Attachment E.
Off-Site Mitigation Project Proposal

California Department of Transportation (Caltrans)
I-580 Eastbound
Truck Climbing Lane Project
April 6, 2011

Cliff Harvey, Environmental Scientist
State Water Resources Control Board
401 Certification & Wetlands Unit
1001 I Street, PO Box 100
Sacramento, CA 95814

Dear Mr. Harvey:

The California Department of Transportation (Department) is providing the attached Off-site Mitigation Proposal for the I-580 Eastbound Truck Climbing Lane for effects to wetlands from the I-580 Eastbound Truck Climbing Lane Project (EA 4A070). This proposal is submitted in response to comments received from the State Water Resources Control Board on the Department’s 401 Certification application (State Water Board Identification: SB 10006 IN; U.S. Army Corps of Engineers Reference SPN-2010-00056-S).

I have reviewed the proposal and approve the requirements specified therein. I confirm that the Department has the intent and capability to meet the conditions and commitments stated in the mitigation proposal for the funding, implementation, and construction of the project.

Sincerely,

James Richards
Deputy District Director
Environmental Planning & Engineering Division

Attachment:

Off-Site Mitigation Proposal, I-580 Eastbound Truck Climbing Lane Project & Location Map
Off-site Mitigation Proposal for the I-580 Eastbound Truck Climbing Lane

Summary

As a condition of the Water Quality Certification under the federal Clean Water Act and the California Water Code, in order to meet compensatory mitigation requirements that would be incurred by construction of the Interstate-580 (I-580) East Bound Truck Climbing Lane Project (Project), the California Department of Transportation (Department hereafter) will provide funding to administer a program to enhance and restore creek and riparian habitat and improve water quality along Arroyo Mocho, an intermittent creek within the Alameda Creek watershed as part of the Arroyo Mocho at Stanley Boulevard Revegetation Program.

Partners

The proposed project will involve three primary participating entities:

California Department of Transportation - District 4 (Caltrans). Caltrans District 4 is the State Department of Transportation's district that implements project delivery in the San Francisco Bay Area. District 4 has a service area consisting of the North Bay (Marin, Sonoma, Napa and Solano Counties), the East Bay (Contra Costa and Alameda Counties), the Peninsula (San Francisco and San Mateo Counties) and South Bay (Santa Clara County).

Zone 7 Water Agency. Zone 7 Water Agency (Zone 7), a locally administered agency, is one of 10 active zones of the Alameda County Flood Control and Water Conservation District. Zone 7 serves eastern Alameda County. Its mission includes drinking water supply, irrigation water supply, flood protection and water resource management. Its objectives include stream and creek restoration to improve water quality and environmental education and public outreach to increase awareness of local water quality issues.

Caltrans is working with Zone 7’s Streamwise Program Manager, Carol Mahoney, to develop an agreement to provide funding for the Arroyo Mocho stream habitat restoration project. (Zone 7 Water Agency, 100 North Canyons Parkway, Livermore, California 94551-9486. www.zone7water.com)

Urban Creeks Council (UCC). The Urban Creeks Council is a non-profit organization which works to preserve, protect, and restore urban streams and their riparian habitats in the San Francisco Bay area. Its restoration projects are designed to preserve the natural form and function of creeks, increase biodiversity and habitat for native species, and serve as a recreational and educational resource for the public. The UCC develops partnerships with federal, state, local agencies to fund restoration projects. Volunteers provide essential field support for restoration activities. Phil Stevens, executive director, developed the Arroyo Mocho at Stanley Boulevard Revegetation Program through the
cooperation of Zone 7's Streamwise Management Program. (Urban Creeks Council, 427 13th Street, Oakland, California, 94612. www.urbancreeks.org)

**Rationale**
The affected wetland demonstrates impaired functionality and connectivity to the watershed; therefore, other enhancement and preservation actions can benefit this watershed and provide mitigation commensurate with the loss of wetland area. Because of the low functional values of the affected wetland, the Department has determined that adequate mitigation can be accomplished through funding a project to develop 0.20 acres of wetland and/or emergent aquatic vegetation at the Arroyo Mocho program site.

**Site Description**
As a regional flood protection entity and stream steward, the Zone 7 Water Agency (Zone 7) is actively involved in efforts to protect and/or restore streams and associated habitats and natural resources within the Alameda Creek Watershed. The project site is currently a channelized reach of the Arroyo Mocho that was constructed to serve as an artificial flood-control channel designed to carry storm water and urban runoff from throughout the Alameda Creek watershed, as well as to convey releases from the South Bay Aqueduct to the Chain of Lakes area to recharge the groundwater basin. This reach of Arroyo Mocho is owned by the Zone 7 and will remain under Zone 7's ownership.

Zone 7 has targeted a particular reach of Arroyo Mocho (extending from Stanley Blvd to Isabel Ave) as a potential pilot project for the restoration planting of a constructed trapezoidal channel with riparian vegetation. Portions of this channel may be planted using funding from private development or other public projects.

Zone 7 proposes restoration of the creek channel and native riparian vegetation for Arroyo Mocho along its Stanley Blvd reach. The reach is defined as the approximately 5,000 linear foot section of Arroyo Mocho between Isabel Avenue and North Murrieta Boulevard (see attached). The total area suitable for riparian planting is approximately 12.02 acres. The Department is funding a portion of these improvements to mitigate for riparian impacts on the State Route 84 Widening Project. To mitigate for the loss of a .054-acre wetland lost due to the construction of the Department's I-580 Eastbound Truck Climbing Lane project, the Department will fund additional 0.2 acres to develop 0.20 acres of wetland and/or emergent aquatic vegetation at the Arroyo Mocho program site. The following information on Zone 7's proposal that is being funded by the Department and other public entities is attached for your review: copy of the location map; conceptual revegetation proposal; and Arroyo Mocho Planting Effects on Roughness Study.

**Goals and Objectives**
The goals of the proposed restoration program are to provide water/sediment conveyance capacity and fish passage in Arroyo Mocho, create cold water aquatic habitat, and improving riparian habitat. These will be met through a series of sequential design objectives:

1. Modifying and restoring stream channel geometry
2. Planting canopy trees that provide shading
3. Restoring and enhancing native riparian communities

Cooperative Agreement

A cooperative agreement that shall be a legally binding contract between the parties involved in a project will be approved by the three participating entities. It will document the roles and responsibilities for each party and defines the source of funds for the project, what work will be performed, by whom, how it will be paid for, on what schedule it will be completed, and any other roles and responsibilities that must be formalized. Because this cooperative agreement involves three parties (Caltrans, Zone 7, and UCC), it will address liability and indemnification issues.

The cooperative agreement for this project will specify the role of Zone 7 as the fund administrator and post-implementation site manager, and UCC as the partner responsible for the design, implementation, monitoring and reporting on the project. The specific requirements for monitoring and reporting on the project will be developed based on recommendations of State Water Board, Caltrans and UCC, which will then be included in the Final Mitigation and Monitoring Plan (MMP).

The cooperative agreement will outline the scope of work that includes revegetation of the creek corridor parallel to Stanley Boulevard in the City of Livermore, and will provide funding to install and maintain 0.20 acres of plantings as compensation for the loss of a 0.054-acre wetland. The Department intends to secure a resolution from Zone 7 supporting our proposal for mitigation at this site. With a resolution in hand the Department can begin the process of developing a Cooperative Agreement with Zone 7.

Program Timeline

The Department will submit a Draft Mitigation and Monitoring Plan (MMP) by July 1, 2011 for the State Water Board’s review and a Final MMP by November 15, 2011 that outlines the following:

a. description of project goals and objectives;
b. a clear description, including an accurate map, of the project implementation area;
c. define roles and responsibilities for each partner;
d. an operating budget which shall provide for adjustment for inflation as needed;
e. a monitoring and reporting plan that is consistent with State Water Board Surface Water Ambient Monitoring Program (SWAMP) standards
f. a proposal to establish no less than 0.2 acres of wetland and/or emergent aquatic vegetation at the Arroyo Mocho program site;
g. a detailed riparian tree planting plan;
h. an invasive plant removal plan;
i. a site maintenance plan;
j. a adaptive management plan;
k. a legal mechanism to protect the mitigation area in perpetuity;
l. Documentation of a legal agreement between Zone 7 and the Department that allows the Department to implement mitigation on Zone 7 property;
m. California Environmental Quality Act (CEQA) documentation for the proposed mitigation. If CEQA documentation is not available at the time of the MMP submittal, a CEQA status report and timeline may instead be included;
n. a minimum 10-year monitoring plan with survivorship, native and invasive percent cover, vigor, and hydrology metrics, success criteria and commitment to submittal of periodic monitoring reports to the Water Board. At a minimum, the Department shall propose a timeline to submit monitoring reports for years 0, 1, 2, 3, 5, 7, and 10. Site maps shall be prepared with photodocumentation points. Prior to implementing the Project, the Department shall photographically document the condition of the Project site. Following installation of the mitigation, the immediate post-construction condition of the site shall be photo-documented and a report shall be submitted to the Water Board including the pre-construction photographs, the post-construction photographs, and the map with the locations of the photo-documentation points clearly marked (Year 0 report).

Zone 7 anticipates beginning the program in July 2012 with restoration and enhancement of the stream channel. Plantings will begin in October 2012 when canopy trees are installed. Understory herbaceous plants and aquatic emergent vegetation will be planted the following year. Zone 7 intends begin construction/planting work in July 2012. Construction for the I-580 Eastbound Truck Climbing Lane Project is planned to begin by August 2011 and complete construction by July 2014.

The Department will work diligently with Zone 7 to execute the Cooperative Agreement to meet the targeted Zone 7’s begin construction date of July 2012. Construction of the off-site mitigation proposed for this Project will be completed prior to the completion of the I-580 Eastbound Truck Climbing Lane Project.

Long term management of the site and protection of the site in perpetuity are provided by Zone 7 ownership of the parcels on which the mitigation is located. The parcels shall be maintained in perpetuity for the goals stated above.
Department Assurances

Construction of the off-site mitigation proposed for this Project will be completed prior to the completion of the I-580 Eastbound Truck Climbing Lane Project. These funds will be used specifically to develop 0.20 acres of wetland and/or emergent vegetation within the restoration site. Zone 7 shall be subject to a binding commitment to the State Water Board to maintain the project area in a condition that meets the Project’s Goals and Objectives in perpetuity.