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CALIFORNIA COASTAL COMMISSION

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STAFF REPORT: REGULAR CALENDAR

Application No.:	1-22-0711
Applicant:	California Department of Transportation (Caltrans)
Location:	Highway 1 at the crossing of Jack Peters Creek and connecting roadway areas (post miles 51.3-52.1), with cross street intersections at Larkin Rd., Lansing St., and County Road 500D, near the unincorporated town of Mendocino in Mendocino County.
Project Description:	Rehabilitate the existing Highway 1 bridge over Jack Peters Creek with new bridge rails and a pedestrian railing; wider shoulders; a new separated bicycle and pedestrian walkway; widened roadway approaches; new guardrail; and strengthened bridge abutments, piers, and foundations.
Staff Recommendation:	Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

The California Department of Transportation (Caltrans) proposes to rehabilitate the Highway 1 bridge over Jack Peters Creek in Mendocino County, just north of the town of Mendocino. The existing Jack Peters Creek Bridge was constructed in 1939. A seismic retrofit was completed in 1996. Because of the seismic retrofit work, Caltrans has determined that the bridge does not need to be replaced. However, Caltrans has determined the bridge needs rehabilitation with modern safety updates, further structural strengthening, and complete street improvements.

1-22-0711 (Caltrans)

The bridge has decaying, corroding bridge railings from the 1930s and narrow, almost non-existent, shoulders. The older bridge rails do not provide adequate safety to withstand accidents. The narrow shoulders do not provide any access for pedestrians or any safe access for cyclists. Caltrans would replace the eroded bridge rails with new bridge rails that are of the type approved by the Commission in many recent Highway 1 bridge projects. The vehicular lanes would remain at 12 feet to match the highway roadway width approaching the bridge of 12 feet, and bridge shoulders would be widened to 6 feet on both sides of the bridge to provide space for cyclists, disabled vehicles, and better collision avoidance. A 6-foot separated pathway would also be added to the west side of the bridge structure to provide safe pedestrian access and a California Coastal Trail crossing over the bridge that will provide an essential CCT connection north and south. Overall, the rehabilitated bridge will be 17 feet wider.

In order to provide structural stability for the new weight of the widened bridge for another 75 years in design life the bridge will be strengthened. The existing two bridge abutments and two piers would be widened, and the foundations expanded. Because the new shoulders and bridge rails will widen the bridge and shift the existing centerline, Caltrans would also shift approximately 1200 feet of the approaching roadway to the east to meet the new bridge centerline, maintaining the existing 12-foot lanes and adding approach shoulders that would taper into existing 4-foot roadway shoulders. The shift east would require excavation of the slope east of the road (previously constructed with the highway). The shift east will also allow Caltrans to extend the California Coastal Trail north and south of the west side of the bridge in the project area that can enable informal and eventually official California Coastal Trail connections to Russian Gulch State Park and the town of Mendocino. The steep coastal bluffs essentially preclude a direct connection to the shoreline, however the project will also repair an existing informal trail under the bridge as access to Jack Peters Creek.

Under the current conditions, the deteriorating bridge rails and narrow shoulders result in unsafe conditions for vehicle users, there is a lack of access for pedestrians, and unsafe access for cyclists, all of which currently severely impede public coastal access and recreation, in conflict with the policies of the Coastal Act protective of these public coastal resources. The rehabilitated bridge would provide for the first time a safe, allweather pedestrian crossing of Jack Peters Creek for the California Coastal Trail as well as improved paved shoulders to provide a safe crossing for bicyclists on the Pacific Coast Bike Route. The rehabilitation of the bridge will help ensure the continued safety of the bridge, extend its design life for another 75 years, and avoid a larger bridge replacement project. Together, those improvements will ensure the continued safe functioning of Highway 1 as a critical coastal access route for all multimodal users.

The relocation of the roadway and shoulder expansion will have some minor impacts to roadside ditches designated as wetlands. Construction activities will also have some minor impacts to a wetland on the bank of Jack Peters Creek. The wetland impacts are allowable under section 30233(a)(4) of the Coastal Act as an incidental public service purpose, and Caltrans has demonstrated that the proposed project represents the least environmentally damaging feasible alternative. Feasible mitigation measures will be

provided to minimize adverse environmental effects, and staff recommends Special Conditions 2, 3, 4, 5, 6, 8, and 11 to require implementation of various minimization and mitigation measures.

Construction activities and the shift of the roadway east will require the clearing of vegetation and trees alongside the roadway and on the banks under the bridge, including areas containing ESHA, most notably Grand Fir Forest and Bishop Pine Forest ESHA. Although the proposed vegetation and tree removal element is inconsistent with the requirements of section 30240 that protect ESHA, denial of the project would preclude achieving section 30210's mandate to ensure maximum safe public access. Thus, the proposed project presents a true conflict between section 30240 on the one hand and section 30210 on the other that must be resolved through application of section 30007.5. As the proposed bridge rehabilitation project is intended to improve the safety and reliability of Highway 1 at this creek crossing and will create safe vehicular, pedestrian, and cycling access, the benefits to public access along the coast are integral to the project purpose. In addition, as any rehabilitation work on the bridge necessitates activities in ESHA, there are no feasible alternatives that would avoid impacts to ESHA.

Caltrans has adopted multiple avoidance and minimization measures to reduce the number of trees and vegetation to be removed and to best protect ESHA and special species habitat from impacts of the project. Caltrans proposes to restore almost all the impacted habitats on site with revegetation. Special Condition 3 requires replanting of the impacted areas at a 3:1 ratio with native plants and Grand Fir trees with extended monitoring for tree replanting.

Special Condition 4 expands on this with off-site mitigation and preservation of Bishop Pine Forest. This additional compensatory habitat mitigation for ESHA and wetland impacts will come through an off-site mitigation project that combines mitigation obligations for three Caltrans projects, including one recently approved by the Commission. That mitigation project includes the purchase of a private coastal blufftop property in Mendocino County, enhancement of the existing habitat on the property via substantial invasive species removal, and protection of the habitat on the property in perpetuity under an open space deed restriction and endowment.

Staff believes that approval of the bridge rehabilitation to provide safe and enhanced public coastal access together with the provision of ESHA mitigation as proposed by Caltrans and as conditioned is on balance the most protective of coastal resources. Staff therefore recommends approval of CDP application number 1-22-0711, as conditioned. The motion to implement this recommendation can be found on page 5.

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LIST OF APPENDICES

Appendix A: Substantive File Documents

LIST OF EXHIBITS

- Exhibit 1 Project Area Vicinity Map
- Exhibit 2 Project Location Map
- Exhibit 3 Existing Conditions Visuals
- Exhibit 4 Caltrans Project Description
- Exhibit 5 Proposed Conditions Visuals
- Exhibit 6 Proposed BMPs and AMMs
- Exhibit 7 ESHA Report
- Exhibit 8 Onsite Revegetation Plan
- Exhibit 9 Offsite Habitat Mitigation and Monitoring Plan
- Exhibit 10 Public Access Easement Area

I. Motion and Resolution

Motion

I move that the Commission **<u>approve</u>** Coastal Development Permit Application No. 1-22-0711 pursuant to the staff recommendation.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution

The Commission hereby **approves** the Coastal Development Permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or (2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. Standard Conditions

This permit is granted subject to the following standard conditions:

- 1. Notice of Receipt and Acknowledgment. The permit is not valid, and development shall not commence, until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. **Expiration**. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- **3. Interpretation**. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- **4. Assignment**. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. Special Conditions

This permit is granted subject to the following special conditions:

- 1. Final Construction Plans. NOT LESS THAN 30 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit for the review and written approval of the Executive Director, final site and construction plans in a full hard copy and electronic set. The Final Construction Plans shall be in substantial conformance to the Final CDP Application, except as otherwise modified by this CDP's terms and conditions. The Final Construction Plans, shall, at a minimum, include and provide for the following:
 - A. **Construction Areas**. The Final Construction Plans shall identify, including in a map or plan, the specific location of all construction areas, all final staging areas, and all construction access corridors in site plan view. All such areas within which construction activities or staging are to take place shall be minimized to the maximum extent feasible in order to have the least impact on coastal resources. Special attention shall be given to siting and designing construction areas when feasible to minimize impacts to public parking and public views. Staging areas shall limit, to the greatest extent feasible, transportation of materials into and out of Mendocino town limits. Construction is prohibited outside of the defined construction, staging, and storage areas.
 - B. Visual Elements. Final specification of all visual elements of the project including design, colors, and other aesthetic treatments of the bridge structure, bridge rails, guardrail, and any other visual elements of the development, which shall be designed to be subordinate to the natural setting through measures such as (but not limited to) visually permeable design, minimizing reflective surfaces, and use of colors that blend in hue and brightness with the surroundings.
 - C. **Construction Methods.** The Final Construction Plans shall specify all construction methods to be used, including all methods to keep the construction areas separated from public recreational use areas, including the public pullout area (e.g., using unobtrusive fencing or equivalent measures to delineate construction areas), all of which shall be clearly identified on the construction site map and described in a narrative description.
 - D. **Construction Timing**. The Final Construction Plans shall provide an updated estimated construction timetable consistent with **Special Condition 2.A** below.
 - E. **Final Transportation Management Plan**, which shall limit lane closures to the maximum extent feasible and be in substantial conformance with such limitations proposed in the application, including that complete road closures be

a maximum of 30 nights and shall only occur at nighttime after 10 pm. All oneway traffic lane closures shall provide for full and continuous access for pedestrians and cyclists through the work corridor, except during limited complete closures. The Transportation Management Plan shall also provide for emergency services to cross the bridge during any one-way traffic lane or full road closures. Updated versions of the Transportation Management Plan shall be provided after any substantial changes.

- F. **Public Access Improvements**. The Final Construction Plans shall include written descriptions, plans, and maps depicting the public access improvements to be undertaken as part of this project, including, at a minimum, descriptions of the trail extensions north and south of the bridge itself, under the bridge, and at the public pullover area. These plans shall demonstrate sufficient public access on the west side of Highway 1 extending north of the bridge site to County Road 500D; south to Lansing Street; within the highway pullout south of the bridge; and from the pullout to Jack Peters Creek. After construction is complete, these trail and pullover areas shall be retained open for public use, without interference or interruption, except for emergency or permitted repairs.
- G. **Shoulder Widths on Approaching Lanes**. The Final Construction Plans shall include specifications showing the approaching areas of Highway 1 include roadway shoulders that taper within 200 feet from the bridge from 6 feet to 4 feet and are maintained at 4 feet through the project corridor.
- H. **Narrative Cover Letter.** The Final Construction Plans shall include documentation demonstrating that the final plans are consistent with all relevant terms of this Special Condition and any other relevant term or condition of this CDP and how the requirements of this CDP will be communicated to any contractor(s) implementing work under the plans.
- 1. **Modifications**. The Permittee shall undertake development in accordance with the approved final plans. The Executive Director may approve minor adjustments to these plans if the Executive Director determines that the adjustments are 1) de minimus in nature and scope, 2) reasonable and necessary, 3) do not adversely impact coastal resources, and 4) do not legally require an amendment to this CDP.
- 2. Construction Responsibilities Required to Protect Coastal Resources. The Permittee shall undertake development in compliance with all conditions of this CDP and with all proposed Avoidance and Minimization Measures (AMMs) and Best Management Practices (BMPs) attached here as Exhibit 6, except as supplemented or modified herein:
 - A. **Construction Timing.** All work that has the potential to directly impact surface waters (including grading, cutting, and filling on the banks of Jack Peters Creek, hoe-ramming, and pile driving) shall take place between June 15 and October 15 unless otherwise approved in writing by the Executive Director as having no

substantial impacts to coastal resources because of timing. Soil disturbing work shall be minimized to the extent feasible during the rainy season.

- B. Environmental Awareness Training. PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT, including major vegetation removal, a qualified biologist shall provide a pre-construction meeting with all construction personnel (contractors and subcontractors), consisting of a briefing on environmental permit conditions and requirements relative to each stage of the proposed project, including but not limited to work windows, construction site management within the project area, locations of environmentally sensitive areas, and how to identify and report sensitive species within the project area. This shall be repeated each season of construction and, if there is worker turnover within the construction shall also be available at the job site to ensure the importance of these measures are recognized.
- C. Flagging of Biologically Sensitive Areas. Demarcation of the boundaries of riparian, wetland, and other ESHA within and adjacent to the project area pursuant to BR-4-B in Exhibit 6 shall be inspected throughout construction to ensure that they are visible for construction personnel. Any fencing that is used shall be properly installed. If any fencing is removed, damaged, or otherwise compromised during the construction period, construction activities shall cease until the fencing is repaired or replaced.
- D. Water Pollution Prevention. PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT, including major vegetation removal, the Permittee shall ensure all temporary erosion, runoff, and sediment control BMPs are in place in accordance with the final Stormwater Pollution Prevention Plan (SWPPP) required by **Special Condition 8** below.
- E. **Spill Prevention.** Fuels, lubricants, solvents, and other hazardous materials shall not be allowed to enter coastal waters, wetlands, or other sensitive habitats. Fueling and maintenance of construction equipment and vehicles shall be conducted off-site, if feasible. Any fueling and maintenance of mobile equipment conducted on-site shall take place at a designated area located at least 50 feet from coastal waters and sensitive habitat. The fueling and maintenance area shall be designed to fully contain any spills of fuel, oil, or other contaminants. Equipment that cannot be feasibly relocated to a designated fueling and maintenance area (such as cranes) may be fueled and maintained in other areas of the site, provided that procedures are implemented to fully contain any potential spills. Hazardous materials management equipment shall be available immediately on-hand at the project site, and a registered first-response, professional hazardous materials cleanup/remediation service shall be locally available on call. Any accidental spill shall be rapidly contained and cleaned up.
- F. **Invasive Species Prevention.** All construction equipment shall be cleaned prior to entering the work site consistent with California Department of Fish and Wildlife (CDFW) protocols to minimize the potential for the transport of non-

native vegetation seeds and plant material or invasive species. Rock, sand, or any material used during construction shall originate from local sources to avoid the inadvertent introduction of non-native plant species to surrounding environmentally sensitive areas. To prevent the spread of invasive plant species in disturbed soil after construction, all disturbed areas shall be seeded with native herbaceous species and straw, straw bales, seed, mulch, or other material used for erosion control or landscaping shall be free of noxious weed seed and propagules.

- G. **Trash/Debris.** During construction, all trash and debris shall be properly contained, removed from the work site, and disposed of on a regular basis to avoid contamination of habitat during construction activities. Any debris inadvertently discharged into coastal waters or surrounding habitats shall be recovered immediately and disposed of consistent with the requirements of this CDP. All construction debris shall be disposed of in an upland location outside of the coastal zone or at another disposal facility approved by the Executive Director.
- H. **Plastic Netting Prohibition.** To minimize wildlife entanglement and plastic debris pollution, the use of temporary rolled erosion and sediment control products with plastic netting (such as polypropylene, nylon, polyethylene, polyester, or other synthetic fibers used in fiber rolls, erosion control blankets, and mulch control netting) is prohibited. Any erosion-control associated netting shall be made of natural fibers and constructed in a loose-weave design with movable joints between the horizontal and vertical twines.
- I. **Vegetation Removal.** Vegetation cutting and removal activities shall be done with the use of hand tools (including chainsaws) to the maximum extent feasible. To minimize the opportunity of spreading tree pathogens, all pine trees that will be cut down, and any trimmed branches or green woody material, shall be chipped to a size equal to or less than 6-inches in diameter and left on-site.
- J. Soil Protection. To the extent feasible, vegetation within proposed access roads shall be cut back close to the ground with roots left undisturbed. Soils within temporarily disturbed areas shall be protected from compaction and tilling of native soils shall be avoided to the extent feasible. Any soil protection materials, barriers, or any additional road base shall be completely removed upon completion of construction. All areas of fill shall be amended with either locally sourced and as weed-free as feasible topsoil or with compost, to create conditions appropriate for planting and revegetation. Where feasible, existing topsoil shall be removed, stockpiled, and replaced on new fill. Fill slopes may also be amended by incorporating compost into the top layer. Topsoil shall not be stockpiled or redistributed from soils where invasive plant species are abundant.
- K. Protection of Nesting Bird ESHA. The Permittee shall submit the results of all pre-construction surveys for nesting birds conducted under the AMM BR-2 in Exhibit 6 within 30 days. If vegetation removal is to take place during the nesting/breeding season, buffers of at least 100 feet from active nests of

sensitive species of birds and 500 feet from any active Raptor nests shall be maintained during the active breeding season, or until the young of the year have fledged.

- L. **Biological Monitoring.** The Marine Mammal Monitoring Plan and the Aquatic Species Relocation Plan specified in BR-2-F and BR-2-K in **Exhibit 6**, shall be submitted prior to the commencement of any construction activities with possible impacts to marine mammals. Biological monitor(s) shall be qualified biologist(s) with the ability to recognize sensitive species and habitats in the project vicinity. Biological monitor(s) shall have the authority to stop work activities in any area if required to avoid adverse impacts to sensitive resources. Monitor(s) shall maintain records of activities, observations, and communications with the Permittee and/or construction personnel. The monitoring logs shall be retained and made available for agency review upon request and shall be submitted to the Executive Director following completion of construction.
- M. **Night Lighting.** The use of artificial lighting shall be temporary and of short duration and lighting shall be directed away from the channel, shielded and pointed downward, and focused specifically on the portion of the project area actively under construction to reduce potential disturbance to sensitive species.
- N. **Protection of Wildlife.** To prevent the inadvertent entrapment of any special status wildlife, all excavated, steep-walled holes or trenches more than one foot deep shall be covered at the close of each working day by plywood or similar materials or, if that is infeasible, one or more escape ramps constructed of earthen fill or wooden planks shall be installed.
- 3. Final Onsite Revegetation Plan (ORP). NOT LESS THAN 30 DAYS PRIOR TO COMMENCEMENT OF MAJOR VEGETATION REMOVAL, the Permittee shall submit, for the review and approval of the Executive Director, a final revised ORP for revegetation of disturbed areas and invasive species removal. The final ORP shall substantially conform to the ORP titled "Onsite Revegetation Plan for the Jack Peters Creek Bridge Replacement Project" dated August 2022 (Exhibit 8), except as supplemented or modified below:

A. The ORP shall include:

- A statement of goals and objectives, including goals for (a) reestablishing forest, riparian, and other habitats within areas disturbed by construction similar to or higher-quality than pre-construction habitat conditions, and (b) removing species ranked as "High" and "Moderate" by the California Invasive Plant Council, excluding non-native annual grasses, and minimizing the establishment and spread of those invasive species in disturbed areas during the 5-year monitoring and maintenance period.
- 2) Updated definitions of temporary and permanent impacts consistent with the following definitions: "Short-term temporary impacts" are those that are restored within 12 months of initial construction activity disturbance; "Long-

term temporary impacts" are those that may occur for up to a 24-month period from the initial disturbance but require no more than 12 months from the conclusion of construction activity disturbance to fully recover. Any impacts that do not meet these parameters shall be considered "permanent impacts."

- 3) Updated estimates for the final habitat impacts of the project's construction and a provision for the submittal to the Executive Director, within 90 days of completion of construction, a final "as-built" onsite habitat impact report verifying the final extent and nature of actual construction impacts.
- 4) Provisions ensuring that habitat impacts shall be mitigated onsite consistent with the following ratios (acres of creation or substantial restoration/acres of impacts) at a minimum: short-term temporary shall be mitigated at a 1:1 ratio; long-term temporary impacts shall be mitigated at a 1.5:1 ratio; permanent impacts shall be mitigated at a minimum ratio of 3:1 for upland ESHA and riparian impacts and 4:1 for other wetlands. The ORP shall also ensure no net loss of wetlands by a minimum 1:1 in kind habitat creation or substantial restoration. When the Permittee demonstrates in the ORP that it is unable to meet these mitigation ratios onsite, the ORP may refer to additional offsite mitigation in the final Offsite Habitat Mitigation and Monitoring Plan (HMMP) required by Special Condition 4.
- 5) Documentation of the nature and extent of revegetation and wetland creation activities, including a plant palette; numbers and acreages of plantings; and a map or plan depicting the areas for revegetation and for wetland creation. The plant palette for revegetation shall be based on a predisturbance survey of what exists there currently. If the area to be impacted is non-native dominated, then a survey of plant composition in the surrounding area shall be conducted to derive an appropriate plant palette for revegetation.
- 6) Documentation of the nature and extent of invasive species removal, including a list of species to be removed; areas for removal; provisions that hand tools shall be used unless infeasible and that the use of chemical pesticides shall be avoided, unless approved by the Executive Director as necessary and with appropriate minimization and mitigation measures.
- 7) A schedule for implementation of the final plan, including erosion control measures, the removal of non-native invasive plants, installation (i.e., planting) of native plants, and ongoing maintenance and monitoring activities. Planting of native species shall take place in the fall/winter after, or just before, the onset of the rainy season.
- 8) A set of Interim and Final Success Criteria for Onsite Revegetation that shall serve as benchmarks and guide adaptive management and that shall include, at a minimum: (a) a minimum of 80% survival of replacement plantings (a combination of living installed, volunteer, and/or resprouting native woody plants) of trees and large shrubs at the end of five years; and (b) for all areas disturbed during construction activities, equal to or less than

5% cover of invasive plants rated "Moderate" and "High" by the California Invasive Plant Council except for nonnative annual grasses.

- 9) A Monitoring Plan that provides for monitoring, maintenance, and remediation activities. The Permittee shall submit monitoring reports prepared by a qualified specialist to the Executive Director for review and approval six-months after planting and at the end of Years 1, 3, and 5 after planting. In the case of Grand Fir replanting, the monitoring plan shall provide for extended biannual monitoring reports through the end of year 10 after replanting. Each report shall document the condition of the revegetation and invasive species removal with photographs taken from the same fixed points in the same directions; a "performance evaluation" section where monitoring results are used to evaluate the status of the revegetation and invasive species removal efforts in relation to the interim and final success criteria in the final approved ORP; and recommendations for work for the subsequent year needed to improve mitigation success.
- 10) Provisions for a final monitoring report for Year 5, and Year 10 for the Grand Fir species, that shall be submitted for the review and approval of the Executive Director at the conclusion of all onsite mitigation efforts consistent with the monitoring schedule in the final approved ORP. The final monitoring report shall evaluate whether the revegetated areas conform to the goals, objectives, and success criteria set forth in the approved final ORP. The final monitoring report shall progress and success and include sufficient detail to evaluate comprehensive mitigation compliance with the mitigation program and specified goals and success criteria set forth in the approved final ORP.
- B. In the event actual impacts in the final "as-built" onsite habitat impact report exceed the estimates in the Final ORP submitted prior to construction, the Permittee shall submit an updated ORP that provides additional mitigation sufficient to compensate for the additional final impacts. The revised or supplemental plan shall be processed as an amendment to this CDP, unless the Executive Director determines that no amendment is legally required.
- C. If the final monitoring report indicates that the onsite revegetation and restoration efforts have been unsuccessful, in part or in whole, based on the approved success criteria, the Permittee shall submit within 90 days a revised or supplemental ORP for the review and approval of the Executive Director to compensate for those portions of the original program which did not meet the approved success criteria. The revised or supplemental ORP shall be prepared by a qualified restoration specialist and shall specify measures to remediate those portions of the original approved ORP that have failed or have not been implemented in conformance with the original approved ORP. The revised plan shall be processed as an amendment to this CDP, unless the Executive Director determines that no amendment is legally required.
- D. The Permittee shall undertake development in accordance with the approved final ORP. Any proposed changes to the approved final plan shall be reported

to the Executive Director. No changes to the approved final plan shall occur without a Commission approved amendment to this CDP unless the Executive Director determines that no amendment is legally required.

4. Final Offsite Habitat Mitigation and Monitoring Plan (HMMP). NOT LESS

THAN 30 DAYS PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT, including major vegetation removal, the Permittee shall submit, for the review and written approval of the Executive Director, a final revised offsite HMMP for enhancement and preservation of ESHA and wetlands as compensatory mitigation for construction impacts of the approved project. The final HMMP shall substantially conform to the draft Offsite Habitat Mitigation and Monitoring Plan titled "Saunder's Landing Offsite Draft Habitat Mitigation and Monitoring Plan" dated September 2022 (Exhibit 9), except as supplemented or modified below:

A. **Components of Offsite Habitat Mitigation and Monitoring Plan (HMMP).** The final HMMP shall include, at a minimum, the following:

- Plans for the Substantial Removal of Invasive Species. The final plan shall include plans for the substantial removal of all Cal-IPC rated "High" invasive species over the whole mitigation parcel. The plans shall include implementation, monitoring, and reporting components, including at a minimum, the following:
 - a) Provisions for completing a seasonally appropriate survey of the eastern parcel for invasive plant species. Survey results shall be mapped, and the map shall be added to the final HMMP. Plans for the substantial removal of all Cal-IPC rated "High" invasive species on the entire parcel, except for non-native annual grasses, including a description of the methods for invasive species removal activities, replanting palette if applicable (species and amounts to be planted if appropriate/necessary, which shall match the surrounding native vegetation composition), monitoring and maintenance plans, interim and final success criteria, and a schedule for implementation.
 - b) Provisions for monitoring annually for a minimum of five (5) years and submitting monitoring reports to the Executive Director in Years 1, 3, and 5, beginning the first year after invasive species removal and replanting of native vegetation and consistent with the monitoring schedule in the final approved HMMP. Each report shall document the condition of the invasive species removal areas and native plant revegetation progress, with photographs taken from the same fixed points in the same directions; a "performance evaluation" section where monitoring results are used to evaluate the status of the invasive species removal efforts and revegetation in relation to the interim and final success criteria in the final approved HMMP; and recommendations for work for the subsequent year needed to improve mitigation success. The final monitoring report shall be prepared by a qualified restoration specialist, shall summarize prior reports, and shall provide a timeline of the overall

progress and success and include sufficient detail to evaluate comprehensive compliance with the specified goals, objectives, and success criteria set forth in the approved final HMMP.

- c) Final success criteria shall include, at a minimum, less than 5% cover of invasive plants rated "High" by the California Invasive Plant Council, except for non-native annual grasses. If the final monitoring report indicates that the habitat enhancement activities have been unsuccessful, in part or in whole, based on the approved success criteria, the Permittee shall submit within 90 days a revised or supplemental HMMP for the review and approval of the Executive Director to compensate for those portions of the original mitigation efforts which did not meet the approved success criteria. The revised or supplemental HMMP shall be prepared by a qualified restoration specialist and shall specify measures to remediate those portions of the original approved HMMP that have failed or have not been implemented in conformance with the original approved HMMP. The revised plan shall be processed as an amendment to this CDP, unless the Executive Director determines that no amendment is legally required.
- 2) Provisions for the Parcel Acquisition and Establishment of an Endowment Fund. The final HMMP shall include provisions for the transfer by the Permittee of 100% of the funds required for the purchase of the mitigation parcel in the name of Mendocino Land Trust (MLT) (or similar land management entity approved in the final HMMP) and the transfer by the Permittee of the final approved funding amount to an endowment account for the long-term management of the parcel by MLT, consistent with the final formal agreements required by **Special Condition 5** below. The final HMMP shall identify the final amount of funding that the Permittee shall provide in a non-wasting endowment account to be used by MLT (or similar land management entity approved in the final HMMP) for the long-term management of the parcel. The final endowment funding amount shall be adequate to fund the long-term management activities described in the final approved HMMP, which shall ensure the habitat on the mitigation parcel is kept in good condition in perpetuity. The final HMMP shall include sufficient detail to support the determination that the final funding amount is adequate.
- 3) Schedule. A schedule for, at a minimum, (1) execution of the formal agreements consistent with **Special Condition 5** below; (2) transfer of funds for the property acquisition and endowment consistent with all applicable special conditions of this CDP; (3) execution and recordation of the required open space deed restriction; and (4) implementation of the habitat enhancement activities in the final approved HMMP and consistent with all applicable special conditions of this CDP.
- 4) Acknowledgments. The final HMMP shall acknowledge and by extension the Permittee and Mendocino Land Trust (or similar land management entity approved in the final HMMP) shall agree to protect the mitigation

parcel in perpetuity consistent with the required deed restriction, with the final approved HMMP, and with all other applicable special conditions of this CDP. The final HMMP shall be signed by both the Permittee and Mendocino Land Trust (or similar land management entity approved in the final HMMP).

- 5) Provisions for Future Grazing on Mitigation Parcel. The final HMMP shall state that in the event the Permittee, Mendocino Land Trust (or similar land management entity approved in the final HMMP), or subsequent landowner intends to use the parcel for grazing activities, the Permittee or landowner shall submit a Grazing Management Plan prior to the undertaking of any grazing for the review and approval of the Executive Director. The Grazing Management Plan shall be prepared by a qualified expert(s) in grazing management and restoration ecology, and shall consider the habitat enhancement, restoration, and management goals of the final HMMP in recommending a grazing regime that is compatible with those goals.
- B. **Timing of Offsite Habitat Mitigation.** The final HMMP shall be implemented consistent with the following minimum requirements:
 - Property Acquisition and Funding Transfers. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit documentation(s) in a form and content acceptable to the Executive Director of the successful transfer of funds to the State Coastal Conservancy (or a similar entity approved in the final HMMP) to cover 100% of the cost of the subject mitigation parcel acquisition consistent with all applicable special conditions of this CDP.
 - 2) PRIOR TO COMMENCEMENT OF IMPLEMENTATION OF THE HABITAT ENHANCEMENT ACTIVITIES IN THE FINAL HMMP, the Permittee shall submit evidence in a form and content acceptable to the Executive Director of the transfer of the mitigation parcel to MLT (or similar land management entity approved in the final HMMP) and the transfer of the final approved funding amount to the endowment account established for the long-term management of the parcel, consistent with all applicable special conditions of this CDP.
 - 3) WITHIN THREE (3) YEARS OF COMMENCEMENT OF CONSTRUCTION, the Permittee shall ensure commencement of implementation of the habitat enhancement activities in the final HMMP pursuant to a CDP issued by Mendocino County or a CDP amendment issued by the Commission, if required and as applicable. If any conditions of the CDP for the implementation of the offsite mitigation conflict with the final HMMP and/or special conditions of this CDP, the Permittee shall submit an application for an amendment to this CDP within 60 days, unless the Executive Director determines an amendment is not legally required. If implementation of the habitat enhancement activities in the final HMMP has not commenced within three (3) years of commencement of construction, the Permittee shall submit a revised or supplemental HMMP with additional mitigation to compensate for the delay in mitigation.

- C. **Consistency.** The Permittee shall undertake development in accordance with the final approved HMMP. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission approved amendment to this CDP unless the Executive Director determines that no amendment is legally required. The Executive Director may extend any deadline above if the Executive Director determines that the Permittee and designated land management entity (e.g., MLT) have: (1) been diligently pursuing the completion of the tasks and milestones, and (2) have demonstrated good cause for any identified delays.
- 5. Offsite Habitat Mitigation Agreements and Non-Wasting Endowment Fund. The Permittee shall comply with the following terms below:
 - A. Mitigation Parcel Acquisition Funding Agreement. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit a signed formal agreement in a form and content acceptable to the Executive Director between the Permittee, Mendocino Land Trust (MLT), the State Coastal Conservancy (SCC), and/or other similar non-profit land management or state entities approved in the final HMMP, which shall provide for the transfer of 100% of the cost of the purchase of the mitigation parcel identified in the final HMMP from the Permittee to either 1) SCC, 2) MLT, or 3) another non-profit land management or state entity approved in the final HMMP or by the Executive Director as being a non-profit entity sufficient to maintain the property in perpetuity in conservation.
 - **B.** Long-Term Mitigation Parcel Management Agreement. WITHIN 90 DAYS OF TRANSFERENCE OF THE MITIGATION PARCEL, the Permittee shall submit a signed formal agreement in a form and content acceptable to the Executive Director between, at a minimum, the Permittee, Mendocino Land Trust (or a similar approved land management entity responsible for managing the mitigation parcel long-term), and the National Fish and Wildlife Foundation (or a similar approved entity responsible for holding the endowment), who shall agree to the following minimum requirements:
 - 1) Agreement for Acquisition. The funding provided by the Permittee in accordance with the final HMMP and all special conditions of this CDP, shall be used for the acquisition of the mitigation parcel, to protect the mitigation parcel, and to implement the long term management plan in the final HMMP, or to transfer the funds to another entity approved by the Executive Director that will use the funds for the acquisition of the mitigation parcel, to protect the mitigation parcel, and to implement the long term management plan in the final HMMP.
 - 2) Responsibility. The agreement shall acknowledge that although Mendocino Land Trust (or a similar approved land management entity) may implement components of the final HMMP such as the long-term management plan, the Permittee (Caltrans) shall remain ultimately responsible for successful

implementation of the final HMMP and compliance with all terms and conditions of this CDP. The Permittee shall also be ultimately responsible for acquiring all permits and approvals necessary for implementing the habitat enhancement activities in the final HMMP, unless otherwise specified in the final approved HMMP.

- 3) Endowment. The agreement shall provide for the establishment of a non-wasting endowment funded by the Permittee to fund all of the long-term management activities associated with protection of the habitat on the mitigation parcel and any other measures and purposes approved in the final offsite HMMP and required by special conditions of this CDP. The endowment shall be deposited into a separate interest-bearing account held by the National Fish and Wildlife Foundation (or a similar entity approved by the Executive Director). The endowment shall be in an amount sufficient to ensure the long-term maintenance and preservation of the mitigation parcel consistent with the final offsite HMMP and all special conditions of this CDP. The original endowment and any accrued interest shall be used solely for the purposes described in the final approved HMMP.
- **C.** The Executive Director may extend any of the deadlines above if the Executive Director determines that the Permittee and designated land management entity (e.g., MLT) have: (1) been diligently pursuing the completion of the tasks and milestones, and (2) have demonstrated good cause for any identified delays.
- 6. Open Space Deed Restriction. WITHIN THREE (3) YEARS OF TRANSFERRANCE OF THE MITIGATION PARCEL, consistent with Special Conditions 4 and 5 above, the Permittee shall provide evidence that a deed restriction in a form and content acceptable to the Executive Director has been executed and recorded restricting the mitigation parcel in perpetuity, consistent with special conditions of this CDP and the following terms:
 - A. Allowed Uses and Development. No development, as defined in section 30106 of the Coastal Act, shall occur on the mitigation parcel except for the following types of development if approved under separate CDP authorization: (a) grazing for habitat enhancement purposes consistent with this CDP; (b) activities associated with habitat maintenance, enhancement, and restoration consistent with the final approved HMMP; and (c) construction and maintenance of the California Coastal Trail and associated features as a nature-study resource-dependent use.
 - **B. Recordation.** The restriction shall be recorded free of prior liens and any other encumbrances that the Executive Director determines may affect the interest being conveyed, and it shall include formal legal descriptions of the entirety of the mitigation parcel, a metes and bounds legal description and graphic depiction, prepared by a licensed surveyor based on an on-site inspection, drawn to scale and approved by the Executive Director, of the deed restricted area. The deed restriction shall run with the land in favor of the People of the State of California, binding successors and assigns of the landowner in

perpetuity. If the Permittee does not provide evidence of a recorded deed restriction that complies with this condition as described above, the Permittee shall submit an application to amend this permit to modify the deadline in this condition and authorize any additional mitigation determined to be necessary due to the delay in compliance with this permit condition.

- **C. Deadlines**. The Executive Director may extend any of the deadlines above if the Executive Director determines that the Permittee and designated land management entity (e.g., MLT) have: (1) been diligently pursuing the completion of the tasks and milestones, and (2) have demonstrated good cause for any identified delays.
- 7. Pile Driving Limitations and Hydroacoustic Monitoring. PRIOR TO COMMENCEMENT OF ANY impact hammering, pile driving, hoe-ram operations, or any substantial construction activities to alter the existing the piers and abutments of Jack Peters Creek Bridge, the Permittee shall submit, and obtain written approval of by the Executive Director, a Hydroacoustic Monitoring Plan consistent with that specified in <u>Exhibit 6</u> (BR-2-E) to minimize the potential for exceedance of threshold sound levels and impacts to coastal resources during pile driving, as supplemented or modified herein:
 - **A.** Pile driving/hammering activities shall be conducted between June 15th and October 15th to avoid the primary salmonid migration season, unless an exception is requested of and approved by the Executive Director and the federal resource agencies.
 - **B.** Vibratory pile driving shall be used in lieu of impact pile driving whenever feasible. Impact driving and hoe-ram operations shall be minimized to the extent practicable.
 - **C.** During impact driving, the contractor shall limit the number of strikes per day to the minimum necessary to complete the work and shall limit the total number of hammer strikes per day to stay below the cumulative sound exposure level (SEL) injurious to fish as established by the Fisheries Hydroacoustic Working Group (FHWG) or otherwise determined by conditions of other agency approvals. Pile-driving activities shall cease for the day if the noise levels approach specified thresholds.
 - **D.** Impact driving and hoe-ram operations shall be limited to daylight hours only and shall be followed by a minimum period of 12 hours with no impact pile driving to allow the accumulated SEL to reset to zero.
 - **E.** If in-water pile driving is necessary, the area shall first be dewatered using a clear water diversion or a sound attenuation device shall be installed while driving piles to avoid exceedance of the interim peak and cumulative sound exposure level thresholds are exceeded for piles driven in water.
 - **F.** The Permittee shall undertake development in compliance with the Final Hydroacoustic Monitoring Plan.

- 8. Stormwater Pollution Prevention Plan. NOT LESS THAN 30 DAYS PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT, including vegetation removal, the Permittee shall submit, for the review and approval of the Executive Director, a Stormwater Pollution Prevention Plan. The plan shall include written confirmation that the plan includes all proposed measures included in Exhibit 6, as supplemented or modified herein, and complies with all terms and conditions of this CDP.
 - **A.** The plan shall include, at a minimum, the following required components:
 - A construction site map delineating the construction site and the location of all temporary construction-phase BMPs (such as silt fences, fiber rolls, straw wattle dikes, compost berms, and inlet protection), staging and stockpiling areas, vehicle and equipment maintenance and fueling areas, concrete washout areas, and dewatering facilities;
 - A description of the BMPs that will be implemented to minimize erosion and sedimentation, control runoff, and minimize the discharge of other pollutants as a result of construction activities, including temporary stream diversion and dewatering activities;
 - A description of how accumulated stormwater, groundwater, and surface water from excavations, temporary containment facilities, and dewatering operations would be handled and disposed of in a way that minimizes erosion and water quality impacts; and
 - 4) A schedule for the management of all construction-phase BMPs (including installation and removal; training for construction personnel; and ongoing operation, inspection, maintenance, and monitoring and reporting).
 - **B.** The Permittee shall undertake development in accordance with the approved final Stormwater Pollution Prevention Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission approved amendment to this CDP unless the Executive Director determines that no amendment is legally required.
- Protection of Archaeological Resources. The Permittee shall undertake development in compliance with the proposed AMMs included in <u>Exhibit 6</u> to protect archaeological resources (CR-1 through CR-4), as supplemented or modified herein:
 - A. Should any cultural resources be encountered during project activities, the Permittee shall cease all project activities that have the potential to uncover or otherwise disturb cultural deposits and an "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) in an area not less than a 60-foot-wide buffer around the discovery. The Permittee shall immediately notify the representatives of all potentially relevant tribes. Construction may continue outside of the exclusion zone area.

- **B.** If the Permittee seeks to recommence project activities within the sensitive area following discovery of cultural resources, the Permittee shall submit written documentation of any proposed measures or changes to construction activities to address the discovery. The Executive Director shall review the proposed changes and/or additional measures for conformance with this CDP and with the Coastal Act. Implementation of the changes or additional measures and recommencement of construction in the sensitive area shall not occur until the Executive Director provides written notice that no amendment to this CDP is legally required, or the Commission approves an amendment to this CDP.
- 10. Seismic and Tsunami Hazard Response Plan. WITHIN 60 DAYS OF COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit, for the review and approval of the Executive Director, a plan for mitigating the risks to the public from the potential impacts of extreme tsunami and seismic events on the new bridge. At a minimum, the plan shall identify the steps that would be taken in the event of a tsunami and/or seismic event to: (a) warn the traveling public of possible hazardous conditions, (b) physically close the bridge, if necessary, (c) detour traffic to alternate routes, and (d) inspect the bridge for damage. The plan shall be developed in coordination with emergency response agencies, including Mendocino County and other relevant local governments.
- **11. Debris Disposal Plan**. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit, for the review and approval of the Executive Director, a plan for the disposal of excess construction debris and materials including excess fill, vegetated spoils, construction debris, and waste material.
 - A. The plan shall demonstrate that:
 - All temporary stockpiles of construction debris, soil and vegetative spoils, and any other debris and waste associated with the authorized work shall be minimized and limited to areas within the proposed project footprint as depicted on the final approved construction plans and where they can feasibly be contained with appropriate BMPs to prevent any discharge of polluted runoff to coastal waters and wetlands; and
 - All construction debris, excess sediments, soil and vegetative spoils, and any other debris and waste generated by the authorized work shall be disposed of at an authorized disposal site(s) capable of receiving such materials
 - B. The plan shall include, at a minimum, the following:
 - 1) A description of the anticipated excess fill, vegetated spoils, debris, and waste material expected, which shall identify any hazardous materials.
 - 2) A site plan showing all proposed locations for the temporary stockpiling of construction debris, soils and vegetative spoils, excess materials, and any other debris and waste associated with the authorized work at least 100 feet from wetland and riparian areas.

- A description of the manner by which the stockpiled materials will be removed from the construction site and identification of all debris disposal sites that will be used.
- 4) A schedule for removal of stockpiled materials from the construction site and temporary stockpile sites and identification of all authorized debris disposal sites that will be used for lawful disposal.
- C. The Permittee shall undertake development in accordance with the approved final Debris Disposal Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission approved amendment to this CDP unless the Executive Director determines that no amendment is legally required.
- 12. Other Agency Approvals. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit to the Executive Director written evidence that all necessary permits, permissions, approvals, or authorizations for the approved project have been granted by all other applicable agencies, including at a minimum the California Department of Fish and Wildlife (CDFW), the Regional Water Quality Control Board (RWQCB), State Lands Commission (SLC), U.S. Army Corps of Engineers (USACE), and the National Marine Fisheries Service (NOAA-Fisheries) or evidence that no such authorizations are required from each of these entities. The Permittee shall inform the Executive Director of any changes to the project required by any other authorizations. Any such changes shall not be incorporated into the project until the Permittee obtains an amendment to this CDP, unless the Executive Director determines that no amendment is legally required.
- **13.** Authority to Implement Conditions of Approval. PRIOR TO ISSUANCE OF CDP 1-22-0711, the Applicant shall submit for the review and approval of the Executive Director evidence that clearly demonstrates the legal right, interest, or entitlement to carry out the conditions of approval of CDP 1-22-0711, including but not limited to evidence the Applicant has acquired all necessary right-of-way and/or temporary construction easement(s) for properties on which the proposed development would be located.
- 14. Assumption of Risk, Waiver of Liability, and Indemnity Agreement. By acceptance of this permit, the Permittee acknowledges and agrees (A) that the site may be subject to hazards from tsunamis, storms, flooding, erosion, earth movement, and other natural hazards, which may worsen with climate change and sea level rise; (B) to assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (C) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (D) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages,

costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

15. Liability for Costs and Attorneys' Fees. By acceptance of this permit, the Applicant/Permittee agrees to reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys' fees that the Coastal Commission may be required by a court to pay that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Applicant/ Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

IV. Findings and Declarations:

A. Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate the Highway 1 bridge over Jack Peters Creek just north of the town of Mendocino in Mendocino County (<u>Exhibit 1</u>). The bridge crosses Jack Peters Creek on a steep coastal bluff above the shoreline adjacent to the ocean, in a scattered residential area just north of the town of Mendocino and south of Russian Gulch State Park (<u>Exhibit 2</u>).



Figure 1: Jack Peters Creek Bridge Setting (Source: Caltrans).

The purpose of the project is to rehabilitate the Jack Peters Creek Bridge and approach roadways to improve the safety and reliability of the bridge and to make multimodal complete street improvements through widened shoulders for cycling access and a separated pathway for pedestrian access on the western side. The bridge foundations, piers, and abutments will also be strengthened to extend the design life of the bridge and carry the wider bridge deck.

The existing Jack Peters Creek Bridge was constructed in 1939 and seismically retrofitted in 1996. The bridge is a concrete-cast bridge on abutments and two piers, extending approximately 220 feet total with a 90-foot span of the creek. The bridge has 12-foot lanes with virtually no shoulders totaling 25.9 feet in lane width. The total bridge width is 30.2 feet. The existing bridge rails date to 1939 and are decaying, with broken concrete and exposed, corroding rebar. (See <u>Exhibit 3</u> for more images of the current bridge.) The approaching sides of Highway 1 are marked by a cut-fill slopes inland constructed with the original highway, and similar man-made slopes west of the highway with areas of open bluff and coastal views. Except for the open areas over the bridge, the entire area is largely in forest of Bishop Pine and Grand Fir trees.



Figure 2: Existing Jack Peters Creek Bridge (Source: Caltrans).

Rather than replace the bridge, Caltrans proposed to make various improvements to rehabilitate the bridge to ensure safe transportation and expanded access for pedestrians and cyclists through the anticipated lifespan of the project of 75 years. (See **Exhibit 4** for the full project description.) Caltrans proposes to replace the 1939-era bridge rails that are fragmenting and corroded with modern bridge rails that meet highway safety criteria and have been evaluated by passing numerous crash tests under the federal testing criteria. Caltrans proposes here the Type 85 see-through concrete bridge barriers. These bridge rails meet federal safety standards and match the type approved by the Commission in many recent Highway 1 bridge projects statewide and were developed by Commission and Caltrans staff following consultations with the Commission's "Road's Edge Subcommittee." That Subcommittee brought together Coastal Commissioners with Caltrans and Commission staff to develop recommendations that balanced and found compromise on Caltrans safety standards with Coastal Act policy issues such as visual resources, and resulted in a Caltrans guide, "Bridge Rails and Barriers A Reference Guide for Transportation

1-22-0711 (Caltrans)

<u>Projects in the Coastal Zone</u>" (2011).¹ Although this guide is not certified or binding on Commission actions, it was developed with the input of Coastal Commission members and staff and reflects a collaborative effort to identify bridge rail designs that meet federal and state safety standards and minimize coastal resource impacts.

Caltrans also proposes to widen the shoulders to 6 feet on the bridge to improve cycling access, allow greater space for potential disabled vehicles, and improve collision avoidance. The bridge currently has 12-foot lanes vehicular lanes and these would be retained, matching the 12-foot lane width on Highway 1 approaching the bridge. (See **Exhibit 5** for visuals of the proposed bridge.) This approach is consistent with past Commission actions for Caltrans Highway 1 bridges statewide and rural Mendocino bridges intended to balance Caltrans safety standards with protection of coastal resources and as reviewed by the Road's Edge Subcommittee.

Additionally, Caltrans proposes a 6-foot separated pedestrian (accessible to cyclists) pathway would be added to the western side of the bridge. A see-through pedestrian railing would be placed west of pathway. Overall, the new bridge would be 17 feet wider than the existing bridge. Other improvements include replacing the existing older metal beam guardrail (MBGR) that transitions from the bridge with Midwest guardrail system (MGS) and extending the guardrail on the southwest corner to Lansing Street.



Jack Peters Creek Bridge - View 2 looking South (proposed) County of Mendocino Prepared by DES / Structure Design Services - Bridge Architecture and Aesthetics S. Heath 3-1-2022

Figure 3: View of Proposed Bridge with bike shoulders and pedestrian path (Source: Caltrans).

¹ The guide is <u>available from the Caltrans website: https://dot.ca.gov/-/media/dot-media/programs/design/documents/caltrans-bridge-rails-and-barriers-a11y.pdf</u>

To carry the additional weight of the widened bridge with the new separated pathway and ensure the bridge can last for another 75 years and, the two existing bridge abutments and two piers would be widened, and the foundations expanded.

Because the new shoulders and bridge rails will shift the road centerline of the bridge 12 feet east, Caltrans also proposes to shift the approaching roadway to the east to meet the new bridge centerline, maintaining the 12-foot lanes and adding 6-foot shoulders that would taper into existing roadway shoulder widths. To connect the bridge to the existing highway consistent with highway safety requirements, the widened shoulders will extend 200 feet to the north (to the intersection with county road 500D) and 1000 feet south (to the intersection with Larkin Road) of the bridge with a taper on both ends to existing Highway. The shift east and shoulder widening would require excavation of the cut and fill slopes created for the original highway that would result in vegetation removal, including the removal of 77 Bishop pine trees, 70 grand fir trees, and other vegetation across an approximately 78,400-square-foot area. The project involves approximately 17,500 cubic yards of cut, the material from which would be temporarily stored in nearby staging areas before being exported offsite. The cut slope would be recontoured and planted with native vegetation and trees.

Construction Methods and Timing

Construction activities are anticipated to extend from August 2023 to Late 2024 or early 2025. One-way lane closures of approximately 200 working days will be necessary for construction activities. Full overnight road closures (10 pm to 6 am) would be required for up to approximately 30 days. Caltrans would first close the eastern lane and remove the bridge rails and overhang on that side, using a debris catchment system to prevent spillage into the creek. A temporary trestle and falsework would be constructed along the length of the bridge structure to support the new bridge widening before it is self-supporting. Caltrans would then construct the new enlarged bridge foundations using excavators and rock hammers mounted on excavators; and the enlarged pier and abutment footings will be constructed using typical timber forming and reinforced concrete pumped from concrete trucks. After the falsework and new pier walls are in place, the new Type 85 see-through concrete bridge barrier and the new bridge deck with wider road shoulders on the east side would be placed working from the elevated access trestle and from each abutment.

Caltrans would then close the western lane and remove the bridge rails and overhang on that side and install the new bridge rails, pedestrian walkway, and pedestrian railing on the western side. A 30-foot-long approach slab will be placed at each end of the bridge and guardrails will be installed. Caltrans will also realign the approach roadways east to match the new bridge centerline and remove asphalt from the western side of the existing roadway, which will provide an area for an unpaved California Coastal Trail connection.

Construction staging would be finalized by the contractor but could take place on the east side of the widened roadway from approximately 650 feet north of County Road 500D south to the bridge, and at the northwest corner of the intersection of Highway 1

and Lansing Street, including the pull-out area. In addition, the project may use two potential staging areas within the town of Mendocino, approximately 0.32 mile south of the project, with a three-acre parcel off Lansing Street and a two-acre parcel off Palette Drive adjacent to Highway 1.

B. Project Location and Environmental Setting

The project site is located on the northern edge of the town of Mendocino on Highway 1, a two-lane highway. Within Mendocino County, Highway 1 follows nearly the full coastline and is essential for travel up and down the coast as a vital transportation route for the local community, the broader region, and travelling visitors. No alternative routes provide sufficient public access up and down the coast without significant detours and delays. Highway 1 also provides essential access to numerous coastal recreational and access areas north and south of the project location, and without access across Jack Peters Creek the ability to reach these coastal access points would be significantly impeded.

The Jack Peters Creek Bridge is on Highway 1 just north of Mendocino as the highway leaves the town center, enters a less densely developed area, and transitions to a rural, undeveloped area (Exhibits 1 and 2). Shortly north of the bridge location Highway 1 crosses Russian Gulch and passes the Russian Gulch State Park. The land use within the project area is primarily rural residential with scattered residential development on larger rural lots. Highway 1 is largely straight in the area and runs along a steep coastal bluff. Directly north of the bridge, is largely undeveloped, and Highway 1 intersects with County Road 500D (Woodstock Drive), which besides one residence on the intersection with Highway 1, is a narrow undeveloped road that includes access to coastal trail entering Russian Gulch State Park. Just south of the bridge, there is a small public access dirt pullout and an intersection with Lansing Street - a narrow, developed, residential road leading back to the center of Mendocino town. The pullout provides a spot to stop and view the coast, though there is no crossing of the bridge for pedestrians. Additionally, the bluff is very steep and high, making it extremely difficult to develop access down to the shoreline from this point. An informal, but very undeveloped trail runs from the pull-out eastwards, under the bridge and along the creek bank, gradually downwards to reach Jack Peters Creek itself under and just east of the bridge.

The project area is on a narrow coastal plateau between the Pacific Ocean and the east side of forested coastal mountains. Jack Peters Creek is a perennial stream originating several miles inland at 480 feet above mean sea level along the western edge of the Jackson State Demonstration Forest and terminating in the Pacific Ocean less than 200 feet west of the bridge. According to Caltrans hydrological studies, the rocky intertidal estuary is subject to tidal influence 200 feet upstream from the ocean shoreline, meaning most of the creek in the project area is tidally influenced. The existing Jack Peters Creek Bridge sits approximately 80-100 feet above mean sea level. The creek is largely surrounded by riparian mixed conifer forest.

The project site is densely vegetated with riparian habitat and generally forested, including stands dominated by Monterey Cypress Forest, Bishop Pine Forest, Grand

Fir, and Red Alder. Much of the habitat within the project area is highly disturbed and contains non-native and invasive plant species. The project area also provides habitat for a variety of special-status species, such as the northern-red legged frog (NRLF) and red-bellied newt in areas of Jack Peters Creek; osprey, purple martin, and Sonoma tree vole in the forest areas; and marine mammals and steelhead salmon in the nearby ocean and creek. The bridge structure also provides potential roosting habitat for various species of bats. The sensitive habitat and species present are described in greater detail in Exhibit 7 (JP ESHA Report) and the Caltrans Initial Study with Mitigated Negative Declaration (ISMND) at pp 57-64.²

C. Standard of Review

Portions of the proposed project will occur within the Coastal Commission's retained CDP jurisdiction, while the remainder of the project is located within the County of Mendocino's LCP jurisdiction. Under Coastal Act section 30601.3, when a project requires a CDP from both a local government with a certified local coastal program and the Commission, the Commission may process a consolidated CDP application for the proposed development when the applicant, the local government, and the Commission's Executive Director agree to process the CDP as a consolidated CDP. In this case, the Mendocino County Board of Directors adopted a resolution (resolution no. 21-094) authorizing the consolidated coastal development permitting process on June 22, 2021, Caltrans provided a copy of the resolution to Commission staff with the subject CDP application and requested the consolidation as well, and the Commission's Executive Director agreed to the consolidation. Under Coastal Act section 30601.3, when a CDP is consolidated, the standard of review is the Coastal Act. The LCP may be used as guidance.

D. Other Agency Approvals

The project requires additional permits from several other agencies, including, at the least, California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), U.S. Army Corps of Engineers (USACE), and the North Coast Regional Water Quality Control Board (NCRWQCB). To ensure that Caltrans obtains all necessary agency approvals, and that these approvals are consistent with the project authorized herein, the Commission attaches **Special Condition 12**, which requires the permittee to submit to the Executive Director evidence of all other agency approvals of the project prior to the commencement of construction activities. The condition requires that any project changes resulting from any other agency approval not be incorporated into the project until the permittee obtains any necessary amendment to this CDP.

E. Property Rights

<u>California State Lands Commission (SLC).</u> Caltrans has provided a letter from the SLC indicating that, based on the information available, a lease from the SLC for the project is not required at this time.

² The IS/MND can be access from the Caltrans website: https://dot.ca.gov/-/media/dot-media/district-3/documents/environmental/01-43484-jack-peters-is-fed-2022-0218.pdf#page=48

<u>Private Property.</u> Construction work for the project will be mostly conducted within existing Caltrans' state right of way. Some temporary construction easements may be required for the construction staging off of Lansing Street and Palette Drive. **Special Condition 13** requires that copies of the temporary easements, or other sufficient evidence of a legal right, interest, or other entitlement to use the property for the proposed development as conditioned, be submitted prior to the issuance of this permit. As conditioned, the project meets the requirements of Coastal Act section 30601.5.

F. Public Access

Coastal Act section 30210 states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Coastal Act section 30211 states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Coastal Act section 30212(a) states, in part:

Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected.

Coastal Act section 30214 states in part:

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

(1) Topographic and geologic site characteristics.

(2) The capacity of the site to sustain use and at what level of intensity.

(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public s constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution...

In applying sections 30210, 30211, 30212, and 30214 cited above, the Commission is limited by the need to show that any denial of a permit application based on these sections or any decision to impose conditions requiring public access on the granting of a permit is necessary to avoid or offset a project's adverse impact on existing or potential access.

Although not the standard of review for this CDP application, the Mendocino County certified Land Use Plan provides the following guidance with respect to transportation improvement projects and public access protection in the County coastal zone:

3.6-17 Caltrans shall be required to improve or construct view turnouts designated on the Land Use Maps as a part of adjoining highway improvement projects when such improvements involve widening or improvements of the highway. (This would exclude rehabilitation type projects).

...

3.6-20 Paved 4 foot shoulders should be provided by Caltrans along the entire length of Highway 1 wherever construction is feasible without unacceptable environmental effects.

...

3.8-2 Current studies indicate a need for future improvement to certain stretches of Highway 1 and to major intersections. These improvements shall be encouraged so as to accommodate essential industries vital to the economic health of the County and other priority uses under the Coastal Act...

•••

3.8-6 It shall be a goal of the Transportation Section to achieve, where possible and consistent with other objectives of The Coastal Act and plan policies for Highway 1, a road bed with a vehicle lane width of 16 feet including the shoulder to achieve a 32 foot paved roadway (12-foot vehicle lane and 4-foot paved shoulder). The minimum objective shall be a 14-foot vehicle lane width (10-foot vehicle lane and 4-foot paved shoulder). New widening projects shall be allocated, first to safety and improved capacity needs and secondly to paved shoulders.

As reflected in the above-cited policies, Highway 1 serves as an essential coastal transit corridor for residents of the Mendocino Coast and is the only north-south travel corridor along the coast for local residents. Highway 1 also provides an essential travel route for

coastal visitors to Mendocino County including residents of the state of California and visitors from farther afield. As a vital stream crossing, Jack Peters Creek Bridge is an important transportation link between the southern portion of the coastal county and the urban center of Fort Bragg to the north. Numerous coastal access points north and south of the bridge site in the region can only be reached by Highway 1. Directly south of the Jack Peters Creek Bridge is the town of Mendocino, a residential community and popular tourist destination on the Mendocino coast. Directly north of the bridge is the Russian Gulch State Park, providing coastal access to coves and coastal trails, as well as numerous coastal access points along Highway 1 running north to Fort Bragg. Both north and south of the bridge, Highway 1 runs along the coast providing important coastal access to coves, beaches, trails, and other coastal recreation amenities. Without the Highway 1 crossing at Jack Peters Creek Bridge, lengthy detours inland on small residential roads through the forest and mountains would be required.

Thus, the continued safe operation of the bridge is a necessity for public access generally in the region and for the greater Mendocino coast. The project includes upgrades that will improve the safety and reliability of the bridge. The design of the proposed project would improve traffic safety by replacing deteriorating old bridge rails, widening roadway shoulders, and providing improved space for disabled vehicles, thus reducing the potential for accidents and collisions on the bridge. Overall, the project will ensure continued public access up and down the Mendocino coast, with improved safety and reliability.

At the same time as the project provides for safe public access for vehicle users, the project addresses the lack of pedestrian public access across the bridge and the lack of any shoulder space for cycling public access, as described discussed below.

Bike and Pedestrian Bridge Improvements

Highway 1 in Mendocino County is legislatively designated as part of the Pacific Coast Bike Route (PCBR). The PCBR is internationally known and is traveled extensively in the summer months by cyclists from multiple countries. The California Coastal Trail (CCT) follows sections of Highway 1 within Mendocino County, when separate trails are unavailable. Although this section of highway is designated as part of the Pacific Coast Bike Route, and cyclists are allowed to use the existing bridge, the shoulders along Highway 1 are almost non-existent, at about 1 foot, functionally below current safety standards, and no separate bike lanes exist on the bridge. The lack of shoulders makes the bridge very unsafe for a cycling crossing of the bridge. The lack of shoulders also means there are no safe bridge crossings for pedestrians, and the bridge also lacks a separate pedestrian pathway. There is, therefore, essentially no pedestrian crossing of the bridge, and no CCT crossing of the bridge or through this stretch of coast.

The project would improve on current conditions by widening the existing almost nonexistent shoulders on the bridge structure and on the immediate approaches to six feet to provide adequate space for safe bicycle access, while maintaining the existing 12foot-wide lanes. The project would also add a 6-foot separated pedestrian and bicycle pathway to the western southbound lane. This separated pathway would form part of the CCT as it is further developed in the region. The separated pathway also offers new coastal views of the ocean and shoreline from the bridge as a form of public access recreation.

The project also proposes to add 6-foot shoulders on the approaching highway to taper into the bridge's shoulders. To the north, this would extend 200 feet to County Road 500D. To the south, however, Caltrans proposes to extend the 6-foot shoulders 1000 feet to the connection with Larkin Road. As noted above, the county LCP calls for 4-foot shoulders on Highway 1, and that has been the practice in Caltrans projects approved under the LCP or by the Commission. As discussed below, there are concerns about increased speeding with wider shoulders, and some increased ESHA impacts with vegetation removal for the shoulder widening and shift of the roadway east. At the same time, shoulders are an important tool to provide physical space for multi-modal users and increase the safety of their use. In considering this balance, the certified LCP's goal of 12-foot-wide vehicle lanes and 4-foot shoulders seems the appropriate general standard except for where roadway facilities and transitional areas dictate six feet for safety needs. **Special Condition 1.G** therefore requires the final Caltrans Construction plans to reduce the proposed 6-foot-wide shoulders extending the 1000 feet south of the bridge to 4 feet with space for a 200-foot taper.

Coastal Access

Directly south of the bridge on the west side is a gravel pullout (or "pull-over") that is in Caltrans right-of-way and is currently publicly accessible and provides coastal view overlooks. West of the pullout and the bridge is a private parcel that is currently undeveloped but has an easement for public access as required by CDP 79-CC-208 (Bernhard) in 1980. The easement allows for public access to the shoreline from the private parcel west of the bridge and Highway 1. The State Coastal Conservancy accepted the access dedication in 1984. Caltrans surveyed the parcel with the easement area at the Commission staff's request to clarify the easement location (Exhibit 10).

The Mendocino County Land Use Plan lists the pullout at Jack Peters Creek as a designated access point that can be potentially developed as a view turnout, and includes policy 4.7-4 for this pull-over that "Offer of access dedication shall be accepted." Mendocino County LCP Policy 3.6-17 states that: "Caltrans shall be required to improve or construct view turnouts designated on the Land Use Maps as a part of adjoining highway improvement projects when such improvements involve widening or improvements of the highway. (This would exclude rehabilitation type projects)." In this case, the pullout is not designated on the LCP Land Use Maps and therefore is not mandated for improvements, but the pullout is nonetheless open for public use, and Caltrans maintains the pullout area, keeping it safe and usable for the public.

This project proposes to retain this pullout and does not impact the size of the pullout. However, the pullout will be temporarily impacted by the project construction activities and used for construction staging. Given that the pullout is directly adjacent to the bridge where there will be significant construction activities and existing recreational opportunities will essentially be precluded, these temporary impacts appear necessary. Caltrans does not propose any specific improvements for the pullout area, such as paving or benches, or public access to the shoreline. Caltrans states that given the active landslide here that is constantly eroding the west edge of the pullout, and the constraints of the size of the pullout, this area cannot be developed with specific parking spots, benches, or other amenities. In the case of a formal vertical stairway to the shoreline, unfortunately, the bluffs here are so steep and high, the construction of any public access stairway would be extremely difficult, expensive, and given the site constraints of landslides and shoreline wave action, nearly impossible to maintain. Only a very massive and expensive structure could be installed, which would come with a whole host of additional impacts to coastal resources.

Under the Coastal Act, section 30214 states that the public access policies of the Coastal Act should allow for consideration of topographic and geologic site characteristics, as well as the capacity of a site to sustain use and at what level of intensity. In this case, given the geographic constraints of the site on an active landslide on a steep and high coastal bluff, and the limited capacity of the site with only a small pullout area available, and the informal character of the access at the location, development of additional turnout improvements or a very large and expensive (and likely infeasible) shoreline access stairs does not seem warranted.

There is currently an existing and largely overgrown informal trail the extends from the pullout on the south side of the bridge down and under the bridge and runs eastward and down toward Jack Peters Creek. From there, when tides are right, members of the public could access the shoreline and the area of the public access easement. Caltrans proposes to improve the trail through brush clearance and other maintenance to utilize this trail for construction activities. Caltrans will then leave the improved trail for public access upon completion of the project. The existing informal trail running under the bridge appears to be the only presently feasible means to achieve public access goals of the LCP and provides shoreline access at this location. Long-term, the State Coastal Conservancy, potentially in partnership with the Mendocino Land Trust, will work to further develop public access here in the vertical public access easement area from CDP 79-CC-208, if feasible given the geographic constraints and in light of future sea level rise issues.

<u>ССТ</u>

As discussed above, Caltrans proposes to shift Highway 1 slightly east to better line-up with the new bridge lanes and maintain a consistent center line. North of the bridge location, Caltrans proposes to use the area of Highway 1 left-over when the highway approaches shift eastward and repurpose that as a gravel trail as part of the coastal trail connecting to the separated pedestrian bridge pathway. Here, the trail would extend to County Highway 500D (also named Woodstock Drive). This county road is undeveloped, except for one house on the corner with Highway 1. It therefore has no residential development and little traffic. County Highway 500D also extends to the edge of Russian Gulch State Park and provides informal connections to trails in the park. County Road 500D would appear to provide an ideal location for future development of the CCT but is owned by the county and outside the project area and Caltrans' state

right-of-way. Moreover, the long-term extension of the CCT from this location to Russian Gulch State Park requires development by Mendocino County in consultation with numerous stakeholders and the local community, and the County and the local public would need to address fundamental decisions about locating the CCT along County Road 500D, closer to the coastal bluffs, or along Highway 1 right-of-way.

South of the bridge, Caltrans proposes to extend the pedestrian walkway over the bridge by again repurposing the left-over area of existing Highway 1 into a continued coastal trail that will connect to Lansing Street south of the bridge. Existing pavement will be removed, and compacted gravel will remain in place to create a trail connection off the bridge. Most pedestrians will likely use the westerly side of the pullout, but the shift east and removal of pavement creates an additional buffer and helpful space for cyclists. At this point, a pedestrian would have informal access to continue to Mendocino town along Lansing Street (which is a small and residentially developed street) or on Highway 1 shoulders in state right-of-way.

Some public commentators on the project have raised concerns that a fair amount of Highway 1 traffic utilizes Lansing Street as a short-cut to access downtown Mendocino and that cars could turn onto Lansing Street from Highway 1 at high speeds, with safety concerns for pedestrian/cyclist users of the new separated walkway on Jack Peters Creek Bridge as they may transition to Lansing Street. Project commentators have also described the pedestrian walkway as a "bridge to no-where" and unnecessary given the lack of pedestrian users in the area, or alternatively as insufficient to provide complete connections north and south because it is not part of a complete CCT development.

The Commission has now approved multiple separated walkways on Mendocino Highway 1 bridges that form part of the CCT but do not create a continuous CCT along Highway 1. Given property ownership interests, fiscal issues, the need for long-term planning, and numerous other concerns, throughout the state the California Coastal Trail is, by necessity, being built in a piecemeal fashion, individual project by project. Each of these Mendocino bridge projects, as well as other Caltrans projects, provides a critically important CCT connection, including in the case of bridges, over waterway crossings where typically no other alternative locations for a CCT crossing exist. The completion of larger CCT segments requires long-term planning, multiple property acquisitions, and input from local stakeholders and the local community.

Here, the project provides an individual crossing at Jack Peters Creek, where there otherwise is no feasible crossing of the creek absent the construction of a new expensive bridge. This bridge rehabilitation project extends the CCT through the project area and in Caltrans right-of-way but cannot create a seamless CCT through the larger Mendocino area on its own. The state right-of-way along Highway 1 does extend south from Lansing Street outside of this project area toward Mendocino town and north towards Russian Gulch State Park and does provide a potential area for CCT development. Yet, Lansing Street south of the bridge and County Road 500D north of the bridge both also provide a potential area for the CCT that is closer to the ocean and potentially quieter, and more seaward bluff areas are also potential locations in some sections. It has been state policy to locate the CCT as close to the ocean as possible,

and practically avoiding Highway 1 shoulders if options exist is preferable. Ultimately, long-term the extension of the CCT from this location to Mendocino town requires development by the County in consultation with numerous stakeholders and needs to address fundamental decisions about locating the CCT along Lansing Street, closer to the coastal bluffs, or along Highway 1 right-of-way.

Regarding the traffic safety concerns of Highway 1 traffic turning onto Lansing Street. Southbound traffic currently has a right-turn lane and pedestrians are largely protected by the existing pullout area. Pedestrians (or cyclists) coming off the separated walkway will enter into the pullout area with substantial space of the pullout area as protection, and with the project an additional gravel buffer space will be added. Further protection measures in the pullout area would block the public's ability to use the pullout space for public parking. Caltrans also reports there have been no accidents here over the past three-year period. It is true that to serve as a safe CCT connection to the town, Lansing Street will need improvement, but as discussed above, decisions about the fuller CCT connection needs development by the County in consultation with numerous stakeholders.

Overall, the project maintains existing public access resources, proposes multiple public access improvements for pedestrians and cyclists to create safe access that otherwise does not exist, and extends the California Coastal Trail throughout the footprint of the project. The project does have temporary public access impacts to the use of the highway pullout, but the proposed improvements offer significant improvements to public access consistent with the goals of the Mendocino LCP.

In order to clarify the final design of the proposed CCT connections north and south of the trail along the western edge of the roadway, the improvements of the informal access trail to Jack Peters Creek, and the status of the pullout after construction, **Special Condition 1.F** requires Caltrans to submit final plan of the proposed public access improvements that describe in detail the manner, location, and details how the improvements will provide sufficient pedestrian access to the creek and to connections north and south of the bridge. Special Condition 1.F also requires that the public access areas shall be retained open for public use, without interference or interruption, except for emergency or permitted repairs.

Public Safety and Lane and Shoulder Widths

The new bridge makes no change to the automobile capacity of the highway, with no new lane additions. Within the project area, the highway currently has 12-foot lanes and narrow shoulders; with only 12 inches from the travel lane available on the bridge structure itself Vehicular travel lanes on the bridge and approaching highway will remain at 12 feet. To meet Caltrans safety standards and allow for safe multi-modal access, shoulders will be expanded to 6 feet on the bridge and for a tapering section north and south approaching the bridge to the current 4 -foot shoulders. The expansion of the roadway shoulders and the maintenance of the existing 12-foot lanes has raised some observers' concerns regarding highway speeds and raises the question if the lanes should be narrowed to 11 feet or the shoulders narrowed. However, in this case, as explained below, the very minor speed reductions that might come with the slight

narrowing are outweighed by cyclist and vehicular safety needs along this short stretch of two-lane highway.

Historically, highway design standards prioritized automobile safety and speeds while giving little consideration to pedestrian and cyclist safety. In general, unconsidered widening of vehicular travel lanes to meet current vehicular safety standards can have an impact on pedestrian safety. This is particularly the case in areas where roadways with fast-moving traffic are intermixed with dense residential areas or community developments. In many such cases, highway design safety standards can result in an increase in automobile traffic speed, which in turn can cause an overall decrease in public safety and an increase in deaths and injury to non-vehicular users. In such cases, increased use of traffic calming devices and narrower lanes, slower speed limits, and other measures are better tools to improve overall safety. (See generally, Offer et al., "Research Synthesis for the California Zero Traffic Fatalities Task Force" (University of California Institute of Transportation Studies 2020).)

Here, the road lanes will not be widened and there are not other highway changes that can influence speed, but there would be a widening of roadway shoulders. The new shoulders will significantly improve safety for cyclists, who currently have to ride in the travel lane due to the extremely narrow existing shoulders. However, it is noted that at the same time, the increased width may provide a greater sense of wideness for auto drivers. Highway 1 is also fairly straight in this area. Taken together, wider shoulders might lead drivers to increase driving speeds through the straight section which is relatively short in length.

Ultimately, the context of the highway improvements and the project location matters greatly. In this context, it is unclear if narrowing the bridge lanes to 11 feet would increase pedestrian safety and this would bring increased risk of vehicular accidents. Narrowing shoulders may reduce speeds, but those are a necessary safety aspect of the project. Several considerations of the context here are relevant.

First and most importantly, we should recognize that this project would create a separated pedestrian path, also open to cyclists, and safer shoulder space for cyclists, leading to greatly improved safety for non-vehicular users. As discussed below, the project area is not substantially used by pedestrians, and those users will now have a separated pathway. The project does have wider shoulders, that may increase the appearance of a wider road, and that may encourage a behavioral increase in speeding for that short distance. However, the wider shoulders are necessary to provide increased protection for cyclists - high-priority, non-motorized users of Highway 1. Paved shoulders on the edge of roadways provide functional space for bicyclists and are often used on the edge of rural or semi-rural highways such as Highway 1 to provide greater protection and a safer experience, thus encourage increased multimodal transportation and reducing vehicle miles travelled. (See e.g. the FHWA guidance "Small Town and Rural Multimodal Networks" (2016).)

This additional shoulder area is particularly important from a cycling perspective on bridge structures because cyclists are bound within the bridge barriers/railings and have

no additional space to escape from errant drivers. Physical space that improves multimodal safety and access outweighs potential risks rooted in the psychological aspects of driver behavior. Furthermore, the six-foot bridge shoulders allow disabled vehicles to pull over and avoid much of the travel lane for ongoing traffic, reducing the risk of collisions. Narrowing the existing 12-foot lanes to 11 feet on the bridge would also create greater risks of vehicles veering into the shoulders, increasing risks to cyclists. These shoulders, and the 12-foot lanes that help prevent vehicle incursions into the shoulders, are increasingly important as we attempt to shift our transportation to more multi-modal forms. In this regard, the <u>Pedestrian Safety</u> <u>Countermeasures Toolbox</u> identifies widened shoulders as an option that "create[s] greater separation between vehicles and pedestrians and also provide motor vehicle safety benefits, such as space for inoperable vehicles to pull out of the travel lane." (Caltrans, 2019; p. 9.)

A second consideration is that maintaining the existing lane width and providing wider shoulders is consistent with the County's certified LCP policies noted above, that identifies 12-foot-wide vehicle lanes and 4-foot highway shoulders as a goal to achieve the public safety and highway capacity needs of the County's coastal zone. The bridge's proposed 12-foot lane width and 6-foot shoulders on the bridge are also consistent with multiple recent Caltrans projects approved by the Commission and with conclusions developed through consultations over the past approximately 10 years among Commission staff, Caltrans staff, and Coastal Commissioners as part of the Commission's Road's Edge Subcommittee. These Road's Edge Subcommittee discussions were an effort to identify recommendations on Caltrans' roadway development projects that at least balance Caltrans safety standards with the need to protect coastal resources, including visual resources and sensitive habitats. These discussions emerged from conflicts between Caltrans' Highway Design Manual (HDM) standards that typically recommended larger highway shoulders and lane widths and Commission recommendations that were for narrower highway shoulders and lanes to reduce coastal impacts, and more visually permeable bridge rails. The HDM establishes uniform policies and procedures to carry out the state highway design functions of the state's Department of Transportation. The HDM requires that bridge widths be equal to the full width of the traveled way and paved shoulders on the approaches, be 40 feet wide for roads such as this with more than 400 daily users, that the minimum lane width on two-lane highways be at least 12 feet, and that standard widths for shoulders on two lane highways be a minimum of 8 feet with a preference for 10 feet.³

At the request of Caltrans District 1 and Headquarters, the Roads Edge Subcommittee previously held a special working session with Caltrans design engineers and transportation planners to develop recommendations for generally achieving both public

³ See generally Caltrans, Highway Design Manual, Seventh Edition (2019), Chapter 200 (200-46); Chapter 300 (300-1, 300-5, 300-6).

safety and minimizing impacts to coastal resources for projects in the coastal zone.⁴ The result of that working session on the multiple considerations of, and literature about, roadway lane and shoulder widths to promote public to the safety led to a general working compromise to reducing the prescribed HDM shoulder widths through special design exemptions that can still adequately provide for multi-modal users' safety. Accordingly, the Commission has since approved multiple Highway 1 bridge projects with 6-foot wide or wider shoulders when curves are involved) and 12-foot lanes to balance Caltrans safety standards with protection of coastal resources.⁵

A third related consideration to the discussion of roadway narrowing and speed issues in this case is the short length of the bridge in comparison to the larger highway corridor. The bridge itself is 223 feet long. Existing shoulders on the modified approaching highway lanes range are about four feet. As modified by Special **Condition 1.G** above, the project would widen shoulders on the north of the bridge to 6 feet as it tapers for about 200 feet north and for about 200 feet south, and then remain at 4 feet in width. Thus, the area widened with 6-foot shoulders would be about 620 feet. This is a very short distance in the context of the many miles of Highway 1 with 12foot lane widths and the longer straightway of some 4,200 feet in which the bridge location sits. If the project were to adopt a one-foot lane narrowing on the bridge, that would amount to a very marginal decrease and takes place almost entirely on the shortsection of the bridge, which will be a very minor temporal passing for drivers. The narrowing of the bridge lanes from the existing highway lanes may lead to psychological anxeity in drivers and some marginal slowing⁶, but the impulse will be counteracted by the almost immediate return to the existing 12-foot highway lanes, especially given the straight nature of the highway and clear views ahead. Even a lane narrowing of the full length of the roadway improvements - some 1200 feet, would be counteracted the longer stretch of road and a return to normal lanes before entering the Mendocino town.

⁴ For instance, for the 10 Mile River Bridge Replacement (1-06-PWP; CDP 1-06-022), Caltrans originally proposed 8-foot shoulders to meet minimum standards, and after discussions with the Road's Edge Subcommittee and several Commission reviews, the final project had 6-foot shoulders and 12-foot lanes.

⁵ In all subsequent Caltrans Highway 1 bridge projects the Commission has approved 6-foot shoulders or wider, 12-foot lanes, and a separated walkway, including Greenwood Creek CDP 1-09-027 (2009); San Pedro Creek Bridge (10-foot shoulders) CDP 2-11-038 (2013); Estero Americano Bridge CDP 2-15-1354 (2016); Toro Creek Bridge (10 and 6 feet); CDP 3-19-1199 (2020); Gleason Beach (10-foot shoulders) CDP 2-20-0282 (2020); Dr. Fine Bridge (10-foot shoulders) CDP 1-20-0422 (2021); Pudding Creek Bridge (8-foot shoulders) 1-21-027 (2021); San Jose Creek Bridge (10-foot shoulders) 4-21-0182 (2022); Elk Creek Bridge CDP 1-22-0446 (2022). See also A-2-MAR-11-025 (Caltrans Marin Storm Damage Repairs) (2013) discussing the Road's Edge Subcommittee and approving 12-foot lanes; The Commission has also recently approved some other Caltrans bridges projects with 10 and 6-foot shoulders on each side.

⁶ Although research is limited, research indicates that narrowing lane width by one-foot reduces speed by about one to two-miles per hour on average. (FHWA, Mitigation Strategies for Design Exceptions, Chapter 3: Lane Widths (2007); Godley et al., "Perceptual lane width, wide perceptual road centre markings and driving speeds," *Ergonomics* 47, 237–256 (2004).

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A fourth consideration is that the area is largely semi-rural, without concentrated residential development and, in this project area, Highway 1 does not pass directly through public community developments. This is not to say that there may not be needs to slow traffic from existing Highway 1 speeds in the rural context,⁷ but that the situation of a rural or semi-rural highway bridge is different from more developed areas, or when entering more developed areas, where more active pedestrians and more commercial activity results in more pedestrian users crossing the roadway, using roadway shoulders, or being adjacent to the highway – such as the town of Gualala where a current Caltrans complete streets project is contemplating narrower roadway widths of 11 feet. In cases such as this Jack Peters Creek bridge area, there is little pedestrian or cyclist safety effectiveness in having a brief narrowing over a bridge as an attempt to slow traffic, when the long straight adjacent highway already has twelve-foot travel lanes. The best approach is to separate any pedestrians through a separated coastal trail and long-term there is the hope that the California Coastal Trail will provide walkable access into Mendocino town and up to Russian Gulch State Park, along the Mendocino County roadway systems.

Finally, especially in the rural highway context, lane narrowing should not be done in isolation but rather in combination with other substantial traffic calming measures that alert drivers the highway is narrowing. According to Caltrans, narrow lanes less than 12 feet increase the probability of collisions between traffic heading opposite directions, and accidental collisions between trucks with wide mirrors can become guite frequent. When speeds can be reduced, this does alleviate that potential somewhat. However, simply reducing the lanes by one foot on a rural highway bridge does not necessarily result in overall decreased speeds within the corridor, because drivers are largely unaware of the minor narrowing, and the minor narrowing is not readily apparent. Typically, lane narrowing as a traffic calming measure is part of a larger traffic calming measures (e.g., landscaping, roadway modifications such as bulb-outs, expanded protected public spaces, lane "chokers," chicanes, roundabouts, expanded and developed medians, diverters, and speed bumps or tables, etc.) that clearly communicates to drivers the need to slow down for a section of roadway. Traffic calming measures should also be applied in concert together, not in isolation, to effectively slow traffic in a corridor. (See FHWA, "Small Town and Rural Multimodal Networks," p.5-4 (2016).) On a highway throughfare such as Highway 1, the simple application of lane narrowing by itself may have little speed reduction benefits but does increase traffic safety concerns. Additionally, the full suit of traffic calming measures on Highway 1 raises other Coastal Act concerns that need careful discussion. Signage, striping and other appurtenances are visually intrusive in a rural setting and can adversely affect the overall rural character of scenic Highway 1 that is specifically called out for protection under the Coastal Act. Traffic calming measures are also typically used in areas approaching more developed communities or areas with public facilities to slow traffic before entering that area. Although the town of Mendocino itself is such an area, Highway 1 does not flow into the town itself and the project site is almost one mile to the intersection with the road into town.

⁷ See for instance: FHWA, "Speed Management: A Manual for Local Rural Road Owners" (2020).

Thus, proposing to shrink bridge lane widths by one foot from the existing lane widths that match the existing highway lane widths would both raise safety concerns from Caltrans' engineers and affect only one small transportation asset with no measurable traffic calming improvements to the Highway 1 corridor entering the town of Mendocino where traffic calming is most needed. Widened highway shoulders may have a behavioral impact of slightly encouraging greater speed, but those shoulders provide something more valuable - safer space and physical room for cyclists. The project as proposed includes measures to better protect pedestrians and cyclists, including new shoulders and a new separated walkway on the bridge will provide more protected, separate pedestrian and cycling access. Overall, the need to more thoroughly consider the application of highway safety standards and the impacts to pedestrians and other non-vehicle users is an important discussion point for Caltrans projects. In many cases, traffic calming should be considered and applied. In this case, given the separated pedestrian path and shoulder improvements for cyclists, and the context of the site, the project as is balances public access improvements and travel speed standards to the benefit of safe public access for all users including multi-modal users.

Temporary Traffic Impacts

Project construction will cause temporary delays during construction. Construction activities are anticipated to extend from as early as August 2023 to late 2024 or early 2025. One-way lane closures with a temporary signal system or flagging will be installed to provide one-way, reversible traffic control for 24 hours a day and these will be necessary for approximately 200 working days of construction activities. Permanent road closures would also be required overnight (10 pm to 6 am) for approximately 30 days. Additionally, the public pullout south of the bridge will be used during construction and have limited public access.

Public commentators on the project have expressed concern about the amount of closures and details of the night-time closures. Caltrans states that with flagging controls there will be no one way lane closures on weekend days (with automatic control they have no such ability), and that they will work with the contractor to monitor and minimize delays. Caltrans does not propose to sign a detour route. Given the full road closures are only late at night, would not be implemented over a specific 30-day window, and there is no feasible local detour route, requiring a designated detour appears infeasible. Detours would require a somewhat lengthy approximately 10-mile inland detour and be a lengthy and confusing signage system, and given the 30 days are not consecutive, difficult to install and maintain. There are also concerns about possible emergency situations requiring emergency vehicles to cross the bridge. Caltrans has proposed measures to allow emergency vehicles to cross the bridge during such events, with some delays to allow Caltrans to move construction equipment.

The project would also potentially use a separate lot in the town of Mendocino on Lansing St. for temporary storage of removed materials. This creates possible traffic concerns with trucks moving to and from the town storage site.

To ensure that these impacts are minimized to the greatest extent feasible, **Special Condition 1.E** requires that a Transportation Management Plan be submitted for the Executive Director's review and approval to ensure that the lane closures are limited to the greatest extent feasible. **Special Condition 1.E** limits permanent road closures to a maximum of 30 days and at the hours proposed above. **Special Condition 1.A** also requires Caltrans to submit final proposed staging area locations that limit impacts to coastal resources and limit trips into and out of Mendocino town, to the greatest extent feasible. The Transportation Management Plan must also provide for full and continuous access for pedestrians and cyclists through the work corridor, except during limited complete closures.

Conclusion

Overall, the project will have temporary impacts to public access through traffic delays during construction, but over the long-term, the project will improve public access by (1) ensuring the safe and continued operation of this section of Highway 1, a vital coastal public access roadway; (2) expanding shoulders for improved and safer cycling access; (3) improving pedestrian and bicyclist access across the bridge on a separated walkway; (4) extending the California Coastal Trail across and north and south of the bridge; and (5) repairing and maintaining an informal coastal access trail. Thus, the project protects existing coastal access and expands multi-modal public access along the coast. Therefore, the Commission finds that the proposed project, as conditioned, will not have a significant adverse effect on public access and is consistent with the requirements of Coastal Act sections 30210, 30211, 30212, and 30214.

G. Coastal Hazards

Section 30253 of the Coastal Act states, in applicable part, as follows:

New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. ...

Section 30270 of the Coastal Act states as follows:

The commission shall take into account the effects of sea level rise in coastal resources planning and management policies and activities in order to identify, assess, and, to the extent feasible, avoid and mitigate the adverse effects of sea level rise.

In addition, Coastal Act section 30001.5 states, in applicable part, as follows:

The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:

(f) Anticipate, assess, plan for, and, to the extent feasible, avoid, minimize, and mitigate the adverse environmental and economic effects of sea level rise.

The proposed project entails development of necessary transportation infrastructure directly along the shoreline in an area potentially subject to high geologic, flood, and fire hazards, potentially including an array of coastal hazards associated with sea level rise.

Seismic and Tsunami Hazards

The project is situated on the coast of California and is therefore located in a seismically active region. Caltrans used its standard Seismic Design Criteria to guide the design of the structural project components to withstand seismic hazards, including ground-shaking and liquefaction. Caltrans submitted its geotech design criteria and other related engineering reports to Commission staff, and a summary is available in the Caltrans Initial Study with Mitigated Negative Declaration (<u>ISMND</u>) at pp 90-91.⁸ Caltrans determined that although the project is within a seismically active region, the project is not within any major earthquake fault zone, there is no potential for the rupture of known faults, and the project is not in an area zoned for fault rupture by the California Geologic Survey (CGS). Caltrans also determined that due to the quality of the soils underlying the site, the potential for liquefaction to occur within materials supporting or impacting the bridge is negligible.

Ultimately, the project would strengthen the existing piles and abutments, therefore improving the bridge's ability to withstand a major earthquake or tsunami event. The abutments foundations are footings supported on weathered rock approximately 11 to 16 feet below road grade. The new abutment is further restrained by ground anchors to better mimic the ground motion response of the existing foundation. The bridge piles are also embedded into rock, which helps to minimize liquefaction risks.

The location of Jack Peters Creek Bridge on the shoreline of the Mendocino Coast also means that it is subject to potential tsunami events. Tsunamis are rare, but often very destructive large wave events triggered by major underwater disturbances, typically earthquakes. The coast of California has a history of infrequent large tsunami events caused by earthquakes from Alaska, Japan, Chile and the northern California coast itself in the year 1700. Tsunamis mainly approach the shore like a rapidly moving tidal bore or "wall of water" and bring high waves, fast moving surges, and rapid currents that pose great risks to anyone and anything caught in their path. Tsunamis can be "near-field events" generated by nearby large earthquakes or "far-field events." Near-field tsunamis provide little lead time to respond after a major earthquake, while far-field events might provide several hours before tsunami impact, with little natural warnings by time for public safety alerts, though the event can still bring major impacts. Tsunamis

⁸ See <u>https://dot.ca.gov/-/media/dot-media/district-3/documents/environmental/01-43484-jack-peters-is-fed-2022-0218.pdf#page=106</u>.

can bring intense and sudden impacts from flooding, wave run-up, erosion, scour, and fast-moving currents. Tsunami waves can also be compressed in geological or manmade features and 'pile up' to overtop areas that might otherwise be safe from flooding, exposing them to fast moving water. The rapid inflow and outflow of large volumes of water can also scour away beach sand, undermine foundations and cause damage to harbors and moored ships. Tsunamis also dislodge and carry various man-made or natural items, often quite large, and these fastmoving debris can cause additional tsunami damages.



Figure 4: View of the existing Jack Peters Creek Bridge and piers anchored into bedrock (Source: Caltrans).

The Jack Peters Creek Bridge is approximately 100 feet inland from the shoreline and sits atop steep coastal bluffs about 80 feet in elevation. Jack Peters Creek carves out a narrow channel with steep bluffs on either side. Caltrans analyzed the tsunami threat and concluded that maximum wave height (MWH) elevation for a tsunami here is 40.0 feet (NAVD88) and maximum flow velocity is 18 feet per second. According to Commission staff's geology and engineering team, the projected runup elevation for a larger (2475-year event) tsunami would be up to 48 feet. In either case, the bridge roadway (80 feet), soffits (70+ feet), and abutments (60+feet) are well above that height. However, the pier and abutment foundations are low enough to be inundated by a tsunami and exposed to fast-moving currents and scour, and a large tsunami could still potentially result in erosion of the layer of soil of the creek banks, potential posing a threat of undermining to the abutments. The drawdown from an extreme tsunami event could also cause potential issues for the pier supports of the bridge. However, Caltrans has concluded that the foundations are scour resistant even in the event of a major

tsunami because they are founded in bedrock, which brings additional stability and lessens the chance of abutment undermining. As mentioned above, this project strengthens the bridge piers and abutments, thereby increasing its resistance to tsunami events.

Therefore, in the event of a rare tsunami of this magnitude, the fill slopes might sustain some damage, but according to Caltrans, the bridge would likely not collapse, and the bridge has generally been designed to remain intact and usable. In general, in emergency situations following a large hazardous event, Caltrans will work in coordination with the local governments, local emergency services, and the state highway patrol, to close the bridge while it is evaluated for damage. If the bridge is determined to be safe, the highway is reopened, and otherwise repairs are undertaken.

Nonetheless, there are potential risks from exposure to extreme seismic and tsunami events impacting the bridge and Jack Peters Creek Bridge is an important route for ingress and egress during and after emergencies. Therefore, **Special Condition 10 (Seismic and Tsunami Hazard Response Plan)** requires Caltrans to submit a Seismic and Tsunami Hazard Response Plan within 60 days of commencement of construction. The Special Condition requires that the plan include procedures to respond to a major seismic and tsunami event that could result in damage to or closure of the Jack Peters Creek Bridge, including procedures to warn the traveling public of the possible hazardous conditions, coordinate with local authorities on emergency responses, ensure adequate alternative evacuation routes, and, afterwards, to evaluate the condition of the bridge.

Flooding Hazards

The project location sits above the Jack Peters Creek and adjacent to the ocean. The bridge location lies within a Federal Emergency Management Agency (FEMA) mapped designated floodplain area along the creek. The FEMA Flood Insurance Rate Map designates a Zone A 100-year floodplain/floodway for the creek area under the bridge crossing, which is used for areas where there is a 1% annual chance of flooding (i.e., at risk of inundation during the 100-year ARP flood event). Caltrans Hydraulics Design determined that the water surface elevation in a 100-year flood event is estimated to be 15.9 ft NAVD88 when modelled. The Jack Peters Creek Bridge deck is about 80 feet above the creek. The bridge soffit elevation is approximately 70 feet NAVD88 and the abutments are at an elevation of 63.9 ft, and the pier footings are at an elevation of 22.9 ft. Given these heights, Caltrans has determined there is ample freeboard from extreme water surface elevations and the bridge design as proposed is generally safe from the major flood events.

Sea Level Rise

Given that Jack Peters Creek Bridge is approximately 100 feet inland from the shoreline, sea level rise (SLR) is a potential concern. Caltrans analyzed potential SLR impacts in their <u>ISMND (pp. 109-110)</u>, and a Final Hydrology Report provided to Commission staff. Caltrans utilized the Ocean Protection Council 2018 Guidance including SLR projections under the highest potential emissions scenario (H++) for the

Arena Cove Tide Gauge with as much SLR as 5.6 feet by 2070 resulting in 100-year flow water surface elevation of 15.9 feet NAVD88. Caltrans demonstrated that there is sufficient freeboard to withstand even greater sea level rise such as the medium high risk aversion scenario projection of 6.7 feet and H++ scenario projection of 9.9 feet by 2100.

All elements of the bridge will sit well above future flood water surface elevation projections. In the very worst-case scenarios, the bridge pier footing could be exposed to a 100-year flood event. However, the abutments and piers are embedded in bedrock, are composed of heavy concrete, and are not used themselves by members of the public. Thus, overall, the structure as proposed will be safe from SLR concerns throughout the life of the project.

<u>Scour Hazards</u>

According to the FHR Caltrans analysis, given the elevation of the bridge soffits and the pier foundations, there is ample freeboard and no hydraulic/scour impacts are anticipated during a 100-year flooding storm event. Moreover, in this case, the channel under the bridge is essentially rock lined with occasional deposits of sand and sediment, which greatly reduces the threat of scour. The piers also rest on bedrock, further providing stability in the case of scour erosion.

Coastal Bluff Erosion

As referenced, the Jack Peters Creek Bridge sits about 80 feet up from sea level on coastal bluffs. This protects the structure from sea level rise, flooding, and tsunamis, but coastal bluff erosion could be a concern. However, because of the geological composition of the rocks and the setting, marine-driven erosion appears to be limited, and there has been a limited history of bluff erosion in this location. Additionally, the bridge is located about 100 feet inland, and this project would shift the roadway to the east slightly further providing a reasonably large buffer against future erosion.

There are a few active landslides in the project area, including one on the coastal bluff just south of the bridge where the informal public pullover is located (visible in <u>Coastal</u> <u>Records Project Views</u>). However, according to Caltrans, this landslide is not expected to threaten the highway in the lifetime of the bridge project. Caltrans geologists evaluated the landslide and determined that based on its current movements, it is southward, not east, and is more likely to eventually impact the county road at Lansing Street but not the highway. Additionally, this project would shift the roadway toward the east away from the landslide area, and the proposed development is therefore sited and designed to minimize landslide risks. An existing culvert also currently drains into the landslide area (also visible in the above Coastal Records Project view) and Caltrans believes that is contributing to the landslide. This culvert will be removed as part of this project and the drainage directed toward the south and east bank along Jack Peters Creek. Caltrans believes this new drainage will reduce the landslide erosion.

Assumption of Risk

Although Caltrans has designed the proposed bridge to minimize risks to coastal hazards, and the Seismic and Tsunami Hazard Response Plan will further minimize risks, given the project location in a seismically active area and with active coastal landslides, it is not possible to remove all risk associated with the uncertainties of natural hazards. Therefore, considering the risks discussed above, the Commission attaches **Special Condition 14 (Assumption of Risk, Waiver of Liability, and Indemnity Agreement)**, which requires the applicant to assume the risks of hazards to the property and waive any claim of liability on the part of the Commission. Given that Caltrans has chosen to implement the project despite the potential coastal erosion, sea level rise, tsunami, and seismic risks, Caltrans must assume the risks. **Special Condition 14** notifies Caltrans that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires Caltrans the Commission as a result of the failure of the development to withstand the hazards.

For all the above reasons, the Commission finds that the proposed project, as conditioned, will minimize risks to life and property from geologic and flood hazards and assure stability and structural integrity, consistent with Coastal Act section 30253. The Commission further finds that Caltrans has appropriately identified and assessed the impacts of sea level rise, and that the proposed project avoids, minimizes, and mitigates the impacts of sea level rise to the extent feasible, consistent with Coastal Act section 30270.

H. Visual Resources

Section 30251 of the Coastal Act states as follows:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30254 of the Coastal Act states in part:

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that <u>it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road</u>(emphasis added)

Although not the standard of review, the Mendocino County certified Land Use Plan provides the following guidance with respect to protection of visual resources:

- 3.5-1 State Highway 1 in rural areas of the Mendocino County coastal zone shall remain a scenic two-lane road...
- 3.5-3 The visual resource areas listed below are those which have been identified on the land use maps and shall be designated as "highly scenic areas," within which new development shall be subordinate to the character of its setting. Any development permitted in these areas shall provide for the protection of ocean and coastal views from public areas including highways, roads, coastal trails, vista points, beaches, parks, coastal streams, and waters used for recreational purposes.

... Portions of the coastal zone within the Highly Scenic Area west of Highway 1 between the Ten Mile River estuary south to the Navarro River as mapped with noted exceptions and inclusions of certain areas east of Highway 1...

... New development should be subordinate to natural setting and minimize reflective surfaces....

3.5-8 Power transmission lines shall be located along established corridors. Elsewhere transmission lines shall be located to minimize visual prominence. Where overhead transmission lines cannot be located along established corridors, and are visually intrusive within a "highly scenic area", the lines shall be placed underground west of Highway One and below ridgelines east of Highway One if technically feasible...

Highway 1 in the project area and throughout Mendocino County is a scenic two-lane road with views of coastal bluffs, beaches and the shoreline, and the Pacific Ocean. The project is within an area designated as "highly scenic" under the Mendocino County certified LCP, and as such, new development in this area shall be subordinate to the character of its setting.

Although the Jack Peters Creek Bridge is close to the developed town of Mendocino, it sits in an area transitioning to more rural character. Highway 1 here runs straight north from the town of Mendocino through lessening and more scattered residential development, through a forested corridor with limited ocean views. East of the road heading north is a cut/fill bank created with the highway sloped upward and covered in trees and vegetation, west of the road also slopes up, but to a lesser extent. Just before the bridge when headed north, at the intersection with Lansing Street, the views open up to the west and the Pacific Ocean becomes visible. As Highway 1 crosses the Jack Peters Bridge the view west opens up completely, the ocean becomes more visible and coastal bluffs and offshore rocks enter the view. East of the bridge are densely forested and vegetated steep slopes running down to Jack Peters Creek, which is largely unseen, with a house visible on an overlook. At the north end of the bridge, the highway is lined with forested areas again, though the trees west of the road are not as dense and allow glimpses of the ocean. The views heading southbound on Highway 1 are largely the same, though the views of the ocean available from the highway remain mostly obscured until crossing the bridge itself where ocean views to the west are available.

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The existing bridge is a concrete stringer bridge constructed in 1939. (See <u>Exhibit 3</u>.) The existing bridge railing is a low, older concrete design of repeating rectangular gaps with arches. The bridge and bridge rails are a structure from the New Deal era, constructed by the Works Progress Administration in 1939. Views of the bridge itself are characterized by its narrow shoulders, and the old concrete bridge rails with the repeating small arches. Older guardrail also is visible on the bridge approaches. Views of and from the bridge to the ocean are also marked by utility lines – with one set remaining west of the bridge and one set crossing over the bridge itself.



Figure 5: Existing Jack Peters Creek Bridge and Bridge Rails (Source: Caltrans).

As noted above, section 30251 of the Coastal Act protects the visual qualities of the coastal zone, and section 30254 requires Highway 1 remain a scenic two-lane highway, and section 30251 and the Mendocino County certified LCP require that new development in highly scenic areas be subordinate to the character of the setting. In this case, the visual character of the existing bridge and approaching sections of roadway will be altered to some extent by the proposed bridge rehabilitation project. (See <u>Exhibit</u> <u>6</u>.) However, the proposed changes in visual character will remain compatible with the existing visual character in the corridor for several reasons. Because the project proposes a rehabilitation rather than a replacement with a modern structure, the bridge will remain a concrete structure and the overall experience of the bridge will remain the

same. The length of the span and bridge crossing will remain the same. The bridge and approaching highway centerline will be shifted east about 12 feet, but this would have no notable effect on the views. Views for the travelling public on the highway will remain largely unchanged, as there will be no blockages of the ocean views from the bridge and its approaches.

Visual changes include the widening of the bridge by 17-feet (from 30 to 47 feet) to add new bridge 6-footwide shoulders and a separated 6-foot pedestrian pathway on the west side. Although the project will increase the scale of the bridge in the landscape when compared to existing narrow conditions, as noted above, the bridge rehabilitation project is necessary to make modern safety changes to the bridge structure and add important multi-modal improvements. Changes are minimized to the extent necessary to make the safety and multi-modal improvements and are consistent with bridge widths in other prior Commission permit actions for bridges in Mendocino County. Visually the bridge will be wider, but the views of the ocean for visitors will remain the same, and the bridge will not significantly increase in scale, change locations, or otherwise significantly increase its presence in the landscape. Additionally, the new pedestrian walkway and coastal trail connections just north and south of the bridge provide new viewing opportunities that allow for visitors to walk or stop the car at the pull-over and get out, to enjoy views of the coastal shoreline. Therefore, the project also includes some improvements for coastal visual resources.



Jack Peters Creek Bridge - View 4 looking West (proposed) County of Mendocino Prepared by DES / Structure Design Services - Bridge Architecture and Aesthetics S. Heath 3-29-2022

Figure 6: Jack Peters Creek Bridge Proposed View (Source: Caltrans).

Rails and Barriers

The existing New Deal era concrete bridge rails will be replaced with modern bridge rails and a pedestrian walk-way railing. The new vehicle barrier railings on the new bridge will be slightly taller type (ST-85) on both sides of the proposed bridge to increase safety, reliability, and to withstand impacts from modern vehicles. The ST-85 railing is an update and slight modification of the ST-80 recommended by the Commission's Road's Edge Subcommittee in the Bridge Rails and Barriers Reference Guide, and a see-through pedestrian railing will be added along the new separated walkway on the western side of the highway. The proposed rails are another selection from the Commission's Road's Edge Subcommittee that provides updated and crashtested safety needs while maintaining visibility through the rails to the ocean. The proposed railing type is visually permeable and galvanized and will be painted or stained a burgundy-brown color similar to the surrounding natural environment and riparian vegetation. Existing guardrail at the ends of the bridge will be upgraded from metal beam guardrail to the current standard Midwest Guardrail System and extended along the southbound lane. The new guardrail will be approximately two inches taller than the existing guardrail. The guardrail will be stained to blend with the surrounding natural environment. Staining the railing and guardrail will also eliminate the glare of these new metal elements.

Bridge abutments and piers will also be enlarged to structurally carry the additional weight of the widened bridge. These will not be visible to highway drivers but may be somewhat visible from the pull-out or from pedestrians that walk across and near the bridge.



Figure 7: View of Proposed Bridge with bike shoulders, pedestrian path, and strengthened piers (Source: Caltrans).

To ensure the final colors and design of bridge railings and guardrail will be subordinate to the natural setting, minimize reflective surfaces, and blend in hue and brightness with their surroundings, **Special Condition 1.B** requires submittal of final design plans for the Executive Director's review and approval prior to commencement of construction, which demonstrate consistency with these standards.

Tree and Vegetation Removal

The project would require the removal of existing vegetation along the banks of Jack Peters Creek and side of the highway for various construction activities and for the shift of the roadway east, including the removal of areas of existing trees, including hundreds of individual Monterey Cypress, Grand Fir, and Bishop Pine trees. Tree removal will be mostly east of the roadway to accommodate the slight shift of the road east and the widened shoulders. All visible disturbed soil areas will be restored to pre-construction conditions, and areas will be replanted with native trees. Thus, tree removal on the east side of the roadway will temporarily (for a period of several years post-construction) alter the character of the otherwise forested area. However, disturbed areas will be restored and replanted with native vegetation, with efforts to control invasive species after construction is complete. As discussed below, Caltrans has submitted an onsite revegetation plan, and Special Condition 3 requires the submittal of a final onsite revegetation plan and implementation to ensure these areas are replanted and that monitoring for reforestation success occurs for at least 10 years. The shoulder side slopes on the east will look the same after revegetation and restoration. Vegetation removal for the enlargement of the bridge piers and abutments will not be visible to almost all visitors or roadway users. Therefore, visual impacts from vegetation removal will be relatively minor and mostly temporary. Some tree removal west of the highway will not be replaced in the same location, but this will have the effect of opening up public views to the ocean - a scenic improvement.

Utility Lines

Existing utility lines west of the bridge currently cross over the bridge. These lines will be temporarily raised to allow movement of Caltrans cranes working on the bridge. Commission staff and Caltrans staff discussed the possibility of using this project as an opportunity to bury the utility lines or otherwise relocate them. However, PG&E refused to undertake or support relocation of the utility lines, essentially requiring Caltrans to return the lines to their existing position. PG&E asserted that burying the utility lines is cost prohibitive. Commission staff also discussed the possibility of relocating the utility lines onto the bridge structure itself. However, this alternative would require significant undergrounding to connect to the bridge. Additionally, the construction of new vaults to transfer the lines onto the bridge structure impacts. Therefore, there currently are no feasible alternatives to relocate the utility lines, which will be returned to their existing configuration upon completion of bridge rehabilitation work.

Conclusion

Overall, the proposed project will maintain existing scenic views in the project area, and bridge upgrades will largely retain the existing visual quality of the bridge. The bridge will remain the same concrete structure in the same location and of the same length. There will be new railings, which will be visually permeable to preserve views and colored and designed to be subordinate to the natural setting. Although the bridge will be wider due to expanded shoulders and new pedestrian pathway, the additional separated walkway will provide for improved public viewing opportunities. Overall, the proposed changes will maintain Highway 1 as a scenic two-lane highway, protect and enhance coastal views, and minimize the alteration of natural landforms. Therefore, the Commission finds that the proposed development, as conditioned, is consistent with sections 30251 and 30254.

I. Archaeological Resources and Tribal Consultation

Section 30244 of the Coastal Act states as follows:

Where development would adversely impact archeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

In addition, in 2018 the Commission adopted a Tribal Consultation Policy to guide consultation with Tribal entities in permitting and other matters.

This area of Mendocino County has a long history of use by Native American Tribal groups, primarily groups speaking the northern Pomo language. Caltrans has its own Tribal consultation process and cultural resource evaluation process in compliance with state law and Caltrans policies. Caltrans prepared a Historic Property Survey Report (HPSR) in 2016 and a Supplemental HPSR in 2020. These reports concluded that there would be no potential impacts to historic resources and that Tribal resources were not known to be present in the project area.

Caltrans contacted the designated Tribes on Native American Heritage Commission (NAHC) contact list for the area. In discussions with the Sherwood Valley Band of Pomo Tribe, it was agreed that a tribal monitor would be present along with an archaeological monitor during ground-disturbing activities at the bridge. Caltrans has adopted a number of cultural resource protection measures, including the Tribal monitor on-site, coordination around other Tribal issues, and procedures in the event of an inadvertent discovery. (See CR-1 to CR-4, <u>Exhibit 6</u>.)

Consistent with the Commission's Tribal Consultation Policy, Commission staff reviewed the tribal consultation undertaken by Caltrans. Commission staff wrote to the tribal representatives and individuals identified by the NAHC on September 15 to inform them of the project's CDP application and the Commission's upcoming hearing on the project, to offer consultation, and to advise them of the opportunity to provide comments for the CDP hearing. Commission staff spoke with a representative of Sherwood Valley Band of Pomo Indians on September 20 about the project and reviewed the proposed mitigation measures, which the Tribal representative found satisfactory. Commission staff did not receive any other responses.

Coastal Act section 30244 requires that reasonable mitigation measures be employed where development could adversely impact archaeological or paleontological resources. The proposed bridge rehabilitation does not have any impacts to known cultural resources. However, construction activities could impact unknown archaeological resources. In this case, the adopted CEQA Avoidance and Minimization Measures provide measures for the project to address those concerns. These include, but are not limited to, on-site cultural monitoring and provisions to stop construction in the event of an unexpected discovery. The cultural protection measures adopted by Caltrans are incorporated into this permit through **Special Condition 2** that attaches the Avoidance and Minimization Measures in **Exhibit 6** and requires they be implemented as proposed.

To reinforce Caltrans' proposed measures to protect any sensitive archaeological resources in the project area and to ensure that any project changes resulting from an inadvertent discovery are consistent with this CDP, the Commission includes **Special Condition 9 (Protection of Archaeological Resources)**. Special Condition 9 further requires that in the event of such a discovery, Caltrans shall submit, for Executive Director review and approval, a report documenting any proposed changes to construction activities or the adoption of any new avoidance, minimization, and mitigation measures. The Executive Director will subsequently respond in writing with a determination of whether the proposed changes are allowable under this CDP or other applicable Coastal Act policies, or an amendment application to this CDP is required.

In conclusion, based on the findings of cultural research by Caltrans, the tribal consultation and outreach performed by Caltrans and the Commission, as well as the cultural resource protection protocols that will be implemented by Caltrans as part of the project, the Commission finds that the proposed project, as conditioned, includes reasonable mitigation measures to protect archaeological resources consistent with Coastal Act section 30244.

J. Wetlands

Coastal Act section 30233 states, in relevant part, as follows:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

[...]

(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

[...]

(b) Dredging and spoils shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation...

(c) In addition to the other provision of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary...

Section 30108.2 of the Coastal Act defines "fill" as "earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area." Additionally, the Commission has long found grading, excavating, and other ground-disturbing activities in coastal wetlands to be a form of dredging or fill.

Caltrans has identified two wetland areas in the project site that could be impacted by the project's construction activities. (See JP ESHA Report, <u>Exhibit 7</u>.) The first is roadside ditch extending north of the bridge alongside the roadway, interrupted by a private driveway, which Caltrans has defined as three wetlands. The second is a "seep wetland" on the north bank of Jack Peters Creek Bridge east of the bridge.

The roadside ditch wetlands, which are less than a tenth of an acre in size, were originally created by Caltrans as part of the highway shoulders to convey storm water runoff and are highly modified habitats. However, they include sufficient characteristics to qualify as 3-parameter palustrine wetlands and meet the definition of wetland under the Coastal Act. Primarily, these ditches would be disturbed by widening the highway approach shoulders and realigning the roadway slightly east to realign with the new bridge centerline. In addition, a small wetland area (less than 40 square feet) will be impacted by the creation of a vegetated bioswale near the intersection of the highway and Lansing Street. Caltrans proposes to retain the wetland soils from the ditch wetlands to be disturbed and restore new drainage ditches along the side of the rehabilitated roadway.

The seep wetland is approximately 800 square feet in size on the north bank of Jack Peters Creek immediately upstream of the bridge. The Seep ESHA is a 3-parameter freshwater seep wetland characterized by permanently saturated soils with water flow seeping out of the bedrock. The habitat in this seep ESHA is dominated by herbaceous vegetation such as common velvet grass, seep monkey flower, and giant horsetail. Also growing in the area are coastal scrub vegetation, such as sword fern, poison oak, and thimbleberry. This wetland area will be disturbed during construction of the temporary falsework and trestle and with general construction activities. Caltrans will revegetate this area after construction. The hydrology of the seep wetland will not be altered except for about 130 square feet of this area, which will be permanently impacted by the enlargement of the northern pier.

Because of the above identified wetland impacts, for the project to be approved under the Coastal Act, the project must comply with section 30233 of the Coastal Act, which sets forth several tests, as discussed below.



Figure 8: Wetlands to be impacted (cropped view, PW-1 and PW-2 refer to palustrine wetlands. PW-3 is just south of the cropped view. (Source: Caltrans JP ESHA Report, **Exhibit 7**).

Wetland Type	Permanent Impact Areas to be revegetated*	Permanent Impacts
Wetland Ditches	0.045	0
Seep Wetland	0.018	0.003
Total Wetland Impacts	0.063	0.003

Table 1. Anticipated Wetland impacts (based on Caltrans JP ESHA Report, Exhibit 7).

* Caltrans describes these impacts as temporal or temporary. As explained in the text below, because they will not be restored within one year of impact, the Commission considers these to be permanent impacts. However, it is useful to distinguish between areas that will be revegetated on site and the truly permanent impacted area that will not be restored.

Allowable Use

The first test set forth above is that any proposed filling, diking, or dredging in wetlands must be for an allowable purpose as specified under section 30233 of the Coastal Act. The relevant category of use listed under section 30233(a) in this case is *incidental public service purpose*.

The Commission has found in many past actions, including for highway bridge projects, that dredging and filling for road safety improvement projects that do not increase vehicular capacity are an "incidental public service" pursuant to Coastal Act section 30233(a)(4). Here, the primary purpose of the project is to maintain safe and reliable public access along coastal Highway 1. The development will not add vehicular lanes or a new route or otherwise increase vehicular capacity. As the proposed wetland fill is being undertaken by a public agency to serve the public, and therefore has a public service purpose, and the public safety purpose is incidental to the primary transportation purpose of the existing highway, the Commission finds that the proposed wetland dredging and filling is for an incidental public service purpose, and an allowable use pursuant to Coastal Act section 30233(a)(4).

Alternatives Analysis

As a second test, for projects involving dredging and filling of wetlands, the Commission must ensure that the approved project has no feasible less environmentally damaging alternative, consistent with section 30233 of the Coastal Act. Coastal Act section 30108 defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors."

In this case, it would not be feasible to avoid the impacts to wetlands from the project. The roadside ditch palustrine wetlands (PW-1, -2, and -3) are adjacent to the existing roadway to be widened and shifted eastwards to accommodate the rehabilitated bridge structure. Given the roadside ditches are within the roadway shoulder, there are no alternatives to shift/widen the roadway to a lesser degree to the east and relocating westward would expose the bridge and roadway to greater erosion risks and would fail to line up with the bridge center-line, creating new and greater highway safety concerns. The seep wetland is within a location required to construct the temporary trestle and falsework to access the base of the piers to allow widening. Given the temporary trestle falsework needs to provide access to the bridge, there are no alternative locations to place that temporary structure.

Alternative bridge or roadway designs are also not feasible to meet the project need. For the roadside ditch palustrine wetlands, narrower shoulders on the bridge approach lanes could marginally lessen impacts, but not avoid them, and the proposed 6-foot shoulders are typically used in coastal bridges as an adequate compromise between Caltrans safety standards, bike safety needs, and reduced impacts on coastal resources. As discussed above in the Public Access Finding, while the lanes could be narrowed to 11 feet, this would make the roadway less safe for vehicular and cycling access than current conditions of 12-foot lane widths and would only have marginal reductions in wetland impacts. An alternative to avoid the impacts to the roadside ditches by not shifting the roadway east would mean inadequate safety for cyclists approaching the bridge, and safety issues with the centerlines of the approaching highway not matching the centerline of the bridge.

For the seep wetland, narrowing the bridge lanes and shoulders would not fundamentally change the need to increase the strength of the abutments and piers – the bridge still needs strengthening to extend its design life and carry the new bridge rails. Any alternative to modifying the location of the impacts of the pier would also mean relocating the existing pier and thus essentially constructing an entirely new bridge with much greater impacts to wetlands. Impacts to the seep wetland could also be lessened if the temporary trestle/falsework were not constructed, however, this would make constructing the new bridge rails and wider shoulders not feasible, and given the location of the bridge, no other locations are feasible for placement of the temporary trestle/falsework.

The only alternative that would avoid the wetland impacts is the "no project," which here means that no repairs or improvements would be made to the existing bridge and roadway. The no project alternative would mean that the Highway 1 crossing of Jack Peters Creek would remain on an older bridge with corroding concrete bridge rails from 1939, that important safety improvements to help avoid traffic accidents on the bridge would not take place, and that the bridge would continue to lack important active transportation/complete streets improvements in widened shoulders and a separated pedestrian pathway. The purpose of this project is to make the needed safety upgrades to the bridge and to provide adequate safe access for pedestrians and cyclists. Therefore, the Commission finds that the "no project" alternative is not a feasible less environmentally damaging alternative to the proposed project, as conditioned.

Overall, the selected alternative was designed to incorporate the smallest environmental footprint possible while still achieving the project purpose. Therefore, the Commission finds that use of an alternative design is not a feasible less environmentally damaging alternative to the proposed project, as conditioned.

Feasible Mitigation Measures to Minimize Adverse Environmental Effects

As a third requirement, section 30233 further requires that feasible mitigation measures be provided to minimize adverse environmental effects of dredging and filling wetlands. Depending on the way the proposed project is completed, the proposed dredging and filling within coastal wetlands could have significant adverse environmental effects on the quality and functional capacity of this habitat and the wildlife within these areas.

Caltrans proposes various construction-phase avoidance and minimization measures (AMMs) and best management practices (BMPs), which are attached as <u>Exhibit 6</u> and incorporated into this permit in **Special Condition 2**. These measures include, but are not limited to, measures to protect water quality (discussed in detail below) and measures to protect sensitive species of amphibians. No adverse impacts to special status amphibian species Northern red-legged frog and Red-bellied newt are anticipated. Potential impacts would be avoided and minimized through implementation

of BMPs designed to protect water quality, utilizing fencing to minimize disturbance in sensitive habitat areas, and preparation of a plan for aquatic species relocation if necessary. A qualified biologist will be present at the start of all construction operations on the banks of the creek to survey and relocate amphibians to suitable habitat outside of construction zones to avoid impacts to this species. As conditioned to require these measures to be implemented, the proposed project will minimize adverse environmental effects of dredging and filling wetlands.

On-site Restoration of Wetlands

As discussed above, the project would have some impacts to wetlands - taken together, the anticipated wetland impacts are 0.063 acres (about 2,750 square feet). Caltrans proposes mitigation to compensate for temporal and permanent loss of the ditch and seep wetlands with on-site restoration at a 1:1 impact to mitigation ratio and an additional off-site mitigation project. For the on-site mitigation, impacted roadside wetland ditches would be re-created in-kind along the new alignment adjacent to the east side of the highway. (See On-Site Revegetation Plan Exhibit 8.) The seep wetland would be restored with plantings and is anticipated to reestablish over the bedrock. Caltrans also proposes a five-year maintenance and monitoring period with specific success criteria to assess progress and identify remedial or adaptive management measures that may be required.

Because the impacted wetland areas will be restored on-site, Caltrans' documents often refers to these impacts as "temporary" or "temporal." However, in past actions by the Commission, the Commission has typically found that impacts are only "temporary" and accepted mitigation ratios at 1:1 when restoration is complete within one year of impact. For longer restoration periods, the Commission generally has treated such impacts as permanent due to the loss of habitat function during the time required for habitat regeneration after construction is complete and site restoration has commenced. Mitigation for permanent impacts have typically relied on a mitigation ratio of 4:1 for wetlands. In some recent actions, such as <u>CDP 2-20-0282</u> the Gleason Beach Roadway Realignment, the Commission has accepted a ratio of 1.5:1 for "temporal" restorations when Caltrans can revegetate the site within a period up to 2 years.

In this case, Caltrans would achieve a 1:1 ratio on site. However, that restoration would not be complete within one year of impact. As the majority of wetland habitat disturbed during construction will be restored on site and would be small in scale as compared to the surrounding community, no change in the overall quality, characteristics or structure of these communities within the project vicinity or proliferation of invasive species are expected. However, there will be a temporal loss of function of these habitat areas during construction and during the time it will take for them to fully reestablish, and these impacts should be considered permanent. Therefore, additional compensatory mitigation is necessary beyond the 1:1 to reach the typical mitigation ratio/acreages approved in past Commission actions, and Caltrans proposes the additional mitigation discussed below.

On Site Mitigation Special Condition

Caltrans has submitted an onsite revegetation plan sufficient to show that it will restore conditions on site and that it is feasible to achieve a 1:1 wetland restoration onsite. **Special Condition 3** requires the submittal of a final Onsite Revegetation Plan that shall substantially conform to submitted draft plan in **Exhibit 8** with some updated changes. These include proper definitions of temporary and permanent impacts consistent with Coastal Commission practice; updated estimates of project impacts and updates restoration plans that will ensure a 1:1 restoration; additional details on the revegetation palette and restoration methods; updated monitoring plan and success criteria, including monitoring for success of grand fir replanting for a minimum of 10 years. **Special Condition 3** also has provisions to ensure actual impacts match the anticipated impacts and require further mitigation if necessary; and sets provisions for the potential failure of the on-site restoration.

Additional Proposed Offsite Mitigation for Wetland Impacts

Caltrans proposes this additional compensatory mitigation through an off-site mitigation project comprised of additional wetland preservation value through the Saunder's Landing Off-Site Habitat Mitigation and Monitoring Plan (<u>Exhibit 9</u>). Because this mitigation would be primarily through preservation rather than wetland creation, Caltrans proposes additional compensatory mitigation greater the typical 4:1 wetland mitigation ratio that the Commission typically accepts as mitigation for permanent wetland impacts involving habitat creation or substantial restoration.

In discussing the mitigation opportunities for the Jack Peters Creek Bridge project with Commission staff, Caltrans was unable to identify a suitable location in direct proximity to the Jack Peters Creek site, and Caltrans has demonstrated that it could find no feasible mitigation options near the Jack Peters Creek Bridge. (See, e.g. the Mitigation Feasibility discussion on pages 56-60 of the Saunder's Landing Off-Site (**Exhibit 9**).)This is because there are limited space and opportunities for habitat enhancements within Caltrans highway right of way and available for purchase near the project location. Caltrans therefore proposes additional offsite habitat mitigation through the purchase of a property on the Mendocino County coast, known as "Saunders Landing" (or the LaBoube property). Use of the Saunders Landing property purchase for habitat mitigation was recently approved conceptually by the Commission in the <u>Elk Creek</u> <u>Bridge Replacement CDP 1-22-0446</u>.⁹ As discussed in that action, Caltrans projects – this project, the Elk Creek project, and the Cleone Shoulders Project.

The full description of the Saunders Reef mitigation project and acquisition of the LaBoube parcel are described in pages 42-47 of the Commission's findings for CDP 1-

⁹ The report is accessible from the Commission's website: <u>https://documents.coastal.ca.gov/reports/2022/8/W14b/W14b-8-2022-report.pdf</u>. Note that although the Commission accepted that mitigation proposal as sufficient for the Elk Creek Bridge Project, it did not approve the actual restoration activities at Saunders Landing. Those activities, which are limited to replanting and invasive species removal, will need authorization from Mendocino County, whether through a permit, exemption, or otherwise. Moreover, the Commission's action in the Elk Creek Bridge Project does not bind the Commission to accept that mitigation for this project at the Jack Peters Creek Bridge.

22-0446, incorporated herein by reference. To summarize briefly, the LaBoube property is a 12-acre undeveloped, oceanfront, blufftop site located along Highway 1 near the Hearn Gulch Coastal Access Point, which is about 10 miles north of the town of Gualala and approximately 40 miles south of the Jack Peters Creek Bridge. The parcel is privately-owned and was originally slated for private residential development but has remained undeveloped. The public uses the western parcel to access Hearn Gulch Beach via a Caltrans lookout/rest area located directly north of the western parcel. As this access is not formally authorized and there is no formal trail here, this public access is at risk of being lost through private development. Under the proposed mitigation package for this (and the other) projects, Caltrans would fund the purchase of the property for public ownership (likely the Mendocino Land Trust (MLT)) and provide for permanent habitat enhancement and preservation. Caltrans would also fund an endowment for the long-term maintenance of the habitat on the mitigation property. which would be placed under a conservation open-space deed restriction. The unauthorized, informal public access would be developed as a legal public access trail and beach access point.

Caltrans performed wetland delineations at the Saunder's Reef site and determined that 1.31 acres of 3 parameter wetlands and 0.070 acres of CCC 1 parameter wetlands were on the property. The property includes high-quality habitat containing special status plant species and rare vegetation alliances, including wetlands, non-wetland waters, riparian, and upland ESHA resources, such as coastal terrace prairie, northern bishop pine forest, northern coastal scrub, and coastal bluff scrub. Some sensitive wildlife species have been noted as occurring or likely occurring on the property as well, including Sonoma tree vole, shoulderband snails, and cormorant species. Under the draft Habitat Mitigation and Monitoring Plan (HMMP), Caltrans would provide enough habitat preservation and enhancement to meet the distinct higher ratios required for each of the three projects. In this case, for instance, the project would preserve 1.112 acres of wetlands in total at Saunders Landing. Caltrans would designate 0.564 of those acres for the wetland impacts of this project while keeping that acreage separate from the acreage credited for the other projects at Elk Creek and Cleone. (See Appendix E, CCC Mitigation Worksheets, **Exhibit 9**.)

Mitigation Special Condition

A number of Special Conditions were applied to the approval of the <u>Elk Creek Bridge</u> <u>Replacement CDP 1-22-0446</u>, and those conditions are already binding on Caltrans as the permittee of that project and will guide implementation of the off-site mitigation project. However, to ensure those conditions are independently enforceable and specific for this permit, the CDP includes **Special Conditions 4**, **5**, and **6** regarding the off-site mitigation at the Saunder's Reef site. **Special Condition 4** requires Caltrans to submit a final revised HMMP that substantially conforms with the proposed HMMP in **Exhibit 9**, sets special conditions guiding the habitat mitigation, and ensures the final mitigation adequately accounts for final impacts at Jack Peters Creek. **Special Condition 5** ensures the mitigation project is implemented through transfer to a nonprofit land management entity through the submittal of final Offsite Habitat Mitigation Agreements and through the establishment of a Non-Wasting Endowment Fund. **Special Condition 6** requires the recording of a open space deed restriction on the parcel.

In conclusion, the Commission finds that the proposed acquisition of the Saunder's Reef site property and enhancement and preservation of its habitat is feasible and sufficient off-site mitigation for the anticipated impacts to wetland habitat as a result of the proposed bridge replacement project.

Maintenance and Enhancement of Biological Productivity and Functional Capacity

The fourth general limitation set by section 30233 of the Coastal Act is that any proposed dredging or filling in coastal wetlands or estuaries must maintain or enhance the functional capacity of the wetland or estuary.

Caltrans has proposed numerous avoidance and minimization measures, including BMPs, as part of the project. These are attached here as **Exhibit 6** and incorporated into the special conditions for this permit in **Special Condition 2**. The mitigation measures incorporated into the project and required by the special conditions will ensure that the project will not have significant adverse impacts on coastal waters or wetlands in and around the project vicinity.

Therefore, the Commission finds that the project, as conditioned, will maintain and enhance the biological productivity, quality, and functional capacity of coastal waters and wetlands consistent with the requirements of section 30233 of the Coastal Act.

Conclusion

For all of the reasons set forth above, the Commission finds that the project, as proposed and conditioned, is an allowable use, that there is no feasible less environmentally damaging alternative, that feasible mitigation will be provided to minimize all significant adverse impacts associated with the dredging and filling of coastal wetlands, that wetland habitat values will be maintained or enhanced, and that coastal water quality will be protected. Therefore, the proposed development, as conditioned, is consistent with section 30233 of the Coastal Act.

K. Marine Resources and Water Quality

Section 30230 of the Coastal Act states as follows:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states as follows:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30232 of the Coastal Act states as follows:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

The project site is adjacent to the Pacific Ocean, adjacent to and above a coastal stream, and includes intermittent drainages. Construction impacts or from the new bridge improvements, which involve excavating 17,500 cubic yards of material, could potentially impact the biological productivity and the quality of coastal waters and streams, and potentially impact populations of marine organisms. Jack Peters Creek is a perennial stream running under the project bridge site in a deeply incised channel and flowing into the ocean. It as a width in the project area that varies between 15 and 42 feet. Caltrans has also identified five intermittent streams or drainages in the project area, including an intermittent drainage with a bedrock channel that flows from the north bridge abutment directly to Jack Peters Creek; 3 drainages south of the bridge site near Larkin Road that flow into a culvert and outfall west of the highway into a residential area; and a narrow, deep, intermittent drainage north of the bridge that flows west from a culvert opening west of the highway. (For a map of these drainages, see Figures 8 and 9, pp. 50-51, <u>Exhibit 7</u>.)

The project would have temporary construction work on the banks of Jack Peters Creek but remain above Ordinary High-Water Mark. For the five intermittent drainages, construction of the project would not alter four of them. The intermittent drainage flowing from the north bridge abutment into Jack Peters Creek would be impacted directly by construction vegetation removal and grading related to the widening of the bridge abutment. Caltrans will recreate this intermittent drainage just east of its current location. (These impacts and mitigation for them are discussed in the ESHA section directly below.) Combining Jack Peters Creek with the drainages, Caltrans estimates there are 0.291 acres of coastal waters in the project area, not including the adjacent ocean.

Caltrans proposes a number of drainage improvements, more fully described in the <u>IS/MND</u> at pages 8-9 and in the Jack Peters ESHA report (**Exhibit 7**) page 17-21,

particularly in Table 1 "Drainage Improvements."¹⁰ Hydraulic Drainage Recommendation Report (May 2022). These improvements include culvert replacements; the placement of new and additional bridge scuppers along the bridge; the recreation of drainage inlets and ditches on the east side of the highway as the highway is widened and shifted east; drainage headwalls; and installation of rock energy dissipators on drainages leading to Jack Peters Creek. The removal of asphalt on the west shoulders of the approach highway lanes will also create more permeable soil there. Significant drainage changes include:

- South of the bridge, the existing culvert and drainage system that connects to the roadside shoulder area and landslide area would be removed. A new gutter and roadside drainage would be constructed along the east side of the roadway, this would feed into a culvert leading eventually to the southern edge of the gulch at Jack Peters Creek.
- A vegetated bioswale treatment for additional stormwater management (and to offsetting impacts to stormwater discharge for other agencies) would be created near the intersection of Lansing Street with Highway 1 south of the bridge. The bioswale would be adjacent to the west of SR 1, starting approximately 43 feet south of the intersection. At the intersection with Lansing Street, the bioswale would continue for another 102 feet adjacent to the east of the northbound lane of Lansing Street. The proposed bioswale is anticipated to be approximately 100 feet in length, 1 foot in depth, with a 10-foot-wide top with and a 2-foot-wide flat bottom, and a 1% longitudinal slope.
- Scuppers on the existing bridge would be replaced and supplemented. Because of the typography of the bridge location and its height relative to the approach roadways, water cannot flow off the bridge to drainages there.

Regardless of whether construction activities directly alter these coastal waters, construction activities could lead to degrading impacts to these waters through spills and leaks, storm-water runoff, and inadequate drainages. To address these potential impacts Caltrans proposes a number of avoidance and minimization measures and best management practices in the AMMs attached as <u>Exhibit 6</u>. These are also described in the Final ESHA Report in <u>Exhibit 7</u> and include:

- Develop a Stormwater Pollution Prevention Plan (SWPPP) and follow the plan to avoid impacts due to erosion and spills during construction.
- Apply construction site BMPs to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; and monitor and maintain BMPs.

¹⁰ Caltrans also submitted a Hydraulic Drainage Recommendation Report (May 2022) that is in the CDP file.

- Prior to the start of work, Temporary High Visibility Fencing (THVF) and/or flagging would be installed around sensitive natural communities, environmentally sensitive habitat areas, rare plant occurrences, intermittent streams, and wetlands and other waters, where appropriate. No work would occur within fenced/flagged areas.
- Construction activities in-stream or performed above the ordinary high water mark of Jack Peters Creek that could potentially directly impact surface waters (i.e., soil disturbance that could lead to turbidity) would be performed during the dry season, typically between June through October.
- Install THVF and/or flagging, where appropriate, to protect the portion of the ESHA outside of the construction footprint.
- Biological monitoring.

Special Condition 2 adopts the proposed AMM/BMPs and incorporates them as enforceable terms of this CDP, including with some expansions as described therein. **Special Condition 8** enforces the proposal for a Stormwater Pollution Prevention Plan and that all work comply with that plan, including with some expansions as described therein. **Special Condition 11** requires submittal of a plan prior to commencement of construction for the disposal of excess construction debris and materials, excess fill, vegetation spoils, and waste material to ensure that such materials/debris/waste is feasibly be contained with appropriate BMPs to prevent any discharge of polluted runoff to coastal waters and wetlands and is disposed of at an authorized disposal site(s) capable of receiving such materials.

Marine Resources and Aquatic Species

Impact hammering will be required to create drill hole piles for the pier foundations and/or for the pile supporting the temporary trestle and falsework. Such impact hammering may subject the nearby ocean environment to noise and vibrations. The noise and vibration disturbances of pile driving and hammering may impact steelhead salmon, marine mammals such as pacific harbor seals and California sea lions, and other fish species. Caltrans coordinated with NMFS for addressing potential impacts on these species and NMFS has provided avoidance and minimization measures. These AMMs (BR-2(E)/(K)) include biological monitoring for marine mammals in a behavioral impact zone through a Marine Mammal Monitoring Plan that would be prepared by a qualified biologist. The plan would include provisions for monitoring the bay prior to and during and pile drilling activities to determine marine mammal presence within a predetermined safety zone. If marine mammals are present prior to or during drilling, drilling activities would be stopped until the species is out of the impact area. **Special Condition 2** requires compliance with these AMMs.

The AMMs also includes Hydroacoustic Monitoring (BR-2(E)) to monitor hydroacoustic impacts of pile driving impact hammering, hoe ramming or jack hammering. **Special Condition 7** further provides for the submittal of the Hydroacoustic Monitoring Plan to

the Executive Director for review and approval, with limits on the amount and cumulative amount of hydroacoustic impacts of any of these activities.

Therefore, the Commission finds that the project as conditioned protects marine resources and water quality consistent with sections 30230, 30231, and 30232 of the Coastal Act.

L. Environmentally Sensitive Habitat Areas

Section 30240 of the Coastal Act states as follows:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.

Although not the standard of review, the Mendocino County certified LCP provides the following guidance with respect to ESHA buffers:

3.1-7 A buffer area shall be established adjacent to all environmentally sensitive habitat areas. The purpose of this buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from significant degradation resulting from future developments. The width of the buffer area shall be a minimum of 100 feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning Staff, that 100 feet is not necessary to protect the resources of that particular habitat area and the adjacent upland transitional habitat function of the buffer from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the environmentally sensitive habitat areas and shall not be less than 50 feet in width... Developments permitted within a buffer area shall generally be the same as those uses permitted in the adjacent environmentally sensitive habitat area and must comply at a minimum with each of the following standards:

1. It shall be sited and designed to prevent impacts which would significantly degrade such areas;

2. It shall be compatible with the continuance of such habitat areas by maintaining their functional capacity and their ability to be self-sustaining and to maintain natural species diversity; and

3. Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel. Mitigation measures, such as planting

riparian vegetation, shall be required to replace the protective values of the buffer area on the parcel, at a minimum ratio of 1:1, which are lost as a result of development under this solution.

The Coastal Act defines environmentally sensitive habitat areas (ESHAs) as areas in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments (section 30107.5).

The proposed project would require vegetation and tree removal for construction activities. These construction activities will result in impacts to ESHA, including riparian corridor along Jack Peters Creek, vegetation along the creek and roadway shoulders, and Grand Fir and Bishop Pine tree removal.

Caltrans has developed a Jack Peters Creek Bridge Project ESHA Assessment ("JP ESHA Report") based on biological surveys conducted through 2021 (Exhibit 7). The areas Caltrans classified as ESHA that could potentially be impacted include several intermittent (non-wetland) drainages with native vegetation, coastal riparian ESHA on the north and south bank of Jack Peters Creek east of the bridge, stands of Grand Fir Forest on the north and south banks Jack Peters Creek east of the bridge, and Bishop Pine Forest stands adjacent to the roadway on both sides of the Highway. As discussed below, the Commission's ecologists have reviewed the Caltrans ESHA report and determined that some of these areas meets the definition of ESHA under section 30107.5 of the Coastal Act due to areas' rarity and ability to be easily disturbed or degraded by human activities and development. Additionally, there are additional areas identified in the ESHA report that will not be directly impacted by the project but for which Caltrans cannot maintain a 100-foot buffer separation. Lastly, each of these ESHA areas provide habitat for a number of sensitive species, as discussed below. The following review of ESHA and impacts are more fully defined in the ESHA Report attached as Exhibit 7.

ESHA Impacts

In general, project construction activities that will potentially impact ESHA include vegetation clearance and grading for construction access on both banks of the creek, the placement of a temporary trestle and falsework adjacent to the bridge that will have impacts on both banks of the creek, and vegetation clearance and grading related to shifting the roadway slightly east and expanding the shoulders. Caltrans labels these impacts as "temporal" because they will revegetate the areas with the appropriate native vegetation at the conclusion of construction. However, as noted above, when it comes to evaluating proposed mitigation ratios, the Commission has only considered impacts to be "temporary" (e.g., a 1:1 mitigation ratio is sufficient) when the impacts are fully restored within one year of the onset of construction, which does not apply to areas in which mature trees and vegetation communities are removed for the purpose of construction, as is the case here. In addition, there will be some small permanent impacts from the widening of the piers and abutment that will result in vegetation clearance that cannot be revegetated. Each type of ESHA to be impacted is described below and summarized in Table 2.

Riparian ESHA

Riparian habitat within the project area qualifies as ESHA, because the area is especially valuable due to its role in the ecosystem of providing essential habitat around Jack Peters Creek for a diverse assemblage of sensitive species, and because it is a rare habitat type that has suffered considerable loss statewide. Caltrans identified 0.072 acres (~3,136 square feet) of riparian habitat in the project area on both sides of the banks above Jack Peters Creek. Caltrans conducted wetland delineations for the project area but did not determine that these areas were wetlands. Senior ecologist Dr. Laurie Koteen of Commission staff concurred the area is not a wetland. Potential impacts to the riparian ESHAs consists mostly of impacts during construction associated with vegetation removal, grading for equipment access, and construction of the temporary trestle and falsework. These impacts total 0.067 acres (~2,918 square feet) and will be subsequently restored. The widening of the pier and abutment would result in a permanent loss of 0.005 acres (~218 square feet) of riparian ESHA.

The Caltrans JP ESHA Report identifies five intermittent streams or drainages that are potentially ESHA, as well as Jack Peters Creek. After review by senior ecologist Dr. Laurie Koteen of Commission staff, only one of these drainages qualifies as ESHA under the Coastal Act and will actually be impacted by the project. This is the intermittent drainage labelled OW-4 in the JP ESHA Report.

OW-4 is an intermittent drainage that has a bedrock channel that flows from the north bridge abutment directly to Jack Peters Creek. Because of the habitat it provides, this drainage area qualifies as riparian ESHA habitat and is defined by an area limited to where the slope significantly changes. Some 0.003 acres (131 square feet) of this drainage will be impacted by vegetation clearance and minor grading for construction access. Caltrans will revegetate these areas with appropriate native vegetation. A small amount, 0.001 acres (44 square feet) would be permanently impacted by activities to widen the piers and abutments. No work will take place within the creek area, rather all work would be above the Ordinary High-Water Mark.

Grand Fir Forest ESHA

The State identifies areas of Grand fir Forest as a sensitive natural community (SNC), with a ranking by the California Native Plant Society (CNPS) and California Department of Fish Wildlife (CDFW) as S2.1. Vegetation alliances with a ranking of S2 are classified as imperiled¹¹, and are by definition ESHA under the Coastal Act. On site, the Grand fir is dominant or co-dominant in the tree canopy with red alder, Sitka spruce, bishop pine, and coast redwood also present in this vegetation community. Caltrans identified 0.298 acres (~12,981 square feet) total of Grand fir Forest ESHA within the project area on both the north and south banks of Jack Peters Creek between riparian vegetation and bishop pine forest, and to the west of Highway 1 north of County Road 500D.

¹¹ The full description of species with a state ranking of S2 is: "imperiled in the state because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from the state." The ".1" of the ranking further indicates the vegetation alliance is "very threatened."

Only the areas on the banks of Jack Peters Creek would be potentially impacted. Primarily, the impacts to Grand Fir Forest ESHA will result from vegetation removal for construction access. Of the 0.298 acres of Grand Fir Forest impacted, the majority of it (0.242 acres or ~10,542 square feet) will be replanted following construction. The widening of the abutments will also result in some impacts to Grand fir Forest ESHA that will persist and will not be replanted due to construction of new bridge infrastructure. Caltrans has also accounted for impacts from shading of the streambed and riparian from the slightly wider bridge impacting a small amount of Grand Fir forest area, resulting in an additional 0.056 acres (2,439 square feet) of impacts.

Bishop Pine Forest ESHA

Areas of the Bishop pine-Monterey pine Forest alliance are also present on site. Areas dominated by this type of vegetation also are recognized as ESHA under the Coastal Act because of their rarity (this sensitive natural community possesses a state ranking of S3.2 and described as "vulnerable", with the ".2" part of the ranking indicating it is "threatened" within the state.)¹² The Bishop pine- Monterey pine ESHA is located throughout the project area and totals 0.792-acre (34,500 square feet), including on both banks of Jack Peters Creek, on the roadway shoulders east of Highway 1, and stands west of Highway 1.¹³ Construction impacts to this ESHA total 0.714-acre (31.102) square feet), including vegetation removal and hillside grading to conform the highway alignment with the widened bridge. Some additional impacts to the forest community would result from the restoration of the wetland ditch alongside the highway (0.074 acres or 3.223 square feet) and from the expansion of the bridge abutments (0.004 acres or 174 square feet). Portions of the impacted areas that will be replanted will not be replanted with Bishop pine but will instead be replanted with Grand fir. This is because of the prevalence of pitch canker in Bishop Pines in the area, which is a fungal pathogen that destroys Bishop Pines, and due to a resulting Caltrans policy of not planting Bishop Pines along roadsides due to the greater potential of injuries or deaths to travelling public from falling limbs or trees.

ESHA Type	Location	Total in Survey Area/ Project Area (acres)	Permanent Impacts that will be revegetated ("Temporal" in Caltrans documents)	Permanent Impacts that can not be revegetated
Riparian ESHA / Intermittent Drainage	North Bank of Jack Peters Creek	0.004	0.003	0.001

Table 2. Summary of ESHA impacts (based on Caltrans ESHA Report, Exhibit 7).

¹² The full S3 definition is "vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation."

¹³ Caltrans distinguishes between representative stands (0.517) and non-representative (0.275) stands of Bishop Pine Forest and describes non-representative stands as being in poor condition, vestigial, with high invasive cover.

Grand Fir Forest	North and South Banks of Jack Peters Creek;	0.298	0.242	0.056
Bishop Pine Forest	Banks of Jack Peters Creek; roadway shoulders	0.792	0.714	0
Total Impacts			0.959	0.057

Allowable Uses within ESHA – Project Consistency with section 30240(a)

Section 30240 of the Coastal Act requires that ESHA shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. The avoidance and minimization measures described herein and attached to this CDP through **Special Condition 2** and **Exhibit 6** generally will ensure avoidance of significant disruption to the habitat values of the ESHA, and the project, as sited and designed, will minimize ESHA impacts to the greatest extent feasible. As discussed in earlier findings, **Special Condition 3** requires the submittal of a final Onsite Revegetation Plan that among other requirements includes an updated monitoring plan to monitor for the successful reforestation of Grand fir in the area for a minimum of 10 years. However, the vegetation clearance and tree removal in ESHA designated areas are activities that are not uses dependent on the ESHA resources. Therefore, the activities in this case are not an allowable resource-dependent use under section 30240 and are therefore inconsistent with section 30240.

Although these impacts are inconsistent with section 30240, the proposed project as mitigated and conditioned is approvable pursuant to the conflict resolution provisions of the Coastal Act, as discussed in Finding IV-M below, because the rehabilitation project assures and enhances safe public access and recreation for all potential bridge users that does not otherwise exist.

<u>Mitigation Measures to Minimize Adverse Environmental Effects TO ESHA – Project</u> <u>Consistency with section 30240(b)</u>

As discussed below, in cases of conflict resolution, section 30007.5 requires the Commission to resolve the conflict in a manner that is on balance most protective of coastal resources. In past actions, the Commission has found it necessary to satisfy this aspect of the Coastal Act through a showing the project would mitigate adverse impacts on coastal resources to the maximum extent feasible. Section 30240(b) of the Coastal Act also requires that projects be sited and designed to avoid impacts to adjacent ESHA areas and be compatible with the continuance of those habitat and recreation areas.

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ESHA Protections

To address these potential impacts Caltrans proposes a number of avoidance and minimization measures and best management practices to minimize possible impacts to ESHA, attached here as **Exhibit 6. Special Condition 2** adopts the proposed AMM/BMPs and incorporates them as enforceable terms of this CDP, including with some expansions as described therein. **Special Condition 8** enforces the proposal for a Stormwater Pollution Prevention Plan and that all work comply with that plan, including with some expansions as described therein. **Special Condition 11** requires submittal of a plan prior to commencement of construction for the disposal of excess construction debris and materials, excess fill, vegetation spoils, and waste material to ensure that such materials/debris/waste is feasibly be contained with appropriate BMPs to prevent any discharge of polluted runoff to coastal waters and wetlands and is disposed of at an authorized disposal site(s) capable of receiving such materials.

The ESHA habitat described above provides potential habitat for multiple special species of wildlife, including: protected bird species (including the white-tailed kite, American peregrine falcon, and Bald eagle); and sensitive mammals (Sonoma tree vole, sensitive bat roosting areas). Caltrans has adopted a number of avoidance and minimization measures to protect environmentally sensitive wildlife habitat areas, as described below and in **Exhibit 6**.

- Colonies of roosting bats including those listed as of special concern by CDFW, have the potential to occur within the project area on the bridge structure or nearby trees. Bats are known to use open bridge cavities for roosting activities. Caltrans determined that there are few open crevices or other elements that provide suitable roosting areas for bats on the Jack Peters Creek Bridge, except for potentially a 1- to 3-inch vertical gap between the abutment and the box girder structure at the southern abutment. Caltrans conducted three bat surveys, and one bat was seen in the southern abutment in 2017 but none were seen in subsequent surveys. Surveys of nearby trees revealed no bats and no suitable bat roosting locations. Under the adopted AMMs for the project (Exhibit 6, BR-2-C), a qualified biologist will survey the site prior to construction. If day roosting bats are observed, bat exclusion measures would be installed and maintained.
- No adverse impacts to special-status bird species are anticipated, however the mature forest stands do provide potential nesting habitat. Tree removal would be required for road shoulder grading and access for construction of the temporary trestle and falsework east of the current bridge and the removal of up to 60 mature bishop pine and grand fir trees could remove suitable nesting habitat. Caltrans states that these impacts are marginal given that the trees are adjacent to a highly traveled roadway, there are few old-growth trees present to support tree vole nests, and there are nearby existing habitat and environmental conditions adjacent to provide better nesting habitat. Under the adopted AMMs for the project (Exhibit 6, BR-2-A and BR-2-B), vegetation in the nesting season would be avoided and a qualified biologist would conduct a nesting bird survey within one week prior to vegetation removal if it were to occur during the nesting season or in the case of

raptors. If an active nest is located, the biologist would coordinate with CDFW on the appropriate actions. Buffers will also be established around active bird nests. **Special Condition 2** and subpart 2.K enforces these AMM measures, requires that survey results be shared with Commission staff, and set minimum standards for buffers during a nesting season.

- The Sonoma tree vole is a sensitive species in the area. Under BR-2-H, surveys would be conducted for Sonoma tree vole no more than 14 days prior to tree removal. If species are discovered during construction, work would stop in the area of discovery and coordination with the appropriate resource agencies would occur. Special Condition 2 and subpart 2.K enforces these AMM measures and requires that these survey results be shared with Commission staff,
- Night work will be necessary, which could lead to degradation of sensitive wildlife ESHA. However, Caltrans proposes AMMs (Exhibit 6, BR-2-G) to minimize the potential impacts to ESHA and sensitive species within these areas, by keeping lights temporary and directed only at the specific active work area. Special Condition 2 and subpart 2.M enforces these AMM measures and requires that night lights be directed downward and away from the channel.

Proposed Onsite and Offsite Mitigation

Caltrans has submitted both draft onsite (Exhibit 8) mitigation plan for direct ESHA impacts. Under the proposed on-site mitigation plan, for impacted riparian areas, Caltrans will revegetate 0.216 acres (~9,409 square feet) to achieve a proposed 3:1 mitigate ratio. This comports to the typical mitigation ratio accepted for permanent impacts to ESHA. For all instances of the proposed onsite revegetation, areas will be replanted with an appropriate mix of native species, as proposed in the draft onsite plan (Exhibit 8). For impacts to the non-wetland drainages, Caltrans will revegetate 0.004 acres (~174 square feet) to achieve a proposed 1:1 mitigate ratio on site, and supplement with the off-site mitigation. For impacts to Grand Fir Forest, Caltrans will revegetate 0.894 acres (~38,943 square feet) to achieve a proposed 3:1 mitigate ratio. Caltrans will replant 0.210-acre (~9,409 square feet) of the total 0.298-acre of impacted grand fir forest in place - e.g., where trees were removed for temporary construction activities. Some areas cannot be replanted in place because they are in the "clear recovery zone," an area adjacent to highways that is left clear of trees for safety purposes to lessen the impacts of automobile accidents, and because some areas (0.034 acres or 1.481 square feet) must be left clear for the utility lines. For impacts to Bishop Pine Forest, Caltrans will revegetate 2.22 acres with Grand Fir trees to achieve a proposed 3:1 mitigate ratio. The planting of Grand Fir trees as replacement for the Bishop Pine trees was developed in consultation with CDFW. This issue is discussed further directly below.

Special Condition 3 requires the submittal of a final Onsite Revegetation Plan that shall substantially conform to submitted draft plan in **Exhibit 8** with some updated changes. These include proper definitions of temporary and permanent impacts consistent with Coastal Commission practice; updated estimates of project impacts and

updates restoration plans that will ensure a 1:1 restoration; additional details on the revegetation palette and restoration methods; updated monitoring plan and success criteria. **Special Condition 3** also has provisions to ensure actual impacts match the anticipated impacts and require further mitigation if necessary; and sets provisions for the potential failure of the on-site restoration.

Caltrans proposes a five-year monitoring and maintenance period, with designated success criteria, as well as provisions for remedial measures. However, much of the revegetation goes to tree planting of Grand Firs, which can take a longer duration to establish itself. Therefore, **Special Condition 3.9** requires Caltrans to monitor the Grand Fir plantings for 10 years.

Caltrans has also proposed an off-site mitigation plan through the acquisition of a coastal bluff parcel and its long-term preservation for coastal habitat, the "Saunders Reef Mitigation Plan." This proposal is described above in **Section J** regarding wetlands.

Given that the on-site mitigation is able to achieve the 3:1 mitigation ratio for ESHA impacts that the Commission has typically required, the off-site mitigation proposal is not necessarily required to directly provide revegetation to compensate for most ESHA impacts. However, as noted above, Caltrans is removing Bishop Pine Forest ESHA and not replanting Bishop Pine Forest trees onsite. Northern Bishop pine forest is rare, highly imperiled along the Mendocino coast, and undergoing severe decline due to several pathogens and compounding factors such as drought and fire suppression. Grand Fir is a species that typically co-occurs with Bishop Pine and both species support a similar assemblage of plant species in the understory, and they provide similar habitats. CDFW has therefore agreed that replanting with Grand Fir is sufficient mitigation for the impacts to Bishop Pine Forest. Yet, Given the rare and declining nature of Bishop Pine forests on the Mendocino coast, additional mitigation may be desired. In this case the proposed Saunders Reef Mitigation Plan does provide for the protection of Bishop Pine forest through the acquisition, enhancement, and preservation of the entire 12-acre parcel. Caltrans has surveyed over 1.1 acres of Northern bishop pine forest at the Saunders Landing site that is currently overall healthy. The Saunders Reef Mitigation Plan will set this area into permanent habitat preservation.¹⁴ The Saunders Reef Mitigation Plan includes monitoring of the Bishop Pine forest and development of a long-term management plan based on best available science. The combination of this off-site preservation of Bishop Pine and the replanting at a 3:1 ratio onsite with the Grand Fir to provide similar habitat of Bishop Pine, is a sufficient mitigation proposal for the impacts to Bishop Pine. It may also be recognized that overall the Saunders Reef Mitigation Plan provides for the preservation and enhancement of similar ESHA habitats including riparian ESHA through the acquisition

¹⁴ Caltrans counted preservation of the 1.1 acres of Bishop Pine Forest at Saunders Landing as out-ofkind mitigation for the riparian ESHA impacts of the Elk Creek Bridge Project, along with several other sensitive habitats. That mitigation was at a 10:1 ratio and used to make up remaining mitigation obligations after onsite restoration and direct riparian habitat preservation at Saunders Landing, and also slightly more (6.206) acres were preserved than needed to make the 10:1 ratio (6.146).

of a 12-acre parcel that will be set aside in public ownership and protected as open space habitat.

Special Condition 4 requires the submittal of a final Saunders Reef HMMP, as well as the submittal of a final construction impact report, to ensure that the final mitigation package meets the expected mitigation ratios described above, and that Caltrans adheres to the required monitoring, maintenance, and (if necessary), remediation plans.

M. Conflict Resolution

Coastal Act section 30007.5 states:

The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.

Coastal Act section 30200(b) states:

Where the commission or any local government in implementing the provisions of this division identifies a conflict between the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.

As noted above, the removal of portions of sensitive natural communities (forest habitats) that meet the definition of ESHA is a necessary part of the construction activities for this project but is not an allowable resource dependent use under section 30240(a). However, as explained below, denying or modifying the proposed project to eliminate this inconsistency would lead to nonconformity with other Coastal Act requirements, namely section 30210 (maximizing public access and recreation).

The standard of review for the Commission's decision whether to approve a coastal development permit in the Commission's retained jurisdiction is whether the project as proposed is consistent with the Chapter 3 policies of the Coastal Act. In general, a proposal must be consistent with all applicable policies in order to be approved. Thus, if a proposal is inconsistent with one or more policies, it must normally be denied (or conditioned to make it consistent with all relevant policies).

However, the Legislature also has recognized that conflicts occur among those policies (Coastal Act section 30007.5). It therefore declared that when the Commission identifies a conflict among the policies in Chapter 3, such conflicts are to be resolved "*in a manner which on balance is the most protective of significant coastal resources* [Coastal Act sections 30007.5 and 30200(b)]." That approach is generally referred to as

the "balancing approach to conflict resolution." Balancing allows the Commission to approve proposals that conflict with one or more Chapter 3 policies, based on a conflict among the Chapter 3 policies as applied to the proposal before the Commission.

The Commission has approved recent Caltrans projects that had unavoidable, nonresource dependent impacts to ESHA through application of the conflict resolution balancing test in a few recent actions, including, among others, the 2020 Gleason Beach Realignment Project <u>CDP 2-20-0282</u>; 2019 Eureka-Arcata 101 Project <u>CDP 1-18-1078</u>; 2014 <u>North Coast Corridor Public Works Plan</u>; 2014 Piedras Blancas Realignment Project <u>CDP 3-13-012</u>; and the 2009 Greenwood Creek Bridge Project <u>CDP 1-09-027</u>.

Identification of a Conflict

For the Commission to use the balancing approach to conflict resolution, it must establish that a project presents a substantial conflict between two statutory directives contained in Chapter 3 of the Coastal Act. The fact that a proposed project is consistent with one policy of Chapter 3 and inconsistent with another policy does not necessarily result in a conflict. Virtually every project will be consistent with some Chapter 3 policy.

In order to identify a conflict, the Commission must find that although approval of a project would be inconsistent with a Chapter 3 policy, the denial of the project based on that inconsistency would result in coastal zone effects that are inconsistent with some other Chapter 3 policy. In most cases, denial of a proposal will not lead to any coastal zone effects at all. Instead, it will simply maintain the status quo. The reason that denial of a project can result in coastal zone effects that are inconsistent with a Chapter 3 policy is that some of the Chapter 3 policies, rather than prohibiting a certain type of development, affirmatively mandate the protection and enhancement of coastal resources, such as sections 30210 ("maximum access . . . and recreational opportunities shall be provided . . ."), 30220 ("Coastal areas suited for water- oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses"), and 30230 ("Marine resources shall be maintained, [and] enhanced..."). If there is ongoing degradation of one of these resources, and a proposed project would cause the cessation of that degradation, then denial would result in coastal zone effects (in the form of the continuation of the degradation) inconsistent with the applicable policy. Thus, the only way that denial of a project can have impacts inconsistent with a Chapter 3 policy, and therefore the only way that a true conflict can exist, is if: (1) the project will stop some ongoing resource degradation, and (2) there is a Chapter 3 policy requiring the Commission to protect and/or enhance the resource being degraded.

With respect to the second of those two requirements, there are relatively few policies within Chapter 3 that include such an affirmative mandate to enhance a coastal resource. Moreover, because the Commission's role is generally a reactive one, responding to proposed development rather than affirmatively seeking out ways to protect resources, even policies that are phrased as affirmative mandates to protect resources more often function as prohibitions. For example, section 30240's requirement that environmentally sensitive habitat areas "*shall be protected against any*

significant disruption of habitat values" generally functions as a prohibition against allowing such disruptive development, and its statement that "only uses dependent on those resources shall be allowed within those areas" is a prohibition against allowing non-resource-dependent uses within these areas. Similarly, section 30251's requirement to protect "scenic and visual qualities of coastal areas" generally functions as a prohibition against allowing development that would degrade those qualities. section 30253 begins by stating that new development shall minimize risks to life and property in certain areas, but that usually requires the Commission to condition projects to ensure that they are not unsafe. Even section 30220, listed above as an affirmative mandate, can be seen more as a prohibition against allowing non-water-oriented recreational uses (or water-oriented recreational uses that could be provided at inland water areas) in coastal areas suited for such activities. Denial of a project cannot result in a coastal zone effect that is inconsistent with a prohibition on a certain type of development. As a result, there are few policies that can serve as a basis for a conflict.

Similarly, denial of a project is not inconsistent with Chapter 3, and thus does not present a conflict, simply because the project would be less inconsistent with a Chapter 3 policy than some alternative project would be, even if approval of the proposed project would be the only way in which the Commission could prevent the more inconsistent alternative from occurring. For denial of a project to be inconsistent with a Chapter 3 policy, the project must produce tangible, necessary enhancements in resource values over existing conditions, not over the conditions that would be created by a hypothetical alternative. In addition, the project must be fully consistent with the Chapter 3 policy requiring resource enhancement, not simply less inconsistent with that policy than the hypothetical alternative project would be.

In addition, if a project is inconsistent with at least one Chapter 3 policy, and the project does not result in the cessation of ongoing degradation of a resource the Commission is charged with enhancing, the project proponent cannot "create a conflict" by adding on an essentially independent component that does remedy ongoing resource degradation or enhance some resource. The benefits of a project must be inherent in the essential nature of the project. Otherwise, project proponents could regularly "create conflicts" and then demand balancing of harms and benefits simply by offering unrelated "carrots" in association with otherwise unapprovable projects.

Finally, a project does not present a conflict among Chapter 3 policies if there is at least one feasible alternative that would accomplish the essential purpose of the project without violating any Chapter 3 policy. Thus, an alternatives analysis is a condition precedent to invocation of the balancing approach. If there are alternatives available that are consistent with all of the relevant Chapter 3 policies, then the proposed project does not create a true conflict among Chapter 3 policies.

In sum, the following findings support the Commission finding that the project can be approved notwithstanding its inconsistency with section 30240 of the Coastal Act pursuant to the Coastal Act's conflict resolution policies:

1) The project, as proposed, is inconsistent with at least one Chapter 3 policy.

For the Commission to apply section 30007.5, a proposed project must be inconsistent with an applicable Chapter 3 policy. In the case of this proposed project, the inconsistency is with section 30240 of the Coastal Act as discussed previously.

2) The project, if denied or modified to eliminate the inconsistency, would affect coastal resources in a manner inconsistent with at least one other Chapter 3 policy that affirmatively requires protection or enhancement of those resources.

A true conflict between Chapter 3 policies results from a proposed project which is inconsistent with one or more policies, and for which denial or modification of the project would be inconsistent with at least one other Chapter 3 policy. Further, the policy inconsistency that would be caused by denial or modification must be with a policy that affirmatively mandates protection or enhancement of certain coastal resources. Denial of the proposed rehabilitation of the Jack Peters Creek Bridge on Highway 1 would be inconsistent with section 30210 of the Coastal Act.

Section 30210 affirmatively mandates that "maximum access ... and recreational opportunities shall be provided for all the people consistent with public safety needs. . . " While the Coastal Act reflects a strong emphasis on maximizing public access, it is important to note that the Act does not mandate the provision of all forms of access in all circumstances. Section 30214 explains that the Act's public access policies shall be implemented in a manner that takes into account the need to still regulate the "manner" of public access depending on the facts and circumstances in each case, including such factors as the capacity of a site to sustain use and at what level of intensity. And section 30210 itself requires maximum access to still be consistent with the need to protect natural resource areas from overuse.

Nevertheless, denial of this project would threaten a necessary public access route along the northern California coast, particularly for safe pedestrian and bicycle access. Highway 1 provides the critical link for the public to access significant stretches of the coast in Mendocino County and as the main traffic conduit north and south it serves as an essential link for access further up and down the coast. The existing Jack Peters Creek Bridge has unsafe deteriorating bridge rails, nonexistent roadway shoulders that are unsafe for vehicular users and needs safety improvements to last another 75 years. Currently the 1930s-era bridge provides no pedestrian access across the bridge, and given the lack of safe shoulder space, little safe cycling access across the bridge. To deny the project would lead to ongoing unsafe highway conditions, and indeed, given the deteriorating infrastructure, lead to worsened conditions in the near future with increasingly unsafe highway conditions. The deteriorating bridge rails and unsafe conditions could, if unaddressed, lead to closures of Highway 1 at the bridge, which would have significant impacts to public access throughout the coast of Mendocino County. The replacement bridge rails and the provision of clear safety shoulders alongside the highway are necessary to ensure that Highway 1 in this corridor provides maximum public access consistent with public safety and without subjecting the natural resources of the area to overuse. Denial of the project will also prolong the lack of public pedestrian and continue unsafe cycling access on the bridge. Multi-modal access for all users is a critical element of maximum public access along the coast will prolong the unsafe or non-existent access for these users.

The project will improve the safety aspects of the highway by replacing deteriorated bridge rails that are likely unable to withstand a vehicle impact; replace non-existent shoulders that do not protect pedestrians or cyclists and do not adequately provide safety for vehicular users because of the increased likelihood of collisions and lack of space to manage vehicle breakdowns: and strengthen older bridge piers and abutments so they can more adequately withstand contemporary vehicle loads, seismic and tsunami events. The new bridge rails, new 6-foot shoulders, stronger bridge piers, as well as the additional separated pedestrian crossing, will maintain and improve safe public access along Highway 1. The project will ensure the continued safe operation of Highway 1 for another estimated 75 years, avoiding safety closures and avoiding the needs for another, larger bridge replacement project that would have significantly greater impacts to ESHA. These bridge and highway improvements consistent with modern highway safety requirements are necessary to ensure that Highway 1 in this corridor provides maximum public access consistent with public safety for all multimodal users - vehicular users, pedestrians, and cyclists. The project is essential to maintaining the safety and continuity of the primary public access corridor in the Mendocino County coastal region.

The project is essential to maintaining the safety and continuity of the primary public access corridor along the Mendocino coast for all multi-modal users. Although the proposed project vegetation and tree removal element is inconsistent with the requirement of section 30240 that limit uses in ESHA to only uses dependent on the resource, denial would preclude achieving section 30210's mandate to ensure maximum public access. Therefore, based on the circumstances of this project, the Commission finds that a conflict between two mandatory Coastal Act policies exists.

3) The project, if approved, would be fully consistent with the policy that affirmatively mandates resource protection or enhancement.

For denial of a project to be inconsistent with a Chapter 3 policy, the proposed project would have to protect or enhance the resource values for which the applicable Coastal Act policy includes an affirmative mandate. That is, if denial of a project would conflict with an affirmatively mandated Coastal Act policy, approval of the project would have to conform to that policy. If the Commission were to interpret this conflict resolution provision otherwise, then any proposal, no matter how inconsistent with Chapter 3 that offered a slight incremental improvement over existing conditions could result in a conflict that would allow the use of section 30007.5. The Commission concludes that the conflict resolution provisions were not intended to apply to such minor incremental improvements.

The proposed project would ensure the ongoing safety and reliability of Highway 1 for vehicular and multi-modal users and would ensure maximum public access by upgrading the safety and reliability of Highway 1 along the Mendocino coast, including new safer bridge rails, safer highway shoulders, and stronger bridge piers and

abutments. Currently the lack of roadway shoulders and deteriorating bridge rails means the Highway 1 connection here is unsafe for vehicular users as they cross the bridge. The lack of roadway shoulders as well as a separated pedestrian bridge crossing, means that the Highway 1 connection here is unsafe for pedestrian and cycling users. The proposed project would make multiple improvements that would ensure public safety for all users of Highway 1 and therefore alleviate the public access impediments for pedestrians, cyclists, and vehicular users, as well as ensure the bridge is able to avoid closures for its designated lifetime. Therefore, the proposed project better ensures maximum public access, in the manner required by section 30210. In addition, it is the very essence of the project, not an ancillary amenity offered as a tradeoff, that provides the Chapter 3 benefits. The project would improve the safety and infrastructure reliability of a major highway that ensures safe public access to the coast in the region. In this case the benefits of the project result from its primary purpose - an upgraded highway corridor that will remain open for public access with the removal of unsafe conditions and increased safety overall. The project is therefore fully consistent with the Coastal Act public access and recreation policies. Thus, the project as proposed and conditioned, is therefore fully consistent with Coastal Act sections 30210 as maximum access would continue to be provided to all the people.

4) The project, if approved, would result in tangible resource enhancement over existing conditions.

This aspect of the conflict between policies may be looked at from two perspectives – either approval of the project would result in improved conditions for a coastal resource subject to an affirmative mandate, or denial or modification of the project would result in continued degradation of that resource.

Approval of the proposed Jack Peters Creek Bridge replacement project would result in rehabilitation of an existing, aging, substandard bridge. Caltrans asserts that if the bridge is not rehabilitated the bridge will not provide safe public access because the inadequate and deteriorating bridge rails will not withstand a vehicle impact and the lack of highway shoulders will maintain unsafe conditions that threaten pedestrians, cyclists, and drivers that experience greater risk of collisions. Deteriorating conditions could lead to bridge and highway closures because of safety concerns. This would significantly affect public coastal access and recreation opportunities on the Mendocino coast and beyond because Highway 1 is a primary transportation route for the region. Approval of the project would ensure the continued safe operation of Highway 1, and tangible improvement over the deteriorating unsafe highway conditions. Approval of the project would also ensure the creation of safe pedestrian public access and improved cycling access that does not currently exist, also tangible resource enhancement over existing conditions.

Denial of the proposed bridge rehabilitation project would result in the continued operation of the existing bridge with the continued use of deteriorating 1939-era bridge rails that do not provide adequate highway safety; the continued use of a highway bridge with no shoulders, further creating highway safety risks through inadequate space to manage vehicle breakdowns and prolonged unsafe conditions for pedestrians and cyclists; and the continued higher risks associated with the response of this older bridge to seismic events and tsunami events. But for the proposed project to rehabilitate the aging bridge with these necessary safety improvements, the existing inadequate bridge would be expected to remain in service for the foreseeable future with risks to all users as well as to the bridge itself. Therefore, approval of the project would result in improved conditions for public access and denial would result in continued degradation of that resource.

5) The benefits of the project must result from the main purpose of the project, rather than from an ancillary component appended to the project to "create a conflict."

A project's benefits to coastal resources must be integral to the project purpose. If a project is inconsistent with a Chapter 3 policy, and the main elements of the project do not result in the cessation of ongoing degradation of a resource the Commission is charged with enhancing, the project proponent cannot "create a conflict" by adding to the project an independent component to remedy the resource degradation. The benefits of a project must be inherent in the purpose of the project. If this provision were otherwise, project proponents could regularly "create conflicts" and then request that the Commission use section 30007.5 to approve otherwise unapprovable projects. The balancing provisions of the Coastal Act could not have been intended to foster such an artificial and easily manipulated process and were not designed to barter amenities in exchange for project approval.

The proposed Jack Peters Creek Bridge rehabilitation project is intended to improve the safety and reliability of the Highway 1 at this creek crossing and intended to make complete streets improvements that expand pedestrian and cycling access and the California Coastal Trail. Therefore, the benefits to public access along the coast are integral to the project purpose.

6) There are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.

Finally, a project does not present a conflict among Chapter 3 policies if at least one feasible alternative would meet the project's objectives without violating any Chapter 3 policy. Thus, an alternatives analysis is a condition precedent to invocation of the balancing approach. If there are alternatives available that are consistent with all of the relevant Chapter 3 policies, then the proposed project does not create a true conflict among those policies.

In this case, the violation of the Chapter 3 policies are the clearing of vegetation and removal of trees in areas designated ESHA. There are no feasible alternatives that would avoid these impacts and achieve the project safety goals for the design life of the bridge. As discussed directly above, the ESHA impacts of the project are in two categories: 1) impacts caused by the clearing work on the north bank of Jack Peters Creek to provide construction access and install a temporary trestle and falsework to work on the bridge and to strengthen the bridge piers and abutments; and 2) impacts

that result from clearing and grading work to widen the roadway shoulders and shift it slightly east to match up with the new centerline.

The first set of impacts will primarily result in temporary impacts to 0.070 acres of vegetation caused by construction activities including vegetation clearance and minor grading for construction access to the north bank and placement of the temporary trestle. The widening of the pier and abutment would also result in a permanent loss of 0.006 acres on the north bank. There are no alternatives to avoid the impacts from strengthening the bridge pier. Replacement of the deteriorated bridge rails is a necessary component of this project that will in turn require strengthening of the bridge piers and abutments. The piers and abutments cannot be strengthened without impacting the ESHA vegetation areas directly next to them and there are no feasible alternatives to rehabilitating the bridge without increasing the size and strength of the piers and abutments, which are necessary to carry the increased weight of the bridge and survive seismic and tsunami events. Modifying the location of the impacts of the piers/abutments would also mean relocating the existing piers/abutments themselves, and thus essentially constructing an entirely new bridge with much great impacts to ESHA. Additionally, to perform any rehabilitation work on the bridge and the pier and abutment, construction crews will need access to these locations and the temporary falsework can only be placed next to the bridge, otherwise it would not provide access. As described above, Caltrans has adopted avoidance and minimization measures to limit impacts from construction access and minimize vegetation clearance. There appear to be no other alternatives that would enable construction for the project and avoid these impacts, which are already substantially minimal.

The second set of ESHA impacts are the removal of 0.792 acres of Bishop Pine Forest and 0.298 acres of Grand Fir forest that qualify as ESHA. These impacts are caused by the need to conform the new roadway to the new bridge centerline and the widened shoulders that will taper down to connect the widened bridge shoulders to existing Highway 1. There are also no feasible alternatives because the vegetation and trees are directly adjacent to the highway. Moving the roadway east to align it with the new bridge centerline cannot take place without removal of this vegetation and trees. Some impacts could be avoided if the roadway was not shifted east, however, this is not a feasible alternative because it would create a mismatch between the approaching highway lanes and the bridge lanes, creating a greater safety risk for all.

The project could adopt an alternative to only install new bridge rails and not widen the roadway shoulders on the bridge and approaches, which would lessen the impacts to Bishop Pine forest on the roadway shoulders necessary to conform the roadway to the widened bridge. However, this would eliminate a necessary safety aspect of the project in the widened 6-foot shoulders on the bridge – providing safe access for pedestrians, cyclists, and for vehicle users. The new bridge rails would also still require strengthening of the bridge piers and abutments, so most ESHA impacts of the project would still occur. Narrower shoulders of less than 6 feet would have essentially no reductions in ESHA impacts and would not meet the safety requirements for cyclists or vehicular users. The 6-foot shoulders on Highway 1 bridges already represent the best compromise between highway safety needs and the protection of coastal resources,

including ESHA, as worked out by Commission staff and Caltrans staff through the Road's Edge Subcommittee and multiple prior Highway 1 bridge projects. For the approach roads and shoulders, the existing shoulders are 4 feet, and the LCP standard is for 4 feet. Special Condition 1.G requires that shoulders for the approaching highway sections be limited to 4 feet in compliance with the LCP policies. Smaller shoulders would have minimal reductions to ESHA impacts, and would not met the requirements for improved safety for cyclists and vehicular users, as well as possible pedestrian users.

The only alternative that would avoid the impacts is the "no project" alternative, which here means that no repairs or improvements would be made to the existing bridge and roadway. As discussed directly above, the no project alternative would mean that the Highway 1 crossing of Jack Peters Creek would remain on an older bridge with corroding concrete bridge rails from 1939, that important safety improvements to help avoid traffic accidents on the bridge would not take place, and that the bridge would continue to not provide safe access for pedestrians and cyclists, as well as vehicular users, on this important transportation corridor. The purpose of this project is to make the needed safety upgrades to the bridge and to provide adequate safe access for pedestrians and cyclists. Denial of this project for a no project alternative would be inconsistent with section 30210.

Overall, the selected alternative was designed to incorporate the smallest environmental footprint possible while still achieving the project purpose. Therefore, the Commission finds that use of an alternative design is not a feasible less environmentally damaging alternative to the proposed project, as conditioned.

Existence of a Conflict between Chapter 3 Policies:

Based on the above, the Commission finds that the proposed project presents a true conflict between section 30240 on the one hand and section 30210 on the other that must be resolved through application of section 30007.5. After establishing a conflict among Coastal Act policies, section 30007.5 requires the Commission to resolve the conflict in a manner that is on balance most protective of coastal resources.

In this case, the impacts on coastal resources from not constructing the project would be more significant than the project's ESHA impacts. The impacts to ESHA are primarily highway-adjacent trees on fill slopes constructed for the highway and adjacent areas. The proposed highway safety rehabilitation ensures essential connectivity north and south through the Mendocino County region and therefore ensures coastal public access is maintained in the region consistent with public safety. The proposed highway safety rehabilitation would also realize a number of public access improvements. The proposed highway safety rehabilitation is therefore essential under the requirements of section 30210 and overall, approval of the project is on balance most protective of coastal resources.

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Mitigation

To conclude that the project in on balance the most protective of coastal resources, the Commission has historically also found that it is also necessary to find that adverse impacts on environmentally sensitive habitat be mitigated to the maximum extent feasible. The finding in sub-section 6 above has concluded that there are no feasible alternatives that would reduce adverse impacts. Additionally, in this case, Caltrans has adopted a number of avoidance and minimization measures to reduce the number of trees and vegetation to be removed and to best protect ESHA and special species habitat from impacts of the project. These measures to reduce adverse impacts are described above in Section IV.L, as well as Section IV.K. These measures are incorporated into this CDP and expanded upon in Special Condition 2 and include, but are not limited to, the fencing of ESHA areas for protection; limited durations for work in ESHA; best management practices to avoid spills and other construction related impacts; and multiple measures to protect species that rely on the ESHA habitat such as biological monitoring, temporal work limitations, and work buffers. As discussed above in Section IV.L., the project also proposed an on-site mitigation plan for the ESHA impacts that will replant matching native trees and vegetation in the project area at a 3:1 ratio including Grand Fir Forest to provide additional habitat to replace impacted ESHA. Special Condition 3 guides implementation of this final revised Onsite Restoration Plan. As also discussed above, Caltrans has proposed an off-site mitigation plan that will enhance and set aside for preservation a coastal bluff parcel that will contain matching ESHA habitat for long-term preservation. Implementation of this offsite mitigation is required and governed by Special Condition 4.

Together these measures ensure that the proposed project is mitigates adverse impacts on ESHA to the maximum extent feasible and overall the project, as conditioned, on balance most protective of coastal resources

Conclusion: Consistency with the Coastal Act

Thus, the Commission finds that approving the project with its safety and public access improvements is more protective of coastal resources than the impacts of the removal of vegetation and trees from forest ESHA along the highway when those trees will be replaced in the same area with similar native vegetation and additional mitigation will occur off-site in perpetuity.

In sum, The Commission finds that in this particular case because (1) the project proposes to create a safer highway corridor which is essential for public access to the coast; (2) the project proposes a number of public access improvements that maximize public access in the manner required by the Coastal Act; (3) the project minimizes impacts to ESHA, which is primarily roadside and not pristine; and (4) the impacts are temporary and mitigated with replanting. Therefore, the Commission finds that approving the project, as conditioned, is, on balance, most protective of coastal resources.

N. Reimbursement of Costs and Fees

Coastal Act section 30620(c)(1) authorizes the Commission to require applicants to reimburse the Commission for expenses incurred in processing CDP applications. See also 14 C.C.R. § 13055(g). Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its action on the pending CDP application. Therefore, consistent with section 30620(c), the Commission imposes **Special Condition 15 (Liability for Costs and Attorneys' Fees)** requiring reimbursement of specified costs and attorneys' fees the Commission incurs in connection with the defense of any action brought by a party other than the applicant/Permittee challenging the approval or issuance of this permit.

O. California Environmental Quality Act (CEQA)

Caltrans served as the lead agency for California Environmental Quality Act (CEQA) purposes for the bridge replacement project. Caltrans prepared an Initial Study and adopted a Mitigated Negative Declaration for the project in February 2022.

The Commission's regulatory program for reviewing and granting CDPs has been certified by the Resources Secretary to be the functional equivalent of environmental review under CEQA. (14 CCR § 15251(c).) Section 13096 of Title 14 of the Commission's regulations requires Commission approval of CDP applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirement of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits approval of a proposed development if there are any feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. No public comments regarding potential significant adverse environmental effects of the project were received by the Commission prior to preparation of the staff report. As discussed above, the proposed project has been conditioned to be consistent with the policies of the Coastal Act. As specifically discussed in these above findings, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmental effects, either individual or cumulative, and complies with the applicable requirements of the Coastal Act to conform to CEQA.

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS

- 1. CDP Application File No. 1-22-0711
- 2. County of Mendocino Certified Local Coastal Program
- 3. Offer et al., Research Synthesis for the California Zero Traffic Fatalities Task Force (University of California Institute of Transportation Studies 2020).
- Jack Peters Creek Bridge Project Initial Study with Mitigated Negative Declaration. Prepared by Caltrans District 1. Approved February 18, 2022. Accessible from the Caltrans website: <u>https://dot.ca.gov/-/media/dot-media/district-</u> <u>3/documents/environmental/01-43484-jack-peters-is-fed-2022-0218.pdf</u>.
- 5. FHWA, "Small Town and Rural Multimodal Networks" (2016).