Protective Features of Maxwell Bridge Replacement Project

Aesthetics

1(b)-1 (Scenic resources) After construction and demolition are completed, final grading of terrace banks and levees will include direction by a landscape architect, geomorphologist, or civil engineer to cut and fill along the banks and levees to make them appear more natural.

I(b)-2 (Scenic resources). The revegetation plan will be designed to replace lost trees with trees that would reach a similar size and character in a relatively short time. The revegetation plan will also specify that some of the replacement trees will be able to reach the full heights and canopies of the more significant trees being lost, which are of a relatively large size and great age.

I(d) (Light and glare). A study of the impact of lateral vehicle headlights from the new bridge will be conducted at the 35% complete design stage. If indicated, the final bridge design will include a new barrier that will block the shine of headlights into residential areas to the southwest. If a headlights barrier is required, secondary impacts resulting from its installation will be addressed. Also, streetlights on the bridge deck will be designed so that they do not throw light outside the bridge facility.

Biological Resources

(Migratory Birds). The construction contract shall specify the following. Contractor shall adhere to all state and federal laws and regulations pertaining to the protection of migratory birds, their nests, eggs, and young. The primary focus for adherence to protection of swallows shall be excluding nests from the structures. Contractor shall remove all existing unoccupied swallow nests from structures before February 15 of each construction year. Contractor shall keep all structures free from swallow nests and will inspect for swallow nests three times per week until notified by Caltrans to stop. Contractor shall submit to the engineer for approval working drawings or written proposals of any exclusion devices, procedures, or methods prior to installing or implementing them.

(Endangered Species). Delta Tule Pea, Salt Marsh Harvest Mouse, Sacramento Splittail, Delta Smelt, and California Steelhead. All Caltrans-related activities shall comply with the applicable requirements developed by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the California Department of Fish and Game, and any other resource agencies for protection of endangered species.

Cultural Resources

V(b, c, and d)-1 (Archaeology). After vegetation is cleared from the project site and before construction begins, a Caltrans archaeologist or designee will conduct an archaeological survey.

V (b, c, and d)-2 (Archaeology). Caltrans policy requires that, in the event that archaeological elements are encountered during construction, work in the vicinity of the

find must be halted until an archaeologist can be consulted and can assess the significance of the find. If the archaeological site cannot be avoided, work will proceed in the vicinity of the find only after appropriate archaeological studies have been undertaken.

Geology and Soils

VI(b) (Soil erosion). All soil disturbing activities, including grading, excavating, and filling, will include Caltrans standard erosion control features.

Hazards and Hazardous Materials

VII(c) (Hazardous Emissions). The construction contractor will take all practical actions necessary to avoid the release of lead-base paint into the environment. The requirements will include provisions for each of the following (or will be as environmentally protective as the following):

- Provide a containment system around the work area where lead-based paint is being disturbed, which must contain all water, resulting debris, and visible dust.
- Work area monitoring, carried out under the direction of a Certified Industrial Hygienist (CIH), including
  - Air sampling to be analyzed for lead and other metals, at the beginning of the work and at least twice per week thereafter;
  - Soil sampling before the work begins to establish a baseline, and repeat soil sampling within 36 hours of completion of working with lead-based paint.
- Emphasize that the CIH, the Caltrans Resident Engineer, or other authorized person may order work to stop if airborne metals concentrations have exceeded specified standards, for instance 10% of the appropriate Permissible Exposure Limits (PELs) for metals, as analyzed according to NIOSH Method 7105 or its successor method.

VII(d)-1 (Hazardous Materials Contamination). There is potential for lead contamination due to the aerial deposition of lead from historic motor vehicle exhaust. Testing will be done before the contracts for design and construction are drafted, upon request from the Project Engineer. If the test results reveal that the soils are contaminated, the soil must be handled according to regulatory requirements. The special handling may include implementing a health and safety plan, reusing the soil according to the Department of Toxic Substances Control Lead Variance dated June 7, 1995, or it may require off-site disposal of the soil.

VII(d)-2 (Hazardous Materials Contamination). Where the soil around the footings of the existing bridge will be disturbed as part of the project, the soil shall also be tested for contamination with metals. The testing will occur before the contracts for design and construction are drafted. If the soil is contaminated, then special provisions regarding the handling and disposal of this material must be included in the contract.

Hydrology and Water Quality

All activities will be conducted in accordance with the terms of NPDES Permit Order No. 99-06-DWQ Order No. 99-08-DWQ. A conceptual Storm Water Pollution Prevention Plan will be submitted to the Regional Water Quality Control Board 60 days

prior to the beginning of construction. Also, Permanent Control Measures, such as slope terracing, are being incorporated into the USACE Flood Reduction Project to improve drainage and reduce erosion. Water quality associated with the Maxwell Bridge Replacement Project will benefit from these measures.

Noise

All construction and demolition activities will comply with the City of Napa noise ordinance. The contract will specify that the contractor is responsible for being aware of and complying with the City's noise ordinance.

Utilities and Service Systems

16 (c) (Storm water drainage). All activities will be conducted in accordance with NPDES Permit Order No. 49-06-DWQ.

16 (f) and (g) (Solid waste management). The terms of Caltrans contracts will specify that the contractor is responsible for managing all materials appropriately.