BART WARM SPRINGS EXTENSION
FINAL SUPPLEMENTAL EIR – ADDENDUM 2
Modifications to Irvington Station and Gallegos Winery Components

San Francisco Bay Area Rapid Transit District

July 2019

APPENDIX B: EXISTING BIOLOGICAL CONDITIONS REPORT

Prepared by:
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May 2, 2019

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TECHNICAL MEMORANDUM

Date: May 2, 2019

To: Ms. Carla Violet, Urban Planning Partners, Project Manager

From: Gary Deghi, Senior Environmental Scientist, Huffman-Broadway Group, Inc.

Re: Existing Biological Conditions at the Proposed Irvington BART Station Site

1.0 INTRODUCTION

Huffman-Broadway Group, Inc. (HBG) has completed a review of biological conditions related to a proposed Irvington Station for the Bay Area Rapid Transit (BART) in Fremont, California, and the results are summarized herein.

Biological components of environmental review for BART's Warm Spring Extension were considered in Draft and Final Environmental Impact Reports (EIRs) certified by BART's Board in 1992 and in Supplemental EIRs certified in 2003. Previous environmental documents covered the area of the proposed Irvington Station. Additional environmental review of a currently-proposed Irvington Station is being conducted within the context of an Addendum to the 2003 EIR currently being prepared for BART by Urban Planning Partners. The purpose of the biological review provided in this memorandum is to review existing conditions for the currently-proposed Irvington Station area to allow comparison to those described in previous biological evaluations to verify that biological conditions have not significantly changed.

The Project Site is located south of Washington Boulevard on both sides of the Union Pacific Railroad (UPRR) railroad and the tracks for the BART Warm Springs Extension. The currently proposed Irvington Station site is generally bounded on the north by Main Street and Washington Boulevard; on the east by Osgood Road; on the west by the residential development (townhomes) east of Roberts Avenue; and on the south by the southern boundary of the property at 41655 Osgood Road, which is currently used as surface parking and storage space for a safety equipment supplier.

The objective of this study was to revisit the site to make a current determination of the potential for the Study Area to support sensitive habitats as defined by state or federal regulation and/or pursuant to the California Environmental Quality Act (CEQA), or for the Study Area to support special status species of flora and fauna. Analysis by HBG included: (1) a review of the habitat characteristics of the site and species of plants and animals expected to utilize the site; (2) review of the California Natural Diversity Data Base (CNDDB) to determine if any populations of endangered, threatened, or rare species have occurred historically or are currently known to exist in the project vicinity; (3) conducting a field survey of the site by HBG biologist Gary Deghi on February 28, 2019.

2.0 EXISTING BIOLOGICAL SETTING

The description of the biological setting for the property is based on a field visit to the site by HBG Senior Environmental Scientist Gary Deghi on February 28, 2019. The survey on this date included observations of the composition and distribution of plant species, wildlife observations, identification of sensitive habitats, and a comparison of site characteristics for similarity to sites known to support special status species within the area.

The currently-proposed Irvington Station site is comprised of 12.44 acres. Active UPRR and BART tracks run west of Osgood Road parallel to each other from north to south, bifurcating the Station site. West of the UPRR and BART tracks, the Station site is primarily vacant and undeveloped with the exception of a number of concrete slabs. On the east side of the tracks, there are active industrial uses. National Trench Safety, a trench and traffic safety supplier, operates between the BART tracks and Osgood Road. The project site also includes the areas supporting the ruins of the historic Gallegos Winery located south of Washington Boulevard east of Osgood Road. As part of the Washington Boulevard/Paseo Padre Parkway Grade Separation Project constructed by the City of Fremont in 2006-2009, the City relocated 1.8 miles of Union Pacific's track between Washington Boulevard and Paseo Padre Parkway to align them with the future BART tracks. Osgood Road and Washington Boulevard were widened and elevated to cross above the realigned rail corridor.

2.1 Plant Communities

Vegetation communities are assemblages of plant species growing in an area of similar biological and environmental factors. Vegetation communities and habitats at the project site were identified based on the currently accepted List of Vegetation Alliances and Associations (or Natural Communities List) (CDFW 2010a). The list is based on A Manual of California Vegetation, Second Edition (Sawyer and Keeler-Wolf 2009), which is the National Vegetation Classification applied to California. The project site contains one vegetative habitat type according to the Natural Communities List: Non-native Grassland. The vegetation in non-native grassland is often referred to as ruderal vegetation. The California Habitat Relationships System (Mayer and Laudenslayer 1988) is one of the few classification systems that include Urban habitats, also referred to as developed habitats and which often include many areas of hardscape. The project site includes two habitat types: (1) non-native grassland or ruderal

habitats comprised of primarily non-native and weedy herbaceous plants and grasses, and (2) Urban or developed habitats including developed areas for commercial uses, track areas within the railroad right-of-way or concrete slabs and associated areas of landscaping vegetation.

Although the February field reconnaissance occurred during the winter when many plants have not germinated and most flowering plants lack inflorescences, many species of plants could be identified during the field review. Vegetation in the area west of the railroad tracks consists almost entirely of non-native grasses and herbaceous plants with scattered mostly non-native small shrubs and trees. Although some areas of ruderal vegetation occur within vacant undeveloped parcels, many areas adjacent to the UPRR tracks consists of concrete slabs and vegetation here consists of those species able to grow within cracks and breaks in the slabs. Non-native grasses include species such as wild oats (*Avena fatua*), perennial ryegrass (*Festuca perennis*), other *Festuca* grasses, and ripgut brome (*Bromus diandrus*). The many non-native herbaceous plants include weedy species such as bull mallow (*Malva nicaeensis*), black mustard (*Brassica nigra*), wild radish (*Raphanus sativa*), cut-leaf geranium (*Geranium dissectum*), spring vetch (*Vicia sativa*), bull thistle (*Cirsium vulgare*), bur clover (*Medicago polymorpha*), sweet fennel (*Foeniculum vulgare*), curly dock (*Rumex crispus),* clovers (*Trifolium* sp.*),* and ice plant (*Caprobrotus edulis*), among others. A small number of native herbaceous plants such as recently-germinated California poppy (*Eschscholzia californica*) are also present.

Shrubs include several small native coyote brush (*Baccharis pilularis*), as well as non-native Castorbean (*Ricinus communis*), prickly pear cactus (*Opuntia* sp.), and invasive pampas grass (*Cortaderia selloana*), among others. Several small native trees are also present including small numbers of arroyo willow (*Salix lasiolepis*) and elderberry (*Sambucus* sp.). A small ditch running along the rear of the townhomes is vegetated mostly with fragrant bedstraw (*Galium trifolium*). Planted Canary Island palms (*Phoenix canariensis*) and date palms (*Phoenix dactylifera)* extend along the Washington Boulevard frontage. A row of non-native planted trees including Monterey pine (*Pinus radiata*), eucalyptus (*Eucalyptus* sp.), and Coast live oak (*Quercus agrifolia*) line the western edge of the property behind the residences fronting on Roberts Drive.

The portions of the site east of Osgood Road consist of the fenced-in historic Gallegos Winery site and surrounding ruderal areas of non-native grassland. The area within the historic Gallegos Winery site is fenced but vegetation includes a number of planted trees including the signature palm trees such as Canary Island palms and date palms, as well as pepper trees (*Schinus molle*), olive trees (*Olea europaea*), eucalyptus, a number of planted fruit trees, and others. Ground cover within the historic winery site and the surrounding non-native grassland consists of the non-native herbaceous plants and grasses found elsewhere throughout the site but including other species such as redstem fillaree (*Erodium cicutarium*), bristly ox-tongue (*Helminthotheca echioides*), English plantain (*Plantago lanceolata),* common dandelion (*Taraxacum officinale),* and sourgrass (*Oxalis pes-caprae*).

2.2 Animal Populations

The habitats on site and in the immediately surrounding area support a number of wildlife species, mostly those adapted for life in disturbed environments. Grasses and herbaceous plants provide minimal nesting and roosting sites for birds, and cover and foraging habitat for species of birds, mammals, reptiles and amphibians. A number of wildlife species were documented at the site during the field review conducted by Gary Deghi of HBG on February 28, 2019. All species documented are common to abundant in the region and would be expected in the habitats present at the site.

Birds documented at the site during the February 28, 2019 field review included Anna's Hummingbird (*Calypte anna*), Mourning Dove (*Zenaida macroura*), Rock Pigeon (*Columba livia)*, American Crow (*Corvus brachyrhynchos*), Northern Mockingbird (*Mimus polyglottos)*, Black Phoebe (*Sayornis nigricans),* American Robin (*Turdus migratorius),* European Starling (*Sturnus vulgaris)*, Yellow-rumped Warbler (*Setophaga coronata),* and House Finch (*Carpodacus mexicanus*), all species that are common to abundant in urban environments such as those found at the Project Site. The only other observed wildlife species at the site were a small number of California ground squirrel (*Otospermophilus beecheyi*) and dens for Botta's pocket gopher (*Thomomys bottae*) in ruderal areas. Other species likely to occur on the property include Pacific treefrog (*Pseudacris regilla*), western fence lizard (*Sceloperus occidentalis),* and mammals adapted to disturbed, urban environments such as Virginia opossum (*Didelphis virginiana*), deer mouse (*Peromyscus maniculatus*), striped skunk, (*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*).

2.3 Sensitive Habitats

On February 28, 2019, Gary Deghi of HBG conducted an initial reconnaissance investigation of the study area for the presence of wetlands and other "waters of the U.S." potentially subject to federal jurisdiction under the Clean Water Act or state or local jurisdiction under the Porter-Cologne Act or California Coastal Act. The review was conducted in accordance with the following: Code of Federal Regulations (CFR) definitions of jurisdictional waters; the Corps' 1987 *Wetlands Delineation Manual* (1987 Manual); the Corps' 2008 *Regional Supplement to Corps of Engineers Wetland Delineation Manual: Arid West, Version 2.0* (Arid West Regional Supplement); and supporting guidance documents. The review included an investigation of existing land forms, vegetation, hydrology, and soil conditions, but consisted of a preliminary review of the area for wetland habitats.

Areas that would be regulated by the USACE as a water of the U.S. under Section 404 of the Clean Water Act; the San Francisco Bay Regional Water Quality Control Board under Clean Water Act Section 401 or as a water of the state of California under the Porter-Cologne Act; or a lake or stream under the California Department of Fish and Wildlife's Lake and Streambed Alteration Agreement Program were not found as part of the site reconnaissance.

In the area west of the tracks, a small ditch crosses the project site and runs parallel to the fence line behind the townhomes fronting on Roberts Avenue. This ditch was constructed as part of the City's Washington Boulevard Grade Separation Project. The small ditch extends from a pipe outfall at the base of the raised roadbed of Washington Boulevard, extends south along the back side of the townhomes, then switches via a buried pipe into another ditch along the UPRR right-of-way and ultimately discharges to Alameda County Flood Control District (ACFCD) Line K-1. The plans for construction of this infrastructure are on Washington Boulevard Grade Separation Project Drainage Plan Sheets D-204, D-306, and D-307. As the ditch was constructed for the Grade Separation Project, this ditch was not present prior to the construction as seen in the wetland delineation (USACE 2002) conducted as part of permitting for the Grade Separation Project. The recent HBG field review was conducted on February 28, 2019, immediately following several months of heavy rainfall, and no field evidence of surface water flow was observed in the ditch where it crosses the project site and travels along the rear of the townhomes. The ditch supports a dominance of non-wetland/non-aquatic vegetation (*Galium triflorum*). The soils appear to be well drained with no evidence of ponding or saturation.

An additional culvert constructed under Washington Boulevard as part of the Washington Boulevard Grade Separation Project is present on the south side of Washington Boulevard between Osgood Road and the historic Gallegos Winery site. The plans for construction of this infrastructure are on the Washington Boulevard Grade Separation Project Drainage Plan Sheets D-202 and D-204. The ditch, extending through the historic winery site and along the base of the raised roadbed of Osgood Road, ties into a buried pipe that ties into the storm drain on Osgood Road where it too eventually outfalls to the ACFCD Line K-1. The area downslope of the culvert was investigated by HBG during the field review, which was conducted shortly after a series of storms with heavy rainfall. No evidence of water flow or wetland vegetation was found below the culvert.

Neither of these ditches that were constructed as part of the drainage infrastructure for the Washington Boulevard Grade Separation Project display characteristics of vegetation or hydrology that would that would result in them being considered a sensitive habitat. It is not likely that either of these areas would be considered a regulated wetland/water.

2.4 Special Status Species

Special status species include those species listed by the federal and state governments as endangered, threatened, or rare or candidate species for these lists. Endangered or threatened species are protected by the federal Endangered Species Act of 1973 as amended, the California Native Plant Protection Act of 1977, and the California Endangered Species Act of 1970. The California Environmental Quality Act (CEQA) provides additional protection for unlisted species that meet the "rare" or "endangered" criteria defined in Title 14, California Code of Regulations Section 15380. Special status species also include those species listed by the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) as Species of Conservation Concern which face extirpation in California if current population and habitat trends continue. Although CDFW and USFWS Species of Concern generally have no

special legal status, they are given special consideration under CEQA. The CEQA also considers impacts to plant species on California Native Plant Society (CNPS) Lists 1 and 2 as special status species and impacts to these species as well as those described above to be significant.

The CDFW maintains records for the distribution and known occurrences of special status species and sensitive habitats in the California Natural Diversity Database (CNDDB). The CNDDB is organized into map areas based on 7.5 minute topographic quadrangle maps produced by the U.S. Geological Survey (USGS). All known occurrences of special status species are mapped onto quadrangle maps maintained by the CNDDB. The database gives further detailed information on each occurrence, including specific location of the individual, population, or habitat (if possible) and the presumed current state of the population or habitat. The Project Site is on the Niles 7.5 minute quadrangle map. Tables 1 and 2 list special status plants and animals, respectively, that have been reported by the CNDDB in the project vicinity within 10 miles of the site and provides evaluation of the potential for these species to be found at the project site.

Special Status Plant Species

A list of special status plants with potential to occur on the property was developed from the CNDDB. A complete list of special status plant species occurring in the vicinity of the property is included in Table 1. The table includes all species of flora mentioned in the CNDDB within approximately ten miles of the site. The disturbed and partially developed nature of the Project Site renders the site a poor habitat for supporting special status plant species. All of the plant species included in Table 1 require habitat conditions that are not found at the subject property.

Special Status Animal Species

Animal species noted in the CNDDB as occurring within a 10-mile radius of the site, or that are known to occur in the general vicinity based on the knowledge of HBG biologists, are discussed in Table 2. The only special status species of animal noted in the CNDDB from near the subject property with a potential for occurrence at the site are Burrowing Owl (*Athene cunicularia*), and California tiger salamander (*Ambystoma californiense*). None of the other animal species discussed in the table have the potential to occur on the site. This finding is made based on the habitat requirements of species listed in the table and is based on field review of habitats present at the site and the immediate vicinity and an evaluation of the suitability of on-site habitats to support these species. California tiger salamander and Burrowing Owl are discussed in greater detail below.

California Tiger Salamander

Status, Life Cycle and Habitat Requirements. The Central California Distinct Population Segment of the California tiger salamander (CTS, *Ambystoma californiense*) is listed as a threatened species under the federal Endangered Species Act. The species is also state-listed as threatened under the California Endangered Species Act. Historically, the California tiger salamander inhabited low elevation grassland and oak savanna plant communities of the

Central Valley, and adjacent foothills, and the inner Coast Ranges in California. The species has been recorded from near sea level to approximately 3,900 feet in the Coast Ranges and to approximately 1,600 feet in the Sierra Nevada foothills. Along the Coast Ranges, the species occurred from the Santa Rosa area of Sonoma County, south to the vicinity of Buellton in Santa Barbara County. The historic distribution in the Central Valley and surrounding foothills included northern Yolo County southward to northwestern Kern County and northern Tulare County.

Although the larvae of CTS develop in vernal pools and ponds in which they were born, they are otherwise terrestrial salamanders and spend most of their post-metamorphic lives in widely dispersed underground retreats. Subadult and adult CTS spend the dry summer and fall months of the year in upland refugia such as the burrows of small mammals such as California ground squirrels and Botta's pocket gopher or other landscape features such as leaf litter or desiccation cracks in the soil. The upland burrows inhabited by CTS have often been referred to as aestivation sites or as upland habitat. Once fall or winter rains begin, the salamanders emerge from the upland sites on rainy nights to feed and to migrate to the breeding ponds. Adult CTS mate in the breeding ponds, after which the females lay their eggs in the water. After breeding, adults leave the pool and return to the small mammal burrows, although they may continue to come out nightly for approximately the next two weeks to feed. In drought years, the seasonal pools may not form and the adults cannot breed. Adult CTS can live for more than 10 years (CDFW 2010b, USFWS 2017).

Dispersal and migration movements made by CTS can be grouped into two main categories: (1) breeding migration; and (2) inter-pond dispersal. Breeding migration is the movement of salamanders to and from a pond from the surrounding upland habitat. After metamorphosis, juveniles move away from breeding ponds into the surrounding uplands, where they live continuously for several years. California tiger salamanders are known to travel large distances from breeding sites into upland habitats, and CTS in Santa Barbara County have been recorded to disperse 1.3 miles from breeding ponds. In addition to traveling long distances during migration to or dispersal from ponds, CTS may reside in burrows that are far from ponds. Although CTS can travel far, typically they stay closer to breeding ponds, and evidence suggests that juvenile CTS disperse further into upland habitats than adults.

Occurrence at the Project Site. California tiger salamander has been known from the Irvington Station Project Site and within the area in the immediate vicinity of the proposed project. CTS were discovered in 2003 in a seasonal wetland found within the railroad right-of-way south of Washington Boulevard. Huffman-Broadway Group, Inc. (HBG and Rana Resources 2004) developed and implemented a CTS relocation plan for this breeding population of CTS prior to the species being federally-listed as a threatened species while assisting the City of Fremont on biological studies related to the Washington Boulevard/Paseo Padre Parkway Grade Separation Project. The details of this effort are described in the Biological Opinion (BO) for BART's Warm Springs Extension Project (USFWS 2006), and that discussion is summarized below as it is relevant to the existing biological conditions related to the Irvington Station site.

During the rainy season of 2003-2004 and prior to the federal listing of the species, CTS were captured in the seasonal wetland south of Washington Boulevard and transported to existing ponds providing suitable habitat conditions. The relocation plan was coordinated with the California Department of Fish and Game (CDFG) rather than USFWS prior to its implementation since the CTS was not a federally-listed species at that time. The initial receptor site was on property owned by Catellus in the Baylands area west of Highway 880. An additional receptor site in the east foothills of Fremont at Pleasanton Ridge was located and approval was given by CDFG to relocate the remaining captured CTS to this site owned by the East Bay Regional Park District. HBG received verbal approval of the CTS relocation plan from CDFG on November 3, 2003, and subsequently began installation of a pitfall trip array on November 10, 2003. A silt fence and 74 pitfall trap buckets were installed at regular intervals around the on-site breeding pond in order to capture CTS coming to the breeding pond. Pitfall traps were checked in the morning following every rainy night during the breeding season (November through February). The transported adult CTS were expected to lay all of their eggs in the receptor breeding ponds at the relocation site. A total of 198 adult, subadult, and juvenile CTS were captured and relocated between November 13, 2003 and February 29, 2004. In addition, in March 2004, 204 larval CTS were captured from the pond and relocated to the Pleasanton Ridge pond per the direction of CDFG.

The CTS became a listed species under the federal Endangered Species Act in August of 2004, at which time the U.S. Army Corps of Engineers initiated a Section 7 consultation with USFWS for the City of Fremont's Washington Boulevard/Paseo Padre Parkway Grade Separation Project. On February 18, 2005, the USFWS issued a Biological Opinion for the Grade Separation Project (USFWS 2005). The Biological Opinion exempted the prohibition of take under Section 9 of the Endangered Species Act associated with the permanent loss of the 0.39-acre seasonal wetland and 7.1 acres of upland CTS habitat. The Biological Opinion also required a second year of trapping and relocation of CTS, which was accomplished in 2006. A pitfall trap array was re-established and the traps were operated from January 5 through March 31, 2006. An additional 220 CTS were relocated to Pleasanton Ridge in 2006, including 38 adult CTS, 4 juvenile CTS, and 178 CTS larvae (HBG and Rana Resources 2006). The CTS breeding pond was filled as part the construction of the City's Grade Separation Project in the summer of 2006.

It is almost certain that the trapping and relocation program implemented by HBG and Rana Resources was not able to capture every single CTS individual inhabiting the general area of the breeding pond south of Washington Boulevard, and it is expected that a small number of CTS continued to inhabit uplands in the general vicinity of the railroad right-of-way subsequent to the relocation of CTS from the area. Given that (1) breeding by CTS in the area has not occurred since the breeding pond was filled as part of the City's Grade Separation Project in 2006; (2) the CTS relocation plan was completed in 2006 approximately 13 years ago; and (3) the life span of CTS is 10 years, or perhaps more; it is expected that most CTS that evaded the capture and relocation effort are deceased. It is possible, however, that a small number of CTS may still be

living in uplands in the vicinity of the Irvington Station site (as of 2019), including beneath residences and commercial buildings in the area.

Project construction of the Irvington Station is scheduled for 2022, which would be 16 years after the trapping and relocation of CTS larvae and adults from the breeding pond and 16 years after filling of the CTS breeding pond as part of construction of the Grade Separation Project. No CTS would be expected to still be alive and living in the area during the construction period, and CTS would not be encountered during construction of the station facilities.

Burrowing Owl

Burrowing Owls are small terrestrial owls commonly found in open grassland ranging from western Canada to portions of South America. Burrowing Owl habitat can be found in annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. In California, Burrowing Owls most commonly use burrows of California ground squirrel, but they also may use man-made structures, such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing Owls may use a site for breeding, wintering, foraging, and/or migration stopovers during migration. While foraging, owls will perch on raised burrow mounds or other topographic relief such as rocks, tall plants, fence posts, and debris piles to attain better visibility. Occupancy of suitable Burrowing Owl habitat can be verified at a site by an observation of at least one Burrowing Owl, or, alternatively, presence of "decoration" at or near a burrow entrance which can include molted feathers, cast pellets, prey remains, eggshell fragments, or excrement.

The Burrowing Owl is a U.S. Fish and Wildlife Service (USFWS) bird species of conservation concern and a California Department of Fish and Wildlife (CDFW) species of special concern (CDFW 2011). CDFW adopted survey protocol and mitigation guidelines for Burrowing Owls as described in a March 7, 2012 Staff Report (CDFW 2012).

Burrowing owls are reported in the CNDDB from suitable habitats located within less than 1.5 miles from the project site. Although the project site is less than optimal for supporting Burrowing Owl, California ground squirrel was observed on the site and presence of Burrowing Owl on the property at the time of any future construction cannot be ruled out, especially since the species has nested in the general project area. The previously-disturbed and partially developed Project Site does not provide suitable foraging area for Burrowing Owl and, therefore, habitat mitigation for the species should not be required. However, as temporary occupation of the site by Burrowing Owl cannot be ruled out, preconstruction surveys may be warranted to ensure no harm to Burrowing Owl occurs during construction.

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ATTACHMENT 1.

TABLES

Table 1. Special-Status Plants with Potential to Occur in the Vicinity of the Project Site, Fremont, California

SPECIES	STATUS FED/STATE/CNPS[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
PLANTS			
Alkali Milk-vetch (*Astragalus tener* var. *tener*)	--/--/1B.2	Inhabits low ground, alkali flats and flooded land in valley and foothill grasslands or in playas or vernal pools. 1-170m.	Not present. Suitable habitat does not occur at the site.
Brittlescale (*Atriplex depressa*)	--/--/1B.2	Inhabits alkali scrub, clay soils in mesic grasslands in the Delta, Central Valley basin.	Not present. Suitable habitat does not occur at the site.
San Joaquin spearscale (*Atriplex joaquiniana*)	--/--/1B.2	Chenopod scrub, meadows, playas, valley and foothill grassland and vernal pools. Usually in seasonal alkali wetlands or alkali sink scrub with *Distichlis*, *Frankenia*, etc. 1-835m.	Not present. Suitable habitat does not occur at the site.
Chaparral harebell *(Campanula exigua)*	--/--/1B.2	Rocky sites, usually on serpentine in Chaparral. 90-1375 m.	Not present. Suitable habitat does not occur at the site.
Congdon's tarplant (*Centromedia parryi congdonii*)	--/--/1B.2	Alkaline soils in valley and foothills grassland.	Not present. Suitable habitat does not occur at the site.
Robust spineflower *(Chorizanthe robusta* var. *robusta)*	FE/--/1B.1	Sandy terraces and bluffs in cismontane woodland, coastal dunes and coastal scrub. 3-120m.	Not present. Suitable habitat does not occur at the site.
Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*)	--/--/4.3	Found on slopes and near drainages in cismontane woodland and chaparral. 90-1500m.	Not present. Suitable habitat does not occur at the site.
Point Reyes bird's beak (*Chloropyron maritimum* spp. *palustre*)	--/--/1B.2	Usually in coastal salt marsh with *Salicornia, Distichlis, Jaumea, Spartina,* etc. 0-15m. Known from a 1908 collection at the mouth of Redwood Creek and 1893 collection at Belmont Slough.	Not present. Suitable habitat does not occur at the site.

SPECIES	STATUS FED/STATE/CNPS[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
Hospital Canyon larkspur (*Delphinium californicum* spp. *interius*)	--/--/1B.2	Found in Cismontane woodland, chaparral, and coastal scrub. Found in wet, boggy meadows, and openings in chaparral and canyons.195-1095 m.	Not present. Suitable habitat does not occur at the site.
Hoover's button-celery *(Eryngium aristulatum var. hooveri)*	--/--/1B.1	Alkanine depressions, vernal pools, roadside ditches and other wet places near the coast. 3-45m.	Not present. Suitable habitat does not occur at the site.
Diablo helianthela *(Helianthela castenea)*	--/--/1B.2	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Usually in chaparral/oak woodland interface in rocky, azonal soils. Often in partial shade. 25-1150m.	Not present. Suitable habitat does not occur at the site.
Contra Costa Goldfields (*Lasthenia conjugens*)	FE/--/1B.1	Vernal pools, swales, low depressions, in open grassy areas. 1-445m. Extirpated from most of its range. Most remaining occurrences restricted to the Fairfield region.	Not present. Suitable habitat does not occur at the site.
Arcuate bush mallow (*Malacothamnus arcuatus*)	--/--/1B.2	Found in gravelly alluvium in chaparral. 80-355m. Nearest location was at a site mapped in 1935 near the San Mateo Bridge which has long been developed and extirpated.	Not present. Suitable habitat does not occur at the site.
Prostrate vernal pool navarretia (*Navarretia prostrata)*	--/--/1B.1	Found in mesic and alkaline sites within Coastal scrub, valley and foothill grassland with vernal pools. 15-700m.	Not present. Suitable habitat does not occur at the site.
Hairless popcornflower *(Plagiobothrys glaber)*	--/--/1A	Coastal salt marsh and alkaline meadows. 5-180m.	Not present. Suitable habitat does not occur at the site.
Oregon Polemonium *(Polemonium carneum)*	-/-/2B.2	Found in Coastal prairie, coastal scrub and lower montane coniferous forest. 0-1830m.	Not present. Suitable habitat does not occur at the site.

SPECIES	STATUS FED/STATE/CNPS[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
Slender-leaved pondweed (*Potamogeton filiformis*)	--/--/2B.2	Occurs in clear, shallow water of marshes, lakes, drainage channels.	Not present. Suitable habitat does not occur at the site.
California alkali grass *(Puccinellia simplex)*	--/--/1B.2	Found in meadows and seeps, chenopod scrub, and vernal pools in foothill grasslands. Found in alkaline, vernally mesic sinks, flats, and lake margins. 1-915 M.	Not present. Suitable habitat does not occur at the site.
Chaparral ragwort *(Senecio aphanactis)*	--/--/1B.2	Known from foothill woodland and chaparral habitats.	Not present. Suitable habitat does not occur at the site.
Long-styled sand-spurrey *(Spergularia macrotheca* var. *longistyla)*	--/--/1B.2	Found in alkaline marshes and swamps, meadows dna seeps. 0-220 M.	Not present. Suitable habitat does not occur at the site.
Most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*)	--/--/1B.2	Found on serpentine outcrops and ridges and slopes within chaparral, valley and foothill grassland, and cismontane woodland. 95-1000m.	Not present. Suitable habitat does not occur at the site.
California seablite (*Sueda californica*)	FE/--/1B.1	Margins of coastal salt marshes. 0-5m.	Not present. Suitable habitat does not occur at the site.
Saline clover (*Trifolium depauperatum* var. *hydrophilum*)	--/--/1B.2	Found in mesic alkaline sites in marshes and swamps, valley and foothill grassland and vernal pools. 0-300m.	Not present. Suitable habitat does not occur at the site.

1. Source: California Natural Diversity Data Base, Natural Heritage Division, California Department of Fish and Wildlife for the Niles 7.5 Minute Quadrangle Maps and surrounding areas, information dated March 2019.

2. Status Codes:

   FE Federal-listed Endangered
   FT Federal-listed Threatened
   FPE Federal Proposed Endangered

FPT Federal Proposed Threatened

CE California State-listed Endangered
CT California State-listed Threatened
CR California Rare
FP California Fully Protected
CSC California Species of Special Concern

California Rare Plant Rank 1A: Plants presumed extirpated in California and either rare or extinct elsewhere.
California Rare Plant Rank 1B: Plants rare, threatened, or endangered in California and elsewhere.
California Rare Plant Rank 2A: Plants presumed extirpated in California, but more common elsewhere.
California Rare Plant Rank 2B: Plants rare, threatened, or endangered in California, but more numerous elsewhere.
California Rare Plant Rank 3: Plants about which more information is needed – a review list.
California Rare Plant Rank 4: Plants of limited distribution – a watch list.
CNPS Threat Ranks
0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Table 2. Special Status Animal Species that Have Been Reported in the Vicinity of the Project Area, Fremont, California

SPECIES[1]	STATUS FED/STATE[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
Obscure Bumble Bee *(Bombus caliginosus)*	--/--	Found in Coastal areas from Santa Barbara County north to Washington State. Food plant genera include *Baccharis, Cirsium, Lupinus, Lotus, Grindelia* and *Phacelia*.	Not present. Suitable habitat is not present at the site.
Western Bumble Bee *(Bombus occidentalis)*	--/--	This species was once common and widespread, but the species has declined precipitously from Central California to Southern British Columbia, perhaps from disease.	Not present. Suitable habitat is not present at the site.
Crotch Bumble Bee (*Bombus crotchii*)	--/--	Found in coastal California east to the Sierra-Cascade Crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia* and *Eriogonum*.	Not present. Suitable habitat is not present at the site.
Monarch Butterfly (*Danaus plexippus*) (wintering sites)	--/--	Winter roost sites located in wind-protected tree groves (eucalyptus, Monterey pine, cypress) with nectar and water sources nearby.	Not present. Suitable habitat is not present at the site.
Mimic Tryonia or California brackishwater snail (*Tryonia imitator*)	--/--	Found in coastal lagoons, estuaries and salt marshes from Sonoma County south to San Diego County. Permanently submerged area, tolerates a variety of salinities.	Not present. Suitable habitat is not present at the site.
Vernal Pool Tadpole Shrimp (*Lepidurus packardi*)	FE/--	Inhabits vernal pools; known from scattered locations in the Delta and Central Valley.	Not present. Suitable habitat is not present at the site.

SPECIES[1]	STATUS FED/STATE[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
California Linderiella (*Linderiella occidentalis*)	--/--	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions.	Not present. Suitable habitat is not present on site.
Steelhead - Central CA Coast ESU *Oncorhynchus mykiss)*	FT/--	Well-oxygenated streams with riffles; loose, silt-free gravel substrate. ESU encompasses drainages in San Francisco and San Pablo Bays east to the Napa River.	Not present. Suitable habitat is not present at the site. Species may pass through San Francisco Bay.
Steelhead-Central Valley ESU (*Oncorhynchus mykiss*).	FT /--	Steelhead spawn in streams that are shallow, clear, and cold with a strong upwelling of water through the gravel. The ESU encompasses the Suisun Bay/Sacramento River Delta watersheds.	Not present. Suitable habitat is not present at the site. Species may pass through San Francisco Bay.
Longfin Smelt (*Spirinchus thaleichthys*)	FC/CT, CSC	In California, Longfin Smelt have been commonly collected from San Francisco Bay, Eel River, Humboldt Bay and Klamath River. As they mature in the fall, adults found throughout San Francisco Bay migrate to brackish or freshwater in Suisun Bay, Montezuma Slough, and the lower reaches of the Sacramento and San Joaquin Rivers. Spawning probably takes place in freshwater.	Not present. Suitable habitat is not present at the site. Species may pass through San Francisco Bay.

SPECIES[1]	STATUS FED/STATE[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
California Tiger Salamander (*Ambystoma californiense*)	FT/CT,CSC	Found in annual grasslands and grassy understory of valley-foothill hardwood habitats in central and northern California. Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water source for breeding.	Unlikely. A CTS breeding pond once existed on the Project Site, but a trapping and relocation plan was implemented in 2003/2004 prior to federal listing of the species. A small number of adult CTS that avoided being trapped may occur in the general area, but none are expected to still be alive and living in the project area during construction in 2022.
California Red-legged Frog (*Rana aurora draytonii)*	FT/CSC	Mostly in lowlands and foothills in/near permanent sources of deep water but will disperse far during and after rain. Prefers shorelines with extensive vegetation.	Not present. Not known to occur in the project area. Suitable wetland and surrounding upland habitats are not present.
Foothill Yellow-legged Frog (*Rana boylii*)	--/CSC	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.	Not present. Suitable habitat is not present at the site.
Western Pond Turtle (*Clemmys marmorata*)	--/CSC	Aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs basking sites and suitable upland habitat for egg-laying (sandy banks or grassy open fields).	Not present. Suitable habitat is not present at the site.

SPECIES[1]	STATUS FED/STATE[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
Alameda Whipsnake *(Masticophis lateralis euryxanthus)*	FT/CT	Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savannah and woodland habitats. Mostly found on south-facing slopes and ravines with rock outcrops, deep crevices or abundant rodent burrows where shrubs form a vegetative mosaic with oak trees and grasses.	Not present. Suitable habitat is not present at the site.
Great Blue Heron (*Ardea herodius*) [Nesting]	--/--	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites are in close proximity to foraging areas such as marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Rookery not present. Suitable habitat for a rookery is not present on the site.
Golden Eagle (*Aquila chrysaetos*) [nesting and wintering]	BCC/FP,WL	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	Not present. Suitable habitat is not present at the site.
Northern Harrier (*Circus cyaneus)* [Nesting]	--/CSC	Coastal salt marsh and freshwater marsh; nests and forages in grasslands; nests on ground in shrubby vegetation, usually at marsh edge.	Not present. Suitable nesting habitat is not present on site.
White-tailed Kite (*Elanus caeruleus*) [nesting]	--/FP	Open grassland and agricultural areas throughout Central California.	Not present. Suitable nesting habitat is not present on site.
Cooper's Hawk (*Accipiter cooperii*) [nesting]	--/WL	Nests primarily in deciduous riparian forests; forages in open woodlands.	Not present. Suitable nesting habitat is not present on site.

SPECIES[1]	STATUS FED/STATE[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
Sharp-shinned Hawk (*Accipiter striatus*) [nesting]	--/WL	Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers, but not restricted to, riparian habitats. North facing slopes, with plucking perches are critical requirements. All habitats except alpine, open prairie, and bare desert used in winter.	Not present. Suitable nesting habitat is not present on site.
American peregrine falcon (*Falco peregrinus*) [nesting]	Delisted, BCC/Delisted	Inhabits open wetlands near cliffs, also occurs in some cities where nests on buildings and bridges.	Not present. Suitable nest sites are not present.
Prairie Falcon *(Falco mexicanus)(*Nesting)	BCC/WL	Associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields and desert scrub. Permanent resident and migrant along inner coast and ranges.	Nesting unlikely. Suitable nest sites are not present.
Merlin (*Falco columbarius*) [wintering]	-/WL	Breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	Not present. Suitable wintering sites are not present.
California Ridgway's Rail (*Rallus obsoletus obsoletus*)	FE/CE,FP	Found in saltwater marshes traversed by tidal sloughs in the vicinity of San Francisco Bay; associated with abundant growths of pickleweed; feeds on mollusks obtained from mud bottomed sloughs.	Not present. Suitable habitat is not present at the site.
California Black Rail *(Laterallus jamaicensis coturniculus)*	BCC/CT,CFP	Mainly inhabits salt-marshes bordering larger bays. Occurs in tidal salt marsh with dense growths of pickleweed; also occurs in freshwater and brackish marshes.	Not present. Suitable habitat is not present at the site.

SPECIES[1]	STATUS FED/STATE[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
Western Snowy Plover (*Charadrius alexandrinus nivosus*) [nesting]	FT,BCC/CSC	Found on sandy beaches or marine and estuarine shores; also salt pond levees and shores of large alkali lakes; requires sandy, gravelly or friable soil substrate for nesting.	Not present. Suitable habitat is not present at the site.
California Least Tern (*Sterna antillarum browni)* [Nesting]	FE/CE,CFP	Nests along the coast from San Francisco Bay south to northern Baja, California; a colonial breeder on bare or sparsely vegetated substrates; sandy beaches, alkali flats, landfills, or paved areas.	Not present. Suitable nesting habitat is not present on site.
Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)	FC,BCC/CE	Nests in riparian forests along the broad, lower flood-bottoms of larger river systems. Requires willows, cottonwoods with lower story of blackberry, nettles or wild grape.	Not present. Suitable habitat is not present at the site.
Burrowing Owl (*Athene cunicularia*)	BCC/CSC	Found in open dry annual or perennial grasslands, deserts and scrublands characterized by low growing vegetation. This species is a subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	Unlikely. Species has occurred within 1.5 miles of the site. No individuals or suitable burrow sites were found during the site reconnaissance. Preconstruction surveys may be warranted.
Bank Swallow *(Riparia riparia)* (nesting)	--/CT	A migrant found primarily in riparian and other lowland habitats in California west of the deserts. In summer, restricted to riparian areas with vertical cliffs and banks with fine-textured or sandy soil, into which it digs its nesting holes.	Not present. Suitable habitat is not present at the site.

SPECIES[1]	STATUS FED/STATE[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
Loggerhead Shrike (*Lanius ludovicianus*)	BCC/CSC	Habitat includes open areas such as desert, grasslands and savannah. Nests in thickly foliaged trees or tall shrubs. Forages in open habitats, which contain trees, fence posts, utility poles, and other perches.	Not present. No nesting sites occur at the project site.
Yellow Warbler (*Dendroica petechia*) [nesting]	BCC/CSC	Breeds in deciduous riparian woodlands, widespread during fall mitigation.	Nesting not present. No breeding habitat is present at the site; migrants expected on site, especially in fall.
San Francisco Common Yellowthroat (*Geothlypis trichas sinuosa*)	BCC/CSC	Requires thick continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	Not present. Suitable nesting habitat not present on site. Foraging by the species is possible, especially in winter.
Alameda Song Sparrow (*Melospiza melodia pusillula*)	BCC/CSC	Resident of salt marshes bordering south arm of San Francisco Bay.	Not present. Suitable habitat is not present on site.
Tri-colored Blackbird (*Agelaius tricolor*) [nesting colony]	BCC/CE	Breeds near freshwater, usually in tall emergent vegetation. Colonies prefer heavy growth of cattails and tules. Uses grasslands and agricultural lands for foraging.	Not present. Suitable habitat for a nesting colony does not occur on site.
Yuma Myotis *(Myotis yumanensis)*	--/--	Closely associated with water; always found near lakes, creeks or ponds. Skims over water to forage for flying insects. By day, roosts under building siding or shingles. Nursery colonies utilize caves, mines, buildings and under bridges.	Not present. Suitable habitat is not present on site.

SPECIES[1]	STATUS FED/STATE[2]	HABITAT	OCCURRENCE ON THE PROJECT SITE
ANIMALS			
Hoary Bat (*Lasuirus cinereus*)	--/--	Prefers open habitats with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees.	Not present. Suitable habitat is not present at the site.
Pallid Bat *(Antrozous pallidus)*	--/CSC	Roosts primarily in oak woodland and ponderosa pine habitats; forages in open areas.	Not present. Suitable habitat is not present at the site.
Townsend's Big-eared Bat *(Corynorhinus townsendii)*	--/CCT,CSC	Found in desert scrub and coniferous forests. Roost in caves or abandoned mines and occasionally are found to roost in buildings.	Not present. Suitable habitat is not present at the site.
Salt Marsh Harvest Mouse (*Reithrodontomys raviventris*)	FE/CE,FP	Inhabits saline emergent wetlands in the San Francisco Bay and its tributaries. Pickleweed is the primary habitat.	Not present. Suitable habitat is not present at the site.
Salt-marsh Wandering Shrew (*Sorex vagrans halicoetes)*	--/CSC	Found in salt marshes of the south arm of San Francisco Bay in medium high marsh 6-8 feet above sea level where abundant driftwood is scattered among *Salicornia*.	Not present. Suitable habitat is not present at the site.
Berkeley Kangaroo Rat (*Dipodomys heermanni berkeleyensis*)	--/--	Found in open grassy hilltops and open spaces in chaparral and blue oak/digger pine woodland. Requires fine, deep, well-drained soil for burrowing.	Not present. Suitable habitat is not present at the site.
San Francisco Dusky-footed Woodrat (*Neotoma fuscipes annectens*)	--/CSC	Found in forested habitats of moderate canopy and moderate to dense understory.	Not present. Suitable habitat is not present at the site.

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FPT Federally Proposed Threatened
BCC USFWS Bird Species of Conservation Concern

CE California State-listed Endangered
CT California State-listed Threatened
CR California Rare
FP California Fully Protected
CSC CDFW Species of Special Concern
WL CDFW Watch List Species