californicus*
ORDER LAGOMORPHA (Rabbits, Hares and Pika)	
FAMILY LEPORIDAE (Rabbits and Hares)	
Brush rabbit	*Sylvilagus bachmani*
*Black-tailed jackrabbit	*Lepus californicus*
ORDER RODENTIA (Rodents)	
FAMILY SCIURIDAE (Squirrels, Chipmunks and Marmots)	
Merriam's chipmunk	*Tamias merriami*
California chipmunk	*Tamias obscurus*
*California ground squirrel	*Spermophilus beecheyi*
Western gray squirrel	*Sciurus griseus*
FAMILY GEOMYIDAE (Pocket Gophers)	
Botta's pocket gopher	*Thomomys bottae*
FAMILY HETEROMYIDAE (Pocket Mice and Kangaroo Rats)	
California pocket mouse	*Chaetodipus californicus*
FAMILY MURIDAE (Mice, Rats and Voles)	
Western harvest mouse	*Reithrodontomys megalotis*
Parasitic mouse	*Peromyscus californicus*
Deer mouse	*Peromyscus maniculatus*
San Francisco dusky-footed woodrat	*Neotoma fuscipes*
California meadow vole	*Microtus californicus*
ORDER CARNIVORA (Carnivores)	
FAMILY CANIDAE (Foxes, Wolves and Relatives)	
*Coyote	*Canis latrans*
Gray fox	*Urocyon cinereoargenteus*
FAMILY PROCYONIDAE (Raccoons and Relatives)	
Ringtail	*Bassariscus astutus*
Raccoon	*Procyon lotor*
FAMILY MUSTELIDAE (Weasels and Relatives)	
American badger	*Taxidea taxus*
FAMILY MEPHITIDAE (Skunks)	
Western spotted skunk	*Spilogale gracilis*
Striped skunk	*Mephitis mephitis*
FAMILY FELIDAE (Cats)	
Feral cat	*Felis catus*
Mountain lion	*Puma concolor*
Bobcat	*Lynx rufus*
ORDER ARTIODACTYLA (Even-toed Ungulates)	
FAMILY SUIDAE (Pigs)	
Wild pig	*Sus scrofa*
FAMILY CERVIDAE (Deer, Elk and Relatives)	
Black-tailed deer	*Odocoileus hemionus*

LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

BIOTIC ASSESSMENT
EVERGREEN COMMUNITY COLLEGE SITE

Prepared by

Live Oak Associates, Inc.

Rick A. Hopkins, Ph.D., Principal, Senior Biologist
Melissa Denena, M.S., Project Manager, Wildlife/Wetland/Plant Ecologist

Prepared for

John Hesler
David J. Powers and Associates
1885 The Alameda
San Jose, CA 95126

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Project No. 640-01

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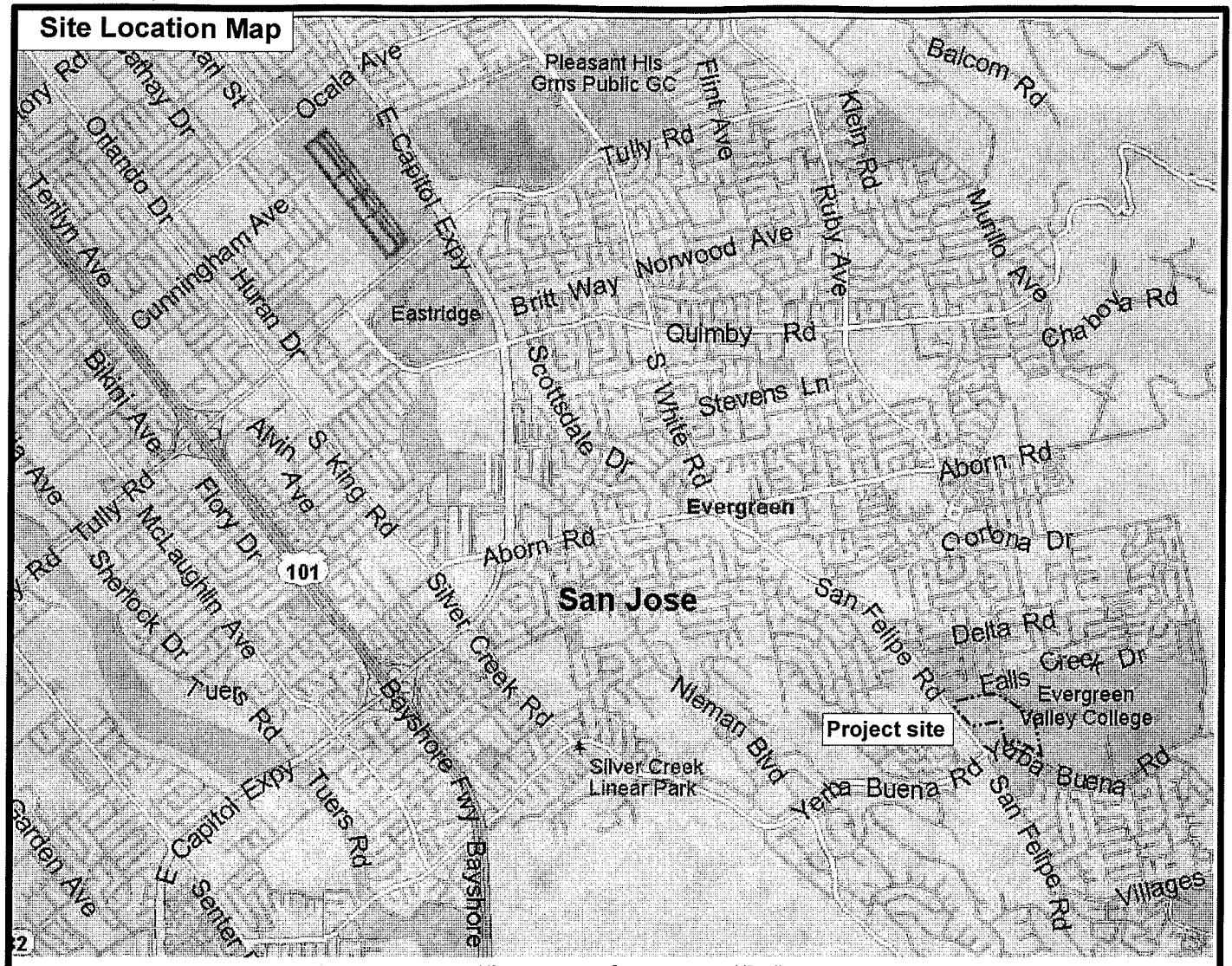
1.0 INTRODUCTION

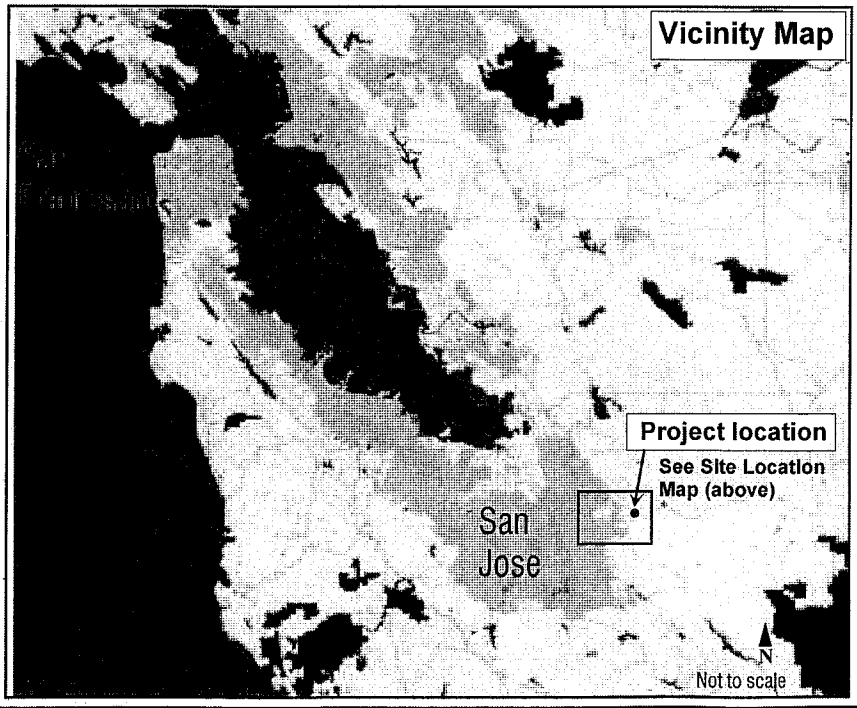
This report describes the biotic resources of an approximately 28-acre site in the City of San Jose in Santa Clara County, California, and evaluates possible constraints such resources may pose for eventual site development. This biotic assessment is being conducted in support of the Evergreen Smart Growth Plan EIR. The study area (also referred to as "the site") is located just northeast of the intersection of Yerba Buena Road and San Felipe Road in the Evergreen area of east San Jose (Figure 1). The majority of the site consists of low quality (ruderal) non-native grassland habitat, some of which is associated with an orchard. A portion of the site is already developed in the form of office buildings and associated facilities (parking lots, driveways, etc.). The location of the site can be found on the San Jose East U.S.G.S. 7.5' quadrangles at Township 7 south, Range 2 east, northwestern corner of Section 28 and northeastern corner of Section 27.

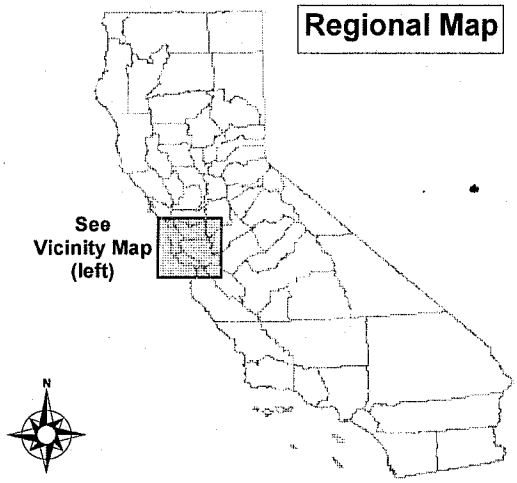
The proposed project is the development of the existing site into commercial and residential development. Proposed construction includes commercial retail (75,000 to 95,000 square feet), commercial office (75,000 square feet), multi-family residential (540 to 630 units), townhomes (60 to 70 homes), open space/parks (two acres), and a library.

Site development of open space 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), covered by policies and ordinances of the City of San Jose, or some combination of these four conditions. This report addresses issues related to sensitive biotic resources occurring on the site, along with the federal, state, and local laws related to such resources and mitigation measures that may be required to reduce the magnitude of anticipated impacts.

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* (CDFG 2003) and (2) the *Inventory of Rare and Endangered Vascular Plants of California*







Live Oak Associates, Inc.

Evergreen Community College
Site / Vicinity Map

Date	Project #	Figure #
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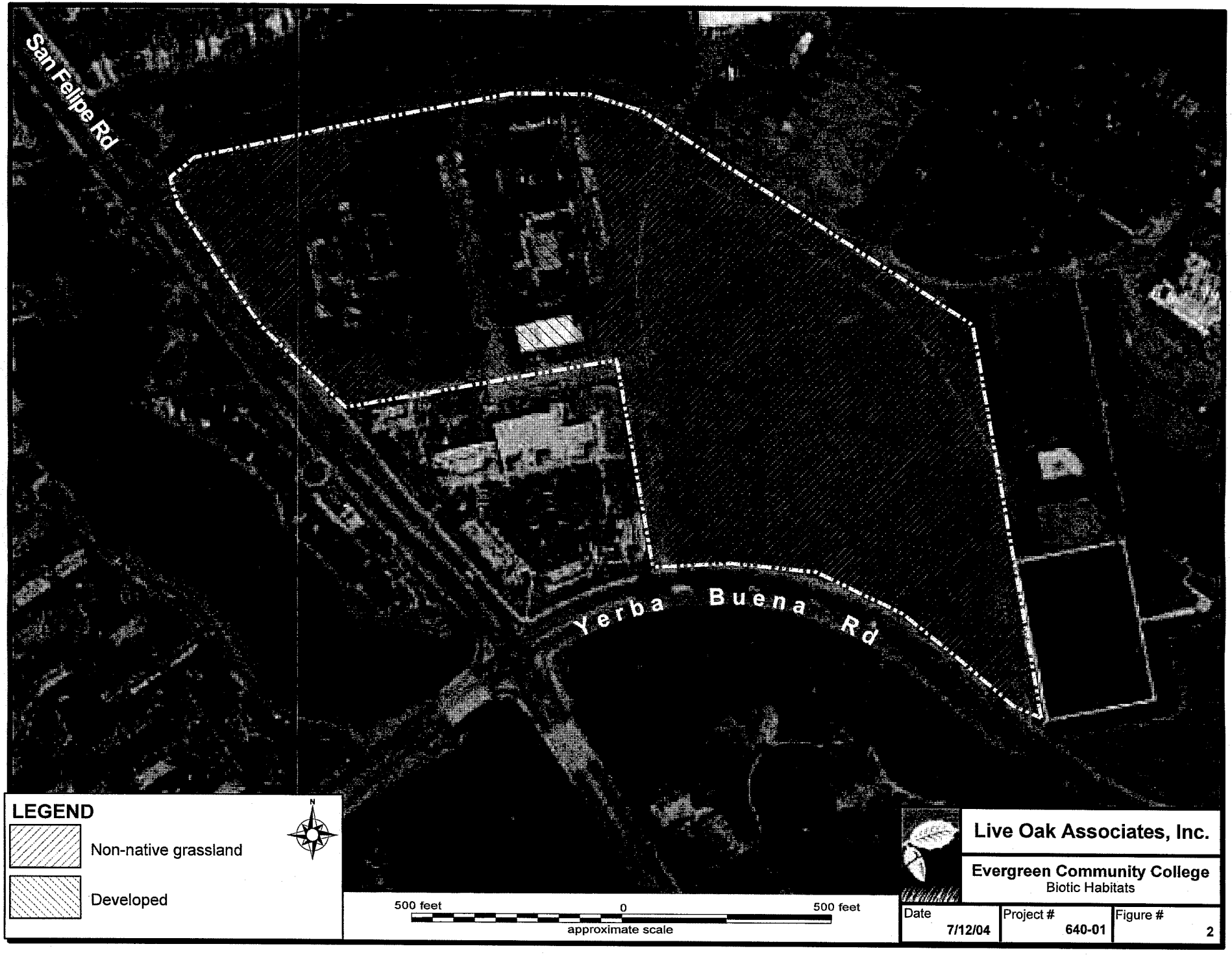
(CNPS 2001) and (3) manuals and references related to plants and animals of the Santa Clara Valley region. Reconnaissance level field surveys were conducted within the study area on July 5, 2004 by Melissa Denena, ecologist with Live Oak Associates, Inc., at which time the principal biotic habitats of the site were identified and the constituent plants and animals of each were noted (Figure 2). Ms. Denena also conducted protocol-level burrowing owl surveys on the site July 5, 13, 14, and 15 of 2004.


San Felipe Rd
Yerba Buena Rd
LEGEND
Non-native grassland
Developed
N
500 feet
0
500 feet
approximate scale
Live Oak Associates, Inc.
Evergreen Community College
Biotic Habitats
Date
7/12/04
Project #
640-01
Figure #
2

2.0 EXISTING CONDITIONS

The approximately 28-acre study area is located in the City of San Jose in Santa Clara County. The site is bounded to the north by Paseo de Arboles and single-family residences, to the east by development associated with the Evergreen Community College, to the south by Yerba Buena Road and Evergreen Park/Yerba Buena Creek, and to the west by San Felipe Road and a retirement community. The site is topographically level at an elevation of approximately 310 to 350 feet National Geodetic Vertical Datum (NGVD). One biotic habitat occurs on the study area, non-native grassland, and a portion of the site consisted of preexisting development, The Academy, South Bay Regional Safety Training Consortium.

Two soil-mapping units have been identified on the site and these soils are described in greater detail in Table 1 and depicted in Figure 3. None of the soils occurring on the site are considered to be hydric, although hydric soil inclusions may occur.

Table 1. Descriptions of soil mapping units of the 28-acre study area (NRCS 1968).

Soil Mapping Unit	Drainage Class	Parent Material
Pleasanton Loam, 2-9% Slopes	Well Drained	Sedimentary Alluvium
Zamora Clay Loam, 0-2% Slopes	Well Drained	Alluvium of Mixed Orgin

Annual precipitation in the general vicinity of the study area averages 16 to 25 inches, almost 85% of which falls between October and March. Virtually all precipitation falls in the form of rain. Stormwater runoff readily infiltrates the soils of the site, but when field capacity has been reached, gravitational water flows off of the site into storm drains, which empty into creeks in the vicinity of the site.

2.1 BIOTIC HABITATS

One biotic habitat and one man-altered habitat have been identified on the study area (Table 2 and Figure 2). For the purposes of this study, these natural terrestrial communities are identified as follows: non-native grassland and developed. A list of the animal species that are known to

LEGEND

PoA Pleasanton loam, 2-9% slopes

ZbA Zamora clay loam, 0-2% slopes

Source:
Soil Conservation Service and the Department of Soils and Plant Nutrition, University of California, July 1968

1/2 mile 0 1/2 mile
approximate scale

Live Oak Associates, Inc.

Evergreen Community College
Soil Survey

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occur in the vicinity of the site is listed in Appendix A. A list of plant species is not included in this report due to the low diversity. Plant species observed on-site are included in the habitat descriptions below. Trees species of the site are defined in the arborist report compiled by David J. Powers and Associates (October 2004).

2.1.1 Non-Native Grassland

The majority of the site consists of low quality (ruderal) non-native grassland habitat, some of which is associated with an orchard. The term "ruderal" refers to areas that are periodically disturbed by anthropogenic influences. These habitats are characterized by being dominated by non-native grasses and forbs of European origin and typically native vegetation is sparse to non-existent. The grasslands in the northwest corner of the site are associated with an orchard, and the open space between the orchard trees had been recently disced at the time of the 2004 field surveys. The grasslands in the eastern portion are classified as being ruderal due to continued disturbance from people utilizing the site to access the community college. There are numerous footpaths that are void of vegetation and it appears that this portion of the site is managed to minimize vegetation.

Non-native grass species observed while on the site included wild oats (*Avena fatua*), soft chess (*Bromus hordaceus*), barnyard barley (*Hordeum murinum* ssp. *leporinum*), ripgut brome (*Bromus diandrus*), rattail fescue (*Vulpia myuros*), and Italian wild rye (*Lolium multiflorum*). Common non-native forbs observed included black mustard (*Brassica nigra*), wild radish (*Raphanus sativa*), yellow star thistle (*Centauria solstitialis*), mayweed chamomile (*Anthemis cotula*), puncture weed (*Tribulus terrestris*), cheeseweed (*Malva parviflora*), fireweed (*Epilobium brachycarpum*), rose clover (*Trifolium hirtum*), fiddleneck (*Amsinkia* sp.), curly dock (*Rumex crispus*), redstem filaree (*Erodium cicutarium*), and jimson weed (*Datura stramonium*. A few trees and shrubs were present on the site. These included coyote brush (*Baccharis pilularis*), coast live oak (*Quercus agrifolia*), and coast redwood (*Sequoia sempervirens*).

Non-native grasslands can provide important habitat to many terrestrial vertebrates. As many as 25 species of reptiles and amphibians, 100 species of birds, and 50 species of mammals are known to use grassland habitats of central California (Mayer and Laudenslayer 1988). A number

of these species are expected to utilize the grasslands occurring on the site throughout all or part of the year as breeding and foraging habitat. However, a particular habitat's importance to the wildlife of a region can be affected by many factors including the proximity of nesting sites, the amount of available escape cover, the availability of water and food, as well as levels of human disturbance. Because the site is disturbed on a regular basis either through discing or other human disturbance and is surrounded on all sides by urban development, the site's value as habitat for many wildlife species occurring in the local region is greatly diminished. Nonetheless, some wildlife was observed using the site during the July 2004 surveys, and still other species, which were not directly observed, would be expected to utilize this habitat. These are described in more detail below.

There are a number of reptile species that are expected to occur on the project site within the grassland habitat Western fence lizards (*Sceloporus occidentalis*) were observed during the July 2004 field surveys. Other species that may occur on the site include California alligator lizards (*Elgaria multicarinatus*) and gopher snakes (*Pituophis melanoleucus*), all of which feed on insects, small mammals, and birds.

Resident and migratory birds breed and forage in grassland habitats. Birds observed in the grasslands of the site include mourning doves (*Zenaida macroura*), killdeers (*Charadrius vociferus*), western scrub jays (*Aphelocoma californica*), California towhees (*Pipilo crissalis*), dark-eyed juncos (*Junco hyemalis*), and Nuttall's woodpeckers (*Picoides nuttallii*). Red-tailed hawks (*Buteo jamaicensis*), American kestrels (*Falco sparverius*), and turkey vultures (*Cathartes aura*) are expected to forage on the site.

Several species of mammals were either observed in the grasslands of the site or would be expected to occur there from time to time. California ground squirrels (*Spermophilus beecheyi*), Botta's pocket gophers (*Thomonys bottae*), and black-tailed jackrabbits (*Lepus californicus*) were observed during the surveys. Other small mammals not observed during the survey but likely to occur here include western harvest mouse (*Reithrodontomys megalotis*) and California meadow vole (*Microtus californicus*). The opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*) would be expected to forage for prey on-site, however, because of the urban

surroundings, it is unlikely that larger mammalian predators such as the coyote (*Canis latrans*), bobcat (*Felis rufus*) or cougar (*Puma concolor*) occur on the site with any regularity.

2.1.2 Developed

The portion of the site designated as developed consists of office buildings and associated facilities (parking lots, driveways, etc.) for The Academy, South Bay Regional Safety Training Consortium. These areas provide limited habitat for the plant and animal species of the area. Habitat for naturally growing plant species has been converted to landscaped flowerbeds and lawns. A few wildlife species may infrequently utilize the trees and shrubs in these areas for perching and possibly breeding. Also, the species that occur in the grassland habitat may occasionally pass through the developed portion of the site.

2.2 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 Game (CDFG) 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 CDFG. 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 2 on the following pages. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988-1990), *California Natural Diversity Data Base* (CDFG 2003), *Endangered and Threatened Wildlife and Plants* (USFWS 2003), *Annual Report on the Status of California*

State Listed Threatened and Endangered Animals and Plants (CDFG 2002), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001). This information was used to evaluate the potential for special-status plant and animal species to occur on site. Figure 4 shows the location of special status species found by the California Natural Diversity Data Base (CNDDB) within a three-mile radius of the project site. It is important to note that CNDDB is a volunteer database and, therefore, it may not contain all known or gray literature records of special status species occurrences.

A search of published accounts for all of the relevant special status plant and animal species was conducted for the San Jose East U.S.G.S 7.5 minute quadrangle in which the project site occurs, and for the eight surrounding quadrangles (Calavaras Reservoir, Mount Day, Lick Observatory, Morgan Hill, Santa Teresa Hills, Los Gatos, San Jose West and Milpitas) using the California Natural Diversity Data Base Rarefind 2003. Plant species reviewed for these quadrangles included those on CNPS List 1A, 1B, 2, and 4.

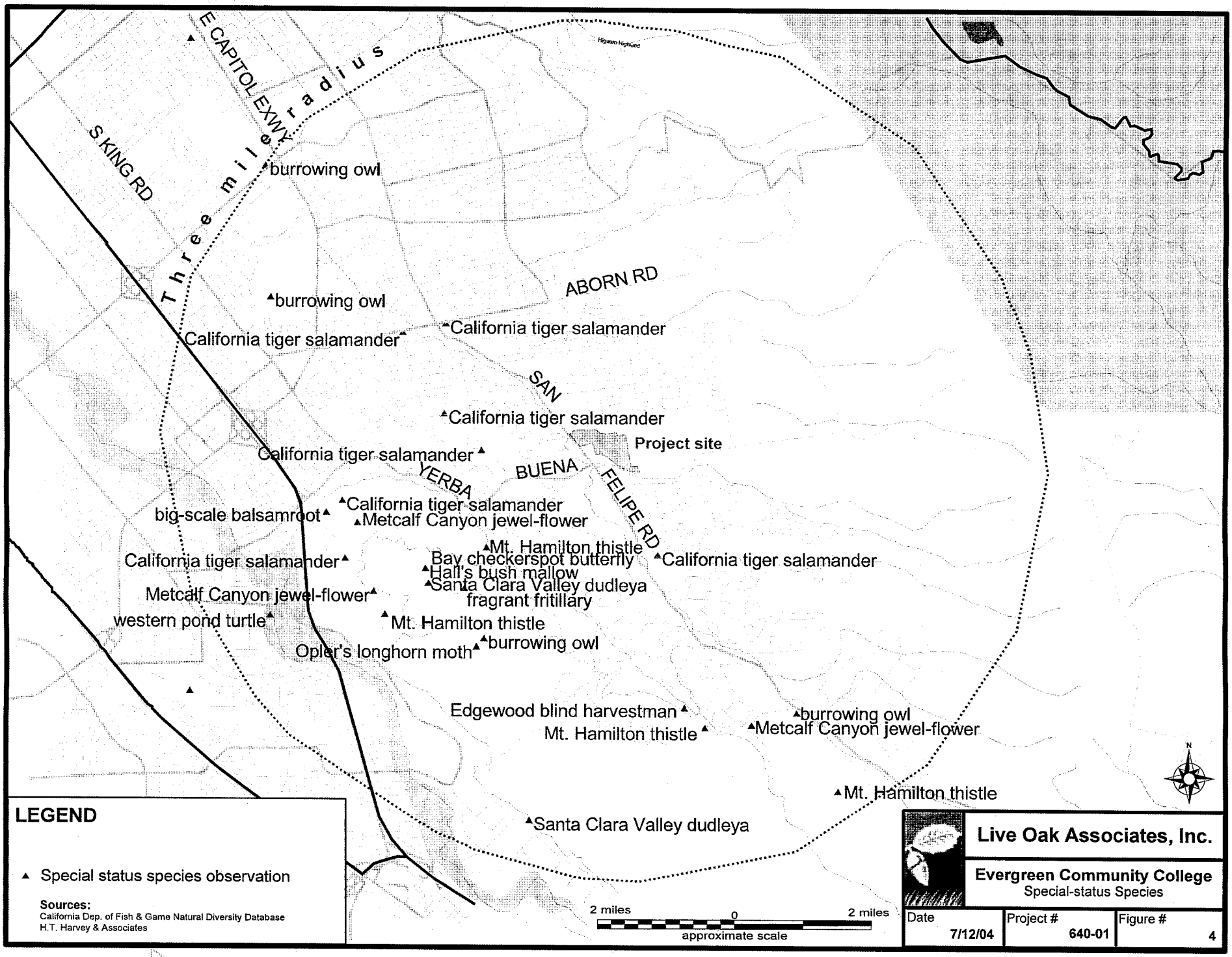
E CAPITOL EXWY
Three mile radius
S KING RD
ABORN RD
SAN
YERBA
BUENA
FELIPE RD
Project site
burrowing owl
California tiger salamander
big-scale balsamroot
Metcalf Canyon jewel-flower
Mt. Hamilton thistle
Bay checkerspot butterfly
Hall's bush mallow
Santa Clara Valley dudleya
fragrant fritillary
western pond turtle
Opler's longhorn moth
Edgewood blind harvestman
Santa Clara Valley dudleya
LEGEND
Special status species observation
Sources:
California Dep. of Fish & Game Natural Diversity Database
H.T. Harvey & Associates
2 miles
0
2 miles
approximate scale
N
Live Oak Associates, Inc.
Evergreen Community College
Special-status Species
Date
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Figure #
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TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFG 2003 and CNPS 2001)

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

Species	Status	Habitat	*Occurrence in the Study Area
Contra Costa Goldfields (*Lasthenia conjugens*)	FE	Occurs in vernal pools and mesic areas of valley and foothill grasslands, typically alkaline, at elevations between 0 and 470 meters.	**Absent.** Vernal pools and alkaline soils are absent from the study area.
Coyote Ceanothus (*Ceanothus ferrisae*)	FE	Occurs in chaparral, coastal scrub, valley and foothill grassland on serpentine, at elevations between 120 and 460 meters.	**Absent.** Serpentine soils are absent from the study area.
Metcalf Canyon Jewel Flower (*Streptanthus albidus* ssp. *albidus*)	FE	Valley and foothill grasslands on serpentine, at elevations between 45 and 800 meters.	**Absent.** Serpentine soils are absent from the study area.
Robust Spineflower (*Chorizanthe robusta* var. *robusta*)	FE	Occurs within cismontane woodlands and coastal dunes/scrub.	**Absent.** Suitable habitat is absent from the study area.
Santa Clara Valley Dudleya (*Dudleya setchellii*)	FE	Occurs on serpentine outcrops in valley and foothill grasslands, at elevations between 60 and 365 meters.	**Absent.** Serpentine soils are absent from the study area.
Tiburon Indian Paintbrush (*Castilleja affinis* ssp. *neglecta*)	FE, CT	Occurs in valley and foothill grassland on serpentine, at elevations between 60 and 400 meters.	**Absent.** Serpentine soils are absent from the study area.

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Alkali Milk-vetch (*Astragalus tener* var. *tener*)	CNPS 1B	Occurs on playas, alkaline vernal pools, and adobe clay valley and foothill grasslands below 60 meters in elevation.	**Absent.** Suitable habitat is absent from the study area.
Big-scale Balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)	CNPS 1B	Chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentine, at elevations between 90 and 1400 meters.	**Absent.** Suitable habitat is absent from the study area. The grasslands of the site are either routinely disced (within the orchard area) or in very poor condition (ruderal).
Caper-fruited Tropidocarpum (*Tropidocarpum capparideum*)	CNPS 1A	Occurs in alkaline soils of valley and foothill grassland, at elevations between 1 and 455 meters.	**Absent.** Suitable habitat is absent. Alkaline soils do not occur within the study area. Species last documented in our area in 1957.
Congdon's Tarplant (*Centromadia parryi* ssp. *congdonii*)	CNPS 1B	Occurs in alkaline soils of valley and foothill grasslands, at elevations between 0 and 425 meters.	**Absent.** Suitable habitat is absent. Alkaline soils do not occur within the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Other special status plants listed by CNPS (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Fragrant Fritillary (*Fritillaria liliacea*)	CNPS 1B	Occurs in coastal prairie, coastal scrub, and valley and foothill grasslands, often on serpentine soils, at elevations between 3 and 410 meters.	**Absent.** Suitable habitat is absent from the study area.
Hairless Popcorn Flower (*Plagiobothrys glaber*)	CNPS 1A	Occurs in heavy clay soils of alkaline meadows, at elevations between 15 and 180 meters.	**Absent**. Suitable habitat is absent. Alkaline soils do not occur within the study area. Last confirmed observance of species was in 1954.
Hall's Bush Mallow (*Malacothamnus hallii*)	CNPS 1B	Occurs in chaparral and coastal scrub, at elevations between 10 and 760 meters.	**Absent.** Suitable habitat is absent from the study area.
Loma Prieta Hoita (*Hoita strobilina*)	CNPS 1B	Occurs in chaparral and cismontane and riparian woodlands, often on serpentine, at elevations between 30 and 600 meters.	**Absent.** Suitable habitat is absent from the study area.
Mt. Hamilton Coreopsis (*Coreopsis hamiltonii*)	CNPS 1B	Occurs in rocky cismontane woodlands.	**Absent.** Suitable habitat is absent from the study area.
Mt. Hamilton Thistle (*Cirsium fontinale* var. *campylon*	CNPS 1B	Occurs in seasonal and perennial drainages on serpentine soils, at elevations between 95 and 890 meters.	**Absent.** Serpentine soils are absent from the study area.
Most Beautiful Jewelflower (*Streptanthus albidus* ssp. *peramoenus*)	CNPS 1B	Occurs in chaparral and valley and foothill grasslands on serpentine soils, at elevations between 120 and 1000 meters.	**Absent.** Serpentine soils are absent from the study area.
Point Reyes Bird's-beak (*Cordylanthus maritimus* ssp. *palustris*)	CNPS 1B	Occurs in coastal salt marshes and swamps.	**Absent.** Suitable habitat is absent from the study area.
Prostrate Navarretia (*Navarretia prostrata*)	CNPS 1B	Occurs in coastal scrub, alkaline valley and foothill grasslands, and mesic vernal pools.	**Absent.** Suitable habitat is absent from the study area. The grasslands of the site are not alkaline.
San Joaquin Saltbush (*Atriplex joaquiniana*)	CNPS 1B	Occurs in chenopod scrub, meadows and seeps, playas, and alkaline valley and foothill grasslands.	**Absent.** Suitable habitat is absent from the study area. The grasslands of the site are not alkaline.
Santa Cruz Mountains Beardtongue (*Penstemon rattanii* var. *kleei*)	CNPS 1B	Chaparral, lower montane coniferous forest, at elevations between 400-1100 meters.	**Absent.** Suitable habitat is absent from the study area.
Smooth Lessingia (*Lessingia micradenia* ssp. *glabrata*)	CNPS 1B	Occurs in serpentine grassland and chaparral, at elevations between 120 and 420 meters.	**Absent.** Serpentine soils are absent from the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (adapted from CDFG 2003 and USFWS 2003)

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

Species	Status	Habitat	*Occurrence in the Study Area
Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)	FE	Native grasslands on serpentine soils. Host plant is *Plantago erecta.*	**Absent.** Serpentine soils are absent from the site.
California Tiger Salamander (*Ambystoma californiense*)	FT, CSC	Breeds in vernal pools and stock ponds of central California; adults aestivate in grassland habitats adjacent to the breeding sites.	**Absent.** The site consisted entirely of upland habitat.
California Red-legged Frog (*Rana aurora draytonii*)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	**Absent.** The site consisted entirely of upland habitat.
Peregrine Falcon (*Falco peregrinus*)	CE	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	**Unlikely**. Suitable nesting habitat does not occur on the study area, however, the site may provide foraging habitat for the rare migrant.
Willow Flycatcher (*Empidonax trailii*)	CE (while nesting) FE (*extimus*)	Species breeds in the Sierras and Southern California.	**Absent**. Uncommon migrant; this species would not breed on the study area. Those birds that may pass through the study area are probably not of the federally listed subspecies.

Federal Candidate Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Foothill Yellow-legged Frog (*Rana boylii*)	CSC	Found primarily in swiftly flowing creeks.	**Absent.** The site consisted entirely of upland habitat.
Western Pond Turtle (*Clemmys marmorata*)	CSC	Open slow-moving water of rivers and creeks of central California with rocks and logs for basking.	**Absent.** The site consisted entirely of upland habitat.
Cooper's Hawk (*Accipiter cooperii*)	CSC	Breeds in oak woodlands, riparian forests and mixed conifer forest of the Sierra Nevada, but winters in a variety of lowland habitats.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
Sharp-shinned Hawk (*Accipiter striatus*)	CSC	Breeds in the mixed conifer forests of the northern Sierra Nevada. This species winters in a variety of habitats of the state.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
Golden Eagle (*Aquila chrysaetos*)	CSC, CP	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	**Absent.** Suitable breeding and foraging habitat is absent from the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Federal Candidate Species and State Species of Special Concern (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Northern Harrier (*Circus cyaneus*)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
White-tailed Kite (*Elanus leucurus*)	CP	Open grasslands and agricultural areas throughout central California.	**Possible.** This species may occasionally forage on the study area and marginal nesting habitat occurs in the few trees of the site.
Merlin (*Falco columbarius*)	CSC	This falcon, which breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	**Possible.** The site provides suitable wintering habitat for migrants of this species.
Prairie Falcon (*Falco mexicanus*)	CSC	Distributed from annual grasslands to alpine meadows; requires cliffs or rock outcroppings for nesting.	**Possible.** This species may occasionally forage on the study area; however breeding habitat is absent.
Burrowing Owl (*Athene cunicularia*)	CSC	Found in open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. This species is often associated with California ground squirrels.	**Possible.** Suitable habitat was present on the site for this species (i.e. ground squirrel burrows). However, the protocol level surveys conducted in July 2004 determined that this species was absent. Nonetheless, due to the fact that the owl is volant, individuals could move onto the site at a later date.
Vaux's Swift (*Chaetura vauxi*)	CSC	Migrants and transients move through the foothills of the western Sierra in spring and late summer. Breeds in coniferous forests.	**Unlikely.** Migrants and transients may forage on the site, however, suitable breeding habitat is absent from the study area.
Black Swift (*Cypseloides niger*)	CSC	Migrants and transients found throughout many habitats of state. Breed on steep cliffs or ocean bluffs, or in cracks and crevasses of inland deep canyons.	**Unlikely.** Migrants and transients may forage on the site, however, suitable breeding habitat is absent from the study area.
Loggerhead Shrike (*Lanius ludovicianus*)	CSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	**Possible.** The site provides suitable foraging and marginal breeding habitat for this species.
California Horned Lark (*Eremophila alpestris actia*)	CSC	Short-grass prairie, annual grasslands, coastal plains, open fields.	**Unlikely.** The site provides marginal foraging and breeding habitat for this species.
Tricolored blackbird (*Agelaius tricolor*)	CSC	Breeds near fresh water in dense emergent vegetation.	**Absent.** The site consisted entirely of upland habitat.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Federal Candidate Species and State Species of Special Concern (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Pallid Bat (*Antrozous pallidus*)	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas providing roosting opportunities.	**Possible.** This species may occasionally forage on the study area and marginal roosting habitat is present within The Academy buildings. However, this species is not expected to roost on site due to the well-kept condition of the buildings.
California Mastiff Bat (*Eumops perotis californicus*)	CSC	Forages over many habitats, requires tall cliffs or buildings for roosting.	**Possible.** This species may occasionally forage on the study area and marginal roosting habitat is present within The Academy buildings. However, this species is not expected to roost on site due to the well-kept condition of the buildings.
Townsend's Big-eared Bat (*Plecotus townsendii townsendii*)	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats of the state.	**Possible.** This species may occasionally forage on the study area and marginal roosting habitat is present within The Academy buildings. However, this species is not expected to roost on site due to the well-kept condition of the buildings.
San Francisco Dusky-Footed Woodrat (*Neotoma fuscipes annectens*)	CSC	Found in hardwood forests, oak riparian and shrub habitats.	**Absent.** Woodlands and dense shrub habitat favored by the species are absent from the study area.
Ringtail (*Bassariscus astutus*)	CP	Occurs in riparian and heavily wooded habitats near water.	**Absent.** The site consisted entirely of upland habitat.

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

STATUS CODES

FE	Federally Endangered
FT	Federally Threatened
FPE	Federally Endangered (Proposed)
FC	Federal Candidate

CE	California Endangered
CT	California Threatened
CR	California Rare
CP	California Protected
CSC	California Species of Special Concern

CNPS	California Native Plant Society Listing
1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened, or Endangered in California and elsewhere
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere
3	Plants about which we need more information – a review list
4	Plants of limited distribution – a watch list

2.3 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 Game (CDFG) and the California Regional Water Quality Control Board (RWQCB) (see *Section 3.2.4* of this report for additional information).

Jurisdictional waters were absent from the project site.

2.4 ORDINANCE-SIZED TREES

According to a tree survey conducted by David J. Powers & Associates in October of 2004, there are a total of 256 trees occur on the site (Table 3).

Table 3. Summary of Tree Survey (David Powers & Associates 2004)

Diameter	Tree Type			Total
	Orchard	Non-Native	Native	
<12"	25	91	5	121
12"-17"	16	55	13	84
>/=18"	6	37	8	51
Total	47	183	26	**256**

Orchard trees consists of primarily walnut trees, with a few apple, pear, apricot, and cherry trees. Native trees include coast live oak and valley oak trees, with non-native trees consisting of all other species. Non-native trees include not only trees not native to California, but those species not naturally occurring in the project vicinity as well. For instance there are trees species that occur in the Santa Cruz Mountains a few miles west of the site (such as the coast redwood and Douglas fir) that could not occur on the valley floor naturally.

The City of San Jose's has a Tree Ordinance (Chapter 13.32 of the Municipal Code), which requires permitting and mitigation for the loss of trees (see *Sections 3.2.5* and *3.3.7* of this report for additional information). Some or all of these trees may fall under this ordinance.

3.0 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. "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 focused with the proposed buildings, access roads and other infrastructure. Some minor modifications of the locations of this development would not require a reassessment of project impacts. However, any proposal that results in substantial revisions as to the scope and/or relative location of the roads, residences and associated infrastructure would need to be accompanied by a subsequent assessment to ensure that the project would not result in significant impacts to biotic resources which are not anticipated by the current proposal.

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 Game (CDFG) 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 CDFG 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 CDFG 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 law also protect most bird species. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., scc. 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, (2003), 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 CDFG.

3.2.4 Wetlands and Other "Jurisdictional Waters"

Natural drainage channels and wetlands are considered "Waters of the United States" (hereafter referred to as "jurisdictional waters"). The U.S. Army Corps of Engineers (USACE) regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act (Wetland Training Institute, Inc. 1991). 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 either intermittently or permanently), 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 will result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The RWCQB 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 Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code (CDFG 2003). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the drainage in question.

3.2.5 Local Policies or Ordinances

The City of San Jose has a Tree Ordinance (Chapter 13.32 of the Municipal Code) that regulates the removal of certain trees. It is the purpose of the ordinance 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 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. 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.

3.3 IMPACTS SPECIFIC TO THE PROJECT SITE

The proposed project consists of the construction of commercial and residential development on the 28-acre project site. This development would include not only the building footprints, but also all necessary infrastructures (roadways, parking lots, etc.). The project also calls for the designation of approximately two acres of open space/parks along the southern boundary of the site. Therefore, the mass majority of the site will be converted to a developed land use. 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 22 special status plant species potentially occurring in the project vicinity, all have been ruled out as occurring on the site due to the absence of suitable habitat for these species. The grassland species that are known to occur in the vicinity of the site either occur on serpentine or alkaline soils or within wetlands habitats, all of which are absent from the site.

Mitigation. None required.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impact. Twenty-five special status animal species occur, or once occurred, regionally (see Table 2). Of these, 14 species would be absent from or unlikely to occur on the site. These include the Bay checkerspot butterfly, California tiger salamander, California red-legged frog, foothill yellow-legged frog, western pond turtle, golden eagle, peregrine falcon, willow

flycatcher, Vaux's swift, black swift, California horned lark, tricolored blackbird, San Francisco dusky-footed woodrat, and ringtail.

Other species might rarely or occasionally occur on the site as transients, migrants, or foragers, but are not expected to nest/breed on the site. These include the Cooper's hawk, sharp-shinned hawk, northern harrier, merlin, prairie falcon, pallid bat, Townsend's big-eared bat, and California mastiff bat.

The remaining special status animal species from Table 2 may occur more frequently as regular foragers or may be resident to the site. These include the white-tailed kite, burrowing owl, and loggerhead shrike. However, no stick nests were observed on the project site, and there does not appear to be historic evidence of raptors or shrikes nesting on-site. All of the above species are relatively common regionally and the small amount of habitat loss would result in a less-than-significant impact to habitat available to these species regionally (see however, *Section 3.3.7 Disturbance to Active Raptor Nests*, below).

Mitigation. None required.

3.3.3 Loss of Habitat for Native Wildlife

Potential Impact. The proposed project will result in the loss of disturbed non-native grassland habitat. The site comprises of a portion of the wildlife's entire home range or territory. As such, some species may disperse through the site, but most wildlife presently using the site do so as part of their normal movements for foraging, mating, and caring for young. Individuals of the various vertebrate species presently occupying the site would be displaced or lost from the development area. While grasslands provide habitat for a number of native wildlife species, this habitat is relatively common in the region.

However, while the previous section (3.3.2) concludes that project impacts would result in less-than-significant impacts to loss of habitat for special status animals, project development could potentially result in harm or injury to individual raptors. There are a number of large trees in the southeast corner and within the developed portion of the site, which provide breeding habitat for

tree-nesting raptors; however no stick nests were observed within these trees. Suitable habitat for the burrowing owl is present on site due to the presence of ground squirrel burrows. Protocol-level burrowing owl surveys were conducted in the mornings of July 13 and 15 and evenings of July 5 and 14. No individuals or signs (i.e. white wash, pellets, feathers) of burrowing owls were observed during these surveys.

Therefore, as of July 2004, tree nesting raptors and burrowing owls were not currently nesting on the site, but as volant species, raptors could move onto the site prior to site development. If a raptor were to nest on the site in the future prior to construction, such activities could result in the abandonment of active nests or direct mortality to these birds. Future construction activities that would adversely affect future nesting activity or result in the mortality of individual birds constitute a violation of federal and state laws (see discussion in *Section 3.2.3*) and are considered significant adverse impacts.

Mitigation. The implementation of the following measures is to ensure that raptors (hawks and owls) are not disturbed during the breeding season.

- A qualified ornithologist will conduct a pre-construction survey for nesting raptors (including both tree and ground nesting raptors) on site within 30 days of the onset of ground disturbance, if ground disturbance is to occur during the breeding season (February 1 to August 31). These surveys will be based on the accepted protocols (e.g., as for the burrowing owl) for the target species. These surveys will explicitly consider the burrowing owl as a potential target species and pre-construction efforts will be conducted according to the most recent protocol. If a nesting raptor were to be detected, an appropriate construction buffer would be established. Actual size of buffer would depend on species, topography, and type of construction activity that would occur in the vicinity of the nest.

- A qualified ornithologist will conduct pre-construction surveys for burrowing owls during the non-breeding season. Pre-construction surveys during the non-breeding season are not necessary for tree nesting raptors, as they are expected to

abandon their roosts during construction. If pre-construction surveys (conducted either during the breeding or non-breeding season) determine that burrowing owls occupy the site just prior to construction, then a passive relocation effort (blocking burrows with one-way doors) maybe necessary to ensure that the owl is not harmed or injured during construction.

Implementation of the above measures will fully mitigate impacts to nesting and burrowing raptors.

3.3.4 Interference with the Movement of Native Wildlife

Potential Impact. The area proposed for development on the site consists of non-native grassland habitat and developed land, which support an assemblage of native wildlife species. The movements of various species on- and off-site vary depending on the species in question. One must differentiate between animals' consistent use patterns in order to assess the importance of an area as a "movement corridor." Wildlife movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species occurring onsite permits sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements. The site is almost entirely surrounded by development and is considered an infill property. The only natural habitat in the immediate vicinity of the site is Yerba Buena Creek. However, Yerba Buena Road is located between the site and the creek habitat, creating a significant barrier for wildlife in the creek attempting to access the site. Therefore, due to the infill nature of the proposed development and the site's close proximity to densely populated areas, this property is not believed to be a significant movement corridor for native wildlife. Project development is expected to have a less-than-significant impact on corridor-type movements of native wildlife.

Mitigation. None required.

3.3.5 Disturbance to Waters of the U.S. or Riparian Habitats

Potential Impact. Waters of the U.S. and riparian habitats are absent from the project site. The site consists entirely of upland habitat.

Mitigation. None required.

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

Potential Impact. Eventual site development may 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 wetland habitats would be considered a potentially significant adverse environmental impact.

Mitigation. The applicant must comply with the provisions of a City of San Jose's grading permit, including standard erosion control measures that employ best management practices (BMPs). Such compliance will result in no impact to water quality in seasonal creeks, reservoirs, and downstream waters from the proposed project.

3.3.7 Local Policies or Ordinance Protecting Biological Resources

Impacts. The only policy or ordinance that this project will need to abide by is the City of San Jose Tree Ordinance. A formal tree survey was completed by David J. Powers & Associates in October of 2004. At the time of this survey, 256 trees were identified on the property. The removal of any or all of the onsite trees may require a permit from the City, along with

appropriate mitigation measures for the removal of trees. Therefore, the loss of ordinance trees would constitute a significant impact under CEQA.

Mitigation. Project build out will result in the loss of the majority of the existing onsite trees. The City of San Jose requires that prior to the removal of any sized tree, a permit application be submitted, including the proposed mitigation for the loss of trees. The project site is unique in that the existing trees were all planted, thereby not occurring naturally. Of the 256 onsite trees, 209 may fall under the City's tree ordinance; the 47 trees that are part of the orchard would not fall under the City's ordinance. Of the 209 non-orchard trees, only 26 are of a native species, coast live oak and valley oak.

Typically, the City requires that mitigation for the loss of all trees be implemented with ratios ranging from 1:1 (replacement planting: tree loss) to 4:1 depending on the size of the individual tree. The mitigation for the 26 native trees should follow the typical requirements, with appropriate compensation ratios and the replacement with native trees. However, due to the fact that the remaining trees are not only non-native species, but also part of landscaping, the required mitigation should be lessened.

Implementation of the below measures will mitigate for the loss of onsite trees:

Native Replacement Plantings	*NUMBER OF TREES*
• The 8 large sized native trees will be compensated at a 4:1 ratio	32
• The 13 medium sized native trees will be compensated at a 2:1 ratio	26
• The 5 small sized native trees will be compensated at a 1:1 ratio	5
Replacement Plantings	
• The 209 non-native trees will be compensated at a 1.5:1 ratio	313
TOTAL	**376**

Where possible, this mitigation can be compensated for through an onsite Landscape Plan. However, if the mitigation obligations cannot be fulfilled onsite, the applicant can either plant

offsite or donate money to *San Jose Beautiful* or *Our City Forest* to be used towards tree plantings.

Onsite plantings will be required to be irrigated for a period of not less than three years and will be maintained during that period, including protection from invasive species and wildlife browsing. For any trees retained in the immediate vicinity of construction or demolition areas, problems of soil compaction within the root zone resulting from heavy construction equipment needs to be prevented. In order to minimize construction and demolition impacts to remaining trees, barrier fencing will be installed around the dripline of all retained trees or at the edge of construction areas. Any construction or demolition activities taking place within the dripline of retained trees will be done by hand or with light equipment that does not cause soil compaction.

3.3.8 Confliction with Provisions of an Adopted Conservation Plan

Potential Impact. An adopted or a Draft Habitat Conservation Plan does not exist for the area in which the project is proposed. Therefore, this significance criterion does not apply.

Migiation. None required.

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APPENDIX A
TERRESTRIAL VERTEBRATES OF THE STUDY AREA

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TERRESTRIAL VERTEBRATES OF THE STUDY AREA

Listed below are those species that may reasonably be expected to use the habitats of the project site routinely during some or all of the year. The list is not intended to include birds that are vagrants or occasional transients. Species observed during the July 5, 13, 14, and 15 of 2004 field surveys have been noted with an asterisk.

CLASS AMPHIBIA (Amphibians)
ORDER CAUDATA (Salamanders)
FAMILY SALAMANDRIDAE (Newts)

California newt	*Taricha torosa*

FAMILY PLETHODONTIDAE (Lungless Salamanders)

Ensatina	*Ensatina eschscholtzii*
Black salamander	*Aneides flavipunctatus*
Arboreal salamander	*Aneides lugubris*
California slender salamander	*Batrachoseps attenuatus*
Pacific slender salamander	*Batrachoseps pacificus*

CLASS REPTILIA (Reptiles)
ORDER SQUAMATA (Lizards and Snakes)
SUBORDER SAURIA (Lizards)
FAMILY PHRYNOSOMATIDAE

*Western fence lizard	*Sceloporus occidentalis*

FAMILY SCINCIDAE (Skinks)

Skilton skink	*Eumeces skiltonianus skiltonianus*
Gilbert's skink	*Eumeces gilberti*

FAMILY ANGUIDAE (Alligator Lizards and Relatives)

California alligator lizard	*Elgaria multicarinata*

SUBORDER SERPENTES (Snakes)
FAMILY COLUBRIDAE (Colubrids)

Ringneck snake	*Diadophis punctatus*
Sharp-tailed snake	*Contia tenuis*
Racer	*Coluber constrictor*
Coachwhip	*Masticophis flagellum*
Gopher snake	*Pituophis catenifer*
Common kingsnake	*Lampropeltis getula*
California black-headed snake	*Tantilla planiceps*
Night snake	*Hypsiglena torquata*

FAMILY VIPERIDAE (Vipers)

Western rattlesnake	*Crotalus viridis*

CLASS AVES (Birds)
ORDER CICONIIFORMES (Herons, Storks, Ibises and Relatives)
FAMILY CATHARTIDAE (New World Vultures)

Turkey vulture	*Cathartes aura*

ORDER FALCONIFORMES (Vultures, Hawks and Falcons)
FAMILY ACCIPITRIDAE (Hawks, Old World Vultures and Harriers)

White-tailed kite	*Elanus leucurus*
Sharp-shinned hawk	*Accipiter striatus*
Cooper's hawk	*Accipiter cooperii*

Red-shouldered hawk	*Buteo lineatus*
Red-tailed hawk	*Buteo jamaicensis*
Ferruginous hawk	*Buteo regalis*
Rough-legged hawk	*Buteo lagopus*
FAMILY FALCONIDAE (Caracaras and Falcons)	
American kestrel	*Falco sparverius*
Merlin	*Falco columbarius*
Praire falcon	*Falco mexicanus*
ORDER GALLIFORMES (Magapodes, Curassows, Pheasants and Relatives)	
FAMILY PHASIANIDAE (Quails, Pheasants and Relatives)	
Ring-necked pheasant	*Phasianus colchicus*
FAMILY ODONTOPHORIDAE (New World Quail)	
California quail	*Callipepla californica*
ORDER CHARADRIIFORMES (Shorebirds, Gulls and Relatives)	
FAMILY CHARADRILDAE (Lapwings and Plovers)	
*Killdeer	*Charadrius vociferus*
ORDER COLUMBIFORMES (Pigeons and Doves)	
FAMILY COLUMBIDAE (Pigeons and Doves)	
Rock dove	*Columba livia*
Band-tailed pigeon	*Columba fasciata*
*Mourning dove	*Zenaida macroura*
ORDER STRIGIFORMES (Owls)	
FAMILY TYTONIDAE (Barn Owls)	
Barn owl	*Tyto alba*
FAMILY STRIGIDAE (Typical Owls)	
Western screech owl	*Otus kennicottii*
Great horned owl	*Bubo virginianus*
ORDER CAPRIMULGIFORME (Goatsuckers and Relatives)	
FAMILY CAPRIMULGIDAE (Goatsuckers)	
Common poorwill	*Phalaenoptilus nuttallii*
ORDER APODIFORMES (Swifts and Hummingbirds)	
FAMILY APODIDAE (Swifts)	
Vaux's swift	*Chaetura vauxi*
FAMILY TROCHILIDAE (Hummingbirds)	
Anna's hummingbird	*Calypte anna*
Allen's hummingbird	*Selasphorus sasin*
ORDER PICIFORMES (Woodpeckers and Relatives)	
FAMILY PICIDAE (Woodpeckers and Wrynecks)	
Acorn woodpecker	*Melanerpes formicivorus*
Red-breasted sapsucker	*Sphyrapicus ruber*
*Nuttall's woodpecker	*Picoides nuttallii*
Downy woodpecker	*Picoides pubescens*
Hairy woodpecker	*Picoides villosus*
Northern flicker	*Colaptes auratus*
ORDER PASSERIFORMES (Perching Birds)	
FAMILY TYRANNIDAE (Tyrant Flycatchers)	
Western wood-pewee	*Contopus sordidulus*
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
Ash-throated flycatcher	*Myiarchus cinerascens*
FAMILY LANIIDAE (Shrikes)	

Loggerhead shrike	*Lanius ludovicianus*
FAMILY VIREONIDAE (Typical Vireos)	
Cassin's vireo	*Vireo cassinii*
Hutton's vireo	*Vireo huttoni*
Warbling vireo	*Vireo gilvus*
FAMILY CORVIDAE (Jays, Magpies and Crows)	
*Western scrub-jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Common raven	*Corvus corax*
FAMILY HIRUNDINIDAE (Swallows)	
Tree swallow	*Tachycineta bicolor*
Violet-green swallow	*Tachycineta thalassina*
Bank swallow	*Riparia riparia*
Cliff swallow	*Petrochelidon pyrrhonota*
Barn swallow	*Hirundo rustica*
FAMILY PARIDAE (Titmice and Relatives)	
Oak titmouse	*Baeolophus inornatus*
FAMILY AEGITHALIDAE (Bushtit)	
Bushtit	*Psaltriparus minimus*
FAMILY SITTIDAE (Nuthatches)	
White-breasted nuthatch	*Sitta carolinensis*
FAMILY TROGLODYTIDAE (Wrens)	
Bewick's wren	*Thryomanes bewickii*
House wren	*Troglodytes aedon*
Winter wren	*Troglodytes troglodytes*
FAMILY REGULIDAE (Kinglets)	
Ruby-crowned kinglet	*Regulus calendula*
FAMILY SYLVIIDAE (Old World Warblers and Gnatcatchers)	
Blue-gray gnatcatcher	*Polioptila caerulea*
FAMILY TURDIDAE (Thrushes)	
Western bluebird	*Sialia mexicana*
Hermit thrush	*Catharus guttatus*
American robin	*Turdus migratorius*
FAMILY TIMALIIDAE (Babblers)	
Wrentit	*Chamaea fasciata*
FAMILY MIMIDAE (Mockingbirds and Thrashers)	
Northern mockingbird	*Mimus polyglottos*
California thrasher	*Toxostoma redivivum*
FAMILY STURNIDAE (Starlings and Allies)	
European starling	*Sturnus vulgaris*
FAMILY PARULIDAE (Wood Warblers and Relatives)	
Orange-crowned warbler	*Vermivora celata*
Common yellowthroat	*Geothlypis trichas*
FAMILY EMBERIZIDAE (Emberizines)	
Spotted towhee	*Pipilo maculatus*
*California towhee	*Pipilo crissalis*
Lark sparrow	*Chondestes grammacus*
Sage sparrow	*Amphispiza belli*
Savannah sparrow	*Passerculus sandwichensis*
Fox sparrow	*Passerella iliaca*
Song sparrow	*Melospiza melodia*

White-throated sparrow	*Zonotrichia albicollis*
White-crowned sparrow	*Zonotrichia leucophrys*
Golden-crowned sparrow	*Zonotrichia atricapilla*
*Dark-eyed junco	*Junco hyemalis*
FAMILY CARDINALIDAE (Cardinals, Grosbeaks and Allies)	
Black-headed grosbeak	*Pheucticus melanocephalus*
Lazuli bunting	*Passerina amoena*
FAMILY ICTERIDAE (Blackbirds, Orioles and Allies)	
Red-winged blackbird	gelaius phoeniceus
Western meadowlark	*Sturnella neglecta*
Brewer's blackbird	*Euphagus cyanocephalus*
Brown-headed cowbird	*Molothrus ater*
FAMILY FRINGILLIDAE (Finches)	
Purple finch	*Carpodacus purpureus*
House finch	*Carpodacus mexicanus*
Lesser goldfinch	*Carduelis psaltria*
American goldfinch	*Carduelis tristis*
FAMILY PASSERIDAE (Old World Sparrows)	
House sparrow	*Passer domesticus*
CLASS MAMMALIA (Mammals)	
ORDER DIDELPHIMORPHIA (Marsupials)	
FAMILY DIDELPHIDAE (Opossums)	
Virginia opossum	*Didelphis virginiana*
ORDER INSECTIVORA (Insectivores)	
FAMILY SORICIDAE (Shrews)	
Ornate shrew	Sorex ornatus
FAMILY TALPIDAE (Moles)	
Broad-footed mole	Scapanus latimanus
ORDER CHIROPTERA (Bats)	
FAMILY VESPERTILIONIDAE (Evening Bats)	
Little brown myotis	*Myotis lucifugus*
Yuma myotis	*Myotis yumanensis*
California myotis	*Myotis californicus*
Western pipistrelle	*Pipistrellus hesperus*
Big brown bat	*Eptesicus fuscus*
Western red bat	*Lasiurus blossevillii*
Hoary bat	*Lasiurus cinereus*
Townsend's big-eared bat	Corynorhinus townsendii
Pallid bat	Antrozous pallidus
FAMILY MOLOSSIDAE (Free-tailed Bats)	
Western mastiff bat	Eumops perotis
ORDER LAGOMORPHA (Rabbits, Hares and Pika)	
FAMILY LEPORIDAE (Rabbits and Hares)	
Brush rabbit	*Sylvilagus bachmani*
Black-tailed jackrabbit	*Lepus californicus*
ORDER RODENTIA (Rodents)	
FAMILY SCIURIDAE (Squirrels, Chipmunks and Marmots)	
*California ground squirrel	*Spermophilus beecheyi*
Western gray squirrel	*Sciurus griseus*
FAMILY GEOMYIDAE (Pocket Gophers)	

*Botta's pocket gopher	*Thomomys bottae*
FAMILY HETEROMYIDAE (Pocket Mice and Kangaroo Rats)	
California pocket mouse	*Chaetodipus californicus*
FAMILY MURIDAE (Mice, Rats and Voles)	
Western harvest mouse	*Reithrodontomys megalotis*
California mouse	*Peromyscus californicus*
Deer mouse	*Peromyscus maniculatus*
Dusky-footed woodrat	*Neotoma fuscipes*
California vole	*Microtus californicus*
ORDER CARNIVORA (Carnivores)	
FAMILY CANIDAE (Foxes, Wolves and Relatives)	
Coyote	*Canis latrans*
Gray fox	*Urocyon cinereoargenteus*
FAMILY PROCYONIDAE (Raccoons and Relatives)	
Ringtail	*Bassariscus astutus*
Raccoon	*Procyon lotor*
FAMILY MUSTELIDAE (Weasels and Relatives)	
Long-tailed weasel	*Mustela frenata*
American badger	*Taxidea taxus*
FAMILY MEPHITIDAE (Skunks)	
Striped skunk	*Mephitis mephitis*
FAMILY FELIDAE (Cats)	
Feral cat	*Felis catus*
Bobcat	*Lynx rufus*
ORDER ARTIODACTYLA (Even-toed Ungulates)	
FAMILY CERVIDAE (Deer, Elk and Relatives)	
Black-tailed deer	*Odocoileus hemionus*