



San Francisco Bay Regional Water Quality Control Board

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July 30, 2019

Governor's Office of Planning & Research

JULY 31 2019

STATE CLEARINGHOUSE

City of Palo Alto
Attn: Michel Jeremias
250 Hamilton Ave, 6th Floor
Palo Alto, CA 94301
Email: Michel.Jeremias@CityofPaloAlto.org

Subject: Comments on the Draft Environmental Impact Report/Environmental Assessment for the Newell Road Bridge Replacement Project, Counties of Santa Clara and San Mateo (SCH No. 2015082026)

Dear Mr. Jeremias:

The San Francisco Regional Water Quality Control Board (Water Board) staff appreciates the opportunity to provide comments on the subject Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) for the Newell Road Bridge Replacement Project (Project). The Project would replace the existing Newell Road Bridge that crosses over San Francisquito Creek (Creek) and connects the cities of East Palo Alto in San Mateo County and Palo Alto in Santa Clara County. The Creek is an important migration corridor for steelhead (*Onchorynchus mykiss*), and the Project area has habitat suitable for other federal or State-listed special status species (e.g., California red-legged frog (*Rana draytonii*) and Western pond turtle (*Emys marmorata*)). The Project has two purposes: (1) to maintain connections and improve safety for vehicular, bicycle, and pedestrian transportation across the Creek at Newell Road; and (2) to increase the Creek's capacity under the bridge from 5,400 cubic feet per second (cfs) to 7,500 cfs, which is about the 50-year flood flow. The City of Palo Alto is the lead agency under the California Environmental Quality Act (CEQA). The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHA), has prepared the DEIR/EA, and is the lead agency under the National Environmental Protection Act (NEPA).

Under CEQA, the Water Board is a responsible agency with permitting authority for the Project under the federal Clean Water Act (CWA) and California Water Code for discharges of stormwater, waste, and dredge and fill materials to waters of the U.S. and

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waters of the State, as well as to locations that could affect waters of the State. In addition to our more-detailed comments below, we note that:

- The DEIR/EA does not yet include information sufficient for us to determine whether the preferred alternative (or any of the alternatives) would comply with the the San Francisco Bay Basin Water Quality Control Plan's (Basin Plan's) requirements, including whether impacts to waters of the State have been minimized to the maximum extent practicable; and
- The DEIR/EA does not clearly identify the potential impacts to jurisdictional waters. Thus, we are unable to determine whether mitigation for impacts to waters of the U.S. and waters of the State would comply with the State and Regional Water Board regulations and policies.

Alternatives Overview

The Project includes four "build" alternatives (Alternatives 1–4) and the No Build Alternative. Alternative 2, the preferred alternative, includes a two-lane bridge on the existing Newell Road alignment. The other build alternatives vary by Newell Road alignments, bridge and lane widths, traffic signage, retaining wall heights, and space designated for vehicles, bicycles, and pedestrians. The improvements would extend for approximately 500 feet along Newell Road and 350 feet along Woodland Avenue. The following elements are some of the key features common to Alternatives 1–4 that would result in impacts requiring Water Board review and, as appropriate, authorization:

- Remove the existing concrete abutments in the Creek, and build a free span, cast-in-place, concrete bridge;
- Remove the existing concrete retaining walls along the Creek and construct rock slope protection or soil nail walls along about 50 linear feet upstream and downstream of the bridge;
- Redevelop about 30,000 to 36,000 square feet (sq. ft) of impervious surface and, in Alternative 2, increase road surface area by 1,700 sq. ft (the increases in Alternatives 1, 3, and 4, would range from 666 to 2,023 sq. ft); and
- For Alternative 2, permanently remove 0.029 acres of stream and 0.022 acres of riparian habitat, affect 24 trees, and remove 12 trees. Alternatives 1, 3, and 4 would remove similar amounts of stream and riparian waters, and affect or remove similar numbers of trees, with slight variations from Alternative 2 to each of these impacts

The DEIR/EA notes that habitat and land cover types in the Project consist of 0.19 acres of waters of the State (0.06 acres of stream waters below the ordinary high water mark and 0.13 acres as Valley foothill riparian habitat), and 0.90 acres of developed land.

While we support a free span bridge design and removal of the existing concrete abutments, which are hydraulic constrictions, the DEIR/EA does not yet include information sufficient to support the Water Board's future authorization of a project. We

have the following comments on aspects of the Project, as presented in the DEIR/EA, which may impact waters of the State.

Comment 1. Basis of Design and Potential Impacts to Aquatic Resources

The DEIR/EA covers the regulatory permits potentially needed for the Project pursuant to the Clean Water Act (CWA) and California Water Code. As presented in the DEIR/EA, both a CWA Section 401 water quality certification from the Water Board and a CWA Section 404 Permit from the U.S. Army Corps of Engineers (Corps) will be necessary to authorize discharges of fill to waters of the U.S. Should the Corps determine that a CWA 404 Permit is not required, Palo Alto and Caltrans may need to file a Report of Waste Discharge under the California Water Code if the Project has discharges that may impact waters of the State (e.g., streambanks above the ordinary high water mark). A Streambed Alteration Agreement from the California Department of Fish and Wildlife may also be necessary since the Project involves the stream channel and riparian habitat.

The Water Board adopted the U.S. EPA's Section 404(b)(1) "Guidelines for Specification of Disposal Sites for Dredge or Fill Material," dated December 24, 1980, in the Basin Plan for determining the circumstance under which filling of wetlands, streams or other waters may be permitted. The 404(b)(1) Guidelines prohibit all discharges of fill material into regulated waters of the U.S., unless a discharge, as proposed, constitutes the least environmentally damaging practicable alternative (LEDPA) that will achieve the basic project purpose.

The Guidelines sequence the order in which proposals should be approached: 1) Avoid—avoid impacts to waters; 2) Minimize—modify project to minimize impacts to waters; and, 3) Mitigate—once impacts have been fully minimized, compensate for unavoidable impacts to waters. When it is not possible to avoid impacts to water bodies, disturbance should be minimized. Compensatory mitigation for lost water body acreage and functions through restoration or creation should only be considered after disturbance has been avoided and minimized to the maximum extent practicable. Where impacts cannot be avoided, the creation of adequate mitigation habitat to compensate for the loss of water body acreage, functions, and values must be provided. Unlike an analysis of alternatives under CEQA, the 404(b)(1) Guidelines do not allow for the use compensatory mitigation¹ as the sole method of reducing environmental impacts in the evaluation of the LEDPA, without also going through the avoidance and minimization steps.

The Water Board also will evaluate the Project alternative to determine whether it is consistent with the California Wetland Conservation Policy (Governor's Executive Order W-59-93 and Senate Concurrent Resolution No.28), also known as the No Net Loss Policy. The No Net Loss Policy is intended to ensure that projects preferentially avoid or

¹ "Compensatory mitigation" refers to the replacement of stream and wetland area, functions, and beneficial uses through creation or restoration as part of a permitting action for a CWA Section 401 water quality certification or waste discharge requirements.

minimize fill or other impacts to waters. Where fill activities are deemed to require mitigation, such mitigation must preferentially be located “within the same section of the Region, wherever feasible.” Ultimately, the project and its mitigation, evaluated together, must result in no net loss of both wetland acreage and functions, where the term “wetland” refers to creek waters from the bank to bank and the riparian zone. We encourage the Palo Alto and Caltrans to develop alternatives in the DEIR/EA that are self-mitigating, such that the Project’s impacts have been minimized and any mitigation required has been incorporated into the Project’s design.

The project alternatives analyzed in the DEIR/EA and *Technical Study-Newell Road/San Francisquito Creek Bridge Replacement Project Alternatives Screening Analysis Report (February 21, 2014)* (Screening Study) are focused on the Creek’s flow capacity and traffic considerations. For example, Alternative 2 was selected as the environmentally superior alternative, because:

“[T]he existing alignment of the bridge would not change. In addition, Build Alternative 2 would not result in the higher delay at Newell Road/Woodland Avenue (North Leg) that Build Alternative 1 would result in. Therefore, Build Alternative 2 is considered the environmentally superior alternative.” (DEIR/EA, p. 3-56)

While this screening process may be adequate for CEQA purposes, it would not satisfy the LEDPA alternatives analysis required for future permitting by the Water Board because it does not consider potential impacts to the Creek’s beneficial uses.

The DEIR/EA considers bank stabilization measures using rock riprap or soil nail walls, but does not yet include information to show how these bank treatments were selected. For a complete analysis that could satisfy the Water Board’s LEDPA requirements, the DEIR/EA should include further analysis of project alternatives that use soil bioengineering techniques wherever possible instead of rock slope protection, a soil nail wall, or other approaches resulting in hardscaping the creek banks or bed. We address other aspects of these proposed bank treatments in the next comment.

Comment 2. Basis of Design

The Water Board regulates waters of the State in part to protect beneficial uses that support the health and success of various species, such as preservation of rare and endangered species (RARE), fish spawning (SPWN), cold and warm freshwater habitat (COLD, and WARM), and wildlife habitat (WILD) (Basin Plan, Chapter 2 and Table 2.1). Though the Project site is in the section of the Creek that is dry during the dry season, the Creek is an important steelhead migration corridor and has habitat that supports a variety of other aquatic species and wildlife. As mentioned in Comment 1, the DEIR/EA does not yet include the basis for the rock slope protection or soil nail wall bank stabilization measures proposed for Alternatives 1-4. In order for us to evaluate the different project alternatives and their potential impacts to the Creek, the DEIR/EA should assess the bridge’s geomorphic function in its current configuration (abutment locations, soffit elevation, bridge width, etc.) and evaluate how the different alternatives would affect Creek geomorphology, including bank stability and sediment transport. A

geomorphic analysis is also necessary to demonstrate that any bank stabilization or other channel modifications would not result in unintended destabilizing forces after the Project is constructed. We recommend evaluating and including in the Project more-sustainable and fish passage-friendly bank stabilization designs if the geomorphic analysis supports such designs. Using such designs is more likely to protect and enhance the Creek's beneficial uses by preserving or improving the Creek's habitat for salmonids and other aquatic species and wildlife at the Project site.

Comment 3. Impacts are Not Yet Fully Characterized

The DEIR/EA states that the permanent impacts to the stream (below ordinary high water mark) would be from excavating the banks to remove old structures and install new pilings and riprap, and the impacts to riparian habitat would be from removal of trees. The impacts would be to about 0.03 acres in Alternative 2, and a range of 0.03 to 0.05 acres for the other three alternatives analyzed. Please note that we will require impacts to linear features, such as a creek, to be reported as impact lengths; please add the linear feet of impacts to DEIR/EA's description. Overall, the DEIR/EA does not yet include enough information for us to understand the impacts' scope, scale, or location.

For example, the DEIR/EA (pp. S-5; 1-17) states that rock slope protection or soil nail walls would be implemented in "...approximately 50 feet upstream and downstream of the bridge. Channel improvements would upgrade the channel width beneath the bridge to allow 7,500 cfs conveyance." Please clarify if this refers to bank stabilization for a total of 50 linear feet, or 50 feet both upstream and downstream (100 linear feet) of Newell Bridge. Also, the DEIR/EA states that channel widening is necessary, but does not yet include information on where widening would be done, other than noting that the existing bridge abutments would be removed. Please add information to clarify the areas of work, a more-detailed description of proposed channel widening elements, including their location, and any work proposed beneath the bridge.

In order for us to authorize the Project pursuant to CWA section 401 and California Water Code sections 13260 and 13367, we will need to understand the type, volume, length, and area of all excavated and fill materials. To facilitate future Project permitting, we suggest the DEIR/EA be revised to include this information, if available. This information is also essential to characterize the Project's impacts and appropriate mitigation, including compensatory mitigation, if necessary. A map or other figures to show the impacts would be helpful. The DEIR/EA includes excellent renderings of road and bridge configurations from a street view perspective for Alternatives 1-4; renderings of the Creek with a similar level of detail would be helpful to better understand the Project's potential Creek impacts.

Comment 4. Potential Impacts on Natural Communities and Proposed Mitigation

The DEIR/EA evaluated potential environmental impacts to riparian trees that would be removed, and on a variety of special status species observed in the Project site or that have suitable habitat in or near the Project site. We appreciate the avoidance and minimization measures (AMMs) that would protect the Creek from sedimentation and

erosion during construction, and other species-specific measures during construction. However, the AMMs and proposed mitigation would not be sufficient to address the potential adverse impacts to the Creek from the proposed bank stabilization treatments or other, as yet unspecified channel bed improvements mentioned above in Comment 3. In addition, we have the following specific concerns for proposed mitigation measures (MMs).

- MM-BIO-2-*Tree Replacement Plan* incorporates the City of Palo Alto's requirements for restoring tree canopy cover for impacts to protected trees. We recommend that canopy cover metrics also be included in MM MM-BIO-1-*Compensate for Permanent Loss of Valley Foothill Riparian* in evaluating the Project's impact to riparian vegetation and developing and implementing appropriate performance and success criteria for impacts to riparian vegetation.
- MM-MM-BIO-1 proposed to replace native species at a ratio of 3:1 and non-native species at a ratio of 1:1. Stipulating the replacement ratios is premature, because the impacts have not been fully characterized, and the DEIR/EA is not clear on where the mitigation vegetation would be planted. While we prefer mitigation to be on-site and in-kind, we can accept offsite and/or out-of-kind if necessary. In that situation, the amount of mitigation required would increase as distance or types differ from the impacted habitat in order to achieve no net loss of waters pursuant to the regulations and policies presented in Comment 1. As such, we are not yet able to determine whether the proposed ratios would comply with Basin Plan and related requirements.
- The impact significance criterion under Biological Resources-(c)-*adverse effect on federally protected wetlands and waters of the U.S* is outdated. Please note that the significance criteria for Biological Resources in the 2019 CEQA Statute and Guidelines were updated to read as follows (underline and strikethrough text shows the changes):

"Have a substantial adverse effect on state or federally protected wetlands ~~as defined by Section 404 of the Clean Water Act~~ (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?"

Please revise the Biological Resources-(c) significance criterion to fully address not only federal waters, but also waters of the State. In addition, the DEIR/EA alternatives analysis should be reevaluated to ensure it fully considers the Project's potential environmental impacts to waters of the State.

Comment 5. Cumulative Impacts

The Project design flow is for the 50-year flow event (7,500 cfs), yet the DEIR/EA technical study reports analyze the 100-year flow event, and the Notice of Preparation was for a Project that would accommodate the 100-year flow event at Newell Bridge, estimated at 8,150 cfs. Please clarify this discrepancy and whether other modifications to the Creek in the vicinity of Newell Bridge are being considered to accommodate a

future 100-year design flow of 8,150 cfs. In addition, we recommend the DEIR/EA include more details on the relationship between this Project and the San Francisquito Creek flood control project from Interstate 101 to Middlefield Road, particularly to show that the Project would not preclude future improvements. if necessary, to accommodate the 100-year flow in the vicinity of Newell Bridge.

Comment 6. Early Consultation

DEIR/EA Table 1-2, *Permits and Approvals Needed* (p. 1-25), indicates that the Water Board would be consulted on the Project design during the final design stage. We recommend that Palo Alto and Caltrans consult with us as soon as possible, and, before completing CEQA/NEPA environmental review, so that any concerns about potential adverse impacts of the Project can be identified and, if possible, eliminated from the Project design (See also DEIR/EA, Section 4.2.8 (p. 4-3), which also states that the Water Board would not be consulted until the final design stage). This will both facilitate permitting and help avoid and reduce potential costs that could result from a future need to redesign the proposed Project.

Table 1-2 also indicates that a consultation with the Federal Emergency Management Agency (FEMA) pertaining to a variance needed for freeboard less than two feet in the Project design would not be completed until the final design stage. We urge an earlier FEMA consultation, before the DEIR/EA is finalized, to ensure that FEMA will grant a variance or to address any changes to the Project that FEMA might require.

Comment 7. Erosion Potential of Creek Banks

The DEIR/EA states that the Creek's banks are subject to erosion and then uses the "Kw" factor from the NPDES Construction Stormwater Permit² to predict erosion potential of the creek banks (p. 2.2.2-4). While the Kw value is useful for determining erosion potential on the land surface beyond the tops of the creek banks, a geomorphic analysis is necessary to determine the erosion potential of the banks. As presented above in Comment 2, we will require completion of a geomorphic analysis to inform the bank stabilization methods for the Project and to identify the extent to which the Project can incorporate soil bioengineering methods that minimize hardscape.

Comment 8. Increase in Amount of Impervious Surfaces

This project would redevelop about 30,000 sq. ft. of roads and would increase the amount of impervious surface by 1,700 sq. ft. in the preferred alternative (or add 666 to 2,023 sq. ft. in the other three built alternatives 1, 3, and 4). We appreciate that the DEIR/EA includes provisions to incorporate low impact development measures to treat runoff from Project impervious surfaces. The DEIR/EA states "The Project design would

² The NPDES Construction Stormwater Permit NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2009- 0009-DWQ, NPDES No. CAS000002 as amended by 2010-0014-DWQ and 2012-0006-DWQ and any subsequent permits. SM-WQ-1-Implement NPDES Permit and Construction General Permit Water Quality Measures

incorporate postconstruction measures and other permanent erosion control elements” (p. 2.2.2-9). In addition, the technical study, *Water Quality Assessment Report*, states the Project will incorporate low impact design (LID) measures “...including, but not limited to: infiltration trenches, vegetated swales, vegetated rock filters, bioretention devices, flow-through planters, permeable pavements, tree well filter units.” We urge Palo Alto and Caltrans to develop concept plans as soon as possible for the LID features in Project design. In addition, we recommend the DEIR/EA main report to be revised with the more-detailed text from the Water Quality Study Report pertaining to LID measures. As appropriate, it should also reference the Green Infrastructure Plan that Palo Alto has prepared pursuant to the Municipal Regional Stormwater NPDES Permit.

We welcome the opportunity to continue to work collaboratively with the Palo Alto and Caltrans on this project. If you have any questions about our comments, please contact Derek Beauduy at derek.beauduy@waterboards.ca.gov, or (510) 622-2348, or Susan Glendening at susan.glendening@waterboards.ca.gov or (510) 622-2462.

Sincerely,

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