

**COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT**

DATE: March 24, 2021

TO: Planning Commission

FROM: Planning Staff

SUBJECT: EXECUTIVE SUMMARY: Consideration of a Coastal Development Permit for the replacement of an existing vehicle bridge with a new 12-foot wide free spanning bridge over Butano Creek on Spruce Lane which serves 47 and 48 Spruce Lane in the unincorporated area of Pescadero. The project includes the removal of two significant trees. The project is appealable to the California Coastal Commission

County File Number: PLN 2020-00155

PROPOSAL

The applicants propose to replace an existing vehicle bridge, crossing Butano Creek. The County Fire Marshall has determined that the bridge is unsafe for use and must be replaced in order to maintain routine and emergency access to 47 and 48 Spruce Lane. The proposed project will remove the existing deteriorated bridge deck and exposed piers, construct two new retaining walls (on either side of the bridge), relocate a power pole and propane tank, and reconstruct the bridge. The project also includes the minor realignment of a section of Spruce Lane and the removal of one 42-inch diameter California nutmeg tree and one 18-inch diameter ornamental tree. This project is appealable to the California Coastal Commission.

RECOMMENDATION

That the Planning Commission approve the Coastal Development Permit, County File Number PLN 2020-00155, by making the required findings and adopting the conditions of approval listed in Attachment A.

SUMMARY

The project site is relatively flat and the area is developed with single-family residential development. The existing bridge serves as the routine and emergency access to the properties located at 47 and 48 Spruce Lane.

Replacement of the bridge will result in the temporary disturbance of approximately 1.295 sq. ft. of riparian woodland to accommodate the reconfigured Spruce Lane, the

new bridge, and new fire truck turnaround. Additionally, one 42-inch diameter California nutmeg tree and one 18-inch multi-trunked ornamental tree located adjacent to Spruce lane are proposed for removal in order to accommodate the road reconfiguration.

The project does not propose any work within the wetted channel as the replacement bridge will be free-spanning over the creek and will be constructed on the top-of-bank, outside of the wetted channel and above the ordinary high-water line. Additionally, the project proposes to install an impermeable tarp under the existing bridge to capture any debris during demolition or construction before it enters the channel.

Furthermore, the applicant has obtained a Streambed Alteration Agreement with the Department of Fish and Wildlife and will obtain a 401 Water Quality Certification from the Regional Water Quality Control Board.

Staff has completed a review of the project and all the submitted documents and reports in order to determine the project's conformity to applicable policies. The project was found to be consistent with the County's General Plan and Local Coastal Program. There is the potential for impacts to special status species and protective measures have been proposed by the applicant's biologist and have been incorporated as conditions of approval to ensure that impacts are less than significant. The project is otherwise compliant with the policies of the soil resources, visual quality, rural land use, and natural hazards components. For the purposes of compliance with the California Environmental Quality Act (CEQA), the San Mateo Resource Conservation District (RCD) has been working with the applicant to complete the project. RCD has assumed the role of lead agency. As such, the District filed a notice of exemption citing that the project is a replacement of an existing structure or facility, where the new structure will be located on the same site and serve the same purpose. The exemption notes that the purpose of the project is to replace an existing, unserviceable bridge with a new bridge on the same site to restore vehicle access for neighbors and emergency vehicles.

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**COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT**

DATE: March 24, 2021

TO: Planning Commission

FROM: Planning Staff

SUBJECT: Consideration of a Coastal Development Permit, pursuant to Section 6328 of the County Zoning Regulations, for the replacement of an existing vehicle bridge with a new 12-foot wide free spanning bridge over Butano Creek on Spruce Lane which serves 47 and 48 Spruce Lane in the unincorporated area of Pescadero. The project includes the removal of two significant trees. This project is appealable to the California Coastal Commission.

County File Number: PLN 2020-00155

PROPOSAL

The applicants propose to replace an existing vehicle bridge, crossing Butano Creek. The County Fire Marshall has determined that the bridge is unsafe for use and must be replaced in order to maintain routine and emergency access to 47 and 48 Spruce Lane. The proposed project will remove the existing deteriorated bridge deck and exposed piers, construct two new retaining walls (on either side of the bridge), relocate a power pole and propane tank, and reconstruct the bridge. The project also includes the minor realignment of a section of Spruce Lane and the removal of one 42-inch diameter California nutmeg tree and one 18-inch diameter ornamental tree. This project is appealable to the California Coastal Commission.

RECOMMENDATION

That the Planning Commission approve the Coastal Development Permit, County File Number PLN 2020-00155, by making the required findings and adopting the conditions of approval listed in Attachment A.

BACKGROUND

Report Prepared By: Angela Chavez, Project Planner, Email Achavez@smcgov.org

Applicants: Catherine Peery and Victoria Johnson

Owner: Catherine Peery and 48 Spruce LLC

Location: 47 and 48 Spruce Lane, Pescadero

APNs: 089-031-170 and 089-031-020

Size: 35,700 sq. ft. (089-031-170) and 34,680 sq. ft. (089-031-020)

Existing Zoning: R-1/S-10/CD (Single-Family Residential/20,000 sq. ft. minimum parcel size/ Coastal Development District)

General Plan Designation: Residential, Low-Density.

Local Coastal Plan Designation: Low-Density Residential

Sphere-of-Influence: None

Williamson Act: Parcels are not covered by a Williamson Act contract.

Existing Land Use: Residential

Water Supply: Parcels are served by Butano Canyon Mutual Water Company. No changes to this service provider are proposed.

Sewage Disposal: Each parcel is served by an individual wastewater treatment system and no changes to the existing systems are proposed.

Flood Zone: The majority of both the parcels are located in Zone A. Areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown. The remaining portions of the parcels are located in Zone X (Areas determined to be outside the 0.2% annual chance floodplain). FEMA Community Panel, 06081C0455E, effective October 16, 2012.

Environmental Evaluation: The San Mateo County Resource Conservation District, as lead agency, has determined this project to be categorically exempt from the California Environmental Quality Act ("CEQA") under CEQA Guidelines Section 15302 (Class 2, replacement or reconstruction of existing structures and facilities with substantially the same purpose and capacity) and has prepared and filed a Notice of Exemption. County staff has reviewed the project and concurs with this determination.

Setting: The project site is located approximately 1.77 miles from the intersection of Canyon Road and Cloverdale Road in the low-density residential community of Butano Canyon. The subject parcels are forested and located on the southern edge of the R-1/S-10 zoning district. Butano Creek bisects Spruce Lane and the runs along the southeast border of the project parcels. Spruce Lane is a private road which includes the bridge that is to be replaced. The parcels to the northwest are undeveloped and

zoned TPZ-CZ/CD (Timber Preserve-Coastal Zone/ Coastal Development District). The lands to the south of the project site are a mix of undeveloped parcels and the Butano Creek Girl Scout Camp which are zoned PAD/CD (Planned Agriculture District/Coastal District)

DISCUSSION

A. KEY ISSUES

1. Conformity with the General Plan

Staff has reviewed and determined that the project complies with all applicable General Plan policies, including the following:

a. Vegetative, Water, Fish, and Wildlife Resources

Policy 1.23 (Regulate Development to Protect Vegetative, Water, Fish and Wildlife Resources), Policy 1.24 (Regulate Location, Density, and Design of development to Protect Vegetative Water, Fish, and Wildlife Resources), Policy 1.26 (Protect Water Resources), Policy 1.27 (Protect Fish and Wildlife Resources), and the applicable Sensitive Habitats Policies, including Policy 1.28 (Regulate Development to Protect Sensitive Habitats), Policy 1.30 (Uses Permitted in Sensitive Habitats), and Policy 1.32 (Regulate the Location, Siting, and Design of Development in Sensitive Habitats), which seek to regulate land uses and development to prevent, or mitigate to the extent possible, significant adverse impacts on vegetative, water, fish, and wildlife resources.

The project includes the replacement of the existing bridge that crosses a segment of Butano Creek. The bridge site provides the only access to the residences on the north side of this segment of Butano Creek. Replacement of the bridge will restore routine and emergency access to 47 and 48 Spruce Lane. New bridge supports (i.e concrete walls and drilled piers) will be constructed in the vicinity of the existing supports and above the ordinary high-water line to minimize impacts to the creek. The new bridge surface is proposed to be approximately 10 feet above the 100-year base flood elevation.

According to the Biological Resources Evaluation prepared for this project by the San Mateo Resource Conservation District, dated November 19, 2019, the project area contains redwood-willow-alder riparian woodland on either side of the bridge. Construction is proposed to take place in such a way that will minimize disturbance to the surrounding area, including utilizing cranes to reach into bank areas and improving existing foundational features. Additionally,

activities will take place outside of any “waters of the United States” as defined by the ordinary high-water mark by the United States Army Corps of Engineers and the Environmental Protection Agency. Further, the evaluation provides additional protective measures to ensure impacts to the riparian area is minimal. The protective measures have been incorporated as Condition of Approval Number 11 in Attachment A.

According to the Resource Conservation District, the California red-legged frog (CRLF) and the San Francisco garter snake (SFGS) which are both federally listed species, have been confirmed within a mile radius of the project site. However, these observations were made in grassland and/or shrubland habitat surrounding wetlands and ponds. While California red-legged frog can occur in forested areas around perennial or ephemeral water sources, water levels and speed during the breeding season of November to April would not provide low flow streams needed for breeding. Therefore, while it is possible for California red-legged frog to inhabit the project site, it is unlikely that breeding would occur. Additionally, the coastal forest surrounding the project site may provide habitat for the California giant salamander which is identified in the report as a sensitive and locally rare wildlife species. The evaluation also notes the project site has the potential to support the Marbled Murrelet. The Marbled Murrelet has been identified on the CNDDDB list as having nesting behavior within a mile of the project. The project area contains mature redwood which are not suitable for nesting due to the lack of adequate foliage cover on large diameter branches. The evaluation notes that Marbled Murrelet prefer Douglas fir trees. However, no Douglas Fir trees were identified within the project area. It is highly likely that Marbled Murrelet occupies the area surrounding the project and may use Butano creek as a flight corridor to nests. Protective measures, including appropriate scheduling of demolition, grading, and construction activities and/or pre-construction surveys to avoid any potential impacts to CRLF, SFGS, the California giant salamander and the Marbled Murrelet, have been incorporated into project conditions of approval in Attachment A.

Furthermore, the project site is within a designated Critical Habitat for Central California Coast steelhead trout. The evaluation notes that Steelhead trout is listed on the CNDDDB and a 4-inch smolt was visually confirmed during the 08/22/2019 survey at the project location. The creek that bisects the project provides ample habitat in the form of riffles and small ponds suitable for breeding and juvenile development. The project proposes to install erosion control measures above the 100-year water surface elevation to avoid disturbance or impacts to the creek. Otherwise, the project does not propose any work within

the wetted channel as the replacement bridge will be free-spanning over the creek and will be constructed on the top-of-bank, outside of the wetted channel and above the ordinary high-water line so as to not impact the channel.

The applicant is in the process of obtaining a Streambed Alteration Agreement with the Department of Fish and Wildlife and a 401 Water Quality Certification from the Regional Water Quality Control Board. Additionally, protective measures from the biological assessment have been incorporated into the recommended conditions of approval in Attachment A that include Best Management Practices to minimize construction-generated sediments from entering the creek and adjacent riparian woodland.

b. Soil Resources

Policy 2.17 (*Regulate Development to Minimize Soil Erosion and Sedimentation*), and Policy 2.23 (*Regulate Excavation, Grading, Filling, and Land Clearing Activities Against Accelerated Soil Erosion*) seek to regulate development in a manner which minimizes soil erosion and sedimentation.

The project proposes 60 cubic yards (c.y.) of grading, including 30 c.y. of cut and 30 c.y. of fill. The project site is relatively flat; however, since the project will cross a creek, there is an increased potential for erosion and sedimentation from demolition, grading, and construction activities to impact the creek. The applicant has developed an erosion control plan that includes boundary and silt fencing around the perimeter of construction areas and impermeable tarps placed under the existing bridge to capture any demolition debris from entering the creek. Furthermore, the project proposes Best Management Practices that include limiting construction to periods of dry weather, prohibiting silt laden runoff from entering the creek, long-term erosion control devices for site stabilization, designated staging and storage areas for equipment and materials away from the creek channel, and daily debris and waste clean-up.

c. Visual Quality

Policy 4.25 (*Location of Structures*), Policy 4.26 (*Earthwork Operations*), Policy 4.27 (*Water Bodies*), and Policy 4.61 (*Roads and Driveways*) seek to protect and enhance the visual quality of scenic corridors by managing the location and appearance of structural development; minimize grading activities; discourage adverse impacts to streams and riparian habitat; and ensure that road improvements are sensitive to the visual quality and character of scenic corridors.

The project will have minimal visual impacts on the scenic quality of the area as the new replacement bridge will be in the same location as the existing bridge. The Spruce Lane realignment is minor but does result in the removal of one 42-inch California nutmeg tree and one 18-inch multitrunked ornamental tree. However, given the tree cover in the area the removal of these two trees will not result in any significant visual impacts. Areas on both sides of the bridge will be impacted by the project. The project proposes to reseed and mulch areas adjacent to the creek to address the disturbance. Protective measures from the biological assessment have been included as project conditions of approval ensuring that removed trees and riparian habitat will be adequately compensated. The project site is not visible from any viewpoint accessible to the general public. Also, see staff's discussion in Section A.1.a. and A.1.b. above.

d. Rural Land Use

Policy 9.21 (*Development Standards for Rural Residential Subdivision*) and Policy 9.45 (*Development Standards for Very Low-Density Residential Uses*) calls for proposed development to consider potential impacts of development on the visual, timber, agricultural and other resources contained in the rural lands immediately surrounding the area and the compatibility with the existing development pattern with the area. The later policy encourages the buffering of residential uses from surrounding resource areas by means of physical barriers, large parcels, distance, visual screening or other appropriate mechanisms.

The project site is located within an established rural residential subdivision and proposes to replace an existing bridge in the same location as the original. The project does not introduce a new use but re-establishes routine and emergency access to the project site. The improvements are limited to within the existing residential area and pose no impacts to the adjacent resource areas. The proposed project does not alter the established development pattern of the area or result in significant visual impacts.

e. Natural Hazards

Policy 15.20 (*Review Criteria for Locating Development in Geotechnical Hazard Areas*), Policy 15.21 (*Requirement for Detailed Geotechnical Investigations*), and Policy 15.46 (*Appropriate Land Uses and Densities in Flooding Hazard Areas*) seek to avoid siting structures in areas where they are jeopardized by geotechnical hazards, unless no alternative site is available and it is designed to maximize safety and reduce hazardous conditions; require a

geotechnical investigation for public or private development projects; and consider rural land uses that do not expose significant numbers of people to flooding hazards, such as agriculture, to be the most appropriate for flooding hazard areas.

According to a Geotechnical Investigation Report prepared by Sigma Prime Geosciences, Inc., the project site is located in an area of geotechnical hazard for seismic shaking, differential compaction, slope stability, and liquefaction. Additionally, the project site is primarily located within Flood Zone A (1% annual chance of flooding) according to the FEMA Flood Insurance Rate Map.

The project involves the replacement of an existing bridge on private property that is limited to providing private access to residential development on the other side of Butano Creek. The bridge will be required to comply with applicable California Building Code standards and design measures as recommended by the project Geotechnical Engineer and be approved by the County's Geotechnical Section. Furthermore, the project has been designed such that the bridge decking and all supporting abutments and foundations will be located above top-of-bank. The bridge decking is proposed to be located 10 feet above the 100-year base flood elevation. As part of the building permit review process, a Federal Emergency Management Agency (FEMA) "No-Rise" Certificate and Flood Elevation Certificate will be required to ensure that the project will not impact base flood elevations, floodway elevations, or floodway widths.

2. Conformity with the Local Coastal Program

Staff has reviewed and determined that the project is in conformance with all applicable components of the Local Coastal Program (LCP), including the following:

a. Locating and Planning New Development

Policy 1.1 (*Coastal Development Permits*), Policy 1.2 (*Definition of Development*), and Policy 1.8 (*Land Uses and Development Densities in Rural Areas*) define development to include the placement of any solid material or structure on land, including construction, reconstruction, demolition, or alteration of the size of any structure; require a Coastal Development Permit (CDP) for all such development; and allow new development in rural areas if it is demonstrated that the development will not have significant adverse impacts on coastal resources or diminish the ability to keep all prime

agricultural land and other lands suitable for agriculture in agricultural production.

The project includes replacement of a bridge and realignment of a small portion of a private road over a segment of Butano Creek. The project falls under the LCP's definition of development and therefore, requires a CDP, which the applicant is seeking as part of the subject application. As proposed and conditioned, the project will not have a significant adverse impact on coastal resources. Furthermore, the project is proposed within an area (existing creek crossing and roadways) which has historically provided access to the subject parcels. The proposed replacement bridge does not introduce a new or intensified use but reestablishes routine and emergency access to the subject parcels. The provision of access is consistent with the rural residential development of the area.

b. Sensitive Habitats

Policy 7.3 (*Protection of Sensitive Habitats*), Policy 7.4 (*Permitted Uses in Sensitive Habitats*), Policy 7.5 (*Permit Conditions*), Policy 7.9 (*Permitted Uses in Riparian Corridors*), and Policy 7.10 (*Performance Standards in Riparian Corridors*) prohibit land use or development which would have significant adverse impacts on sensitive habitat areas; permit only resource dependent uses in sensitive habitats as specified in Policy 7.9; require the applicant to demonstrate that any potentially significant impacts on sensitive habitat will be mitigated; permit, when no feasible alternative exists, bridges when supports are not in significant conflict with corridor resources; and require development to comply with applicable performance standards set forth in Policy 7.10, including: minimize removal of vegetation; minimize land exposure during construction and use Best Management Practices to protect critical areas; minimize erosion, sedimentation, and runoff; use of native or non-invasive plant species when replanting; provide sufficient passage for native and anadromous fish; avoid interference with surface waterflows; and minimize alteration of natural streams.

The project area contains willow-alder riparian woodland along both banks of Butano Creek, which will be impacted by the project. Approximately 1,295 sq. ft. of area adjacent to the creek will be impacted to accommodate the new bridge and adjacent access road improvements. The replacement bridge has been designed such that the decking and all supporting abutments and foundations will be located above top-of-bank. The project site provides routine and

emergency access to the subject properties on the opposite side of Butano Creek. Replacement of the bridge in the same location, rather than establishing a new creek crossing location, will limit project disturbance to an area that is already predominantly disturbed by the existing development. As concluded in the Biological Impact Assessment, prepared by the San Mateo Resource Conservation District, the project, as proposed and mitigated, will not result in significant adverse impacts to the riparian corridor habitat. Protective measures from the biological evaluation have been included as conditions of approval. Furthermore, see staff's discussion in Section A.1.a. and A.1.b. above.

c. Visual Resources

Policy 8.5 (*Location of Development*), Policy 8.6 (*Streams, Wetlands, and Estuaries*), Policy 8.17 (*Alteration of Landforms; Road and Grading*), and Policy 8.18 (*Development Design*), require new development to be located on a portion of the parcel where the development is least visible from scenic roads, least likely to significantly impact views from public viewpoints, and is consistent with all other LCP requirements, best preserves the visual and open space qualities of the parcel overall; prohibit structural development which will adversely affect the visual quality of streams and associated riparian habitat; seek to minimize changes to landforms due to grading.

The project site is not located in a scenic corridor and is not visible from any public scenic viewpoint. The project site is relatively flat and will not result in visual impacts as it is designed to be only slightly above existing grade and creek top-of-bank and does not introduce any new significant visible features. Minimal grading is necessary for the bridge supports and widening of the access road on both sides of the bridge.

d. Hazards

Policy 9.9 (*Regulation of Development in Floodplains*) requires development located within a flood hazard area to comply with the standards, limitations, and controls contained in Chapter 35.5 of the County Ordinance Code and the applicable Building Regulations. See staff's discussion in Section A.1.e. above for project compliance.

B. ENVIRONMENTAL REVIEW

The San Mateo County Resource Conservation District, as lead agency, has determined this project to be Categorical Exempt from the California Environmental Quality Act ("CEQA") under CEQA Guidelines Section 15302 (Class 2, replacement or reconstruction of existing structures and facilities with substantially the same purpose and capacity) and has prepared and filed a Notice of Exemption. County staff has reviewed the project and concurs with this determination.

C. REVIEWING AGENCIES

Building Inspection Section
Drainage Section
Geotechnical Section
CAL-Fire

ATTACHMENTS

- A. Recommended Findings and Conditions of Approval
- B. Vicinity Map
- C. Project Plans
- D. Biological Resources Evaluation, prepared by San Mateo Resource Conservation District, dated November 19, 2019
- E. RCD CEQA Exemption

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County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2020-00155 Hearing Date: March 24, 2021

Prepared By: Angela Chavez,
Project Planner

For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Environmental Review, find:

1. That the Commission, acting as a responsible agency, has reviewed and considered the Notice of Exemption, prepared by the San Mateo Resource Conservation District as Lead Agency, and has determined this project to be categorically exempt from the California Environmental Quality Act ("CEQA") under CEQA Guidelines Section 15302 (Class 2, replacement or reconstruction with substantially the same purpose and capacity).

For the Coastal Development Permit, Find:

2. That the project, as described in the application and accompanying materials required by Section 6328.7 and as conditioned in accordance with Section 6328.14, conforms to the plans, policies, requirements, and standards of the San Mateo County Local Coastal Program (LCP), specifically in regard to Locating and Planning New Development, Sensitive Habitats, Visual Resources, and Hazards Component of the LCP. Staff has reviewed the plans and materials and determined that the project, as proposed and conditioned, will not pose any adverse significant impacts on coastal resources, sensitive habitats, or visual resources in the area. Furthermore, the project will be required to comply with Building Code standards to ensure minimal risk from natural hazards.
3. That the project is not subject to the public access and public recreation policies of Chapter 3 of the Coastal Act of 1976 (commencing with Section 30200 of the Public Resources Code) since the project is not located between the nearest public road and the sea, or the shoreline of the Pescadero Marsh.

4. That the project conforms to specific findings required by policies of the San Mateo County LCP with regard to Locating and Planning New Development, Sensitive Habitats, Visual Resources, and Hazards Component, as discussed in detail in the Staff Report dated March 24, 2021.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. This approval applies only to the proposal as described in this report and materials submitted for review and approval by the Planning Commission at the March 24, 2021 meeting. Minor revisions or modifications may be approved by the Community Development Director if they are consistent with the intent of and in substantial conformance with this approval.
2. This permit shall be valid for one (1) year from the date of final approval in which time a valid building permit shall be issued and a completed inspection (to the satisfaction of the Building Inspection Section) shall have occurred within 180 days of its issuance. Any extension of the permits shall require submittal of an application for permit extension and payment of applicable extension fees sixty (60) days prior to the expiration date.
3. A total of 2 trees (42-inch dbh California nutmeg tree and 18-inch dbh multi-trunked ornamental tree) are approved for removal. Any additional trees to be removed shall require review by the Community Development Director and may be subject to a public hearing before the Planning Commission for approval.
4. The site is considered a Construction Stormwater Regulated Site (SWRS). Any grading activities conducted during the wet weather season (October 1 to April 30) will require monthly erosion and sediment control inspections by the Building Inspection Section, as well as prior authorization from the Community Development Director, to conduct grading during the wet weather season.
5. The applicant shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including, but not limited to, the following:
 - a. Delineation with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses within the vicinity of areas to be disturbed by construction and/or grading.
 - b. Protection of adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.

- c. Performing clearing and earth moving activities only during dry weather.
 - d. Stabilization of all denuded areas and maintenance of erosion control measures continuously between October 1 and April 30.
 - e. Storage, handling, and disposal of construction materials and wastes properly, so as to prevent their contact with stormwater.
 - f. Control and prevention of the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.
 - g. Use of sediment controls or filtration to remove sediment when dewatering site and obtain all necessary permits.
 - h. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
 - i. Limiting and timing application of pesticides and fertilizers to prevent polluted runoff.
 - j. Limiting construction access routes and stabilization of designated access points.
 - k. Avoiding tracking dirt or other materials off-site; cleaning off-site paved areas and sidewalks using dry sweeping methods.
 - l. Additional Best Management Practices in addition to those shown on the plans may be required by the Building Inspector to maintain effective stormwater management during construction activities. Any water leaving the site shall be clear and running slowly at all times.
6. Prior to site construction, coordinate with all state agencies to obtain applicable jurisdictional permits for the project, including the California Department of Fish and Wildlife (CDFW) to obtain a Streambed Alteration Agreement (SAA) and the Regional Water Quality Control Board (RWQCB) to obtain a 401 Water Quality Certification. Prior to the issuance of a building permit for this project, the applicant shall submit evidence of a SAA and a 401 Water Quality Certification to the Current Planning Section.

7. The following Best Management Practices shall be implemented:
 - a. The contractor shall only use the approved access routes shown on the plans. No persons, equipment, or material shall be allowed outside the designated limits of disturbance.
 - b. The stockpile areas shall be fully enclosed with silt fence and boundary fence. The engineer shall direct fence placement to avoid existing, native vegetation.
 - c. All equipment shall be stored, maintained, and refueled in a designated portion of the stockpile area. The contractor shall adhere to a spill prevention plan, to be prepared by the contractor and submitted for review by the engineer.
 - d. The contractor shall immediately stop all operations and devote all on-site personnel to the containment and clean-up of any fuel, fluid, or oil spill, to the satisfaction of the engineer.
 - e. All excess soil shall be disposed of off-site or at locations designated on plans and approved by the County of San Mateo.
 - f. Stationary equipment such as motors, pumps, generators, compressors, and welders, located adjacent to the creek, shall be positioned over drip-pans.
 - g. Any equipment or vehicles driven and/or operated adjacent to the creek areas shall be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat. Vehicles must be moved away from the stream prior to refueling and lubrication.
 - h. Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into State waters or its tributaries shall be contained in water tight containers or removed from the project site.
8. To prevent debris from falling into Butano Creek during demolition of the existing bridge or installation of the new bridge, the contractor will install and maintain a continuous, impermeable tarp under the bridge. The tarp shall extend beyond the bridge deck a minimum of 5 feet on each side and conform to the abutments on each side of the creek. The tarp shall be positioned and maintained to prevent all debris from falling into the creek. Care shall be taken during removal of the tarp to prevent caught debris from entering Butano Creek.

9. To prevent sediment or debris from falling into Butano Creek during removal of the existing bridge, removal of the existing abutments, installation of the new abutments, and backfilling of the new abutments, the contractor shall install temporary silt fences. The silt fences will run parallel to the channel and be installed outside of flowing water, above ordinary high water. The silt fences will be periodically inspected, and sediment will be hauled off, by hand, to maintain their effectiveness. The silt fences will be removed, by hand, following construction.
10. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m., weekdays and 9:00 a.m. to 5 p.m. Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo County Ordinance Code Section 4.88.360).
11. The applicant shall implement the following Protective Measures throughout the duration of the project:
 - A. Riparian and Aquatic Habitat Protective Measures
 1. Construction activities nearby or within aquatic habitats should be limited to the maximum extent feasible.
 2. Worker environmental awareness training shall be conducted for all construction crews and contractors. The education training shall be conducted prior to starting work on the project and upon the arrival of any new worker. The training will include a brief review of special-status species, sensitive habitats, and other sensitive resources that may exist in the project area. It will include the life history of each relevant special-status species, field identification, habitat requirements, locations of sensitive biological resources, and a description of the legal status and protection for each species. The training will include materials concerning the following topics: sensitive resources, resource avoidance, permit conditions, and possible consequences for violations of State or Federal environmental laws. The training will cover the maintenance activity's conservation measures, environmental permits, and regulatory compliance.
 3. Prior to the start of construction within areas containing sensitive biological resources, the biological monitor will delineate and conspicuously flag all sensitive aquatic resources to prevent impacts to these resources. If required, setback or non-disturbance buffer zones around these resources should be established and monitored by a biologist.

4. Minimize removal of vegetation.
5. Minimize land exposure during construction and use mulching or tarping to protect critical areas.
6. Minimize erosion sedimentation and runoff by appropriately grading modified areas.
7. If significantly impacted, replant to protect critical areas and use adapted native or non-invasive exotic species when replanting.
8. Minimize adverse effects of wastewater discharges and entrainment.
9. Prevent depletion of groundwater supplies and substantial interference with surface and subsurface waterflows.
10. Maintain natural vegetation buffer areas that protect riparian habitats to the maximum extent possible.
11. Minimize alteration of natural stream below the 100-year water surface elevation.
12. Installation of tarp or other material barrier to exclude debris deposition into the creek.
13. Erosion control measures such as installation of silt fences above the 100-year water surface elevation will be implemented as necessary to ensure that sediment or other contaminants do not reach surface water bodies.
14. Utilization of crane and/or excavator to dismantle existing bridge to reduce impacts to the bank of the creek and minimize impacts to riparian habitat.
15. Best Management Practices (BMPs) outlined in Condition of Approval 12 of this report.

B. Marbled Murrelet Protective Measures

1. Potential impacts can be minimized through working outside of the Marbled Murrelet nesting season (March 25 – September 15).
2. If work should occur within the nesting season, noise-inducing work should occur outside of the Marbled Murrelet's core breeding season (April 1 -August 1). During the Marbled Murrelet's late breeding season (August 2 -September 15), it is recommended that noise-

inducing activities be limited to the daytime hours from two hours after sunrise to two hours before sunset (avoiding the time period at night and within two hours of sunrise and sunset when Marbled Murrelets are most sensitive to noise disturbance). These recommendations are consistent with a 2017 USFWS Biological Opinion prepared for the California Department of Parks and Recreation for Marbled Murrelets in Muir Woods and for a similar bridge project downstream of Butano Creek of the current project.

3. To reduce the presence of corvid predators, any food trash must be properly contained or removed from the work site.

C. Steelhead Protective Measures

1. Work will occur above the 100-year water surface elevation as to not disturb or impact the creek.
2. Erosion control materials will be installed above the 100-year water surface elevation to avoid impact to aquatic wildlife.
3. Work in streams is restricted to the period of June 15 through November 1, or the first significant rainfall, whichever comes first. This is to prevent impacts to immigrating and emigrating salmonids.
4. BMPs listed in condition of approval number 16 will additionally ensure steelhead and its habitat is not affected from project construction activities.

D. California Red-Legged Frog Protective Measures

1. Biological monitors shall be on site during initial ground disturbing activities to avoid impacts to California red-legged frog and other amphibians and reptiles.
2. A biological monitor shall be on call at all times during construction in the event a California red-legged frog is discovered, or for any other assistance relating to the avoidance and minimization measures. Biological monitors have the ability to stop construction if a special status amphibian is seen in the construction zone.
3. USFWS-approved biologist(s) who handle California red-legged frogs shall ensure that their activities do not transmit diseases. To ensure that diseases are not conveyed between work sites by the USFWS approved biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force shall be followed at all times (<http://www.fws.gov/ventura/docs/species/protocols/DAFTA.pdf>).

4. A survey of the project site shall occur by a USFWS-approved biologist(s) within 48 hours prior to start of project activities for California red-legged frog and California giant salamander. Visual surveys will be conducted along the creek and bank sides within least 20 feet surrounding the impacted area. If California red-legged frogs or California giant salamanders are found within the project area, those individuals who are likely to be killed or injured during work activities will be allowed enough time to move from the site before activities resume. Only USFWS-approved biologists will participate in handling or capturing activities of California red-legged frogs. Individuals moved will be moved downstream to a predetermined area of the project area in similar habitat to where it was found.
5. If special status species amphibians are found within the work site during construction, all work will stop that could potentially harm the animal until the animal leaves the construction site or is relocated by a qualified biologist.

E. Migratory Birds Protective Measures

1. Work should be conducted outside of the nesting or breeding season to minimize impacts. This area has potential for migratory bird nesting. No surveys will be needed outside of the nesting season (February 1-August 10). Nesting season is based on species that have been identified as possibly present on the project site.
2. If activities will be conducted during the nesting season, a nesting bird survey will be conducted no more than two weeks prior to construction activities, including staging, tree removal, pruning or surface disturbing activities. If no nests are found within the impact zone, no further actions are needed.
3. If active nests are found (eggs or fledglings present) within 300 feet for raptor species or 100 feet for all other bird species, non-disturbance buffers shall be established at a sufficient distance to minimize disturbance based on tolerance for disturbance location, topography, cover, species and noise, and the type of disturbance. Work within the non-disturbance zone will be rescheduled for a date after the young have fledged.
4. If rescheduling of work is infeasible and non-disturbance buffers cannot be maintained, a qualified biologist should be on site to monitor active nests for signs of disturbance. If it is determined that project-related activities are resulting in nest disturbance, work should cease immediately and CDFW and the USFWS Migratory Bird Permit Office should be contacted for further guidance.

5. Tree removal, pruning, grubbing, grading, or other construction activities conducted outside of the breeding season (i.e., August 11 to March 31) do not require preconstruction surveys.
12. The applicant shall implement the following measures throughout the duration of the project:
 - A. BMP - 1 Erosion Control
 1. Erosion control measures such as installation of silt fences above the 100-year water surface elevation will be implemented as necessary to ensure that sediment or other contaminants do not reach surface water bodies.
 2. No erosion control materials that have natural or plastic monofilament type netting will be used during construction. All materials will be approved by a qualified biologist prior to use.
 3. Bare soil surfaces resulting from construction activities shall be covered with suitable erosion controls (fabrics, hydroseeding, mulch, etc.) within 12 hours of a break in work unless project activities will resume within 7 days.
 4. Earthwork will be completed as quickly as possible, and site restoration will occur immediately following use.
 - B. BMP - 2 Staging and Stockpiling Materials
 1. Staging, access, and parking areas will be located outside of sensitive habitats to the extent feasible.
 2. Areas of disturbance will be limited to the smallest footprint necessary.
 3. All construction equipment that may leak petroleum products, fuels, lubricants, or other hazardous materials will be staged in upland areas, away from sensitive natural communities or habitats.
 4. Any large wood or topsoil displaced by project activities will be stockpiled for use during site restoration. Native vegetation displaced by project activities will be stockpiled if it would be useful during site restoration.
 5. All construction related items, including equipment, stockpiled material, temporary erosion control treatments, and trash will be removed within 24 hours of project completion. All residual soils

and/or materials will be cleared from the project site or placed in designated locations that have been cleared by biologists.

6. Building materials and other construction related materials, including chemicals, will not be stockpiled or stored where they could spill into water bodies or storm drains, or where they could cover aquatic or riparian vegetation.

C. BMP - 3 Equipment and Vehicle Maintenance and Cleaning

1. Spill cleanup materials (rags, absorbents, etc.) will be stockpiled at the construction site where they are readily accessible.
2. All equipment will be maintained free of petroleum leaks. All vehicles operated within 250 feet of waterways will be inspected daily for leaks. Use drip pans to catch leaks until repairs are made. Repair leaks before leaving the staging areas.
3. Vehicle and equipment maintenance activities will be conducted in a designated area to prevent inadvertent fluid spills.
4. Secondary containment such as drain pan or drop cloth to catch spills or leaks will be used when removing or changing fluids. Fluids will be stored in appropriate containers with covers and properly recycled or disposed of offsite.
5. Clean up spills or leaks immediately and dispose of cleanup materials properly.
6. Sweep up spilled dry materials immediately. Do not wash them away with water or bury them. Use dry clean methods (absorbent materials, rags, etc.). Do not use water to wash away spilled materials.
7. Report significant spills immediately. It is required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, 800/852-7550 (24 hours).
8. Vehicles will not be washed on-site.

D. BMP - 4 Hazardous Material Management

- a. Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state, and federal regulations.

- b. Store hazardous materials and wastes in watertight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- c. Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- d. Arrange for appropriate disposal of all hazardous wastes.
- e. Cover waste disposal containers securely with tarps at the end of every workday and during wet weather.
- f. Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- g. Clean or replace portable toilets and inspect them frequently for leaks and spills.
- h. Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.).
- i. Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

E. BMP - 5 Fire Prevention

- 1. All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors.
- 2. During the high fire danger period (April 1–December 1), work crews will have appropriate fire suppression equipment available at the work site.
- 3. On days when the fire danger is high, flammable materials will be kept at least 10 feet away from any equipment that could produce a spark, fire, or flame.
- 4. On days when the fire danger is high, portable tools powered by gasoline fueled internal combustion engines will not be used within 25 feet of any flammable materials unless at least one round-point shovel or fire extinguisher is within immediate reach of the work crew (no more than 25 feet away from the work area).

13. Prior to final approval of the building permit for the project, the applicant shall provide evidence of implementation of a riparian revegetation program, prepared by a qualified biologist or restoration specialist, which provides compensation for temporary and permanent impacts to the riparian woodland. At a minimum, provide 1:1 habitat replacement for temporary impacts to the riparian woodland and 3:1 habitat replacement for permanent impacts to riparian woodland. For temporary impacted areas, implement erosion control after construction and allow native riparian vegetation, trimmed for bridge placement, to re-grow, as long as new growth does not impinge on the bridge function or traffic movement. The riparian revegetation program and plan(s) shall be submitted to the County of San Mateo Planning and Building Department for review and approval prior to the issuance of a grading or building permit for the project and shall include maintenance and monitoring for a minimum of 5 years from the initial plantings. Monitor plant cover, plant survival, plant health and vigor, and plant height on a yearly basis. Revegetation should achieve 80% survival of all installed plants each year for 5 years and 60% woody plant cover by year 5. Maintain the compensation site to less than 5% cover by invasive, nonnative plant species each year. Remedial measures shall be implemented if yearly success criteria are not met, which may include replanting, additional weeding, or additional irrigation. Provide annual reports to regulatory agencies (i.e., California Department of Fish and Wildlife, Regional Water Quality Control Board, U.S. Army Core of Engineers, and County of San Mateo Planning and Building Department).
14. Prior to site construction, coordinate with all state agencies to obtain applicable jurisdictional permits for the project, including the California Department of Fish and Wildlife (CDFW) to obtain a Streambed Alteration Agreement (SAA) and the Regional Water Quality Control Board (RWQCB) to obtain a 401 Water Quality Certification. Prior to the issuance of a building permit for this project, the applicant shall submit evidence of a SAA and a 401 Water Quality Certification to the Current Planning Section.

Building Inspection Section

15. No demolition, grading, or construction activity shall commence until a valid building permit is issued for such work.
16. Prior to the issuance of a building permit, the applicant shall comply with all Building Inspection Section requirements.

Drainage Section

17. Final grading/site plan, erosion control plan, and hydrology report will be required with the building permit submittal.

Geotechnical Section

18. The Geotechnical Report, the Grading Plan, and the Foundation Plan are subject to Geotechnical Review at Building Permit Stage.
19. Additional Geotechnical Analysis, including but not limited to Liquefaction and Lateral Spreading Analysis may be required at Building Permit Stage.

Cal-Fire

20. Prior to the issuance of a building permit, the applicant shall comply with all Cal-Fire requirements.
21. ADD Note to plans: All bridges used for fire department access shall meet Cal-Trans HS-20-44 loading standards and have a minimum rated capacity of 25 tons, (live load). A registered civil or structural engineer shall certify rated capacities. All bridges shall have the rated capacity posted on both entries. Turnouts are required at each end of one-lane bridges.
22. A registered civil or structural engineer shall certify the rated capacity posted for the bridge in a signed and stamped letter to the San Mateo County Fire Marshal's Office.
23. "No Parking - Fire Lane" signs shall be provided on both sides of bridge.
24. A Knox padlock or key switch will be required if there is limited access to property. CFC 506.1. For application and instructions please email smcfdfiremarshal@fire.ca.gov If you need further assistance please contact San Mateo County Fire Marshal's Office at 650/573-3846.
25. Gates shall be a minimum of 2 feet wider than the access road/driveway they serve. Overhead gate structures shall have a minimum of 15 feet of vertical clearance. Locked gates shall be provided with a Knox Box or Knox Padlock. Electric gates shall have a Knox Key Switch. Electric gates shall automatically open during power failures. CFC 503.6, 506. For application and instructions please smcfdfiremarshal@fire.ca.gov if you need further assistance please contact San Mateo County Fire Marshal's Office at 650/573-3846.

26. ADD Note to plans: Per San Mateo County Fire Department, building identification shall be conspicuously posted and visible from the street. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE). The letters/numerals for permanent address signs shall be 4 inches in height with a minimum 1/2-inch stroke. Such letters/numerals shall be internally illuminated and facing the direction of access. Residential address numbers shall be at least six feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the San Mateo County Fire Department. This remote signage shall consist of a 6-inch by 18-inch green reflective metal sign with 3-inch reflective Numbers/ Letters similar to Hy-Ko 911 or equivalent shall be placed at the entrance from the nearest public roadway.

ACC;cmc – ACCFF0571_WCU.DOCX

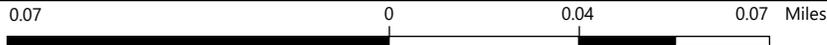


COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT B



Project Location



WGS_1984_Web_Mercator_Auxiliary_Sphere
© Latitude Geographics Group Ltd.

1:2,257

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT C

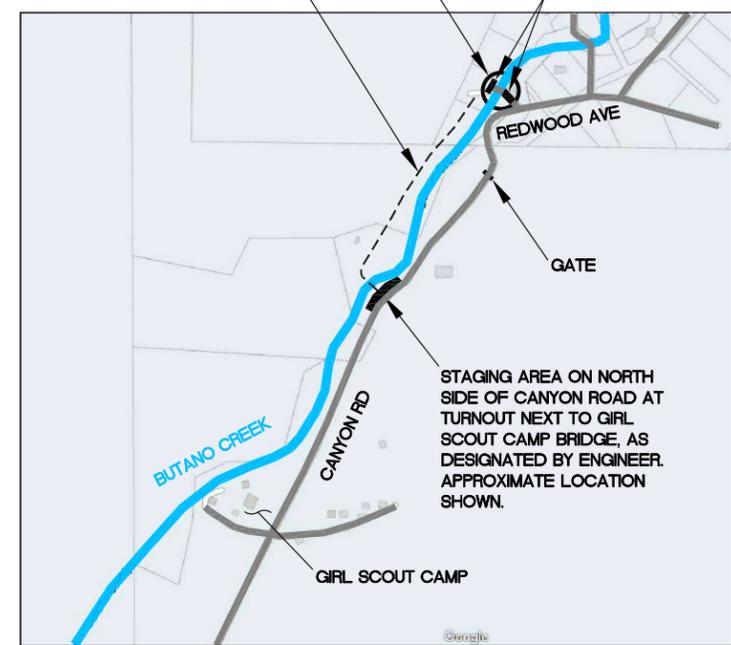
SPRUCE LANE BRIDGE REPLACEMENT

100% DESIGN SUBMITTAL



PROJECT LOCATION

SECONDARY ACCESS TO SITE ACROSS BUTANO CREEK AT GIRL SCOUT CAMP BRIDGE AND ALONG AN EXISTING DIRT ROAD. APPROXIMATE LOCATION SHOWN.



PROJECT LOCATION

SPRUCE LANE AND STAGING AREAS AS SHOWN ON DRAWINGS AND DESIGNATED BY ENGINEER.

STAGING AREA ON NORTH SIDE OF CANYON ROAD AT TURNOUT NEXT TO GIRL SCOUT CAMP BRIDGE, AS DESIGNATED BY ENGINEER. APPROXIMATE LOCATION SHOWN.

GENERAL NOTES

- TOPOGRAPHIC MAPPING WAS PERFORMED BY: WATERWAYS CONSULTING, INC. 509A SWIFT STREET SANTA CRUZ, CA 95060 SURVEY DATES; NOVEMBER 27, 2018, DECEMBER 21, 2018, AND MARCH 27, 2019
- ELEVATION DATUM: AN ASSUMED ELEVATION OF 100.00' WAS ESTABLISHED AT SURVEY CONTROL POINT #1 (MAGNETIC NAIL IN PAVEMENT AT EXISTING BRIDGE ABUTMENT) AS SHOWN ON SHT. C2.
- BRIDGE PROVIDES ACCESS TO ASSESSOR PARCEL NUMBERS 089-031-020 AND 089-031-170 LOCATED AT 47 AND 49 SPRUCE LANE IN PESCADERO, CALIFORNIA.
- BASIS OF BEARINGS: BASIS OF BEARINGS BETWEEN POINTS #1 AND #2 IS N00°00'00"E, AS SHOWN ON SHT. C2.
- CONTOUR INTERVAL IS ONE FOOT. ELEVATIONS AND DISTANCES SHOWN ARE IN DECIMAL FEET.
- A BOUNDARY AND RECORD SURVEY HAS BEEN PREPARED BY BOWMAN AND WILLIAMS ON MAY 30, 2018 FOR THE OWNER OF APN 089-031-120 (MARK AND MARNA KELLEY). THIS BOUNDARY DATA WAS OVERLAID IN CAD AND BOUNDARIES ARE ESTIMATED BASED GROUND SURVEY BY WATERWAYS OF BOWMAN AND WILLIAMS SURVEY POINTS LABELED "LS 8229" AS FOUND IN THE FIELD (WATERWAYS SURVEY POINTS 180 AND 6014).
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE 2018 EDITION OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS, ISSUED BY THE DEPARTMENT OF TRANSPORTATION (HEREAFTER REFERRED TO AS "STANDARD SPECIFICATIONS").
- THESE DESIGNS ARE INCOMPLETE WITHOUT THE FINAL STAMPED TECHNICAL SPECIFICATIONS PREPARED BY WATERWAYS CONSULTING, INC. REFER TO TECHNICAL SPECIFICATIONS FOR DETAILS NOT SHOWN HEREON.

ABBREVIATIONS

AB	AGGREGATE BASE
AVG.	AVERAGE
CC	CONCRETE
CY	CUBIC YARDS
AVG.	DIAMETER
E	EXISTING
EG	EXISTING GROUND
ELEV.	ELEVATION
DI	DRAINAGE INLET
FG	FINISHED GRADE
FT	FEET
INV	INVERT
N	NEW
NIC	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
RC	RELATIVE COMPACTION
RSP	ROCK SLOPE PROTECTION
SPK	SPIKE
SQ.FT.	SQUARE FOOT
T	TREE
T.B.D.	TO BE DETERMINED
TYP	TYPICAL
UNK	UNKNOWN
WSE	WATER SURFACE ELEVATION
YR	YEAR

TREE SPECIES

BM	BIGLEAF MAPLE
DF	DOUGLAS FIR
RC	RED CEDAR
WF	WHITE FIR

PROJECT DESCRIPTION

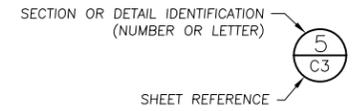
THESE DRAWINGS PROVIDE 100% DESIGN LEVEL DETAILS FOR THE REPLACEMENT OF A BRIDGE CROSSING OVER BUTANO CREEK, SERVING 47 & 49 SPRUCE LANE IN PESCADERO, SAN MATEO COUNTY, CALIFORNIA.

WORK SHALL CONSIST OF REMOVAL AND DISPOSAL OF THE EXISTING FAILED BRIDGE AND PIERS, AND REPLACEMENT WITH A NEW 98-FOOT CLEAR SPAN BRIDGE, NEW ABUTMENTS, AND A NEW FOUNDATION.

SHEET INDEX

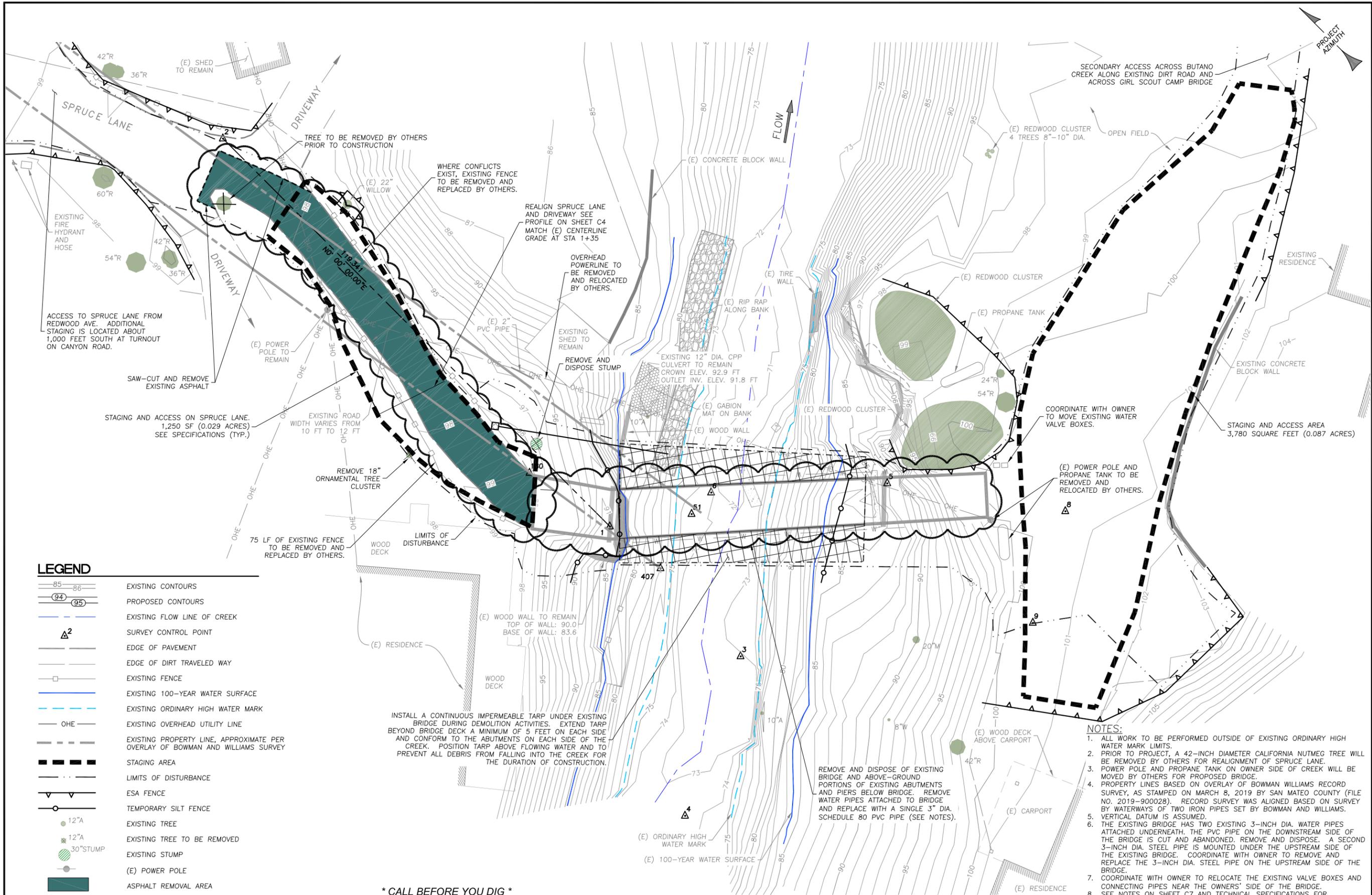
- C1 COVER
- C2 EXISTING CONDITIONS, STAGING, ACCESS, AND DEMOLITION PLAN
- C3 BRIDGE PLAN AND PROFILE
- C4 SECTIONS
- C5 DETAILS
- C6 EROSION CONTROL PLAN
- C7 NOTES

SECTION AND DETAIL CONVENTION



REV.	DATE	DESCRIPTION	BY
1	10/26/20	NO CHANGES TO THIS SHEET	M.W.W.
2	1/4/20	NO CHANGES TO THIS SHEET	M.W.W.

*** CALL BEFORE YOU DIG ***
 CONTACT UNDERGROUND SERVICE ALERT (USA)
 PRIOR TO ANY CONSTRUCTION WORK 1-800-227-2600



LEGEND

	EXISTING CONTOURS
	PROPOSED CONTOURS
	EXISTING FLOW LINE OF CREEK
	SURVEY CONTROL POINT
	EDGE OF PAVEMENT
	EDGE OF DIRT TRAVELED WAY
	EXISTING FENCE
	EXISTING 100-YEAR WATER SURFACE
	EXISTING ORDINARY HIGH WATER MARK
	EXISTING OVERHEAD UTILITY LINE
	EXISTING PROPERTY LINE, APPROXIMATE PER OVERLAY OF BOWMAN AND WILLIAMS SURVEY
	STAGING AREA
	LIMITS OF DISTURBANCE
	ESA FENCE
	TEMPORARY SILT FENCE
	EXISTING TREE
	EXISTING TREE TO BE REMOVED
	EXISTING STUMP
	(E) POWER POLE
	ASPHALT REMOVAL AREA

*** CALL BEFORE YOU DIG ***
 CONTACT UNDERGROUND SERVICE ALERT (USA)
 PRIOR TO ANY CONSTRUCTION WORK 1-800-227-2600

EXISTING CONDITIONS, STAGING, ACCESS, AND DEMOLITION PLAN
 SCALE: 1" = 10'

- NOTES:**
- ALL WORK TO BE PERFORMED OUTSIDE OF EXISTING ORDINARY HIGH WATER MARK LIMITS.
 - PRIOR TO PROJECT, A 42-INCH DIAMETER CALIFORNIA NUTMEG TREE WILL BE REMOVED BY OTHERS FOR REALIGNMENT OF SPRUCE LANE.
 - POWER POLE AND PROPANE TANK ON OWNER SIDE OF CREEK WILL BE MOVED BY OTHERS FOR PROPOSED BRIDGE.
 - PROPERTY LINES BASED ON OVERLAY OF BOWMAN WILLIAMS RECORD SURVEY, AS STAMPED ON MARCH 8, 2019 BY SAN MATEO COUNTY (FILE NO. 2019-900028). RECORD SURVEY WAS ALIGNED BASED ON SURVEY BY WATERWAYS OF TWO IRON PIPES SET BY BOWMAN AND WILLIAMS.
 - VERTICAL DATUM IS ASSUMED.
 - THE EXISTING BRIDGE HAS TWO EXISTING 3-INCH DIA. WATER PIPES ATTACHED UNDERNEATH. THE PVC PIPE ON THE DOWNSTREAM SIDE OF THE BRIDGE IS CUT AND ABANDONED. REMOVE AND DISPOSE. A SECOND 3-INCH DIA. STEEL PIPE IS MOUNTED UNDER THE UPSTREAM SIDE OF THE EXISTING BRIDGE. COORDINATE WITH OWNER TO REMOVE AND REPLACE THE 3-INCH DIA. STEEL PIPE ON THE UPSTREAM SIDE OF THE BRIDGE.
 - COORDINATE WITH OWNER TO RELOCATE THE EXISTING VALVE BOXES AND CONNECTING PIPES NEAR THE OWNERS' SIDE OF THE BRIDGE.
 - SEE NOTES ON SHEET C7 AND TECHNICAL SPECIFICATIONS FOR PROTECTION OF EXISTING UTILITIES.

REV.	DATE	DESCRIPTION	BY
10/26/20		NO CHANGES TO THIS SHEET	M.W.W.
1/4/20		NO CHANGES TO THIS SHEET	M.W.W.

WATERWAYS CONSULTING INC.

509A SWIFT ST.
SANTA ANA, CA 92705
PH: (831) 427-2525 FAX: (888) 919-6847
WWW.WATERWAYS.COM

DATE: 1/4/21

MATT W. WELD

PREPARED AT THE REQUEST OF:
**VICTORIA JOHNSON AND
 CATHERINE PEERY**

**EXISTING
 CONDITIONS,
 STAGING,
 ACCESS, AND
 DEMOLITION
 PLAN**

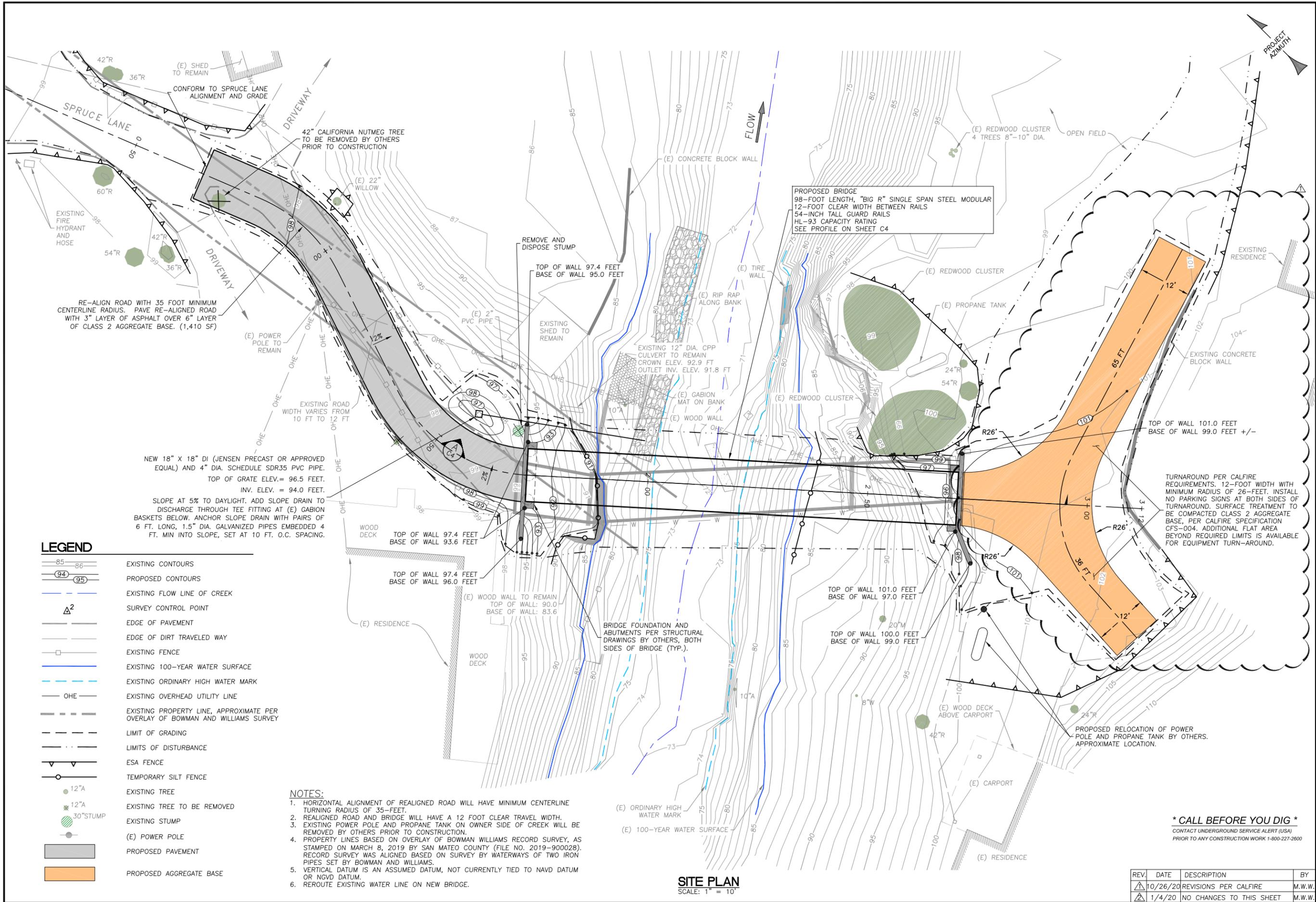
**SPRUCE LANE BRIDGE
 REPLACEMENT PROJECT
 100% DESIGN SUBMITTAL**

DESIGNED BY: D.R./M.W.
 DRAWN BY: D.R.
 CHECKED BY: M.W.W.
 DATE: 5/11/20
 JOB NO.: 18-061

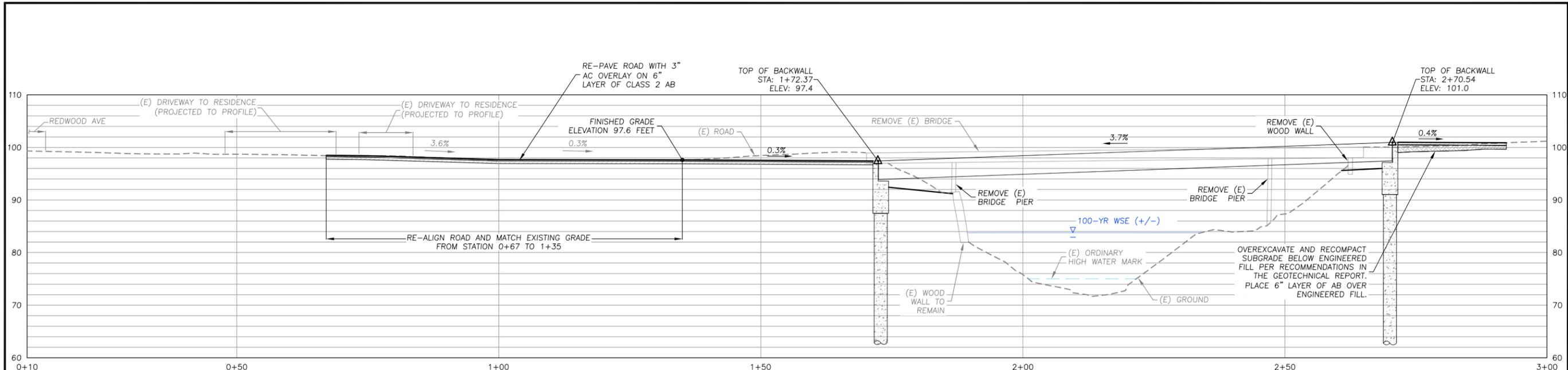
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS

0" = 1"

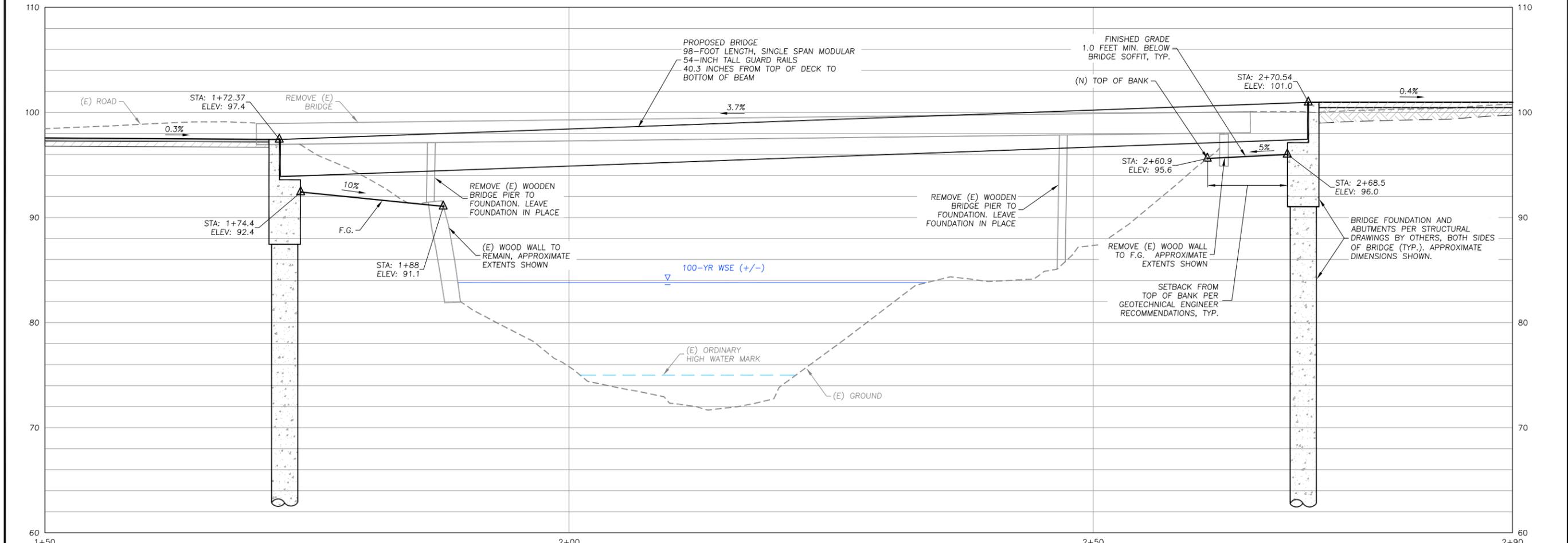
2 OF 7



REV.	DATE	DESCRIPTION	BY
1	10/26/20	REVISIONS PER CALFIRE	M.W.W.
2	1/4/20	NO CHANGES TO THIS SHEET	M.W.W.



SPRUCE LANE DRIVEWAY AND BRIDGE PROFILE
SCALE: 1" = 10'



BRIDGE SECTION
SCALE: 1" = 5'

NOTES:
1. BRIDGE STRUCTURE AND FOUNDATION TO BE DESIGNED BY THE STRUCTURAL ENGINEER AND THE GEOTECHNICAL ENGINEER.
2. THE PROFILE ABOVE SHOWS THE PROPOSED LAYOUT FOR SITE PLANNING.

REV.	DATE	DESCRIPTION	BY
1	10/26/20	NO CHANGES TO THIS SHEET	M.W.W.
2	1/4/20	NO CHANGES TO THIS SHEET	M.W.W.

*** CALL BEFORE YOU DIG ***
CONTACT UNDERGROUND SERVICE ALERT (USA)
PRIOR TO ANY CONSTRUCTION WORK 1-800-227-2600

DATE: 1/4/21

 MATT W. WELD

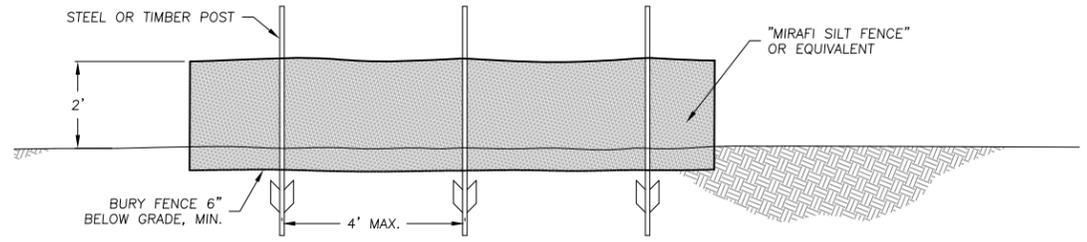
PREPARED AT THE REQUEST OF:
VICTORIA JOHNSON AND CATHERINE PEERY

ROAD PROFILE AND BRIDGE AND SECTION

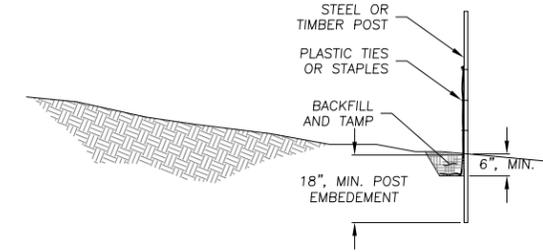
SPRUCE LANE BRIDGE REPLACEMENT PROJECT 100% DESIGN SUBMITTAL

DESIGNED BY: D.R./M.W.
DRAWN BY: D.R.
CHECKED BY: M.W.W.
DATE: 5/11/20
JOB NO.: 18-061

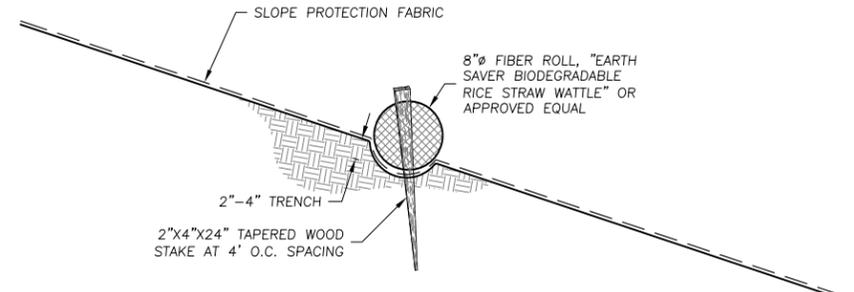
BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS



SILT FENCE NOTES
 1. DIG TRENCH FIRST, THEN ERECT FENCE IN TRENCH. BACKFILL AND COMPACT SOIL TO SECURE FABRIC.
 2. PROVIDE 1' MINIMUM OVERLAP AT FENCE SPLICES.
 3. PLACE SILT FENCE PARALLEL WITH SLOPE CONTOURS.
 4. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE ACCUMULATED SEDIMENT, TO AN APPROVED AREA.
 5. TURN ALL FENCE TERMINATIONS UPSLOPE TO PREVENT FLANKING.



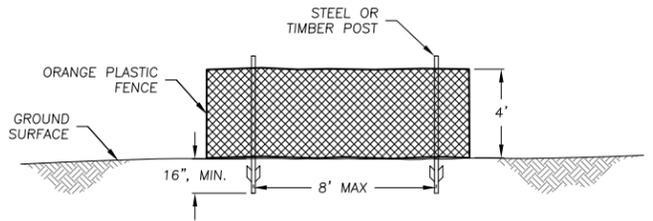
SILT FENCE
 SCALE: 1" = 2' (1/C6)



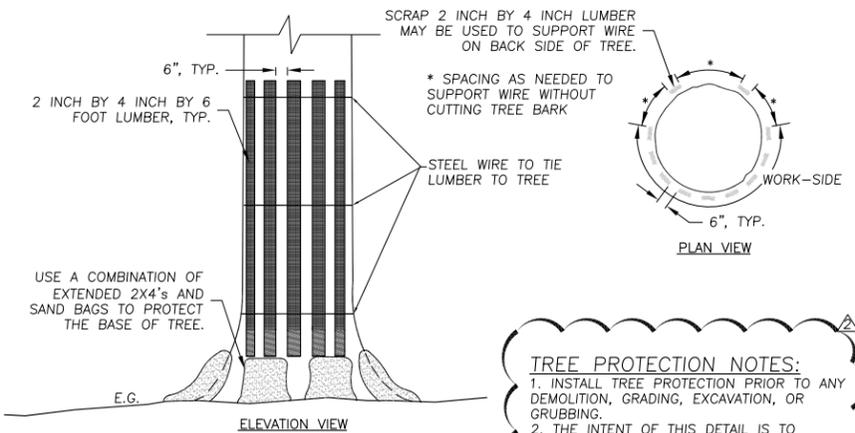
FIBER ROLL
 SCALE: 1" = 1' (3/C6)

FIBER ROLL NOTES

1. CONSTRUCT TRENCHES TO THE DEPTH SHOWN, AND TO A SUFFICIENT WIDTH TO HOLD THE FIBER ROLL. INSTALL STAKES AT THE ON-CENTER SPACING SHOWN ALONG THE LENGTH OF THE FIBER ROLL AND STOPPED AT 12 INCHES FROM EACH END OF THE ROLLS. DRIVE STAKES TO BETWEEN TWO AND THREE INCHES ABOVE THE TOP OF THE ROLL.
2. PLACE FIBER ROLLS 10 FEET APART ALONG THE SLOPE FOR SLOPE INCLINATION OF 2H:1V AND STEEPER, AND 15 FEET APART ALONG THE SLOPE FOR SLOPE INCLINATION BETWEEN 2H:1V AND 4H:1V.
3. CLEAR THE BEDDING AREA FOR THE FIBER ROLL OF OBSTRUCTIONS INCLUDING ROCKS, CLODS, AND DEBRIS GREATER THAN ONE INCH IN DIAMETER BEFORE INSTALLATION.
4. INSTALL FIBER ROLLS APPROXIMATELY PARALLEL TO THE SLOPE CONTOUR. ANGLE THE TERMINUS OF ROWS UP-SLOPE AT 45 DEGREES FOR A DISTANCE OF THREE FEET. WHERE FIBER ROLLS MEET, PROVIDE AN OVERLAP OF 18 INCHES, WITH ADJACENT ROLLS TIGHTLY ABUTTING EACH OTHER.
5. INSTALL FIBER ROLLS PRIOR TO SEEDING WHERE USED WITHOUT SLOPE PROTECTION FABRIC.
6. INSTALL FIBER ROLLS OVER FABRIC (AFTER SEEDING) WHERE SLOPE PROTECTION FABRIC IS TO BE INSTALLED.



BOUNDARY (ESA) FENCE
 SCALE: 1" = 4' (2/C6)

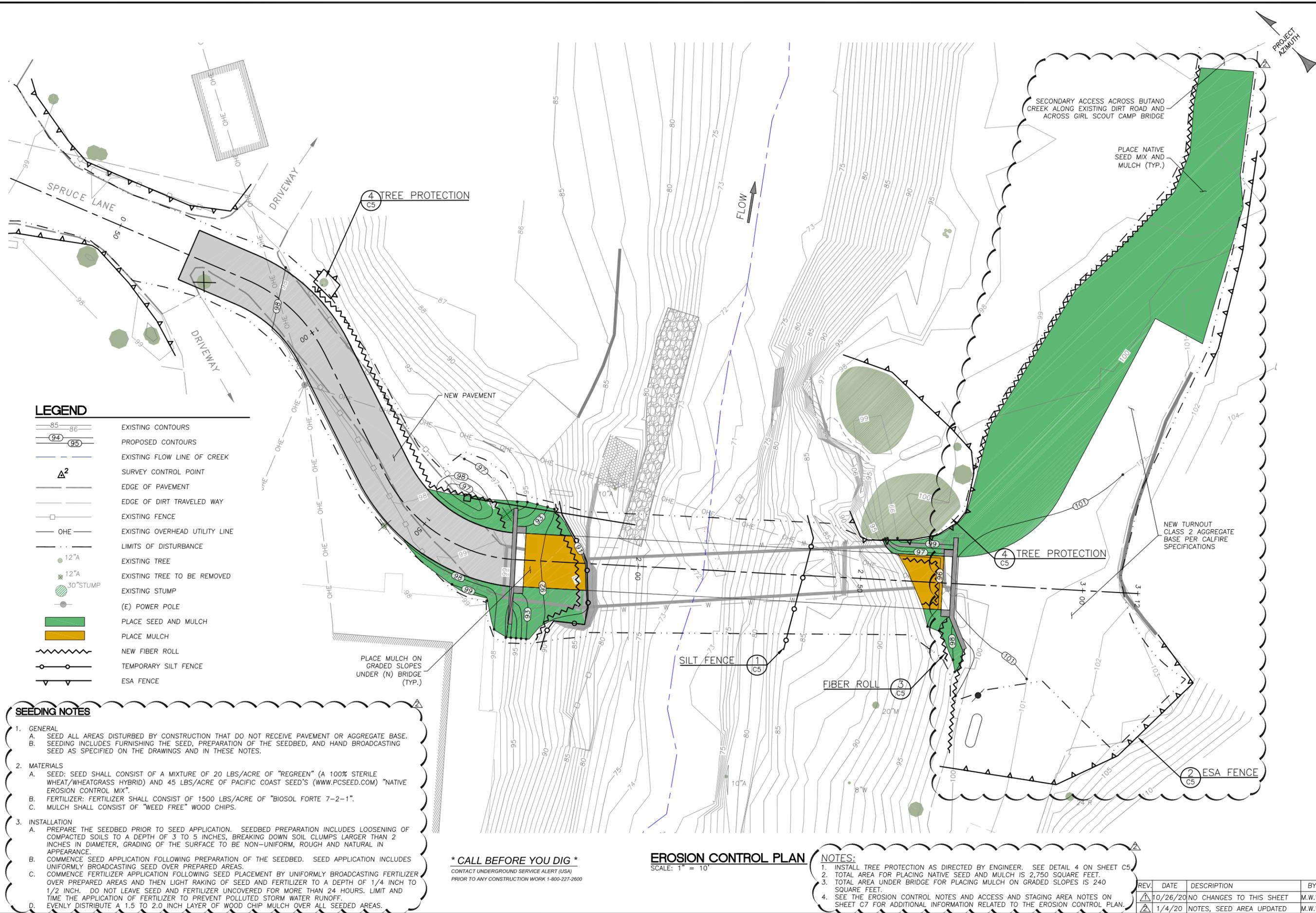


TREE PROTECTION
 SCALE: 1" = 2' (4/C6)

TREE PROTECTION NOTES:
 1. INSTALL TREE PROTECTION PRIOR TO ANY DEMOLITION, GRADING, EXCAVATION, OR GRUBBING.
 2. THE INTENT OF THIS DETAIL IS TO PROTECT EXISTING TREES FROM DAMAGE DURING CONSTRUCTION.
 3. THIS DETAIL SHALL BE USED WHEN WORKING WITHIN 10' OF AN EXISTING TREE TO REMAIN, AS DIRECTED BY THE ENGINEER.
 4. DO NOT DAMAGE OR REMOVE TREES UNLESS NOTED OTHERWISE ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

*** CALL BEFORE YOU DIG ***
 CONTACT UNDERGROUND SERVICE ALERT (USA)
 PRIOR TO ANY CONSTRUCTION WORK 1-800-227-2600

REV.	DATE	DESCRIPTION	BY
Δ	10/26/20	NO CHANGES TO THIS SHEET	M.W.W.
Δ	1/4/20	NOTES UPDATED	M.W.W.



GENERAL NOTES

- NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER OR A DESIGNATED REPRESENTATIVE SHALL OBSERVE THE CONSTRUCTION PROCESS, AS NECESSARY TO ENSURE PROPER INSTALLATION PROCEDURES.
- EXISTING UNDERGROUND UTILITY LOCATIONS:
 - CALL UNDERGROUND SERVICE ALERT (1-800-642-2444) TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO COMMENCING CONSTRUCTION.
 - PRIOR TO BEGINNING WORK, CONTACT ALL UTILITIES COMPANIES WITH REGARD TO WORKING OVER, UNDER, OR AROUND EXISTING FACILITIES AND TO OBTAIN INFORMATION REGARDING RESTRICTIONS THAT ARE REQUIRED TO PREVENT DAMAGE TO THE FACILITIES.
 - EXISTING UTILITY LOCATIONS SHOWN ARE COMPILED FROM INFORMATION SUPPLIED BY THE APPROPRIATE UTILITY AGENCIES AND FROM FIELD MEASUREMENTS TO ABOVE GROUND FEATURES READILY VISIBLE AT THE TIME OF SURVEY. LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE DIMENSIONS, SIZES, MATERIALS, LOCATIONS, AND DEPTH OF UNDERGROUND UTILITIES.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE LOCATION AND/OR PROTECTION OF ALL EXISTING AND PROPOSED PIPING, UTILITIES, TRAFFIC SIGNAL EQUIPMENT (BOTH ABOVE GROUND AND BELOW GROUND), STRUCTURES, AND ALL OTHER EXISTING IMPROVEMENTS THROUGHOUT CONSTRUCTION.
 - PRIOR TO COMMENCING FABRICATION OR CONSTRUCTION, DISCOVER OR VERIFY THE ACTUAL DIMENSIONS, SIZES, MATERIALS, LOCATIONS, AND ELEVATIONS OF ALL EXISTING UTILITIES AND POTHOLE THOSE AREAS WHERE POTENTIAL CONFLICTS ARE LIKELY OR DATA IS OTHERWISE INCOMPLETE.
 - TAKE APPROPRIATE MEASURES TO PROTECT EXISTING UTILITIES DURING CONSTRUCTION OPERATIONS. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COST OF REPAIR/REPLACEMENT OF ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
 - UPON LEARNING OF THE EXISTENCE AND/OR LOCATIONS OF ANY UNDERGROUND FACILITIES NOT SHOWN OR SHOWN INACCURATELY ON THE PLANS OR NOT PROPERLY MARKED BY THE UTILITY OWNER, IMMEDIATELY NOTIFY THE UTILITY OWNER AND THE CITY BY TELEPHONE AND IN WRITING.
 - UTILITY RELOCATIONS REQUIRED FOR THE CONSTRUCTION OF THE PROJECT FACILITIES WILL BE PERFORMED BY THE UTILITY COMPANY, UNLESS OTHERWISE NOTED.
- IF DISCREPANCIES ARE DISCOVERED BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS, NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE FULLY INFORMED OF AND TO COMPLY WITH ALL LAWS, ORDINANCES, CODES, REQUIREMENTS AND STANDARDS WHICH IN ANY MANNER AFFECT THE COURSE OF CONSTRUCTION OF THIS PROJECT, THOSE ENGAGED OR EMPLOYED IN THE CONSTRUCTION AND THE MATERIALS USED IN THE CONSTRUCTION.
- ALL TESTS, INSPECTIONS, SPECIAL OR OTHERWISE, THAT ARE REQUIRED BY THE BUILDING CODES, LOCAL BUILDING DEPARTMENTS, OR THESE PLANS, SHALL BE DONE BY AN INDEPENDENT INSPECTION COMPANY. JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE REQUIRED TESTS AND INSPECTIONS ARE PERFORMED.
- PROJECT SCHEDULE: PRIOR TO COMMENCEMENT OF WORK, SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL A DETAILED CONSTRUCTION SCHEDULE. DO NOT BEGIN ANY CONSTRUCTION WORK UNTIL THE PROJECT SCHEDULE AND WORK PLAN IS APPROVED BY THE ENGINEER. ALL CONSTRUCTION SHALL BE CLOSELY COORDINATED WITH THE ENGINEER SO THAT THE QUALITY OF WORK CAN BE CHECKED FOR APPROVAL. PURSUE WORK IN A CONTINUOUS AND DILIGENT MANNER TO ENSURE A TIMELY COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN, PERMITTING, INSTALLATION, AND MAINTENANCE OF ANY AND ALL TRAFFIC CONTROL MEASURES DEEMED NECESSARY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL SAFETY DURING CONSTRUCTION. ALL WORK SHALL CONFORM TO PERTINENT SAFETY REGULATIONS AND CODES. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING, AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK, AND PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF OSHA IN THE CONSTRUCTION PRACTICES FOR ALL EMPLOYEES DIRECTLY ENGAGED IN THE CONSTRUCTION OF THIS PROJECT.
- CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTION LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL. NEITHER THE PROFESSIONAL ACTIVITIES OF CONSULTANT NOR THE PRESENCE OF CONSULTANT OR HIS OR HER EMPLOYEES OR SUB-CONSULTANTS AT A CONSTRUCTION SITE SHALL RELIEVE THE CONTRACTOR AND ITS SUBCONTRACTORS OF THEIR RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND APPLICABLE HEALTH OR SAFETY REQUIREMENTS OF ANY REGULATORY AGENCY OR OF STATE LAW.
- MAINTAIN A CURRENT, COMPLETE, AND ACCURATE RECORD OF ALL AS-BUILT DEVIATIONS FROM THE CONSTRUCTION AS SHOWN ON THESE DRAWINGS AND SPECIFICATIONS, FOR THE PURPOSE OF PROVIDING THE ENGINEER OF RECORD WITH A BASIS FOR THE PREPARATION OF RECORD DRAWINGS.
- MAINTAIN THE SITE IN A NEAT AND ORDERLY MANNER THROUGHOUT THE CONSTRUCTION PROCESS. STORE ALL MATERIALS WITHIN APPROVED STAGING AREAS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE FULLY INFORMED OF AND TO COMPLY WITH ALL PERMIT CONDITIONS, LAWS, ORDINANCES, CODES, REQUIREMENTS AND STANDARDS, WHICH IN ANY MANNER AFFECT THE COURSE OF CONSTRUCTION OF THIS PROJECT, THOSE ENGAGED OR EMPLOYED IN THE CONSTRUCTION AND THE MATERIALS USED IN THE CONSTRUCTION.
- PROVIDE, AT CONTRACTOR'S SOLE EXPENSE, ALL MATERIALS, LABOR AND EQUIPMENT REQUIRED TO COMPLY WITH ALL APPLICABLE PERMIT CONDITIONS AND REQUIREMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING AND LAYOUT, UNLESS OTHERWISE SPECIFIED.
- FIELD INSPECTIONS AND OR THE PROVISION OF CONSTRUCTION STAKES DO NOT RELIEVE THE CONTRACTOR OF THEIR SOLE RESPONSIBILITY FOR ESTABLISHING ACCURATE CONSTRUCTED LINES AND GRADES, AS SPECIFIED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND PRESERVATION OF ALL SURVEY MONUMENTS OR PROPERTY CORNERS. DISTURBED MONUMENTS SHALL BE RESTORED BACK TO THEIR ORIGINAL LOCATION AND SHALL BE CERTIFIED BY A REGISTERED CIVIL ENGINEER OR LAND SURVEYOR AT THE SOLE EXPENSE OF THE CONTRACTOR.
- ALL STANDARD STREET MONUMENTS, LOT CORNER PIPES, AND OTHER PERMANENT MONUMENTS DISTURBED DURING THE PROCESS OF CONSTRUCTION SHALL BE REPLACED AND A RECORD OF SURVEY OR CORNER RECORD PER SECTION 8771 OF THE PROFESSIONAL LAND SURVEYORS ACT ARE TO FILED BY THE CONTRACTOR BEFORE ACCEPTANCE OF THE IMPROVEMENTS. COPIES OF ANY RECORD OF SURVEY OR CORNER RECORDS SHALL BE SUBMITTED TO THE OWNERS.
- CONTRACTOR IS REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE CONTRACTOR SHALL CONFORM TO THE RULES AND REGULATIONS OF THE CONSTRUCTION SAFETY ORDERS OF THE CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH PERTAINING TO EXCAVATION AND TRENCHES THE CALIFORNIA CODE OF REGULATIONS TITLE 8, SUBCHAPTER 4 CONSTRUCTION SAFETY ORDERS, ARTICLE 6 EXCAVATION.
- CULTURAL RESOURCES: IN THE EVENT THAT HUMAN REMAINS AND/OR CULTURAL MATERIALS ARE FOUND, ALL PROJECT-RELATED CONSTRUCTION SHALL CEASE WITHIN A 100-FOOT RADIUS. THE CONTRACTOR SHALL, PURSUANT TO SECTION 7050.5 OF THE HEALTH AND SAFETY CODE, AND SECTION 5097.94 OF THE PUBLIC RESOURCES CODE OF THE STATE OF CALIFORNIA, NOTIFY THE COUNTY OF SAN MATEO CORNER IMMEDIATELY.

EARTHWORK NOTES

- ALL GRADING SHALL COMPLY WITH THE RECOMMENDATIONS OF THE ENGINEERING GEOLOGIC REPORT, THE GEOTECHNICAL REPORT, AND WITH THE APPLICABLE REQUIREMENTS OF THE COUNTY OF SAN MATEO GRADING ORDINANCE. REFER TO GEOTECHNICAL INVESTIGATION REPORT BY:

SIGMA PRIME GEOSCIENCES, INC
332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
(650) 728-3590
REPORT DATED OCTOBER, 2017

PRIOR TO PERFORMING ANY WORK, THE CONTRACTOR SHALL BE FAMILIAR WITH THE GEOTECHNICAL INVESTIGATION. IN THE EVENT OF DISCREPANCY BETWEEN THE REPORT AND THE NOTES HEREIN, THE REPORT SHALL PREVAIL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND MAKE HIS OWN INTERPRETATIONS WITH REGARD TO MATERIALS, METHODS AND EQUIPMENT NECESSARY TO PERFORM THE WORK REQUIRED FOR THIS PROJECT.
- GRADING SUMMARY:

TOTAL CUT VOLUME =	30 CY
TOTAL FILL VOLUME =	30 CY
NET (CUT/FILL) =	0 CY

THE ABOVE QUANTITIES ARE APPROXIMATE IN-PLACE VOLUMES CALCULATED AS THE DIFFERENCE BETWEEN EXISTING GROUND AND THE PROPOSED FINISH GRADE, PREPARED FOR PERMITTING PURPOSES ONLY. EXISTING GROUND IS DEFINED BY THE TOPOGRAPHIC CONTOURS AND/OR SPOT ELEVATIONS ON THE PLAN. PROPOSED FINISH GRADE IS DEFINED AS THE DESIGN SURFACE ELEVATION OF WORK TO BE CONSTRUCTED. THE QUANTITIES HAVE NOT BEEN FACTORED TO INCLUDE ALLOWANCES FOR BULKING, CLEARING AND GRUBBING, SUBSIDENCE, SHRINKAGE, OVER EXCAVATION, AND RECOMPACTION, UNDERGROUND UTILITY AND SUBSTRUCTURE SPOILS AND CONSTRUCTION METHODS.

THE CONTRACTOR SHALL PERFORM AN INDEPENDENT EARTHWORK ESTIMATE FOR THE PURPOSE OF PREPARING BID PRICES FOR EARTHWORK. THE BID PRICE SHALL INCLUDE COSTS FOR ANY NECESSARY IMPORT AND PLACEMENT OF EARTH MATERIALS OR THE EXPORT AND PROPER DISPOSAL OF EXCESS OR UNSUITABLE EARTH MATERIALS.
- PRIOR TO COMMENCING WORK, PROTECT ALL SENSITIVE AREAS TO REMAIN UNDISTURBED WITH TEMPORARY FENCING, AS SHOWN ON THE DRAWINGS, AS SPECIFIED, OR AS DIRECTED BY THE ENGINEER.
- DO NOT DISTURB AREAS OUTSIDE OF THE DESIGNATED LIMITS OF DISTURBANCE, UNLESS AUTHORIZED IN WRITING BY THE ENGINEER. THE COST OF ALL ADDITIONAL WORK ASSOCIATED WITH RESTORATION AND REVEGETATION OF DISTURBED AREAS OUTSIDE THE DESIGNATED LIMITS OF DISTURBANCE, AS SHOWN ON THE DRAWINGS, SHALL BE BORNE SOLELY BY THE CONTRACTOR.
- REMOVE ALL EXCESS SOILS TO AN APPROVED DUMP SITE OR DISPOSE OF ON SITE AT A LOCATION TO BE APPROVED BY THE ENGINEER, IN A MANNER THAT WILL NOT CAUSE EROSION.
- CLEARING AND GRUBBING, SUBGRADE PREPARATION AND EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 19 OF THE STANDARD SPECIFICATIONS, THESE DRAWINGS, AND THE TECHNICAL SPECIFICATIONS.
- PRIOR TO STARTING WORK ON THE PROJECT, SUBMIT FOR ACCEPTANCE BY THE ENGINEER A HAZARDOUS MATERIALS CONTROLS AND SPILL PREVENTION PLAN. INCLUDE PROVISIONS FOR PREVENTING HAZARDOUS MATERIALS FROM CONTAMINATING SOIL OR ENTERING WATER COURSES, AND ESTABLISH A SPILL PREVENTION AND COUNTERMEASURE PLAN.
- UNLESS AUTHORIZED BY THE GEOTECHNICAL ENGINEER, THE FOLLOWING MATERIALS SHALL NOT BE INCORPORATED INTO THE WORK:
 - ORGANIC MATERIALS SUCH AS PEAT, MULCH, ORGANIC SILT OR SOD.
 - SOILS CONTAINING EXPANSIVE CLAYS.
 - MATERIAL CONTAINING EXCESSIVE MOISTURE.
 - POORLY GRADED COURSE MATERIAL.
 - PARTICLE SIZES IN EXCESS OF 6 INCHES.
 - MATERIAL WHICH WILL NOT ACHIEVE SPECIFIED DENSITY OR BEARING.
- FINE GRADING ELEVATIONS, CONFORMS, AND SLOPES NOT CLEARLY SHOWN ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD TO DIRECT DRAINAGE TO PROTECTED DRAINAGE CONTROL STRUCTURES OR NATURAL WATERWAYS IN A MANNER THAT SUPPORTS THE INTENT OF THE DESIGN. ALL FINAL GRADING SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
- THE TOP 6" OF SUBGRADE UNDER ALL PAVED SURFACES SUBJECT TO VEHICULAR USE SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION, IN ACCORDANCE WITH ASTM-D1557. ALL OTHER FILL TO BE COMPACTED TO A MINIMUM OF 90% MAXIMUM DENSITY AS DETERMINED BY ASTM-D1557 AND SO CERTIFIED BY TESTS AND REPORTS FROM THE CIVIL ENGINEER IN CHARGE OF THE GRADING CERTIFICATION.
- SPREAD FILL MATERIAL IN LIFTS OF APPROXIMATELY 8 INCHES, MOISTENED OR DRIED TO NEAR OPTIMUM MOISTURE CONTENT AND RECOMPACTED. THE MATERIALS FOR ENGINEERED FILL SHALL BE APPROVED BY A REGISTERED CIVIL ENGINEER. ANY IMPORTED MATERIALS MUST BE APPROVED BEFORE BEING BROUGHT TO THE SITE. THE MATERIALS USED SHALL BE FREE OF ORGANIC MATTER AND OTHER DELETERIOUS MATERIALS.
- ALL CONTACT SURFACES BETWEEN ORIGINAL GROUND AND RECOMPACTED FILL SHALL BE EITHER HORIZONTAL OR VERTICAL. ALL ORGANIC MATERIAL SHALL BE REMOVED AND THE REMAINING SURFACE SCARIFIED TO A DEPTH OF AT LEAST 12 INCHES, UNLESS DEEPER EXCAVATION IS REQUIRED BY THE ENGINEER.
- REGULATORY AGENCIES MAY REQUIRE A FINAL GRADING COMPLIANCE LETTER. WE CAN ONLY OFFER THIS LETTER IF WE ARE CALLED TO THE SITE TO OBSERVE AND TEST, AS NECESSARY, ANY GRADING AND EXCAVATION OPERATIONS FROM THE START OF CONSTRUCTION. WE CANNOT PREPARE A LETTER IF WE ARE NOT AFFORDED THE OPPORTUNITY OF OBSERVATION FROM THE BEGINNING OF THE GRADING OPERATION. THE CONTRACTOR MUST BE MADE AWARE OF THIS AND EARTHWORK TESTING AND OBSERVATION MUST BE SCHEDULED ACCORDINGLY. PLEASE CONTACT OUR OFFICE: (831) 421-9291.

ACCESS AND STAGING AREA NOTES

- USE ONLY THE APPROVED ACCESS POINTS, AS SHOWN ON THE DRAWINGS. STOCKPILE MATERIALS WITHIN AN EXISTING FLAT AND PREVIOUSLY DISTURBED AREA.
- ACCESS AND STAGING FROM REDWOOD AVE AND FROM THE SECONDARY ACCESS OVER THE GIRL SCOUT CAMP BRIDGE TO COMPLY WITH PROVISIONS IN THE TECHNICAL SPECIFICATIONS.
- THE ACCESS PLAN SHOWN ON THE DRAWINGS IS SCHEMATIC. SUBMIT A SITE ACCESS PLAN FOR APPROVAL BY THE ENGINEER, PRIOR TO MOBILIZATION.
- CONTAIN THE DOWNSLOPE PERIMETER OF STAGING OR STOCKPILE AREAS WITH SILT FENCE.
- STORE, MAINTAIN AND REFUEL ALL EQUIPMENT AND MATERIALS IN A DESIGNATED PORTION OF THE STAGING AREA. CONTAINED AND TREAT WASH WATER.
- STAGING AREA LIMITS WILL BE STAKED IN THE FIELD BY THE ENGINEER AND MAY NOT BE ENLARGED WITHOUT WRITTEN APPROVAL OF THE ENGINEER. CONTAIN AND TREAT WASH WATER.
- STORE, HANDLE, AND DISPOSE OF CONSTRUCTION WASTES PROPERLY. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS TO STORM DRAINS AND WATERCOURSES.

EROSION CONTROL NOTES

- THE EROSION CONTROL PLAN SHOWN IS INTENDED FOR THE SUMMER CONSTRUCTION SEASON (APRIL 30TH TO OCTOBER 1ST). IF THE DRAINAGE FEATURES SHOWN ON THESE DRAWINGS ARE NOT COMPLETED AND DISTURBED AREAS STABILIZED BY OCTOBER 15TH, CONSULT THE ENGINEER FOR ADDITIONAL RAINY SEASON EROSION CONTROL MEASURES.
- PRIOR TO COMMENCING WORK, PROTECT AREAS TO REMAIN UNDISTURBED WITH ESA FENCING, AS SHOWN ON THE DRAWINGS. ADDITIONAL FENCING MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER.
- UTILIZE ONLY THE APPROVED HAUL ROADS AND ACCESS POINTS (AS SHOWN ON THE DRAWINGS) FOR TRANSPORT OF MATERIALS AND EQUIPMENT.
- BETWEEN OCTOBER 1 AND APRIL 30, PROTECT EXPOSED SOIL FROM EROSION AT ALL TIMES. DURING CONSTRUCTION, SUCH PROTECTION MAY CONSIST OF MULCHING AND/OR PLANTING OF NATIVE VEGETATION OF ADEQUATE DENSITY. BEFORE COMPLETION OF THE PROJECT, STABILIZE ALL EXPOSED SOIL ON DISTURBED SLOPES AGAINST EROSION.
- MAINTAIN A STANDBY CREW FOR EMERGENCY WORK AT ALL TIMES DURING THE RAINY SEASON (OCTOBER 1 THROUGH APRIL 30). STOCKPILE NECESSARY MATERIALS AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES.
- CONSTRUCT TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AND/OR AS DIRECTED BY THE ENGINEER TO CONTROL DRAINAGE WHICH HAS BEEN AFFECTED BY GRADING AND/OR TRENCHING OPERATIONS.
- INCORPORATE ADEQUATE DRAINAGE PROCEDURES DURING THE CONSTRUCTION PROCESS TO ELIMINATE EXCESSIVE PONDING AND EROSION.
- CONSTRUCT AND MAINTAIN EROSION CONTROL MEASURES TO PREVENT THE DISCHARGE OF EARTHEN MATERIALS TO THE CREEK FROM DISTURBED AREAS UNDER CONSTRUCTION AND FROM COMPLETED CONSTRUCTION AREAS.
- INSTALL ALL PROTECTIVE DEVICES AT THE END OF EACH WORK DAY WHEN THE FIVE-DAY RAIN PROBABILITY EQUALS OR EXCEEDS 50 PERCENT AS DETERMINED FROM THE NATIONAL WEATHER SERVICE FORECAST OFFICE: WWW.SRH.NOAA.GOV.
- THE EROSION CONTROL DEVICES ON THIS PLAN ARE A SCHEMATIC REPRESENTATION OF WHAT MAY BE REQUIRED. EROSION CONTROL DEVICES MAY BE RELOCATED, DELETED, OR ADDITIONAL ITEMS MAY BE REQUIRED DEPENDING ON THE ACTUAL SOIL CONDITIONS ENCOUNTERED, AT THE DISCRETION OF THE ENGINEER.
- MAINTAIN ALL EROSION CONTROL DEVICES AND MODIFY THEM AS SITE PROGRESS DICTATES.
- MONITOR THE EROSION CONTROL DEVICES DURING STORMS AND MODIFY THEM IN ORDER TO PREVENT PROGRESS OF ANY ONGOING EROSION.
- CLEAN DAILY ANY EROSION OR DEBRIS SPILLING ONTO A PUBLIC STREET.
- CONTACT THE ENGINEER IN THE EVENT THAT THE EROSION CONTROL PLAN AS DESIGNED REQUIRES ANY SUBSTANTIAL REVISIONS.
- IMPLEMENT ALL REQUIRED BMP'S PRIOR TO COMMENCING SITE DISTURBING ACTIVITIES.
- USE OF PLASTIC SHEETING BETWEEN OCTOBER 1 AND APRIL 30 IS NOT ACCEPTABLE, UNLESS FOR USE ON STOCKPILES WHERE STOCKPILE IS ALSO PROTECTED WITH FIBER ROLLS CONTAINING THE BASE OF THE STOCKPILE.
- CLEARING AND EARTH-MOVING ACTIVITIES SHALL ONLY OCCUR DURING DRY WEATHER.
- MAINTAIN A STOCKPILE OF EROSION CONTROL MATERIALS ON-SITE THROUGHOUT CONSTRUCTION.
- TRAIN AND PROVIDE INSTRUCTION TO ALL EMPLOYEES AND SUBCONTRACTORS REGARDING THE SAN MATEO COUNTY WATERSHED PROTECTION MAINTENANCE STANDARDS AND CONSTRUCTION BEST MANAGEMENT PRACTICES.
- EROSION CONTROL POINTS OF CONTACT:

OWNER/APPLICANT 1 VICTORIA JOHNSON 48 SPRUCE LANE PESCADERO, CA 94060 (415) 602-1354 SPRUCEBRIDGECONTACT@GMAIL.COM TORY.JOHNSON62@GMAIL.COM	OWNER/APPLICANT 2 CATHERINE PEERY 47 SPRUCE LANE PESCADERO, CA 94060 SPRUCEBRIDGECONTACT@GMAIL.COM CATHERINE@BEN-E-FIT.COM
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DUST CONTROL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUOUS DUST CONTROL, THROUGHOUT THE CONSTRUCTION, IN ACCORDANCE WITH THE PERMIT CONDITIONS OF APPROVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REGULAR CLEANING OF ALL MUD, DIRT, DEBRIS, ETC., FROM ANY AND ALL ADJACENT ROADS AND SIDEWALKS, USING DRY SWEEPING METHODS, AT LEAST ONCE EVERY 24 HOURS WHEN OPERATIONS ARE OCCURRING.
- ALL DISTURBED AREAS, INCLUDING UNPAVED ACCESS ROADS OR STORAGE PILES, NOT BEING ACTIVELY UTILIZED FOR CONSTRUCTION PURPOSES, SHALL BE EFFECTIVELY STABILIZED OF DUST EMISSIONS USING WATER, CHEMICAL STABILIZER/SUPPRESSANT, OR VEGETATIVE GROUND COVER.
- ALL GROUND-DISTURBING ACTIVITIES (E.G., CLEARING, GRUBBING, SCRAPING, AND EXCAVATION) SHALL BE EFFECTIVELY CONTROLLED OF FUGITIVE DUST EMISSIONS UTILIZING APPLICATION OF WATER OR BY PRE-SOAKING.
- ALL MATERIALS TRANSPORTED OFFSITE SHALL BE COVERED OR EFFECTIVELY WETTED TO LIMIT DUST EMISSIONS.
- FOLLOWING THE ADDITION OF MATERIALS TO, OR THE REMOVAL OF MATERIALS FROM, THE SURFACES OF OUTDOOR STORAGE PILES, SAID PILES SHALL BE EFFECTIVELY STABILIZED OF FUGITIVE DUST EMISSIONS UTILIZING SUFFICIENT WATER OR CHEMICAL STABILIZER/SUPPRESSANT.
- ONSITE VEHICLE SPEED ON UNPAVED SURFACES SHALL BE LIMITED TO 15 MPH.
- DISTURBED AREAS SHALL BE SEEDED PRIOR TO OCTOBER 15TH OR EARLIER AS REQUIRED BY THE APPLICABLE PERMIT CONDITIONS.

*** CALL BEFORE YOU DIG ***
CONTACT UNDERGROUND SERVICE ALERT (USA)
PRIOR TO ANY CONSTRUCTION WORK 1-800-227-2600

REV.	DATE	DESCRIPTION	BY
A	10/26/20	NO CHANGES TO THIS SHEET	M.W.W.
B	1/4/20	NOTES UPDATED	M.W.W.

WATERWAYS CONSULTING INC.

509A SWIFT ST.
SANTA ANA, CA 92705
PH: (831) 421-9291 FAX: (888) 919-6847
WWW.WATERWAYS.COM

DATE
1/4/21

MATT W. WELD

**PREPARED AT THE REQUEST OF:
VICTORIA JOHNSON AND
CATHERINE PEERY**

NOTES

**SPRUCE LANE BRIDGE
REPLACEMENT PROJECT
100% DESIGN SUBMITTAL**

DESIGNED BY: D.R./M.W.
DRAWN BY: D.R.
CHECKED BY: M.W.W.
DATE: 5/11/20
JOB NO.: 18-061

BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS

0" = 1"

C7

7 OF 7



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT D

MEMORANDUM

Date: November 19, 2019

To:

From: San Mateo Resource Conservation District

Re: Biological Resources Evaluation for Butano Creek Bridge Replacement and Habitat Enhancement Project

1 GOALS OF ASSESSMENT

The goals of this assessment are to characterize the vegetation communities within and surrounding the project area that are likely to be impacted by project actions; identify any rare and unique habitat types in the project area; identify special-status species that could be impacted by the project; determine the effects on the special-status species that could be impacted by the project; and develop a series of recommendations to avoid and minimize impacts to resources present at the project.

2 PROJECT DESCRIPTION

The Spruce Lane Bridge Replacement Project is located in unincorporated San Mateo County three miles from Pescadero, CA in a community called "Butano Canyon". This community sits within the Santa Cruz mountains, surrounded by Butano State parks and private forested lands. The project site consists of Spruce Lane a single land private road, residential driveways on both sides of the creek and a 98-foot bridge that connects residential homes to Spruce Lane. The current bridge across Butano Creek on Spruce Lane was built in 1952 with large redwood spanners. The bridge has become deteriorated and unserviceable and a new bridge is required to provide access to private property by residents and emergency vehicles. Proposed work will remove the deteriorated bridge and replace it with a new bridge. The new bridge will meet County codes and allow for safe access to private property by residents and emergency vehicles. The bridge replacement will take on a similar footprint to the current bridge. Adjustments are being made to the angle of the bridge by a few feet and to the sinuosity and width of the road to provide better access through Spruce Lane.

The project will remove the existing bridge, construct retaining walls, relocate a power pole and propane tank, realign Spruce Lane, and reconstruct Spruce Lane bridge. Construction will include the use of equipment such as, skid steer, compactor, drill rig, concrete truck, chainsaw, excavator, and possibly others. The following describes each of these activities in greater detail.

Remove existing bridge: The existing bridge will be removed via crane and excavator. Some salvageable material from the bridge will be saved with appropriate pieces potentially used in a future project to install large woody debris in the Butano Creek channel; other material will be properly disposed of. The existing wooden piers will

be cut to the existing foundation and removed, the existing foundation including below ground portions will be left in place to reduce impacts and erosion.

Construct retaining wall: Two retaining walls will be constructed, one at each end of the bridge, to retain engineered fill and facilitate an appropriate turn radius, per CalFire specification. The retaining walls will be installed out of the stream channel, at the top of the bank, and well above the modeled 100-year water surface elevation.

Relocate power pole and propane tank: There is currently a power pole and a propane tank located directly adjacent to the northwest edge of the bridge. The pole and tank will be relocated for the proposed bridge.

Realign Spruce Lane: Spruce Lane will be realigned at the approach to the bridge from the east.

Reconstruct Butano Canyon Bridge: A 98-foot length, Big R single span modular bridge will be constructed with a 12-foot clear with, 54-inch tall guardrails, and HL-93 capacity rating. The bridge will be supported by drilled cast-in-place concrete piers installed out of the stream channel and above modeled 100-year water surface elevation.

Remove nutmeg tree: a 42-in California nutmeg (*Torreya californica*) will be removed to allow Spruce Lane to be realigned to the east of the bridge to allow for emergency vehicle access.

3 METHODOLOGY

The methods used to develop this biological assessment are a combination of desktop analysis and field analysis.

3.1 PRE-FIELD INVESTIGATIONS

Prior to field investigations, biologists reviewed relevant background data of the project site to determine potential special-status species and suitable habitat. The desktop component included the following components:

- Aerial photo and geospatial analysis of the site and its proximity to watercourses, wetlands, and other areas of biological interest. This analysis was conducted using ArcGIS version 10.6 using aerial imagery updated 7/9/2019. This aerial imagery was additionally used to create vegetation community and resources of interest.
- Review of data contained in the Department of Fish and Wildlife's California Natural Diversity Database (CNDDDB). The CNDDDB database analysis and spatial data analysis was performed using CNDDDB/Rare Find for ArcGis 10.0, with the version last updated on 04/01/2017. The analysis was completed August of 2019 by Cleopatra Today (San Mateo Resource Conservation District). A one-mile radius was used to focus on the CNDDDB analysis on species known to be present surrounding the project site. The search was refined for species listed under the federal Endangered Species Act (ESA), California Endangered Species Act (CESA), or as listed as species of special concern by the California Department of Fish and Wildlife (CDFW) a map of proximal species is provided in Appendix A.
- The U.S. Fish and Wildlife Service (USFWS) Environmental Conservation On-line System's Information for Planning and Consultation (IPaC) database was used to run a query for federally listed species and

critical habitat in proximity to the project area. A one-mile radius polygon surrounding the project and a significant buffer was used to run this analysis. The full output is provided in Appendix B.

3.2 FIELD INVESTIGATION

The field analysis was performed by biologist Cleopatra Taday on August 22, 2019 between 2:30 and 3:30 pm. Field analysis included walking the entire project site, paying close attention to areas of interest identified through the aerial imagery analysis and pre-field investigations. This included walking through and around areas of interest such as the riparian area below the bridge. Field supplies included an iPhone 7, integrated handheld GPS (Garmin 64s), mapping software (Avenza), and paper site maps prepared by engineers, WaterWays Inc. Observations of native or natural vegetation types and wildlife were noted and mapped. Representative photos of the natural resource were taken and can be found in the photo plates at the end of the memorandum.

4 FINDINGS

4.1 LANDSCAPE SETTING

The Spruce Lane Bridge Replacement Project is located off Butano Canyon Road three miles South East of Pescadero, San Mateo County, CA in the Coastal Zone. The area along Spruce Lane is surrounded by second growth redwood forest intermixed with one- and two-story residential homes. Replacement of the bridge will take place in and around redwood-alder-willow riparian while either side of the bridge consists of a mix of residential homes and mature redwood forest. Both the redwood forest and riparian areas contain a mix of native understory/riparian, ornamentals, non-natives and escaped ornamentals.

4.2 LAND COVER/HABITAT TYPES

To understand the likelihood of species presence, it's critical to understand the ecological context of the project area. Identifying the landscape and unique habitat is critical for determining suitable habitat for special status species and the project's potential impacts. Redwoods dot the residential landscape, as do other tree species such as Douglas fir, California nutmeg, and tan oak. Some of these large diameter trees consist of mature redwoods. Areas impacted by the road reconfiguration are within residential landscaping which consist of native understory plants, ornamentals and non-natives.

The Spruce Lane bridge spans Butano Creek, which is a perennial creek that feeds into the Butano-Pescadero watershed. The bank is incised by 23 feet from the top of the road to the bottom of the creek. The riparian habitat that occupies Butano Creek is dominated by red alder (*Alnus rubra*), coast redwood (*Sequoia sempervirens*) and willow (*Salix sp.*). The understory consists of non-native species such as English ivy (*Hedera helix*) and Cape ivy (*Delairea odorata*), and native species like California Blackberry (*Rubus ursinus*), periwinkle (*Vinca major*), red elderberry (*Sambucus racemosa*), California wood fern (*Dryopteris arguta*), thimbleberry (*Rubus parviflorus*), etc. This creek is known to support a host of aquatic species such as Central California Coast (CCC) steelhead (*Oncorhynchus mykiss irideus*) and California giant salamander (*Dicamptodon ensatus*).

4.3 SENSITIVE HABITATS

Sensitive habitats consist of unique plant assemblages, environments that support special status species, have ecological value, or have specific regulatory protection for local, state or federal entities. Sensitive habitats

within the area includes, North Central Coast California roach/stickleback/steelhead stream, marbled murrelet critical habitat and California red-legged frog critical habitat.

4.3.1 Riparian Habitat

Butano Creek is a perennial creek system that flows into the Pescadero Marsh approximately 4.5 miles downstream where it converges with Pescadero Creek and the Pacific Ocean. Butano Creek has discernable bed and incised bank with a distinct ordinary high water mark. Water levels were low at time of field investigation (8/22/2019), and the creek is presumed to hold water all year round. Butano Creek is also listed as a R3UBH (Riverine, Upper Perennial, Unconsolidated Bottom, Permanently Flooded wetland under USFWS's National Wetlands Inventory).

According to the Local Coastal Plan and County of San Mateo General Plan, riparian corridors in the coastal zone are considered sensitive habitat, which require protection. Riparian corridors are defined by the "limit of riparian vegetation" determined by the association of vegetation normally found near streams such as: red alder and arroyo willow which are present within Butano Creek within the project area. Such a corridor must contain at least 50% cover of some combination of the plants listed.

4.4 SPECIAL STATUS SPECIES:

Three main data sources were utilized to determine likelihood of presence and potential impacts to special status species from project activities. Species were obtained from CNDDDB output for special-status species within a 1-mile radius, USFWS's IPaC database, knowledge of regional biota and observations made in the field. Table 1 and Table 2 lists a compilation of species that have the potential to exist within the project area. The potential for each species to occur in the project area was evaluated based on species needs, habitat and existing conditions. Based on that evaluation, potential for species is based on the following categories:

- **None** indicates that the study site does not provide suitable habitat, the local range is restricted, and or the species was confirmed not present within the area.
- **Unlikely** indicates suitable habitat may exist but is of poor quality or is isolated from known populations.
- **Possible** indicates suitable habitat within the project area that potentially support the species.
- **Present** indicates target species observed within the project area during field investigations.

Species listed as Unlikely or None are assumed to not be present within the project site.

The USFWS IPaC database query is available in Appendix B. This list includes all ESA listed species known with the larger coastal region as well as 22 USFWS birds of conservation concern (listed in Table 2). Additional species not listed under either the CNDDDB or IPaC query include the California giant salamander (*Dicamptodon ensatus*), a CDFW species of special concern, which has the potential to inhabit the project area. Many of the ESA listed species within the IPaC database are marine (eg. Sea otter, sea turtle), beach species (e.g. least turn, snowy plover, short-tailed albatross) or estuarine species (e.g. tide water gobi, delta smelt). None of these species are to be directly or indirectly impacted by the project.

Of the ESA species provided by IPaC database, and the CNDDDB, there are a number of species that may occur within or near the project location. These species are listed in Table 1. The project site also lies within the critical habitat of both California red-legged frog and marbled murrelet. Of the 22 migratory birds, some may utilize the bridge and surrounding forest as nesting habitat.

4.4.1 Federally and State Protected Species

Marbled Murrelet

Observations from CNDDDB list marbled murrelet nesting behavior within a mile of the project. The project area does contain mature redwood but are not suitable for nesting (lack of adequate foliage cover on large diameter branches). No mature Douglas fir were identified within the project area, which are preferred by marbled murrelet in the Santa Cruz Mountains region over mature redwood (Baker 2006). Scrub jays were audibly confirmed in the area during the 08/22/2019 survey and are most likely prevalent due to residential occupation. It is highly likely that marbled murrelet occupies the area surrounding the project and may use Butano creek as a flight corridor to nests.

Steelhead Trout (Central California Coast)

Steelhead trout is listed on CNDDDB and a 4-inch smolt was visually confirmed on the 08/22/2019 survey. The creek that bisects the project provides ample habitat in the form of riffles and small ponds suitable for breeding and juvenile development. Therefore, steelhead trout may occur within the project area.

California red-legged frog

California red-legged frogs have been confirmed within a mile radius of the project. However, these observations were made in grassland shrubland habitat surrounding wetlands and ponds. While California red-legged frog can occur in forested areas around perennial or ephemeral water sources, water levels and speed during the breeding season of November to April would not provide low flow streams needed for breeding. Therefore, it is possible for California red-legged frog to inhabit the project site, but unlikely that breeding occurs.

San Francisco garter snake

Like California red-legged frog, species occurrences found within a mile range of the project site have been within grassland and wetland habitat. San Francisco garter snake is not known to occupy creek and stream habitat, especially within redwood forests. Therefore, it is highly unlikely that San Francisco garter snake will occur within the project area.

Santa Cruz cypress

Santa Cruz cypress (var. *butanoensis*) described as occupying redwood, closed-cone pine/cypress forests. The project area is described as redwood, alder riparian, and thus it is unlikely that Santa Cruz cypress would occupy the area. No species were found on the 08/22/2019 survey.

Point Reyes meadowfoam

Point Reyes meadowfoam is unlikely to occupy the area. Since Point Reyes meadowfoam only blooms in March to May, there were confirmations of presence or absence on the 08/22/2019 survey. However, the species grows in wet meadows of coastal prairie, not redwood, alder riparian and is therefore unlikely to occupy the area.

4.4.2 Sensitive and Locally Rare Wildlife Species

California giant salamander

California giant salamanders occur in wet coastal forests near cold streams. Butano Creek meets those habitat requirements and occur within the watershed. It is likely that California giant salamander could occur in the creek part of the project area.

4.4.3 Sensitive and Locally Rare Plant Species

Of the three special status plant species, only Anderson's manzanita (*Arctostaphylos andersonii*) is not covered by ESA or CESA. Anderson's manzanita is listed under the California Rare Plant Rank as 1B.2 (rare, threatened or endangered in California) and is found within open sites or forest edges within mixed-evergreen, redwood forests and coastal chaparral. This species was not observed within the project area during a site visit on 8/22/2019.

4.4.4 Migratory Birds

There are two main regulatory actions for migratory birds, the Migratory Birds Treaty Act of 1918 and the Bald and Golden Eagle Protection Act of 1940. Of the listed species from the IPaC database analysis, only two species have suitable breeding habitat within the breeding area, Allen's hummingbird and wren-tit. These species breed in a wide range of habitats including coastal forests and residential areas that are present in the project area.

4.5 TREE PROTECTIONS

There are two overarching regulatory documents for non-ESA or non-CESA tree species within unincorporated San Mateo County, San Mateo County Significant Tree Ordinance (Ordinance No. 3229, Revised October 2016) and San Mateo County Heritage Tree Ordinance (Ordinance No. 2427).

According to the significant tree ordinance, a "significant tree" is described as any single stem with a circumference of 38 inches or more within all of San Mateo County. A permit must be acquired through San Mateo County Planning Department for any removal, trimming of any tree, exotic or indigenous on any property. Exemptions include trees within a Timber Harvesting Plan or under Heritage Tree regulations, removal within a resource management zone, Timberland production zone or planned agricultural district. Hazard to life and personal property, in an area under a tree management program or authorization from the County.

Heritage trees fall under two classes. The first is any tree designated by the County Board of Supervisors, second is specific to the species and diameter at breast height. Specifically, California nutmeg falls under 30 or more inches at diameter at breast height is considered a "heritage tree". Any removal or trimming of trees that fall under either category must be permitted by the County under the Heritage Tree Removal/ Trimming Permit provided by the Planning Department. Permit application includes an Existing Tree Plan.

5 POTENTIAL RELATED EFFECTS AND RECOMMENDATIONS

The proposed project would improve existing bridge conditions and improve bank stabilization. Replacing the bridge will provide access improvements for residence and emergency personnel. With the addition of a retaining wall, the bank is much less likely to experience bank failure and additionally decrease the likelihood of bridge failure. Failure of the bridge would negatively impact aquatic and amphibian species, including sediment pollution. Effects on species will be temporary as the bridge is being installed utilizing existing structures with minimal impact around the surrounding area and would not take away existing habitat.

5.1 SENSITIVE HABITATS (RIPARIAN/ AQUATIC)

The regulatory framework that could potentially apply to riparian habitats within the project area includes, Section 1603 of California Fish and Wildlife Code, sections 404 of the Federal Clean Water Act, and county

regulations. Vegetation removal and impacts to the stream bank could be subject to one or more of the regulations above. Construction will take place in a way that will minimize disturbance to the surrounding area, including utilizing cranes to reach into bank areas and utilizing existing foundational features. Activities will additionally take place outside of any “waters of the United States” as defined by the ordinary high water mark by United States Army Corps of Engineers and Environmental Protection Agency. The following protective measure will ensure minimal disturbance to the bank above the ordinary high water mark and minimize sediment or debris deposition into the creek.

Mitigation Measure BMP-1: Riparian and Aquatic Habitat Protective Measures

- a) Construction activities nearby or within aquatic habitats should be limited to the maximum extent feasible.
- b) Worker environmental awareness training should be conducted for all construction crews and contractors. The education training should be conducted prior to starting work on the project and upon the arrival of any new worker. The training will include a brief review of special-status species, sensitive habitats, and other sensitive resources that may exist in the project area. It will include the life history of each relevant special-status species, field identification, habitat requirements, locations of sensitive biological resources, and a description of the legal status and protection for each species. The training will include materials concerning the following topics: sensitive resources, resource avoidance, permit conditions, and possible consequences for violations of State or Federal environmental laws. The training will cover the maintenance activity’s conservation measures, environmental permits, and regulatory compliance.
- c) Prior to the start of construction within areas containing sensitive biological resources, the biological monitor will delineate and conspicuously flag all sensitive aquatic resources to prevent impacts to these resources. If required, setback or non-disturbance buffer zones around these resources should be established and monitored by a biologist.
- d) Minimize removal of vegetation.
- e) Minimize land exposure during construction and use mulching or tarping to protect critical areas.
- f) Minimize erosion sedimentation and runoff by appropriately grading modified areas.
- g) If significantly impacted, replant to protect critical areas and use adapted native or non-invasive exotic species when replanting.
- h) Minimize adverse effects of wastewater discharges and entrainment.
- i) Prevent depletion of groundwater supplies and substantial interference with surface and subsurface waterflows.
- j) Maintain natural vegetation buffer areas that protect riparian habitats to the maximum extent possible.
- k) Minimize alteration of natural stream below the 100-year water surface elevation.
- l) Installation of tarp or other material barrier to exclude debris deposition into the creek.
- m) Erosion control measures such as installation of silt fences above the 100-year water surface elevation will be implemented as necessary to ensure that sediment or other contaminants do not reach surface water bodies.
- n) Utilization of crane and/or excavator to dismantle existing bridge to reduce impacts to the bank of the creek and minimize impacts to riparian habitat.
- o) BMPs outlined in Table 1.
- p) Best practice measures (BMPs) outlined in Table 3.

5.2 FEDERALLY AND STATE PROTECTED SPECIES

Marbled murrelet

Potential related effects for marbled murrelet are through noise disturbances. Heavy machinery may cause noise levels above normal ambient levels. Noise from equipment could adversely impact nesting pairs of murrelets if present within 300-500 of activities (Baker 2006).

Mitigation Measure Bio-1: Marbled Murrelet Protective Measures

- a) Potential impacts can be minimized through working outside of the murrelet nesting season (March 25 – September 15).
- b) If work should occur within the nesting season, noise-inducing work should occur outside of the marbled murrelet's core breeding season (April 1 -August 1). During the marbled murrelet's late breeding season (August 2 -September 15), it is recommended that noise-inducing activities be limited to the daytime hours from two hours after sunrise to two hours before sunset (avoiding the time period at night and within two hours of sunrise and sunset when marbled murrelets are most sensitive to noise disturbance). These recommendations are consistent with a 2017 USFWS Biological Opinion prepared for the California Department of Parks and Recreation for murrelets in Muir Woods and for a similar bridge project downstream of Butano Creek of the current project.
- c) To reduce the presence of corvid predators, any food trash must be property contained or removed from the work site.

Steelhead trout (Central California Coast)

Impacts to steelhead trout includes decline of water quality from construction work. This decline includes discharge pollutants such as sediment, pathogens and metals into surface waters. In addition, the effects of road building and stream-crossings can, “destabilize hillsides and increase erosional processes that deliver fine sediment to streams and rivers” (Howe 2016). Therefore, any construction should be designed to reduce sediment introduction in the creek from erosion or from bank destabilization. Any woody debris must stay within the creek to provide fish refugia.

Mitigation Measure Bio-2: Steelhead Protective Measures

- a) Work will occur above the 100-year water surface elevation as to not disturb or impact the creek.
- b) Erosion control materials will be installed above the 100-year water surface elevation to avoid impact to aquatic wildlife.
- c) Work in streams is restricted to the period of June 15 through November 1, or the first significant rainfall, whichever comes first. This is to prevent impacts to immigrating and emigrating salmonids.
- d) BMPs listed in Table 1 will additionally ensure steelhead and its habitat is not affected from project construction activities.

California red-legged frog

Potential impacts for California red-legged frog include disturbance of adults from earth work activities near the streambank and surrounding vegetation, and potential for frogs to shelter within machinery or construction materials. Other potential impacts include transmission of diseases, such as chytrid disease, which can be transmitted through moving equipment (machinery, boots, waders) from an infected body of water to another.

Mitigation Measure Bio-3: California red-legged frog Protective Measures

- a) Biological monitors shall be on site during initial ground disturbing activities to avoid impacts to California red-legged frog and other amphibians and reptiles.
- b) A biological monitor will be on call at all times during construction in the event a California red-legged frog is discovered, or for any other assistance relating to the avoidance and minimization measures. Biological monitors have the ability to stop construction if a special status amphibian is seen in the construction zone.
- c) USFWS-approved biologist(s) who handle California red-legged frogs shall ensure that their activities do not transmit diseases. To ensure that diseases are not conveyed between work sites by the USFWS-approved biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times (<http://www.fws.gov/ventura/docs/species/protocols/DAFTA.pdf>).
- d) Survey of the project site within 48 hours prior to start of project activities for California red-legged frog and California giant salamander. Visual surveys will be conducted along the creek and bank sides within least 20 feet surrounding the impacted area. If California red-legged frogs or California giant salamanders are found within the project area, these individuals who are likely to be killed or injured during work activities will be allowed enough time to move from the site before activities resume. Only USFWS-approved biologists will participate in handling or capturing activities of California red-legged frogs. Individuals moved will be moved downstream to a predetermined area of the project area in similar habitat to where it was found.
- e) If special status species amphibians are found within the work site during construction, all work will stop that could potentially harm the animal until the animal leaves the construction site or is relocated by a qualified biologist.

5.3 SENSITIVE AND LOCALLY RARE WILDLIFE SPECIES

California giant salamander

Since California giant salamander is likely to occur within the project site, impacts could occur when equipment is disturbing refugia such as large logs or other ground laying material. Work to avoid active California giant salamanders, activities should occur during the dry season (June 15 – November 1), or before the first significant rainfall. Protective measures outlined in Bio-3 for California red-legged frog include measures sufficient for reducing impacts to California giant salamander.

Migratory Birds

Modification of the bridge may result in the disturbance of migratory birds that utilize artificial structures as nesting habitat. Disturbance may cause nest damage or abandonment.

Mitigation Measure Bio-5: Migratory Birds Protective Measures

- a) Work window outside of the nesting or breeding season. This area has potential for migratory bird nesting. No surveys will be needed outside of the nesting season (February 1-August 10). Nesting season based on possibly present species.
- b) If activities will be conducted during the nesting season, a nesting bird survey will be conducted no more than two weeks prior to construction activities, including staging, tree removal, pruning or surface disturbing activities. If no nests are found within the impact zone, no further actions are needed.
- c) If active nests are found (eggs or fledglings present) within 300 feet for raptor species or 100 feet for all other bird species, non-disturbance buffers shall be established at a sufficient distance to minimize

disturbance based on location, topography, cover, species tolerance for disturbance and noise, and the type of disturbance. Work within the non-disturbance zone will be rescheduled for a date after the young have fledged.

- d) If rescheduling of work is infeasible and non-disturbance buffers cannot be maintained, a qualified biologist should be on site to monitor active nests for signs of disturbance. If it is determined that project-related activities are resulting in nest disturbance, work should cease immediately and CDFW and the USFWS Migratory Bird Permit Office should be contacted for further guidance.
- e) Tree removal, pruning, grubbing, grading, or other construction activities conducted outside of the breeding season (i.e. August 11 to March 31) do not require preconstruction surveys.

5.4 TREE PROTECTIONS

The only tree proposed for removal or trimming for the 42" California nutmeg (*Torreya californica*). This tree falls under both the under the significant tree ordinance and the heritage tree ordinance. Since there are exemptions for significant tree permit applications for trees removed under the heritage tree ordinance, only the Heritage tree removal/ trimming permit would apply to the California nutmeg.

6 TABLES

Table 1. Potential Species List

Scientific Name	Common Name	Protected Status	Habitat Requirements	Habitat Suitability and Local Distribution	Presence
State / Federally Listed Species					
<i>Brachyramphus marmoratus</i>	marbled murrelet	Federally Threatened, State Endangered	Old growth redwood forests with branch platforms for nesting and dense foliage. Preference toward Douglas-fir in the Santa Cruz Mountains Unit.	Old growth redwood on site along riparian corridor. Known nesting behavior within a mile of project site.	Possible
<i>Oncorhynchus mykiss irideus</i>	steelhead - CCC DPS	Federally Threatened,	Cold perennial streams with complexity in stream for spawning and juvenile development	Cold perennial stream with woody debris mixed into stream, creating pools and riffles.	Present
<i>Rana draytonii</i>	California red-legged frog	Federally Threatened, SSC	Low flow streams, wetlands, ponds. Mostly in grass-shrub mosaic but can utilize upland riparian.	Redwood-alder riparian with medium to high flowing creek. Low flows not until summer-fall.	Possible- Unlikely
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco garter snake	Federally Endangered, State Endangered, FP	Grasslands, wetlands near ponds, marshes or sloughs	No grassland or suitable wetlands present.	None
<i>Hesperocyparis abramsiana</i>	Santa Cruz cypress	Federally Threatened, State Endangered, 1B.2	Redwood, closed-cone pine, cypress forests	There are redwoods present on site, although there are no closed-cone or cypress trees present.	None
<i>Limnanthes douglasii ssp. sulphurea</i>	Point Reyes meadowfoam	State Endangered, 1B.2	wet meadows of coastal prairie	No wet meadows in coastal prairie present.	None
Sensitive and Locally Rare Wildlife Species					
<i>Dicamptodon ensatus</i>	California giant salamander	SSC	wet coastal forests near cold streams	Project site within costal forest and Butano Creek.	Possible
Sensitive and Locally Rare Plant Species					
<i>Arctostaphylos andersonii</i>	Anderson's manzanita	1B.2	Open sites or forest edge on redwood or mixed-evergreen forest.	Redwood forest present, though not near the forest edge or naturally open site.	None
Habitat					
California red-legged frog critical habitat					
marbled murrelet critical habitat					
North Central Coast California roach/stickleback/steelhead stream.					

Table 2. Migratory Birds

Scientific Name	Name	Breeding Season	Habitat Requirements	Habitat Suitability and Local Distribution	Presence
<i>Selasphorus sasin</i>	Allen's Hummingbird	Breeds Feb 1 to Jul 15	Coastal forest, shrub, and chaparral	coastal forest present	possible
<i>Haliaeetus leucocephalus</i>	Bald Eagle	Breeds Jan 1 to Aug 31	Lakes, reservoirs, rivers, marshes, and coastline. Where fish are present or scavenging food sources	not large enough food sources present. Not near a large body of water	none
<i>Haematopus bachmani</i>	Black Oystercatcher	Breeds Apr 15 to Oct 31	Shoreline	no shoreline	none
<i>Arenaria melanocephala</i>	Black Turnstone	Breeds elsewhere	Breeds elsewhere		
<i>Numenius americanus</i>	Long-billed Curlew	Breeds elsewhere	Breeds elsewhere		
<i>Limosa fedoa</i>	Marbled Godwit	Breeds elsewhere	Breeds elsewhere		
<i>selasphorus rufus</i>	Rufous Hummingbird	Breeds elsewhere	Breeds elsewhere		
<i>Limnodromus griseus</i>	Short-billed Dowitcher	Breeds elsewhere	Breeds elsewhere		
<i>Numenius phaeopus</i>	Whimbrel	Breeds elsewhere	Breeds elsewhere		
<i>Tringa semipalmata</i>	Willet	Breeds elsewhere	Breeds elsewhere		
<i>Rynchops niger</i>	Black Skimmer	Breeds May 20 to Sep 15	Shoreline	no shoreline	none
<i>Athene cunicularia</i>	Burrowing Owl	Breeds Mar 15 to Aug 31	Open areas with no trees and low-lying vegetation in grasslands, deserts and steppe environments. Utilize rodent burrows.	not open	none
<i>Aechmophorus clarkii</i>	Clark's Grebe	Breeds Jan 1 to Dec 31	Marshes and freshwater lakes	no marsh	none
<i>Geothlypis trichas sinuosa</i>	Common Yellowthroat	Breeds May 20 to Jul 31	Breed in thick, low-lying vegetation where shrubs are readily available. Found along marshes, wetland edges and brushy fields.	no marshes	none
<i>Aquila chrysaetos</i>	Golden Eagle	Breeds Jan 1 to Aug 31	Open to semi-open country	not open	none
<i>Carduelis lawrencei</i>	Lawrence's Goldfinch	Breeds Mar 20 to Sep 20	Open woodlands, chaparral and weedy fields	no oak woodlands	none
<i>Picoides nuttallii</i>	Nuttall's Woodpecker	Breeds Apr 1 to Jul 20	Oak woodland	no oak woodlands	none
<i>Baeolophus inornatus</i>	Oak Titmouse	Breeds Mar 15 to Jul 15	open dry oak or oak-pine woodlands.	no oak woodlands	none

<i>Melospiza melodia</i>	Song Sparrow	Breeds Feb 20 to Sep 5	open habitat such as tidal marshes, chaparral and agricultural fields, forest edges, and suburbs. In mixed woodlands.	no open habitat	none
<i>Pipilo maculatus clementae</i>	Spotted Towhee	Breeds Apr 15 to Jul 20	Dry thickets, forest edges, old fields, chaparral, dense shrub cover.	no forest edge	none
<i>Agelaius tricolor</i>	Tricolored Blackbird	Breeds Mar 15 to Aug 10	wetlands and wet agricultural fields	no wetlands	none
<i>Chamaea fasciata</i>	Wrentit	Breeds Mar 15 to Aug 10	coastal scrub and chaparral, areas of dense shrubbery	dense shrubbery in residential area within redwood forest	Possible

Abbreviations for Protected Status

State Listing

FP Fully Protected

SSC Species of Special Concern

California Native Plant Society Rare Plant Rank

1B Rare or Endangered in California and elsewhere

.2 Fairly Endangered in California (20-80% occurrences Threatened)

Table 3. Best Management Practices (BMP) for project activities

No.	Name	Measure
BMP - 1	Erosion Control	<ul style="list-style-type: none"> • Erosion control measures such as installation of silt fences above the 100-year water surface elevation will be implemented as necessary to ensure that sediment or other contaminants do not reach surface water bodies. • No erosion control materials that have natural or plastic monofilament type netting will be used during construction. All materials will be approved by a qualified biologist prior to use. • Bare soil surfaces resulting from construction activities shall be covered with suitable erosion controls (fabrics, hydroseeding, mulch, etc.) within 12 hours of a break in work unless project activities will resume within 7 days. • Earthwork will be completed as quickly as possible, and site restoration will occur immediately following use.
BMP - 2	Staging and Stockpiling materials	<ul style="list-style-type: none"> • Staging, access, and parking areas will be located outside of sensitive habitats to the extent feasible. • Areas of disturbance will be limited to the smallest footprint necessary. • All construction equipment that may leak petroleum products, fuels, lubricants, or other hazardous materials will be staged in upland areas, away from sensitive natural communities or habitats. • Any large wood or topsoil displaced by project activities will be stockpiled for use during site restoration. Native vegetation displaced by project activities will be stockpiled if it would be useful during site restoration. • All construction related items, including equipment, stockpiled material, temporary erosion control treatments, and trash will be removed within 24 hours of project completion. All residual soils and/or materials will be cleared from the project site or placed in designated locations that have been cleared by biologists. • Building materials and other construction related materials, including chemicals, will not be stockpiled or stored where they could spill into water bodies or storm drains, or where they could cover aquatic or riparian vegetation.
BMP - 3	Equipment and Vehicle Maintenance and Cleaning	<ul style="list-style-type: none"> • Spill cleanup materials (rags, absorbents, etc.) will be stockpiled at the construction site where they are readily accessible. • All equipment will be maintained free of petroleum leaks. All vehicles operated within 250 feet of waterways will be inspected daily for leaks. Use drip pans to catch leaks until repairs are made. Repair leaks before leaving the staging areas. • Vehicle and equipment maintenance activities will be conducted in a designated area to prevent inadvertent fluid spills. • Secondary containment such as drain pan or drop cloth to catch spills or leaks will be used when removing or changing fluids. Fluids will be stored in appropriate containers with covers and properly recycled or disposed of off-site. • Clean up spills or leaks immediately and dispose of cleanup materials properly. • Sweep up spilled dry materials immediately. Do not wash them away with water or bury them. Use dry clean methods (absorbent materials, rags, etc.). Do not use water to wash away spilled materials. • Report significant spills immediately. It is required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours). • Vehicles will not be washed on-site.

BMP - 4	Hazardous material management	<ul style="list-style-type: none"> • Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state, and federal regulations. • Store hazardous materials and wastes in watertight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast. • Follow manufacturer’s application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours. • Arrange for appropriate disposal of all hazardous wastes. • Cover waste disposal containers securely with tarps at the end of every workday and during wet weather. • Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site. • Clean or replace portable toilets and inspect them frequently for leaks and spills. • Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.) • Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.
BMP - 5	Fire prevention	<ul style="list-style-type: none"> • All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors. • During the high fire danger period (April 1–December 1), work crews will have appropriate fire suppression equipment available at the work site. • On days when the fire danger is high, flammable materials will be kept at least 10 feet away from any equipment that could produce a spark, fire, or flame. • On days when the fire danger is high, portable tools powered by gasoline-fueled internal combustion engines will not be used within 25 feet of any flammable materials unless at least one round-point shovel or fire extinguisher is within immediate reach of the work crew (no more than 25 feet away from the work area).

7 REFERENCES

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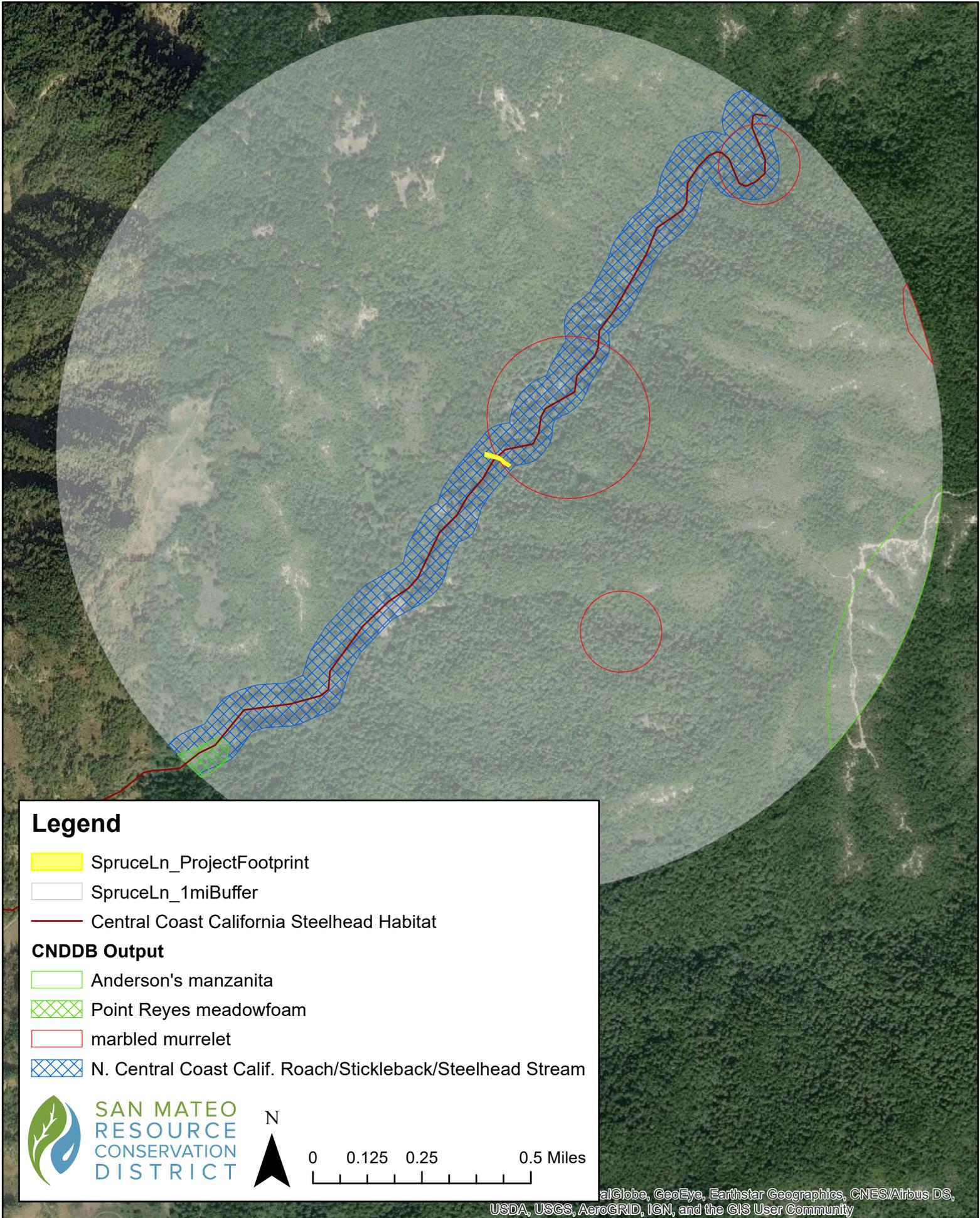
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Seymour, G. 2014. Fish Passage Improvements at Memorial County Park, San Mateo County. MND Project.

_____. Maps: Coastal Zone Boundary. California Coastal Commission. <https://www.coastal.ca.gov/maps/czb/> accessed 08/29/2019.

_____. National Wetlands Inventory. U.S. Fish and Wildlife. Accessed 8/29/2019. <https://www.fws.gov/wetlands/data/Mapper.html>

8 APPENDIX



IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Mateo County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME

STATUS

Southern Sea Otter *Enhydra lutris nereis*
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/8560>

Threatened
 Marine mammal

Birds

NAME	STATUS
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Marbled Murrelet <i>Brachyramphus marmoratus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened
Short-tailed Albatross <i>Phoebastria (=Diomedea) albatrus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/433	Endangered
Western Snowy Plover <i>Charadrius nivosus nivosus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6199	Threatened
San Francisco Garter Snake <i>Thamnophis sirtalis tetrataenia</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5956	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened
Tidewater Goby <i>Eucyclogobius newberryi</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
San Bruno Elfin Butterfly <i>Callophrys mossii bayensis</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3394	Endangered

Conifers and Cycads

NAME	STATUS
Santa Cruz Cypress <i>Cupressus abramsiana</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1678	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
California Red-legged Frog <i>Rana draytonii</i> https://ecos.fws.gov/ecp/species/2891#crithab	Final
Marbled Murrelet <i>Brachyramphus marmoratus</i> https://ecos.fws.gov/ecp/species/4467#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

<p>Allen's Hummingbird <i>Selasphorus sasin</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637</p>	Breeds Feb 1 to Jul 15
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626</p>	Breeds Jan 1 to Aug 31
<p>Black Oystercatcher <i>Haematopus bachmani</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591</p>	Breeds Apr 15 to Oct 31
<p>Black Skimmer <i>Rynchops niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234</p>	Breeds May 20 to Sep 15
<p>Black Turnstone <i>Arenaria melanocephala</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds elsewhere
<p>Burrowing Owl <i>Athene cunicularia</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9737</p>	Breeds Mar 15 to Aug 31
<p>Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jan 1 to Dec 31
<p>Common Yellowthroat <i>Geothlypis trichas sinuosa</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084</p>	Breeds May 20 to Jul 31
<p>Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680</p>	Breeds Jan 1 to Aug 31

Lawrence's Goldfinch <i>Carduelis lawrencei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Long-billed Curlew <i>Numenius americanus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker <i>Picoides nuttallii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse <i>Baeolophus inornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Rufous Hummingbird <i>selasphorus rufus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Song Sparrow <i>Melospiza melodia</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee <i>Pipilo maculatus clementae</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20

Tricolored Blackbird *Agelaius tricolor*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

Whimbrel *Numenius phaeopus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9483>

Willet *Tringa semipalmata*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

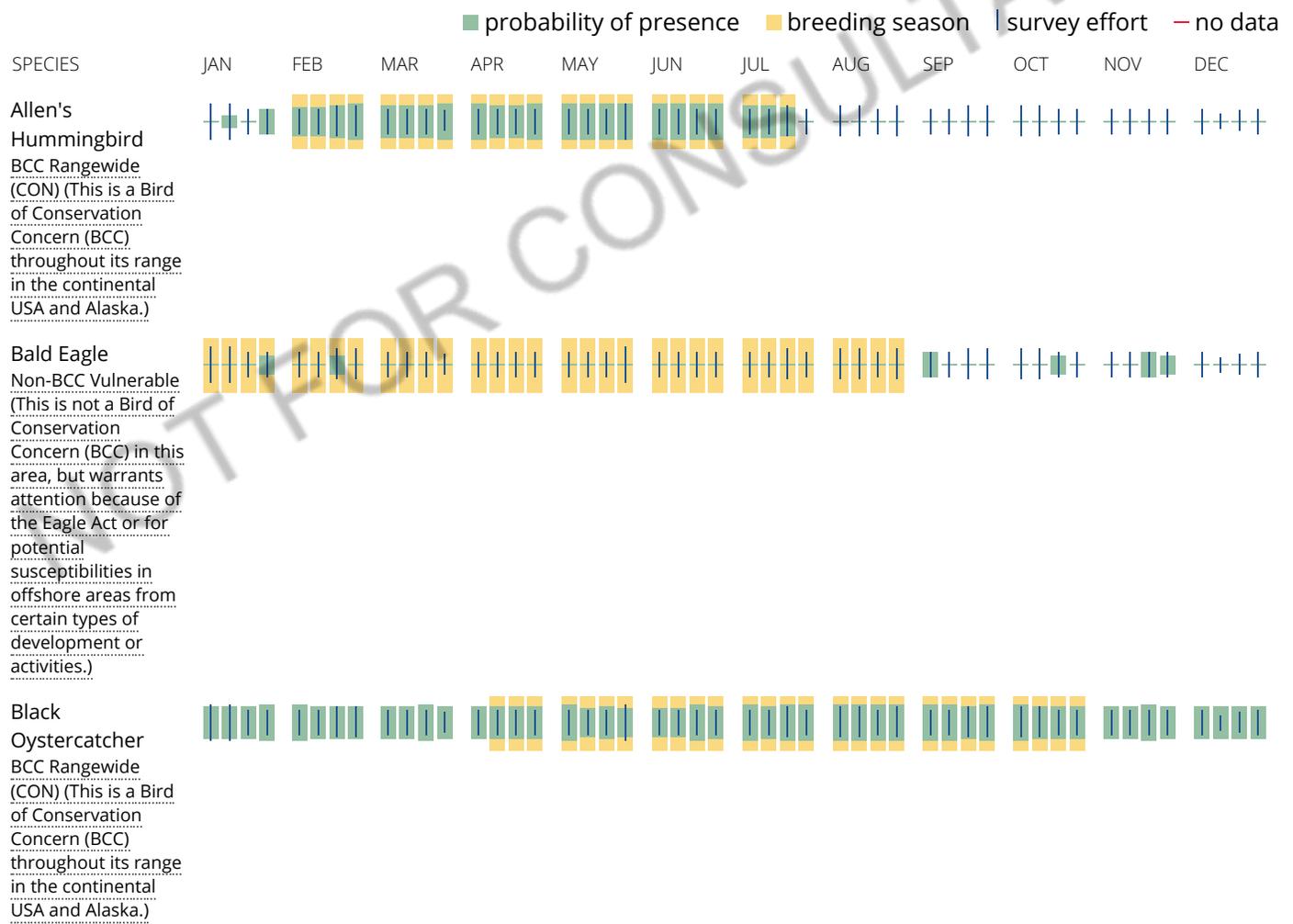
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

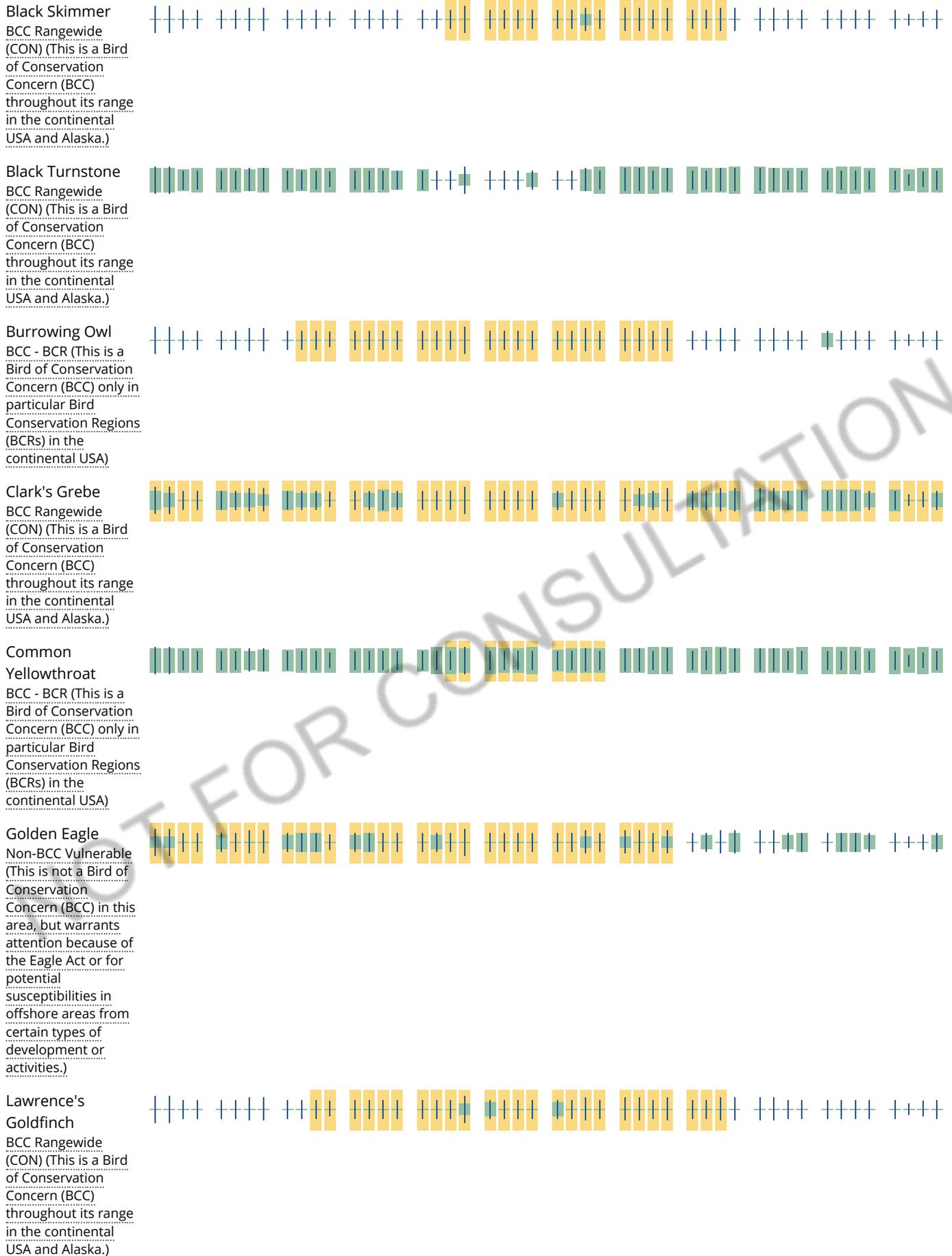
No Data (-)

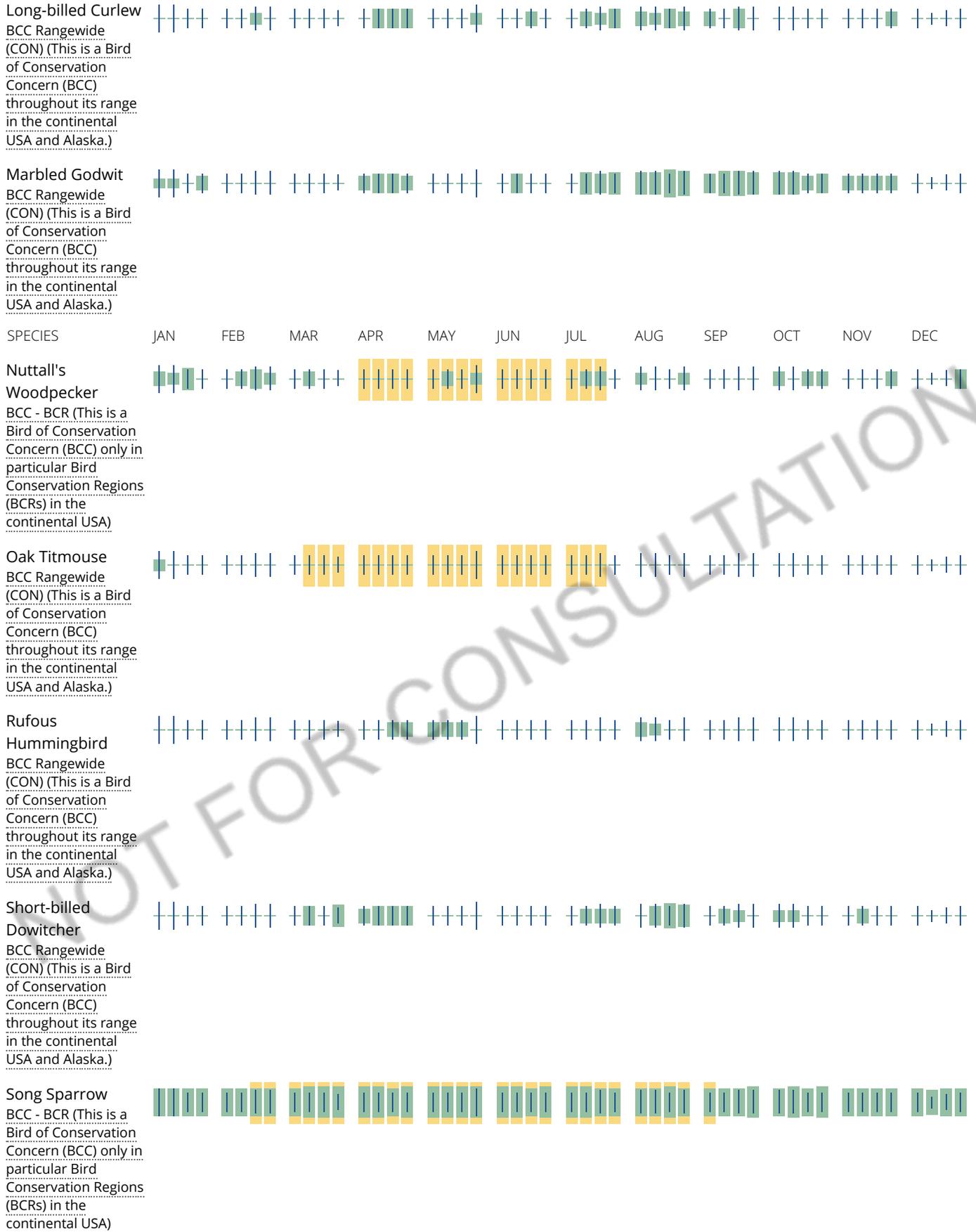
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.









Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project

intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Marine mammals

Marine mammals are protected under the [Marine Mammal Protection Act](#). Some are also protected under the Endangered Species Act¹ and the Convention on International Trade in Endangered Species of Wild Fauna and Flora².

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries³ [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the [Marine Mammals](#) page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The [Endangered Species Act](#) (ESA) of 1973.
2. The [Convention on International Trade in Endangered Species of Wild Fauna and Flora](#) (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

Southern Sea Otter *Enhydra lutris nereis*
<https://ecos.fws.gov/ecp/species/8560>

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

[R3UBH](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT E

San Mateo Resource Conservation District
C/O: Amy Kaeser
80 Stone Pine Road Suite 100
Half Moon Bay, CA 94019



State of California - Department of Fish and Wildlife
2019 ENVIRONMENTAL FILING FEE CASH RECEIPT
 DFW 753.5a (REV. 12/01/18) Previously DFG 753.5a

Print **StartOver** **Finalize&Email**

RECEIPT NUMBER:
 41 — 10152019 — 1334
 STATE CLEARINGHOUSE NUMBER (If applicable)

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY San Mateo Resource Conservation District	LEAD AGENCY EMAIL	DATE 10152019
COUNTY/STATE AGENCY OF FILING San Mateo	DOCUMENT NUMBER 127660	

PROJECT TITLE
Butano Canyon Bridge Replacement Project

PROJECT APPLICANT NAME Amy Kaeser	PROJECT APPLICANT EMAIL	PHONE NUMBER (650) 712-7765
PROJECT APPLICANT ADDRESS 80 Stone Pine Road Suite 100	CITY Half Moon Bay	STATE CA
		ZIP CODE 94019

PROJECT APPLICANT (Check appropriate box)

Local Public Agency
 School District
 Other Special District
 State Agency
 Private Entity

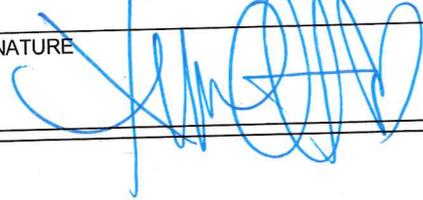
CHECK APPLICABLE FEES:

<input type="checkbox"/> Environmental Impact Report (EIR)	\$3,271.00	\$	<u>0.00</u>
<input type="checkbox"/> Mitigated/Negative Declaration (MND)(ND)	\$2,354.75	\$	<u>0.00</u>
<input type="checkbox"/> Certified Regulatory Program (CRP) document - payment due directly to CDFW	\$1,112.00	\$	<u>0.00</u>
<input checked="" type="checkbox"/> Exempt from fee			
<input checked="" type="checkbox"/> Notice of Exemption (attach)			
<input type="checkbox"/> CDFW No Effect Determination (attach)			
<input type="checkbox"/> Fee previously paid (attach previously issued cash receipt copy)			
<hr/>			
<input type="checkbox"/> Water Right Application or Petition Fee (State Water Resources Control Board only)	\$850.00	\$	<u>0.00</u>
<input checked="" type="checkbox"/> County documentary handling fee		\$	<u>50.00</u>
<input type="checkbox"/> Other		\$	<u> </u>

PAYMENT METHOD:

Cash
 Credit
 Check
 Other

TOTAL RECEIVED \$ 50.00

SIGNATURE X 	AGENCY OF FILING PRINTED NAME AND TITLE XIMENA CASTILLO / DEPUTY CLERK
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County of San Mateo
Assessor-County Clerk-Recorder
Mark Church

555 County Center
Redwood City, CA, 94063

Finalization 2019068107
10/15/19 9:03 am
018 96

Item	Title	Amount
1	EIR Administrative Fee	
	Document ID	
	DOC# 2019-000252	50.00
	Total	50.00
	Payment Type	Amount
	Check tendered	50.00
	# 1406	
	Amount Due	0.00

THANK YOU
PLEASE RETAIN THIS RECEIPT
FOR YOUR RECORDS



SAN MATEO
RESOURCE
CONSERVATION
DISTRICT

FILED ENDORSED
IN THE OFFICE OF THE
COUNTY CLERK/RECORDER
SAN MATEO COUNTY CALIF.

PHONE: 650.712.7765

OCT 15 2019

80 STONE PINE ROAD, SUITE 100
HALF MOON BAY, CA 94019

MARK CHURCH, County Clerk
By **XIMENA CASTILLO**
Deputy Clerk

SANMATEORCD.ORG

**CERTIFICATE OF DETERMINATION
OF EXEMPTION/EXCLUSION FROM ENVIRONMENTAL REVIEW**

Project Title: Butano Canyon Bridge Replacement Project
 Project Location: Spruce Lane is located off Redwood Ave in San Mateo County
 Assessor's Parcel Numbers: 089031020, 089031170
 City and County: Pescadero, San Mateo County

Description of Nature and Purpose of Project:

The Butano Canyon Bridge Replacement Project will replace an unserviceable bridge in unincorporated San Mateo County, CA. The project site is located in a community called Butano Canyon within the Santa Cruz mountains, surrounded by Butano State parks and private forested lands. The project site consists of Spruce Lane, a single lane private road, residential driveways on both sides of the creek, and the bridge across the creek.

The existing Butano Canyon Bridge is a 100-foot long three span wooden bridge on Spruce Lane constructed in 1952 with redwood spanners. The bridge has become unserviceable due to deterioration including a failing deck and an unstable foundation, resulting in it being unsafe for emergency vehicles or residents.

The project will remove the existing deteriorated bridge deck and exposed abutments, construct new retaining walls, relocate a power pole and propane tank, minor realignment of a section of Spruce Lane, and reconstruct Butano Canyon Bridge. The bridge replacement will take in a similar footprint to the current bridge and approach, expect for the minor realignment of approximately 120 feet of Spruce Lane approximately five to 10 feet to the west. The exposed concrete above ground of the existing abutments will be cut and removed. The new abutments will be installed outside of the stream channel, beyond top of bank, and well above the 100-year water surface elevation. Minor adjustments (a few feet) are being made to the angle of the bridge and to the sinuosity and width of the road to provide better access through Spruce Lane. The new bridge will restore access for residents and emergency vehicles.

Name of Person, Board, Commission or Department Proposing to Carry Out Project:

San Mateo Resource Conservation District
 Kellyx Nelson
 80 Stone Pine Road, Suite 100
 Half Moon Bay, CA 94019

EXEMPT STATUS:

Categorical Exemption, Class 2 [CEQA State Guidelines, Section 15302]

REMARKS: See page 3.

Contact Person: Amy Kaeser Telephone: (650) 712-7765 x 121

10/7/2019

Date of Determination:

I do hereby certify that the above determination has been
made pursuant to State and Local requirements.



Amy Kaeser, Conservation Project Manager
San Mateo Resource Conservation District

REMARKS:

This project is needed for safe landowner and emergency vehicle passage over Butano Creek through replacement of an existing bridge.

As described below, the project meets the CEQA criteria for exemption from environmental review under Class 2 (15302).

Project Description

The Butano Canyon Bridge Replacement Project will replace an unserviceable bridge in unincorporated San Mateo County, CA. The project site is located in a community called Butano Canyon within the Santa Cruz mountains, surrounded by Butano State parks and private forested lands. The project site consists of Spruce Lane a single lane private road, residential driveways on both sides of the creek, and bridge across the creek.

The existing Butano Canyon Bridge is a 100-foot long three span wooden bridge on Spruce Lane constructed in 1952 with redwood spanners. The bridge has a failing deck, the foundation has become unstable, and it is unsafe for emergency vehicles or residents. A new bridge is required to restore safe access.

The project will remove the existing deteriorated bridge, construct new retaining walls and abutments, install a new bridge, relocate a power pole and propane tank, and realign a small portion of Spruce Lane. The new bridge will be rebuilt on the same site and for the same purpose. Adjustments are being made to the angle of the bridge by a few feet and to the sinuosity and width of the road to provide better access through Spruce Lane to emergency vehicles. Under the proposed project, work will take place over six weeks, between August 1 – October 31, 2020. All work will occur above the ordinary high water, the project will not require any work within the active stream channel, and additional actions will be taken to reduce impacts to the site and avoid impacts to special-status species. The following describes each of these activities in greater detail.

Remove existing bridge: The existing bridge will be removed via crane and excavator. Some salvageable material from the bridge will be saved with appropriate pieces potentially used in a future project to install large woody debris in the Butano Creek channel; other material will be properly disposed of. The above ground exposed concrete of the existing abutments will be saw cut and removed, the below ground portion of the existing abutments will be left in place to reduce impacts and erosion.

Construct retaining wall: Two retaining walls will be constructed, one at each end of the bridge, to retain engineered fill and facilitate an appropriate turn radius, per CalFire specification. The retaining walls will be installed out of the stream channel, at the top of the bank, and well above the modeled 100-year water surface elevation.

Relocate power pole and propane tank: There is currently a power pole and a propane tank located directly adjacent to the northwest edge of the bridge. The pole and tank will be relocated for the proposed bridge.

Realign Spruce Lane: Spruce Lane will be realigned at the approach to the bridge from the east. An existing 42-inch diameter California nutmeg (*Torreya californica*) will be removed for the realignment.

Reconstruct Butano Canyon Bridge: A 98-foot length, Big R single span modular bridge will be constructed with a 12-foot clear width, 54-inch tall guardrails, and HL-93 capacity rating. The bridge will be supported by

drilled cast-in-place concrete piers installed out of the stream channel and above modeled 100-year water surface elevation.

Class 2 (CEQA State Guidelines, Section 15302)

This section of the CEQA guidelines describes replacement of existing structures or facilities, where new structures will be located on the same site and serve the same purpose. The purpose of this project is to replace an existing, unserviceable bridge with a new bridge on the same site to restore vehicle access for neighbors and emergency vehicles.

15302. REPLACEMENT OR RECONSTRUCTION

Class 2 consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced, including but not limited to:

- (a) Replacement or reconstruction of existing schools and hospitals to provide earthquake resistant structures which do not increase capacity more than 50 percent.*
- (b) Replacement of a commercial structure with a new structure of substantially the same size, purpose, and capacity.*
- (c) Replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity.*
- (d) Conversion of overhead electric utility distribution system facilities to underground including connection to existing overhead electric utility distribution lines where the surface is restored to the condition existing prior to the undergrounding.*

This project will reconstruct a bridge on the same site as an existing bridge. The reconstructed bridge will have substantially the same purpose and capacity as the bridge being replaced. The new bridge will be slightly shorter in length and slightly wider than the old bridge to create a better alignment and width for emergency vehicles.

The project will not have a significant impact on Butano Creek or species of concern. Actions and precautions will be taken to reduce impacts to the site and avoid impacts to special-status species. All work will take place above the ordinary high water line of the creek, and a tarp or other protective fabric will be temporarily installed below the bridge to prevent any debris from falling into the creek from bridge removal and reconstruction. Additionally, silt fences will be installed above the ordinary high water line to further prevent material or sediment from entering the creek. Measures will be taken to reduce impacts to the site, such as tree protections and minimizing disturbance of the soil and site. Measures will also be taken to reduce impacts to special status species including pre-construction surveys and a suite of additional best management practices.

CEQA State Guidelines Section 15300.2 states that a categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances. As described above, there are no unusual circumstances surrounding the proposed project that would suggest a reasonable possibility of a significant environmental effect.