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January 26, 2021
Project No: 20-09882

Jodi Ketelsen
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Via email: jodi.ketelsen@tylin.com

Subject: Biological Resources Assessment for the Todd Road/Standish Avenue Signalization Project in Sonoma County, California

Dear Mr. Pyrz:

This report documents the findings of a biological resources assessment conducted by Rincon Consultants, Inc. (Rincon) for the Todd Road/Standish Avenue Signalization Project (project) in the City of Santa Rosa, Sonoma County, California. The purpose of this report is to document existing conditions at the project site and to evaluate the potential for impacts to special-status biological resources in compliance with Sonoma County's California Environmental Quality Act (CEQA) review process. The project does not have potential for significant effects to sensitive biological resources because project impacts will be restricted to previously developed and disturbed areas along the roadway. Potential impacts to nesting birds will be avoided and minimized through implementation of a mitigation measure.

Project Location and Description

The project site is located in unincorporated Sonoma County to the south of the city of Santa Rosa (see Figure 1; Attachment A). The 2.66-acre site is located at the intersection of Todd Road and Standish Road. The eastern end of the project boundary is approximately 0.3-mile west of Highway 101 and 350 feet west of Sonoma-Marin Area Rail Transit (SMART) tracks that run north-south (see Figure 2; Attachment A). The site is located within the Santa Rosa Plain, on the valley floor. The project site is surrounded by a mix of land uses. Light manufacturing and commercial/industrial uses occur at: the northeast corner of the intersection; farther to the north on either side of Standish Road; south of the intersection, on either side of Ghilotti Avenue; and at both east and west ends of the site. The northeast corner of the intersection contains large-lot residential properties, and additional residential properties are found to the north of Todd Road at the western end of the project site. Open fields and undeveloped land surround the residential properties, and two undeveloped areas occur to the south of Todd Road at the western end of the project. The parcel to the southwest of the project site falls within a California Tiger Salamander (CTS) Conservation Area boundary, per the Santa Rosa Plain Conservation Strategy (USFWS 2005). Both this parcel and the field to the east of the parcel within the CTS Conservation Area appear to be regularly mowed.

The proposed project involves improvements to the intersection, including installation of a traffic signal, standard-width sidewalks, and replacement of a utility pole. Excavation would occur to connect



improvements to underground utility lines, such as connecting new drainage inlets to connect to existing or relocated storm drain lines. At least five trees at the intersection would be removed. Construction would be confined to the roadway and exclusion fencing would be installed at the road shoulder, avoiding project impacts to roadside ditches.

Regulatory Background

Regulatory authority over biological resources is shared by federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, Sonoma County). The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under CEQA and also has direct jurisdiction under the California Fish and Game Code (CFGC). Under the California and federal Endangered Species Acts (CESA/ESA), CDFW and U.S. Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as Threatened or Endangered as well as native bird species listed under the Federal Migratory Bird Treaty Act (MBTA), and the Bald and Golden Eagle Protection Act. The U.S. Army Corps of Engineers (USACE) has regulatory authority over specific biological resources—namely, wetlands and waters of the United States, under Section 404 of the federal Clean Water Act. The CDFW, under CFGC Sections 1600-1617, and Regional Water Quality Control Boards (RWQCB), under the Porter-Cologne Water Quality Control Act, protect waters and streambeds at the State level. The analysis in this biological resources assessment is guided by the requirements of these laws, and by the operating standards of the implementing agencies. The project is also subject to policies in the long-range plans detailed below.

Sonoma County 2020 General Plan. The Sonoma County General Plan includes open space and conservation elements which involve goals and policies providing for the conservation of natural resources and open space. The General Plan identifies areas where sensitive species or habitat may be present.

South Santa Rosa Area Plan. The South Santa Rosa Area Plan includes land use and wildlife resources issues which involve goals to retain natural resources and preserve biological diversity.

Santa Rosa Plain Conservation Strategy. The site is within the Santa Rosa Plain Conservation Strategy Area (USFWS 2005). The Conservation Strategy is a long-term agreement between USFWS, CDFW, and other federal and State agencies, and the County of Sonoma, the City of Santa Rosa and other local city governments. The USFWS issued a Programmatic Biological Opinion (BO) for the Conservation Strategy in 1998, which was updated in 2007, and has since been superseded by the BO issued in June 2020. The goal of the Conservation Strategy is to aid in the conservation of listed species and vernal pools by providing local governments and developers a way to obtain authorization for incidental take of federally listed species for development. Species covered under the BO include; California tiger salamander (*Ambystoma californiense*), Burke's goldfields (*Lasthenia burkei*), Sonoma sunshine (*Blennosperma bakeri*), Sebastopol meadowfoam (*Limnanthes vinculans*), and many-flowered navarretia (*Navarretia leucocephala* ssp. *plieantha*). The Conservation Strategy has been finalized but is yet to be implemented in local area plans; however, the BO is in effect and may be implemented.



Methods

The biological resources study for the project consisted of a review of relevant literature and background information, followed by a field reconnaissance survey. The potential presence of special-status species is based on the literature review and a field survey designed to assess habitat suitability for special-status species and the presence or potential for occurrence of special-status species. The study area evaluated for this biological resource assessment includes the 2.66-acre site within the project boundary, which includes the Todd Road and Standish Avenue intersection, and areas along the road to the north, west, and east of the intersection (see Figure 2; Attachment A).

Literature Review

The literature review included database research on special-status resource occurrences within the *Santa Rosa, California* 7.5-minute U.S. Geological Survey (USGS) quadrangle and the surrounding eight quadrangles; *Healdsburg, Mark West Springs, Calistoga, Sebastopol, Kenwood, Two Rock, Cotati, and Glen Ellen*. Sources included the CDFW California Natural Diversity Data Base (CNDDDB) (CDFW 2020a), Biogeographic Information and Observation System (CDFW 2020b), USFWS Information for Planning and Consultation (IPaC) (USFWS 2020a), and USFWS Critical Habitat Portal (USFWS 2020b). Other resources included the California Native Plant Society's (CNPS) online Inventory of Rare and Endangered Plants of California (CNPS 2020), CDFW's Special Animals List (CDFW 2020c), CDFW's Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2020d), USFWS National Wetlands Inventory (USFWS 2020c), and the USGS National Hydrography Database (USGS 2020). Aerial photographs, topographic maps, soil survey maps, geologic maps, and climatic data in the area were also examined. A review of the information contained within these databases, supported by the expert opinion of Rincon's biological staff, resulted in a list of special-status species and other resources to be evaluated for their presence or potential to occur at the proposed project site.

Field Survey

Rincon biologist Anastasia Ennis conducted a reconnaissance-level biological resource site visit to document site conditions, assess the habitat suitability for special-status species, and evaluate the potential for special-status species and other sensitive biological resources to occur on the project site. Ms. Ennis conducted the site visit on December 1, 2020, between the hours of 0730 and 0830. Conditions onsite were 38°F and foggy with no wind. The study area was surveyed from the public right of way. Representative photographs from the survey are included as Attachment B.

Plant vegetation communities observed within the study area were documented. Limitations to the compilation of a comprehensive floral checklist were imposed by seasonal factors, such as blooming period and emergence of some of the annual species.

Wildlife species observed directly or detected from calls, tracks, scat, nests, or other signs were documented. The detection of wildlife species was limited by seasonal and temporal factors. As the survey was performed during the day, identification of nocturnal animals was limited to signs if present on-site.



Existing Setting

Topography and Soils

The site's elevation ranges from approximately 99-105 feet (30-32 meters) above mean sea level and the topography of the site and its immediate surroundings are generally flat. Adjacent land uses include rural residential, industrial, commercial and undeveloped lands. The site is located on the Santa Rosa Plain valley floor. Based on the most recent Natural Resources Conservation Service soil survey for Sonoma County (USDA 2020a), the study area contains one soil map unit:

- **Wright loam, shallow, wet, 0 to 2 percent slopes:** a deep, somewhat poorly drained soil that occurs on gently undulating or hummocky low terraces. It is formed in alluvium from mixed sources. A typical soil profile consists of loam to 15 inches, sandy clay loam to 25 inches, and clay to 98 inches. with several layers of clay loam and sandy clay loam from 5 to 55 inches, and gravelly clay from 55 to 60 inches. Soil layers vary from neutral to medium acidity. This soil type is well drained and is included on the hydric soils list (USDA 2020b).

Vegetation and Other Land Cover Types

Four (4) terrestrial vegetation communities or other land cover types were identified within the study area during the field survey. A map approximating the types and acreages of the various vegetation communities and land-cover types that occur within the study area is shown in Attachment A, Figure 3.

Developed

The study area contains approximately 1.67 acres of developed land. This land cover type makes up most of the study area, and includes paved and graveled roads, buildings, and other anthropogenic hardscapes.

Landscaped

The study area contains approximately 0.61 acre of landscaped areas. It consists of non-native ornamental trees, although some native vegetation is present or has been included in ornamental plantings. Landscaped cover occurs along the edges of the roadway, often within property lines outside of the public right of way, although still within the project boundary. Non-native pine (*Pinus* sp.), alder (*Alnus acuminata*), glossy privet (*Ligustrum lucidum*) and ivy (*Hedera helix*) are planted throughout the site. Native trees planted at the side of the road include coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*).

Ruderal

The study area contains approximately 0.38 acre of ruderal lands. Vegetation that has been heavily disturbed or altered such that natural vegetation has largely been removed are mapped as ruderal areas. Ruderal areas have had visible disturbance of soil or vegetation and are mostly bare and colonized by weeds and disturbance-tolerant natives. Edges of ruderal habitat from adjacent land cover occur within the project site. These include non-native annual grasses (*Avena* sp., *Hordeum* sp., *Bromus* sp.) and other weedy species. Scattered trees, such as valley oak planted along the roadside are included in this land cover type. Drainage ditches at the western end of the study area are bordered by ruderal vegetation. Trees also occur throughout this land cover type, individually or in low density, including



coast live oak, valley oak, and red willow. Ruderal fields adjacent to the study area show evidence of mowing or disking.

Drainage Ditch

Drainage ditches occur on approximately 0.05 acre of both ruderal vegetation community and developed land cover type within the study area, at the edges of Todd Road west of the Standish Avenue intersection. Ditches in the study area likely drain storm water from adjacent properties and roadways into the storm drain system. These ditches pass through culverts (both concrete and corrugated metal) under driveways and turnouts along Todd Road. Ditches contain more vegetation at the western portion of the study area. No water was observed within the ditches at the time of the site reconnaissance survey. The direction of flow in the ditches on the south side of Todd Road is unknown but based on elevation within the ditch on the north side of the road, the direction of flow appears to be west to east. The ditch north of Todd Road at the west end is the most densely vegetated, with grasses, sedge (*Carex* sp.), cattail (*Typha latifolia*), and other weedy species. This ditch also forks at its east end. While it does drain into a concrete culvert to the west, it also branches off through a small section of corrugated pipe to drain into the ruderal field in the property to the north. The ditch on the south side of Todd Road at the southwest corner of the intersection is almost devoid of vegetation, except for some Himalayan blackberry (*Rubus armeniacus*) growing in the bottom. At its western end, the ditch on the south side of Todd Road is vegetated with grasses and weedy plants where it borders the CTS Conservation Area to the south.

General Wildlife

The study area and its surroundings provide habitat for wildlife species that commonly occur in urban habitats. Avian species observed/detected on or adjacent to the site include European starling (*Sternus vulgaris*), American crow (*Corvus brachyrhynchos*), and turkey vulture (*Cathartes aura*).

Special-Status Biological Resources

This section discusses sensitive biological resources observed on the study area and evaluates the potential for the study area to support other sensitive biological resources.

Special-Status Species

Local, State, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted prior to the approval of development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB from other sites in the vicinity of the study area (CDFW 2020a), and previous reports for the study area. The potential for each special-status species to occur in the study area was evaluated according to the following criteria:

- **Not expected.** Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

- **Low Potential.** Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species' requirements are present, and/or only 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.** All of the habitat components meeting the species' requirements are present and/or 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 is observed on the site or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last 5 years).

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the ESA; those listed or candidates for listing as Rare, Threatened, or Endangered under the CESA or Native Plant Protection Act; those identified as Fully Protected by the California Fish and Game Code (Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern or Watch List species by the CDFW; and plants occurring on lists 1 and 2 of the California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) system per the following definitions:

- **Rank 1A:** Plants presumed extinct in California;
- **Rank 1B.1:** Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- **Rank 1B.2:** Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);
- **Rank 1B.3:** Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened, or no current threats known);
- **Rank 2:** Rare, threatened or endangered in California, but more common elsewhere.

Based on a query of the CNDDDB (2020a), there are 62 special-status plant species, 27 special-status wildlife species, and four sensitive natural communities documented within the *Santa Rosa, California* USGS 7.5-minute quad and the eight surrounding quads. The 89 special-status species have been evaluated for potential to occur within the study area (Attachment C).

Special-Status Plant Species

Sixty-two (62) special-status plant species known to occur in the region were evaluated for their potential to occur in the study area (see Attachment C). Most of these 62 species would not be expected to occur within the project site. Species could be excluded based on known range and elevation, the lack of the species' specific habitat requirements within the study area (e.g., chaparral and serpentine substrate) or due to the disturbed nature of the site and its lack of connectivity to natural vegetation communities.

One species, the congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*; 1B.2) has low potential to occur within the project site. Congested-headed hayfield tarplant is found in valley and foothill grassland, sometimes on roadsides. Two (2) historic occurrences have been reported within 5



miles of the project site (CDFW 2020a). There is a low potential for this species to occur in ruderal grasslands along the roadside within the project site, with ruderal grasslands adjacent to the site providing a larger area of potential habitat.

Special-Status Wildlife Species

Rincon identified 27 special-status wildlife species that have been documented within the nine-quadrangle search radius. These species were reviewed for potential to occur within the study area (see Attachment C); three species have low potential to occur in the study area. Special-status species are discussed in further detail below.

California Tiger Salamander

California tiger salamander (CTS) is a federally endangered and State threatened species. CTS require burrows for refuge and seasonal water sources for breeding. Larvae hatch 10-28 days after eggs are laid and then take three to six months to metamorphose (USFWS 2017), thus standing water is required for at least three and a half months to provide suitable breeding habitat. No burrows were observed from the public right of way in the grasslands surrounding the project site. The closest recorded CNDDDB occurrences are from 2010, approximately 0.23 miles south and southwest, respectively, of the project site (CDFW 2020a). The site is in CTS critical habitat and the parcel south of the project site's west end containing ruderal grassland is included in the Santa Rosa Plain Conservation Strategy's CTS Conservation Area (USFWS 2005). The closest potential breeding habitat to the project site that can be located on aerial maps are ponds 0.25-mile northwest of the project site, with additional vernal pool habitats within 0.5-mile to the west, in undeveloped grasslands. Based on historical aerial imagery, the drainage ditches within the project site are not likely to contain water long enough to support CTS breeding, although it cannot be definitively determined if water remains in these areas for a sufficient amount of time. If burrows are present adjacent to the project site, CTS are more likely to be found within the project site, or to use the site to migrate from estivation to breeding grounds. Based on the presence of seasonal wetland and possible pond habitat in the vicinity of the study area, there is a low potential for this species to occur within or adjacent to the project site.

Western Pond Turtle

Western pond turtle (*Emys marmorata*) is a State species of special concern found in ponds, rivers, streams, and irrigation ditches with aquatic vegetation; and within suitable adjacent grasslands for egg laying within 0.33 mile of water. The closest CNDDDB record for this species was from 2004, and occurred 1.65 miles southwest of the project site, on the east side of Highway 101 (CDFW 2020a). The closest body of water that provides marginally suitable aquatic habitat is the canal that runs north-south, 400 feet (0.12 km) to the east of the project boundary. This canal has steep sides reinforced with rock to the north of Todd road and vertical concrete sides to the south of Todd Road. SMART rail tracks run parallel to the canal to its west, creating a barrier to movement, thus it is unlikely that pond turtles will cross the tracks from this canal and enter the project site. Aerial maps show what appear to be recently constructed ponds 0.25-mile to the northwest of the study area in undeveloped grasslands. Although it cannot be definitively determined if these ponds constitute a permanent water, if they do, it increases the likelihood for western pond turtles to be present within the study area. Although suitable habitat is not present within the site, ruderal fields to the south and west of the project site may provide suitable upland habitat for egg laying. Due to the presence of suitable grassland and likely pond habitats



adjacent to the study area, there is a low potential for western pond turtle to occur within or adjacent to the project site.

Cooper's Hawk

Cooper's hawk (*Accipiter cooperi*) is a State watch list species that breeds in oak woodlands and deciduous riparian areas. Its nests are often constructed near water, and the species forages in a variety of woodland and edge habitats. An agile flier, the species is known to pursue small birds and mammals through thickets and woodlands, and generally occurs in wooded areas. During the winter months, the Cooper's hawk utilizes a wider variety of habitats for foraging including open fields and grasslands. There is only one occurrence reported by the CNDDDB, 2.7 miles north of the site; however, suitable riparian habitat is present within 0.5-mile of the project site and there are numerous sightings on eBird (2020) in the vicinity of the study area. Due to the level of human presence and developed areas surrounding the site, this species has a low potential to nest in trees within the study area or project vicinity.

Nesting Birds

Non-game migratory birds protected under the MBTA and CFGC Section 3503, such as native avian species common to developed and ruderal areas, have the potential to breed and forage in the study area and vicinity. Species of birds common to the area that typically occur in the region, such as American crow, northern mockingbird (*Mimus polyglottos*), and black phoebe (*Sayornis nigricans*), may nest in the study area. Nesting by a variety of common birds protected by CFGC Section 3503 could occur in virtually any location throughout the study area containing native or non-native vegetation.

Special-Status Vegetation Communities and Critical Habitat

Sensitive Natural Communities

Plant communities are also considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDDB. CNDDDB vegetation alliances are ranked 1 through 5 based on NatureServe's methodology (Jennings 2009), with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Some alliances with the rank of 4 and 5 have also been included in the 2020 sensitive natural communities list under CDFW's revised ranking methodology (2020e). Four sensitive natural communities were identified within the nine-quadrangle search radius:

- Coastal and Valley Freshwater Marsh
- Northern Hardpan Vernal Pool
- Northern Vernal Pool
- Valley Needlegrass Grassland

None of these sensitive communities were observed in the study area.



Critical Habitat

Federally designated critical habitat units occur for two species within five miles of the study area: California tiger salamander and coho salmon Central California Coast (CCC) Evolutionarily Significant Unit (ESU; *Oncorhynchus kisutch* population 4). The project site is located within designated critical habitat for California tiger salamander. Critical habitat for the coho salmon CCC ESU occurs approximately 3.2 miles to the west in Laguna de Santa Rosa and 3.6 miles to the north, in Santa Rosa Creek.

Jurisdictional Waters and Wetlands

The drainage ditches present within the study area are manmade and drain roads and upland areas surrounding the study area. Because they are not adjacent to any traditionally navigable water, the feature is unlikely to be under USACE or CDFW jurisdiction but may be subject to RWQCB jurisdiction.

Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Other corridors may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

Habitats within a habitat linkage do not necessarily need to be identical to those habitats being linked. Rather, the linkage needs only to contain sufficient cover and forage to allow temporary utilization by species moving between core habitat areas. Habitat linkages are typically contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Some species may require specific physical resources (such as rock outcroppings, vernal pools, or oak trees) within the habitat link for the linkage to serve as an effective movement corridor, while other more mobile or aerial species may only require discontinuous patches of suitable habitat to permit effective dispersal and/or migration. Wildlife movement corridors may occur at either large or small scales.

The study area is located within critical habitat for tiger salamander and within the Santa Rosa Plain, home to a number of sensitive plant and wildlife species. Despite the sensitive habitat in its vicinity, the study area is located at the edge of an urban growth boundary (USFWS 2005) and is bisected by the heavily trafficked Todd Road. The study area is small, contains no natural vegetation communities, is mostly surrounded by developed areas, and is not within any Essential Connectivity Areas or Natural Landscape Blocks (CDFW 2020b). Additionally, the drainage ditches flow into culverts and stormwater inlets, and do not provide connectivity for local movement. Therefore, the project site does not function as a large- or small-scale corridor for wildlife movement.

Local Policies and Ordinances

The Sonoma County General plan has goals to protect sensitive wildlife and habitat but has no specific ordinances or measures to implement. A tree ordinance in the county code protects heritage trees. If



the project site is determined to support CTS habitat, the Santa Rosa Conservation Strategy requires mitigation for all projects within 1.3 miles of known breeding sites. The study area is within 1.3 miles of known breeding sites, but the project site does not support CTS habitat.

Habitat Conservation Plans

The study area is not subject to any Habitat Conservation Plans (HCP), Natural Community Conservation Plan (NCCP), it is however, within the Santa Rosa Plain Conservation Strategy Area, and the southwest edge of the study area abuts, and may overlap with a CTS Conservation Area. According to the Conservation Strategy, the study area is within 1.3 miles of a known California tiger salamander breeding pool, however the project site does not contain CTS habitat.

Impact Analysis and Mitigation Measures

This section discusses the potential impacts and effects to biological resources that may occur from project implementation.

Special-Status Species

The project would have a significant effect on biological resources if it would:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*

Special-Status Plants

The proposed project has potential to result in direct impacts to special-status plant species if they are present in the disturbance footprint due to removal of individuals or crushing by heavy equipment.

Species that are recognized by CNPS as CRPR 1B, such as congested-headed hayfield tarplant, are rare, but more usually broadly distributed in California than federal or State listed species. Impacts to this species resulting from the proposed project would not represent a population-level impact that resulted in a loss of, or risk to the entire regional population. Given the small size of the study area and surrounding development, and the low potential for this species to occur, impacts to what would be at most a very few individuals of congested-headed hayfield tarplant are unlikely to result in an adverse effect to a regional or local population and would be less than significant.

Special-Status Wildlife

Three special-status wildlife species: CTS, western pond turtle, and Cooper's hawk, have potential to occur within the study area based upon known ranges, habitat preferences, species occurrence records in the vicinity of the study area, and presence of suitable habitat. Potential impacts for these species and native birds with potential to occur on-site are discussed below.



California Tiger Salamander

California tiger salamander are unlikely to breed or estivate within the study area; however, this species may move through the drainage ditches within the study area during migration from breeding to estivation areas or during dispersal. The project would include installation of silt fencing at the limits of construction as indicated on the project site plans and project description to prevent construction impacts to ditches and adjacent uplands and prevent CTS from entering the project site. Therefore, no impacts to CTS would occur.

Western Pond Turtle

Western pond turtles (WPT) are unlikely to lay eggs or winter within the study area; however, they may move through the drainage ditches within the study area. Installation of silt fencing at project limits would prevent construction impacts to ditches and adjacent uplands and prevent WPT from entering the project site. Therefore, no impacts to WPT are expected.

Nesting Birds and Raptors

Special-status raptors such as the Cooper's hawk, and other native birds protected by the MBTA and CFGC Section 3503, are likely to nest within the study area. Impacts may occur through removal of trees and vegetation if active nests are present. Impacts may also occur if active nests are present in undeveloped and landscaped areas adjacent to active construction or staging through disturbance and nest abandonment. With the implementation of Mitigation Measure BIO-1, impacts to nesting birds would be reduced to less than significant level.

BIO 1 Nesting Birds

To avoid disturbance of nesting and special-status birds including raptorial species protected by the MBTA and Sections 3503, 3503.5, and 3513 of the CFGC, activities related to the project, including, but not limited to, vegetation removal, ground disturbance, and construction shall occur outside of the bird breeding season. For construction activities occurring during the nesting season (generally February 1 to August 31), surveys for nesting birds covered by the MBTA and CFGC shall be conducted by a qualified biologist no more than 14 days prior to initiation of construction activities for the intersection improvements, including construction staging and vegetation removal. The surveys shall include the entire disturbance areas plus a 200-foot buffer around any disturbance areas. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by the qualified biologist. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The biologist shall have full discretion for establishing a suitable buffer. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed, and young have fledged the nest prior to removal of the buffer.

Sensitive Plant Communities and Critical Habitat

The project would have a significant effect on biological resources if it would:



- b) *Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.*

No CDFW-listed sensitive natural communities or riparian habitats are present within the study area. Therefore, no impacts to sensitive natural communities would occur. Critical habitat for CTS overlaps with the study area; however, no impacts to CTS would occur as disclosed above.

Jurisdictional Waters and Wetlands

The project would have a significant effect on biological resources if it would:

- c) *Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

Drainage ditches drain upland areas and are not adjacent to, or tributaries of, a traditionally navigable water; therefore, these features are unlikely to be under USACE or CDFW jurisdiction. The drainage ditches may be considered waters of the State and fall under the jurisdiction of the RWQCB under the Porter-Cologne Act, resulting in impacts requiring a Waste Discharge Requirements permit. No construction activities would occur within drainage ditches, and silt fencing would be installed at project limits to avoid impacts to ditches. Therefore, no impacts to wetlands or waters would occur.

Wildlife Movement

The project would have a significant effect on biological resources if it would:

- d) *Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors or impede the use of wildlife nursery sites.*

No significant wildlife movement corridors or habitat linkages are present in the study area. Due to the relatively small size of the project footprint, and its location in existing development, the project would not interfere substantially with the movement of wildlife species. No impacts to wildlife movement would occur.

Local Policies and Ordinance

The proposed project would have a significant effect on biological resources if it would:

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance*

The study area is located in Sonoma County and is subject to the Sonoma County General Plan and County Ordinances. A tree ordinance in the County Code protects heritage trees. If any of the trees proposed for removal have been designated as heritage trees, appropriate permits would be obtained prior to removal. The study area is also covered under the Santa Rosa Conservation Strategy. The project does not support CTS habitat; therefore, no impacts to CTS and no conflicts with local policies or ordinances protecting biological resources would occur.



Habitat Conservation Plan

The proposed project would have a significant effect on biological resources if it would:

- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State habitat conservation plan.*

The Santa Rosa Conservation Strategy requires mitigation for all projects within 1.3 miles of known CTS breeding sites. The study area is within 1.3 miles of known breeding sites; however, the project site does not support CTS. Therefore, no conflicts with State, regional, or local habitat conservation plans would occur.

Sincerely,

Rincon Consultants, Inc.

A handwritten signature in blue ink that reads "Anastasia G. Ennis".

Anastasia G. Ennis, M.S.
Associate Biologist

A handwritten signature in blue ink that reads "Sherri Miller".

Sherri Miller, M.S.
Principal Biologist

Attachments

- Attachment A Figures
- Attachment B Representative Site Photographs
- Attachment C Special-Status Species Evaluation Tables

References

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Attachment A

Figures

Figure 1 Regional Location



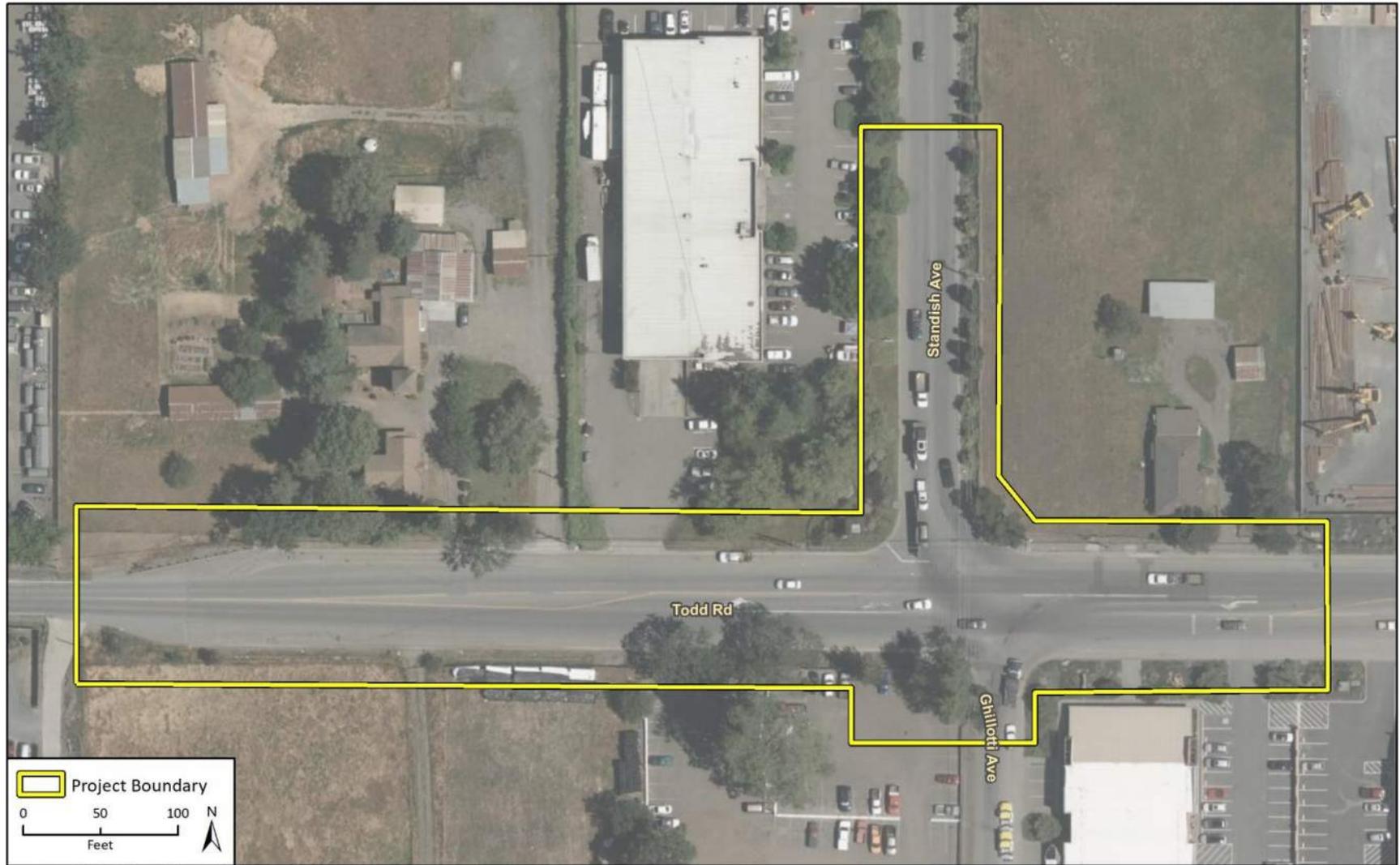
Imagery provided by Esri and its licensors © 2020.

Project Location



Map 1 Regional Location

Figure 2 Study Area



Imagery provided by Microsoft Bing and its licensors © 2020.

BioFig 2 Project Location

Figure 3 Vegetation Communities and Land Cover



Attachment B

Representative Site Photographs



Photograph 1. View of Todd Road and Standish Avenue intersection from the western corner of Ghilotti Avenue, facing north.



Photograph 2. Todd Road from the western corner of Ghilotti Avenue, facing west.



Photograph 3. Todd Road and Ghilotti Avenue intersection, facing north.



Photograph 4. View of south edge of Todd Road, east of intersection, facing east.



Photograph 5. View of north edge of Todd Road from northwest corner of study area, facing west.



Photograph 6. View of Todd Road from northeast corner of intersection, facing east.



Photograph 7. View of west end of study area from north side of Todd Road, facing west.



Photograph 8. Eastern end of drainage ditch on north side of Todd Road, facing west. Concrete inlet to storm drain system visible in foreground.



Photograph 9. View of fork in drainage ditch on north side of Todd Road where it turns to drain into ruderal area on property to north, facing north.



Photograph 10. Western end of drainage ditch on north side of Todd Road, facing west.



Photograph 11. View of western end of drainage ditch at southwest corner of the study area, facing east.



Photograph 12. View of drainage ditch on south side of Todd Road, adjacent to ruderal field that is part of the California Tiger Salamander Conservation Area, facing east.



Photograph 13. View of drainage ditch on south side of Todd Road, from east end of westernmost segment, facing west.



Photograph 14. View of drainage ditch on south side of Todd Road, from east end of center segment, facing west.



Photograph 15. View of drainage ditch on south side of Todd Road, from west end of easternmost segment, facing east.



Photograph 16. View of drainage ditch on south side of Todd Road, from east end of easternmost segment, facing west.

Attachment C

Special-Status Species Evaluation Tables



Special-Status Plant Species in the Regional Vicinity (Nine Quad) of the Study Area

Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan onion	None/None G5T2/S2 1B.2	Cismontane woodland, Valley and foothill grassland. clay, volcanic, often serpentinite. 52 - 305 m. perennial bulbiferous herb. Blooms (Apr)May-Jun	Not Expected	Suitable elevation is not present.
<i>Alopecurus aequalis</i> var. <i>sonomensis</i> Sonoma alopecurus	FE/None G5T1/S1 1B.1	Marshes and swamps (freshwater), Riparian scrub. 5 - 365 m. perennial herb. Blooms May-Jul	Not Expected	Marshes, swamps, and riparian scrub are not present.
<i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	None/None G4T2/S2 1B.2	Broadleafed upland forest (openings), Chaparral, Cismontane woodland. 50 - 2000 m. perennial deciduous shrub. Blooms Apr-Jul	Not Expected	Suitable habitat and elevation are not present.
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	None/None G3/S3 1B.2	Coastal bluff scrub, Cismontane woodland, Valley and foothill grassland. 3 - 500 m. annual herb. Blooms Mar-Jun	Not Expected	Native grasslands are not present. One historic occurrence (1940) has been reported 3.8 miles to the north (CDFW 2020a)
<i>Arctostaphylos densiflora</i> Vine Hill manzanita	None/SCE G1/S1 1B.1	Chaparral (acid marine sand). 50 - 120 m. perennial evergreen shrub. Blooms Feb-Apr	Not Expected	Suitable habitat and elevation are not present.
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i> Rincon Ridge manzanita	None/None G3T1/S1 1B.1	Chaparral (rhyolitic), Cismontane woodland. 75 - 370 m. perennial evergreen shrub. Blooms Feb-Apr(May)	Not Expected	Suitable habitat and elevation are not present.
<i>Astragalus claranus</i> Clara Hunt's milk-vetch	FE/SCT G1/S1 1B.1	Chaparral (openings), Cismontane woodland, Valley and foothill grassland. serpentinite or volcanic, rocky, clay. 75 - 275 m. annual herb. Blooms Mar-May	Not Expected	Suitable habitat and elevation are not present.
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	None/None G2/S2 1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland. sometimes serpentinite. 45 - 1555 m. perennial herb. Blooms Mar-Jun	Not Expected	Suitable habitat and elevation are not present.



Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Blennosperma bakeri</i> Sonoma sunshine	FE/SCE G1/S1 1B.1	Valley and foothill grassland (mesic), Vernal pools. 10 - 110 m. annual herb. Blooms Mar-May	Not Expected	Ruderal grasslands within the project site are heavily disturbed and vernal pools are not present within the site. Eleven (11) occurrences, three (3) of which are historic, have been reported within 5 miles in undeveloped areas with seasonal wetlands and vernal pools (CDFW 2020a).
<i>Brodiaea leptandra</i> narrow-anthered brodiaea	None/None G3?/S3? 1B.2	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland. volcanic. 110 - 915 m. perennial bulbiferous herb. Blooms May-Jul	Not Expected	Suitable habitat and elevation are not present.
<i>Calamagrostis crassiglumis</i> Thurber's reed grass	None/None G3Q/S2 2B.1	Coastal scrub (mesic), Marshes and swamps (freshwater). 10 - 60 m. perennial rhizomatous herb. Blooms May-Aug	Not Expected	Suitable habitat is not present.
<i>Campanula californica</i> swamp harebell	None/None G3/S3 1B.2	Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Meadows and seeps, Marshes and swamps (freshwater), North Coast coniferous forest. mesic. 1 - 405 m. perennial rhizomatous herb. Blooms Jun-Oct	Not Expected	Suitable habitat is not present.
<i>Castilleja uliginosa</i> Pitkin Marsh paintbrush	None/SCE GXQ/SX 1A	Marshes and swamps (freshwater). 240 - 240 m. perennial herb (hemiparasitic). Blooms Jun-Jul	Not Expected	Suitable habitat and elevation are not present.
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	None/None G1/S1 1B.1	Closed-cone coniferous forest, Chaparral, Cismontane woodland. volcanic or serpentinite. 75 - 1065 m. perennial evergreen shrub. Blooms Feb-Jun	Not Expected	Suitable habitat and elevation are not present.



Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Ceanothus divergens</i> Calistoga ceanothus	None/None G2/S2 1B.2	Chaparral (serpentinite or volcanic, rocky). 170 - 950 m. perennial evergreen shrub. Blooms Feb-Apr	Not Expected	Suitable habitat and elevation are not present.
<i>Ceanothus foliosus</i> var. <i>vineatus</i> Vine Hill ceanothus	None/None G3T1/S1 1B.1	Chaparral. 45 - 305 m. perennial evergreen shrub. Blooms Mar-May	Not Expected	Suitable elevation and habitat are not present.
<i>Ceanothus purpureus</i> holly-leaved ceanothus	None/None G2/S2 1B.2	Chaparral, Cismontane woodland. volcanic, rocky. 120 - 640 m. perennial evergreen shrub. Blooms Feb-Jun	Not Expected	Suitable elevation and habitat are not present.
<i>Ceanothus sonomensis</i> Sonoma ceanothus	None/None G2/S2 1B.2	Chaparral (sandy, serpentinite or volcanic). 215 - 800 m. perennial evergreen shrub. Blooms Feb-Apr	Not Expected	Suitable elevation and habitat are not present.
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	None/None G3T2/S2 1B.2	Chaparral, Coastal prairie, Meadows and seeps, Marshes and swamps (coastal salt), Valley and foothill grassland (vernally mesic). often alkaline. 0 - 420 m. annual herb. Blooms May-Nov	Not Expected	Suitable habitat is not present.
<i>Chorizanthe valida</i> Sonoma spineflower	FE/SCE G1/S1 1B.1	Coastal prairie (sandy). 10 - 305 m. annual herb. Blooms Jun-Aug	Not Expected	Suitable habitat is not present.
<i>Clarkia imbricata</i> Vine Hill clarkia	FE/SCE G1/S1 1B.1	Chaparral, Valley and foothill grassland. acidic sandy loam. 50 - 75 m. annual herb. Blooms Jun-Aug	Not Expected	Suitable elevation and habitat are not present.
<i>Cordylanthus tenuis</i> ssp. <i>capillaris</i> Pennell's bird's-beak	FE/SCR G4G5T1/S1 1B.2	Closed-cone coniferous forest, Chaparral. serpentinite. 45 - 305 m. annual herb (hemiparasitic). Blooms Jun-Sep	Not Expected	Suitable elevation and habitat are not present.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	None/None G5T4?/SH 2B.2	Marshes and swamps (freshwater). 15 - 280 m. annual vine (parasitic). Blooms Jul-Oct	Not Expected	Suitable habitat is not present.
<i>Delphinium luteum</i> golden larkspur	FE/SCR G1/S1 1B.1	Chaparral, Coastal prairie, Coastal scrub. rocky. 0 - 100 m. perennial herb. Blooms Mar-May	Not Expected	Suitable habitat is not present.



Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Downingia pusilla</i> dwarf downingia	None/None GU/S2 2B.2	Valley and foothill grassland (mesic), Vernal pools. 1 - 445 m. annual herb. Blooms Mar-May	Not Expected	Ruderal grasslands within the project site are heavily disturbed and vernal pools are not present within the site. Two (2) occurrences have been reported within 5 miles in undeveloped areas with vernal pools and swales (CDFW 2020a).
<i>Erigeron serpentinus</i> serpentine daisy	None/None G2/S2 1B.3	Chaparral (serpentinite, seeps). 60 - 670 m. perennial herb. Blooms May-Aug	Not Expected	Suitable elevation and habitat are not present.
<i>Eryngium constancei</i> Loch Lomond button-celery	FE/SCE G1/S1 1B.1	Vernal pools. 460 - 855 m. annual / perennial herb. Blooms Apr-Jun	Not Expected	Suitable elevation and habitat are not present.
<i>Fritillaria liliacea</i> fragrant fritillary	None/None G2/S2 1B.2	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland. Often serpentinite. 3 - 410 m. perennial bulbiferous herb. Blooms Feb-Apr	Not Expected	Ruderal grasslands within the project site are heavily disturbed, and no native grasslands are present. Six (6) occurrences, four (4) of which are historic, have been reported within 5 miles. Non-historic occurrences are in undeveloped, protected open-space areas (CDFW 2020a).
<i>Gilia capitata</i> ssp. <i>tomentosa</i> woolly-headed gilia	None/None G5T1/S1 1B.1	Coastal bluff scrub, Valley and foothill grassland. Serpentinite, rocky, outcrops. 10 - 220 m. annual herb. Blooms May-Jul	Not Expected	Suitable habitat is not present.
<i>Gratiola heterosepala</i> Boggs Lake hedge- hyssop	None/SCE G2/S2 1B.2	Marshes and swamps (lake margins), Vernal pools. clay. 10 - 2375 m. annual herb. Blooms Apr-Aug	Not Expected	Suitable habitat is not present.
<i>Hemizonia congesta</i> ssp. <i>congesta</i> congested-headed hayfield tarplant	None/None G5T2/S2 1B.2	Valley and foothill grassland. sometimes roadsides. 20 - 560 m. annual herb. Blooms Apr-Nov	Low	Ruderal grasslands along roadsides are present within the site. Two (2) historic occurrences have been reported within 5 miles (CDFW 2020a).



Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Horkelia tenuiloba</i> thin-lobed horkelia	None/None G2/S2 1B.2	Broadleafed upland forest, Chaparral, Valley and foothill grassland. mesic openings, sandy. 50 - 500 m. perennial herb. Blooms May-Jul(Aug)	Not Expected	Suitable elevation and habitat are not present.
<i>Lasthenia burkei</i> Burke's goldfields	FE/SCE G1/S1 1B.1	Meadows and seeps (mesic), Vernal pools. 15 - 600 m. annual herb. Blooms Apr-Jun	Not Expected	Ruderal grasslands within the project site are heavily disturbed and vernal pools are not present within the site. Seven (7) occurrences presumed to be extant have been reported within 5 miles in undeveloped areas with vernal pools or wetland basins (CDFW 2020a).
<i>Lasthenia californica</i> ssp. <i>bakeri</i> Baker's goldfields	None/None G3T1/S1 1B.2	Closed-cone coniferous forest (openings), Coastal scrub, Meadows and seeps, Marshes and swamps. 60 - 520 m. perennial herb. Blooms Apr-Oct	Not Expected	Suitable elevation and habitat are not present.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE/None G1/S1 1B.1	Cismontane woodland, Playas (alkaline), Valley and foothill grassland, Vernal pools. mesic. 0 - 470 m. annual herb. Blooms Mar-Jun	Not Expected	No native grasslands or vernal pools are present. No occurrences have been reported within 5 miles (CDFW 2020a).
<i>Layia septentrionalis</i> Colusa layia	None/None G2/S2 1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland. sandy, serpentinite. 100 - 1095 m. annual herb. Blooms Apr-May	Not Expected	Suitable elevation and habitat are not present.
<i>Legenere limosa</i> legenere	None/None G2/S2 1B.1	Vernal pools. 1 - 880 m. annual herb. Blooms Apr-Jun	Not Expected	Suitable habitat is not present.
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	None/None G2G3/S2S3 1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland. usually volcanic. 100 - 500 m. annual herb. Blooms Mar-May	Not Expected	Suitable elevation and habitat are not present.



Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Lilium pardalinum</i> <i>ssp. pitkinense</i> Pitkin Marsh lily	FE/SCE G5T1/S1 1B.1	Cismontane woodland, Meadows and seeps, Marshes and swamps (freshwater). mesic, sandy. 35 - 65 m. perennial bulbiferous herb. Blooms Jun-Jul	Not Expected	Suitable habitat and soils are not present, and site is just below expected elevation range.
<i>Limnanthes</i> <i>vinculans</i> Sebastopol meadowfoam	FE/SCE G1/S1 1B.1	Meadows and seeps, Valley and foothill grassland, Vernal pools. vernal mesic. 15 - 305 m. annual herb. Blooms Apr-May	Not Expected	Native grasslands and vernal pools are not present. Thirty (30) occurrences have been reported within 5 miles in vernal pools and wet meadows in undeveloped areas (CDFW 2020a).
<i>Lupinus sericatus</i> Cobb Mountain lupine	None/None G2?/S2? 1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest. 275 - 1525 m. perennial herb. Blooms Mar-Jun	Not Expected	Suitable habitat and elevation are not present.
<i>Microseris paludosa</i> marsh microseris	None/None G2/S2 1B.2	Closed-cone coniferous forest, Cismontane woodland, Coastal scrub, Valley and foothill grassland. 5 - 355 m. perennial herb. Blooms Apr-Jun(Jul)	Not Expected	Native grasslands are not present. One historic occurrence has been reported within 5 miles (CDFW 2020a).
<i>Navarretia</i> <i>leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	None/None G4T2/S2 1B.1	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools. Mesic. 5 - 1740 m. annual herb. Blooms Apr-Jul	Not Expected	Native grasslands and vernal pools are not present. Five (5) occurrences, three (3) of which are historic, have been reported within 5 miles (CDFW 2020a).
<i>Navarretia</i> <i>leucocephala</i> ssp. <i>plieantha</i> many-flowered navarretia	FE/SCE G4T1/S1 1B.2	Vernal pools (volcanic ash flow). 30 - 950 m. annual herb. Blooms May-Jun	Not Expected	Vernal pools and suitable soils are not present.
<i>Penstemon</i> <i>newberryi</i> var. <i>sonomensis</i> Sonoma beardtongue	None/None G4T2/S2 1B.3	Chaparral (rocky). 700 - 1370 m. perennial herb. Blooms Apr-Aug	Not Expected	Suitable habitat and elevation are not present.



Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Plagiobothrys strictus</i> Calistoga popcornflower	FE/SCT G1/S1 1B.1	Meadows and seeps, Valley and foothill grassland, Vernal pools. alkaline areas near thermal springs. 90 - 160 m. annual herb. Blooms Mar-Jun	Not Expected	Suitable habitat and elevation are not present.
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	None/SCT G2/S2 1B.1	Broadleaved upland forest, Meadows and seeps, North Coast coniferous forest. open areas, mesic. 10 - 671 m. perennial rhizomatous herb. Blooms Apr-Jun	Not Expected	Suitable habitat is not present.
<i>Poa napensis</i> Napa blue grass	FE/SCE G1/S1 1B.1	Meadows and seeps, Valley and foothill grassland. alkaline, near thermal springs. 100 - 200 m. perennial herb. Blooms May-Aug	Not Expected	Suitable habitat and elevation are not present.
<i>Potentilla uliginosa</i> Cunningham Marsh cinquefoil	None/None GH/SH 1A	Marshes and swamps. Freshwater, permanent oligotrophic wetlands. 30 - 40 m. perennial herb. Blooms May-Aug	Not Expected	Suitable habitat is not present.
<i>Puccinellia simplex</i> California alkali grass	None/None G3/S2 1B.2BLM_S-Sensitive	Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools. Alkaline, vernal mesic; sinks, flats, and lake margins. 2 - 930 m. annual herb. Blooms Mar-May	Not Expected	Suitable habitat and alkaline soils are not present. No occurrences have been reported within 5 miles (CDFW 2020a).
<i>Rhynchospora alba</i> white beaked-rush	None/None G5/S2 2B.2	Bogs and fens, Meadows and seeps, Marshes and swamps (freshwater). 60 - 2040 m. perennial rhizomatous herb. Blooms Jun-Aug	Not Expected	Suitable habitat and elevation are not present.
<i>Rhynchospora californica</i> California beaked-rush	None/None G1/S1 1B.1BLM_S-Sensitive	Bogs and fens, Lower montane coniferous forest, Meadows and seeps (seeps), Marshes and swamps (freshwater). 45 - 1010 m. perennial rhizomatous herb. Blooms May-Jul	Not Expected	Suitable habitat and elevation are not present.



Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Rhynchospora capitellata</i> brownish beaked-rush	None/None G5/S1 2B.2	Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Upper montane coniferous forest. mesic. 45 - 2000 m. perennial herb. Blooms Jul-Aug	Not Expected	Suitable habitat and elevation are not present.
<i>Rhynchospora globularis</i> round-headed beaked-rush	None/None G4/S1 2B.1	Marshes and swamps (freshwater). 45 - 60 m. perennial rhizomatous herb. Blooms Jul-Aug	Not Expected	Suitable habitat and elevation are not present.
<i>Sidalcea hickmanii</i> ssp. <i>napensis</i> Napa checkerbloom	None/None G3T1/S1 1B.1	Chaparral. rhyolitic. 415 - 610 m. perennial herb. Blooms Apr-Jun	Not Expected	Suitable habitat and elevation are not present.
<i>Sidalcea oregana</i> ssp. <i>valida</i> Kenwood Marsh checkerbloom	FE/SCE G5T1/S1 1B.1	Marshes and swamps (freshwater). 115 - 150 m. perennial rhizomatous herb. Blooms Jun-Sep	Not Expected	Suitable habitat and elevation are not present.
<i>Spergularia macrotheca</i> var. <i>longistyla</i> long-styled sand-spurrey	None/None G5T2/S2 1B.2	Meadows and seeps, Marshes and swamps. Alkaline. 0 - 255 m. perennial herb. Blooms Feb-May(Jun)	Not Expected	Suitable habitat is not present, and no occurrences have been reported within 5 miles (CDFW 2020a).
<i>Trifolium amoenum</i> two-fork clover	FE/None G1/S1 1B.1	Coastal bluff scrub, Valley and foothill grassland (sometimes serpentinite). 5 - 415 m. annual herb. Blooms Apr-Jun	Not Expected	Suitable habitat is not present.
<i>Trifolium buckwestiorum</i> Santa Cruz clover	None/None G2/S2 1B.1	Broadleaved upland forest, Cismontane woodland, Coastal prairie. gravelly, margins. 105 - 610 m. annual herb. Blooms Apr-Oct	Not Expected	Suitable habitat and elevation are not present.
<i>Trifolium hydrophilum</i> saline clover	None/None G2/S2 1B.2	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools. 0 - 300 m. annual herb. Blooms Apr-Jun	Not Expected	Native grasslands and vernal pools are not present. Five (5) occurrences, three (3) of which are historic, have been reported within 5 miles in vernal pools and wet meadows.
<i>Triquetrella californica</i> coastal triquetrella	None/None G2/S2 1B.2	Coastal bluff scrub, Coastal scrub. soil. 10 - 100 m. moss.	Not Expected	Suitable habitat is not present.



Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Viburnum ellipticum</i> oval-leaved viburnum	None/None G4G5/S3? 2B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest. 215 - 1400 m. perennial deciduous shrub. Blooms May-Jun	Not Expected	Suitable habitat and elevation are not present.

Regional Vicinity refers to within a 9-quad search radius of site.

FE = Federally Endangered FT = Federally Threatened FC = Federal Candidate Species
 SE = State Endangered ST = State Threatened SC = State Candidate SR = State Rare

CRPR (CNPS California Rare Plant Rank)

- 1A=Presumed Extinct in California
- 1B=Rare, Threatened, or Endangered in California and elsewhere
- 2A=Plants presumed extirpated in California, but more common elsewhere
- 2B=Plants Rare, Threatened, or Endangered in California, but more common elsewhere

CRPR Threat Code Extension

- .1=Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2=Fairly endangered in California (20-80% occurrences threatened)
- .3=Not very endangered in California (<20% of occurrences threatened)



Special-Status Animal Species in the Regional Vicinity (Nine Quad) of the Study Area

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
Invertebrates				
<i>Bombus crotchii</i> Crotch bumble bee	None/SCE G3G4/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Not Expected	Suitable host plants are available, however presence in the site is unlikely due to disturbance. No recorded occurrences within 5 miles.
<i>Bombus occidentalis</i> western bumble bee	None/SCE G2G3/S1	Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.	Not Expected	Suitable host plants are available, however presence in the site is unlikely due to disturbance. One historic occurrence is recorded within 5 miles (CDFW 2020a).
<i>Syncaris pacifica</i> California freshwater shrimp	FE/SE G2/S2	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main streamflow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	Not Expected	Suitable riparian habitat is not present.
Fish				
<i>Hysteroecarpus traskii</i> Russian River tule perch	None/None G5T4/S4 SSC	Low elevation streams of the Russian River system. Requires clear, flowing water with abundant cover. They also require deep (> 1 m) pool habitat.	Not Expected	Suitable aquatic habitats are not present.
<i>Lavinia symmetricus</i> <i>navarroensis</i> Navarro roach	None/None G4T1T2/S2S3 SSC	Habitat generalists. Found in warm, intermittent streams as well as cold, well-aerated streams.	Not Expected	Suitable aquatic habitats are not present.
<i>Oncorhynchus kisutch</i> pop. 4 coho salmon - central California coast ESU	FE/SE G4/S2	Federal listing = pops between Punta Gorda & San Lorenzo River. State listing = pops south of Punta Gorda. Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water & sufficient dissolved oxygen.	Not Expected	Suitable aquatic habitats are not present.
<i>Oncorhynchus mykiss irideus</i> pop. 8 steelhead - central California coast DPS	FT/None G5T2T3Q/S2S3	DPS includes all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, California (inclusive). Also includes the drainages of San Francisco and San Pablo Bays.	Not Expected	Suitable aquatic habitats are not present.



Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
Amphibians				
<i>Ambystoma californiense</i> California tiger salamander	FT/ST G2G3/S2S3 WL	Central Valley DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Low	The project site is located within USFWS-designated critical habitat for this species. Marginally suitable habitat is present in ruderal grasslands and drainage ditches within the project site. Adjacent ruderal fields may contain burrows. Seventy (70) occurrences recorded within 5 miles of the project (CDFW 2020a).
<i>Dicamptodon ensatus</i> California giant salamander	None/None G3/S2S3 SSC	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County, and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	Not Expected	Suitable aquatic habitats are not present.
<i>Rana boylei</i> foothill yellow-legged frog	None/SE G3/S3 SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Not Expected	Suitable aquatic habitats are not present
<i>Rana draytonii</i> California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not Expected	Suitable aquatic habitats are not present
<i>Taricha rivularis</i> red-bellied newt	None/None G4/S2 SSC	Coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Isolated population of uncertain origin in Santa Clara County. Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	Not Expected	Suitable aquatic habitats are not present



Scientific Name	Status		Potential	
Common Name	Fed/State ESA	Habitat Requirements	to Occur	Rationale
Reptiles				
<i>Emys marmorata</i> western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Low	Suitable habitat is not present within the site. Ruderal fields to the south of the project site may provide suitable upland habitat. The closest body of water that provides marginally suitable aquatic habitat is the canal that runs north-south, 400 feet (0.12 km) to the east of the project boundary. The SMART rail tracks occur between the steep-sided canal, which has vertical concrete sides to the south of Todd Road, creating a barrier to movement, thus it is unlikely that pond turtles will cross the tracks and enter the project site. Fifteen (15) occurrences recorded within 5 miles, all near streams or ponds without concrete banks (CDFW 2020a). Closest recorded occurrence (2004) is 1.65 miles SW of project site, on the east side of Highway 101.
Birds				
<i>Accipiter cooperii</i> Cooper's hawk	None/None G5/S4 WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood plains; also, live oaks.	Low	Trees within the study area and in the vicinity provide suitable nesting habitat, despite the lack of riparian habitat within the site. One occurrence has been recorded, 2.7 miles north of the site (CDFW 2020a).
<i>Accipiter striatus</i> sharp-shinned hawk	None/None G5/S4 WL	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.	Not Expected	Suitable nesting habitat is not present.



Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Agelaius tricolor</i> tricolored blackbird	None/ST G2G3/S1S2 SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not Expected	Suitable nesting habitat is not present.
<i>Ammodramus savannarum</i> grasshopper sparrow	None/None G5/S3 SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	Not Expected	Native grasslands and suitable nesting habitat are not present.
<i>Aquila chrysaetos</i> golden eagle	None/None G5/S3 SFP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not Expected	Suitable nesting habitat is not present, and the site is too small to provide foraging habitat.
<i>Athene cunicularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not Expected	Suitable nesting habitat and prey base are not present due to the small size and disturbed nature of ruderal areas in the project site.
<i>Buteo regalis</i> ferruginous hawk	None/None G4/S3S4 WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Not Expected	Suitable wintering habitat is not present.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT/SE G5T2T3/S1 WL	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not Expected	Suitable nesting habitat is not present.
<i>Coturnicops noveboracensis</i> yellow rail	None/None G4/S1S2 SSC WL	Summer resident in eastern Sierra Nevada in Mono County. Freshwater marshlands.	Not Expected	Suitable habitat is not present.
<i>Elanus leucurus</i> white-tailed kite	None/None G5/S3S4 SFP	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Not Expected	Suitable nesting habitat is not present.
<i>Eremophila alpestris actia</i> California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County; also main part of San Joaquin Valley and east to foothills. Short-grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Not Expected	Suitable nesting habitat is not present in the project site. No occurrences recorded within 5 miles (CDFW 2020a).



Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Falco peregrinus anatum</i> American peregrine falcon	FD/SD G4T4/S3S4 SS SFP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not Expected	Suitable nesting habitat is not present.
<i>Pandion haliaetus</i> osprey	None/None G5/S4 SS WL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	Not Expected	Suitable nesting habitat is not present.
<i>Riparia</i> bank swallow	None/ST G5/S2	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not Expected	Suitable nesting habitat is not present.

Mammals

<i>Antrozous pallidus</i> pallid bat	None/None G5/S3 SSC WBWG_H- High Priority	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Not Expected	Suitable roost habitats are not present. No occurrences are recorded with 5 miles of the site (CDFW 2020a).
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	None/None G3G4/S2 SSC WBWG_H- High Priority	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Not Expected	Suitable roost habitats are not present. No occurrences are recorded with 5 miles of the site (CDFW 2020a).
<i>Lasiurus blossevillii</i> western red bat	None/None G5/S3 CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Not Expected	Suitable roost habitats are not present. No occurrences are recorded with 5 miles of the site (CDFW 2020a).
<i>Taxidea taxus</i> American badger	None/None G5/S3 CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not Expected	Suitable habitats are not present.

Regional Vicinity refers to within a 9-quad search radius of site.

FE = Federally Endangered FT = Federally Threatened FC = Federal Candidate Species FS = Federally Sensitive
 SE = State Endangered ST = State Threatened SCE = State Candidate SS = State Sensitive
 SSC = CDFW Species of Special Concern SFP = State Fully Protected WL = State Watch List