

BIOLOGICAL RESOURCES ASSESSMENT FOR THE TRACTOR SUPPLY CO. CITY OF HIGHLAND

APN #1200-381-05 & 1200-381-43

A 9 Acre Property, Total Area Surveyed: ~10 Acres

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Report Date: January 31, 2021

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I. INTRODUCTION

This report describes the findings of a General Biological Resources Assessment as part of compliance with local, State and Federal requirements and was conducted by Kidd Biological, Inc. This biological assessment is intended to provide information about the potential for various sensitive resources to occur on site based on the current site conditions. If there is a potential for any sensitive species to occur, additional focused surveys for that specific species may be necessary.

Project Site Location

The study area is comprised of the proposed impact areas associated with the construction of a shopping center, residential units and associated infrastructure as well as a parking lot ("Project site"). The study area is located in a mixed commercial and residential area of the City of Highland in western San Bernardino County. Generally, the site lies south and west of Highway 210 (Foothill Freeway), east of Interstate 215 (Barstow Freeway), southwest of Highway 330 (City Creek Road), and north of Interstate 10 (Redlands Freeway) (Figure 1). The project location is also described as being in Section 33 of Township 1 North, Range 3 West of the Redlands, CA U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map (Figure 2).

More specifically, the project site is located at the northwest corner of the intersection of Baseline and Church Avenue with Villa Avenue providing the northern boundary (Figure 3). Ecologically, the site is ½ mile west of City Creek, 1.5 miles north of the Santa Ana River, in the Inland Valleys of Southern California Coast Ecoregion.

Project Description

The Applicant proposes to construct a Mixed-Use development consisting of four commercial tenant buildings, a multi-family residential building, and two single family residences on approximately 9.06 acres (Figure 4). The overall property consists of two legal parcels, APNs 1200-381-05 and 1200-381-43.

Access for the commercial portion of the project will be taken via two newly constructed driveways along Base Line Road and Church Avenue.

All public utilities (water, sewer, power, telco/data) are available along the project frontages. Existing utility lines located within said easement are to remain overhead and will be incorporated into the project with new easements granted as required by the service providers.

Figure 1 General Vicinity Map (Google Maps 2020)

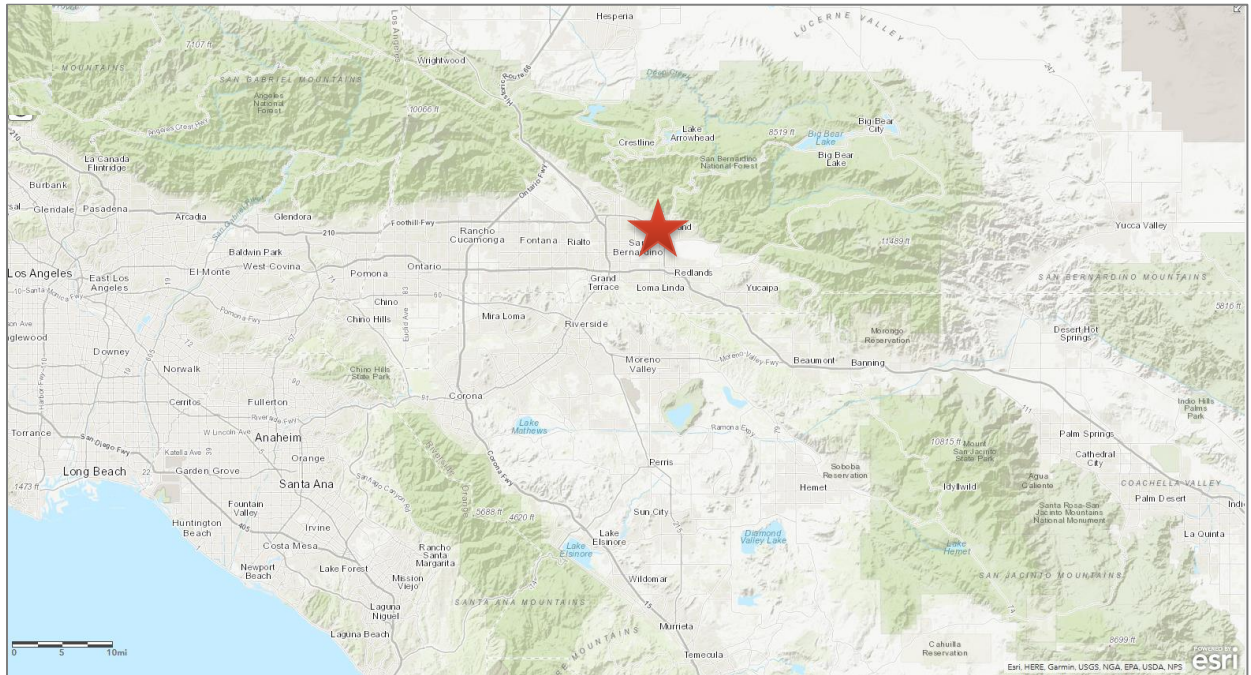


Figure 2. Project Site on the Redlands, CA USGS Topo Map

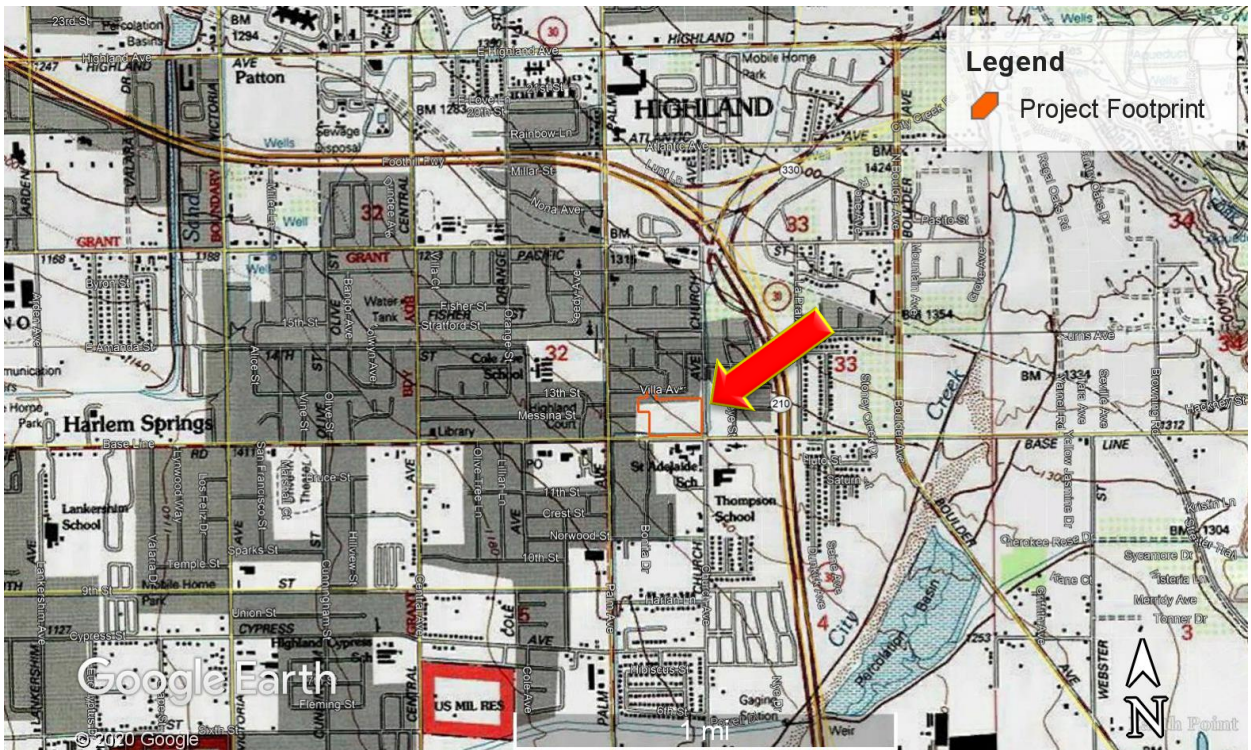


Figure 3. Project Boundary



Architectural site plan for the proposed Tractor Supply Co. building and parking lot. The plan shows the building footprint, parking spaces, and surrounding streets including Villa Ave, Church Ave, and Base Line St. Key features include the proposed main building, parking lot, and various site notes and dimensions.

II. METHODS

Literature Review

This assessment focused on reviewing documented sensitive biological resources in the Project's vicinity and to use the information found in the literature review to determine the potential for these species to occur onsite. The literature review relied on the California Department of Fish and Wildlife's (CDFW) Natural Diversity Database (CNDDDB 2021), California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants (CNPS 2021) and the U.S. Fish and Wildlife Service (USFWS) IPaC database (USFWS 2021). A report was prepared for sensitive species recorded within 5 miles of the site. This information was used to help determine if any sensitive resources were previously reported on, or adjacent, to the subject property. Information from other resources such as the site plans, previously prepared reports, aerial photography and various mapping sources were included in the review.

Sensitive Resources

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, U.S. Fish and Wildlife Service (USFWS), and groups like the California Native Plant Society (CNPS) maintain special watch lists of such resources. Once the field survey was completed, it was determined from several criteria, which sensitive resources have a low, moderate or high potential to occur on site. Criteria used to determine potentials of occupancy include, but are not limited to, soil types and conditions, habitat types and quality, disturbance, site history, adjacent land uses and proximity to nearest known extant populations of each respective species.

Field Survey

This biological field study focused on four primary objectives: documenting project site and adjacent land use(s), documenting detected species (Appendix A – Species Compendium), commenting on any other sensitive species or habitat(s) found on-site. Typical habitats found throughout the property were photographed for reference (Appendix B – Site Photos).

The site was surveyed by Kidd Biological, Inc., on January 24, 2021 between the hours of 9:30 and 1145. Temperatures were cool, ranging from 45°F to 48°F, with cloudy skies and winds 1-3 miles per hour. The site was systematically surveyed by walking approximately 10-foot wide transects starting from the north corner and ending in the south corner of the parcel. A smart phone notepad was used to document the plants and animals observed onsite.

III. RESULTS

Site Conditions

The parcel is mostly flat with little to no change in topography. Elevation on-site is approximately 1,255-1,265 feet (382-385 meters) above mean sea level. Areas surrounding the site support mostly residential developments to the north and commercial developments to the south and east. To the west are both commercial and residential developments. There are few, small scattered vacant parcels throughout the area, however most of the area is heavily developed. There are no large areas of open space in the vicinity. After reviewing aerial photos, it appears most of the residential developments were constructed before 1968 (USDA 1968).

Natural Communities

The site is fairly disturbed and appears to have been subject to regular mowing or plowing for weed abatement purposes. Historic aerial photos show that the site has been maintained in such a manner since at least 1968. Vegetation on site is typical for parcels that have received regular mowing or abatement and is comprised of disturbed annual grasslands dominated by native and non-native grasses and herbs. The most dominant plant observed during the survey was common fiddleneck (*Amsinckia menziesii*). Other common species include red-stemmed filaree (*Erodium cicutarium*)¹, cheeseweed (*Malva parviflora*)¹, Asian mustard (*Brassica tournefortii*)¹ and various grasses such as wild oat (*Avena barbata*)¹, barley grass (*Hordeum sp.*)¹ and chess (*Bromus sp.*)¹. Within the parcel are a few scattered bush sunflowers (*Encelia californica*) and a single coast live oak (*Quercus agrifolia*). This oak is approximately 15-feet in height and in poor health (Exhibit A – Site Photos).

There are a few Mexican fan palms (*Washingtonia robusta*) along the northern boundary wall that separates the site from a neighboring residential community.

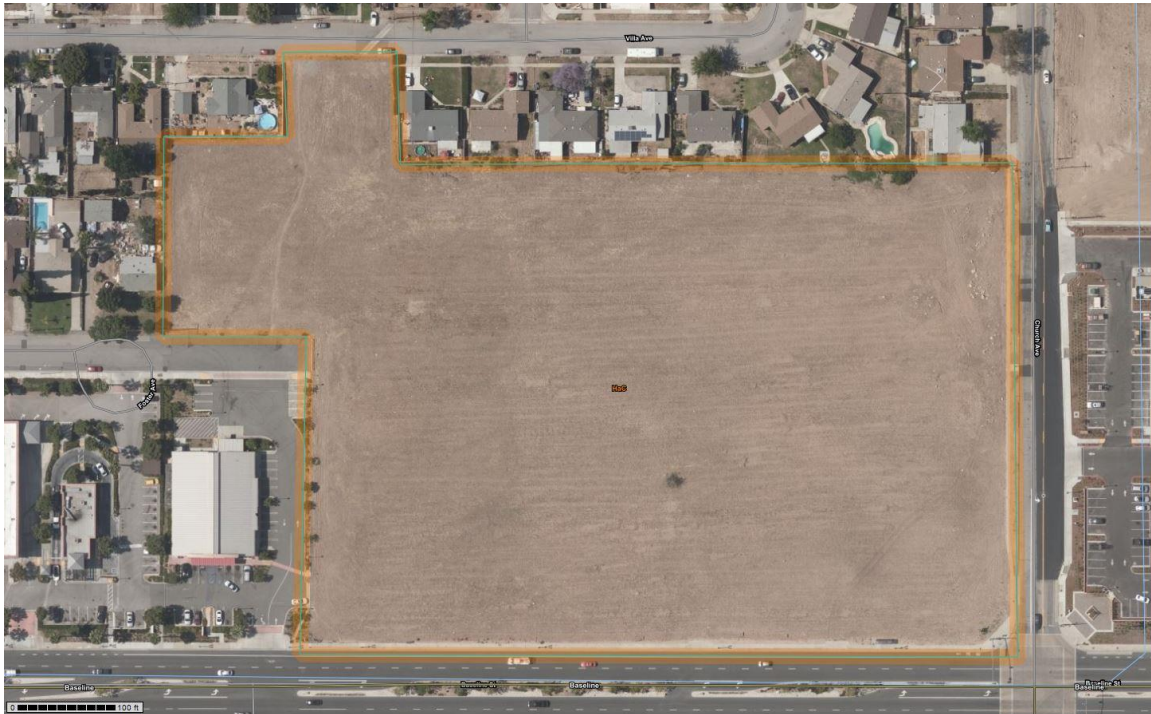
The California Native Plant Society classifies this community as an herbaceous semi-natural alliance. Based on review of aerial photos, it appears that the site is densely vegetated with cheeseweed later in the growing season. Species detected were limited to what was identifiable during the site visit and from reviewing other sources of information. It is likely that the diversity on site is greater during other times of year, however, based on the disturbed nature of the site, it is most likely that additional species would be similar in that they would be commonly found in ruderal sites and fallow fields.

¹ Non-native

Soils

Onsite soils are mapped as Hanford coarse sandy loam (HaC) (2-9% slopes) for the entire parcel (Exhibit 5). Soil classifications were provided by the USDA Soils Conservation Service Maps (USDA 1980) and the Natural Resources Conservation Service – Web Soil Survey (2021). The Greenfield series consists of deep, well drained alluvial soils derived from granite. It has no capacity for ponding and no ponding was evident on site.

Figure 5. Soils Map (USDA 2020)



Common Wildlife

Wildlife detected during the survey were limited to the time of day and the time of year the survey was conducted. For example, nocturnal species would likely not have been observed during the day time survey. Some migrants which may be on site in the summer, would not have been detected during the winter survey. Species observed were typical of those commonly found in suburban areas. Birds detected included house finch (*Haemorphus mexicana*), Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), black phoebe (*Sayornis nigricans*), western kingbird (*Tyrannus verticalis*), Lawrence's goldfinch (*Spinus lawrencei*), lesser goldfinch (*Spinus psaltria*), northern mockingbird (*Mimus polyglottis*), western bluebird (*Sialia mexicana*), yellow-rumped warbler (*Setophaga coronata*), Canada goose (flyover) (*Branta canadensis*) as well as non-native Rock Pigeons (*Columba livia*), and European Starlings (*Sternus vulgaris*).

The only mammal species detected were Botta's pocket gophers (*Thomomys bottae*). There were very few small mammal burrows observed within the parcel and seemed typical of very small mammal burrows such as deer mice (*Peromyscus maculatus*) or voles (*Microtus californicus*). No burrows typical of common ground squirrels (*Otospermophilus beecheyi*) or kangaroo rats (*Dipodomys* sp.) were found within the survey area. No large dens typical of coyotes, foxes or badgers were found on site.

Sensitive or Protected Species

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, USFWS, and groups like the CNPS maintain special watch lists of such resources. After reviewing aerial photos, maps and site photos, and conducting the site visits it was determined from several criteria which sensitive resources have a low, moderate or high potential to occur on site.

The CNDDDB and USFWS identified 54 sensitive species (34 animals, 20 plants) as having been previously reported within 5 miles of the project site. Criteria used to determine potentials of occupancy include, but are not limited to, soil types and conditions, habitat types and quality, disturbance, site history, adjacent land uses and proximity to nearest known extant populations of each respective species. Table 2, below, lists the species that were reported within the vicinity of the site and the potential these species have to occur on or adjacent (within 500 feet) to the site.

Table 1. List of Species Reported within 5 miles of Site

Species		Status			Potential for Impact from Project
Scientific Name	Common Name	FWS	CDFW	CNPS	
PLANTS					
<i>Ambrosia pumila</i>	San Diego ambrosia	FE	-	1B.1	Highly disturbed, no suitable soils. No impacts expected.
<i>Arenaria paludicola</i>	marsh sandwort	FE	SE	1B.1	No suitable habitat onsite. No impacts expected.
<i>Astragalus hornii</i> var. <i>horni</i>	Horn's milk-vetch	-	-	1B.1	Highly disturbed, no suitable soils. No impacts expected.
<i>Berberis nevinii</i>	Nevin's barberry	FE	SE	1B.1	Shrub not observed on site. No impacts expected.
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	-	-	4.2	No suitable habitat onsite. No impacts expected.

Species		Status			Potential for Impact from Project
Scientific Name	Common Name	FWS	CDFW	CNPS	
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	-	-	1B.1	Highly disturbed and no suitable soils. No Effect.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	FE	SE	1B.2	No suitable habitat on site. No impacts expected.
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	-	-	1B.1	No suitable habitat on site. No impacts expected.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	-	-	2B.2	Extirpated. No suitable freshwater habitat present.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE	SE	1B.1	Highly disturbed, no suitable soils. No impacts expected.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	FE	SE	1B.1	No suitable habitat and not observed. No Effect.
<i>Imperata brevifolia</i>	California satintail	-	-	2B.1	No suitable habitat on site. No impacts expected.
<i>Lycium parishii</i>	Parish's desert-thorn	-	-	1B.3	No suitable habitat on site. No impacts expected.
<i>Malacothamnus parishii</i>	Parish's bush-mallow	-	-	1A	No suitable habitat on site. No impacts expected.
<i>Nasturtium gambelii</i>	Gambel's water cress	FE	ST	1B.1	No suitable habitat on site. No impacts expected.
<i>Ribes divaricatum</i> var. <i>parishii</i>	Parish's gooseberry	-	-	1A	Highly disturbed habitat on site. No impacts expected.
<i>Sidalcea malviflora</i> ssp. <i>dolosa</i>	Bear Valley checkerbloom	-	-	1B.2	Site is outside required elevation range. No effect.
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	-	-	2B.2	No suitable habitat on site. No impacts are expected.
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	-	-	1B.2	No suitable habitat on site. No impacts are expected.
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern	-	-	2B.2	Highly disturbed habitat on site. No impacts are expected.

Species		Status			Potential for Impact from Project
Scientific Name	Common Name	FWS	CDFW	CNPS	
WILDLIFE					
<i>Aimophila ruficeps canescens</i>	S. California rufous-crowned sparrow	-	WL	-	No potential to nest on site. Low potential adjacent.
<i>Anniella stebbinsi</i>	Southern California legless lizard	-	SC	-	No suitable habitat on site. No impacts expected.
<i>Arizona elegans occidentalis</i>	California glossy snake	-	SC	-	Highly disturbed habitat onsite. No impacts expected.
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	BCC	WL	-	No suitable habitat on site. No impacts expected.
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	-	SC	-	No suitable habitat onsite. No impacts expected.
<i>Athene cunicularia</i>	burrowing owl	BCC	SC	-	No suitable burrows found on site. Impacts not expected.
<i>Bombus crotchii</i>	Crotch bumble bee	-	Cand	-	Marginal habitat adjacent. Impacts not expected.
<i>Buteo swainsoni</i>	Swainson's hawk	BCC	ST	-	No nesting habitat on site. No impacts expected.
<i>Catostomus santaanae</i>	Santa Ana sucker	FT	-	-	No aquatic habitat on site. No impacts are expected.
<i>Chaetodipus fallax fallax</i>	NW San Diego pocket mouse	-	SC	-	Highly disturbed habitat on site. No impacts are expected.
<i>Charina umbratica</i>	southern rubber boa	-	ST	-	Highly disturbed habitat on site. No impacts are expected.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT	SE	-	No suitable riparian habitat present. No impacts expected.
<i>Crotalus ruber</i>	red-diamond rattlesnake	-	SC	-	Highly disturbed habitat on site. No impacts are expected.
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	FE	Cand	-	Highly disturbed habitat on site. No impacts are expected.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FE	ST	-	Highly disturbed habitat on site. No impacts are expected.

Species		Status			Potential for Impact from Project
Scientific Name	Common Name	FWS	CDFW	CNPS	
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE	SE	-	No suitable riparian habitat present. No impacts expected.
<i>Eremophila alpestris actia</i>	California horned lark	-	WL	-	Suitable nesting and foraging habitat. No effect with avoidance measures.
<i>Eumops perotis californicus</i>	western mastiff bat	-	SC	-	No suitable roosting habitat on site. No impacts expected.
<i>Lasiurus xanthinus</i>	western yellow bat	-	SC	-	No suitable roosting habitat on site. No impacts expected.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	BCC	ST	-	No suitable habitat on site. No impacts expected.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	-	SC	-	No burrows detected. No impacts are expected.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	-	SC	-	No suitable roost habitat onsite. No impacts expected.
Oncorhynchus mykiss irideus pop. 10	steelhead - southern Calif. DPS	FE	-	-	No suitable riverine habitat on site. No impacts expected.
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	-	SC	-	No suitable habitat on site. No impacts expected.
<i>Phrynosoma blainvillii</i>	coast horned lizard	-	SC	-	Highly disturbed habitat on site. No impacts are expected.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT	SC	-	No suitable habitat present. No impacts expected.
<i>Rana draytonii</i>	California red-legged frog			-	No suitable aquatic habitat on site. No impacts expected.
<i>Rana muscosa</i>	s. mountain yellow-legged frog			-	No suitable aquatic habitat on site. No impacts expected.
<i>Rhaphiomidas terminatus abdominalis</i>	Delhi Sands flower-loving fly	FE	-	-	No suitable soils on site. No impacts are expected.
<i>Rhinichthys osculus</i> ssp. 3	Santa Ana speckled dace	-	SC	-	No suitable riverine habitat on site. No impacts to this species are expected.

Species		Status			Potential for Impact from Project
Scientific Name	Common Name	FWS	CDFW	CNPS	
<i>Spea hammondi</i>	western spadefoot	-	SC	-	No suitable breeding habitat on site. No impacts expected.
<i>Taxidea taxus</i>	American badger	-	SC	-	No suitable burrows detected. Assumed absent from site.
<i>Thamnophis hammondi</i>	two-striped gartersnake	-	SC	-	No suitable riparian habitat on site. No impacts expected.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE	SE	-	No suitable riparian habitat on site. No impacts expected.
California Native Plant Society (CNPS) 1B Plants rare, threatened, or endangered in California and elsewhere. 2B Plants rare, threatened, or endangered in California but more common elsewhere. 4 Plants of limited distribution; a watch list Threat Ranks 0.1 High degree of threat (>80% of occurrences threatened) 0.2 Moderate degree of threat (20-80% of occurrences threatened) 0.3 Low degree of threat (< 20% of occurrences threatened)					
U.S. Fish and Wildlife Service (FWS) FE-Federal Endangered FT-Federal Threatened BCC- Birds of Conservation Concern		California Department of Fish and Wildlife (CDFW) SE- State Endangered ST- State Threatened SC- State Species of Special Concern WL- Watch list (either by CDFW or other conservation group such as Audubon) Cand- Candidate for listing as Endangered			

Of the list of 49 species reported within five miles of the site, one has marginal potential to occur within the site: the horned lark. This species is addressed in greater detail in the following section. A second species- the federally threatened California gnatcatcher- has a potential to occur within the sage scrub habitat along the northern boundary. Although no sage scrub habitat will be lost from this project, the species could be indirectly impacted, especially during the construction phase of the project. Of greatest concern is the indirect impacts during the breeding season as nest failure could be caused from increases in noise and human activity. Once the site is constructed impacts will be negligible and mostly limited to increased lighting in the parking area. With prudent avoidance measures, these impacts can be reduced to levels below significant.

Critical Habitats

Critical habitat is defined as areas that contain the primary constituent elements essential for the survival and recovery of endangered and threatened species. Designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Critical habitat is designated by USFWS for endangered and threatened species per the federal ESA (16 U.S.C. § 1533 (a)(3)). The designation includes all suitable habitat for the species, whether or not it is occupied. The project site does not fall within or adjacent to any designated critical habitat for endangered species.

Wildlife Movement Corridors

A wildlife corridor is an area of habitat that provides passage for wildlife across artificial obstacles such as dams, roads, and railways. They usually connect fragmented natural areas to provide access to water, food or breeding areas. They are critically important in maintaining migration routes and facilitating genetic diversity within species. Although these corridors are focused on animal movements, the linkages also provide opportunities for pollination and dispersal of plants. The project site is not located within or immediately adjacent to a designated wildlife corridor or linkage.

IV. RIPARIAN/ RIVERINE, VERNAL POOL ASSESSMENT

There are no drainage features, streams, wetlands, vernal pools, waters of the U.S. or Riparian vegetation within the project site; however, there is an unnamed blue line stream that appears to have possibly run through or near the site in the past. Presently, this feature has been moved to an underground culvert that runs south under Church Street and west under Baseline. These features' locations can be seen in Figure 5. They are classified as R5UBFx by the USFWS.

Classification code: R5UBFx. The descriptions are below:

System Riverine (R) : The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.

Subsystem Unknown Perennial (5) : This Subsystem designation was created specifically for use when the distinction between lower perennial, upper perennial, and tidal cannot be made from aerial photography and no data is available.

Class Unconsolidated Bottom (UB) : Includes all wetlands and deepwater habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.

Water Regime Semipermanently Flooded (F) : Surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land surface.

Special Modifier Excavated (x) : This Modifier is used to identify wetland basins or channels that were excavated by humans.

Impacts to these features are not anticipated from this project; however, Best Management Practices (BMPs) are recommended to ensure compliance with local authorities who ensure compliance with the Clean Water Act.

The City of Highland has a Water Quality Management Plan (WQMP). Per this Plan:

“A Preliminary WQMP(P-WQMP) shall be submitted and approved by the City Engineer prior to approval of a development application. The P-WQMP shall meet the City’s National Pollutant Discharge Elimination System (NPDES) permit requirements in effect at the time of submittal. The P-WQMP is intended to be a planning level document and is expected to identify the means and methods for water quality management to be incorporated into the project, including rough sizing and types of Best Management Practices (BMPs)”

The other requirements can be found at the City’s of Highland’s [website](#).

The proposed project will include the creation of a retention basin in order to capture any nuisance runoff from the parking lots. This basin will ensure the project is in compliance with the Clean Water Act and regulations monitored by the Regional Water Quality Control Board. Currently the location of this basin is on the northern portion of the site (see Figure 4).

v. IMPACT ANALYSIS

The construction of a new shopping center and residential structures will result in the loss of approximately 9 acres of non-native grassland habitat and the loss of a single coast live oak tree. Only one sensitive species has a potential to be impacted by the project: the horned lark. This bird is vulnerable to harm as it forages and nests on the ground in grasslands. This and other bird species are protected under State and Federal laws protecting nesting birds, specifically Section 3500 and 3503 of the CDFW game code and the Migratory Bird Treaty Act. Impacts to the horned lark and other nesting birds can be reduced by conducting clearing and grubbing of the site outside of the bird nesting season, which is generally considered February 1- September 15, with a peak between March and June.

No impacts to wildlife movement corridors or critical habitat are expected. It is not expected that this project will conflict with any local ordinances or policies protecting biological resources and the site does not fall within a Natural Community Conservation Plan or Habitat Conservation Plan.

VI. RECOMMENDATIONS

VII. CONCLUSION STATEMENT

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed:

A. J. Jansen-Held

VIII. REFERENCES

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APPENDIX A

SITE PHOTOS



1. Looking Southwest from northeastern boundary



2. Looking West from eastern boundary



3. Looking Northeast across site



4. Looking east at soil testing area



5. Looking west at second soils testing area and lone oak in background



6. Looking east along northern boundary