

Original: November 2020
Modified: May 2022

FILE NUMBER: PLN19-0226
SUBJECT: Grading Abatement
SITE LOCATION: 10500 Creston Drive (APN 326-12-057)

Project Description: Creek Bank Restoration on Stevens Creek at 10500 Creston Drive

This document provides a project description, including description of the site, explanation of structures that will be removed, explanation and justification of structures that will be preserved, explanation and basis of design for the creek bank restoration, and explanation of plan drawings.

This document also includes the "Project Impacts" and "Project Measures" descriptions submitted as part of Attachment A: Supplemental Information in the CDFW permit application.

Modification (May 2022)

This document is modified to add the grading of the bank behind Wall 'C' (the pre-existing, lower upstream wall built in 1980). After structural discovery and analysis, and discussion with County Building, Land Development, and Planning engineers, it was determined that the best solution for Wall C is to grade the bank behind the wall, to reduce the load on the wall. A modification to Grading Abatement PLN19-0226 is being submitted, requesting that this additional scope be approved together with removing the condition to obtain a building permit for Wall C.

The downstream deck will also be removed (this is unrelated to Wall C). It is above the top of bank, but within the floodway.

Project Location

The project site is located at 10500 Creston Drive (latitude: 37.330186, longitude: -122.060737; APN: 326-12-057) in unincorporated Santa Clara County, California surrounded by the cities of Los Altos and Cupertino. The project site occurs within the U.S. Geological Survey (USGS) 7.5' series Cupertino Quadrangle. This property has been in private ownership since before California joined the United States. It is therefore not part of the Township and Range system, which was a survey of federal lands.

To access the site from I-280 South, take the Foothill Expressway exit and merge onto Foothill Boulevard. Turn left onto Starling Drive, left onto Baxter Avenue, and right onto Creston Drive.

The project site is located along Stevens Creek upstream of I-280.

Project Description

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Project Description

The parcel is developed with a single-family dwelling including a pool, paved parking area, ornamental vegetation, and a lawn. It is adjacent to Stevens Creek, which flows from its headwaters in the Santa Cruz Mountains to San Francisco Bay. The flows in Stevens Creek are controlled by a dam at the Stevens Creek Reservoir; at this location upstream of Fremont Avenue, the flows are typically perennial, but reaches downstream of the project are not perennial.

The project includes the demolition of an unpermitted retaining wall and patio located between the lawn and Stevens Creek, subsequent bank stabilization, and replanting of native vegetation. Plus grading of the bank behind another wall (built in 1980), to reduce load on the wall, and removal of two decks that are within the floodway. Photographs of the project site are included in the file "Photos-1.pdf", and detailed project plans are included in the file "Plans-4.pdf". The project description also incorporates National Pollution Discharge Elimination System (NPDES) best management practices (BMPs) to prevent deleterious materials or pollutants from entering Stevens Creek. The total project footprint is approximately 0.012 acres (60 feet long x 6 feet wide = 360 square feet behind the unpermitted Wall 'A', and 170 square feet behind the pre-existing Wall 'C') and is located adjacent to Stevens Creek.

The 0.31-acre parcel is mostly developed and includes a single-family house, swimming pool, yard/landscaped areas, and a small deck and patio area that is located adjacent to Stevens Creek. At the time of a biological survey, Stevens Creek was flowing and supported mixed riparian woodland. The project site (i.e., limits of disturbance) is confined to the stone retaining wall and stone patio area adjacent to the creek and is elevated approximately seven feet above the creek bed.

The parcel contains mixed riparian woodland along Steven's Creek. The woodland habitat is dominated by Fremont's cottonwood (*Populus fremontii*) and western sycamore (*Platanus racemosa*). The understory is dominated by English ivy, California blackberry (*Rubus ursinus*), and mint (*Mentha* sp.). Other understory species present include flatsedge (*Cyperus* sp.) and stinging nettle (*Urtica dioica*).

Stevens Creek is 22 miles long. It originates in the Santa Cruz Mountains on the western flank of Black Mountain in the Monte Bello Open Space Preserve. From its headwaters the creek flows into Stevens Creek Reservoir. Past the reservoir, the creek flows north through dense residential and commercial development through Cupertino, Los Altos, Sunnyvale and Mountain View before emptying into San Francisco Bay at Whisman Slough. The creek watershed has been modified, and currently includes a portion of the Permanente Creek Watershed, due to the Permanente diversion channel that connects the two creeks downstream of Fremont Avenue. In addition, flows in Stevens Creek are controlled by the dam at Stevens Creek Reservoir upstream of the parcel.

Project Background

The applicant was issued a grading abatement order from the County of Santa Clara. To comply with the order, the applicant proposes to remove the retaining wall. As a result, the applicant sought a Lake and Streambed Alteration Agreement from CDFW to complete work under Section 1602 of California Fish and Game Code, authorization from the US Army Corps of Engineers under Section 404 of the Clean Water Act (CWA), and authorization from the Regional Water Quality Control Board under Section 401 of the CWA. The CDFW and USACE applications were submitted on October 21, 2020, and the RWQCB application will be submitted once the Grading Abatement application to the County is deemed complete and the Planning Department is within 60 days of completing the Environmental Assessment. On November 11, 2020, the USACE determined it would not require a permit. Therefore, the applicant will now be required to submit a Notice of Intent to enroll the project under the State Water Resources

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Control Board Order 2004-0004-DWQ. The project was discussed at the April 9, 2020 interagency meeting with representatives from CDFW, USACE, RWQCB, USFWS, and NMFS in attendance.

Construction Schedule and Duration

Construction will occur during the dry season, June 15 through October 15. Construction is expected to last up to 30 days.

Construction Workers and Hours

The on-site workforce would consist of laborers, supervisory personnel, support personnel and construction management personnel. Construction would generally be conducted during day light hours, five to six days a week and will be consistent with the City of Los Altos municipal codes. Pursuant to Ordinance No. 6.16.070 of the Los Altos Municipal Code, construction work conducted between the hours of 7:00 AM and 5:30 PM Monday through Friday and 9:00 AM and 3:00 PM Saturday. Furthermore, construction activities will not exceed maximum noise levels described in Section (b) of the ordinance.

Staging and Access

The staging area will be located in the back yard. Access will occur via the paved driveway and the back yard.

Demolition

The creek bank area consists of several retaining walls and decks, some of which will be removed and some of which will remain. As shown in Plan Sheet C3, the following structures will be removed:

- **Wall A:** The lower, downstream retaining wall. This is the unpermitted wall that is the focus of this project. The wall is made from concrete blocks and replaced an existing, rotted wooden wall in the exact same location in 2011. Wall A is 55 linear feet running parallel to the creek. The flagstone terrace area above the wall is 7.5 feet deep (front to back). Wall A and the flagstone terrace above will be completely removed.
- **Wall B-2:** The short wall perpendicular to the channel. Wall B-2 runs between the upper and lower retaining walls, forming an edge at the upstream end of the flagstone terrace, and measures 7.5 linear feet.
- **Upstream Deck:** This deck was added by the owner in 2005 and extends beyond the top of bank. It is labeled Deck #2 on the Demolition plan sheet.
- **Downstream Deck:** This deck is above the top of bank and existed when the owner purchased the property in November 2000. However, it is within the floodway, and will be removed. It is labeled Deck #1 on the Demolition plan sheet. It is behind Wall B-1, where the yard is flat, and there is no grading associated with its removal.

As shown in Plan Sheet C3, the following structures will be preserved:

- **Wall C:** The lower, upstream concrete block retaining wall. Wall C is not part of the grading violation order. It is 6 feet high, 21 linear feet, and was built in 1980 (the year "1980" is etched on the wall), prior to the original Flood Insurance Rate Maps for Stevens Creek.

The goal of the project is to abate the original violation as required, while also avoiding expanding the project scope and impact (i.e. minimize earthwork) to the creek. This pre-existing Wall C is holding approximately 8.5 to 9 feet of vertical creek bank in place. It preserves the structure of the existing bank and prevents scour and erosion of this piece of bank. The upstream end of Wall C is covered in vines and ties into the upstream neighbors' bank, which is nearly vertical. A large oak tree at its toe provides stability. The downstream end of Wall C is buttressed by a large cottonwood tree; the wall could not be removed without also removing the trees, which would have a detrimental impact on creek bank stability. As requested in the Grading Abatement Order Incomplete Letter, the wall was evaluated by a hydrologic engineer. The results are included in the file "Hydro Rpt-1 101320.pdf". The memorandum includes a discussion of creek bank and bed erosion, a hydraulic analysis, and justification for preserving Wall C. No features indicative of instability were observed in the vicinity of Wall C. Removing Wall C would likely result in more impacts to jurisdictional waters than preserving Wall C.

A Condition of Approval for PLN19-0226 (approved in Sept. 2021), was to obtain a building permit for this wall. However, after GPR scanning, drilling into the wall, and analysis by a structural engineer, the structural engineer concluded that Wall C cannot be structurally reinforced (e.g. with tieback rods and piers). However, the wall has stood since 1980, and it is undesirable to remove the wall due to the large impacts to the creek noted above. Therefore, after discussion with County Building, Land Development, and Planning engineers, the proposed solution is to leave the wall as-is, and grade the bank behind the wall, to reduce load on the wall. The bank will be graded to 2 feet below the top of the wall, up to the top of bank at a slope of 2:1, using the same design and materials as the bank behind Wall A.

- **Wall B-1:** The upper retaining wall. Wall B-1 is not part of the grading violation order. It is 4 feet high, approximately 57 linear feet, located just behind top of bank. The exact date of construction is unknown; its construction characteristics indicate it was built well after Wall C (1980), and it existed when the owner purchased the property in November 2000.

A Condition of Approval for PLN19-0226 (approved in Sept. 2021), is to obtain a building permit for this wall. The building permit application (DEV21-3137) is in progress. Wall B-1 will be structurally enhanced to meet current requirements. The construction work will be done at the same time as the grading project.

Bank Grading and Restoration

Following demolition, the project area will be recontoured, and biodegradable erosion control measures will be installed. The area from the base of the lower retaining wall (to be removed), to the base of the upper retaining wall (to remain), results in a slope of 1.15:1. The contractor will create two 3-foot rises using biodegradable Bio D Block coir material, secured by 2-foot-long wooden stakes. This involves removal (cut) of about 45 cubic yards of earthen material, and no added fill.

The site (area behind Wall A) will then be planted with native plants that will enhance riparian habitat and improve bank stability. The planting plan was developed by Stillwater Sciences and watershed-

specific species were selected. The Habitat Mitigation, Monitoring, and Reporting Plan (HMMRP) was prepared by MIG. The planting plan along with planting and seeding specifications is included in the Plans file, and the HMMRP is included as a separate file.

The grading behind Wall C uses the same design and materials as the grading behind Wall A. The bank will be graded starting 2 feet below the top of the wall, up to the top of bank, at a slope of 2:1. This involves removal (cut) of about 4 cubic yards of earthen material. The area behind Wall C does not have any plant growth (other than some sparse ivy by the creek edge), as it is directly under a large oak tree, and other dense canopy.

Basis of Design

Planting of native riparian species is an important aspect of this project. Project-specific plant species, zones, quantities, and spacings are described on the Planting Sheet of the Plan Set. The purpose of the riparian planting is to provide long-term bank stability and shade for the riparian corridor while also providing a diversity of species to support the riparian ecosystem. The contractor and/or landowners will follow instructions listed in the Seeding Specifications section of the Habitat Mitigation, Monitoring, and Reporting Plan. The basis for the terraced design is to provide bank stability while complying with all regulations and guidelines. Santa Clara County grading ordinance states that “cuts shall not be steeper in slope than two horizontal to one vertical, unless a soils engineering and/or an engineering geology report is filed”. The terrace grading will tie into the existing grades up and downstream to the extent possible. At its upstream end it will terminate into a very large tree and thus be protected from scour.

Equipment and Machinery

Small / compact equipment, and hand tools will be used to complete the project.

Explanation of Plan Drawings

The plan drawings consist of multiple sheets, which provide clarification and demonstrate our intent to remove the wall, restore the creek bank, and comply with all regulations and guidelines. The plan set also includes the planting plan and planting specifications.

- **C1 – Cover Sheet:** the county template COVER SHEET, includes a revamped legend and most importantly revised Statement of Justification notes. Careful consideration and responses are included to each of the five items. The overall intent of the Statement of Justification is for an experienced professional to state that this proposed work effort complies with County requirements. In short, this proposed project will correct a violation in an environmentally sensitive approach by removing the wall and performing a minimal amount of re-contouring, installing erosion control measures, and revegetating the bank. The entire drawing set clearly demonstrates these attributes.
- **C2 – Boundary/Topo Survey Sheet:** shows the unvarnished boundary and topographic survey performed by Kevin Smith a licensed surveyor in CA. It includes all publicly available property

record information and topographic features using spot elevations, contours, and call outs. The sheet clearly discerns the site as it has existed since the Owner purchased the property in 2000.

- **C3 – Demolition Sheet:** calls for the removal of 55 LF of Wall ‘A’, the removal of on average 7 feet of level flagstone just above wall ‘A’, the removal (cut) of about 45 cubic yards of earthen material from behind the wall, and removal of both the upstream and downstream decks.
- **C4 – Earthwork & Improvements Sheet:** delineates the top of bank as well as the placement of biodegradable erosion control measures using natural fiber materials and wooden stakes. A section line is included which references a detailed cross section for both existing and proposed conditions.
- **C5 and C6 – Sections Sheets:** sheet C5 shows both an existing and proposed section through Walls ‘A’ and ‘B’ on a scaled grid. In addition, it shows a profile (i.e. elevation in architectural jargon) of Wall ‘A’ for further clarification. Sheet C5 also includes a 2009 FEMA Map Image taken from the FEMA web site for this property. The interpolated base flood elevation is 272.2 feet MSL. Sheet C6 shows a proposed section for the grading behind Wall ‘C’.
- **Erosion Control Sheets:** shows erosion control plan.
- **Planting Plan and Irrigation Plan Sheets:** The Planting Plan shows the species of plants to be planted in disturbed areas to control erosion, stabilize the impact area, and restore the creek bank. The Irrigation Plan shows the irrigation plan for the planting area. These are WELO compliant. Prepared by Stillwater Sciences.
- **Planting and Seeding Specifications:** accompanies the Planting Plan. The specifications are in conformance with Chapter 4, Guide 2 of the Guidelines and Standards for Land Use Near Streams. Prepared by Stillwater Sciences.

Project Impacts
(from CDFW Application)

Note: This section covers the original project scope; it does not include the grading behind Wall C.

QUESTION A: Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

One California Department of Fish and Wildlife (CDFW) jurisdictional feature, Stevens Creek, is located in the project site. Approximately 0.008 acres will be permanently impacted by project activities (Exhibit 3). Ultimately, the project will result in restoration of riparian habitat and a net benefit to jurisdictional waters. No other CDFW- regulated feature will be impacted by the proposed project.

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Permanent impacts to jurisdictional waters that will occur as a result of project construction include vegetation removal, removal of the retaining wall, grading by hand, and planting of native vegetation. Approximately 45 cubic yards of material would be removed in the stream bank and approximately 4.5 cubic yards of fill would be placed. Fill will consist of Bio D Block mattress coir blocks with woven coir fabric, which are completely biodegradable. There is no net increase in soil fill, and only native soil will be used within the coir blanket. Soil will be excavated and then replaced in its original footprint after it is wrapped in coir fabric.

No dewatering is proposed because no activity will occur within the active channel.

Project activities will directly impact Stevens Creek, though the project footprint is outside of the OHWM. Project activities have the potential to impact jurisdictional waters due to changes in water quality. Specifically, project activities could cause the degradation of surface or ground water quality due to erosion and transport of fine sediments downstream of the construction area, unintentional release of contaminants into jurisdictional waters, trampling of wetland vegetation, vegetation removal, and soil compaction from access and equipment. However, the project has incorporated mitigation measures to control the discharge of stormwater pollutants under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ). Additionally, Stevens Creek in the parcel will be subject to the regulatory jurisdiction of the RWQCB and will require a Notice of Applicability to enroll the project under the State Water Resources Control Board Order 2004-0004-DWQ prior to project activities. This permit may require additional protection measures.

To the extent feasible, the applicant will design and construct the project to avoid and minimize impacts to jurisdictional waters. Ultimately, the project will result in a net benefit to the creek.

Approximately 0.008 acres of CDFW jurisdictional waters would be permanently impacted by dredge and fill activities associated with the project (refer to Attachment B, Exhibit 3: Vegetation Communities and Jurisdictional Impacts).

Type and Quantity of Material to be Placed in CDFW Jurisdictional Riparian Area:

Following demolition and removal of the retaining wall, the creek bank will be graded as shown in Exhibit 6: Project Plans. The area of disturbance is characterized by the following:

- Area = 0.008 acres
- Length = 55 feet
- Width = Up to 9 feet
- Depth = Average of 30 inches
- Total volume of cut = 45 cubic yards
- Total volume of fill = 4.5 cubic yards.

Feature Characteristics

Physical Characteristics

A delineation of federal and state jurisdiction was conducted on August 23, 2019 (reported in Attachment C: General Biological Resources Assessment). The delineation survey area included the

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entire 0.31-acre parcel (Attachment B, Exhibit 2). Evaluation of CDFW jurisdiction followed guidance in the California Fish and Game Code and standard field practices by CDFW personnel. CDFW jurisdiction was delineated by measuring outer width boundaries of state jurisdiction (lakes or streambeds), consisting of the greater of either the “top of bank” (TOB) measurement or the dripline of riparian vegetation.

In the project area, Stevens Creek is regulated by CDFW as a streambed. No other regulated features exist onsite. Stevens Creek is 22 miles long. It originates in the Santa Cruz Mountains on the western flank of Black Mountain in the Monte Bello Open Space Preserve and drains approximately 46 square miles. From its headwaters the creek flows into Stevens Creek Reservoir. Past the reservoir, the creek flows north through dense residential and commercial development through Cupertino, Los Altos, Sunnyvale and Mountain View before emptying into San Francisco Bay at the Whisman Slough. The creek watershed has been modified, and currently includes a portion of the Permanente Creek Watershed, due to the Permanente diversion channel that connects the two creeks downstream of Fremont Avenue, which is downstream of the parcel. In addition, flows in Stevens Creek are controlled at the dam at Stevens Creek Reservoir upstream of the parcel.

Biological Characteristics

Stevens Creek forms a continuous riparian buffer from its headwaters until it enters tidal marsh in San Francisco Bay. Continuous riparian buffers provide important wildlife migration corridors, which are critical “movement highways” for terrestrial species such as mammals and reptiles as well as for water dependent species such as amphibians and waterfowl. Wildlife corridors play an important role in countering habitat fragmentation. A wildlife corridor is a landscape element which serves as a linkage between historically connected habitats or landscapes that are otherwise separated and is meant to provide avenues along which wildlife can travel, migrate, and meet mates; plants can propagate; genetic interchange can occur; populations can move in response to environmental changes and natural disasters; and individuals can re-colonize habitats from which populations have been locally extirpated. Corridors can consist of a sequence of stepping-stones across the landscape (i.e., discontinuous areas of habitat such as isolated wetlands and roadside vegetation), continuous lineal strips of vegetation and habitat (e.g., riparian strips and ridge lines), or they may be parts of larger habitat areas of known or likely importance to local wildlife.

Mixed riparian woodland habitats in California generally support animal communities that contribute disproportionately to landscape-level species diversity. The presence of seasonal water and abundant invertebrate fauna provide foraging opportunities for many species, and the diverse habitat structure provides cover and breeding opportunities. The mixed riparian woodland habitat in the parcel provides cover and foraging habitat for a wide variety of terrestrial vertebrates (e.g., amphibians, reptiles, and mammals), as well as several guilds of birds, including insectivores (e.g., warblers, flycatchers), seed-eaters (e.g., finches), and raptors. Cavity-nesting birds (e.g., swallows and woodpeckers) may nest in the large trees in this habitat type.

Several species of amphibians and reptiles occur in the mixed riparian woodland habitats. Leaf litter, downed tree branches, low-growing forbs, and fallen logs provide cover for the ensatina (*Ensatina eschscholtzii*), California newt (*Taricha torosa*), western toad, and Pacific treefrog. Reptile species found in this habitat include the western fence lizard, western skink (*Eumeces skiltonianus*), southern alligator lizard (*Elgaria multicarinata*), and ringneck snake (*Diadophis punctatus*) among others. Among the

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species of birds that use the mixed riparian woodland habitat on the site for breeding are the Pacific-slope flycatcher (*Empidonax difficilis*), California scrub jay, and bushtit. Trees in this habitat provide also provide nesting opportunities for smaller raptors, such as the Cooper's hawk (*Accipiter cooperii*).

Small mammals, such as the ornate shrew (*Sorex ornatus*) and broad-footed mole (*Scapanus latimanus*), use the mixed riparian woodland for breeding and foraging. Medium-sized mammals such as the raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), bobcat, and nonnative Virginia opossum (*Didelphis virginiana*) are also present in this habitat. Black-tailed deer are common in the surrounding habitats and use mixed riparian woodland areas for access to water and foraging. Several species of bats, including the Yuma myotis (*Myotis yumanensis*) and Mexican free-tailed bat (*Tadarida brasiliensis*), forage over mixed riparian woodland habitats and roost in trees.

Stevens Creek is known to support special status species, as noted in the response to Question C, below.

QUESTION B: Will the project affect any vegetation?

Vegetation Impacts

Approximately 0.008 acres of mixed riparian woodland will be permanently impacted during construction. This area is described and depicted in representative photographs provided in Exhibit 5.

The removal of the retaining wall will likely require removal or disturbance of adjacent riparian understory vegetation. The project description includes mitigation for impacts to riparian habitat through the re-establishment and stabilization of original contours along banks; and seeding with a native seed mix and native tree plantings. Impacts to jurisdictional waters will be mitigated in place by restoring approximately 0.008 acres of riparian habitat along Stevens Creek in the project footprint. See Attachment D: Mitigation, Monitoring, and Reporting Plan for a full description of post-construction revegetation activities.

No trees will be removed due to project activities.

QUESTION C: Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

Based on a 2019 review of USFWS and CNDDDB databases, the biologist's knowledge of sensitive species, and a habitat assessment at the project site, it was determined that special-status species including Central California coast (CCC) steelhead Distinct Population Segment (DPS) (*Oncorhynchus mykiss irideus*; federal threatened), California red-legged frog (*Rana draytonii*; federal threatened, state species of special concern), and western pond turtle (*Actinemys marmorata*; state species of special concern) have the potential to occur in the project area.

CCC steelhead are known to occur in Stevens Creek. Habitat conditions in Stevens Creek adjacent to the project site are suitable to support freshwater migration of adult and juvenile CCC steelhead. The reach of Stevens Creek immediately adjacent to the project site does not support suitable habitat for spawning, rearing, or feeding during most times of the year due to the lack of channel complexity, gravels, or connectivity with an adjacent floodplain. As a result, steelhead are likely only present in the

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section of Stevens Creek adjacent to the project site during upstream and downstream migration, which occurs late fall into spring.

There are two extant occurrences of red-legged frog near the parcel: The first is approximately one mile to the west at Permanente Creek near Rancho San Antonio Open Space Preserve, which is within the potential overland dispersal distance of this species to the project site (i.e., within two miles for red-legged frog). However, the parcel is separated from this occurrence by extensive development and roadways; therefore, it is considered unlikely that California red-legged frog would successfully disperse to the parcel from this occurrence. The second occurrence is approximately four miles south at Picchetti Ranch Open Space Preserve near Stevens Creek Reservoir. California red-legged frog could potentially disperse downstream along Stevens Creek from Stevens Creek Reservoir to the project site, although there are no known documented occurrences of red-legged frog downstream of Stevens Creek Reservoir. Stevens Creek adjacent to the project site does not provide suitable breeding habitat for California red-legged frog. However, Stevens Creek, including the riparian habitat along the banks, provides suitable foraging and refugia habitat for California red-legged frog.

While there are no documented occurrences of western pond turtle in Stevens Creek in the CNDDDB, pond turtle is known to occur in Stevens Creek based on personal observations of MIG biologists.

Biological field surveys were conducted to assess the existing conditions of the project site, record observed plant and wildlife species, characterize and delineate onsite vegetation communities and associated wildlife habitats, and evaluate the potential for the project site to support special-status species and sensitive natural communities. The General Biological Resources Report (Attachment C) provides an evaluation of habitat suitability and an analysis of potential project impacts to special-status species.

Special-Status Plants

“Special-status plant species” are defined as species that are listed as endangered or threatened, are proposed or candidates for listing, or are designated as fully protected species under one or more of the following regulatory statutes: Federal Endangered Species Act (ESA), as amended (50 Code of Federal Regulations [CFR] 17.12), California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5), California Fish and Game Code (Section 1900 et seq.), and the California Native Plant Protection Act of 1977.

A list of 74 special-status plant species thought to have some potential for occurrence within the parcel was compiled using the CNPS rare plant inventory (CNPS 2019) and CNDDDB records (CNDDDB 2019). Analysis of the documented habitat requirements and occurrence records of these plants, and our plant ecologist’s knowledge of sensitive species considered, allowed us to reject all 74 species as not having a reasonable potential to occur within the parcel for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements (e.g., serpentine or alkaline soils); (3) the species is presumed extirpated or is not expected to occur in the project vicinity due to range; and/or (4) the site is too disturbed to be expected to support the species. As the parcel is largely composed of areas with little habitat value (urban land cover), the parcel does not provide suitable habitat for special-status plants. Therefore, no special-status plant species are expected to occur in the parcel and the proposed project would not result in a substantial adverse effect on any special-status plant species.

Special-Status Wildlife

Special-status wildlife species include those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; species of special concern to the CDFW; and birds protected by the CDFW under CFGC Sections 3503 and 3513.

Based on a review of the USFWS and CNDDDB databases, the biologist’s knowledge of sensitive species, and an assessment of the types of habitats within the project site, it was determined that eight wildlife species could potentially occur within or near the parcel. This determination was made due to the presence of essential habitat requirements for the species, the presence of known occurrences within 5 miles of the parcel, and/or the parcel’s location within the species’ known range of distribution. Special-status animal species that are not expected or have a low potential to occur within or near the work parcel were excluded from this analysis.

The legal status and likelihood of occurrence of special-status animal species in the work parcel are shown in Table 1 and CCC Steelhead and California red-legged frog are discussed in greater detail below. All special-status species with the potential to occur in the project area, including western pond turtle, are fully discussed in the General Biological Resources Assessment (see Attachment C).

Table 1. Special-Status Animal Species with Potential to Occur in the Parcel

Common Name	Regulatory Status	Likelihood of Occurrence in the Parcel (including Project Site)
Central California Coast Steelhead DPS	FT	Assumed Present (non-breeding)
California red-legged frog	FT, CSSC	Moderate (non-breeding)
Western pond turtle	CSSC	High (non-breeding)

Key to Status Abbreviations: Federally Listed as Endangered (FE); Federally Listed as Threatened (FT); Federal Candidate for Listing (FC), Federal Species of Concern (FSC), State Listed as Endangered (SE); State Listed as Threatened (ST); State Candidate for Listing (SC); State Fully Protected (FP); California Species of Special Concern (CSSC)

Central California Coast Steelhead (*Oncorhynchus mykiss irideus*) Federal Listing Status: Threatened; State Listing Status: None.

Central California Coast (CCC) Steelhead DPS is an anadromous fish that is born and rears in streams that flow to San Francisco Bay and the Pacific Ocean, that swims to the ocean to mature, and that returns to its natal stream to reproduce. Steelhead migrate up freshwater streams to spawn during the late-fall and winter months because these months usually provide high flows and lower water temperatures. Adult female steelhead create a nest (or redd) in a section of stream with gravel and moderate to fast flowing water to provide constant, fresh water to oxygenate the eggs. Once hatched, the steelhead rear in the freshwater system they were hatched in (approximately 1-2 years). Once large enough, they migrate to the ocean to finishing rearing and maturing (approximately 1-2 more years) and return to their natal stream to spawn (Shapovalov and Taft 1954; Barnhart 1986; Busby et al. 1996). CCC Steelhead can spawn multiple times in their lifetime.

The CCC steelhead was listed as a threatened species in August 1997 (NMFS 1997) and the threatened status was reaffirmed in January of 2006 (NMFS 2006). Critical habitat was designated for the CCC steelhead DPS in September 2005 (NMFS 2005), and a final recovery plan was published in October

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2016. In many areas, steelhead populations have declined due to habitat fragmentation and degradation of spawning habitat, natural and manmade barriers to upstream breeding grounds, over-harvesting by recreational fisheries and the reduction of winter/spring flow in response to dams and water diversion. In addition, non-native fish species pose risks to the CCC steelhead through predation, competition and habitat modification. An increase in marine mammal predation on the CCC steelhead DPS have been reported at the ocean confluence while the steelhead wait for access to migrate upstream.

The project site is located in designated critical habitat for CCC steelhead (NMFS 2005). Critical Habitat for CCC steelhead DPS was designated on September 2, 2005 and includes all river reaches and estuarine areas accessible to listed steelhead in coastal river basins from the Russian River in Sonoma County to Aptos Creek in Santa Cruz County. The San Mateo Hydrologic Unit includes the coastal streams in San Mateo County from San Pedro Creek near Pacifica to Butano Creek near Año Nuevo and the Santa Clara Hydrologic Unit includes South Bay creeks from San Francisquito Creek in Palo Alto eastward to Coyote Creek (NMFS 2006) and includes Stevens Creek.

CCC Steelhead are known to occur in Stevens Creek (Leidy et al. 2005, CNDDDB 2019); however, the status of steelhead populations in coastal San Francisco Bay streams, including Stevens Creek, remains highly uncertain, and it has been determined that sections of upper Stevens Creek, including the project site, are periodically inaccessible due to passage barriers (Domenichelli & Associates 2017; Williams et al. 2016).

Stevens Creek has been identified as a priority for steelhead population restoration by the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE), which includes federal, state and local stakeholders. The FAHCE is in the process of developing a Fish Habitat Conservation Plan for three local watersheds, including Stevens Creek.

Habitat conditions in Stevens Creek adjacent to the project site are suitable to support freshwater migration of adult and juvenile CCC steelhead. The reach of Stevens Creek immediately adjacent to the project site does not support suitable habitat for spawning, rearing, or feeding during most times of the year due to the lack of channel complexity, gravels, or connectivity with an adjacent floodplain. As a result, steelhead are likely only present in the section of Stevens Creek adjacent to the project site during upstream and downstream migration, which occurs late fall into spring.

One of the primary constituent elements (PCEs) of Critical Habitat essential to the conservation of the species is present within Stevens Creek adjacent to the project site. This PCE consists of freshwater migration corridors free of obstruction with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival. These features are essential to conservation because without them juveniles cannot use the variety of habitats that allow them to avoid high flows, avoid predators, successfully compete, begin the behavioral and physiological changes needed for life in the ocean, and reach the ocean in a timely manner. Similarly, these features are essential for adults because they allow fish in a nonfeeding condition to successfully swim upstream, avoid predators, and reach spawning areas on limited energy stores. PCEs for CCC steelhead that do not occur near the project site include freshwater spawning and rearing, as well as estuarine and marine habitats. Steelhead were not observed during the field survey.

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Though no work will occur in the wetted channel, minor and temporary increases in turbidity may occur. However, steelhead might be killed or injured as a result of the spill of petrochemicals, hydraulic fluids, or solvents into Stevens Creek. The implementation of BMPs will minimize potential impacts on steelhead as a result of increased turbidity and spills of hazardous materials into Stevens Creek. Project-related impacts on Critical Habitat or individual steelhead, would be significant under CEQA (Criteria A and B).

California Red-legged Frog (*Rana draytonii*). Federal Listing Status: Threatened; State Listing Status: Species of Special Concern.

The California red-legged frog inhabits perennial and seasonal freshwater pools, streams, and ponds throughout the Central California Coast Range as well as isolated portions of the western slopes of the Sierra Nevada (Fellers 2005). Its preferred breeding habitat consists of deep perennial pools with emergent vegetation for attaching egg clusters (Fellers 2005), as well as shallow benches to act as nurseries for juveniles (Jennings and Hayes 1994). Non-breeding frogs may be found adjacent to streams and ponds in grasslands and woodlands; and may travel up to 2 miles from their breeding locations across a variety of upland habitats (Bulger et al. 2003, Fellers and Kleeman 2007).

The historic distribution of California red-legged frog extended from the City of Redding in the Central Valley and Point Reyes National Seashore along the coast, south to Baja California, Mexico. The species' current distribution includes isolated locations in the Sierra Nevada and the San Francisco Bay area, and along the central coast (USFWS 2002). The California red-legged frog was listed as threatened in June 1996 (USFWS 1996), based largely on a significant range reduction and continued threats to surviving populations (Miller 1994). Revised Critical Habitat was designated in March 2010 (USFWS 2010). No Critical Habitat for this species overlaps the parcel.

There are two extant occurrences of red-legged frog near the parcel: The first is approximately one mile to the west at Permanente Creek near Rancho San Antonio Open Space Preserve, which is within the potential overland dispersal distance of this species to the project site (i.e., within two miles for red-legged frog). However, the parcel is separated from this occurrence by extensive development and roadways; therefore, red-legged frog is not expected to successfully disperse to the parcel from this occurrence. The second occurrence is approximately four miles south at Picchetti Ranch Open Space Preserve near Stevens Creek Reservoir (CNDDDB 2019). California red-legged frog could potentially disperse downstream along Stevens Creek from Stevens Creek Reservoir to the project site, but there are no known documented occurrences of red-legged frog downstream of Stevens Creek Reservoir (CNDDDB 2019). Additionally, Steven's Creek adjacent to the project site does not provide suitable breeding habitat for red-legged frog. However, Stevens Creek, including the riparian habitat along the banks, provides suitable foraging and refugia habitat for red-legged frog. Thus, due to suitable dispersal and refugia habitat for the red-legged frog adjacent to the project site and the potential for dispersal to the site from a known occurrence of this species, California red-legged frog could be present in the creek and riparian areas adjacent to the project site. California red-legged frog was not observed during the field survey.

Project activities would result in the temporary loss of California red-legged frog foraging and dispersal habitat. Project activities could also potentially result in the loss of individuals (e.g., during construction activities). Due to the rarity of both species, project-related impacts to individual California red-legged frogs would be significant under CEQA (Criteria A). For example,

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- Project activities may result in the injury or mortality of individuals as a result of worker foot traffic or equipment use;
- Disturbance from project activities may disrupt foraging and dispersal behavior of both species;
- Seasonal movements may be temporarily affected during project activities because of disturbance, and substrate vibrations may cause individuals to move out of refugia, exposing them to a greater risk of predation or desiccation;
- Petrochemicals, hydraulic fluids, and solvents that are spilled or leaked from construction vehicles or equipment may kill individuals, although BMPs to control releases of such chemicals make this unlikely;
- Increases in human concentration and activity in the vicinity of suitable habitat may result in an increase in native and non-native predators that would be attracted to trash left at the work site and that would prey opportunistically on California red-legged frog; and
- Movement of project personnel within the site, and between on-site and off-site areas, could spread pathogens such as chytrid fungus, which can impair the health of amphibians.

Implementation of Mitigation Measures 1 through 12, described in Box 12 below, will reduce project impacts on the California red-legged frog due to temporary loss of foraging and dispersal habitat as well as impacts on individuals. With the implementation of these measures the impacts to these species will be less than significant.

Protection Measures
(from CDFW Application)

QUESTION A: Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction

To the extent feasible, the project will be designed and built to avoid and minimize impacts to jurisdictional waters. Ultimately, the project will result in restoration of riparian habitat and a net benefit to jurisdictional waters. The following measures will be included in the project to avoid and minimize impacts to Stevens Creek, water quality, and biological resources.

Protection of Watercourses During Construction

Project work has the potential to impact downstream waters through an increase in sedimentation and decrease in water quality, as well as cumulative impacts resulting in the degradation of overall habitat quality for aquatic plant and wildlife species. In order to avoid and minimize these potential effects, the following mitigation measure will be implemented.

Mitigation Measure 17¹: Avoidance of Waters. All aquatic habitat to be avoided will be shown on project design plans and prior to project activities these areas will be protected with environmentally sensitive area (ESA) fencing. The project will also implement the BMPs incorporated into the project

¹ Mitigation Measures are numbered per their order in the GBRA. Refer to the GBRA for a full list of Mitigation Measures.

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description to prevent increases in peak flow, erosion, or reduction in water quality for downslope waters and wetlands, which will prevent stream downcutting, riparian bank erosion, or other downstream impacts.

Additionally, appropriate sediment and erosion control best management practices (BMPs; e.g., use of silt fencing and/or straw wattles around the perimeter of the construction zone) will be implemented to minimize surface runoff originating from the development and thereby protect water quality of downstream areas. Erosion/sediment control BMPs will be implemented during and following project construction.

Protection of Watercourses After Construction

Urban runoff is typically associated with impervious surfaces, such as rooftops, streets, and other paved areas, where various types of pollutants may build up and eventually be washed into the offsite waters. Urban pollutants entering and potentially polluting the local water system would not be expected to occur as a result of the proposed project. Due to the planting of native vegetation post-construction, the project will decrease the area of impervious surfaces in the project area by 0.008 acres and manage stormwater runoff.

QUESTION B: Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

The following impact avoidance and minimization measures (AMMs) will be implemented as part of the proposed project to avoid and/or minimize impacts to fish, plant, and wildlife resources:

Measures to Protect Fish and Critical Habitat

Implementation of appropriate BMPs and Mitigation Measure 17, described in the response to Question A above, will reduce project impacts on CCC steelhead and Critical Habitat.

Measures to Protect California Red-Legged Frog and Western Pond Turtle

Implementation of Mitigation Measures 1 through 12, below, will reduce project impacts on both the California red-legged frog and western pond turtle due to temporary loss of foraging and dispersal habitat as well as impacts on individuals.

Mitigation Measure 1: Receive Agency Approval of Qualified Biologist. The qualifications of a biologist(s) experienced with the California red-legged frog and other special-status species that have the potential to occur in work area will be submitted to the USFWS and CDFW for review and written approval at least 30 calendar days prior to the start of project activities.

Mitigation Measure 2: Install Wildlife Exclusion Barrier. Prior to any ground disturbance in the work area, an agency-approved temporary wildlife exclusion barrier will be installed along the limits of disturbance. An agency-approved biologist will inspect the area prior to installation of the barrier. The barrier will be designed to allow the California red-legged frog to leave the work area and prevent them from entering the work area. The fence will remain in place until all development activities have been

completed. This barrier will be inspected daily and maintained and repaired as necessary to ensure that it is functional and is not a hazard to California red-legged frogs on the outer side of the barrier.

Mitigation Measure 3: Conduct Preconstruction Survey. No more than 24 hours prior to the date of initial ground disturbance, a pre-construction survey for California red-legged frog and western pond turtle will be conducted within the impact area by an agency-approved biologist. The survey will consist of walking the limits of impact to ascertain the possible presence of the species. The agency-approved biologist will investigate all potential areas that could be used by California red-legged frog and western pond turtle for feeding, sheltering, movement, and other essential behaviors.

Mitigation Measure 4: Worker Environmental Awareness Program. All construction personnel will participate in a worker environmental awareness program. These personnel will be informed about the possible presence of all special-status species and habitats associated with the species identified here to be potentially present in the parcel and that unlawful take of the animal or destruction of its habitat is a violation of FESA. Prior to construction activities, the agency-approved biologist will instruct all construction personnel about (1) the description and status of the species; (2) the importance of their associated habitats; and (3) a list of measures being taken to reduce impacts on these species during project construction and implementation. A fact sheet conveying this information will be prepared for distribution to the construction crew and anyone else who enters the project site.

Mitigation Measure 5: Vegetation Removal. All vegetation within the work area will be completely removed by hand just prior to the initiation of grading to remove cover that might be used by California red-legged frogs. The agency-approved biologist will monitor the vegetation removal.

Mitigation Measure 6: Construction Monitoring. An agency-approved biologist will be onsite during all project activities that may result in take of any special-status species. The agency-approved biologist will be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the project site, otherwise associated with the project, the USFWS, the CDFW, or their designated agents. The agency-approved biologist will have oversight over implementation of all the conservation measures and will have the authority and responsibility to stop project activities if they determine any of the associated requirements are not being fulfilled.

Mitigation Measure 7: Relocation of California Red-legged Frog. If a red-legged frog is found during implementation of Mitigation Measures 2, 3, 5, 6 and 11, an agency-approved biologist will contact the USFWS to determine if moving any of the individuals is appropriate. In making this determination the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, the project proponent will ensure the agency-approved biologist is given sufficient time to move the animals from the impact area before ground disturbance is initiated. Only agency-approved biologists will capture, handle, and move California red-legged frog. The agency-approved biologist will monitor any relocated frog until it is determined that it is not imperiled by predators or other dangers.

Mitigation Measure 8: Relocation of Western Pond Turtle. If a pond turtle is found during implementation of Mitigation Measures 2, 3, 5, 6, and 11, an agency-approved biologist will contact CDFW to determine if moving any of the individuals is appropriate. In making this determination CDFW will consider if an appropriate relocation site exists. If CDFW approves moving animals, the project proponent will ensure the agency-approved biologist is given sufficient time to move the animals from

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the impact area before ground disturbance is initiated. Only agency-approved biologists will capture, handle, and move the western pond turtle. The agency-approved biologist will monitor any relocated turtle until it is determined that it is not imperiled by predators or other dangers.

Mitigation Measure 9: Daytime Restriction. To the maximum extent practicable, nighttime construction will be minimized.

Mitigation Measure 10: Food and Trash. To eliminate an attraction for the predators of the California red-legged frog and western pond turtle, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in solid, closed containers (trash cans) and removed at the end of each working day from the entire construction site.

Mitigation Measure 11: Steep-walled Holes and Trenches. To prevent inadvertent entrapment of the California red-legged frog or western pond turtle, the agency-approved biologist and/or construction foreman/manager will ensure that all excavated, steep-walled holes or trenches more than one foot deep are completely covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the agency-approved biologist. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the agency-approved biologist and/or construction foreman/manager. If at any time a trapped California red-legged frog or western pond turtle is discovered by the agency-approved biologist or anyone else, the steps in Mitigation Measure 7 Relocation of California red-legged frog or Mitigation Measure 8 Relocation of Western Pond Turtle will be followed.

Mitigation Measure 12: Prohibition of Plastic Mono-filament Netting. Plastic mono-filament netting (erosion control matting), rolled erosion control products or similar material will not be used at the project site to prevent trapping California red-legged frogs or other species.

Preconstruction Nesting Bird Surveys and Nest Protection Measures

Implementation of Mitigation Measure 13 would avoid impacts on active nests of birds protected by the MBTA or California Fish and Game Code and reduce impacts to a less than significant level.

Mitigation Measure 13: Pre-Construction/Pre-Disturbance Survey for Nesting Birds. To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season for most birds in Santa Clara County extends from February 1 through September 15.

If it is not possible to schedule construction activities between September 16 and January 31, then preconstruction surveys for nesting birds will be conducted by a qualified biologist to ensure that no nests would be disturbed during project implementation. These surveys will be conducted no more than five days prior to the initiation of any site disturbance activities and equipment mobilization, including vegetation removal, fence installation, etc. If project activities are delayed by more than five days, an additional nesting bird survey will be performed. During this survey, the biologist will inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings) in and immediately adjacent to the impact area for nests. Active nesting is present if a bird is building a nest, sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys will be documented.

If an active nest is found sufficiently close to work areas to be disturbed by these activities, the biologist will determine the extent of a construction-free buffer zone to be established around the nest (typically up to 1000 feet for raptors and up to 250 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation. Within the buffer zone, no site disturbance and mobilization of heavy equipment, including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition, and grading will be permitted until the chicks have fledged. Monitoring will be required to ensure compliance with MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings will be documented.

Measures to Protect Plant Resources

Implementation of the following mitigation measures would avoid and minimize impacts to plant resources.

Mitigation Measure 14: Avoidance of Riparian Habitat. All riparian habitat to be avoided will be shown on project design plans and prior to project activities these areas will be clearly delineated by a CDFW approved biologist. The project will also comply with the project BMPs to prevent erosion or reduction in water quality for downslope waters, which will prevent stream downcutting, riparian bank erosion, or other downstream impacts.

Mitigation Measure 15: Pruning of Riparian Trees. No tree shall be pruned by more than one-third. If project activities require heavier pruning of riparian trees or shrubs, a certified arborist will be retained to direct any necessary pruning to minimize harm to vegetation and ensure rapid regeneration. Pruning will be limited to the minimum area necessary.

Mitigation Measure 16: Riparian Vegetation Removal. The removal of the retaining wall will likely require removal or disturbance of adjacent riparian vegetation. The project mitigates for impacts to riparian habitat through the re-establishment and stabilization of original contours along banks; and seeding with a native seed mix and native tree plantings. The project will also include these measures (see Attachment D: Habitat Mitigation, Monitoring, and Reporting Plan): (1) a planting plan will be developed by a qualified restoration ecologist, (2) The native seed mix will contain native grass and forb species that occur in the project vicinity, (3) Tree plantings will be native trees, such as arroyo willow, Fremont's cottonwood, or western sycamore. Impact areas will be monitored for a minimum of two years and the criteria for success will be 75% vegetation cover and no more than 5% cover of Cal-IPC-rated moderate and high impact weed species (excluding Cal-IPC-rated annual grasses).

Mitigation Measure 18: Tree Protection. Comply with the City of Los Altos tree protection regulations by installing recommended tree protection.