November 15, 2019

Governor's Office of Planning & Research

NOV 18 2019

STATE CLEARINGHOUSE

Rachelle Hadley Department of Transportation, District 1 North Region Environmental P.O. Box 3700 Eureka, CA 95502-3700

SUBJECT: Comments on Caltrans Notice of Completion of a Draft Joint Environmental Impact Report /Environmental Assessment, Dr. Fine Bridge Replacement Project, Bridge # 01-0020 on U.S. Highway 101 from post mile (PM) 35.8 to Fred D. Haight Drive at PM 36.5, Del Norte County (State Clearinghouse Number 2010102037)

Dear Rachelle,

Thank you for the opportunity to provide comments on the subject draft environmental document (DED) prepared for Caltrans' proposal to replace the Dr. Fine Bridge on Highway 101 in Del Norte County. We also appreciate Caltrans' continued efforts to coordinate with our staff and other resource agencies during the environmental design and review process for the subject project, including the recent opportunity to participate in an interagency meeting on September 17, 2019 in advance of the release of this DED.

Commission staff previously provided comments on August 23, 2017 in response to Caltrans' previous release of an Initial Study with Mitigated Negative Declaration/Environmental Assessment (IS/MND) for the subject project. Our previous comments highlighted concerns with project alternatives, hydroacoustic impacts, and potential mitigation requirements, among others. We understand that the subject DED has been prepared in response to agency comments received in 2017, and particularly "to thoroughly assess the alternatives (cast-in-place vs. pre-cast construction; on alignment vs. off alignment) to identify the least environmentally damaging practicable alternative."

As part of the current DED, Caltrans is evaluating three build alternatives to replace the Dr. Fine Bridge, in addition to the no-build alternative. Of the three build alternatives, Caltrans is evaluating two cast-in-place alternatives: one on a new westerly alignment (Alternative 1), and one on the existing alignment (Alternative 3); and one pre-cast alternative on a new alignment (Alternative 2). Additionally, Caltrans is considering two construction options for a temporary bridge as part of Alternative 3, including the use of a "Jack and Slide" method of transferring the main spans of the existing bridge to the temporary bridge (Alternative 3A), or using a temporary panel bridge for a detour (Alternative 3B). All build alternatives consider a bridge with two 12-foot travel lanes, two 8-foot shoulders, and one 6-foot wide pedestrian walkway separated by a traffic barrier.



The purpose of this letter is to highlight certain aspects of the environmental document where we believe additional information and analysis is necessary to address the impacts of the project and inform project design and future coastal development permitting. This letter also contains certain comments from our August 23, 2017 letter for those instances where responses to our previous comments could not be located in the current DED.

We recognize that Caltrans may prepare additional environmental and/or engineering studies to address comments, and will be developing a preferred alternative as part of its preparation of subsequent environmental documents. Therefore, we will continue to provide additional comments and recommendations as we continue to review the draft environmental documents and as project details are revealed and refined. The comments provided below memorialize some of the issues that should be addressed as part of the Final Environmental Impact Report and reflect issues that we have previously discussed with Caltrans staff during our recent project meetings, including but not limited to site visits conducted on March 29, 2018, May 3, 2019, and the interagency meeting held on September 17, 2019.

Jurisdiction

The Coastal Commission retains jurisdiction over any development proposed or undertaken on any tidelands, submerged lands, or on public trust lands, whether filled or unfilled, lying within the coastal zone. In this case, the proposed project will involve public trust lands along the Smith River. Therefore, a Coastal Development Permit (CDP) will be required from the Coastal Commission. The project may additionally require separate federal consistency review depending on Caltrans' final environmental determination prepared for the project.

The Draft Joint Environmental Impact Report /Environmental Assessment (DEIR/EA) correctly indicates in Section 2.1.1.3 that a portion of the project limits occur within the delegated jurisdiction of Del Norte County and a portion of the project occurs within the retained jurisdiction of the Coastal Commission. For that portion of the project located within the Coastal Commission's retained jurisdiction, the policies of Chapter 3 of the Coastal Act will serve as the standard of review when Caltrans applies to our agency for a coastal development permit; additionally, the local government's certified local coastal program (LCP) may be used as guidance. The DEIR also indicates that Caltrans intends to request approval from Del Norte County to pursue a consolidated permit application to be reviewed by the Commission (in which case the standard of review for the entire project would be the policies of Chapter 3 of the Coastal Act).

If Caltrans does not pursue a consolidated permit or if Del Norte County does not authorize a consolidated permit request, then the standard of review for the portion of the project within Del Norte County's purview will be whether the development is consistent with the policies of the Del Norte County certified LCP. Any local permit action by Del Norte County on this project will be appealable to the Coastal Commission because all or a portion of the project is located: a) within 100 feet of a wetland and stream, and (b) within 300 feet of the inland extent of the beach. In addition, any action by the County to either approve or deny a CDP for the project would also be appealable to the Commission

on the basis that the proposed project is a major public works facility. (See Coastal Act Section 30603).

We note that certain information contained within the current DED does not appear to accurately represent the Commission's retained and appeal jurisdictions. Table 2-18 of the DEIR/EA depicts temporary and permanent impacts on waters and wetlands, and indicates those features that are subject to the jurisdiction of U.S. Army Corps of Engineers (ACOE), state Coastal Commission, or both. Table 2-18 indicates that both the Smith River and streams within the project area are within ACOE jurisdiction, but erroneously indicates these features are not within the Coastal Commission's retained jurisdiction. Therefore, please correct Table 2-18 accordingly to correctly reflect the Commission's retained jurisdiction over these features.

Coastal Act and LCP Consistency

The DEIR/EA Table 2-2 presents a summary of Coastal Act Chapter Three policies and includes references to the applicable sections of the DEIR/EA that address these policies. The summary table also includes under each "policy area" a brief reference to certain requirements of the Del Norte County certified LCP that are related to the Chapter Three policies of the Coastal Act. We recommend eliminating references to the Del Norte County LCP from Table 2-2 because the narrative describes the purpose of the section as evaluating the project's consistency with the Coastal Act, and the references to the Del Norte County LCP do not represent all LCP policies relevant to each Coastal Act "policy area" depicted in the table. Any separate analysis of the project's consistency with the certified LCP should more comprehensively address all relevant policies applicable to the proposed project.

Table 2-2 also presents an analysis of the project's consistency with Sections 30230, 30231, and 30233 of the Coastal Act regarding protection of wetland resources. The consistency analysis references a three-part test under Section 30233(a) triggered by the current DED's stated need for permanent wetland fill as part of the proposed project, and summarizes the test components as "allowable use, alternatives, and mitigation." Please note that Section 30233(a) only allows wetland fill in part "where there is *no feasible less environmentally damaging alternative.*" Therefore, the analysis should clearly demonstrate with supporting documentation throughout the EIR/EA those project components that Caltrans has determined are the least environmentally damaging, feasible alternatives.

Western Pearlshell Mussel Mitigation and Gravel Pads

The DEIR/EA describes in Section 2.2.1.3 the hydraulic effects of the proposed project under all alternatives. The section describes the placement of temporary gravel berms in annually-variable configurations across approximately 80 percent of the Smith River during the summer seasons of in-water construction activities. Section 2.3.3.3 describes potential impacts to western pearlshell mussels under all build alternatives, including risk of increased velocity and scour that could concentrate flow directly into the mussel bed. Mitigation Measure 1c proposes to normalize flows across the river, including "making gravel berms permeable to the extent practicable." The berms that are installed in the

vicinity of the mussel beds should be as permeable as possible to reduce the impacts on scour and of high velocities on the mussel bed. Also, these berms should be protected on all sides and overhead to minimize gravel and dust falling into the river and onto the mussel beds.

While the DEIR/EA acknowledges changes in flow patterns and sediment mobilization around gravel berms, it does not appear that the DEIR/EA or supporting documents (e.g. 2019 Scour Analysis Memo, 2017 Hydraulic Report, or 2019 Western Pearlshell Mussel Impact Assessment Report) evaluate the feasibility and hydraulic effects of increasing permeability to the gravel berms under various scenarios. Therefore, please provide an analysis that evaluates the feasibility and effects of increasing gravel permeability under various scenarios, and if increasing permeability to gravel berms is not feasible or practicable, please explain why.

Clarification of Duration of In-Water Activities

Table 1-1 provides a comparison of temporary gravel berm footprint volumes by season for all build alternatives, and indicates under Alternative 3B that 2,844 cubic yards of gravel would be anticipated in Season 4. Table 1-2 provides a comparison of distinguishing elements of all build alternatives, and indicates that each build alternative would consist of three (not four) in-water summer seasons of construction activity, among other elements. Please clarify whether Alternative 3B would require three or four in-water seasons of construction activity and address the discrepancy accordingly.

Clarification of Temporary, Permanent, and Seasonal vs. Year-Round Piles

The DEIR/EA describes in several places the installation of piles to support temporary construction trestles, falsework, bridge piers, sheet piles, and steel shell piles, among others. Section 1.7.1.10 describes the installation of six 30-inch trestle piles downstream and six upstream, and that "it is assumed the construction trestle piles would remain in the river year-round for the duration of the project." Section 1.7.1.11 describes in-water activities in part as including an estimated 18 piles downstream and 12 piles upstream for construction trestles and falsework supports, and that "the southern-most piles are not anticipated to be in the water during summer flows." Table 2-22 lists the number of driven piles ranging from 116 to 194 under various alternatives, but does not specify which piles would be permanent, which would be temporary, and which temporary piles would remain year-round during construction activities. While we appreciate Caltrans staff providing us with an explanation of temporary and seasonal pile placement, the environmental analysis should clearly describe and evaluate impacts of pile placement under all scenarios. Therefore, please clarify within the final environmental document the pile driving requirements and duration of pile placement under all build alternatives.

Debris Loading

Our August 23, 2017 comments regarding Caltrans' 2017 IS/MND stated in part the following:

If debris does rack on the temporary construction features, Caltrans asserts that proper debris loading management techniques could be implemented to prevent

structure failure and other adverse impacts. Proposed mitigation measure HF-1 states that "debris removal during construction would be conducted as often as feasible and practicable by the contractor." However, it is questionable whether it would be feasible and practicable to dislodge debris during high flow events when debris is most likely to create an issue. To address these concerns, please analyze the potential impacts of feasible worst-case scenario conditions of high flows and large debris during project construction, and provide more information on feasible debris management techniques during these conditions.

The DEIR/EA proposes that the contractor shall prepare a debris removal plan (e.g., Mitigation Measures HF-2, WQ-5, and pages 99 and 242) and continues to propose that debris removal during construction would be conducted at the earlies possible date and when conditions allow the safe removal of debris (e.g., Mitigation Measure Mussel 1b). The DEIR/EA does not appear to contain an analysis of the potential impacts of feasible worst-case scenario conditions of high flows and large debris during project construction, and of feasible debris management techniques during these conditions. Therefore, please provide this analysis as previously requested.

Vegetation Communities

The DEIR/EA at times describes vegetation communities as degraded (e.g., Table S-1, Section 2.3.1.2, and page 200), apparently as justification for some temporary and permanent impacts to natural communities and habitat areas. Unless a sensitive vegetation community or wetland is so degraded that it is not recognizable, we do not take into account the condition of a habitat in determining whether or not impacts to that community must be compensated.

In weighing impacts to vegetation communities, the Coastal Commission is more interested in evaluating the impacts to sensitive communities than impacts to overall acreage of all habitat types. For example, on page 154 of the DEIR/EA, there is a comparison among alternatives that tabulates impacts to ruderal communities on the one hand against a smaller acreage of impacts, but with those occurring to habitat overall. The more important metric is impacts to intact native vegetation communities, and ESHAs. Impacts to ruderal areas are of much lesser concern.

Invasive Species Control

The DEIR/EA includes in Section 2.3.5.2 a list of invasive species observed within the affected environment. The list does not include reference to invasive English holly (*Ilex aquifolium*), whereas page 165 of the DEIR/EA lists English holly observed within the study area. Please address this discrepancy. Additionally, Section 2.3.5.4 indicates no avoidance, minimization or mitigation measures are proposed for controlling invasive species within the project area, whereas Mitigation Measures NC-2, IS-1, IS-2, IS-3, and IS-4 appear to present certain proposed mitigation measures associated with the project. Please clarify and address these discrepancies accordingly.

Mitigation for Impacts to Wetland and Riparian Areas

The DEIR/EA describes temporary impacts that would occur to waters, wetlands, and other environmentally sensitive habitat areas (ESHAs) under all build alternatives. Among other places in the DEIR/EA, the narrative contained in Section 2 and data summarized in tables (including but not limited to Tables 2-14 through 2-18) and figures (including but not limited to Figures 2-20 through 2-26) distinguish separately those impacts that are temporary versus permanent, and impacts to ACOE and Coastal Commission-jurisdictional features. As we have indicated in past site visits and meetings with Caltrans staff, many of the impacts that are listed as temporary would be considered permanent by the Coastal Commission. As a reminder, starting from the onset of impacts, an impact is considered permanent by the Coastal Commission unless it can be restored to its state prior to the impact. This includes age classes of vegetation.

Additionally, Commission staff has emphasized to Caltrans staff in the past the importance of identifying early in the project design process potential mitigation sites for project-related impacts to wetlands, riparian areas, and other ESHAs. In addition to comments we provided on this matter during site visits conducted on March 29, 2018, May 3, 2019, and during the interagency meeting held on September 17, 2019, our August 23, 2017 comments regarding Caltrans' 2017 IS/MND stated in part the following:

In order to demonstrate that the project includes feasible mitigation measures to minimize adverse environmental effects, additional information on the compensatory mitigation proposal is required, including a map and narrative description of the specific mitigation area; a narrative description and conceptual plans of the proposed wetland restoration or enhancement activities: a description of the estimated time frame of when bridge construction would occur relative to when the mitigation work would be completed and when habitat values would be restored at the mitigation site; an analysis of how the proposed mitigation is feasible and appropriate for mitigating the wetland impacts of the bridge replacement project (including identification of a specific mitigation ratio); and an indication of how the acreage to be used for mitigating the project would be reserved in perpetuity for habitat use. Most critically, given the current proposal involving wetland restoration on privately owned agricultural lands, *Caltrans needs to secure a legal right, interest, or other entitlement to use the* property, and we would appreciate Caltrans working with Commission staff to determine whether conversion of particular lands zoned for agriculture can be performed consistent with the relevant coastal development permitting standard of review (i.e. the Del Norte County LCP and/or the Coastal Act).

Without an accurate assessment of the impacts to each habitat type, and to wildlife, it will not be possible to determine the type and suitability of mitigation options. Concurrent with a complete impact assessment, mitigation sites should be developed and mitigation options fleshed out prior to finalizing the EIR.

Visual Resources: Utility Relocation

As described in the DEIR/EA, the project is within an area noted for its scenic quality and beauty. Travelers across Dr. Fine Bridge are afforded with views of the Smith River and the surrounding landscape of riparian, coniferous, and deciduous vegetation, as well as open landscapes of agricultural lands. Section 1.7.1.6 of the DEIR/EA describes the need for installation of temporary and permanent utility poles as part of the project, including the rerouting of two poles in conflict with the proposed project. Coastal Act Section 30251 requires in part that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance, and permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas. Section V(C)(10) of the Visual Resources Chapter in Del Norte County's certified land use plan (page 259) requires "New or relocated utility lines shall be placed underground, whenever feasible and when warranted in highly scenic coastal areas." To ensure consistency with the visual resource protection policies of the Coastal Act and the certified LCP, the environmental document should evaluate the feasibility of relocating utility lines underground in lieu of installing new poles.

Tree Impacts

The DEIR/EA evaluates impacts to trees and recommends trees for removal based upon an analysis of estimated total impacts to the tree's "structural root zone" (SRZ) and "root health zone" (RHZ), recommending tree removal when impacts exceed 30 percent of the tree's SRZ or 40 percent of the tree's RHZ. According to the DEIR/EA, potential tree impacts were determined by reviewing graphical illustrations that show the two root zones overlaid on a layout of proposed construction areas. It is unclear how the described method accurately represents potential impacts to trees within the project area, because lateral extent of a tree's root system is not easily quantified across the board. Many trees have a much more extensive lateral root system than others, dependent on species, soil depth, landscape position, etc. The location of large structural roots can often be identified by looking at the location of large branches, with the idea that large structural roots will occur in locations where they will be needed to support branches. The above and belowground often correspond.

Similarly, analysis of tree impacts using the "root health zone" like the SRZ, appears to overly simplify potential impacts to trees. For example, page 164 of the DEIR/EA indicates in part that:

Removal of up to 40 percent of the RHZ of trees in general, including redwood, is unlikely to have a substantial effect on the overall health and stability of the trees because absorbing roots are ephemeral under undisturbed conditions and reproduce rapidly (Harris et al. 1999) if post-project soil conditions are restored following construction.

Species can differ greatly in how rapidly fine roots turn over. Furthermore, reliance on the premise that 40% of fine roots can be removed with little impact appears flawed because if a tree is impacted in this way, and environmental conditions are harsh the following year, a tree could be adversely impacted. In particular, very tall trees, such as redwoods can be significantly more susceptible to wind impacts if structural roots are

removed, which they require for anchoring. Therefore, the environmental analysis should evaluate the impacts and mitigation for all trees in which the root zone is substantially impacted.

Thank you again for the opportunity to provide comments on this proposed project. We look forward to continued opportunities to meet with Caltrans staff to provide ongoing feedback as the project moves forward in the environmental review and coastal development permit processes. Should you have any questions, please call me at (707) 826-8950, extension 4.

Sincerely,

TAMARA L. GEDIK Coastal Program Analyst

- Cc: David Melendrez, Caltrans District 1, Eureka Taylor Carsley, Del Norte County Department of Planning and Building Services Tami Grove, Statewide Development and Transportation Program Manager Mark Delaplaine, Manager, Coastal Commission Federal Consistency Division
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