SAN FRANCISQUITO CREEK
JOINT POWERS AUTHORITY
sfcjpa.org

East Palo Alto, Menlo Park, Palo Alto, San Mateo County Flood Control District, and the Santa Clara Valley Water District

Notice of Regular Meeting of the

SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY BOARD

City of Menlo Park Council Chambers

701 Laurel Street, Menlo Park, California

Thursday, July 25, 2013 at 4:00 p.m.

AGENDA

1) ROLL CALL

2) APPROVAL OF MEETING MINUTES – June 27, 2013 Board meeting

3) APPROVAL OF AGENDA

4) PUBLIC COMMENT – *Members of the public may speak for up to three minutes on items not on the Agenda. They may address the Board on any Agenda item when that item is considered by the Board.*

5) REGULAR BUSINESS – EXECUTIVE DIRECTOR'S REPORT

   a) Approve Resolution #13-07-25, which formally approves the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, San Francisco Bay to Highway 101, and, as required by the California Environmental Quality Act, makes Written Findings, adopts a Statement of Overriding Considerations and a Mitigation Monitoring and Reporting Plan, and authorizes the Executive Director to File a Notice of Determination for the Project

   b) Authorize the Executive Director to negotiate and execute an agreement with HDR, Inc. to provide Right-of-Way services for S.F. Bay-Highway 101 project easements on the East Palo Alto side of the creek

6) BOARD MEMBER MATTERS - *Non-agendized comments, requests, or announcements by Board members; no action may be taken.*

7) ADJOURNMENT

PLEASE NOTE: This Board meeting Agenda can be viewed online by 4:00 p.m. on July 22, 2013 at www.sfcjpa.org -- click on the "Meetings" tab near the top. Supporting documents related to the Agenda items listed above will be available at the same online location by 4:00 p.m. on July 23, 2013.

NEXT MEETING: Regular Board meeting, August 22, 2013 at 4:00 p.m., East Palo Alto City Council Chambers.

San Francisquito Creek Joint Powers Authority

July 25, 2013 Regular Board Meeting

Agenda Item 2

June 27, 2013 Board Meeting Minutes

Chairperson Burt called the meeting to order at 4:06 p.m. at the City of Palo Alto Council Chambers, Palo Alto, CA.

DRAFT

1) **ROLL CALL**

Members Present:	Director Burt, City of Palo Alto Director Keith, City of Menlo Park Director Schmidt, Santa Clara Valley Water District Director Pine, San Mateo County Flood Control District
Members Absent:	Director Abrica, City of East Palo Alto
JPA Staff Present:	Len Materman, Executive Director Kevin Murray, Staff Miyko Harris-Parker, Staff
Legal Counsel Present:	Greg Stepanicich
Others Present:	Trish Mulvey, Palo Alto resident; Dennis Parker, East Palo Alto resident; Jerry Hearn, Portola Valley resident; Heather Rosmarin, East Palo alto resident; Adena Rosmarin, East Palo Alto resident; Brenda Erwin, East Palo Alto resident; Joe Teresi, City of Palo Alto; Fernando Bravo, City of Menlo Park; Tom Zigterman, Stanford; Sharon Jones, City of East Palo Alto; Saeid Hosseini, SCVWD; Melanie Richardson, SCVWD; Linc Tu, HDR Engineering

2) **APPROVAL OF MEETING MINUTES – May, 2013**

Director Keith made a motion to approve the May 23, 2013 Board meeting minutes. Director Pine seconded. Motion to approve May 23, 2013 Board meeting minutes approved unanimously 4-0.

3) **APPROVAL OF AGENDA**

Director Schmidt made a motion to approve the Board agenda. Director Keith seconded. Motion to approve Board agenda approved unanimously 4-0.

4) **PUBLIC COMMENT**

None

5) **REGULAR BUSINESS**

Discuss S. F. Bay-Highway 101 project construction planning

Mr. Materman and Mr. Murray provided updates regarding the S.F. Bay-Highway 101 project construction planning, highlighting the interagency Construction Management Agreement, project funding and alternate construction schedules. Mr. Materman said that we hope to bring the Construction Management Agreement for Board approval at the July Board meeting with a request for project approval and filing of the Notice of Determination, which is important because final permits depend on project approval. Mr. Stepanicich remarked that expected to meet this timeline in regards to the approval of the Construction Management Agreement.

San Francisquito Creek Joint Powers Authority

July 25, 2013 Regular Board Meeting

Agenda Item 2

June 27, 2013 Board Meeting Minutes

Chairperson Burt asked for clarification on the date the Construction Management Agreement is expected to be completed. Mr. Stepanicich responded saying he expects the agreement to be complete in two weeks.

Mr. Materman provided the Board with an update on project funding, reminding the Board that in May of 2013 he reported to them that the total costs for the project were looking to be more than the originally expected. Mr. Materman reminded the Board that funds for the project are currently coming from the SCVWD, the City of East Palo Alto and a grant from the state. Mr. Materman said that there have been meetings between himself, City Managers, the SCVWD CEO and staff from our member agencies, including San Mateo County. Also, Mr. Murray has had meetings with the Technical Advisory Committee to discuss the funding issues.

Director Schmidt asked about the last estimate given to the Board for the total cost of the Bay – 101 project. Mr. Murray responded saying $21-29 million, which was in the HDR 95% design. Director Schmidt asked for the total amount of money we have available for the Bay-101 project. Mr. Materman replied that, for construction, we have the State grant commitment of $7.85 million, we have an executed agreement from the City of East Palo Alto for $400,000, and we have a commitment from SCVWD staff.

Director Pine stated that he and Mr. Materman have spoken at length regarding the funding issues and that the SMCFCD will continue to discuss what can be done.

Director Keith asked for an explanation on the funding amount available from the SCVWD. Mr. Materman said that Measure B did not describe a specific amount for this project, but an overall amount of $35.5 million for this project and 50-year protection projects upstream of Highway 101. Director Keith asked staff from the SCVWD to clarify the funding language of Measure B regarding this project. Melanie Richardson, SCVWD, stated that Safe Clean Water has $16 million allocated for the Bay -101 project and that the remaining funds are for upstream work.

Mr. Materman asked Ms. Richardson to discuss the funds that were allocated in the prior Measure B. Ms. Richardson replied saying that in the original Clean, Safe Creeks measure allocated $8 million as well as the use of an additional Watershed Stewardship tax funds.

Chairperson Burt asked for clarification on the fact that the Stewardship funds were consumed in planning and design. Saeid Hosseini , SCVWD, stated that the money has not been completely spent as we are still working on planning and design. Chairperson Burt asked for clarification that the $16 million is for both downstream and upstream projects. Mr. Hosseini replied saying that is correct.

Director Keith said that it would be helpful to have a description of the funds that were/are available in both of the measures that also explains what the funds were/are to be used for.

Chairperson Burt asked what the expected timeline was to be able to have a total costs number. Mr. Murray responded saying that we are anticipating receiving 100% design in December; however that number may not be the same number we get from the bids. Chairperson Burt asked when the Bids would be received. Ms. Richardson explained that the SCVWD will not be able to start the bidding process until we have a number to work with.

Ms. Richardson said that the SCVWD is in a position to front the money but there has to be an agreement in place that says how and when the SCVWD will be reimbursed. Director Pine asked what our delta is as of today. Mr. Materman responded saying our range of cost scenarios is about $10 million.

Chairperson Burt said that the Board could vote to endorse the idea of going forward with a construction bid process without assuming what the final project cost would be, because we won't really know that until bids are received. Director Keith agreed that it should be agendized for the Board and Mr. Stepanicich said that this could be done at an upcoming meeting.

Mr. Murray explained our alternate construction schedules. Mr. Murray said that that we have long hoped to have permits by September 1, 2013 noting that the SFCJPA is not in control of a process driven by State and Federal agencies. If we get all permits by that time, we will provide the Board with a construction schedule that allows for some in-channel work this calendar year. Mr. Murray said that if we do not get the permits by September 1, we will bring to the Board an alternate construction schedule that will emphasize initial work, primarily utilities, outside of the channel this calendar year and next spring. We are developing both schedules right now.

Authorize the Executive Director to develop and execute a Contract Amendment with HDR, Inc. to complete Plans, Specifications & Estimates for the S. F. Bay-Highway 101 project
Mr. Materman asked the Board to authorize him to execute a contract Amendment with HDR, Inc. to move funding within the current HDR budget in order to complete Plans, Specifications & Estimates for the S.F. Bay-Highway 101 project.

Director Schmidt asked if there is a dollar amount for the contract amendment. Mr. Materman responded saying that as of right now it is less than $99,000. Director Schmidt suggested that we put a ceiling on the amount. Chairperson Burt asked what the ceiling amount should be. Mr. Murray suggested that some amount of funding from the available $99,000 should be left to provide for bidding support services, and deferred to SCVWD staff to provide a recommended amount as it is anticipated that SCVWD will manage the bidding process. Ms. Richardson suggested leaving $10,000 - $15,000 for bidding support.

Director Schmidt made a motion to authorize the Executive Director to develop and execute a Contract Amendment with HDR, Inc. to complete Plans, Specifications & Estimates for the S. F. Bay-Highway 101 project not to exceed $85,000. Director Keith seconded. Director Keith asked for clarification that this is for 100% design. Mr. Materman responded saying it is for the complete 100% set. Motion to authorize the Executive Director to develop and execute a Contract Amendment with HDR, Inc. to complete Plans, Specifications & Estimates for the S. F. Bay-Highway 101 project not to exceed $85,000 passed unanimously 4-0.

Update regarding SFCJPA efforts to protect and enhance areas along the Bay
Mr. Materman provided the Board an update on the SFCJPA efforts to protect and enhance areas along the Bay highlighting parts of the RFP that will be released to the public before the next Board meeting. Director Schmidt said that it was great to see some movement on this and he noted that the City of Mountain View has some dedicated funding for this type of work.

Public outreach update; June 6, 19, 27 and 29 public meetings and community events, and enhancements to the sfcjpa.org website

Mr. Materman gave the Board an update on the public meetings and community events that the SFCJPA has and will participate in during the month of June which include: an EIR Scoping Meeting that occurred on June 6; sponsoring and staffing a table at the City of Menlo Park Block party which occurred on June 19; and a Scoping Meeting on June 27 at 7:00 pm during a Crescent Park Neighborhood Association annual meeting at Lucy Stern Community Center. Mr. Materman noted that residents from Duveneck-St. Francis neighborhood were invited to attend the CPNA meeting. The final public outreach opportunity this month is at the East Palo Alto 30th Anniversary event on June 29th, where we will staff table in the City tent.

Mr. Materman gave a brief description of enhancements to the SFCJPA website, including; an interactive project map with photos, captions and site specific information; a calendar of events and a get involved section where people can sign up for updates and an e-newsletter.

Schedule of upcoming Board meetings and a 2013 Board retreat

Mr. Materman said that the July Board meeting will be held subject to our ability to approve the S.F. Bay-Highway 101 project, and that the August Board meeting may be replaced by a Board retreat to discuss the agency purposes, our new comprehensive plan document and updating policies. Mr. Materman said that as of right now the September meeting is set as scheduled.

Trish Mulvey, Palo Alto resident, congratulated staff on the new website. Mrs. Mulvey commented on the refining of the SFCJPA's original stated purposes saying that it was important to move toward something that is close to the draft alignment that was presented the last time and that she is concerned that the "current realities" mentioned in the Executive Director's Report might imply a focus foremost on flooding. She appreciates that it is something the agency has to do, but she asks that the Board reflect on the number of times environmental and recreational enhancements have been spoken about and make sure they stay on the list though not necessarily the first priority. Ms. Mulvey commented on the draft Comprehensive Plan of the SFCJPA activities being prepared by the EIR consultant saying that it is a little different than what she had anticipated in a comprehensive plan for the creek and the watershed and she will be looking for what that becomes, and will make comments at that point. Mrs. Mulvey stated that she is looking forward to the retreat as the last one was fun and she learned a lot.

6) **BOARD AND ASSOCIATE MEMBER MATTERS** - *Non-agendized comments, requests, or announcements by Board and/or Associate members, no action may be taken*

Director Keith asked if there were any updates on the Floodbreak information. Mr. Materman said that we are looking at how Floodbreak can be used to reduce potential impacts of a new Pope-Chaucer Bridge on surrounding areas.

7) **ADJOURMENT:**

Chairperson Burt adjourned the meeting at 5:44 pm

Minutes Prepared by Clerk of the Board: Miyko Harris-Parker

San Francisquito Creek Joint Powers Authority

July 25, 2013 Board Meeting

Agenda Item 5

Executive Director's Report

With the help of Kevin Murray and Miyko Harris-Parker, I am pleased to submit the following:

a) Approve Resolution #13-07-25, which formally approves the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, San Francisco Bay to Highway 101, and, as required by the California Environmental Quality Act, makes Written Findings, adopts a Statement of Overriding Considerations and a Mitigation Monitoring and Reporting Plan, and authorizes the Executive Director to File a Notice of Determination for the Project

On October 25, 2012 the Board certified the final Environmental Impact Report (EIR) for the S.F. Bay to Highway 101 Project. In addition to certification of the final EIR, there are subsequent steps required to legally comply with the California Environmental Quality Act (CEQA) that prepare us for Project construction. We have now completed the documentation associated with these required steps, and have reached a point in the Project's planning that it is desirable and prudent to ask the Board to approve a resolution that approves the Project. This action also authorizes me to file a notice that we intend to complete the environmental review process, which is necessary to obtain Project permits and initiates a 30-day period for any challenges to the EIR, and so that we can finalize agreements needed to construct the Project. All of the documents mentioned in the title of this agenda item are attached to this Executive Director's Report.

The attached Resolution #13-07-25 provides for the Board to make the following:

1. Written Findings for each potentially significant environmental effect identified by the Final EIR (Exhibit A to the Resolution);
2. Adoption of the Statement of Overriding Considerations for the air quality and recreational impacts described in the Final EIR that cannot be feasibly mitigated to a level of insignificance;
3. Adoption of the Mitigation Monitoring and Reporting Plan;
4. Approval of the Project as described in the EIR, subject to the following conditions:
   a. All mitigation measures identified and described in the Final EIR and summarized in the attached Exhibit A shall be incorporated into the Project.
   b. Sufficient funding is obtained by the Authority to pay for the costs of construction of the Project.
   c. An agreement is entered into by the Authority providing for the competitive bidding and award of a construction contract and the management of Project construction.
   d. All necessary property interests are obtained for the construction of the Project.
   e. All necessary regulatory permits are obtained for the construction of the Project; and
5. Authorization and Direction to the SFCJPA Executive Director to file a Notice of Determination.

Proposed Board Action: Approve Resolution #13-07-25, Making Written Findings, Adopting a Statement of Overriding Considerations and Adopting a Mitigation Monitoring and Reporting Plan as Required by the California Environmental Quality Act, Approving the San Francisquito Creek Flood Reduction, Ecosystem Restoration and Recreation Project, San Francisco Bay to Highway 101, and Directing the Executive Director to File a Notice of Determination for the Project.

b) Authorize the Executive Director to negotiate and execute an agreement with HDR, Inc. to provide Right-of-Way services for S.F. Bay-Highway 101 project easements on the East Palo Alto side of the creek

At the May 23 Board meeting, I reported that our design consultant HDR had provided information to enable us to determine the number and extent of the needed easements on the East Palo Alto side of the creek. On May 24, SFCJPA Project Manager Kevin Murray met with HDR staff, and they adjusted temporary construction or permanent operations and maintenance lines to minimize the number and size of easement acquisitions needed. SFCJPA and City of East Palo Alto staff met in June to review this information, and concurred on the number and types of easements that will be required.

San Francisquito Creek Joint Powers Authority
July 25, 2013 Board Meeting
Agenda Item 5
Executive Director's Report

Neither the City of East Palo Alto nor the SFCJPA have the staff to prepare plats and legal descriptions of the related properties, a necessary step in the process of acquiring needed right-of-way. Our design firm, HDR, has provided a formal proposal to provide these services and additional services that would include property appraisals and limited negotiations with property owners for acquisition of the easements. The proposal does not include costs for the actual purchase of any of the easements.

HDR, given its familiarity with the project, is in a unique position to provide the needed right-of-way services quickly and at a minimal cost to the SFCJPA. Because of the urgency of the work and the likely cost savings, and because of HDR's standing with the SFCJPA, legal counsel has advised that it would be appropriate for the Board to consider this as a single-source contract that does not require public advertisement.

The formal proposal from HDR (attached) details the scope of services to be provided. The estimated cost of the services provided in the proposal is $52,088

There are several assumptions in the proposal that, if met, would limit the costs of the contract to the proposed amount. There may be instances in which a slightly higher amount of funding would be required to accommodate the services needed based on what is discovered when the work begins. Therefore, I recommend that the Board authorize me to negotiate and execute the agreement with a not-to-exceed amount slightly higher than what is provided in the cost estimate to provide for contingencies. Expenses incurred by the SFCJPA to complete this contract can be reimbursed by the State through an amendment to the grant contract currently executed between the California Department of Water Resources and the SFCJPA for Proposition 1E funding awarded to the Project.

Proposed Board Action: Authorize the Executive Director to negotiate and execute an agreement with HDR, Inc. to provide Right-of-Way services for S.F. Bay-Highway 101 project easements on the East Palo Alto side of the creek in an amount not-to-exceed $60,000.

Submitted by:

Len Materman
Executive Director

SAN FRANCISQUITO CREEK
JOINT POWERS AUTHORITY
sfcjpa.org

East Palo Alto, Menlo Park, Palo Alto, San Mateo County Flood Control District, and the Santa Clara Valley Water District

RESOLUTION NO. #13-07-25

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY MAKING WRITTEN FINDINGS, ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS AND ADOPTING A MITIGATION MONITORING AND REPORTING PLAN AS REQUIRED BY THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, APPROVING THE SAN FRANCISQUITO CREEK FLOOD REDUCTION, ECOSYSTEM RESTORATION AND RECREATION PROJECT, SAN FRANCISCO BAY TO HIGHWAY 101, AND DIRECTING THE EXECUTIVE DIRECTOR TO FILE A NOTICE OF DETERMINATION FOR THE PROJECT

The Board of Directors of the San Francisquito Creek Joint Powers Authority hereby resolves as follows:

Section 1. Recitals:

A. San Francisquito Creek (the "Creek") has a history of flooding the communities in and around East Palo Alto, Menlo Park, and Palo Alto, most recently in December 2012, impacting residential properties adjacent to the Creek.

B. Following the severe flood in February 1998, the cities of East Palo Alto, Menlo Park and Palo Alto along with the San Mateo County Flood Control District and the Santa Clara Valley Water District formed the San Francisquito Creek Joint Powers Authority (the "Authority") on May 18, 1999 to address these flooding hazards.

C. The Authority was authorized to represent its member agencies as the local sponsor for a U.S. Army Corps of Engineers' ("Corps") San Francisquito Creek flood control and ecosystem restoration project on May 23, 2002. In March 2005, the Corps, working with the Authority, completed a reconnaissance study for the Creek. The reconnaissance study results indicated a Federal Interest in developing this project for the Creek, and since that time the Corps has engaged in the feasibility study ("Study") phase of the San Francisquito Creek Flood Damage Reduction and Ecosystem Restoration Project ("FDRER"), which requires a Feasibility Cost Share Agreement with a local sponsor.

D. The Authority entered into a Feasibility Cost Share Agreement ("FCSA") with the San Francisco District of the Corps for the Study on the Creek. The Corps, pursuant to the FCSA, is developing a project to evaluate flood protection and ecosystem restoration opportunities within the San Francisquito Creek watershed and floodplain in Santa Clara and San Mateo Counties. At the conclusion of the Study, the Corps will issue a Federally Preferred Plan, which will detail the pre-design actions to be taken to complete the FDRER.

E. The Corps' ability to complete the Study has been impacted by unanticipated delays due to federal funding constraints and Corps processes.

F. Due to the Corps' delay in completing the Study and the Authority's desire to begin addressing the risk of flooding, the Authority and Member Agency staff conducted a process of evaluating alternatives for an initial capital project and recommended a preferred alternative with conceptual design drawings to the Authority's Board of Directors for consideration. The Board directed that environmental review and design plans be prepared for the preferred alternative, which involved flood control, ecosystem and recreational improvements being designed and constructed along the San Francisquito Creek from San Francisco Bay to Highway 101.

I. The Authority hired a design engineering firm to prepare design documents and an environmental consulting firm to prepare an Environmental Impact Report for the preferred alternative (the "proposed project").

J. The Notice of Preparation for the proposed project was submitted to the State Clearinghouse on September 15, 2010. Two public scoping meetings were held at the end of September 2010 in East Palo Alto and Palo Alto with these meetings being publicized through direct mailings to approximately 11,000 affected and interested households, businesses, and public agencies.

K. The draft Environmental Impact Report (the "Draft EIR") was circulated for a 45-day public review period beginning on July 30, 2012. Two public hearings on the Draft EIR were held on August 15 and August 29, 2012 in East Palo Alto.

L. Certification of the Final Environmental Impact Report (the "Final EIR") by the Authority as Lead Agency took place on October 25, 2012.

M. The Board desires to proceed with the approval of the Project subject to the completion of specified actions necessary to begin construction of the Project.

Section 2. California Public Resources Code Section 21081 provides that no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment unless certain findings are made. Pursuant to Section 21081(a) the Board makes the required written findings for each potentially significant environmental effect identified by the Final EIR set forth in Exhibit A attached hereto.

Section 3. California Public Resources Code Section 21081(b) requires that a statement of overriding considerations be adopted by the Lead Agency if one or more of the potentially significant environmental effects of a project cannot be feasibly mitigated to a level of insignificance. The Board adopts the statement of overriding considerations set forth in Exhibit A attached hereto for the air quality and recreational impacts described in the Final EIR that cannot be feasibly mitigated to a level of insignificance.

Section 4. Pursuant to California Public Resources Code Section 21081.6, the Board adopts the Mitigation Monitoring and Reporting Plan, set forth in Appendix F of the Final EIR.

Section 5. The Board hereby approves the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, San Francisco Bay to Highway 101, as more particularly described in the Project Description set forth in Chapter 2 of the Final EIR and Exhibit A attached hereto, subject to the following conditions:

a. All mitigation measures identified and described in the Final EIR and summarized in Exhibit A attached hereto shall be incorporated into the Project.

b. Sufficient funding is obtained by the Authority to pay the costs to construct the Project.

c. An agreement is entered into by the Authority providing for the competitive bidding and award of a construction contract and the management of the construction for the Project.

d. All necessary property interests are obtained for the construction of the Project.

e. All necessary regulatory permits are obtained for the construction of the Project.

Section 6. The Board authorizes and directs the Executive Director of the Authority to file a Notice of Determination pursuant to California Public Resources Code Section 21152(a) in the manner required by law with the Clerk-Recorder's Office of the County of Santa Clara, the County Clerk of the County of San Mateo, and the Office of Planning and Research of the State of California.

PASSED, APPROVED AND ADOPTED by the San Francisquito Creek Joint Powers Authority Board of Directors on July 25, 2013.

INTRODUCED AND PASSED:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____ Date: 7/25/13
Vice Chairperson

APPROVED:

_____ Date: 7/25/13
Chairperson

APPROVED AS TO FORM:

Gregory W. Stepanicich
_____
Legal Counsel Date: 7/23/13

Exhibit A to Resolution 13-07-25

San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project
San Francisco Bay to Highway 101

Findings of Fact and Statement of Overriding Considerations

This document presents Findings of Fact (Findings) and a Statement of Overriding Considerations (Statement) by the San Francisquito Creek Joint Powers Authority (SFCJPA)—a regional government agency whose members are the Cities of Palo Alto, Menlo Park, and East Palo Alto; the San Mateo County Flood Control District, and the Santa Clara Valley Water District (District)—regarding the Final Environmental Impact Report (Final EIR) for the San Francisquito Creek Flood Reduction Project, East Bayshore Road to San Francisco Bay (Project), for which the SFCJPA is acting as the California Environmental Quality Act (CEQA) lead agency. The Findings and Statement presented herein were prepared in compliance with CEQA and the State's CEQA Guidelines. Substantial evidence supporting all findings made herein is contained in the Environmental Impact Report (EIR) and/or the record of proceedings.

If a proposed project would have significant adverse effects on the environment, CEQA requires the lead agency to prepare findings describing how those effects would be reduced or avoided. Under California Public Resources Code Section 21081[a], several findings are possible.

(1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.

(2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

For any significant effects that cannot be avoided or reduced to a less-than-significant level, the lead agency must describe the reasons why mitigation or adoption of an alternative approach is infeasible (California Public Resources Code Section 21081[a][3]). Adoption of a project that would have significant adverse effects on the environment requires that the lead agency identify the project benefits that are evaluated as outweighing its significant effects on the environment (Public Resources Code Section 21081[b]).

Background

The Project would construct flood reduction facilities along an approximately 1.5-mile stretch of San Francisquito Creek (Creek) from East Bayshore Road to San Francisco Bay (Bay).

Flooding from the Creek is a common occurrence. The most recent flood event occurred as a result of record creek flows in February 1998, when the Creek overtopped its banks in several areas, affecting approximately 1,700 residential, commercial, and public structures and causing more than

$28 million in property damages. The maximum instantaneous peak flow recorded during the February 1998 event was 7,200 cubic feet per second (cfs). The U.S. Army Corps of Engineers (USACE) estimates that the 1998 flood was a 45-year flood event. A 100-year flood event[1] is anticipated to result in flows of 9,400 cfs at the mouth of the Creek. These flows would exceed the existing capacity of the Creek (San Francisquito Creek Joint Powers Authority 2009).

The Project would increase conveyance and retention capacity of floodwaters from runoff and San Francisco Bay tides to protect residents and property from flood events along the lower section of the Creek, from East Bayshore Road to the San Francisco Bay.

Project Description

Increasing the Creek's capacity from San Francisco Bay to East Bayshore Road would be achieved by:

- Degrading a portion of an unmaintained levee downstream of Friendship Bridge to allow flood flows from the Creek channel into the Palo Alto Baylands Nature Preserve (Baylands Preserve) north of the Creek.
- Excavating sediment deposits within the channel to maximize conveyance.
- Rebuilding levees and relocating a portion of the southern levee to widen the channel to reduce influence of tides and increase channel capacity.
- Constructing floodwalls in the upper reach to increase capacity and maintain consistency with the California Department of Transportation's (Caltrans) enlargement of the U.S. 101/East Bayshore Road Bridge over San Francisquito Creek (Caltrans facility).

Major Project elements include:

- An overflow terrace at marsh elevation adjacent to the Baylands Preserve.
- Levee setback and improvements to widen the channel and increase levee height and stability between East Palo Alto and the Palo Alto Golf Course.
- Floodwalls in the upper reach downstream of East Bayshore Road.
- Extension of Friendship Bridge via a boardwalk across new marshland within the widened channel.

The majority of the Project elements would occur on properties in Palo Alto and East Palo Alto and owned by the City of Palo Alto; or within Santa Clara Valley Water District (District) or City of East Palo Alto rights-of-way.

The Project elements proposed to improve management of flood flows along the Creek from East Bayshore Road to San Francisco Bay include opening the Creek channel to flow in to the Baylands Preserve, reconfiguring levees, creating a marshplain terrace to convey high flows, installing floodwalls; widening of the Creek channel; and constructing access roads for maintenance purposes.

[1] The 100-year flood is more accurately referred to as the 1 percent annual exceedance probability flood because it is a flood that has a 1 percent chance of being equaled or exceeded in any single year. A 100-year flood has approximately a 63.4 percent chance of occurring in any 100-year period, not a 100 percent chance of occurring, but conversely could theoretically occur in consecutive years.

Scoping and Draft EIR Circulation

The District submitted the Notice of Preparation (NOP) for the Project to the State Clearinghouse on September 15, 2010. Two public scoping meetings were held in September 2010. To reach as many community members as possible, the first meeting (midday Wednesday, September 29, 2010) was held at the East Palo Alto Senior Center in East Palo Alto, and the second meeting (Thursday evening, September 30, 2010) was held at the International School of the Peninsula in Palo Alto. Both meetings were publicized through direct mailings to approximately 11,000 affected and interested households, offices, and agencies.

The SFCJPA circulated the Draft EIR for a 45-day public and agency review period, beginning on July 30, 2012 and concluding on September 13, 2012. The Draft EIR and Notice of Completion were transmitted to the State Clearinghouse on July 30, 2012. Bound hard copies of the Draft EIR were placed on reserve at several public venues, including the East Palo Alto Public Library, Palo Alto Public Library, and the SFCJPA's offices. The Draft EIR was also made available in electronic format online, via the District's website. Notice of the Draft EIR's availability was e-mailed to interested parties, including adjacent residents and other community members who had requested Project notification. Two public hearings to solicit comments on the Draft EIR were held at 6 p.m. on August 15 and August 29, 2012 at East Palo Alto City Hall (2415 University Avenue) in the East Palo Alto City Council Chambers.

Final EIR

The Final EIR for the proposed Project is on file in the SFCJPA's offices at 1020 Blossom Hill Road, Menlo Park, California. It is also available online at: www.sfcjpa.org. The Final EIR consists of the following materials: copies of all comments on the Draft EIR received by the SFCJPA; the SFCJPA's responses to those comments; and the complete text of the EIR, including revisions made in response to comments received. The Final EIR and all associated materials in the administrative record are incorporated herein by this reference.

Findings of Fact

Regarding the EIR prepared for the proposed Project, the SFCJPA finds as follows. The findings are summarized in Table 1.

Table 1. Impacts and Mitigation for the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project San Francisco Bay to Highway 101

Impact	Mitigation	Level of Impact After Mitigation [a,b] Construction	O&M
Aesthetics			
Impact AES1—Substantial Damage to Scenic Resources within a State Scenic Highway	No mitigation is required.	NI	NI
Impact AES2—Substantial Effect on a Scenic Vista	No mitigation is required.	LTS	LTS
Impact AES3—Alteration in Existing Visual Character or Quality of the Site and Its Surroundings	No mitigation is required.	LTS	LTS
Impact AES4—Creation of a New Source of Light or Glare	No mitigation is required.	LTS	NI
Air Quality			
Impact AQ1—Conflict with or Obstruction of Applicable Air Quality Plan	No mitigation is required.	LTS	n/a
Impact AQ2—Violation of Any Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation	Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction. Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction. Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction. Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents. Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns.	SU	n/a
Impact AQ3—Exposure of Sensitive Receptors to Substantial Pollutant Concentrations	Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction. Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction. Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction.	SU	n/a

Impact	Mitigation	Level of Impact After Mitigation [a,b] Construction	O&M
	Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents.		
	Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns.		
Impact AQ4—Creation of Objectionable Odors	Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction.	LTS/M	n/a
	Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction.		
	Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction.		
	Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns.		
Biological Resources			
Impact BIO1—Disturbance or Loss of Special-Status Plant Populations	Mitigation Measure BIO1.1—Conduct Botanical Surveys	LTS/M	NI
	Mitigation Measure BIO1.2—Confine Construction Disturbance and Protect Special-Status Plants during Construction		
	Mitigation Measure BIO1.3—Compensate for Loss of Special-Status Plants		
Impact BIO2—Disturbance, Injury, or Mortality of Western Pond Turtles	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training	NI	NI
	Mitigation Measure BIO2.2—Implement Survey and Avoidance Measures to Decrease Disturbance to Western Pond Turtles		
	Mitigation Measure BIO2.3—Daily Surveys and Monitoring of Construction Activities to Decrease Disturbance to Western Pond Turtles		
Impact BIO3—Disturbance of Nesting Migratory Birds and Raptors (Excluding Burrowing Owl)	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training	LTS/M	NI
	Mitigation Measure BIO3.1—Establish Buffer Zones for Nesting Raptors and Migratory Birds (Excluding Burrowing Owl)		

Impact	Mitigation	Level of Impact After Mitigation [a,b] Construction	O&M
Impact BIO4—Disturbance of Western Burrowing Owls and Habitat	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training	LTS/M	NI
	Mitigation Measure BIO4.1—Implement Survey and Avoidance Measures for Western Burrowing Owls Prior to Construction Activities		
Impact BIO5—Disturbance of California Clapper Rail and California Black Rail and Habitat	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training	LTS/M	LTS/M
	Mitigation Measure BIO5.1—Implement Survey and Avoidance Measures for California Clapper Rail and California Black Rail Prior to Construction Activities		
	Mitigation Measure BIO5.2—Produce and Implement Habitat Monitoring Plan for Habitat within the Faber Tract Prior to Construction Activities		
Impact BIO6—Disturbance of Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew and Habitat	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training	LTS/M	LTS/M
	Mitigation Measure BIO6.1—Implement Survey and Avoidance Measures for Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Prior to Construction		
Impact BIO7—Disturbance of California Least Tern and Western Snowy Plover and Habitat	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training	LTS/M	LTS/M
	Mitigation Measure BIO7.1—Implement Survey and Avoidance Measures for California Least Tern and Western Snowy Plover Prior to Construction Activities		
Impact BIO8—Disturbance of California Red-Legged Frog and San Francisco Garter Snake and Habitat	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training	LTS/M	NI
	Mitigation Measure BIO8.1—Implement Survey and Avoidance Measures for California Red-Legged Frog and San Francisco Garter Snake Prior to Construction Activities		
Impact BIO9—Disturbance of Steelhead Trout and Suitable Habitat	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training	LTS/M	NI
	Mitigation Measure BIO9.1—Implement Avoidance Measures for Steelhead Trout Prior to Construction Activities		
Impact BIO10—Temporary Degradation of Instream Habitat	No mitigation is required.	LTS	NI

Impact	Mitigation	Level of Impact After Mitigation [a,b] Construction	O&M
Impact BIO11—Disturbance or Loss of Riparian Habitat	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training Mitigation Measure BIO11.1—Identify and Protect Riparian Habitats Mitigation Measure BIO11.2—Restore Riparian Habitat	LTS/M	NI
Impact BIO12—Disturbance or Loss of State- or Federally Protected Wetlands	Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training Mitigation Measure BIO12.1—Avoid and Protect Jurisdictional Wetlands during Construction	LTS/M	NI
Impact BIO13—Loss of, or Damage to, Protected Trees	Mitigation Measure BIO13.1—Transplant or Compensate for Loss of Protected Landscape Trees, Consistent with Applicable Tree Protection Regulations Mitigation Measure BIO13.2—Protect Remaining Trees from Construction Impacts	LTS/M	NI
Cultural and Paleontological Resources			
Impact CR1—Effect of Ground Disturbance on Undocumented Cultural Resources, Including Human Remains	Mitigation Measure CR1.1—Conduct a Preconstruction Cultural Field Survey and Cultural Resources Inventory and Evaluation Mitigation Measure CR1.2—Conduct Worker Awareness Training for Archaeological Resources Prior to Construction	LTS/M	LTS/M
Impact CR2—Substantial Adverse Change to Historical Resources	No mitigation is required.	NI	NI
Impact PALEO1—Damage to Significant Paleontological Resources	Mitigation Measure Paleo1.1—Conduct a Preconstruction Paleontological Resources Field Survey and Paleontological Resources Inventory and Evaluation Mitigation Measure Paleo1.2—Conduct Worker Awareness training for Paleontological Resources Prior to Construction Mitigation Measure CR1.3—Stop Work Immediately if Buried Cultural Resources are Discovered Inadvertently	LTS/M	NI
Geology and Soils			
Impact GEO1—Exposure to Surface Fault Rupture Hazards	No mitigation is required.	LTS	LTS
Impact GEO2—Exposure to Seismic Groundshaking Hazards	No mitigation is required.	LTS	LTS

Impact	Mitigation	Level of Impact After Mitigation [a,b] Construction	O&M
Impact GEO3—Exposure to Seismically Induced Liquefaction Hazards	No mitigation is required.	LTS	LTS
Impact GEO4—Exposure to Landslide and Other Slope Failure Hazards	No mitigation is required.	LTS	LTS
Impact GEO5—Location on Unstable or Expansive Soil	No mitigation is required.	LTS	LTS
Impact GEO6—Soil Erosion and Loss of Topsoil	No mitigation is required.	LTS	LTS
Greenhouse Gas Emissions			
Impact GHG1—Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment	Mitigation Measure GHG1.1—Implement BAAQMD Best Management Practices for Construction	LTS/M	n/a
Impact GHG2—Conflict with an Applicable Plan, Policy, or Regulation Adopted for The Purpose of Reducing the Emissions of Greenhouse Gases	No mitigation is required.	LTS	n/a
Hazardous Materials and Public Health			
Impact HAZ1—Creation of Hazard through Transport, Use, or Disposal of Hazardous Materials	Mitigation Measure HAZ1.1—Preparation and Implementation of a Spill Prevention, Control, and Countermeasure Plan Mitigation Measure HAZ1.2—Require Proper Storage and Handling of Potential Pollutants and Hazardous Materials	LTS/M	LTS/M
Impact HAZ2—Exposure of Workers or the Public to Existing Hazardous Materials Contamination	Mitigation Measure HAZ2.1—Stop Work and Implement Hazardous Materials Investigations and Remediation in the Event that Unknown Hazardous Materials Are Encountered	LTS/M	LTS/M
Impact HAZ3—Generation of Hazardous Emissions/Use of Hazardous Materials within 0.25 Mile of Schools	However, Mitigation Measure HAZ1.1 requires all hazardous materials to be handled, stored, and used in a manner consistent with relevant regulations and guidelines.	LTS/M	LTS/M
Impact HAZ4—Located on a Site that is Included on a List of Hazardous Materials Sites	No mitigation is required.	LTS	LTS
Impact HAZ5—Create a Safety Hazard for People in the Project Area Due to the Proximity to an Airport	No mitigation is required.	LTS	LTS
Impact HAZ6—Interference with Emergency Response or Evacuation Plan	Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan	LTS/M	LTS
Impact HAZ7—Exposure of People or Structure to Risk of Wildland Fires	No mitigation is required.	NI	NI

Impact	Mitigation	Level of Impact After Mitigation [a,b] Construction	O&M
Impact HAZ8—Breeding or Harborage of Disease Vector Organisms	Mitigation Measure HAZ8.1—Prevent Mosquito Breeding during Project Construction	LTS/M	LTS/M
Hydrology and Water Resources			
Impact HWR1—Effects on Flood Hazards	Mitigation Measures HWR1.1—Design of Temporary Relocation of Storm Drainage Facilities during Construction Mitigation Measures HWR1.2—Design of Permanent Relocation of Storm Drainage Facilities	LTS/M (HWR1.1)	LTS/M (HWR1.2)
Impact HWR2—Effects on Groundwater Supply and Recharge	No mitigation is required.	LTS	LTS
Impact HWR3—Degradation of Water Quality	No mitigation is required.	LTS	LTS
Impact HWR4—Effects on Designated Beneficial Uses	No mitigation is required.	LTS	LTS
Land Use and Planning			
Impact LU1—Physical Division of an Established Community	No mitigation is required.	NI	NI
Impact LU2—Conflict with Applicable Plan, Policy, or Regulation	No mitigation is required.	LTS	LTS
Impact LU3—Conflict with Applicable Habitat Conservation Plan or Natural Communities Conservation Plan	No mitigation is required.	NI	NI
Noise and Vibration			
Impact NV1—Noise Levels in Excess of Applicable Standards	No mitigation is required.	LTS	LTS
Impact NV2—Excessive Groundborne Vibration Levels	Mitigation Measure NV2.1—Conduct Construction Vibration Monitoring and Implement Vibration Control Approach(es)	LTS/M	LTS
Impact NV3—Substantial Permanent Increase in Ambient Noise	No mitigation is required.	NI	LTS
Impact NV4—Substantial Temporary Increase in Ambient Noise	Mitigation Measure NV4.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents Mitigation Measure NV4.2—Implement Work Site Noise Control Measures	LTS/M	NI

Impact	Mitigation	Level of Impact After Mitigation [a,b] Construction	O&M
	Mitigation Measure NV4.3—Designate a Noise and Air Quality Disturbance Coordinator to Address Resident Concerns Mitigation Measure NV4.4—Install Temporary Noise Barriers		
Public Services			
Impact PS1—Adversely Affect Fire Protection Services or Require the Provision of New or Physically Altered Fire Protection Facilities	No mitigation is required.	LTS	LTS
Impact PS2—Adversely Affect Police Services or Require the Provision of New or Physically Altered Police Facilities	No mitigation is required.	LTS	LTS
Impact PS3—Adversely Affect Schools or Require the Provision of New or Physically Altered School Facilities	No mitigation is required.	NI	NI
Recreation			
Impact REC1—Result in the Need for Development of New Parks or Recreational Facilities, the Need for the Expansion of Existing Facilities, or the Increased Use of Existing Parks or Other Recreational Facilities, thereby Resulting in Substantial Physical Deterioration	No mitigation is required.	LTS	LTS
Impact REC2—Result in Reduced Availability of Existing Recreational Facilities or Uses	Mitigation Measure REC-1—Compensate the City of Palo Alto for the Conversion of 7.4 Acres of the Palo Alto Municipal Golf Course to Accommodate Project Features	LTS	SU
Traffic and Transportation			
Impact TT1—Potential to Conflict with an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System	No mitigation is required.	LTS	NI
Impact TT2—Potential to Conflict with an Applicable Congestion Management Program	No mitigation is required.	LTS	NI
Impact TT3—Potential to Create Traffic Safety Hazards	Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan	LTS/M	NI
Impact TT4—Potential to Obstruct Emergency Access	Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan	LTS/M	NI
Impact TT5—Potential to Conflict with Alternative Transportation	Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan	LTS/M	NI

Impact	Mitigation	Level of Impact After Mitigation [a,b] Construction	O&M
Utilities and Service Systems			
Impact UT1—Adversely Affect Water Supply, Water Treatment Facilities, Wastewater Treatment Facilities, Storm Drainage Facilities, or Gas or Electric Service	No mitigation is required.	LTS	NI
Impact UT2—Adversely Affect Landfill Capacities	No mitigation is required.	LTS	NI
Cumulative			
Air Quality (criteria pollutants)	Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction. Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction. Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction. Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents. Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns.	SU	n/a

[a] The greatest level of impact on any of the project elements is recorded here. Some project elements could sustain a lower level of impact than indicated.

[b] Impact level in increasing order.

B = Beneficial.
NI = No Impact.
LTS = Less Than Significant.
LTS/M = Less Than Significant with Mitigation.
SU = Significant and Unavoidable.

O&M = operations and maintenance.

Significant Impacts that Can Be Mitigated to a Less-than-Significant Level

AQ4— Creation of Objectionable Odors

Impact

Project construction activities could generate odors associated with diesel exhaust, paving activities, and other construction-related sources. Odors would be temporary and localized but could still result in disturbance, potentially rising to the level of a significant impact, for all Project elements, especially where construction takes place in close proximity to residences.

Mitigation

Odor impacts would be reduced to less-than-significant levels through *Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction*, which requires all construction contractors to implement the exhaust Basic Construction Mitigation Measures and Additional Construction Mitigation Measures recommended by the Bay Area Air Quality Management District (BAAQMD) to control exhaust emissions; *Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction*, which requires that all on-road heavy-duty diesel trucks with a gross vehicle weight rating of 19,500 pounds or greater used at the Project site will comply with U.S. Environmental Protection Agency (EPA) 2007 on-road emission standards for particulate matter less than 10 microns in diameter (PM10) and oxides of nitrogen (NO_X); *Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction*, which requires that the contractor's equipment used for directional drilling meet EPA Tier 2 or higher emissions standards, in addition to being outfitted with the best available control technology (BACT) devices certified by the California Air Resources Board (CARB) that achieve emissions reductions no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations; and *Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns*, which designates a representative to act as construction noise and air quality disturbance coordinator, responsible for resolving construction noise and air quality concerns.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures AQ2.1, AQ2.2, AQ2.3, and NV1.3 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to creation of objectionable odors during construction would be less than significant.

BIO1—Disturbance or Loss of Special-Status Plant Populations

Impact

For all Project elements, construction activities could damage or remove individuals of the following special-status species with potential to occur in the Project area: Alkali milkvetch, San Joaquin spearscale, Congdon's tarplant, Point Reyes bird's-beak, Hairless popcornflower, Slender-leaved

pondweed, California seablite, and/or Saline clover. However, it is unlikely that the Project would have any impact on Slender-leaved pondweed, if it is determined to be present. Substantial loss of individuals of any of these species as a result of construction disturbance (earthwork, staging activities, foot traffic, vehicle traffic, or other activity) or destruction of suitable habitat adjacent to an existing population could result in a significant impact on the species.

Mitigation

To ensure that significant impacts on special-status plants during Project construction are avoided if possible, and are compensated if they cannot be avoided, the SFCJPA will implement the following measures: *Mitigation Measure BIO1.1—Conduct Botanical Surveys, Mitigation Measure BIO1.2—Confine Construction Disturbance and Protect Special-Status Plants during Construction*, and *Mitigation Measure BIO1.3—Compensate for Loss of Special-Status Plants*.

Mitigation Measure BIO1.1 requires a qualified botanist to survey suitable habitat in the Project area for special-status plants during the appropriate blooming periods for each species, in accordance with the California Native Plant Society (CNPS) Botanical Survey Guidelines (California Native Plant Society 2001). *Mitigation Measure BIO1.2* would be implemented if it is determined that individuals of identified special-status plant species could be affected by construction traffic or activities, and it requires that construction disturbance be confined to the minimum area necessary to complete the work and is required to avoid encroachment on adjacent habitat. If deemed necessary by a qualified botanist, a species-appropriate buffer area determined in consultation with agency (California Department of Fish and Game [DFG] and U.S. Fish and Wildlife Service [USFWS]) staff will be protected from encroachment and damage during construction by installing temporary construction fencing. *Mitigation Measure BIO1.3* would be implemented if any individuals of listed special-status plants are present and cannot be effectively avoided through implementation of Mitigation Measure BIO1.2 and requires that the SFCJPA will develop and implement a compensation plan so that there is no net loss of special-status plants.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO1.1, BIO1.2, and BIO1.3 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance or loss of special-status plant populations during construction would be less than significant.

BIO2—Disturbance, Injury, or Mortality of Western Pond Turtles

Impact

In the Project area, levee lowering on the right bank, levee raising on the right bank, levee raising on the left bank and levee relocation, construction of the access road on the left bank, and modification to Friendship Bridge have the potential to disturb upland habitat adjacent to the freshwater pond in the Project area and could result in the loss of western pond turtle individuals or nests; this potential for disturbance and loss would represent a significant impact.

Mitigation

Impacts to western pond turtles would be reduced to less than significant by implementing *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training, Mitigation Measure BIO2.2—Implement Survey and Avoidance Measures to Decrease Disturbance to Western Pond Turtles*, and (if necessary) *Mitigation Measure BIO2.3—Daily Surveys and Monitoring of Construction Activities to Decrease Disturbance to Western Pond Turtles*.

Mitigation Measure BIO2.1 requires that prior to construction, Worker Awareness Training be conducted to inform construction workers of their responsibilities regarding sensitive environmental resources. *Mitigation Measure BIO2.2* requires that prior to the start of construction activities at Project element sites that could support western pond turtle, the SFCJPA retain a qualified biologist to conduct preconstruction surveys for western pond turtles in all suitable habitats in the vicinity of the work sites. If preconstruction surveys identify active nests, the biologist will establish no-disturbance buffer zones in consultation with DFG. If turtles are observed during the surveys, then *Mitigation Measure BIO2.3* will be implemented, which requires that SFCJPA retain a qualified biologist to conduct preconstruction surveys for western pond turtles in all suitable habitats in the vicinity of work sites that will be active within the 3 days prior to the onset of site preparation and construction activities with the potential to disturb turtles or their habitat. If a turtle is found during the daily preconstruction survey, construction in the vicinity of the turtle will not commence until the turtle is removed from the Project area to be relocated to suitable habitat outside of the Project limits per DFG protocols and permits.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1, BIO2.2, and BIO2.3 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance, injury, or mortality of western pond turtles during construction would be less than significant.

BIO3—Disturbance of Nesting Migratory Birds and Raptors (Excluding Burrowing Owl)

Impact

For all Project elements, heavy equipment and human activity during construction would increase noise in the vicinity of the work area, potentially resulting in disturbance of birds nesting and foraging in the area. If occupied nests are present on or adjacent to the construction area, construction activities could result in the abandonment of nests, the death of nestlings, and the destruction of eggs in active nests. Migratory birds, raptors, and their nests are protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Disturbance of nesting migratory birds or raptors thus represents a significant impact.

Mitigation

Implementation of *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training* described under BIO2 above, and *Mitigation Measure BIO3.1—Establish Buffer Zones for Nesting Raptors and Migratory Birds (Excluding Burrowing Owl)* would reduce the potential for impacts on

nesting raptors and migratory birds to less than significant. *Mitigation Measure BIO3.1* requires that prior to the start of construction activities that begin during the migratory bird nesting period (between January 15 and August 31 of any year), SFCJPA retain a qualified wildlife biologist to conduct a survey for nesting raptors and migratory birds that could nest along the Project corridor, and with the exception of raptor nests, inactive bird nests may be removed. If an active nest is discovered during these surveys, the qualified wildlife biologist will establish a no-disturbance buffer zone around the nest tree or nest in consultation with DFG, and construction will be stopped if necessary.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1 and BIO3.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of nesting migratory birds and raptors (excluding burrowing owl) during construction would be less than significant.

BIO4—Disturbance of Western Burrowing Owls and Habitat

Impact

Project elements with potential to affect this species include levee lowering on the right bank, levee raising on the left bank and levee relocation, construction of the floodwall on the left bank, construction of the downstream access road on the right bank, and construction of the upstream access road on the right bank. Construction activities within these Project element sites during the nesting period could result in direct injury or mortality, as well as disturbance impacts related to elevated noise and human presence. Impacts could be significant.

Mitigation

Implementation of *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training* described under Impact BIO2 above (western burrowing owl awareness will be included in the preconstruction worker awareness training required for all construction personnel) and *Mitigation Measure BIO4.1—Implement Survey and Avoidance Measures for Western Burrowing Owls Prior to Construction Activities* would reduce this impact to less than significant. *Mitigation Measure BIO4.1* requires that, prior to any construction activity, the SFCJPA retain a qualified wildlife biologist to conduct seasonally appropriate preconstruction surveys for burrowing owls. If any western burrowing owls are found within the disturbance area, or if any nesting western burrowing owls are found within 250 feet of the construction footprint, during the survey or at any time during the construction process, SFCJPA will notify DFG and will proceed under DFG direction. Any necessary buffers will be established in consultation with DFG.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1 and BIO4.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation.

With these measures in place, impacts related to disturbance of western burrowing owls and their habitat during construction would be less than significant.

BIO5—Disturbance of California Clapper Rail and California Black Rail and Habitat

Impact

Clapper rail and black rail are considered to have a high potential to be present in suitable habitat within and adjacent to the Project area. Disturbance of species and habitat could result from construction activities associated with the following Project elements: levee lowering on right bank, levee raising on right bank, construction of the floodwall on right bank, levee raising on left bank and levee relocation, construction of the floodwall on left bank, modification of Friendship Bridge, and all marshland restoration Project elements. In addition, maintenance of Project facilities identified as being in or near suitable habitat associated with levee lowering on right bank would have some potential to disturb California clapper rail and California black rail, and the project would result in spill flows into the Faber Tract, which while historically consistent with natural functions, have not occurred in at least 50 years due to the channelization of San Francisquito Creek. Thus, operation and maintenance impacts could be significant.

Mitigation

Implementation of *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training* described under Impact BIO2 above (California clapper rail and California black rail awareness will be included in the preconstruction worker awareness training required for all construction personnel), *Mitigation Measure BIO5.1—Implement Survey and Avoidance Measures for California Clapper Rail and California Black Rail Prior to Construction Activities*, and *Mitigation Measure BIO5.2—Produce and Implement Habitat Monitoring Plan for Habitat within the Faber Tract Prior to Construction Activities* would reduce disturbance on California clapper rail and California black rail to less than significant.

Mitigation Measure BIO5.1 states that work activities within 50 feet of California clapper rail habitat will not occur within 2 hours before or after extreme high tides (6.5 feet or above) when the marshplain is inundated. In addition, seasonally appropriate surveys will be conducted by a permitted biologist. During breeding season, if necessary, Project activities occurring within 500 feet of active nests will be postponed until after young have fledged. Outside breeding season, if necessary, no-disturbance buffer will be established, and no work will occur within the buffer until the biologist verifies that California clapper rail or California black rail individuals have left the area. If individuals are routinely observed in the work area, a species avoidance plan will be developed in coordination with USFWS and DFG. *Mitigation Measure BIO5.2* states that the SFCJPA or its approved designee will be responsible for the development and implementation of a habitat monitoring plan for existing (i.e., pre-Project) habitat within the Faber Tract that will document baseline conditions prior to Project implementation. Plan approval by USFWS and DFG will be necessary before implementation of activities recommended by the plan.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1, BIO5.1, and BIO5.2 are feasible and will adopt them as described in the Final EIR. These measures will be

incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of California clapper rail and California black rail and habitat during construction and operation and maintenance would be less than significant.

BIO6—Disturbance of Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew and Habitat

Impact

Construction activities occurring in the Project element sites could disturb salt marsh harvest mouse and salt marsh wandering shrew and habitat for the following Project elements: levee lowering on right bank, levee raising on right bank, construction of the floodwall on right bank, levee raising on left bank and levee relocation, construction of the floodwall on left bank, modification to Friendship Bridge, and all marshplain restoration Project elements. In addition, increasing in periodicity of fluvial inputs associated with the levee lowering on right bank could potentially result in habitat changes detrimental to salt marsh harvest mouse and salt marsh wandering shrew.

Mitigation

Implementation of *Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training* described under BIO2 above (salt marsh harvest mouse and salt marsh wandering shrew awareness will be included in the preconstruction worker awareness training required for all construction personnel), *Mitigation Measure BIO5.2—Produce and Implement Habitat Monitoring Plan for Habitat within the Faber Tract Prior to Construction Activities* (which is described under Impact BIO5 above), and *Mitigation Measure BIO6.1—Implement Survey and Avoidance Measures for Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Prior to Construction* would reduce these impacts to less than significant. *Mitigation Measure BIO6.1* requires that construction and maintenance work, including site preparation, be avoided to the extent possible within suitable habitat for these species during their breeding seasons (February 1 to November 30). As work during the species' breeding seasons will be necessary, a species avoidance plan will be developed and implemented in consultation with USFWS and DFG. In addition, vegetation clearing will be monitored by a permitted biologist, and appropriate measures will be taken if individuals are observed.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1, BIO5.2, and BIO6.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of salt marsh harvest mouse and salt marsh wandering shrew and habitat during construction and operation would be less than significant.

BIO7—Disturbance of California Least Tern and Western Snowy Plover and Habitat

Impact

Levee lowering on the right bank has potential to disturb California least tern and western snowy plover. Construction activities serving this Project element would occur near suitable habitat for these species and could disturb nesting or foraging individuals that could be present. Disturbance of nesting or foraging California least tern and western snowy plover would be a significant impact. In addition, because California least tern and western snowy plover have potential to occur in habitat in the Faber Tract, flooding from San Francisquito Creek associated with levee lowering on right bank and subsequent habitat alteration could affect these species as well. This habitat alteration would be significant.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training* described above under BIO2 (California least tern and western snowy plover awareness will be included in the preconstruction worker awareness training required for all construction personnel), *Mitigation Measure BIO7.1—Implement Survey and Avoidance Measures for California Least Tern and Western Snowy Plover Prior to Construction Activities*, and *Mitigation Measure BIO5.2—Produce and Implement Habitat Monitoring Plan for Habitat within the Faber Tract Prior to Construction Activities* (which is described under BIO5) would reduce this impact to less than significant. *Mitigation Measure BIO7.1* requires that construction work, including site preparation, will be avoided to the extent possible within and near (500 feet) suitable habitat for these species during their breeding seasons. In addition, prior to the initiation of work within 500 feet of suitable habitat (regardless of the time of year), a permitted biologist will be retained to conduct surveys of appropriate habitat for California least tern and western snowy plover and their nests, and Project activities will be postponed or appropriate buffers will be established, if necessary. If individuals are routinely observed in or within 500 feet of the work area or do not leave the work area, a species avoidance plan will be developed in coordination with USFWS and DFG.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1, BIO5.2, and BIO7.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of California least tern and western snowy plover and habitat during construction and operation would be less than significant.

BIO8—Disturbance of California Red-Legged Frog and San Francisco Garter Snake and Habitat

Impact

The following Project elements have potential to disturb California red-legged frog and San Francisco garter snake: levee lowering on right bank, levee raising on right bank, and levee raising on left bank and levee relocation. Construction activities for these Project elements would occur

near suitable habitat for California red-legged frog and San Francisco garter snake and could disturb individuals that might be present in the uplands and in the ponds. Such an effect could constitute a significant impact.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training* described above under BIO2 (California red-legged frog and San Francisco garter snake awareness will be included in the preconstruction worker awareness training required for all construction personnel) and *Mitigation Measure BIO8.1—Implement Survey and Avoidance Measures for California Red-Legged Frog and San Francisco Garter Snake Prior to Construction Activities* would reduce this impact to less than significant. *Mitigation Measure BIO8.1* requires that SFCJPA retain a permitted biologist to conduct a survey of the freshwater ponds and surrounding upland habitat prior to initiation of construction activities in accordance with applicable protocols, and buffer areas and/or a species avoidance plan will be developed in coordination with USFWS and DFG if needed.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1 and BIO8.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of California red-legged frog and San Francisco garter snake and habitat during construction would be less than significant.

BIO9—Disturbance of Steelhead Trout and Suitable Habitat

Impact

Construction activities for all Project elements would occur near suitable habitat for steelhead trout and could disturb individuals that could be present in San Francisquito Creek. Such an effect would be considered a significant impact.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training* (steelhead trout and habitat awareness will be included in the preconstruction worker awareness training required for all construction personnel) and *Mitigation Measure BIO9.1—Implement Avoidance Measures for Steelhead Trout Prior to Construction Activities* would reduce this impact to less than significant. *Mitigation Measure BIO9.1* requires that no in-channel construction activities will occur during the steelhead migration period, to reduce the likelihood that steelhead are present during construction activities, and a qualified fisheries biologist, approved by the National Marine Fisheries Service (NMFS), will survey the construction area 1 to 2 days before the Project begins. If no surface water is present in the immediate construction area, fish will not be relocated. If water is present, additional procedures will be implemented to capture and relocate fish as described in the Final EIR.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1 and BIO9.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of steelhead trout and suitable habitat during construction would be less than significant.

BIO11—Disturbance or Loss of Riparian Habitat

Impact

The only Project element that would affect riparian habitat is channel widening and marshplain creation and restoration in the upper reach of San Francisquito Creek in the Project area. Extensive trimming, pruning, or removal of riparian habitat could represent a significant impact.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training* (which is described under BIO2), *Mitigation Measure BIO11.1—Identify and Protect Riparian Habitats*, and *Mitigation Measure BIO11.2—Restore Riparian Habitat* would reduce impacts to less than significant by replacing any riparian areas permanently impacted. *Mitigation Measure BIO11.1* requires that the SFCJPA retain a qualified biologist or ecologist to survey and demarcate riparian habitat on or adjacent to the proposed areas of construction in the upper reach of San Francisquito Creek. Riparian areas not slated to accommodate Project construction will be protected from encroachment and damage during construction by installing temporary construction fencing to create a no-activity exclusion zone in accordance with International Society of Arboriculture tree protection zone recommendations and any additional requirements of the resource agencies with jurisdiction. *Mitigation Measure BIO11.2* makes the SFCJPA responsible for restoring permanently affected riparian habitat at a mitigation-to-impact ratio of 2:1, and restoring temporarily affected habitat at a minimum impact-to-mitigation ratio of 1:1 to ensure no net loss of riparian habitat in the affected stream reach. A Mitigation Monitoring Plan (MMP) will be developed in the context of the federal and state permitting processes under the Clean Water Act and California Fish and Game Code, and will include success criteria as specified by the permitting agencies.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1, BIO11.1, and BIO11.2 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of or loss of riparian habitat during construction and operation would be less than significant.

BIO12—Disturbance or Loss of State- or Federally Protected Wetlands

Impact

Levee and floodwall construction activities would temporarily and permanently affect diked marsh and tidal salt marsh habitat. Additionally, marshplain creation and restoration activities would temporarily affect tidal salt marsh habitat.

Mitigation

Implementation of *Mitigation Measures BIO2.1—Develop and Implement Worker Awareness Training,* which is described under BIO2, and *Mitigation Measure BIO12.1—Avoid and Protect Jurisdictional Wetlands during Construction* would minimize impacts on wetlands not within the grading footprint, including the low-flow channel, to less than significant. *Mitigation Measure BIO12.1* requires that a qualified resource specialist (biologist, ecologist, or soil scientist) clearly identify wetland areas outside of the direct impact footprint with temporary orange construction fencing before site preparation and construction activities begin at each site or will implement another suitable low-impact measure. Construction will not encroach upon jurisdictional wetlands identified by the wetland specialist.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO2.1 and BIO12.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of or loss of state- or federally protected wetlands during construction would be less than significant.

BIO13—Loss of, or Damage to, Protected Trees

Impact

Construction of all Project elements could damage and/or would remove protected tree species outside of riparian habitat. Damage to protected trees affecting their chances of survival and/or removal of any protected trees would be considered a significant impact. Note that removal of trees in riparian habitat is addressed and compensated separately under BIO11.

Mitigation

Implementation of *Mitigation Measure BIO13.1—Transplant or Compensate for Loss of Protected Landscape Trees, Consistent with Applicable Tree Protection Regulations* and *Mitigation Measure BIO13.2—Protect Remaining Trees from Construction Impacts* would reduce this impact to less than significant. *Mitigation Measure BIO13.1* requires that protected landscape trees slated for removal be transplanted or replaced as appropriate in accordance with a landscape plan. *Mitigation Measure BIO13.2* provides that trees not designated for removal will be protected from damage during construction by the installation of temporary fencing in a manner consistent with International Society of Arboriculture tree protection zone recommendations.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures BIO13.1 and BIO13.2 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to disturbance of, or damage to, protected trees during construction would be less than significant.

PALEO1—Damage to Significant Paleontological Resources

Impact

Project construction activities for all Project elements, such as excavations associated with channel widening and floodwall placement, could affect sensitive, previously undisturbed geologic units, potentially unearthing and damaging previously unknown paleontological resources or unique geologic features. According to available geologic maps, such sensitive native sediments, may exist on both sides of the channel nearest the upstream portion of the Project area. Any such disturbance could result in a significant impact on sensitive deposits potentially containing paleontological resources. The remainder of the Project site is in areas mapped as artificial fill and artificial levee deposits of varying depth. Should Project-related excavation extend below artificial fill, the Project could result in a significant impact on sensitive deposits underlying the artificial fill potentially containing paleontological resources.

Mitigation

Implementation of *Mitigation Measure Paleo1.1—Conduct a PreConstruction Paleontological Resources Field Survey and Paleontological Resources Inventory and Evaluation*; *Mitigation Measure Paleo1.2—Conduct Worker Awareness training for Paleontological Resources Prior to Construction;* and *Mitigation Measure CR1.3—Stop Work Immediately if Buried Cultural Resources are Discovered Inadvertently* would reduce impacts on paleontological resources to less than significant level. *Mitigation Measure Paleo1.1* requires that the SFCJPA retain qualified personnel to conduct a paleontological resources field survey to determine whether significant resources exist, and paleontological resources monitoring will be conducted if necessary. *Mitigation Measure Paleo1.2* requires that prior to the initiation of any site preparation and/or start of construction, all construction workers receive training overseen by a qualified professional paleontologist, to ensure that forepersons and field supervisors can recognize paleontological resources in the event that any are discovered during construction. *Mitigation Measure CR1.3* requires that if paleontological resources are discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the SFCJPA and other agencies as appropriate.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures Paleo1.2 and CR1.3 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation.

With these measures in place, impacts related to damage to significant paleontological resources during construction would be less than significant.

GHG1—Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

Impact

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting greenhouse gases (GHGs) during construction phases. Project operation would not generate any direct long-term, operational emissions, or contribute to indirect emissions. While not established as a construction threshold, construction-related emissions from the Project are slightly above the Bay Area Air Quality Management District's (BAAQMD) 1,100 metric ton operational threshold.

Mitigation

As discussed above, the BAAQMD's Air Quality Guidelines do not recommend a GHG emission threshold for construction-related emissions. However, they do recommend implementation of best management practices (BMPs) to help control and reduce GHG emissions. Implementation of the BAAQMD's BMPs is therefore required to reduce construction-related GHG emissions. Impact GHG1 is considered less than significant with implementation of *Mitigation Measure GHG1.1—Implement BAAQMD Best Management Practices for Construction*, which requires use of alternative fueled vehicles, local building materials, and construction waste recycling.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measure GHG1.1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment during construction would be less than significant.

HAZ1—Creation of Hazard through Transport, Use, or Disposal of Hazardous Materials

Impact

Construction of all Project elements would require the use of hazardous substances such as vehicle fuels, lubricants, and solvents. Improper storage and handling, including spills and releases, could result in exposure of the workers and the general public to toxins and carcinogens, a significant impact. In addition, Periodic activities required to maintain the new Project elements would require the use of vehicle fuels, lubricants, etc., and could also require solvents, paints, paving media, and other substances and would be similar to existing maintenance requirements. As for construction, improper storage and handling, including spills and releases, could result in exposure of the workers and the general public to toxins and carcinogens, a significant impact.

Mitigation

Implementation of *Mitigation Measure HAZ1.1—Preparation and Implementation of a Spill Prevention, Control, and Countermeasure Plan* and *Mitigation Measure* and *HAZ1.2—Require Proper Storage and Handling of Potential Pollutants and Hazardous Materials* would reduce this impact to less than significant. *Mitigation Measure HAZ1.1* requires that the project applicant prepare and implement a Spill Prevention, Control, and Countermeasure Plan before any construction activities begin; and *Measure HAZ1.2* requires that the storage and handling of potential pollutants and hazardous materials be in accordance with all local, state and federal laws and other requirements.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures HAZ1.1 and HAZ 1.2 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment during construction and maintenance would be less than significant.

HAZ2—Exposure of Workers or the Public to Existing Hazardous Materials Contamination

Impact

Due to current and historic uses of properties adjacent to the Project site, there is a possibility of undocumented soil and/or groundwater contamination that, if disturbed, could impact the Project site. This translates to some risk that construction workers or the public could be exposed to hazardous substances through disturbance during Project construction, potentially constituting a significant impact.

Mitigation

Any impacts would be reduced to a less-than-significant level by implementing *Mitigation Measure HAZ1.1—Preparation and Implementation of a Spill Prevention, Control, and Countermeasure Plan*, which is described above under HAZ1, and *Mitigation Measure HAZ2.1—Stop Work and Implement Hazardous Materials Investigations and Remediation in the Event that Unknown Hazardous Materials Are Encountered* would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures HAZ1.1 and HAZ2.1 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to exposure of workers or the public to existing hazardous materials contamination during construction would be less than significant.

HAZ3—Generation of Hazardous Emissions/Use of Hazardous Materials within 0.25 Mile of Schools

Impact

The upstream portion of the Project reach is located within 0.25 mile of the International School of the Peninsula. Because construction would require the use of a variety of hazardous substances, there would be some potential for exposure of students, school employees, and the public to hazardous materials. The same would be true for ongoing maintenance activities. This is a potentially significant impact for all Project elements.

Mitigation

This impact would be reduced to less than significant by implementing *Mitigation Measure HAZ1.1—Preparation and Implementation of a Spill Prevention, Control, and Countermeasure Plan*, which is described above under HAZ1.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measure HAZ1.1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to generation of hazardous emissions/use of hazardous materials within 0.25 Mile of schools during construction and maintenance would be less than significant.

HAZ6—Interference with Emergency Response or Evacuation Plan

Impact

For all Project elements, the presence of construction equipment and vehicles, worker activities, and materials storage would have the potential to impede emergency access to the Project site and/or interfere with emergency evacuation plans. This would also be true for maintenance activities, although to a lesser degree because fewer pieces of equipment and vehicles would typically be involved. This is a potentially significant impact.

Mitigation

Implementation of *Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan*, which requires contractors to develop and implement a traffic control plan for each construction site and would impose similar requirements for maintenance activities, would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measure *TT1* is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure

in place, impacts related to interference with an emergency response or evacuation plan during construction and maintenance would be less than significant.

HAZ8—Breeding or Harborage of Disease Vector Organisms

Impact

Construction of any of the Project elements has potential to create of expand the potential for mosquito breeding in the Project area, which would be a significant impact.

Mitigation

Mitigation Measure HAZ8.1—Prevent Mosquito Breeding During Project Construction, which requires that the SFCJPA ensure that standing water that accumulates on the construction site is gone within four days (96 hours) and that construction personnel will property dispose of unwanted or unused artificial containers and tires, would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measure HAZ8.1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to breeding or harborage of disease vector organisms during construction would be less than significant.

HWR1—Effects on Flood Hazards

Impact

For all Project elements, clear water diversions associated with Project construction have the potential to disrupt storm water flows within the Creek during significant storm events. Temporary relocation of storm drains would occur during the dry season. This is a potentially significant impact. In addition, the permanent alteration of storm drainage facilities as a result of new Project facilities (i.e., levees) could affect conditions during flood events. This impact has the potential to be significant if relocated storm drains are not designed to accommodate preconstruction flood flows.

Mitigation

Mitigation Measure HWR1.1—Design of Temporary Relocation of Storm Drainage Facilities during Construction states that temporary storm drainage design during construction will include the necessary review and assessment of alternative routes and ancillary facilities to ensure that they can safely accommodate the redirected flow to the same level of design and performance (i.e., storm drain capacity) as that of the existing facilities until such time that the original facilities are restored. Implementation of *Mitigation Measure HWR1.1* reduces construction impacts to less than significant. *Mitigation Measure HWR1.2—Design of Permanent Relocation of Storm Drainage Facilities* states that the permanent relocation of stormwater conveyance facilities would be designed so as not to alter the original outlet locations and internal routes. The design will include the necessary review and assessment of pipeline additions and ancillary facilities to ensure that they can safely accommodate flood flows to the same level of design and performance (i.e., storm drain capacity) as that of the

existing facilities. Implementation of *Mitigation Measure HWR1.2* reduces operational impacts to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures HWR1.1 and HWR1.2 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to flood hazards during construction and operation would be less than significant.

NV2—Excessive Groundborne Vibration Levels

Impact

For all Project elements, pile driving associated with Pacific Gas and Electric (PG&E) tower relocations is expected to exceed the thresholds at which vibration may become an annoyance and/or damage plaster-walled residential structures for homes within 50 feet of the proposed tower locations. In addition, vibration impacts may be significant for the first row of homes located within approximately 25 feet of the construction sites using heavy construction equipment that is not high-impact equipment.

Mitigation

Mitigation Measure NV2.1—Conduct Construction Vibration Monitoring and Implement Vibration Control Approach(es) would reduce this impact to less than significant. It requires that during periods of construction, SFCJPA retain a qualified acoustical consultant or engineering firm to conduct vibration monitoring at homes or occupied vibration-sensitive buildings to determine if the measured peak particle velocity (PPV) is in excess of 0.2 inches/second. If the threshold is exceeded, construction activity will cease and alternative methods of construction and excavation will be considered. In addition, if permitted, a preconstruction survey will be conducted that documents any existing cracks or structural damage at vibration-sensitive receptors by means of color photography or video, and a designated complaint coordinator (Mitigation Measure NV1.3) will be responsible for handling and responding to any complaints received during such periods of construction.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measure NV2.1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to excessive groundborne vibration levels during construction would be less than significant.

NV4—Substantial Temporary Increase in Ambient Noise

Impact

For all Project elements, construction activities could result in substantial short-term noise increases at noise-sensitive land uses that could rise to the level of a significant impact.

Mitigation

Implementation of *Mitigation Measure NV4.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents*, *Mitigation Measure NV4.2—Implement Work Site Noise Control Measures*, *Mitigation Measure NV4.3—Designate a Noise and Air Quality Disturbance Coordinator to Address Resident Concerns*, and *Mitigation Measure NV4.4—Install Temporary Noise Barriers* would reduce this impact to less than significant.

Mitigation Measure NV4.1 requires that SFCJPA provide advance written notification of the proposed construction activities to all residences and other noise- and air quality–sensitive uses within 750 feet of the construction site, including the name and contact information of the person responsible for ensuring that reasonable measures are implemented to address the problem. *Mitigation Measure NV4.2* requires that SFCJPA require all contractors to adhere to specific noise control measures. *Mitigation Measure NV4.3* states that SFCJPA will designate a representative to act as construction noise and air quality disturbance coordinator, responsible for resolving construction noise and air quality concerns. *Mitigation Measure NV4.4* requires that if a resident or school employee submits a complaint about construction noise, and SFCJPA is unable to reduce noise levels to below the significance threshold (exceeding 110 dBA at a distance of 25 feet) through other means, SFCJPA will install temporary noise barriers to reduce noise levels below the applicable construction noise standard, and work will be suspended until barriers are installed.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures NV4.1, NV4.2, NV4.3, and NV4.4 are feasible and will adopt them as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. With these measures in place, impacts related to substantial temporary increases in ambient noise during construction would be less than significant.

TT3—Potential to Create Traffic Safety Hazards

Impact

For all Project elements, the presence of large, slow-moving construction-related vehicles and equipment among the general-purpose traffic on roadways in the study area could result in safety hazards, which would be a significant impact.

Mitigation

To address the potential for safety hazards related to construction traffic, SFCJPA would implement *Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan,* which requires contractors to

develop and implement a traffic control plan for each construction site, would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measure TT1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to potential to create traffic safety hazards during construction would be less than significant.

TT4—Potential to Obstruct Emergency Access

Impact

At all Project work areas, construction would have the potential to affect emergency vehicle access. Construction-related traffic could also delay or obstruct the movement of emergency vehicles on local area roadways. This would be a potentially significant impact.

Mitigation

Implementation of *Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan*, which is described above under TT3, would include provisions to ensure unrestricted access and passage for emergency vehicles and would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measure TT1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to potential to obstruct emergency access during construction would be less than significant.

TT5—Potential to Conflict with Alternative Transportation

Impact

Construction of all Project elements would require closure of existing pedestrian and bicycle trails located on both sides of the Project portion of the Creek and Friendship Bridge. In addition, the support transit and/or bikeways on the designated truck routes of the Project could be interrupted by slow moving trucks. The impact on the alternative transportation would be temporary but significant.

Mitigation

Implementation of *Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan*, which is described above under TT3, would include provisions for maintaining safe, efficient passage for transit, bicyclists, and pedestrians and would reduce this impact to less than significant.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measure TT1 is feasible and will adopt it as described in the Final EIR. This measure will be incorporated into the Project construction documents (plans and specifications) to ensure its implementation. With this measure in place, impacts related to potential to conflict with alternative transportation during construction would be less than significant.

Significant Impacts that Cannot Be Fully Mitigated

AQ2—Violation of Any Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation

Changes or alterations have been required in, or incorporated into, the Project which mitigate the significant effects on the environment, but the SFCJPA finds that mitigation is unlikely to reduce NO_X emissions to a less than significant level (i.e., mitigation is unlikely to reduce NO_X emissions below BAAQMD daily emission threshold of 54 pounds per day [lbs/day]), and that no alternate or additional mitigation that would provide such a reduction has been identified as feasible. Consequently, the SFCJPA finds that a significant residual impact is likely during construction of some of the Project elements.

The following mitigation measures, as described in the Final EIR, will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation: *Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction*, *Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction*, *Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction*, *Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents*, *Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns*. The proposed mitigation measures represent all feasible, cost-effective mitigation measures to reduce exhaust emissions to be implemented by the construction contractor. Although the maximum emissions would be generated only when construction activities from all Project elements overlap and would likely to be short-term, the impact would still be significant and unavoidable with mitigation incorporated.

With implementation of all feasible mitigation, Project construction would generate daily emissions of NO_X exceeding the BAAQMD threshold for various Project components during all construction phases: Utility Relocation, Phase One, and Phase Two. During the Utility Relocation phase, gas line work and directional drilling would result in daily NO_X emissions of 65.71 lbs/day. During Phase One, construction of the new left bank levee and construction of the right bank levee would result in daily NO_X emissions of 110.45 and 94.63 lbs/day, respectively. During Phase Two, Conservative Scenario 1—overlap of gas line work, directional drilling, and construction of new left bank levee (Utility Relocation and Phase One) would result in daily NO_X emissions of 176.16 lbs/day. In addition, a second scenario was evaluated for Phase Two. Conservative Scenario 2— overlap of site prep, installation of right and left bank floodwalls, and flatbed trailer truck trips (Phase Two) would result in daily NO_X emissions of 68.45 lbs/day.

In summary, the SFCJPA has adopted mitigation (Measures AQ2.1, AQ2.2, AQ2.3, NV1.1, and NV1.3) that comprise all of the approaches identified as feasible to reduce criteria pollutant impacts

associated with construction of various Project elements. However, even with these measures in place, pollutant levels could intermittently be high enough to exceed BAAQMD thresholds. Any such exceedance would constitute a significant residual impact, and is considered unavoidable.

AQ3—Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Changes or alterations have been required in, or incorporated into, the Project which mitigate the significant effects on the environment, but the SFCJPA finds that mitigation is unlikely to reduce Toxic Air Contaminant (TAC) emissions to a less-than-significant level (i.e., mitigation is unlikely to reduce TAC emissions below BAAQMD daily emission thresholds: annual PM2.5 concentration of 0.3 micrograms per cubic meter [$\mu g/m^3$], cumulative diesel particulate matter [DPM] cancer risk of 100 per million, and cumulative average annual PM2.5 concentration of 0.8 $\mu g/m^3$), and that no alternate or additional mitigation that would provide such a reduction has been identified as feasible. Consequently, the SFCJPA finds that a significant residual impact is likely during construction of some of the Project elements.

The following mitigation measures, as described in the Final EIR, will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation: *Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction*, *Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction*, *Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction*, *Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents*, *Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns*. The proposed mitigation measures represent all feasible, cost-effective mitigation measures to reduce exhaust emissions to be implemented by the construction contractor.

With implementation of all feasible mitigation, Project construction would generate daily emissions of PM2.5 and DPM exceeding the BAAQMD threshold for various Project elements during all construction phases: Utility Relocation, Phase One, and Phase Two. During the Utility Relocation phase, construction of Shoofly Towers (T1-4) and gas line work/directional drilling would result in annual PM2.5 concentrations of 0.65 and 0.40 $\mu g/m^3$, respectively. During Phase One, site preparation would result in an annual PM2.5 concentration of 0.46 $\mu g/m^3$; construction of new left bank levee would result in an annual PM2.5 concentration of 0.52 $\mu g/m^3$; modifications to Friendship Bridge would result in an annual PM2.5 concentration of 0.35 $\mu g/m^3$; and channel widening and marsh plain terracing would result in an annual PM2.5 concentration of 1.57 $\mu g/m^3$, cumulative DPM cancer risk of 141.83/million, and cumulative average annual PM2.5 concentration of 2.45 $\mu g/m^3$. During Phase Two, site preparation would result in a cumulative DPM cancer risk of 139.77/million and a cumulative average annual PM2.5 concentration of 1.13 $\mu g/m^3$; installation of right and left bank floodwalls would result in an annual PM2.5 concentration of 3.46 $\mu g/m^3$, cumulative DPM cancer risk of 149.23/million, and a cumulative average annual PM2.5 concentration of 4.35 $\mu g/m^3$; construction of upstream access road on right and left banks would result in a cumulative DPM cancer risk of 139.83/million and a cumulative average annual PM2.5 concentration of 1.18 $\mu g/m^3$; Conservative Scenario 1—overlap of gas line work, directional drilling and construction of new left bank levee (Utility Relocation and Phase One) — would result in an annual PM2.5 concentration of 0.9 $\mu g/m^3$, a cumulative DPM cancer risk of 0.6/million, and a cumulative average annual PM2.5 concentration of 0.9 $\mu g/m^3$; Conservative Scenario 2—overlap of site prep, installation of right and left bank floodwalls, and Flatbed trailer truck trips (Phase Two) —

would result in an annual PM2.5 concentration of 3.7 µg/m^3, a cumulative DPM cancer risk of 149.3/million, and a cumulative average annual PM2.5 concentration of 4.6 µg/m^3.

In summary, the SFCJPA has adopted mitigation (Measures AQ2.1, AQ2.2, AQ2.3, NV1.1, and NV1.3) that comprise all of the approaches identified as feasible to reduce impacts associated with TAC emissions during construction of various Project elements. However, even with these measures in place, TAC levels could intermittently be high enough to exceed BAAQMD thresholds. Any such exceedance would constitute a significant residual impact, and is considered unavoidable.

REC2—Result in Reduced Availability of Existing Recreational Facilities or Uses

Changes or alterations have been required in, or incorporated into, the Project which mitigate the significant effects on the environment. The Project would relocate the levee on the left bank of San Francisquito Creek inland from its existing location, thereby widening the Creek and cutting through a portion of the Golf Course. To accommodate the new levee footprint and maintain playability of the course, holes 12 through 15 (which are adjacent to the Creek) and certain holes among the remaining fourteen holes would need to be reconfigured on a timetable to be determined by the City of Palo Alto. The total area of the Golf Course to be permanently incorporated into the Project is 7.4 acres. The converted portion of the Golf Course would remain dedicated parkland, but would be permanently converted from Golf Course use to open space as part of the Project. However, it is feasible to reconfigure the Golf Course design in order to maintain or improve the Golf Course's Professional Golfers' Association (PGA) rating and its playability. *Mitigation Measure REC-1—Compensate the City of Palo Alto for the Conversion of 7.4 Acres of the Palo Alto Municipal Golf Course to Accommodate Project Features* requires SFCJPA to provide monetary compensation to the City of Palo Alto to offset the costs of reconfiguring the Golf Course to maintain its PGA regulation status. Implementation of the proposed mitigation measure REC-1 would reduce permanent impacts on the Golf Course to a less-than-significant level.

However, *those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency* because implementation of the mitigation measure is outside SFCJPA's jurisdiction and fulfillment cannot be guaranteed. Therefore, a significant and unavoidable impact on the Golf Course is assumed. SFCJPA is committed to fulfilling the conditions described in Mitigation Measure REC-1.

In summary, the SFCJPA has adopted Mitigation Measure REC-1 that comprises all of the approaches identified as feasible to reduce impacts associated with the permanent incorporation of 7.4 acres of the Golf Course into the Project. However, even with this measure in place, because implementation of the mitigation measure is outside SFCJPA's jurisdiction and fulfillment cannot be guaranteed, a significant and unavoidable impact is assumed.

Contributions to Cumulative Impacts

Air Quality (Criteria Pollutants)

Impact and Project Contribution

The San Francisco Bay Area Air Basin is a nonattainment area for the federal 8-hour ozone standard, the state 1-hour ozone standard, and the state PM10 and PM2.5 standards; this represents a

significant existing cumulative impact on air quality. Construction of the proposed project would temporarily increase emissions of ozone precursors, such as NO_X. The BAAQMD has established emissions thresholds which it believes a project's individual operational criteria pollutant emissions would be cumulatively considerable. Therefore, it considers the project-level criteria pollutant thresholds to address both project-level and cumulative impacts (Bay Area Air Quality Management District 2011). The Project's construction emissions were estimated to exceed the BAAQMD daily emission threshold for NO_X. Therefore, construction-related tailpipe emissions are expected to constitute a considerable contribution to existing cumulative air quality degradation, notwithstanding the mitigation incorporated into the Project above.

Mitigation

Implementation of Mitigation Measures AQ2.1 through AQ2.3 and Mitigation Measures NV1.1 and NV1.3 discussed above would reduce NO_X emissions, but BAAQMD's NO_X thresholds would still be exceeded. Therefore, the project's construction activities on cumulative air quality impacts are expected to be significant and unavoidable.

Finding

Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment. SFCJPA finds that Mitigation Measures AQ2.1 through AQ2.3 and Mitigation Measures NV1.1 and NV1.3 are feasible and will adopt these measures as described in the Final EIR. These measures will be incorporated into the Project construction documents (plans and specifications) to ensure their implementation. However, even with this measure in place, the Project is expected to have a cumulatively considerable contribution to regional air quality degradation.

Alternatives to Project as Proposed

The SFCJPA certifies the following with regard to the alternatives analyzed in the EIR, as discussed in more detail below.

- The EIR describes a reasonable range of alternatives to the Project as proposed.
- The SFCJPA has evaluated the comparative merits of the alternatives and rejected them in favor of the proposed Project.

Alternatives Analyzed in EIR

CEQA requires EIRs to evaluate a reasonable range of alternatives to the proposed project, focusing on alternatives that appear to be feasible, would meet the project objectives, and would avoid or substantially lessen at least one of the proposed project's significant environmental effects. EIRs must also analyze the No Project Alternative. The Draft EIR analyzed two alternatives advanced from the preliminary alternatives analysis in addition to the Project as proposed: Alternative 3 (Golf Course Bypass) and the No Project Alternative.

Findings Regarding the Alternatives

Specific economic, legal, social, or other considerations make infeasible the alternatives identified in the EIR.

Alternative 3 (Golf Course Bypass) includes in-channel marshplain terraces, similar to the Project and a large bypass channel extending across the center of the Golf Course. It does not include levee setbacks in either the middle or upper reaches as set forth in the Project. The differentiating feature of Alternative 3 is a large bypass channel extending from south to north through the center of the Golf Course. This bypass reach would intersect the existing channel just downstream of the Baylands Athletic Center and reconnect with the main channel near the airport runway. During both normal daily flows and fluvial flood events, a portion of upstream flows would be diverted through the bypass channel, therefore significantly reducing water levels in the middle reach and conveying a large percentage of flows away from the residences of East Palo Alto. Maintenance and operations of Alternative 3 would be identical to those of the Project. Although Alternative 3 would accomplish Project goals and objectives and reduce impacts on several resources, Alternative 3 would result in greater impacts in multiple resource areas and in the severity of the impacts to those resource areas. Consequently, the proposed Project was identified as environmentally superior, and Alternative 3 was rejected. The No Project Alternative would avoid numerous significant impacts identified for the proposed Project, but would not accomplish the Project's identified goal and objectives. As such, it cannot effectively substitute for the Project, and is rejected.

No Recirculation of the EIR is Required

The changes and new information provided in the Final EIR consist of the following.

- Clarifications to the Draft EIR analysis in response to comments received.
- Minor revisions to mitigation measures in response to comments received.
- Corrections of typographic and editorial errors.

This new information does not include identification of new significant impacts associated with the Project or mitigation measures, or new Project alternatives or mitigation measures that warrant consideration.

SFCJPA finds that the new information added to the Final EIR merely clarifies, amplifies, or makes insignificant modifications in an adequate EIR and is not "significant" within the meaning of CEQA Guidelines Section 15088.5. SFCJPA further finds that incorporating the new information and corrections does not deprive the public of a meaningful opportunity to comment on the Project or its effects, and that no information has been added to the Final EIR that would warrant recirculation pursuant to Public Resources Code Section 21092.1. This finding is based on all the information presented in the Final EIR and the record of proceedings.

Mitigation, Monitoring, and Reporting Plan

As part of the accompanying resolution SFCJPA is also approving a Mitigation, Monitoring, and Reporting Plan (MMRP) pursuant to Public Resources Code Section 21081.6. The MMRP, which is found in Appendix F of the Final EIR and is incorporated herein by this reference, is designed to

enable, ensure, and document compliance with the mitigation measures imposed to avoid or substantially lessen the Project's environmental impacts as documented in the Final EIR.

Statement of Overriding Considerations

As described in the Background section, flooding from the Creek is a common occurrence and the most recent flood event in February 1998 affected approximately 1,700 residential, commercial, and public structures and caused more than $28 million in property damages. The maximum instantaneous peak flow recorded during the February 1998 event was 7,200 cfs. The USACE estimates that the 1998 flood was a 45-year flood event. A 100-year flood event is anticipated to result in flows of 9,400 cfs at the mouth of the Creek, and these flows would exceed the existing capacity of the Creek (San Francisquito Creek Joint Powers Authority 2009).

Protection from the 100-year flood (1percent flood protection) is the currently accepted standard for flood protection works, and the Project is being designed specifically to meet a goal of providing 1 percentflood protection for residents and businesses along the San Francisquito Creek corridor. Its specific objectives include the following.

- Protect properties and infrastructure between East Bayshore Road and the San Francisco Bay from Creek flows resulting from 100-year fluvial flood flows occurring at the same time as a 100-year tide that includes projected sea level rise through 2067.
- Accommodate future flood protection measures that might be constructed upstream of the Project.
- Enhance habitat along the Project reach, particularly habitat for threatened and endangered species.
- Enhance recreational uses.
- Minimize operational and maintenance requirements.

Construction of the Project as proposed would likely result in significant and unavoidable effects on air quality associated with construction of various Project elements during all Project phases and significant and unavoidable effects related to reduced availability of existing recreational facilities due to the permanent incorporation of 7.4 acres of the Golf Course into the Project. The SFCJPA has committed to all feasible mitigation to reduce these impacts, but the residual impact on air quality is still likely to be significant, and implementation of the mitigation measure for recreation impacts is outside SFCJPA's jurisdiction and fulfillment cannot be guaranteed. No additional feasible mitigation is available.

In consideration of the existing flood risks along San Francisquito Creek associated with lack of adequate capacity in the Creek channel, and the analysis of Project outcomes presented in the Final EIR, SFCJPA finds that the economic, social, and environmental benefits of meeting the Project's flood protection goals and objectives outweigh the significant and unavoidable air and recreation impacts associated with the Project's construction and operation.

References Cited

Bay Area Air Quality Management District. 2011. California Environmental Quality Act Air Quality Guidelines. June. San Francisco, CA.

California Native Plant Society. 2001. Botanical Survey Guidelines of the California Native Plant Society. (Originally published on December 9, 1983; revised on June 2, 2001.) *Fremontia* 29:3–4.

San Francisquito Creek Joint Powers Authority. 2009. *San Francisquito Creek Flood Reduction Alternatives Analysis.* Prepared by Philip Williams & Associates, Ltd., San Francisco, CA and H.T. Harvey and Associates.

Agenda Item 5.a.

S.F. Bay – Highway 101 Project Approval

Documents mentioned in Resolution 13-07-25, Sections 4, 5, and 6

DRAFT

NOTICE OF DETERMINATION

Approval Date:	July 25, 2013
State Clearinghouse No.	2010092048
Project Title:	**San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, San Francisco Bay to Highway 101**
Project Location:	Unincorporated San Mateo and Santa Clara Counties/ Cities of East Palo Alto, Menlo Park, Palo Alto, Portola Valley, and Woodside (see attached map)
Lead Agency:	San Francisquito Creek Joint Powers Authority
Staff Contact:	Kevin Murray (650-324-1972)
Project Sponsor:	San Francisquito Creek Joint Powers Authority
Sponsor Contact:	Kevin Murray (650-324-1972)

To: Clerk-Recorder's Office
County of Santa Clara
East Wing, First floor
70 West Hedding Street
San Jose, CA 95110

State of California
Office of Planning and Research
P.O. Box 3044
Sacramento, CA 95812-3044

County Clerk - Assessor - Recorder - Elections
County of San Mateo
555 County Center
Redwood City, CA 94063-1665

Pursuant to the California Environmental Quality Act (CEQA), the Guidelines of the Secretary for Resources (CEQA Guidelines), and Santa Clara County and San Mateo County requirements, this Notice of Determination is transmitted to you for filing. At the end of the posting period, please return this Notice to the Staff Contact with a notation of the period it was posted.

Attached fee:

X $50 processing fee (Santa Clara County) **AND** X $2,969.00 EIR Fee (DFW)

X $50 processing fee (San Mateo County)

PROJECT DESCRIPTION:

The San Francisquito Creek Joint Powers Authority's Board of Directors (Board) approved the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, San Francisco Bay to Highway 101 (Project) by Resolution Number 13-07-25 on July 25, 2013. The Project as approved by the Board is described as follows.

The Project would construct flood reduction facilities along an approximately 1.5-mile stretch of San Francisquito Creek from East Bayshore Road to the San Francisco Bay. The Project would protect properties and infrastructure between East Bayshore Road and the San Francisco Bay from San Francisquito Creek (Creek) flows resulting from 100-year fluvial flood flows occurring at the same time as a 100-year tide that includes projected sea level rise through 2067; accommodate future flood protection measures that might be constructed upstream of the Project; enhance habitat along the Project reach, particularly habitat for threatened and endangered species; enhance recreational uses; and minimize operational and maintenance requirements.

The Project would consist of the following major elements:

- An overflow terrace at marsh elevation adjacent to the Baylands Preserve.
- Levee setback and improvements to widen the channel and increase levee height and stability between East Palo Alto and the Palo Alto Golf Course.
- Floodwalls in the upper reach downstream of East Bayshore Road.
- Extension of Friendship Bridge via a boardwalk across new marshland within the widened channel.

The majority of the Project elements would occur on properties in Palo Alto and East Palo Alto and owned by the City of Palo Alto; or within Santa Clara Valley Water District (District) or San Mateo County rights-of-way.

DETERMINATION:

1. The San Francisquito Creek Joint Powers Authority decided to carry out or approve the Project on July 25, 2013 (Resolution Number 13-07-25).

2. A Final Environmental Impact Report (Final EIR) was prepared and, prior to approval of the Project, was certified on October 25, 2012 pursuant to CEQA (Resolution Number 12-10-25A).

3. A determination was made that the Project in its approved form will have a significant effect on the environment and findings were made pursuant to the provisions of CEQA and State CEQA Guidelines, and a Statement of Overriding Considerations was adopted.

4. Mitigation measures were made a condition of Project approval and a Mitigation Monitoring and Reporting Program was adopted.

This is to certify that the Final EIR and the record of Project approval are available to the public at: San Francisquito Creek Joint Powers Authority, 615 B Menlo Avenue, Menlo Park, CA 94025.

Chapter 2
Project Description

This chapter describes the Project, including information on the Project background, purpose and need, ~~components~~elements, construction, maintenance, and required permits and approvals.

2.1 Project Location and Setting

Project Location

The San Francisquito Creek watershed encompasses a 45-square-mile basin, extending from Skyline Boulevard to San Francisco Bay. The watershed includes public and private lands in the Cities of East Palo Alto, Menlo Park, Palo Alto, Portola Valley, and Woodside; the unincorporated areas of San Mateo and Santa Clara counties; and Stanford University. The San Francisquito Creek floodplain, which has almost no overlap with the watershed, comprises almost 5 square miles.

San Francisquito Creek represents the boundary between San Mateo and Santa Clara counties in the lower watershed. The last relatively unaltered urban creek system in the South Bay, San Francisquito Creek begins at the confluence of Corte Madera Creek and Bear Creek, just below Searsville Lake in Stanford University's Jasper Ridge Biological Preserve. The mouth of the Creek opens to the San Francisco Bay adjacent to Palo Alto Airport of Santa Clara County (Palo Alto Airport) to the south and the Baylands Nature Preserve to the north. The system contains more than 71 miles of creek bed; the mainstem is approximately 14 miles long. The Project is focused on the mainstem of the Creek.

Figure 2-1 shows the Project location.

Project Setting

The Creek is located within the District's Lower Peninsula Watershed and San Mateo County's San Francisquito Creek Flood Control Zone. The City of Palo Alto and Stanford University border the Creek on the southeast; the Cities of Menlo Park and East Palo Alto border the Creek to the northwest.

For description purposes, the Project is divided into three reaches. A *reach* is a continuous part of the Creek between two specified points. The Project reach as a whole is from San Francisco Bay to East Bayshore Road. The *lower reach* is from San Francisco Bay to Friendship Bridge, the *middle reach* from Friendship Bridge to Daphne Way, and the *upper reach* from Daphne Way to East Bayshore Road. Additionally, the *right* bank refers to the San Mateo County (East Palo Alto) side of the Creek and the *left* bank refers to the Santa Clara County (Palo Alto) side of the Creek. Figure 2-2 shows the Project reaches and identifies the left and right banks.

Land uses adjacent to the Project include protected open space, residential, light industrial, and recreational. The right bank of the Project reach is bordered by residences and by tidal salt marsh; the left bank of the Project reach is bordered by businesses, the International School of the

Peninsula, the United States Postal Service (USPS) facility, the Baylands Athletic Center, the Palo Alto Municipal Golf Course (Golf Course), and Palo Alto Airport.

2.2 Project Purpose and Need

The Project would ultimately improve channel capacity for creek flows coupled with the influence of the tides of San Francisco Bay, including projected Sea Level Rise (SLR), from the downstream face of East Bayshore Road to San Francisco Bay. It would reduce local fluvial flood risks in the Project area during storm events, provide the capacity needed for future upstream improvements, increase and improve ecological habitat, and provide for improved recreational opportunities.

Goals and Objectives

The Project's goals are to improve flood protection, habitat, and recreational opportunities within the Project reach, with the following specific objectives:

- Protect properties and infrastructure between East Bayshore Road and the San Francisco Bay from Creek flows resulting from 100-year fluvial flood flows occurring at the same time as a 100-year tide that includes projected Sea Level Rise through 2067.
- Accommodate future flood protection measures that might be constructed upstream of the Project.
- Enhance habitat along the Project reach, particularly habitat for threatened and endangered species.
- Enhance recreational uses.
- Minimize operational and maintenance requirements.

2.3 ~~Components~~Elements of the Proposed Project

Increasing the Creek's capacity from San Francisco Bay to East Bayshore Road would be achieved by:

- Degrading a portion of an unmaintained levee downstream of Friendship Bridge to allow flood flows from the Creek channel into the Palo Alto Baylands Preserve north of the Creek.
- Excavating sediment deposits within the channel to maximize conveyance.
- Rebuilding levees and relocating a portion of the southern levee to widen the channel to reduce influence of tides and increase channel capacity.
- Constructing floodwalls in the upper reach to increase capacity and maintain consistency with Caltrans' enlargement of the U.S. 101/East Bayshore Road Bridge over San Francisquito Creek (Caltrans facility).

Major ~~project~~Project elements include:

- An overflow terrace at marsh elevation adjacent to the Baylands Preserve.
- Levee setback and improvements to widen the channel and increase levee height and stability between East Palo Alto and the Palo Alto Golf Course.
- Floodwalls in the upper reach downstream of East Bayshore Road.
- Extension of Friendship Bridge via a boardwalk across new marshland within the widened channel.

The majority of the Project elements would occur on properties in Palo Alto and East Palo Alto and owned by the City of Palo Alto; or within District or City of East Palo Alto rights-of-way.

The Project ~~components~~elements proposed to improve management of flood flows along the Creek from East Bayshore Road to San Francisco Bay include opening the Creek channel to flow in to the Baylands Preserve, reconfiguring levees, creating a marshplain terrace to convey high flows, installing floodwalls; widening of the Creek channel; and; constructing access roads for maintenance purposes. Project ~~components~~elements are summarized below in Table 2-1. A detailed overview of each ~~project~~Project component is provided in the sections that follow.

Table 2-1. Summary of Project ~~Components~~Elements

Project Component	Description
Levee and floodwall construction	
Levee lowering on right bank	From the mouth of the Creek at San Francisco Bay to 200 feet downstream of the existing Friendship Bridge. This would allow floodwaters to flow into the Baylands north of San Francisquito Creek.
Levee raising on right bank	From the O'Connor Pump Station tie-in near Friendship Bridge to the floodwall.
Floodwall on right bank	The right floodwall would extend from just downstream of Daphne Way to the end of the Project reach where it would connect with the Caltrans U.S. 101/East Bayshore Road facility.
Levee raising on left bank and levee relocation	Levee relocation of the middle reach and a small portion of the upper and lower reaches. The levee would be relocated inland (currently occupied by the Golf Course), creating space on the left bank for a marshplain terrace. Except for a section around the eastern footings of Friendship Bridge, the existing levee along this stretch would be removed.
Floodwall on left bank	The left floodwall would extend from the end of the left levee, along the streambed, around the Palo Alto Pump Station, to the end of the Project reach where it would connect with the Caltrans facility.
Downstream access road on right bank	The right bank downstream access road would be approximately 16 feet wide and extend from the crown of the right levee to street level to just downstream of Daphne Way.
Upstream access road on right bank	The right bank upstream access road would be approximately 12 feet wide and would extend from just downstream of Verbena Drive to the Caltrans facility at East Bayshore Road.

Project Component	Description
Access road on left bank	The left bank access road would be generally 12 feet wide and would extend from a point downstream of the International School of the Peninsula to the Palo Alto Pump Station. The access road would also be used as a public trail within the City of Palo Alto and would connect to the Baylands Athletic Center.
Friendship Bridge	The existing Friendship Bridge would be retained and extended as a boardwalk from the retained eastern footing across the new marshplain terrace to the relocated left bank levee.
Marshplain restoration	
Downstream of Friendship Bridge on right bank	High-marsh and transitional vegetation would be planted from the edge of the Creek channel to the toe of the levee from just upstream of San Francisco Bay to just downstream of Friendship Bridge.
Upstream of Friendship Bridge on right bank	High-marsh and transitional vegetation would be planted from the edge of the Creek channel to the toe of the levee from just upstream of Friendship Bridge to East Bayshore Road.
Left bank	High-marsh and transitional vegetation would be planted from the edge of the Creek channel to the base of the floodwall or the toe of the levee. In this area the marsh would be planted adjacent to the toe of the cut-and-fill area. The marsh would extend from the point at which the new levee would diverge inland from the existing levee to East Bayshore Road.

Levee, Floodwall, and Access Road Construction

Construction of Project elements would likely occur in two phases. While all Project elements could be constructed at one time if sufficient funding was secured, the two-phase construction methodology is conservatively assumed to be the preferred construction approach. A summary of the anticipated construction methodology, the proposed starting date and duration of each activity, and the equipment to be used during each phase is listed in Table 2-2.

Table 2-2. Summary of Construction Methodology, Timing, and Equipment

Project Component	Proposed Starting Date	Activity	Proposed Duration	Equipment
Utility Relocation				
PG&E Electricity Transmission	12/2012	Site and road preparation: Trees and brush trimmed in work areas	2 weeks	1 dump truck 1 grader 1 four-door pickup
	12/2012	Wood pole relocation	4 weeks	1 flat-bed truck 3 four-door pickups 3 bucket trucks 3 line trucks 1 rope truck 1 tensioner (on a trailer)
	1/2013	Demolition of wood poles and secondary wire removal	6 days	
	1/2013	Construction of shoo-fly tower at T3	2 weeks	1 pickup 1 four-door pickup 1 2-ton tool truck with air compressor 1 dump truck 1 70-ton crane 1 caterpillar (pile driver) 1 back hoe 1 concrete truck 1 pump truck
	2/2013	Tower raises (T1 and T4)	2 weeks (1 week per tower)	
	3/2013	New tower construction and demolition of T2	4 weeks	
	3/2013	Demolition of shoo-fly	1 day	
	4/2013	Gas line work	4 weeks	2 4-door pickups 1 backhoe 2 flatbed truck
	4/8/2013	directional drilling	2 weeks	1 directional drill rig
PG&E Gas Transmission	4/18/2013	export of material	1 week	2 dump trucks 1 flatbed truck
	4/25/2013	concrete	2 days	1 concrete truck
	4/27/2013	Demobilization	1 week	2 4-door pickups 1 flatbed truck
Phase One—Levees and Excavation				
Site Preparation	1/2013	Mobilization Tree Removal Clearing and Grubbing Stripping Demolition	6 weeks	4 four-door pickups 1 backhoe 1 loader 1 jackhammer 1 flat-bed truck
Construction of new left bank levee	4/2013	Site excavation Levee construction Seeding for erosion control	5 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4–6 dump trucks (20 cy each) 2 water trucks

Project Component	Proposed Starting Date	Activity	Proposed Duration	Equipment
Removal of old left bank levee	6/2013	Site excavation	3 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4–6 dump trucks (20 cy each) 2 water trucks
Removal of right bank levee	6/2013	Site excavation Relocation of East Palo Alto sewer line and siphon	2 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4–6 dump trucks (20 cy each) 2 water trucks
Construction of right bank levee	7/2013	Levee construction Seeding for erosion control	3 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4–6 dump trucks (20 cy each) 2 water trucks
Construction of downstream access road on right and left banks	8/2013	Site preparation and paving	4 weeks	4 four-door pickups 1 dump truck 1 grader 1 four-door pickup 2 concrete trucks 1 asphalt paver 1 compactor
Friendship Bridge	9/2013	Site excavation Boardwalk construction	6 weeks	4 four-door pickups 1 backhoe 1 loader 1 flat-bed truck
Channel widening and marshplain terracing	6/2013	Site excavation Terracing	10 weeks	4 four-door pickups 3 excavators 1 backhoe 2 loaders 4–6 dump trucks (20 cy each) 2 water trucks
Revegetation	9/2013	Installation of irrigation system Revegetation	6 weeks	2 four-door pickups
Phase Two—Floodwalls				
Site Preparation	5/2014	Mobilization Clearing and grubbing	3 weeks	4 four-door pickups 1 backhoe 1 loader 1 jackhammer 1 flat-bed truck

Project Component	Proposed Starting Date	Activity	Proposed Duration	Equipment
Installation of right and left bank floodwalls	6/2014	Site excavation Preparation of foundation Construction of floodwalls	5 months	4 four-door pickups 1 excavator 1 trencher 1 backhoe 1 loader 1 dump truck 1 grader 2 concrete trucks 1 flat-bed truck
Construction of upstream access road on right and left banks	10/2014	Site preparation and paving	4 weeks	4 four-door pickups 1 dump truck 1 grader 1 four-door pickup 2 concrete trucks 1 asphalt paver 1 compactor
Site Restoration	11/2014	Demobilization	2 weeks	2 four-door pickups 1 loader 1 flat-bed truck

Phase One—Levees and Excavation

This section includes a description of levee modification and relocation and floodwall construction along the Project reach on the right and left banks. Levee modification and relocation would provide several flood protection improvements. For example, lowering the right levee from San Francisco Bay to Friendship Bridge (see discussion below) would allow floodwaters to spill over onto the Baylands located north of the Creek annually during regular storm events. Additionally, relocation of the left levee in the middle reach (see discussion below) would allow for the creation of a marshplain terrace on the left bank.

The levee slopes would have a slope of 3H:1V (horizontal:vertical) on the water side and H2:1V on the land side. The levee crowns would be functionally level[2] to accommodate a bicycle/pedestrian path and would generally be 16 feet wide. However, the paths would be 12 feet wide[3] on the left and right banks, respectively, near the International School of the Peninsula and East Palo Alto residences (Figure 2-2) in order to maximize the width of the streambed where it narrows. The levee elevations would increase from downstream to the upstream ~~project~~Project extent to match the design water surface elevations.

Lower Reach

The right bank levee alterations would begin approximately 250 feet inland from the San Francisco Bay. The existing levee would be lowered to an elevation of 8 feet. The reduction in the levee elevation would continue upstream at this constant elevation to approximately 200 feet downstream of Friendship Bridge. At this point, the levee cut would change to an upward angle of

[2] Levee crowns would have a 2 percent slope to aid drainage, but would appear and feel functionally level to recreational users.

[3] 10 feet is the minimum bike path width

3:1 and would continue at this slope until it reaches the existing levee, which would remain unchanged. At the O'Connor Pump Station the levee would transition into a short floodwall that would tie into the existing structure of the O'Connor Pump Station.

The left bank levee alterations would begin approximately 460 feet downstream of Friendship Bridge, where the levee would begin to diverge landward from the existing levee starting at an elevation of 16.2 feet and increasing as the improvements move upstream.

Friendship Bridge

The abutments supporting Friendship Bridge would remain unchanged. Adjacent to the existing bridge on the left side of the Creek, the Project would include a marshplain terrace that would be graded to an elevation equal to the mean higher high water[4] (MHHW) tide elevation. This terrace would create a continuous tidal marsh beginning in the lower reach, surrounding Friendship Bridge's southeast approach, and extending upstream along the Creek's left bank. The terrace would be inundated during spring tides and more moderate stream flow events. The left end of Friendship Bridge would stand in the marshplain terrace after the Project was implemented.

A boardwalk would traverse the marsh plain from the left bank and would tie into the abutment on the left end of Friendship Bridge. The boardwalk would be the same width as Friendship Bridge, constructed of a timber deck and concrete piles, and would be designed with consideration to aesthetics that would be consistent with the Palo Alto Baylands Master Plan. The elevation of the low mark of the boardwalk would be set above the highest anticipated flood elevation, with the lowest point of the bridge a minimum of 5 feet above the marshplain terrace beneath it.

Middle Reach

The right levee would be improved to meet USACE standards in the same alignment as the existing levee, minimizing the intrusion of the Project on East Palo Alto residences. Upstream of Friendship Bridge, the right levee would be raised for much of the remaining Project extent.[5] The right levee would be constructed at elevations ranging from 16.5 to approximately 19 feet depending on the design water surface elevation. The right levee would extend for approximately 2,600 feet (0.5 mile), at which point the floodwall would begin, just downstream of Daphne Way (Figure 2-2). At this point, the levee crown would transition into the existing levee but would be designed to accommodate the floodwall that would be constructed during Phase Two. See the discussion under the subheading *Access Roads* for a description of the access road. The description of the floodwall that would be constructed in Phase Two is discussed under *Phase Two–Floodwalls*.

As described above, beginning in the lower reach, slightly downstream of Friendship Bridge, the left levee would be relocated inland from its existing location. Where the Creek turns south, the left levee would be relocated approximately 100 feet or more inland from its existing location and would cut through a portion of the Golf Course. Where the Creek straightens outs, the left levee would begin to converge with the Creek and would be located approximately 50 feet from the

[4] The average height of the highest tide in a tidal cycle (referred to as higher high water) over a 19-year period. For shorter periods of observation, corrections are applied to eliminate known variations and reduce the result to the equivalent of a mean 19-year value.

[5] Depending on the results of geotechnical surveys, in some locations, portions of the existing levee could be re-used in the reconstructed levees.

existing levee for the remainder of the middle reach. From Friendship Bridge, the levee would vary in elevation depending on the design water surface elevation for approximately 2,500 feet (0.5 mile). At this point, approximately 350 feet north of where the Creek turns west, the levee would transition into the existing levee but would be designed to accommodate the floodwall that would be constructed during Phase Two.

Upper Reach

In the upper reach, the Creek channel would be excavated to the interior toe of the existing right and left bank levees up to the new East Bayshore Road Bridge being constructed as part of the Caltrans facility. No other work would occur in this reach during Phase One.

Levee Construction

In the lower reach on the right bank, the levee would be degraded down to an elevation of 8 feet to approximately 200 feet downstream of Friendship Bridge. Upstream of that point, the levee would be reconstructed to USACE standards in the same alignment as the existing levee. Construction on this phase of the Project is likely to occur over 5 weeks. It is expected that vehicles would be entering and leaving the Project site at the O'Connor Street access point for 25 days (see the discussion under the subheading *Construction Staging Areas, Project Site Access, and Haul Routes*).

In the lower reach on the left bank and from Friendship Bridge to the floodwalls in the upper reach, the levees would be raised using imported fill. The fill would be geotechnically engineered to USACE and District specifications and standards. Construction on this phase of the Project is likely to occur over 5 weeks. The left levee (Palo Alto Side) is a setback levee and is expected to experience 1 foot of settlement. The right levee (East Palo Alto Side) is a raise of the existing levee and therefore will experience less settlement, anticipated to be 0.5 feet. After settlement both levees will be the same height.

Levee raising would be preceded by soil conditioning and foundation preparation that would involve use of heavy equipment over 5 days. Levee raising would last approximately 4 to 5 weeks: mass-grading operations would last approximately 20 days and miscellaneous construction activities and contingencies would occur over approximately 5 days. The levee crown would be prepared to comply with District maintenance road criteria with a Class 2 aggregate base and paved with asphalt concrete.

After levee construction is complete, the sides of the levees and the margin of the paths would be seeded with appropriate native plants for erosion control.

For levee raising activities on the right bank, it is expected that vehicles would enter and leave the Project site at the O'Connor Street access point for 25 days and the Daphne Way access point for 5 days. For levee raising activities on the left bank, it is expected that vehicles would enter and leave the Project site at the Geng Road for 25 days.

Access Roads

Phase One of the Project would include the construction of access and maintenance roads on the downstream Phase One levee improvements on the right and left bank (Figure 2-2). The access roads would be used for maintenance purposes and for local trail users. The right bank is presumed to be primarily used for maintenance access and would not be paved.

The right bank downstream access road would extend from the O'Connor Pump Station to just downstream of Daphne Way. The downstream access road on the right bank would be reached from the O'Connor Street access point (see the discussion under the subheading *Construction Staging Areas, Project Site Access, and Haul Routes*). The road would be approximately 16 feet wide. This access road would be surfaced with aggregate base.

The downstream access road on the left bank would be reached from the terminus of Geng Road (see the discussion under the subheading *Construction Staging Areas, Project Site Access, and Haul Routes*). The access road would be approximately 16 feet wide and would be paved with asphalt concrete between Friendship Bridge and the Geng Road access point during Phase One.

Construction of the downstream access roads would likely last 4 weeks. Preparation of the roadbed is expected to take 10 days, and surfacing the road is expected to take 10 days. Construction would be staged from the Daphne Way access point on the right bank and Geng Road on the left bank.

Phase Two—Floodwalls

Floodwalls would be built on either side of the Phase One widened channel from East Bayshore Road to roughly just downstream from the Baylands Athletic Center to accommodate flows while minimizing the need to acquire property.

The floodwall on the right bank would range in elevation from 18.6 feet to 21.3 feet and would be approximately 586 feet long extending from just downstream of Daphne Way and continuing to the end of the Project reach where it would connect with the Caltrans facility. On the landward side the floodwall would extend approximately 3.3 feet above the grade of the access road to provide a safety barrier in the floodwall section of the ~~project~~Project.

The floodwall on the left bank would begin where the left levee crown transitions into an access road, and would follow the streambed to the Palo Alto Pump Station where it would take a sharp turn landward and trace the outline of the Palo Alto Pump Station before turning upstream and connecting to the Caltrans facility. The floodwall on the left bank would range in elevation from 18.5 feet to 20.5 feet and would be approximately 800 feet long.

At the Caltrans facility, watertight connections would transition between the metal sheet pile floodwalls on both banks and the concrete wing wall or abutment structure of East Bayshore Road.

The placement of floodwalls in the upper reach of the Project would widen the Creek channel by 30 feet approximately from the San Francisquito Creek Pump Station in Palo Alto to the basketball court next to the International School of the Peninsula.

Floodwall Construction

As discussed above, floodwalls would be constructed and installed on both sides of the Creek channel in the upper reach and a portion of the middle reach (i.e., from East Bayshore Road to roughly just downstream of the Baylands Athletic Center). The floodwalls would be constructed of sheet pile and reinforced concrete.

For floodwall installation, all access to the right bank would be from the Verbena Drive access point; the left bank would be accessed from Geng Road (see the discussion under the subheading *Construction Staging Areas, Project Site Access, and Haul Routes*). The existing levees would be excavated to prepare for installation of the reinforced concrete wall pieces and is expected to last for

10 days. A peak of approximately 30 vehicles per day is expected. Installation of the floodwalls would be preceded by preparation and compaction to prepare the foundation; these activities would occur over 10 days.

Pieces of the floodwall would be brought to the Project site by tractor trailer. Installation of the floodwall would last approximately 4 months: 72 days for installation of the floodwall panels and 10 days for miscellaneous construction activities and contingencies. The floodwalls would be tied in with the levee and with the upstream Caltrans facility.

Access Roads

The Project would include the construction of two access and maintenance roads consistent with access roads in the Phase One reach: one upstream access road behind the floodwall on the right bank and one access road behind the floodwall on the left bank (Figure 2-2). The access roads would be used for maintenance purposes for the floodwalls. On the right bank, the upstream access road would extend from just downstream of Verbena Drive to East Bayshore Road. The access road on the left bank would extend from a point downstream of the International School of the Peninsula to the Palo Alto Pump Station. Both access roads are described in further detail below.

Right Bank

The upstream access road on the right bank would be reached from the Verbena Drive access point (see the discussion under the subheading *Construction Staging Areas, Project Site Access, and Haul Routes*). The road elevation would vary from 16.7 to 17.0 feet and would extend up to meet East Bayshore Road at grade. The road would be approximately 10–12 feet wide and would be surfaced with aggregate base.

Construction of the upstream road would likely last 4 weeks. Preparation of the roadbed is expected to take 10 days, and surfacing the road 10 days. Construction would be staged from the Verbena Drive access point.

Left Bank

The access road on the left bank would be reached from the Palo Alto Pump Station access point (see the discussion under the subheading *Construction Staging Areas, Project Site Access, and Haul Routes*). At the upstream end of the levee, the path on the levee crown would transition to an access road, which would descend in elevation from 19.3 feet on the landward side of the floodwall to level out at an elevation between approximately 15 and 16 feet. The road would ascend slightly to an approximate elevation of 16.4 feet at the access road's end (at the Palo Alto Pump Station access point). The road would be approximately 12 feet wide for most of its length and would be surfaced with aggregate base. The road would be paved with asphalt concrete between the Geng Road access point and the International School of the Peninsula in Phase Two.

Marshplain Creation and Restoration

The proposed Project would create approximately 18 acres of tidal marsh on both sides of the Creek, effectively restoring tidal influence in the Project reach (see Figure 2-2). Marshplain creation would span the entire Project extent on both banks from East Bayshore Road to San Francisco Bay on the right bank and from East Bayshore Road to the end of the existing left levee on the left bank. Both

sides of the channel would be planted from the toe of the levee or base of the floodwall to the edge of the Creek channel.

After Phase One levee construction is complete, the tidal marsh area would be terraced and revegetated with high-marsh plants. The high-marsh planting area would total 7.05 acres and the high-marsh transition planting area would total 10.77 acres. Additionally, in areas where rock slope protection is required, 10-foot vegetated shrub bands would be installed to provide refugia and promote long term vegetated protection and stability across the rock slope protection areas.

Native marsh plants would be used to revegetate the terraced land. Plants appropriate to the high marsh would be planted near the stream channel. Plants native to marsh transition areas would be planted in areas more distant from the Creek channel. The SFCJPA, or its designated contractor, will be responsible for the acquisition of plant material. All container stock will be propagated from native stock collected within the south San Francisco Bay and tidally influenced creeks in coordination with Santa Clara Valley Water District staff.

Additional Construction

Associated activities required to complete the Project include the following.

- Construction of tie-ins:
  - Levee from west footings of Friendship Bridge to the right bank levee (Phase One).
  - Floodwall to O'Connor Pump Station (Phase One).
  - Interim structure to connect Phase One levees to existing levees in Phase Two reach.
  - Floodwall to Caltrans abutments on both banks (Phase Two).
  - Floodwall to levee connections on both banks (Phase Two).
- Construction of Friendship Bridge boardwalk (Phase Two).
- Installation of channel rock slope protection (Phase One and Phase Two).

Right-of-way (ROW) acquisition is expected to be required during Phase Two for property adjacent to Yeaman's Auto Body, International School of the Peninsula, the U.S. Postal Service, and during Phase One for the Golf Course and the Baylands Athletic Center. All other land is within easements held by the City of East Palo Alto and the District (currently SFCJPA member agencies).

Construction Staging Areas, Project Site Access, and Haul Routes

Access to the Project site would be at the locations discussed below and (shown in Figure 2-3) potentially could be utilized during both construction phases. As previously mentioned, the *right* bank refers to the San Mateo County (East Palo Alto) side of the Creek and the *left* bank refers to the Santa Clara County (Palo Alto) side of the Creek.

Right Bank

- Site access and a construction staging area would be located at the end of O'Connor Street near the intersection with Daisy Lane in East Palo Alto. The haul route would be along O'Connor Street to Pulgas Avenue, East Bayshore Road, and Embarcadero Road to U.S. 101. This is the

designated route for large vehicles, including dump trucks and flatbed trucks, in the City of East Palo Alto.

- Site access and a construction staging area would be located at the end of Daphne Way at Jasmine Way in East Palo Alto. The haul route would be along Jasmine Way to Camelia Drive, Pulgas Avenue, East Bayshore Road, and Embarcadero Road to U.S. 101. Large vehicles, including but not limited to dump trucks and flatbed trucks, will be prohibited on Daphne Way and Jasmine Way. Further vehicle restrictions on Daphne Way and Jasmine Way may be required by the City of East Palo Alto and will be determined during development of the Project Traffic Plan.
- Site access and a construction staging area would be located at the end of Verbena Drive at Abelia Way. The haul route would be along Verbena Drive to Camelia Drive, Pulgas Avenue, East Bayshore Road, and Embarcadero Road to U.S. 101. Large vehicles, including but not limited to dump trucks and flatbed trucks, will be prohibited on Verbena Drive and Camelia Drive. Further vehicle restrictions on Verbena Drive and Camelia Drive may be required by the City of East Palo Alto and will be determined during development of the Project Traffic Plan.

Left Bank

- Site access would be at the Palo Alto Pump Station, accessed from East Bayshore Road. The haul route would be along East Bayshore Road to Embarcadero Road and U.S. 101.
- Site access would be at Geng Road between the Baylands Athletic Center and the Golf Course. The haul route would be along Geng Road to Embarcadero Road and U.S. 101.

Fill Disposal and Fill Import

Approximately 108,500 cubic yards of fill would be excavated from the Project site during Phase One levee modification activities and channel widening described above. Approximately 20 percent (21,800 cubic yards) of this fill would be hauled off the site. Approximately 190,800 cubic yards of fill would need to be brought to the Project site for levee raising. It is anticipated that removed fill would be placed within the adjacent Golf Course for use in reconfiguration of the Golf Course, a separate project being managed by the City of Palo Alto. Any removed fill that cannot be utilized in the Golf Course reconfiguration project would be hauled off the site.

Utility Relocation and Removal

Project activities would require relocation or removal of electricity transmission towers and poles; abandonment of existing and construction of new gas transmission lines; and realignment or relocation of sewer lines and storm drains (Figure 2-4). These activities are described in more detail below.

Electric Utilities

Pacific Gas & Electric (PG&E) would require the relocation, removal, or raising of some electric transmission towers and wood poles on both the right and left banks in order to accommodate the Project. Figure 2-4 shows the location of each of the existing and relocated towers and wood poles and assigns each tower and pole a corresponding letter and number (pole: P; tower: T). The following discussion summarizes the proposed actions.

- P1 through P6 are existing wood transmission poles located in the City of East Palo Alto southwest of Friendship Bridge. The secondary wires (i.e., the lowest set of wires, which provide cathodic protection to the underground gas lines) would be removed from these poles.
- P7 is an existing wood transmission pole located in the City of East Palo Alto. This pole would be removed and replaced in the same location with a light-duty steel (LDS) pole of comparable height (approximately 65 feet high). The wires would run north and south.
- P8 is an existing wood transmission pole located in the City of East Palo Alto. This pole would be removed.
- P9 would be a new LDS transmission pole in the City of East Palo Alto replacing P8. P9 would be approximately 65 feet high (comparable to P8). The wires would run north and south.
- P10 would be a new LDS transmission pole. This pole would be approximately 75 feet high and the wires would be angled in an "L" from north to east, thereby crossing the Creek. The LDS pole would be anchored to the ground with additional wires.
- P11 is an existing wood transmission pole located in the City of Palo Alto that would be removed.
- P12 is an existing wood transmission pole in the City of Palo Alto that would be replaced with a new LDS transmission pole. This pole would be approximately 75 feet high and the wires would be angled in an "L" from east to south.
- T1 is an existing transmission tower in the City of East Palo Alto. This tower would be raised by 15 feet and the tower design would otherwise not change.
- T2 is an existing transmission tower in the City of Palo Alto. This tower would be removed.
- T3 would be located approximately 25 feet north of T2 and would replace T2. T3 would be 25 feet taller than T2, but would otherwise have the same design. Following completion of the Project, T3 would be located within the Creek. Therefore, there would be a fortified concrete pier supporting each leg of the tower. A shoo-fly structure would be built to allow for the construction of the new tower. The shoo-fly structure would have two wooden poles; one pole would be approximately 25 feet south of the existing tower and the second pole would approximately 75 feet north of the existing tower. The shoo-fly poles would be placed in the toe of the existing levee and would be removed once the new tower is fully operational.
- T4 is an existing transmission tower in the City of Palo Alto. This tower would be raised by 15 feet and the tower design would otherwise not change.

Gas Utilities

Portions of the PG&E gas transmission line immediately downstream of the International School of the Peninsula and upstream of Friendship Bridge on both right and lefts banks are located within the realigned channel and would need to be relocated during Phase One. Approximately 3,000 feet of the existing 20-inch gas line would be abandoned, slurried, and closed off. A new 24-inch gas pipeline would be installed on the Palo Alto side of the Creek. The pipe would cross to the East Palo Alto side near Friendship Bridge, where it would tie in to the existing pipeline (Figure 2-4).

The new pipe would tie into old pipe at the electrical transmission tower east of the recreation area parking lot, at the end of Geng Road in Palo Alto. The new pipeline would extend northward on the left bank to the approximate location of Friendship Bridge just south of O'Connor Street. Between

Geng Road and Friendship Bridge, the pipeline would lie within the Palo Alto Golf Course at a minimum of 15 feet east of the proposed new levee. At Friendship Bridge, the pipeline would cross under the Creek channel to the right bank, where the new pipe would tie into old pipe.

The tunnel for the new pipeline under the Creek channel would be bored. The trench for the pipe on the left bank would be constructed by cut and fill. The pipeline would be located a minimum of 4 feet below grade.

Construction access on the left bank would be from Geng Road across the Palo Alto Golf Course. Gas pipe construction equipment would use the same construction access route used for relocation and installation of electrical transmission lines and towers on the left bank. Three spoils storage areas, each approximately 100 by 100 feet, would be spaced evenly on the left bank. An approximately 100 by 150 foot staging area for the construction bore would be located near the terminus of Geng Road at the Baylands Athletic Center.

Construction access on the right bank would be from O'Connor Street. Gas pipe construction equipment would use temporary roads. These roads would either be used by construction equipment for both gas pipeline and electrical transmission line and tower installation or by construction equipment for gas pipeline installation only. One approximately 100 by 100 foot spoils storage area and a 100 by 100 foot termination hold would be located adjacent to the borehole site.

Use of spoils storage areas would be contingent on the suitability to reuse the spoils for covering the new pipeline at the end of construction.

Storm Drains and Sewer Lines

- An East Palo Alto Sanitary District sanitary sewer trunk line and associated manholes immediately upstream of Friendship Bridge and downstream of Friendship Bridge adjacent to the Golf Course on the left bank are located within the marshplain terrace and the realigned channel, respectively, and would be relocated during Phase One.
- Storm drains and outfalls at the East Palo Alto Pump Station would be relocated outside of the new levee footprint during Phase One.
- Storm drains and outfalls immediately downstream of the East Bayshore Frontage Road on both sides of the Creek are located within the floodwall footprint and would be relocated during Phase Two.

2.4 Construction Schedule

Phase One construction would begin in 2013 and be completed by 2015. Construction would begin with building the new levee structure outside of the existing levee, during or after completion of PG&E and EPASD modifications to existing utilities and modifications to the PAGC, and would proceed at Friendship Bridge and upstream with the excavation of the channel up to East Bayshore Road being the final Project activity. Phase Two construction of upstream floodwalls and associated maintenance roads would occur once funding was secured.

Construction activities would take place between 8 a.m. and 6 p.m. on weekdays, and 9 a.m. and 5 p.m. on Saturdays, in accordance with City of Palo Alto and City of East Palo Alto municipal codes. Final construction permits issued for the ~~project~~Project may place additional constraints on

construction timing. Table 2-2 shows the Project elements, when construction on each is expected to begin, construction activities, and construction duration.

2.5 Operation and Maintenance

Once the Project elements are constructed, they would require maintenance to continue to function effectively, similar to existing facilities. Maintenance for the new Project elements would include activities such as removing debris from channels, which could occur during any flood season, and infrequent post-flood clean-up of the marshplain, which would be needed only after major flood events. In places where the Project is limited to replacing, expanding, or improving existing facilities (for example, the widened and deepened channel segment), post-Project maintenance would be similar to existing maintenance. Additionally, monitoring and maintenance of replacement trees and new marsh vegetation would occur, at a minimum, for 3 years following completion of the project. This activity would be minimal, consisting of invasive plant weeding and inspection of newly plated vegetation.

New facilities, such as the floodwalls and marshplain terrace, would create new maintenance needs. Routine post ~~project~~Project maintenance within the Creek channel corridor within the District's right-of-way (in Santa Clara County) would continue to be included under the District's Stream Maintenance Program (SMP). Under the SMP, the maintenance of the newly constructed floodwalls and marshplain terrace would also be covered. The Project would also replace and upgrade existing sections of concrete channel for the channel-widening ~~project~~Project element. Maintenance of the replaced concrete sections would be covered under the SMP.

Routine post ~~project~~Project maintenance within the Creek channel corridor within the East Palo Alto's right-of-way (in San Mateo County) would continue to be conducted by the city and would primarily consist of yearly inspections and regular cleaning of graffiti off of the floodwalls.

The extent and nature of post-Project activities under the SMP would be similar to what is currently taking place in both jurisdictions. No new or additional maintenance activities beyond the scope of the SMP would be required to maintain the SMP-covered Project features, and routine channel and bank maintenance would continue to incorporate all of the Best Management Practices (BMPs) required under the SMP. Because there would be no material change in SMP activities as a result of the Project, SMP maintenance is not discussed further.

2.6 Environmental Commitments

In addition to the BMPs covered under the Districts' SMP, the Project would also incorporate the following Environmental Commitments for all elements of the Project.

Community Outreach

The SFCJPA will provide advance written notification of the proposed construction activities to all residences and other traffic, noise- and air quality-sensitive uses within 750 feet of the construction site. Noticing would occur at the three specific times during the ~~project~~Project.

- When the Traffic Plan is completed.

- 30 days prior to the initiation of Phase 1 construction.
- 30 days prior to the initiation of Phase 2 construction.

No later than ~~two~~ 2 weeks prior to the initiation of each phase of construction, the SFCJPA would hold a public meeting in East Palo Alto to inform local residents about the current status of the ~~project~~Project, construction schedule, truck haul routes, and Project contact information during construction. Project contacts during construction would include the SFCJPA Project Manager, the Project Engineer, the Construction Manager designated by the SFCJPA, and at least one designated individual that would be onsite daily during construction.

General Construction Site Housekeeping

1. The work site, areas adjacent to the work site, and access roads will be maintained in an orderly condition, free and clear from debris and discarded materials. Personnel will not sweep, grade, or flush surplus materials, rubbish, debris, or dust into storm drains or waterways. Upon completion of work, all building materials, debris, unused materials, concrete forms, and other construction-related materials will be removed from the work site. (Santa Clara Valley Water District Water Quality BMP 18)
2. To prevent mosquito breeding on construction sites, the SFCJPA will require the construction contractor to ensure that surface water is gone within four days (96 hours). All outdoor grounds will be examined and unnecessary water that may stand longer than 96 hours will be drained. Construction personnel will properly dispose of unwanted or unused artificial containers and tires. If possible, any container or object that holds standing water that must remain outdoors will be covered, inverted, or have drainage holes drilled. (California Department of Public Health 2008)
3. The following general construction site housekeeping measures will be implemented as necessary within staging areas.
    a. Staging areas that are not already paved or covered with compacted aggregate base, and that are used for parking vehicles, trailers, workshops, maintenance areas, or equipment, piping, formwork, rebar, storing masonry on pallets, and metal product storage, will be graded as required, and surfaced with a minimum of 3 inches of compacted aggregate base rock over a high modulus, woven, and soil separation geo-textile. Areas storing aggregate base or other rock products will also be placed on this same geo-textile. The objective is to maintain separation between native and construction materials. Areas storing soils and sand are not required to be surfaced with aggregate base course.
    b. Aggregate base will be removed from all staging areas prior to ~~project~~Project completion and the surfaces will be regraded to their original grades or matching surrounding conditions as directed by the Engineer.
    c. Any soils contaminated with petroleum product or other hazardous materials by the Contractor will be removed by the Contractor and disposed of in accordance with local, state, and federal laws.
    d. Contractor is responsible for weed control in staging areas and material storage areas.
4. The spread of invasive nonnative plant species and plant pathogens will be avoided or minimized by implementing the following measures:

a. Construction equipment will arrive at the ~~project~~Project clean and free of soil, seed, and plant parts to reduce the likelihood of introducing new weed species.

b. Any imported fill material, soil amendments, gravel, etc., required for construction and/or restoration activities that will be placed within the upper 12 inches of the ground surface will be free of vegetation and plant material.

c. Certified weed-free imported erosion control materials (or rice straw in upland areas) will be used exclusively.

d. To reduce the movement of invasive weeds into uninfested areas, the contractor will stockpile topsoil removed during excavation and will subsequently reuse the stockpiled soil for re-establishment of disturbed ~~project~~Project areas.

Water Quality Protection

1. The following measures will be implemented as necessary to reduce and minimize stormwater pollution during ground disturbing maintenance activities:

    a. Soils exposed due to maintenance activities will be seeded and stabilized using hydroseeding, straw placement, mulching, and/or erosion control fabric. These measures will be implemented such that the site is stabilized and water quality protected prior to significant rainfall.

    b. The preference for erosion control fabrics will be to consist of natural fibers.

    c. Appropriate measures include, but are not limited to, the following:

        - Silt Fences.
        - Straw Bale Barriers.
        - Brush or Rock Filters.
        - Storm Drain Inlet Protection.
        - Sediment Traps.
        - Sediment Basins.
        - Erosion Control Blankets and Mats.
        - Soil Stabilization (i.e. tackified straw with seed, jute or geotextile blankets, etc.).
        - Wood chips.
        - Straw mulch.

    d. All temporary construction-related erosion control methods will be removed at the completion of the ~~project~~Project (e.g., silt fences). (Santa Clara Valley Water District Water Quality BMP 41)

2. Sediments will be stored and transported in a manner that minimizes water quality impacts.

    a. Wet sediments may be stockpiled outside of a live stream or may be stockpiled within a dewatered stream so water can drain or evaporate before removal.

    b. This measure applies to saturated, not damp, sediments and depends upon the availability of a stockpile site.

c. For those stockpiles located outside the channel, water draining from them will not be allowed to flow back into the Creek or into local storm drains that enter the Creek, unless water quality protection measures recommended by RWQCB are implemented.

d. Trucks may be lined with an impervious material (e.g., plastic), or the tailgate blocked with dry dirt or hay bales, for example, or trucks may drain excess water by slightly tilting their loads and allowing the water to drain out at identified wash down stations.

e. Water will not drain directly into channels (outside of the work area) or onto public streets without providing water quality control measures

f. Streets and affected public parking lots will be cleared of mud and/or dirt by street sweeping (with a vacuum-powered street sweeper), as necessary, and not by hosing down the street. (Santa Clara Valley Water District Water Quality BMP 4)

3. Oily, greasy, or sediment-laden substances or other material that originate from the ~~project~~Project operations and may degrade the quality of surface water or adversely affect aquatic life, fish, or wildlife will not be allowed to enter, or be placed where they may later enter, any waterway.

4. The ~~project~~Project will not increase the turbidity of any watercourse flowing past the construction site by taking all necessary precautions to limit the increase in turbidity as follows.

   a. Where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases will not exceed 5 percent.

   b. Where natural turbidity is greater than 50 NTU, increases will not exceed 10 percent.

   c. Where the receiving water body is a dry creek bed or storm drain, waters in excess of 50 NTU will not be discharged from the ~~project~~Project.

   d. Water turbidity changes will be monitored. The discharge water measurements will be made at the point where the discharge water exits the water control system for tidal sites and 100 feet downstream of the discharge point for non-tidal sites. Natural watercourse turbidity measurements will be made in the receiving water 100 feet upstream of the ~~discharge site~~ diversion structure. Natural watercourse turbidity measurements will be made prior to initiation of ~~project~~Project discharges, preferably at least 2 days prior to commencement of operations, after a rain event, and/or a change in construction activity with daily water quality monitoring conduct at least twice per day. (Santa Clara Valley Water District Water Quality BMP 40)

5. Vehicles will be washed only at the approved area in the corporation yard. No washing of vehicles will occur at job sites. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 9)

6. No fueling will be done in a waterway or immediate flood plain, unless equipment stationed in these locations is not readily relocated (i.e., pumps, generators).

   a. For stationary equipment that must be fueled on the site, containment will be provided in such a manner that any accidental spill of fuel will not be able to enter the water or contaminate sediments that may come in contact with water.

   b. Any equipment that is readily moved out of the waterway will not be fueled in the waterway or immediate flood plain.

c. All fueling done at the job site will provide containment to the degree that any spill will be unable to enter any waterway or damage riparian vegetation. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 10)

7. No equipment servicing will be done in a stream channel or immediate flood plain, unless equipment stationed in these locations cannot be readily relocated (i.e., pumps, generators).

   a. Any equipment that can be readily moved out of the channel will not be serviced in the channel or immediate flood plain.

   b. All servicing of equipment done at the job site will provide containment to the degree that any spill will be unable to enter any channel or damage stream vegetation.

   c. If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location will be done in a channel or flood plain.

   d. If emergency repairs are required, containment will be provided equivalent to that done for fueling or servicing. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 11)

8. Measures will be implemented to ensure that hazardous materials are properly handled and the quality of water resources is protected by all reasonable means.

   a. Prior to entering the work site, all field personnel will know how to respond when toxic materials are discovered.

   b. The discharge of any hazardous or nonhazardous waste as defined in Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations (CCR) will be conducted in accordance with applicable State and federal regulations.

   c. In the event of any hazardous material emergencies or spills, personnel will call the Chemical Emergencies/Spills Hotline at 1 800 510 5151. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 12)

9. Prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water.

   a. Field personnel will be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills.

   b. No fueling, repair, cleaning, maintenance, or vehicle washing will be performed in a creek channel or in areas at the top of a channel bank that may flow into a creek channel. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 13)

10. Spill prevention kits appropriate to the hazard will always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations).

    a. Prior to entering the work site, all field personnel will know the location of spill kits on crew trucks and at other locations within District facilities.

    b. All field personnel will be advised of these locations and trained in their appropriate use. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 14)

11. Runoff from soil stockpiles will be avoided. If soil is to be stockpiled, no run-off will be allowed to flow to a creek.

12. Coffer dams will be used for tidal work areas. For tidal areas, a downstream cofferdam will be constructed to prevent the work area from being inundated by tidal flows. By isolating the work

area from tidal flows, water quality impacts are minimized. Downstream flows continue through the work area and through pipes within the cofferdam.

a. Installation of coffer dams will begin at low tide.

b. Waters discharged through tidal coffer dam bypass pipes will not exceed 50 NTU over the background levels of the tidal waters into which they are discharged.

c. Coffer dams shall not be constructed of earthen fill due to potential adverse water quality impacts in the event of a failure. ~~Coffer dams in tidal areas may be made from earthen material. If earth is used, the downstream and upstream faces will be covered by a protected covering (e.g., plastic or fabric) if needed to minimize erosion.~~

d. Coffer dams constructed of gravel shall be covered by a protective covering (e.g., plastic or fabric) to prevent seepage.

13. Groundwater will be managed at work sites. If high levels of groundwater in a work area are encountered, the water will be pumped out of the work site. If necessary to protect water quality, the water will be directed into specifically constructed infiltration basins, into holding ponds, or onto areas with vegetation to remove sediment prior to the water re-entering a receiving water body. Water pumped into vegetated areas will be pumped in a manner that will not create erosion around vegetation.

14. Sanitary/septic waste will be managed. Temporary sanitary facilities will be located on jobs that last multiple days in compliance with California Division of Occupational Safety and Health (Cal/OSHA) regulation 8 CCR 1526. All temporary sanitary facilities will be placed outside of the Creek channel and flood plain and removed when no longer necessary.

In addition, as part of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the San Mateo Countywide Stormwater Pollution Prevention Program (SM-STOPPP), required under Waste Discharge Requirements and NPDES Permit for the discharge of stormwater runoff from the municipal separate storm sewer systems (MS4s) overseen by the San Francisco Bay Water Board, all construction sites are required to have site-specific and seasonally and phase-appropriate effective BMPs (San Francisco Bay Regional Water Quality Control Board 2009). SFCJPA will be responsible for ensuring compliance with all local and State regulations, including the RWQCB NPDES permits and local BMPs for jurisdictions adjoining the ~~project~~Project site~~these stormwater requirements and programs~~. The Project specifications require that the Project construction contractor prepare a SWPPP and erosion control and sedimentation plan showing placement of BMPs at various stages of construction in conformance with requirements, and all SWPPP documents and plans will be stamped by a State-certified Qualified SWPPP Developer (QSD).~~employ a Qualified SWPPP Practitioner to implement and document the pollution prevention measures outlined in the SWPPP prepared for the Project.~~ The Project will implement measures to accomplish objectives specified in SFCJPA's *San Francisquito Creek Watershed Analysis and Sediment Reduction Plan*, which fulfills NPDES permit provisions that require the co-permittees of the SCVURPPP and SM-STOPPP within the Creek watershed to assess and implement sediment management measures in the watershed (San Francisquito Creek Joint Powers Authority 2004). Water quality protection standards during construction will comply with the most protective BMPs of the local jurisdictions and the State of California.

Safe Use of Herbicides and Pesticides

1. Pesticides products are to be used only after an assessment has been made regarding environmental, economical, and public health aspects of each of the alternatives. The following pesticides are used by the District.

   a. Herbicides.

      - To control algae, weeds and undesirable vegetation.
      - To minimize fire hazards.
      - To maintain flood conveyance of waterways.
      - To maintain compliance with State and Federal requirements.

   b. Insecticides.

      - Used only in and around District buildings, or in the case of a serious pest outbreak, on landscape and re-vegetation facilities.
      - Used only after all other methods, such as prevention or natural nontoxic control methods, have proven ineffective.
      - Where required, the lowest toxicity will be used in accordance with the label and the details of this policy.

   c. Rodenticides.

      - To control burrowing rodents, including ground squirrels, moles and gophers, in District flood control levees, excluding known and potential habitat for salt marsh harvest mouse and salt marsh wandering shrew. No rodenticides or fumigants will be used within the range of the salt marsh harvest mouse or California clapper rail as identified on District range maps. Methods of rodent control within salt marsh harvest mouse or California clapper rail habitat will be limited to live trapping. All live traps shall have openings measuring no smaller than 2 inches by 1 inch to allow any salt marsh harvest mouse that inadvertently enter the trap to easily escape. All traps will be placed outside of pickleweed areas and above the high tide line.
      - In areas where rodenticides are used, carcass retrieval surveys will be conducted daily for acute toxins and weekly for anticoagulants to minimize secondary poisoning impacts during the use period. Any spilled bait will be cleaned up immediately.
      - Alternatives such as trapping and smoke bombs are used wherever practical prior to rodenticide use. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 2)

2. All herbicide use will be consistent with approved product specifications. Applications will be made by, or under the direct supervision of, State Certified applicators under the direction of a licensed Pest Control Advisor. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 1)

3. Only herbicides and surfactants registered for aquatic use will be applied within the banks of channels within 20 feet of any water present. Aquatic herbicide use will be limited to July 1st through October 15th. If rain is forecast then application of aquatic herbicide will be rescheduled. (Santa Clara Valley Water District Hazards & Hazardous Materials BMP 8)

Construction Dust Control

1. Dust control measures for all construction sites:

    a. Bay Area Air Quality Management District (BAAQMD) Basic Control Measures for construction emissions of PM10 will be implemented at all construction sites. Current measures stipulated by the BAAQMD CEQA Guidelines include the following (Bay Area Air Quality Management District 2010):

    - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day under normal conditions. Watering periodicity can be increased or decreased as necessitated by site specific conditions as determined by the SFCJPA's designated construction manager and with the SFCJPA's approval.
    - All haul trucks transporting soil, sand, or other loose material off the site will be covered.
    - All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
    - All vehicle speeds on unpaved roads will be limited to 15 mph.
    - All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used.
    - Idling times will be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage will be provided for construction workers at all access points.
    - All construction equipment will be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.

    b. A publicly visible sign will be posted, with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person will respond and take corrective action ~~within 48 hours~~ as soon as is feasible and no later than 24 hours after the complaint is made. The Air District's phone number, as well as the contact numbers for the SFCJPA Project Manager, Designated Construction Manager, and a designated contact with the City of East Palo Alto will also be visible to ensure compliance with applicable regulations. ~~(Santa Clara Valley Water District Air Quality BMP 1)~~

Construction Noise Control

1. The SFCJPA will implement practices that minimize disturbances to residential neighborhoods surrounding work sites.

    a. In general, work will be conducted during normal working hours and as required by the Cities of Palo Alto and East Palo Alto. Extending weekday hours and working weekends may be necessary to complete some projects.

b. Internal combustion engines will be equipped with adequate mufflers.

c. Excessive idling of vehicles will be prohibited.

d. All construction equipment will be equipped with manufacture's standard noise control devices.

e. The arrival and departure of trucks hauling material will be limited to the hours of construction.

f. The use of Jacobs Compression Release Brakes (commonly known as "jake brakes") is prohibited in residential areas. (Santa Clara Valley Water District Noise BMP 2)

Aesthetics Resources Protection

1. To buffer the effects of construction activities and staging on aesthetic values, SFCJPA will require contractors to provide visual screening for the active construction site, including the construction staging and laydown area. Screening will consist of 8-foot-high chain-link fence covered with fabric or an equivalent. It will be put in place during the first week of construction and will remain until construction is complete and equipment is demobilized.

Biological Resources Protection

1. Existing access ramps and roads to waterways will be used where possible. If temporary access points are necessary, they will be constructed in a manner that minimizes impacts on waterways:

   a. Temporary project access points will be created as close to the work area as possible to minimize running equipment in waterways and will be constructed so as to minimize adverse impacts.

   b. Any temporary fill used for access will be removed upon completion of the project. Site topography and geometry will be restored to pre-Project conditions to the extent possible. (Santa Clara Valley Water District Biological Resources BMP 4)

2. Migratory bird nesting surveys will be performed prior to any project-related activity that could pose the potential to affect migratory birds. Inactive bird nests may be removed, with the exception of raptor nests. No birds, nests with eggs, or nests with hatchlings will be disturbed. (Santa Clara Valley Water District Biological Resources BMP 8)

3. Nesting exclusion devices may be installed to prevent potential establishment or occurrence of nests in areas where construction activities would occur. All nesting exclusion devices will be maintained throughout the nesting season, or until completion of work in an area makes the devices unnecessary. All exclusion devices will be removed and disposed of when work in the area is complete. (Santa Clara Valley Water District Biological Resources BMP 10)

4. Impacts on native aquatic vertebrates will be avoided or minimized. Native aquatic vertebrates (fish, amphibians and reptiles) are important ~~components~~elements of stream ecosystems. Native aquatic vertebrates may or may not be able to rapidly recolonize a stream reach if the population is eliminated from that stream reach. If native aquatic vertebrates are present when cofferdams, water bypass structures, and silt barriers are to be installed, an evaluation of the stream and the native aquatic vertebrates will be conducted by a qualified biologist. The qualified biologist will consider:

a. Native aquatic species present at the site.

b. The ability of the species to naturally recolonize the stream reach.

c. The life stages of the native aquatic vertebrates present.

d. The flow, depth, topography, substrate, chemistry and temperature of the stream reach.

e. The feasibility of relocating the aquatic species present.

f. The likelihood the stream reach will naturally dry up during the work season.

Based on consideration of these factors, the qualified biologist may make a decision to relocate native aquatic vertebrates. The qualified biologist will document in writing the reasons to relocate native aquatic species, or not to relocate native aquatic species, prior to installation of cofferdams, water bypass structures or silt barriers.

If the decision is made to relocate the native aquatic species, then the operation will be based on the District's Fish Relocation Guidelines.

5. Local ecotypes of native plants will be planted and appropriate erosion-control seed mixes will be chosen. Whenever native species are prescribed for installation on District fee properties or easements, the following steps will be taken by a qualified biologist or vegetation specialist:

   a. Evaluate whether the plant species currently grows wild in Santa Clara County.

   b. If the plant species currently grows wild in Santa Clara County, the qualified biologist or vegetation specialist will determine whether the plant installation must include local natives, i.e. grown from propagules collected in the same or adjacent watershed, and as close to the project site as feasible.

      A qualified biologist or vegetation specialist will be consulted to determine which seeding option is ecologically appropriate and effective. The following guidelines will inform the biologist or vegetation specialist's determination.

   c. For areas that are disturbed, an erosion control seed mix may be used consistent with the District Guidelines and Standards for Land Use Near Streams, Design Guide 5, 'Temporary Erosion Control Options.'

   d. In areas with remnant native plants, the qualified biologist or vegetation specialist may choose an abiotic application instead, such as an erosion control blanket or seedless hydro-mulch and tackifier to facilitate passive revegetation of native species.

   e. Temporary earthen access roads may be seeded when site and horticultural conditions are suitable.

   f. If a gravel or wood mulch has been used to prevent soil compaction per BI-11, this material may be left in place [if ecologically appropriate] instead of seeding.

      Seed selection will be ecologically appropriate as determined by a qualified biologist, per *Guidelines and Standards for Land Use Near Streams, Design Guide 2: Use of Local Native Species; and, Supplemental Landscaping\Revegetation Guidelines* (ISO document WQ71001).

6. Animal entry and entrapment will be avoided.

   a. All pipes, hoses, or similar structures less than 12 inches diameter will be closed or covered to prevent animal entry. All construction pipes, culverts, or similar structures, greater than

2-inches diameter, stored at a construction site overnight, will be inspected thoroughly for wildlife by a qualified biologist or properly trained construction personnel before the pipe is buried, capped, used, or moved.

b. If inspection indicates presence of sensitive or state- or federally-listed species inside stored materials or equipment, work on those materials will cease until a qualified biologist determines the appropriate course of action.

c. To prevent entrapment of animals, all excavations, steep-walled holes or trenches more than 6-inches deep will be secured against animal entry at the close of each day. Any of the following measures may be employed, depending on the size of the hole and method feasibility.

- Holes will be securely covered (no gaps) with plywood or similar materials at the close of each working day, or any time the opening will be left unattended for more than 1 hour.
- In the absence of covers, the excavation will be provided with escape ramps constructed of earth or untreated wood, sloped no steeper than 2:1, and located no farther than 15 feet apart.
- In situations where escape ramps are infeasible, the hole or trench will be surrounded by filter fabric fencing or a similar barrier with the bottom edge buried to prevent entry.

Cultural Resources Protection

1. Work in areas where archaeological artifacts are found will be restricted or stopped until proper protocols are met. Work at the location of the find will halt immediately within 30 feet of the find. A Consulting Archaeologist will visit the discovery site as soon as practicable for identification and evaluation pursuant to Section 21083.2 of the Public Resources Code and Section 15126.4 of the California Code of Regulations. If the archaeologist determines that the artifact is not significant, construction may resume. If the archaeologist determines that the artifact is significant, the archaeologist will determine if the artifact can be avoided and, if so, will detail avoidance procedures. If the artifact cannot be avoided, the archaeologist will develop within 48 hours an Action Plan which will include provisions to minimize impacts and, if required, a Data Recovery Plan for recovery of artifacts in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines. (Santa Clara Valley Water District Cultural Resources BMP 2)
2. Work in areas where any burial site is found will be restricted or stopped until proper protocols are met. Upon discovering any burial site as evidenced by human skeletal remains, the County Coroner will be immediately notified. No further excavation or disturbance within 30 feet of the site or any nearby area reasonably suspected to overlie adjacent remains may be made except as authorized by the County Coroner, California Native American Heritage Commission, and/or the County Coordinator of Indian Affairs. (Santa Clara Valley Water District Cultural Resources BMP 3)

Geology and Soils Commitments

1. All new construction will be designed based on recommendations from geotechnical analyses of the Project site.
2. The contractor(s) retained for construction and revegetation of the proposed Project will be required to stockpile excavated topsoil so it can be reused for revegetation on the Project site as needed. To ensure maximum topsoil recovery, topsoil will be stockpiled separately from other excavated materials.

Land Use Commitments

1. Project design will be consistent with guidelines presented in San Francisco Bay Conservation and Development Commission's *Shoreline Spaces: Public Access Design Guidelines for the San Francisco Bay* (2005) and *Public Access and Wildlife Compatibility* (2001) and *City of Palo Alto's Site Assessment and Design Guidelines, Palo Alto Baylands Nature Preserve* (2005).

Transportation/Traffic

1. Suitable public safety measures will be used. Fences, barriers, lights, flagging, guards, and signs will be installed as determined appropriate by the public agency having jurisdiction, to give adequate warning to the public of the construction and of any dangerous condition to be encountered as a result thereof.

2.7 Required Permits and Approvals

The Project would be subject to numerous federal, state, and local regulations that protect various aspects of environmental quality. More detailed information on regulatory requirements is provided in Chapter 3. Table 2-3 presents a summary of permit requirements, organized by agency with jurisdiction.

Table 2-3. Permit Requirements Potentially Applicable to the Project

Agency with Jurisdiction	Regulation(s)	Required Authorization
San Francisco Bay Regional Water Quality Control Board	Federal Clean Water Act, Sections 401 and 402 California Porter-Cologne Water Quality Control Act	401 Water Quality Certification or Waste Discharge Requirements, National Pollutant Discharge Elimination System (NPDES) general permit for discharge of stormwater from construction sites
Bay Area Air Quality Management District	Authority to Construct/ Permit to Operate	An "Authority to Construct" is issued after District engineers review a proposed project and determine if it is capable of complying with air quality laws; and a "Permit to Operate", is issued after the project is built and compliance is demonstrated.
U.S. Army Corps of Engineers	Federal Clean Water Act, Section 404, 33 U.S.C 408 National Environmental Policy Act (NEPA)	Permits for dredge and fill activities below ordinary high water mark in waters of the United States; Federal action requires NEPA compliance
USFWS	Federal Endangered Species Act (ESA)	Potential need for "take" authorization of terrestrial species under ESA Section 7 will be determined through USACE consultation with USFWS
National Marine Fisheries Service (NMFS)	ESA	Potential need for "take" authorization of Steelhead under ESA Section 7 will be determined through USACE consultation with NMFS
DFG	California Endangered Species Act (CESA) California Fish and Game Code Section 2081 California Fish and Game Code Section 1602	Potential need for "take" authorization under Section 2081 *ff*. of the California Fish and Game Code will be determined through consultation with DFG Streambed Alteration Agreement for activities affecting bed/banks of a jurisdictional stream
State Office of Historic Preservation	National Historic Preservation Act State Office of Historic Preservation requirements California Public Resources Code	Authorization under Section 106 of the National Historic Preservation Act
San Francisco Bay Conservation and Development Commission	California McAteer-Petris Act and Federal Coastal Zone Management Act	Permits for consistency with the Bay Plan and Bay Plan policies that guide future uses of the Bay and shoreline areas.
City of Palo Alto	Local plans and regulations	Permitting entity for work on City land or public right-of-way.
City of East Palo Alto	Local plans and regulations	Permitting entity for work on City land or public right-of-way.

Appendix F. Mitigation Monitoring and Reporting Plan for the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project San Francisco Bay to Highway 101

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Air Quality				
Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction. According to the BAAQMD guidelines (2011a), the SFCJPA will require all construction contractors to implement the exhaust Basic Construction Mitigation Measures and Additional Construction Mitigation Measures recommended by the BAAQMD to control exhaust emissions. Emission reduction measures will include at least the following measures and may include other measures identified as appropriate by the SFCJPA and/or contractor. • Idling times will be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes. Clear signage will be provided for construction workers at all access points. • All construction equipment will be maintained and properly tuned in accordance with manufacturer‘s specifications. All equipment will be checked by a certified visible emissions evaluator. • The Project will develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction Project (i.e., owned, leased, and subcontractor vehicles) would achieve a Project wide fleet-average 20 percent NO_X reduction and 45 percent PM reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such	All Project elements, during construction	Construction contractors	This measure will remain in effect for the duration of Project construction.	The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
as particulate filters, and/or other options as such become available. • Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_X and PM. • Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.				
Mitigation Measure AQ2.2—Fleet Modernization for Onroad Material Delivery and Haul Trucks during Construction. During construction, the Project Applicant will ensure that all onroad heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used at the Project site will comply with EPA 2007 on-road emission standards for PM10 and NO_X (0.01 grams per brake horsepower-hour [g/bhp-hr] and 0.20 g/bhp-hr, respectively). The Project Applicant will submit evidence of the use of modern truck fleet to the BAAQMD. For purposes of analysis, the mitigated reductions provided by MM-AQ-2.3 herein assume a 2007 and newer model truck fleet.	All Project elements, during construction	Construction contractors	This measure will remain in effect for the duration of Project construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure AQ2.3—Modernization for Directional Drilling Equipment during Construction. During construction, the SFCJPA will require that the contractor's equipment used for directional drilling meet EPA Tier 2 or higher emissions standards. In addition, all directional drilling equipment will be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor will achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.	All Project elements, during construction	Construction contractors	This measure will remain in effect for the duration of Project construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
The requirement of MM-AQ-2.3 will be met, unless the contractor is able to provide proof that any of these circumstances exists: • A piece of specialized equipment is unavailable in a controlled form within the State of California, including through a leasing agreement. • A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the proposed Project, but the application is not yet approved, or the application has been approved, but funds are not yet available. • A contractor has ordered a control device for a piece of equipment planned for use on the proposed Project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the proposed Project has the controlled equipment available for lease.				
Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents. The SFCJPA will provide advance written notification of the proposed construction activities to all residences and other noise- and air quality-sensitive uses within 750 feet of the construction site. Notification will include a brief overview of the proposed Project and its purpose, as well as the proposed construction activities and schedule. It will also include the name and contact information of the SFCJPA's project manager or another SFCJPA representative or designee responsible for	All Project elements, during construction	The SFCJPA's project manager will coordinate written notification and will identify the appropriate staff member(s) to serve as noise and air quality disturbance coordinator.	Notification will occur at least 30 days before construction begins at each site. The noise and air quality disturbance coordinator will continue to be available during working hours (included any extended hours) for the duration of Project construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

<table>
<tr><th>Mitigation Measure</th><th>Required for the Following Sites/Project Phases</th><th>Implementation Responsibility</th><th>Implementation Timing</th><th>Monitoring, Enforcement, and Reporting Responsibility</th></tr>
<tr><td>ensuring that reasonable measures are implemented to address the problem (the construction noise and air quality disturbance coordinator; see Mitigation Measure NV1.3).</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Mitigation Measure NV1.3—Designate Construction Noise and Air Quality Disturbance Coordinator to Address Resident Concerns. The SFCJPA will designate a representative to act as construction noise and air quality disturbance coordinator, responsible for resolving construction noise and air quality concerns. The disturbance coordinator’s name and contact information will be included in the preconstruction notices sent to area residents (see Mitigation Measure AQ2.2). She or he will be available during regular business hours to monitor and respond to concerns. In the event an air quality or noise complaint is received, she or he will be responsible for determining the cause of the complaint and ensuring that reasonable measures are implemented to address the problem.</td><td>All Project elements, during construction</td><td>The SFCJPA’s project manager will coordinate written notification and will identify the appropriate staff member(s) to serve as noise and air quality disturbance coordinator.</td><td>Notification will occur at least 30 days before construction begins at each site. The noise and air quality disturbance coordinator will continue to be available during working hours (included any extended hours) for the duration of Project construction.</td><td>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</td></tr>
<tr><td>Biological Resources</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Mitigation Measure BIO1.1—Conduct Botanical Surveys. SFCJPA will retain a qualified botanist to survey suitable habitat in the Project area for special-status plants. Surveys will be conducted during the appropriate blooming periods for each species as indicated in Table 3.3-3.

Table 3.3-3. Timing of Surveys for Special-Status Plants
<table><tr><th>Species</th><th>Blooming Period</th><th>Period Surveys Should Occur[a]</th></tr><tr><td>Alkali milk-vetch</td><td>March–June</td><td>April/May</td></tr><tr><td>San Joaquin spearscale</td><td>May–October</td><td>July/August</td></tr></table></td><td>All Project elements, during construction</td><td>A qualified botanist or ecologist retained by the SFCJPA will perform the surveys, documentation, and reporting described in this measure.</td><td>Surveys will be completed during the blooming periods for each species before ground-disturbing activities begin. Surveys will take place far enough in advance of ground-disturbing activities to allow for Mitigation Measures BIO1.2 and BIO1.3 to be implemented, if necessary.

Survey timing may be adjusted based on input from the qualified</td><td>The SFCJPA’s project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.</td></tr>
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Mitigation Measure			Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Congdon's tarplant	June–November	July/August			botanist/ecologist, based on variations in weather and other factors that influence the blooming period. If possible, surveys should be timed to coincide with blooming periods of known local populations.	
Point Reyes bird's-beak	June–October	July/August				
Hairless popcorn-flower	April–May	April/May				
Slender-leaved pondweed	May–July	June/July				
California seablite	July–October	July/August				
Saline clover	April–June	April/May				

[a] Exact timing of surveys should account for annual variations in climate and weather; surveys should be timed to coincide with blooming periods of known local populations whenever possible.

Surveys will follow the CNPS Botanical Survey Guidelines (California Native Plant Society 2001**Error! Bookmark not defined.**). Special-status plants identified during the surveys will be mapped using a handheld global positioning system unit and documented as part of the public record. A report of occurrences will be submitted to SFCJPA and the CNDDB. Surveys will be completed before ground-disturbing activities begin; survey timing will allow for follow-up mitigation, if needed. If it is determined that individuals of identified special-status plant species could be affected by construction traffic or activities, Mitigation Measure BIO1.2 and, if necessary, Mitigation Measure BIO1.3, will be implemented.

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Mitigation Measure BIO1.2—Confine Construction Disturbance and Protect Special-Status Plants During Construction. Construction disturbance will be confined to the minimum area necessary to complete the work, and will avoid encroachment on adjacent habitat. If special-status plants are found, a setback buffer will be established around individuals or the area occupied by the population, based on judgment of a qualified botanist. The plants and a species-appropriate buffer area determined in consultation with agency (DFG and USFWS) staff will be protected from encroachment and damage during construction by installing temporary construction fencing. Fencing will be brightly colored and highly visible. Fencing will be installed under the supervision of a qualified botanist to ensure proper location and prevent damage to plants during installation. Fencing will be installed before site preparation or construction work begins and will remain in place for the duration of construction. Construction personnel will be prohibited from entering these areas (the exclusion zone) for the duration of Project construction. Fencing installation will be coordinated with fence installation required by other mitigation measures protecting wetlands, riparian habitat, and mature trees.	All Project elements, during construction	A qualified botanist or ecologist retained by the SFCJPA will coordinate with DFG and USFWS staff to establish setback buffers (i.e., determine their location and extent). The qualified botanist/ecologist will either install construction fencing to protect plants within the setback, or will supervise installation by construction personnel. The botanist/ecologist will be responsible for ensuring that fencing is installed without damage to special-status plants. All contractor staff will be expected to observe the setback buffers.	At each site, all setbacks will be established and fenced before any site preparation or construction activities are permitted to commence.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Setbacks will be established in consultation with DFG and USFWS.
Mitigation Measure BIO1.3—Compensate for Loss of Special-Status Plants. If any individuals of listed special-status plants are present and cannot be effectively avoided through implementation of Mitigation Measure BIO1.2, SFCJPA will develop and implement a compensation plan. The compensation plan will preserve an off-site area containing individuals of the affected species. The plan will be implemented so that there is no net loss of special-status plants. If an off-site population is not located or is not available for preservation, SFCJPA will employ a qualified nursery to collect and propagate the affected species, collected at the appropriate time	All Project elements, prior to construction	A qualified botanist or ecologist retained by the SFCJPA will coordinate with DFG and USFWS to develop the compensation plan and monitoring and adaptive management plan. The SFCJPA's project manager will be responsible for implementing the plan.	If propagation is required, propagules will be collected before ground disturbance begins. Any transplantation will also occur prior to ground disturbance. Compensation described in this measure will be arranged, and if possible, completed prior to groundbreaking.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. SFCJPA will submit documentation of the completed compensation and subsequent monitoring and adaptive management plan results to DFG and USFWS

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of year, prior to population disturbance at the affected areas of the Project. Transplantation will also be implemented if practicable for the species affected, including mature native plants to the extent feasible. The compensation plan will be developed by a qualified botanist in coordination with and approval of DFG or USFWS, depending on whether the plant has state or federal status, respectively, or both. The compensation area will contain a population and/or acreage equal to or greater than that lost as a result of Project implementation and will include adjacent areas as needed to preserve the special-status plant population in perpetuity. Compensation of the affected population will occur in an amount equal to or greater than the amount lost as a result of the Project to ensure that genetic diversity is preserved and no net loss of the number of individuals occurs. The quality of the population preserved will also be equal to or greater than that of the affected population, as determined by a qualified botanist retained by the SFCJPA. Compensation sites and populations will be subject to DFG and USFWS approval. The SFCJPA will be responsible for ensuring that the compensation area is acquired in fee or in conservation easement, maintained for the benefit of the special-status plant population in perpetuity, and funded through the establishment of an endowment. A monitoring and adaptive management plan will be developed for each compensation site, subject to DFG and USFWS approval. This plan will establish success criteria for the site and will include protocols for annual monitoring of the site. The goal of monitoring will be to assess whether the plan has successfully mitigated Project impacts; monitoring will be designed to ensure that the required number of plants and/or plant acreage is being sustained through site maintenance. Factors to be monitored could				

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include density, population size, natural recruitment, and plant health and vigor. If monitoring indicates that special-status plant populations are not maintaining themselves, adaptive management techniques will be implemented. Such techniques could include reseeding/replanting, nonnative species removal, and other management tools. The site will be evaluated at the end of the monitoring period to determine whether the mitigation has met the goal of this mitigation measure to preserve a population the same size as that affected and of equal or greater quality as that lost as a result of Project activities at the site. Criteria by which this determination will be made will be established in the monitoring plan. The monitoring plan will also address adaptive management strategies to be adopted if the evaluation determines that the site does not meet the success criteria. In that case, a monitoring plan will stay in place until the success criteria are met.				
Mitigation Measure BIO2.1—Develop and Implement Worker Awareness Training. Prior to construction, Worker Awareness Training must be conducted to inform construction workers of their responsibilities regarding sensitive environmental resources. The training will include environmental education about the western pond turtles, nesting raptors and migratory birds, western burrowing owl, California clapper rail, California black rail, salt marsh harvest mouse, salt marsh wandering shrew, California least tern, western snowy plover, California red-legged frog, San Francisco garter snake, and steelhead, as well as sensitive habitat (e.g., in-stream habitat, riparian habitat, wetlands). The training will include visual aids to assist in identification of regulated biological resources, actions to take should protected wildlife be observed within the Project area, and possible legal repercussions of impacting such regulated resources.	All Project elements, prior to construction	The SFCJPA will retain a qualified wildlife biologist to implement this measure for construction contractor crews.	Construction crew training will occur prior to any work on the site.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the SFCJPA's designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

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Mitigation Measure BIO2.2—Implement Survey and Avoidance Measures to Decrease Disturbance to Western Pond Turtles. Prior to the start of construction activities at Project element sites that could support western pond turtle, SFCJPA will retain a qualified biologist to conduct preconstruction surveys for western pond turtles in all suitable habitats in the vicinity of the work sites. Surveys will take place no more than 7 days prior to the onset of site preparation and construction activities with the potential to disturb turtles or their habitat. If preconstruction surveys identify active nests, the biologist will establish no-disturbance buffer zones around each nest using temporary orange construction fencing. The demarcation will be permeable to allow young turtles to move away from the nest following hatching. The radius of the buffer zone and the duration of exclusion will be determined in consultation with DFG. The buffer zones and fencing will remain in place until the young have left the nest, as determined by the qualified biologist. If western pond turtles are found in the Project area, a qualified biologist will remove and relocate them to suitable habitat outside the Project limits, consistent with DFG protocols and permits. Relocation sites will be subject to agency approval. If turtles are observed during the surveys, then Mitigation Measure BIO2.3 will be implemented.	All Project elements, prior to construction	The SFCJPA will retain a qualified wildlife biologist to implement this measure.	The surveys and avoidance measures described in this measure will be performed before site preparation and construction activity begins.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the SFCJPA's designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Exclusion fencing will be established in consultation with DFG and USFWS as necessary. A written report will be submitted to DFG detailing the survey results of any western pond turtles and subsequent relocation activities (if necessary).
Mitigation Measure BIO2.3—Daily Surveys and Monitoring of Construction Activities to Decrease Disturbance to Western Pond Turtles. SFCJPA will retain a qualified biologist to conduct preconstruction surveys for western pond turtles in all suitable habitats in the vicinity of work sites that will be active within the 3 days prior to the onset of site preparation and construction activities with the potential to disturb turtles or their habitat. If no turtles are found during the daily survey, construction will commence and be monitored for the duration of	All Project elements, prior to construction	The SFCJPA will retain a qualified wildlife biologist to implement this measure.	The surveys and avoidance measures described in this measure will be performed daily before construction activity begins.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the SFCJPA's SMP program manager will be responsible for ensuring proper

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
work within suitable western pond turtle habitat. If a turtle is found during the daily preconstruction survey, construction in the vicinity of the turtle will not commence until the turtle is removed from the Project area to be relocated to suitable habitat outside of the Project limits per DFG protocols and permits. Relocation sites will be subject to agency approval. Following turtle relocation, the biologist will return to the Project area and monitor construction activities that take place within suitable western pond turtle habitat.				implementation, for enforcement, and for documenting compliance. Exclusion fencing will be established in consultation with DFG and USFWS as necessary. A written report will be submitted to DFG detailing the survey results of any western pond turtles and subsequent relocation activities (if necessary).
Mitigation Measure BIO3.1—Establish Buffer Zones for Nesting Raptors and Migratory Birds (Excluding Burrowing Owl). Prior to the start of construction activities that begin during the migratory bird nesting period (between January 15 and August 31 of any year), SFCJPA will retain a qualified wildlife biologist to conduct a survey for nesting raptors and migratory birds that could nest along the Project corridor, including special-status species such as salt marsh common yellowthroat, Alameda song sparrow, northern harrier, and white-tailed kite. Surveys will cover all suitable raptor and migratory bird nesting habitat that will be impacted directly or indirectly through disturbance, including habitat potentially used by ground-nesting migratory bird species. All migratory bird nesting surveys will be performed no more than 2 weeks (14 days) prior to any Project-related activity that could pose the potential to affect migratory birds. If a lapse in Project-related work of 2 weeks or longer occurs, another focused survey will be conducted before Project work can be reinitiated. With the exception of raptor nests, inactive bird nests may be removed. No birds, nests with eggs, or nests with hatchlings will be disturbed. In addition, nesting bird preconstruction surveys will occur prior to ground disturbance, including site	All Project elements, prior to construction	A qualified wildlife biologist retained by the SFCJPA will be responsible for conducting the surveys described in this measure. If any active nests are identified, s/he will coordinate with DFG to establish buffers, will install or oversee the installation of exclusion fencing, and will determine when the nest(s) are no longer active.	Any buffers that are established as a result of surveys will remain in place as long as the nest is active or young remain in the area, as determined by the qualified wildlife biologist.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Buffer zones will be established in consultation with DFG as necessary.

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preparation. If an active nest is discovered during these surveys, the qualified wildlife biologist will establish a no-disturbance buffer zone around the nest tree (or, for ground-nesting species, the nest itself). The no-disturbance zone will be marked with flagging or fencing that is easily identified by the construction crew and will not affect the nesting bird. In general, the minimum buffer zone widths will be 0.5-mile for bald and golden eagles, 25 feet (radius) for nonraptor ground-nesting species; 50 feet (radius) for nonraptor shrub- and tree-nesting species; and 250 feet (radius) for all raptor species. Buffer widths may be modified based on discussion with DFG, depending on the proximity of the nest, whether the nest would have a direct line of sight to construction activities, existing disturbance levels at the nest, local topography and vegetation, the nature of proposed activities, and the species potentially affected. Buffers will remain in place as long as the nest is active or young remain in the area. No construction presence or activity of any kind will be permitted within a buffer zone until the biologist determines that the young have fledged and moved away from the area and the nest is no longer active. If monitoring of active nests indicates that disturbance is affecting active nests, buffer widths will be increased until the disturbance no longer affects the nest(s). If the buffer cannot be extended further, then work within the area will stop until the nest is no longer active.				
Mitigation Measure BIO4.1—Implement Survey and Avoidance Measures for Western Burrowing Owls Prior to Construction Activities. Prior to any construction activity planned to begin during the fall and winter nonnesting season (September 1-January 31), SFCJPA will retain a qualified wildlife biologist to conduct a preconstruction survey for burrowing	All Project elements, prior to construction	A qualified wildlife biologist retained by the SFCJPA will be responsible for conducting the surveys described in this measure. If individuals are observed outside the	During the nonnesting season (September 1-January 31), surveys will be conducted no more than 7 days prior to ground-disturbing activities. For sites where	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Buffers will be established in consultation with DFG as

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owls. Surveys will be conducted no more than 7 days prior to ground-disturbing activities and will cover all suitable burrowing owl habitat subject to disturbance. If any western burrowing owls are found within the disturbance area during the survey or at any time during the construction process, SFCJPA will notify DFG and will proceed under DFG direction. If construction is planned to occur during the nesting season (February 1-August 31), surveys for nesting owls will be conducted by a qualified wildlife biologist in the year prior to construction to determine if there is breeding within 250 feet of the construction footprint. This prior-year survey will provide the Project team advance notice regarding nesting owls in the Project area and allow ample time to discuss with DFG the appropriate course of action if nesting owls are found. In addition, same-year preconstruction surveys for nesting western burrowing owls will be conducted no more than 7 days prior to ground disturbance in all suitable burrowing owl habitat. If the biologist identifies the presence of a nesting burrowing owl in an area scheduled to be disturbed by construction, a 250-foot no-activity buffer will be established and maintained around the nest while it is active. Surveys and buffer establishment will be performed by qualified wildlife biologists, will be coordinated with DFG, and will be subject to DFG review and oversight.		nesting period, s/he will coordinate with DFG to identify and implement appropriate measures. If active nests are identified, s/he will coordinate with DFG to establish buffers, will install or oversee the installation of exclusion fencing, and will determine when the nest(s) are no longer active.	construction work is scheduled to occur between February 1 and August 31, surveys will be completed before any site preparation or construction activities begin. Surveys will take place no more than 7 days prior to ground disturbance. Any buffers that are established as a result of the surveys will remain in place as long as the nest is active, as determined by the qualified wildlife biologist.	necessary. A written report will be submitted to DFG detailing the survey results of any western burrowing owls found on the Project site.
Mitigation Measure BIO5.1—Implement Survey and Avoidance Measures for California Clapper Rail and California Black Rail Prior to Construction Activities. Work activities within 50 feet of California clapper rail habitat will not occur within two hours before or after extreme high tides (6.5 feet or above) when the marsh plain is inundated, which could prevent individuals from reaching available cover. If work is to be conducted during the species' breeding and rearing seasons (March–August 31) within 700 feet of suitable habitat, a permitted	All Project elements, prior to construction	A qualified biologist retained by the SFCJPA will be responsible for the surveys described in this measure and for any needed consultation with DFG.	Surveys will take place no more than 48 hours prior to the onset of work.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the SFCJPA's designated maintenance manager will be responsible for ensuring proper implementation, for

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biologist will be retained to conduct surveys of appropriate habitat for California clapper rail and California black rail. The surveys will be conducted no more than 48 hours prior to commencement of construction and maintenance activities and will be performed at dawn or dusk, the vocalization periods of highest intensity. Project activities occurring within 700 feet of active nests will be postponed until after young have fledged. Outside of breeding season, a permitted biologist will be retained to conduct surveys of appropriate habitat for California clapper rail and California black rail within the work area, including all staging and access routes, no more than 7 days prior to initiation of work within suitable habitat. If individuals are observed during this survey, a biologist will conduct an additional survey immediately prior to initiation of construction activities. If individuals are observed within or near the work area, a no-disturbance buffer (minimum 50 feet) will be implemented. If the daily work area is expanded, then a qualified biologist will survey the suitable habitat prior to initiation of work and movement of equipment that day. No work will occur within the buffer until the biologist verifies that California clapper rail or California black rail individuals have left the area. If individuals are routinely observed in the work area, a species avoidance plan will be developed in coordination with USFWS and DFG. If no individuals are observed in accordance with the survey protocols, no buffers will be required. All vegetation removal within suitable habitat of these species, as determined by a biologist, will be done by hand to the extent possible. If movement of heavy equipment in necessary in suitable habitat or within 50 feet of habitat, then a biological monitor will observe the area in front of the equipment from a safe vantage point. If these species are detected within the area in front of the equipment, then the equipment will stop and the				enforcement, and for documenting compliance. Protection measures will be identified in consultation with DFG and USFWS as necessary.

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biologist will direct the equipment on an alternative path. If this is not possible, then equipment will stop until a clear path can be identified.				
Mitigation Measure BIO5.2—Produce and Implement Habitat Monitoring Plan for Habitat within the Faber Tract Prior to Construction Activities. The SFCJPA or its approved designee will be responsible for the development and implementation of a habitat monitoring plan for existing (i.e., pre-Project) habitat within the Faber Tract that will document baseline conditions prior to Project implementation. The plan will include routine monitoring of the habitat within the Faber Tract to document changes resulting from the hydrologic reconnection of San Francisquito Creek and potential subsequent flooding into the Faber Tract. The habitat monitoring plan will include adaptive management measures to rectify potential conversion of habitat types and other issues that might arise in the Faber Tract as a result of Project implementation. Additionally, contingency measures will be developed and included in the plan in the event of habitat conversion or loss resulting from the Project. Plan approval by USFWS and DFG will be necessary before implementation of activities recommended by the plan. Routine monitoring reports will be submitted to the appropriate agencies following their completion.	All Project elements, prior to construction	A qualified biologist retained by the SFCJPA will be responsible for Plan development described in this measure, coordination with DFG, and for any needed follow-up activities.	Coordination with DFG will be initiated before any construction activity begins, and will remain in effect for the duration of the Project. The plan for the site will be completed and approved by DFG prior to groundbreaking.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. The plan would be finalized in consultation with DFG and USFWS as necessary.
Mitigation Measure BIO6.1—Implement Survey and Avoidance Measures for Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Prior to Construction. Construction and maintenance work, including site preparation, will be avoided to the extent possible within suitable habitat for these species during their breeding seasons (February 1 to November 30). As work during the species' breeding seasons will be necessary, a species avoidance plan will be developed in consultation with USFWS and DFG, and implemented. The avoidance plan, at a	All Project elements, prior to construction	A qualified biologist retained by the SFCJPA will be responsible for the surveys described in this measure and for any needed consultation with DFG.	Surveys will take place no more than 24 hours prior to the onset of work.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the SFCJPA's designated maintenance manager will be responsible for ensuring

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minimum, will include: • Hand vegetation removal shall start at the edge farthest form the largest contiguous salt marsh area and work its way towards the salt marsh, providing cover for salt marsh harvest mice and allowing them to move towards the salt marsh as vegetation is being removed. • In consultation with DFG, exclusion fencing shall be placed around a defined work area immediately following vegetation removal and before Project activities begin. The final design and proposed location of the fencing shall be reviewed and approved by DFG prior to placement. • Prior to initiation of work each day within 300 feet of tidal or pickelweed habitats, the qualified biologist shall thoroughly inspect the work area and adjacent habitat areas to determine if saltmarsh harvest mice are present. The biologist shall ensure the exclusion fencing has no holes or rips and the base remains buried. The fenced area will be inspected daily to ensure that no mice are trapped. Prior to initiation of work within suitable habitat, a permitted biologist will be retained to monitor the hand removal of pickleweed to avoid impacts on salt marsh harvest mouse and salt marsh wandering shrew. Monitoring will occur for the duration of all clearing work within suitable habitat, and all clearing of pickleweed will be conducted by hand. If salt marsh harvest mouse or salt marsh wandering shrew are observed during clearing activities, clearing will cease and workers will move to a new area. Clearing work may begin in the area of the observation 1 day or more after the observation date.				proper implementation, for enforcement, and for documenting compliance. Protection measures will be identified in consultation with DFG and USFWS as necessary.

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During the survey, if salt marsh harvest mouse or salt marsh wandering shrew individuals are observed, or if active nests of these species are observed, proposed Project activities within 100 feet of the observation will be postponed and a no-disturbance buffer will be established. The buffer will remain in place until the biologist determines that the individuals have left the area and are not present in or near (100 feet) of the work area. If no individuals are observed in accordance with the survey protocols, no buffers will be required. Work activities within 50 feet of salt marsh harvest mouse habitat will not occur within two hours before or after extreme high tides (6.5 feet or above) when the marsh plain is inundated, which could prevent individuals from reaching available cover.				
Mitigation Measure BIO7.1—Implement Survey and Avoidance Measures for California Least Tern and Western Snowy Plover Prior to Construction Activities. Construction work, including site preparation, will be avoided to the extent possible within and near (700 feet) suitable habitat for these species during their breeding seasons (March 1 to August 31). Western snowy plover may be present within suitable habitat year-round. Prior to the initiation of work within 700 feet of suitable habitat (regardless of the time of year), a permitted biologist will be retained to conduct surveys of appropriate habitat for California least tern and western snowy plover and their nests. The surveys will be conducted no more than 48 hours prior to commencement of construction activities and will be performed during optimal observation periods when these species are most active. If active nests for California least tern or western snowy plover are observed or heard during the survey, Project activities within 500 feet of the observation will be postponed until young have fledged. If individuals are observed outside of the breeding season	All Project elements, prior to construction	A qualified biologist retained by the SFCJPA will be responsible for the surveys described in this measure and for any needed consultation with DFG.	Surveys will take place no more than 48 hours prior to the onset of work.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the SFCJPA's designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Protection measures will be identified in consultation with DFG and USFWS as necessary.

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within 500 feet of the work area, a biologist will establish a no-disturbance buffer. No work will occur within the buffer until the biologist verifies that individuals have left the area. If individuals are routinely observed in or within 500 feet of the work area or do not leave the work area, species avoidance plan will be developed in coordination with USFWS and DFG. If no individuals are observed in accordance with the survey protocols, no buffers will be required.				
Mitigation Measure BIO8.1—Implement Survey and Avoidance Measures for California Red-Legged Frog and San Francisco Garter Snake Prior to Construction Activities. SFCJPA will retain a permitted biologist to conduct a survey of the freshwater ponds and surrounding upland habitat prior to initiation of construction activities. The surveys will be conducted according to applicable protocols and will be performed during optimal observation periods of the day when detection potential for these species is maximized. The survey will be conducted prior to initiation of construction, but such that enough time is allowed to coordinate with USFWS and DFG to develop a species avoidance plan if needed. If California red-legged frog or San Francisco garter snake individuals are observed or heard during the survey, proposed Project activities within 500 feet of the observation will be postponed. A species avoidance plan will be developed in coordination with USFWS and DFG and implemented during construction and maintenance. If no individuals are observed during the surveys, no further action will be necessary.	All Project elements, prior to construction	The SFCJPA will retain a qualified wildlife biologist to implement this measure.	The surveys and any needed relocation of individuals described in this measure will be performed before site preparation and construction activity begins. Fencing will remain in place for the duration of construction or maintenance activity.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the SFCJPA's designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Relocation sites will be established in consultation with DFG and USFWS as necessary. A written report will be submitted to DFG and USFWS detailing the survey results of listed amphibians and subsequent relocation activities (if necessary).

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Mitigation Measure BIO9.1—Implement Avoidance Measures for Steelhead Trout Prior to Construction Activities. No in-channel construction activities will occur during the steelhead migration period (October 1–April 30), to reduce the likelihood that steelhead are present during construction activities. A qualified fisheries biologist, approved by NMFS, will survey the construction area 1 to 2 days before the Project begins. If no surface water is present in the immediate construction area, fish will not be relocated. If water is present, the following procedures will be implemented. • Before a work area is dewatered, fish will be captured and relocated to avoid injury and mortality and minimize disturbance. • Before fish relocation begins, a qualified fisheries biologist will identify the most appropriate release location(s). Release locations should have water temperatures similar to the capture location and offer ample habitat for released fish, and should be selected to minimize the likelihood that fish will reenter the work area or become impinged on the exclusion net or screen. At this time the open reach below the Project site is anticipated to have suitable conditions for relocation. • Seining or dip netting will be utilized to keep stress and injury to fish at a minimum. Given the salinity of the Project reach, electrofishing will not be utilized. • To the extent feasible, relocation will be performed during morning periods. Water temperatures will be measured periodically, and relocation activities will be suspended if water temperature exceeds 18^0C (National Marine Fisheries Service 2000).	All Project elements, prior to construction	A qualified biologist retained by the SFCJPA will be responsible for the surveys described in this measure and for any needed consultation with NMFS.	Surveys will take place no more than 48 hours prior to the onset of work.	For the construction period, the SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the SFCJPA's designated maintenance manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Protection measures will be identified in consultation with NMFS as necessary.

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• Handling of salmonids will be minimized. When necessary, personnel will wet hands or nets before touching fish. • Fish will be held temporarily in cool, shaded water in a container with a lid. Overcrowding in containers will be avoided. Fish will be relocated promptly. If water temperature reaches or exceeds NMFS limits, fish will be released and relocation operations will cease. • If fish are abundant, capture will cease periodically to allow release and minimize the time fish spend in holding containers. • Fish will not be anesthetized or measured. However, they will be visually identified to species level, and year classes will be estimated and recorded. • Reports on fish relocation activities will be submitted to DFG and NMFS within 30 days of completion. • If mortality during relocation exceeds 5% or mortality of any State or Federal listed species occurs, relocation will cease and DFG and NMFS will be contacted immediately or as soon as feasible. • Fish relocation efforts will be performed concurrent with the installation of the diversion and will be completed before the channel is fully dewatered. The fisheries biologist will perform a second survey 1 to 2 days following the installation of the diversion to ensure that fish have been excluded from the work area and spot checks will be performed at least biweekly while the diversion is in place.				

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Mitigation Measure BIO11.1—Identify and Protect Riparian Habitats. To avoid unnecessary damage to or removal of riparian habitat, the SFCJPA will retain a qualified biologist or ecologist to survey and demarcate riparian habitat on or adjacent to the proposed areas of construction in the upper reach of San Francisquito Creek. Riparian areas not slated for trimming or removal to accommodate Project construction will be protected from encroachment and damage during construction by installing temporary construction fencing to create a no-activity exclusion zone. Fencing will be brightly colored and highly visible, and installed under the supervision of a qualified biologist to prevent damage to riparian habitat during installation. The fencing will protect all potentially affected riparian habitat consistent with International Society of Arboriculture tree protection zone recommendations and any additional requirements of the resource agencies with jurisdiction. Fencing will be installed before any site preparation or construction work begins and will remain in place for the duration of construction. Riparian vegetation that must be trimmed will be trimmed by an International Society of Arboriculture certified arborist who will minimize stress and potential damage to trees and shrubs. Construction personnel will be prohibited from entering the exclusion zone for the duration of Project construction. Access and surface-disturbing activities will be prohibited within the exclusion zone.	All Project elements, prior to construction	A qualified botanist or ecologist retained by the SFCJPA will establish the setback buffers (i.e., determine their location and extent). The qualified botanist/ecologist will either install the construction fencing to protect riparian habitat within the setback, or will supervise installation by construction personnel.	Surveys will be conducted and setbacks will be established and fenced before work begins. Fencing will remain in place for the duration of construction, site finishing, and demobilization.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure BIO11.2—Restore Riparian Habitat. The SFCJPA will be responsible for restoring permanently affected riparian habitat at a mitigation-to-impact ratio of 2:1, and restoring temporarily affected habitat at a minimum impact-to-mitigation ratio of 1:1 to ensure no net loss of riparian habitat in the affected stream reach. The SFCJPA will develop a Mitigation and Monitoring Plan (MMP) to ensure that all removed habitat is replaced "in kind" with	All Project elements, prior to construction	A qualified botanist/ecologist retained by the SFCJPA will be responsible for identifying and mapping riparian areas and preparing the MMP.	The MMP will be developed and restoration will be planned during the permit process, prior to groundbreaking. The MMP will remain in force until the success criteria described in the plan are met.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. The MMP will be developed in consultation with resource agency staff.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
the appropriate native overstory and understory species to maintain structural complexity and habitat value. The MMP will be developed in the context of the federal and state permitting processes under the CWA and California Department of Fish and Game Code, and will include success criteria as specified by the permitting agencies. The MMP will also include adaptive management guidelines for actions to be taken if the success criteria are not met. The success criteria will be met if 80% of the riparian plantings become established after 10 years. Monitoring will occur, at a minimum, during years 1, 2, 3, 5, 7, and 10, with the plantings taking place in year 0.The initial annual monitoring will assess progress of the plantings according to predetermined success criteria. If progress is not satisfactory, adaptive management actions (including replanting, nonnative species removal, etc.) could be implemented. The MMP will remain in force until the success criteria are met.				
Mitigation Measure BIO12.1—Avoid and Protect Jurisdictional Wetlands during Construction. The SFCJPA will ensure that a qualified resource specialist (biologist, ecologist, or soil scientist) will clearly identify wetland areas outside of the direct impact footprint with temporary orange construction fencing before site preparation and construction activities begin at each site or will implement another suitable low-impact measure. Construction will not encroach upon jurisdictional wetlands identified by the wetland specialist. The resource specialist will use the wetland delineation (ICF 2012) mapping prepared for the proposed Project and will confirm or modify the location of wetland boundaries based on existing conditions at the time of the survey. Exclusion fencing will be installed before construction activities are initiated, and the fencing will be maintained throughout the construction period. No construction activity, traffic, equipment, or	All Project elements, prior to construction	A qualified botanist or ecologist retained by the SFCJPA will establish the setback buffers (i.e., determine their location and extent). The qualified botanist/ecologist will either install the construction fencing to protect jurisdictional wetlands within the setback, or will supervise installation by construction personnel.	At each site, all setbacks will be established and fenced before work begins. Fencing will remain in place for the duration of construction, site finishing, and demobilization.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
materials will be permitted in fenced wetland areas.				
Mitigation Measure BIO13.1—Transplant or Compensate for Loss of Protected Landscape Trees, Consistent with Applicable Tree Protection Regulations. Protected landscape trees slated for removal and deemed good candidates for transplantation will be considered for transplanting in conjunction with the proposed landscaping plans. Transplanted trees will be located on the site if space permits. If the number of trees to be transplanted is too large to be accommodated on the Project site, the SFCJPA will prepare a landscaping plan detailing other locations where transplanted trees will be planted, consistent with the requirements of the applicable tree protection ordinance or regulations. Transplanted trees will be subject to the monitoring and replacement requirements identified for replacement trees below. Protected landscape trees not deemed good candidates for transplantation will be replaced. The landscaping plan for tree replacement will specifically identify the locations where replacement trees are to be planted; replacements will be planted on the site, if possible. The landscaping plan will be subject to review and approval by the agency with jurisdiction (Santa Clara County, San Mateo County, City of Palo Alto, or City of East Palo Alto). Tree removals within the Cities of Palo Alto and East Palo Alto will be compensated for at a mitigation-to-impact ratio of 1:1, or as determined by the City. Species and location of the replacement tree will be determined in consultation with the property owner and the City. Impacted mitigation trees associated with the Matadero Creek and Palo Alto Pump Station projects would be replaced in accordance with the terms and conditions of the respective permits for those projects and in consultation with the	All Project elements, prior to construction	Surveys and reporting will be performed by an ISA- (International Society of Arboriculture) or ASCA- (American Society of Consulting Arborists) certified arborist retained by the SFCJPA. Landscape plans will be developed by a licensed landscape architect and/or civil engineer in consultation with the arborist and SFCJPA project manager. Transplantation and compensation plantings will be performed by contractor staff under the supervision of the certified arborist.	The arborist surveys will be performed during Project design. The landscaping plan, which will determine the feasibility of transplanting protected landscape trees, will be completed prior to groundbreaking. Transplantation efforts, if determined feasible by the certified arborist, will take place during construction as protected landscape trees are removed. If transplantation is not feasible, compensation will be arranged, and if possible, completed prior to groundbreaking. Any onsite compensation plantings will be provided during Project construction/ site finishing.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
responsible permitting authorities for those projects, should the monitoring period for successful completion of mitigation requirements not be completed at the time of construction. The SFCJPA will be responsible for ensuring newly planted trees will be monitored at least once a year for 3 years. Each year, trees that do not survive will be replaced in a manner consistent with the compensation required under the applicable tree ordinance. Trees planted as remediation for failed plantings will then be monitored for a period of 3 years in the same manner, and trees that do not survive will be replaced. Trees that are replaced will be consistent with the Guidelines and Standards for Land Uses near Streams prepared by the Santa Clara Valley Water Resources Protection Collaborative. The SFCJPA will be responsible for the removal of irrigation systems that are no longer used following tree establishment. Inactive irrigation systems will be removed within 5 years of satisfaction of the mitigation measure.				
Mitigation Measure BIO13.2—Protect Remaining Trees from Construction Impacts. Trees not designated for removal will be protected from damage during construction by the installation of temporary fencing in a manner consistent with International Society of Arboriculture tree protection zone recommendations. Fencing will keep construction equipment away from trees and prevent unnecessary damage to or loss of protected trees on the Project site. Protected trees retained on the site and located adjacent to construction activities will be monitored as specified for newly planted trees (see Mitigation Measure BIO13.1) and replaced if they do not survive through the monitoring period.	All Project elements, prior to construction	An ISA- (International Society of Arboriculture) or ASCA- (American Society of Consulting Arborists) certified arborist retained by the SFCJPA will either install the construction fencing to protect remaining trees within the setback, or will supervise installation by construction personnel. Follow up monitoring will also be performed by a certified arborist.	At each site, all setbacks will be established and fenced before any site preparation or construction activities are permitted to commence.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Cultural and Paleontological Resources				
Mitigation Measure CR1.1—Conduct a Pre-Construction Cultural Field Survey and Cultural Resources Inventory and Evaluation. The SFCJPA will retain qualified personnel to conduct an archaeological field survey of the Project area to determine whether significant resources exist within the Project area. The inventory and evaluation will include the documentation and result of these efforts, the evaluation of any cultural resources identified during the survey, and cultural resources monitoring, if the survey identifies that it is necessary. The monitoring process will be carried out in combination with the District's standard BMPs.	All Project elements, prior to construction groundbreaking	A qualified architectural historian retained by the SFCJPA will be responsible for conducting the historical resources evaluation described in this measure.	The historical resources evaluation will be conducted during preparation of the National Historic Preservation Act Section 106 report required for the permit process, and will be completed prior to site preparation or construction activities.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure CR1.2—Conduct Worker Awareness Training for Archaeological Resources Prior to Construction. Prior to the initiation of any site preparation and/or start of construction, the applicant will ensure that all construction workers receive training overseen by a qualified professional archaeologist who is experienced in teaching nonspecialists, to ensure that forepersons and field supervisors can recognize archaeological resources (e.g., areas of shellfish remains, chipped stone or groundstone, historic debris, building foundations, human bone) in the event that any are discovered during construction.	All Project elements, prior to construction groundbreaking	A qualified archaeologist retained by the SFCJPA will be responsible for conducting the construction monitoring described in this measure.	This measure will remain in effect for the duration all ground-disturbing activities.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure Paleo1.1—Conduct a Pre-Construction Paleontological Resources Field Survey and Paleontological Resources Inventory and Evaluation. The SFCJPA will retain qualified personnel with experience in vertebrate fossil monitoring and salvage at construction sites to conduct a paleontological resources field survey of the Project area with native soils to determine whether significant resources exist within the Project area. The inventory and evaluation will include the documentation and result of these	All Project elements, prior to construction groundbreaking	A qualified paleontologist retained by the SFCJPA will be responsible for conducting the survey. If salvage and/or protection are required, measures will be designed and implemented by the qualified paleontologist	Surveys will be conducted prior to ground disturbance, and with enough lead time to allow for salvage and/or protection. If salvage or protection is needed, these operations will also be completed prior to construction ground	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
efforts, the evaluation of any paleontological resources identified during the survey, and paleontological resources monitoring, if the survey identifies that it is necessary.		in consultation with the SFCJPA's project manager.	disturbance.	
Mitigation Measure Paleo 1.2—Conduct Worker Awareness training for Paleontological Resources Prior to Construction. Prior to the initiation of any site preparation and/or start of construction, the applicant will ensure that all construction workers receive training overseen by a qualified professional paleontologist who is experienced in teaching nonspecialists, to ensure that forepersons and field supervisors can recognize paleontological resources in the event that any are discovered during construction.	All Project elements, prior to construction groundbreaking	The SFCJPA will retain a qualified paleontologist or California-licensed professional geologist (PG) experienced in training non-specialists to deliver the required training.	Training will occur prior to groundbreaking.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure CR1.3—Stop Work Immediately if Buried Cultural Resources are Discovered Inadvertently. If paleontological resources are discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified paleontologist with experience in vertebrate fossil monitoring and salvage at construction sites can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the SFCJPA and other agencies as appropriate. Equipment operators, supervisors, inspectors, and other field personnel will be required to report to the paleontology monitor any suspected fossil discoveries. The paleontologist will have authority to halt or redirect excavation operations in the event of discovery of vertebrate, plant, or invertebrate fossils until such time as their probable significance can be assessed and, if potentially significant, appropriate salvage measures have been implemented. The paleontologist will properly collect and document any large vertebrate remains and recognize and appropriately sample and	All Project elements, during construction	Stop work orders may be issued by the qualified paleontologist, or by the construction foreperson in response to discoveries by construction workers. All SFCJPA and contractor staff will be responsible for adhering to stop work orders. Any follow-up (evaluation, treatment) will be performed by or under the supervision of the qualified paleontologist.	This measure will remain in effect for the duration of construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
document any sedimentary bodies revealing small vertebrate remains. Large bulk samples may be appropriate. Minimum documentation includes exact location (GPS data), orientation, depth (elevation), and detailed geologic setting of any large- or small-vertebrate finds, including detailed diagrams showing microstratigraphy in nearby excavations supplemented with good-quality field photographs. If vertebrate fossils are discovered in spoils piles during excavation, the paleontologist will make every effort to locate and record the original site of the specimen(s) prior to disturbance. Should ground-disturbing activities within Caltrans ROW make an inadvertent burial discovery, all construction within 50 feet of the find shall cease. Caltrans' Cultural Resource Studies Office, District 4, shall be immediately contacted at (510) 286-5618. A Caltrans staff archaeologist will evaluate the finds within one business day after contact. Salvage of potentially significant specimens discovered in situ in excavated surfaces will be conducted by the paleontologist in compliance with all safety regulations and with implementation of all feasible precautions. The on-site safety inspector will hold final authority to determine whether each proposed salvage operation is consistent with established safety policies at the site. Excavation equipment and operators will be made available for short periods to remove overburden above in situ specimens, to improve safety conditions during salvage operations, or to aid in transport within the site boundaries of any large salvaged specimens which cannot be safely transported by hand. Any potentially significant fossils recovered during the monitoring and salvage phase will be cleaned, repaired, and hardened to the level required by the repository institution, and will be donated to that institution. Any collected bulk				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
sediment samples having the potential for small fossil vertebrate remains will be wet- or dry-screened and processed as necessary for recovery of the included fossils. Details of requirements and conditions for transfer of salvaged specimens to the repository museum will be arranged with the museum as soon as the scope of the salvaged collection becomes apparent, and will be in accordance with the recommendations outlined in SVP 1996. On completion of the above tasks, the supervising paleontologist will prepare a final report on the implementation of the mitigation plan and results and submit it to the appropriate parties, institutions, and government agencies.				
Greenhouse Gas Emissions				
Mitigation Measure GHG1.1—Implement BAAQMD Best Management Practices for Construction: • Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet; • Use at least 10 percent local building materials (from within 100 miles of the Project site); • Recycle at least 50 percent of construction waste or demolition materials.	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Hazardous Materials and Public Health				
Mitigation Measure HAZ1.1—Preparation and Implementation of a Spill Prevention, Control, and Countermeasure Plan. The Project applicant with prepare and implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan to minimize the potential for, and effects from, accidental spills of hazardous, toxic, or petroleum substances during construction of the Project. The SPCC will be completed before any construction activities begin.	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure HAZ1.2—Require Proper Storage and Handling of Potential Pollutants and Hazardous Materials. The storage and handling of potential pollutants and hazardous materials, including, but not necessarily limited to, gasoline, diesel, oils, paint, and solvents, will be in accordance with all local, state and federal laws and other requirements. Temporary storage enclosures, double walled tanks, berms, or other protective facilities will be provided as required by law. All hazardous materials will be stored and handed in strict accordance with the Material Safety Data Sheets for each product. A copy of each Materials Safety Data Sheet will be submitted to the Project Engineer at the time of delivery of the products to the Project site.	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure HAZ2.1—Stop Work and Implement Hazardous Materials Investigations and Remediation in the Event that Unknown Hazardous Materials Are Encountered. In the event that unknown hazardous materials are encountered during construction monitoring or testing of soil suitability, all work in the area of the discovery will stop and SFCJPA will conduct a Phase II hazardous materials investigation to identify the nature and extent of contamination and evaluate potential impacts on Project construction and human health. A Phase I investigation will be done concurrent with or prior to Phase II. If necessary, based on the outcomes of the Phase II investigation, SFCJPA will implement remediation measures consistent with all applicable local, state, and federal codes and regulations. Construction in areas known or reasonably suspected to be contaminated will not resume until remediation is complete. If waste disposal is necessary, SFCJPA will ensure that all hazardous materials removed during construction are handled and disposed of by a licensed waste-disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
disposal or recycling facility, in accordance with local, state, and federal requirements.				
Mitigation Measure HAZ8.1—Prevent Mosquito Breeding During Project Construction. To prevent mosquito breeding during Project construction, SFCJPA will ensure that standing water that accumulates on the construction site is gone within 4 days (96 hours). All outdoor grounds will be examined and unnecessary water that may stand longer than 96 hours will be drained. Construction personnel will property dispose of unwanted or unused artificial containers and tires. If possible, any container or object that holds standing water that must remain outdoors will be covered, inverted, or have drainage holes drilled.	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Hydrology and Water Resources				
Mitigation Measures HWR1.1—Design of Temporary Re-location of Storm Drainage Facilities during Construction. A temporary disruption in stormwater conveyance facilities located in the immediate Project construction footprint could result in the temporary relocation and re-routing of outfalls. The temporary design will include the necessary review and assessment of alternative routes and ancillary facilities to ensure that they can safely accommodate the re-directed flow to the same level of design and performance (i.e., storm drain capacity) as that of the existing facilities until such time that the original facilities are restored.	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measures HWR1.2—Design of Permanent Relocation of Storm Drainage Facilities. The permanent relocation of stormwater conveyance facilities would be designed so as not to alter the original outlet locations and internal routes. The design will include the necessary review and assessment of pipeline additions and ancillary facilities to ensure that they can safely accommodate flood flows to	All Project elements, prior to construction groundbreaking	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
the same level of design and performance (i.e., storm drain capacity) as that of the existing facilities.				
Noise				
Mitigation Measure NV2.1—Conduct Construction Vibration Assessment and Implement Recommended Vibration Control Approach(es) for Culvert Installation. During final design, the SFCJPA will retain a qualified, state-licensed geotechnical professional to determine site-specific soil stratigraphy and engineering properties and model anticipated vibration levels from the anticipated culvert construction activities based on soil properties. If the anticipated vibration level at any home exceeds 80 VdB or 0.2 in/sec, the SFCJPA will modify the proposed construction approach to ensure that both thresholds can be achieved, avoiding annoyance and structural damage.	All Project elements, during construction	A qualified, state-licensed geotechnical engineer retained by the SFCJPA will conduct the vibration assessment. If modifications to Project design are required to meet the thresholds in this mitigation measure, they will be developed by the design team in consultation with the geotechnical engineer, at the direction of the SFCJPA project manager.	This measure will be implemented during Project design.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure NV4.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents. SFCJPA will provide advance written notification of the proposed construction activities to all residences and other noise- and air quality–sensitive uses within 750 feet of the construction site. Notification will include a brief overview of the proposed Project and its purpose, as well as the proposed construction activities and schedule. It will also include the name and contact information of SFCJPA's project manager or another SFCJPA representative or designee responsible for ensuring that reasonable measures are implemented to address the problem (the construction noise and air quality disturbance coordinator; see Mitigation Measure NV4.3).	All Project elements, during construction	SFCJPA staff will implement this measure at the direction of the SFCJPA project manager.	Advance written notification of proposed construction activities will be provided at least 1 month and not more than 3 months in advance of site work. The 24-hour hotline will be in operation for the duration of construction at each site, including site finishing and demobilization.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure NV4.2—Implement Work Site Noise Control Measures. To reduce noise impacts, SFCJPA will require all contractors to adhere to the following measures. SFCJPA will be	All Project elements, during construction and operation	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction at each site.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
responsible for ensuring implementation. • All construction equipment will be equipped with manufacturer's standard noise control devices or with equally effective replacement devices consistent with manufacturer specifications. • Stationary noise-generating equipment will be located as far as possible from sensitive receptors, and, if feasible, will be shielded by placement of other equipment or construction materials storage. • Contractors will be required to use ambient-sensitive backup alarms.				enforcement, and for documenting compliance.
Mitigation Measure NV4.3—Designate a Noise and Air Quality Disturbance Coordinator to Address Resident Concerns. SFCJPA will designate a representative to act as construction noise and air quality disturbance coordinator, responsible for resolving construction noise and air quality concerns. The disturbance coordinator's name and contact information will be included in the preconstruction notices sent to area residents (see Mitigation Measure NV4.1). She or he will be available during regular business hours to monitor and respond to concerns; if construction hours are extended, the disturbance coordinator will also be available during the extended hours. In the event an air quality or noise complaint is received, she or he will be responsible for determining the cause of the complaint and ensuring that all reasonable measures are implemented to address the problem.	All Project elements, during construction	The SFCJPA's project manager will designate a noise disturbance coordinator. The noise disturbance coordinator will be responsible for receiving and responding to noise complaints, and will coordinate with the SFCJPA project manager to implement timely solutions.	This measure will remain in effect for the duration of Project construction. Resolutions to noise complaints will be provided as rapidly as possible.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure NV4.4—Install Temporary Noise Barriers. As described in Mitigation Measures NV1.1, NV1.2, and NV1.3, SFCJPA will notify noise-sensitive land uses near the site of upcoming activity before construction begins, will	All Project elements, during construction	Noise barriers will be installed by contractor staff at the direction of the SFCJPA project manager	This measure will remain in effect for the duration of construction.	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
require construction-site noise reduction measures, and will provide a 24 hour complaint hotline. If a resident or school employee submits a complaint about construction noise and SFCJPA is unable to reduce noise levels to below the significance threshold (exceeding 110 dBA at a distance of 25 feet) through other means, SFCJPA will install temporary noise barriers to reduce noise levels below the applicable construction noise standard. Barriers will be installed as promptly as possible, and work responsible for the disturbance will be suspended or modified until barriers have been installed. SFCJPA will include a construction bid item to provide noise barriers onsite and install noise barriers immediately in response to noise or dust concerns from the community. The following minimum criteria will be required of the contractor. • The barrier will be 10 feet tall. It will surround the work area to block the line of sight for all diesel-powered equipment on the ground, as viewed from any private residence or any building. • The barrier will be constructed of heavyweight plywood (5/8 inch thick) or other material providing a Sound Transmission Classification of at least 25 dBA. (Note that 5/8 inch is sufficiently thick to provide optimal noise buffering; increasing the thickness of the barrier above 5/8 inch would not provide a noticeable improvement in noise reduction.) • The barrier will be constructed with no gaps or holes that would allow noise to transmit through the barrier. • To minimize reflection of noise toward workers at the construction site, the surface of the barrier facing the workers will be covered with a sound-absorbing material meeting a Noise				documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Reduction Coefficient of at least 0.70.				
Recreation				
Mitigation Measure REC-1—Compensate the City of Palo Alto for the Conversion of 7.4 Acres of the Palo Alto Municipal Golf Course to Accommodate Project Features. In order to replace permanently affected holes at the Golf Course, compensate the City of Palo Alto an amount equivalent to the cost of replacing golf holes 12 through 15 within the Project footprint, and the relocation of other holes accommodate the new holes 12 through 15, so that the Golf Course can remain a PGA-regulation 18-hole course. To ensure this mitigation measure will be implemented, SFCJPA and City of Palo Alto will enter into a Memorandum of Understanding no later than 30 days prior to the initiation of construction that will require SFCJPA to fund improvements at the Golf Course. SFCJPA and the City of Palo Alto will mutually agree on the amount and timing of the deposit, which will be determined by the results of site evaluation and preliminary design conducted by a certified golf course architect. Money will be used exclusively for mitigation of impacts on the Golf Course that are related to the Project.	All Project elements, prior to and during construction	The SFCJPA's Executive Director will coordinate with the City of Palo Alto to reach mutually agreeable terms.	The Agreement will be signed by both parties prior to the initiation of construction.	The SFCJPA's Executive Director will be responsible for ensuring proper implementation, and for documenting compliance.
Traffic				
Mitigation Measure TT1—Require a Site-Specific Traffic Control Plan. SFCJPA will develop a site-specific traffic control plan to minimize the effects of construction traffic on surrounding areas and roadways. The plan will be prepared with oversight by a licensed traffic engineer, and with input from school, park and community stakeholders to ensure that all concerns are appropriately addressed. The plan will be subject to review and approval by the Cities of Palo Alto and East Palo Alto. The SFCJPA would also coordinate, as necessary, with Caltrans, for traffic controls and measures affecting Caltrans	All Project elements, prior to and during construction	The SFCJPA's project manager will liaise with the Cities and Caltrans during Project design to identify issues that should be addressed in the site-specific traffic control plan for each work site, and will oversee contractors developing the individual plans.	Coordination will local jurisdictions will be initiated before any construction activity begins, and will remain in effect for the duration of the Project. The traffic control plan for each site will be completed and approved by the local jurisdiction prior to groundbreaking;	The SFCJPA's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. The local jurisdiction for each work site will have review and approval authority over the applicable traffic control plan.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
facilities. The SFCJPA will be responsible for ensuring that the plan is effectively implemented. The traffic control plan will include, at a minimum, information regarding working hours, allowable and restricted streets, allowable times for lane closures, emergency vehicle access, detours, and access to private and public properties. All construction traffic control plans will contain the following general requirements: • Restrict work site access to the roadways indicated on the traffic control plan. • Prohibit access via residential streets unless expressly approved by the City with jurisdiction. • Maintain two-way traffic flow on arterial roadways accessing active work to accommodate construction of Project facilities, or unless otherwise allowed by the City with jurisdiction. • Provide 72-hour advance notification if access to driveways or private roads will be affected. Limit effects on driveway and private roadway access to working hours and ensure that access to driveways and private roads is uninterrupted during non-work hours. If necessary, use steel plates, temporary backfill, or another accepted measure to provide access. • Provide clearly marked pedestrian detours to address any sidewalk or pedestrian walkway closures. • Provide clearly marked bicycle detours to address bicycle route closure or if bicyclist safety would be otherwise compromised. • Provide crossing guards and/or flagpersons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.		Each plan will be developed with oversight from a licensed traffic engineer. All SFCJPA and contractor staff will adhere to the plans.	draft traffic control plans will be submitted for review and approval for each work site. Traffic control plans will be in effect for the entire duration of construction at each site.	

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
• Use nonskid traffic plates over open trenches to minimize hazards. • Locate all stationary equipment as far away as possible from areas used by vehicles, bicyclists, and pedestrians. • Notify and consult with emergency service providers, and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles. Ensure clear emergency access to all existing buildings and facilities at all times. • Trucks will be queued only in areas and at times allowed by the City with jurisdiction. • Provide adequate parking for construction vehicles, equipment, and workers within the designated staging areas throughout the construction period. If inadequate space for parking is available at a given work site, provide an off-site staging area at another suitable location, and coordinate the daily transport of construction vehicles, equipment, and personnel to and from the work site as needed. • Fences, barriers, lights, flagging, guards, and signs will be installed as determined appropriate by the public agency having jurisdiction to give adequate warning to the public of the construction and of any dangerous condition to be encountered as a result thereof.				

References

Bay Area Air Quality Management District. 2011a. California Environmental Quality Act Air Quality Guidelines. June. San Francisco, CA.

California Native Plant Society. 2001. Botanical Survey Guidelines of the California Native Plant Society. (Originally published on December 9, 1983; revised on June 2, 2001.) *Fremontia* 29:3–4.

ICF International. 2012. *Preliminary Delineation of Wetlands and Other Waters of the United States, San Francisquito Creek Flood Protection Project.* San Jose, CA. Prepared for San Francisquito Creek Joint Powers Authority, San Jose, CA.

National Marine Fisheries Service (NMFS). 2000. Guidelines for electrofishing waters containing salmonids listed under the Endangered Species Act. June.

Agenda Item 5.b.

S.F. Bay – Highway 101 Project

Right-of-Way Services on the East Palo Alto side

HDR, Inc. proposal

July 19, 2013

San Francisquito Creek Joint Powers Authority
Attn: Mr. Kevin Murray
615 B Menlo Avenue
Menlo Park, CA 94025

Reference: Scope of Work for Real Estate Acquisition Services

Dear Mr. Murray:

HDR Engineering, Inc. (HDR) is pleased to provide the San Francisquito Creek Joint Powers Authority (SFCJPA) with Right of Way (ROW) Acquisition Services for the San Francisquito Creek Flood Reduction, Ecosystem Restoration and Recreation Project. HDR's ROW services include the following scope of work:

ACQUISITION SERVICES

Task 1. Project Management: HDR will provide coordination with SFCJPA staff to ensure timely delivery of ROW of three (3) parcels: 063-571-060, American Storage Associates; 063-540-010, Blossom L. Hughes; and 063-580-050, Finley Honey Trust. HDR will thoroughly Quality Check (QC) all documents prepared and received by HDR, which are necessary to clear the ROW for SFCJPA's project.

Task 2. Title and Escrow: HDR will coordinate and obtain three (3) title reports for the parcels identified in Task 1. HDR will coordinate with the escrow company to complete the acquisitions, clear title and record deed, and easement documents. HDR will perform "in-house" closings for any acquisitions not requiring title clearance.

Task 3. ROW Engineering: HDR will coordinate and obtain stamped and signed legal descriptions and plat maps for a fee acquisition, a permanent easement, and a temporary construction easement.

Task 4. Appraisal/Appraisal Review: HDR will coordinate the preparation of appraisals, review appraisals, and appraisal summary statements for three (3) acquisitions. Prior to making offers, HDR will prepare the Statement of Just Compensation forms for review and approval by SFCJPA.

Task 5. Acquisition/Negotiation: HDR will prepare three (3) offer packages, make offers in person, when possible, and negotiate in good faith with property owners. HDR will prepare and maintain acquisition files, agent negotiation diaries, and applicable documents necessary for the acquisition of said parcels.

Task 6. File Close out: HDR will complete the close out of acquisition files, perform a multi-person QC review check, and submit closed files with original, signed documents to SFCJPA.

2365 Iron Point Road, Suite 300
Folsom, CA 95630

Phone (916) 817-4700
Fax (916) 817-4747
www.hdrinc.com

ASSUMPTIONS

The proposed fee and scope of work is based on the following assumptions:

- HDR will provide the SFCJPA with three (3) preliminary title reports, legal descriptions and plat maps for identified take areas, three (3) appraisals, and (3) appraisal summary statements. HDR will provide these items as a pass-through cost to SFCJPA, without any markup. HDR will also provide (3) appraisal review reports.

- If requested by SFCJPA, HDR can coordinate the preparation of Environmental Site Assessment reports for the proposed acquisition areas.

- SFCJPA will provide approved and offer-package ready acquisition document templates. If SFCJPA directs HDR to provide acquisition template documents, they will be provided by HDR on a time and expense basis.

- HDR will prepare one (1) offer package per parcel and will make at least one in-person contact, when possible, to deliver the offer to the property owner. Follow-up negotiations will be made either in-person, or by email and telephone contact. After three contacts, HDR will provide a cost to complete fee amendment to SFCJPA, based on either voluntary, or eminent domain action acquisition requirements, as directed to HDR by SFCJPA. Condemnation support services and ROW Certification services are not included in the proposed cost. If requested by SFCJPA, HDR can provide these services on a Time and Expense basis.

- If an escrow company performs the closing, title and escrow closing fees will be paid by the SFCJPA, directly to escrow, as part of the acquisition costs. HDR's fees include either escrow coordination or "in-house" closings services for all parcels not closed through the escrow company.

- Property Owner's appraisal reimbursement fee of up to $5,000, per appraisal, will be paid by SFCJPA.

- Appraiser's fee is based on a land value appraisal for a strip take. If the take on the self-storage site affects traffic/fire lanes/or has other effects upon the buildings or operation which require evaluation of possible severance damages by the appraiser, Appraiser's fee and schedule may be amended to perform a full before and after appraisal.

- HDR's fee does not include relocation of business or residential displaces, and/or personal property relocation. If these services are required, HDR can provide them on a Time and Expense basis.

LABOR CATEGORIES AND RATES

Please see the attached ROW fee estimate for HDR's labor categories and rates.

HDR will perform this work on a time and materials basis, with a not-to-exceed fee of $52,088. HDR is prepared to commence activities upon receipt of your notice to proceed.

Please contact Serge Jimenez at (916) 471-5803 or Amy Gilleran at (415) 377-9063 if you have any questions. Should the terms of this proposal be acceptable to the SFCJPA, please indicate your agreement on the signature line below.

Sincerely,

HDR Engineering, Inc.

Sergio Jimenez, P.E.
Project Manager

Amy A. Gilleran, P.E.
Senior Vice President

_____ _____

Len Materman, SFCJPA Executive Director **Date**

This instrument may be amended at any time by signature of both HDR and the SFCJPA. Changes in scope of work or not to exceed amount shall be attached to this original and remain in force unless further amended by the parties.

85309/SJ/cs

HDR Engineering, Inc.
San Francisquito Creek
Right of Way Fee Estimate
July 19, 2013

Consultant: HDR Engineering, Inc.				
Services to be furnished: Right of Way Services				
DETAILED DESCRIPTION OF COST ELEMENTS				
1. LABOR (specify function/title)	**ESTIMATED HOURS**	**AVG. FULLY BURDENED LABOR RATE PER HOUR**	**ESTIMATED COST**	**TOTAL ESTIMATED COST**
Project Manager	28	$ 157.00	$ 4,396	$ 4,396.00
Appraisal Mgr./Review Appraiser	42	$ 116.00	$ 4,872	$ 4,872.00
Sr. Right of Way Agent	50	$ 111.00	$ 5,550	$ 5,550.00
Right of Way Agent	140	$ 82.00	$ 11,480	$ 11,480.00
			TOTAL LABOR COSTS:	$ 26,298

2.	**OTHER DIRECT COSTS**	
	Preliminary Title Reports	$ 3,000
	Legal Descriptions and Plat Maps	$ 6,000
	Appraisals	$ 13,500
	Reproduction	$ 100
	Airfare (2 trips @ $250/ea)	$ 500
	Hotel (2 nights @ $100/ea) and Car Rental (4 days @ $75/ea)	$ 500
	Tech Charge ($3.70/hour)	$ 962
	TOTAL OTHER DIRECT COSTS:	$ 24,562
	ODC Mark-up (5%)	$1,228
3.	**TOTAL NOT-TO-EXCEED COST AND FEE:**	**$ 52,088**

ASSUMPTIONS:

The proposed fee and scope of work is based on the following assumptions:

- HDR will provide SFCJPA with three (3) preliminary title reports, legal descriptions and plat maps for identified take areas, three (3) appraisals and (3) appraisal summary statements. HDR will also provide (3) appraisal review reports.
- If requested by SFCJPA, HDR can coordinate the preparation of Environmental Site Assessment reports for the proposed acquisition areas.
- SFCJPA will provide approved and offer-package ready acquisition document templates. If SFCJPA directs HDR to provide acquisition template documents, they will be provided by HDR on a Time and Expense basis.
- HDR will prepare one offer package per parcel and will make at least one in-person contact, when possible, to deliver the offer to the property owner. Follow-up negotiations will be made either in-person, or by email and telephone contact. After three contacts, HDR will provide a cost to complete fee amendment to SFCJPA, based on either voluntary, or eminent domain action acquisition requirements, as directed to HDR by SFCJPA. Condemnation support services and ROW certification services are not included in the proposed cost. If requested by SFCJPA, HDR can provide these services on a Time and Expense basis.
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- Property Owner's appraisal reimbursement fee of up to $5,000, per appraisal, will be paid by SFCJPA.
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- HDR's fee does not include relocation of business or residential displacees, and/or personal property relocation. If these services are required, HDR can provide them on a Time and Expense basis.