

**County of Santa Clara**  
Office of the County Clerk-Recorder  
Business Division

County Government Center  
70 West Hedding Street, E. Wing, 1<sup>st</sup> Floor  
San Jose, California 95110 (408) 299-5688



Santa Clara County Clerk—Recorder's Office  
State of California



Document No.: 19852  
Number of Pages: 2  
Filed and Posted On: 2/16/2016  
Through: 3/21/2016  
CRO Order Number:  
Fee Total: 3,120.00

**CEQA DOCUMENT DECLARATION**

REGINA ALCOMENDRAS, County Clerk—Recorder  
by Nina Khamphilath, Clerk—Recorder Office Spe,

**ENVIRONMENTAL FILING FEE RECEIPT**

PLEASE COMPLETE THE FOLLOWING:

1. LEAD AGENCY: Santa Clara Valley Water District
2. PROJECT TITLE: Upper Berryessa Creek Flood Risk Management Project, Santa Clara County, California Final EIR
3. APPLICANT NAME: Santa Clara Valley Water District PHONE: 408-630-2833
4. APPLICANT ADDRESS: 5750 Almaden Expressway, San Jose, CA 95118
5. PROJECT APPLICANT IS A: ☐ Local Public Agency ☐ School District ☒ Other Special District ☐ State Agency ☐ Private Entity
6. NOTICE TO BE POSTED FOR 35 DAYS.

**7. CLASSIFICATION OF ENVIRONMENTAL DOCUMENT**

**a. PROJECTS THAT ARE SUBJECT TO DFG FEES**

- |   |             |                    |
|---|-------------|--------------------|
| <input checked="" type="checkbox"/> 1. <b><u>ENVIRONMENTAL IMPACT REPORT</u></b> (PUBLIC RESOURCES CODE §21152)                                   | \$ 3,070.00 | \$ <u>3,070.00</u> |
| <input type="checkbox"/> 2. <b><u>NEGATIVE DECLARATION</u></b> (PUBLIC RESOURCES CODE §21080(C))  | \$ 2,210.25 | \$ <u>0.00</u>     |
| <input type="checkbox"/> 3. <b><u>APPLICATION FEE WATER DIVERSION</u></b> (STATE WATER RESOURCES CONTROL BOARD ONLY)                              | \$ 850.00   | \$ <u>0.00</u>     |
| <input type="checkbox"/> 4. <b><u>PROJECTS SUBJECT TO CERTIFIED REGULATORY PROGRAMS</u></b>   | \$ 1,043.75 | \$ <u>0.00</u>     |
| <input checked="" type="checkbox"/> 5. <b><u>COUNTY ADMINISTRATIVE FEE</u></b> (REQUIRED FOR a-1 THROUGH a-4 ABOVE)<br>Fish & Game Code §711.4(e) | \$ 50.00    | \$ <u>50.00</u>    |

**b. PROJECTS THAT ARE EXEMPT FROM DFG FEES**

- |   |          |                |
|---|----------|----------------|
| <input type="checkbox"/> 1. NOTICE OF EXEMPTION (\$50.00 COUNTY ADMINISTRATIVE FEE REQUIRED)  | \$ 50.00 | \$ <u>0.00</u> |
| <input type="checkbox"/> 2. A COMPLETED "CEQA FILING FEE NO EFFECT DETERMINATION FORM" FROM THE DEPARTMENT OF FISH & GAME, DOCUMENTING THE DFG'S DETERMINATION THAT THE PROJECT WILL HAVE NO EFFECT ON FISH, WILDLIFE AND HABITAT, OR AN OFFICIAL, DATED RECEIPT / PROOF OF PAYMENT SHOWING PREVIOUS PAYMENT OF THE DFG FILING FEE FOR THE *SAME PROJECT IS ATTACHED (\$50.00 COUNTY ADMINISTRATIVE FEE REQUIRED) |          |                |
| DOCUMENT TYPE: <input type="checkbox"/> ENVIRONMENTAL IMPACT REPORT <input type="checkbox"/> NEGATIVE DECLARATION   | \$ 50.00 | \$ <u>0.00</u> |

**c. NOTICES THAT ARE NOT SUBJECT TO DFG FEES OR COUNTY ADMINISTRATIVE FEES**

- |  |        |                  |
|--|--------|------------------|
| <input type="checkbox"/> NOTICE OF PREPARATION <input type="checkbox"/> NOTICE OF INTENT | NO FEE | \$ <u>NO FEE</u> |
|--|--------|------------------|

8. OTHER: \_\_\_\_\_ FEE (IF APPLICABLE): \$ \_\_\_\_\_

9. TOTAL RECEIVED..... \$ 3,120.00

\*NOTE: "**SAME PROJECT**" MEANS **NO** CHANGES. IF THE DOCUMENT SUBMITTED IS NOT THE SAME (OTHER THAN DATES), A "NO EFFECT DETERMINATION" LETTER FROM THE DEPARTMENT OF FISH AND GAME FOR THE **SUBSEQUENT** FILING OR THE APPROPRIATE FEES ARE REQUIRED.

THIS FORM MUST BE COMPLETED AND ATTACHED TO THE FRONT OF ALL CEQA DOCUMENTS LISTED ABOVE (**INCLUDING COPIES**) SUBMITTED FOR FILING. WE WILL NEED AN ORIGINAL (WET SIGNATURE) AND THREE COPIES. (**YOUR ORIGINAL WILL BE RETURNED TO YOU AT THE TIME OF FILING.**)

CHECKS FOR ALL FEES SHOULD BE MADE PAYABLE TO: SANTA CLARA COUNTY CLERK-RECORDER

PLEASE NOTE: FEES ARE ANNUALLY ADJUSTED (Fish & Game Code §711.4(b); PLEASE CHECK WITH THIS OFFICE AND THE DEPARTMENT OF FISH AND GAME FOR THE LATEST FEE INFORMATION.

"... NO PROJECT SHALL BE OPERATIVE, VESTED, OR FINAL, NOR SHALL LOCAL GOVERNMENT PERMITS FOR THE PROJECT BE VALID, UNTIL THE FILING FEES REQUIRED PURSUANT TO THIS SECTION ARE PAID." Fish & Game Code §711.4(c)(3)

(Fees Effective 01-01-2016)

## Notice of Determination

## Appendix D

## To:

☐ Office of Planning and Research  
 U.S. Mail: Street Address:  
 P.O. Box 3044 1400 Tenth St., Rm 113  
 Sacramento, CA 95812-3044 Sacramento, CA 95814

☒ County Clerk  
 County of: Santa Clara  
 Address: 70 West Hedding Street, E Wing, 1st Floor  
 San Jose, CA 95110

## From:

Public Agency: Santa Clara Valley Water District  
 Address: 5750 Almaden Expressway  
 San Jose, CA 95118  
 Contact: James Manidakos  
 Phone: 408-630-2833

Lead Agency (if different from above):

Address: \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Phone: \_\_\_\_\_

**SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.**

State Clearinghouse Number (if submitted to State Clearinghouse): 2001104013

Project Title: Upper Berryessa Creek Flood Risk Management Project, Santa Clara County, California

Project Applicant: Santa Clara Valley Water District

Project Location (include county): Milpitas and San Jose, Santa Clara County, California

## Project Description:

The project will increase the flow conveyance capacity of Upper Berryessa Creek within the cities of Milpitas and San Jose, California to reduce flood hazards. The creek modifications include flood risk management improvements along 2.2 miles of Upper Berryessa Creek, stretching from I-680 downstream to Calaveras Boulevard. The primary improvements include: constructing a floodwall at the area identified as being most in danger of overtopping; excavating sediment and vegetation to enlarge the channel, enhancing flood passage through culverts and bridges, and improving access for creek maintenance.

This is to advise that the Santa Clara Valley Water District has approved the above  
☒ Lead Agency or ☐ Responsible Agency

described project on 2/9/2016 and has made the following determinations regarding the above  
 (date)  
 described project.

1. The project ☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.  
☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures ☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan ☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations ☒ was ☐ was not] adopted for this project.
6. Findings ☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:

Santa Clara Valley Water District, 5750 Almaden Expressway, San Jose, CA 95118

Signature (Public Agency) James Fredt Title: Acting CEO

Date: 2/12/2016 Date Received for filing at OPR: \_\_\_\_\_

Authority cited: Sections 21083, Public Resources Code.  
 Reference Section 21000-21174, Public Resources Code.

Revised 2011

2/16/2016

19852

File#:

**BOARD OF DIRECTORS  
SANTA CLARA VALLEY WATER DISTRICT**

**RESOLUTION NO. 16- 04**

**CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT, ADOPTING THE  
MITIGATION MONITORING AND REPORTING PROGRAM, FINDINGS OF FACT, AND  
STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE UPPER BERRYESSA CREEK  
FLOOD RISK MANAGEMENT PROJECT**

WHEREAS, the Santa Clara Valley Water District ("SCVWD"), the lead agency under the California Environmental Quality Act ("CEQA") §21067, has prepared a Final Environmental Impact Report (EIR) for the Upper Berryessa Creek Flood Risk Management Project ("Project"). The SCVWD is hereby certifying said EIR, issuing written findings regarding the potential for the Project to result in significant environmental effects, adopting a statement of overriding considerations, and adopting a mitigation monitoring and reporting program in accordance with CEQA Guidelines §15090, 15091, and 15093:

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of the Santa Clara Valley Water District that:

1. The Board certifies the Final EIR, certifying that:
  - A. The Final EIR has been completed in compliance with CEQA and is adequate for Board consideration of the Project.
  - B. The Board of Directors has reviewed and considered the information contained in the Final EIR and the record including, but not limited to, technical reports, oral and written comments provided by the public and state and local agencies; responses to said comments contained in the Final EIR; and other matters deemed material and relevant prior to making a decision on the Project.
  - C. The Final EIR reflects the independent judgment and analysis of the District.
2. Changes have been incorporated into the Project which avoid, and/or substantially lessen most of the significant environmental effects identified in the Final EIR. The District has responsibility for ensuring the implementation of such changes during implementation of the Project.
3. Specific economic, legal, social, technological, and other considerations make mitigation measures for certain significant environmental effects infeasible. The findings of fact contained in Exhibit 1 state the overriding considerations that support the Project described in the Final EIR.
4. The findings of fact and Statement of Overriding Considerations contained in Exhibit 1, attached hereto and incorporated by reference, are supported by substantial evidence in the record.

5. The Mitigation Monitoring and Reporting Program (MMRP) attached as Exhibit 2, is hereby adopted. Implementation of the MMRP to avoid or substantially lessen significant environmental effects is required as a condition of approval of the Project.
6. The documents and materials which constitute the record of proceedings upon which this decision is based are available from the Clerk of the Board of the Santa Clara Valley Water District, 5750 Almaden Expressway, San Jose, CA 95118-3614.
7. The Chief Executive Officer is hereby authorized and directed, on behalf of the District's Board of Directors, to execute any such documents and to perform any such acts as may be deemed necessary or appropriate to accomplish the intent of this resolution.

PASSED AND ADOPTED by the Board of Directors of Santa Clara Valley Water District by the following vote on February 9, 2016:

AYES: Directors N. Hsueh, G. Kremen, L. LeZotte, R. Santos,  
J. Varela, B. Keegan

NOES: Directors None

ABSENT: Directors T. Estremera

ABSTAIN: Directors None

SANTA CLARA VALLEY WATER DISTRICT

By:   
BARBARA KEEGAN  
Chair/Board of Directors

ATTEST: MICHELE L. KING, CMC

  
Clerk/Board of Directors

## FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE UPPER BERRYESSA CREEK FLOOD RISK MANAGEMENT PROJECT

This document presents Findings of Fact and a Statement of Overriding Considerations by the Board of Directors (Board) of the Santa Clara Valley Water District (District) regarding the Final Environmental Impact Report (Final EIR) for the Upper Berryessa Creek Flood Risk Management Project, for which the Santa Clara Valley Water District (District) is acting as CEQA lead agency. The Findings and Statement presented herein were prepared in compliance with the California Environmental Quality Act (Pub. Res. Code §21000 et seq., "CEQA") and the CEQA Guidelines (Cal. Code Regs. Title 14, §15000 et seq.). Substantial evidence supporting all findings made herein is contained in the Environmental Impact Report (EIR) and/or the record of proceedings.

### Background

Flooding within the Berryessa Creek watershed and vicinity has occurred often during the past decades. Stormwater flooding that inundates streets and yards occurs an average of at least once every 4 years. Overflow channel flooding also occurs along Upper Berryessa Creek on average of once every 10 to 20 years, which results in significant damage to homes, businesses, infrastructure, and automobiles.

High rainfall events occurring in 1982, 1983, and 1998 caused extensive flooding and damage to areas along creeks in the cities of San Jose and Milpitas. As a result of these and other floods, the District and the USACE commenced studies to identify areas of Berryessa Creek and its tributaries, a part of the Coyote Watershed, that are most vulnerable to flooding. The proposed project was originally authorized for study under the federal Water Resources Development Act of 1990. Teams of hydraulic engineers, planners, and field inspectors reviewed historic flood information, topographic maps, and other available data and reports, and prepared detailed hydraulic models of the Upper Berryessa Creek system. The various studies in hydraulics, economics, geotechnical issues, hazardous materials, and sediment movement resulted in the Berryessa Creek Integrated General Reevaluation Report and Environment Impact Statement (GRR-EIS) published in 2014. The studies indicated that Upper Berryessa Creek does not have sufficient capacity to contain the 1 percent (100-year) recurrence flood, meaning that destructive flooding would continue to occur unless measures are taken to expand flow capacity.

The proposed project consists of the USACE-selected project with modifications that would increase the level of flood protection to meet FEMA certification standards. The District and USACE have formed a partnership to plan and implement the proposed project following CEQA review. The USACE is the project lead and the District is the local partner. USACE would be responsible for project design, construction, and initial maintenance of the improvements. The District would be responsible for partially funding the project, acquiring real property interests needed for the project, and operating and maintaining the creek channel after construction is complete.

### Project Objectives

The District has the following three objectives for the proposed project:

*Objective 1: Reduce flood damages from Berryessa Creek upstream of Calaveras Boulevard throughout the study reach during the 50-year period of analysis beginning in 2017. Completed project would meet FEMA certification standards in all 4 project reaches.*

*Objective 2: Use environmentally sustainable design practices in addressing the flood risk management purpose of the project wherever possible within the study reach, including taking advantage of restoration opportunities that may be pursued incidentally to the flood damage reduction purpose.*

*Objective 3: Be consistent with Berryessa Creek Flood Risk Management Project Plan selected by USACE in the Director's Report of May 29, 2014.*

## **Project Description**

The proposed project includes the construction of flood risk management features along a 2.2 mile stretch of Upper Berryessa Creek, between I-680 and Calaveras Boulevard. This stretch is divided into 4 reaches, with Reach 1 starting at Calaveras Boulevard and Reach 4 ending at I-680. The major features of the proposed project include widening of the creek channel, construction of transition structures at bridges, expanding or surfacing with aggregate existing access roads, and adding concrete floodwalls in two areas where adequate channel width cannot be attained due to physical limitations of the project area. Specific features of the proposed project include the following:

- Channel excavation and shaping of earthen trapezoidal channels up to the water surface level of the 95 percent certainty and 1 percent exceedance probability event discharge;
- Shaping of 2H:1V channel sideslopes along trapezoidal walls with buried rock revetment scour protection placed from the toe of bank to between the 2.5-year and 10-year flood elevation and installation of biodegradable erosion control blankets and vegetation between the top of the rock revetment and the top of the bank;
- Building a roughly 2,200-foot long concrete floodwall on the west bank of Upper Berryessa Creek with a maximum height of 2 feet above ground level;
- Building a roughly 450-foot long buried floodwall located on the west bank of the creek upstream of Montague Expressway
- Installing concrete box culverts and wingwalls at Los Coches and Piedmont Creeks, with access roads constructed over the top of the culverts;
- New access road located along the east bank channel slope downstream of Yosemite Drive, and concrete-paved ramps to access the channel bottom in Reach 4;
- Replacing the existing UPRR trestle with a double-barreled box culvert;
- Constructing transition structures (concrete warped wingwalls between the channel banks and bridge abutments) at upstream and downstream faces of the newly constructed UPRR trestle, existing UPRR culvert, and existing Los Coches Street Bridge, and at the upstream face of existing Calaveras Boulevard Bridge;
- Shoring of existing bridge abutments and construction of transition structures at Ames Avenue and Yosemite Drive to accommodate widened channel; and
- Relocating utilities and storm drains entering the channel or running parallel to the channel and located within the channel excavation areas.

## Environmental Review Process and the EIR

On October 27, 2001, in accordance with Section 15082 of the CEQA Guidelines, the District, as the CEQA lead agency, prepared a Notice of Preparation (NOP) for this EIR. The 30-day scoping period for the project occurred between October 27 and November 27, 2001. A public scoping meeting was held on November 7, 2001, at the City of Milpitas Police Department.

The District released the Draft EIR (DEIR) for review and comment by the public and other interested parties, agencies, and organizations for a 49-day period of September 25, 2015 and ending on November 12, 2015. The DEIR and notice of completion (NOC) were transmitted to the State Clearinghouse on September 24, 2015, and notice of the DEIR's availability was sent to regulatory agencies, state and local government agencies, non-profit organizations, private citizens, and other entities that expressed an interest in the project. Bound hard copies of the Draft EIR were placed on reserve at several public venues, including the City of Milpitas main library. The Draft EIR was also made available in electronic format online, via the District's website. The District received four comment letters on the Draft EIR during the comment period, and accepted one late comment letter on Nov. 30, 2015.

The District published the Final EIR on January 29, 2016. The District provided written responses to all public comments on the Draft EIR on January 29, 2016, which is at least 10 days prior to a public hearing on February 9, 2016, at which time the District considered certifying the Final EIR.

The Final EIR for the proposed project is on file in the District library located at 5750 Almaden Expressway, San Jose, CA 95118. It is also available online at the District's website located at <http://www.valleywater.org/PublicReviewDocuments.aspx>. The Final EIR consists of the following materials: copies of all comments on the Draft EIR received by the District; the District's responses to those comments; and the complete text of the EIR, including revisions made to the Draft EIR in response to comments received, and all appendices. The Final EIR is incorporated herein by this reference.

## Findings of Fact

Pursuant to Public Resources Code § 21081 and CEQA Guidelines § 15091, a public agency may not approve or carry out a project for which an EIR has been certified which identifies one or more significant effects on the environment unless the public agency makes one or more of the following findings with respect to each significant impact:

- (1) Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
- (2) Such 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 final EIR. (The concept of infeasibility also encompasses whether a particular alternative or mitigation measure promotes the Project's underlying goals and objectives, and whether an alternative or mitigation measure is impractical or undesirable from a policy standpoint. See *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957.)

The Board has made one or more of these specific written findings regarding each significant impact associated with the proposed project. Those findings are presented below. These findings are based on full appraisal of all viewpoints, including all comments received up to the date of adoption of these findings, concerning the environmental issues identified and discussed in the EIR.

### **Significant Impacts that Can Be Mitigated to a Less than Significant Level**

Impacts that would be significant before implementation of mitigation, but which would be less than significant with mitigation, are described by resource category in this section.

#### **Biological Resources**

**BIO-2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW, or USFWS or healthy stands of trees and shrubs.**

##### *Impact*

As described in Chapter 3 (Section 3.5.5.1) of the EIR, construction of the proposed project would result in removal of 45 native trees and shrubs with diameter at breast height (dbh) of 2 inches or greater in Reaches 1 through 3. These trees include 1 redwood, 4 California nutmeg, 8 coast live oak, 2 Fremont cottonwood, 20 toyon, 6 white alders, 1 coyote brush, 2 elderberry, and 1 valley oak. The trees/shrubs to be removed include 26 native trees/shrub in the vicinity of the exercise equipment and recreational trail located on the east bank of Berryessa Creek upstream of the Los Coches Creek confluence. These trees/shrubs extend from the creek channel and provide connectivity between the channel and riparian habitat at the top of bank. Removal of this healthy stand of native trees/shrubs would be a significant impact.

A small stand of riparian vegetation has formed below the top of bank at the upper end of Reach 4. This riparian area, which totals 0.18 acre, would not be excavated during construction. Although no direct removal of native trees would occur in Reach 4, ground excavation in the root zone may adversely affect these riparian trees. Seven native trees, consisting of four coast live oaks and three Fremont cottonwoods are located on the lower portion of the bank and would likely suffer substantial root damage due to sediment removal. These trees would likely have to be removed. In addition one native arroyo willow located on the east bank in the central portion of the reach would be removed during construction of the access road. Removal of these healthy trees would be a significant impact.

##### *Mitigation Measures*

**BIO-B: COMPENSATE FOR TREES AND SHRUBS REMOVED DURING CONSTRUCTION.** The following measure to mitigate for removal of native trees and shrubs has been coordinated between USACE and U.S. Fish and Wildlife Service (USFWS). This measure represents a variation on the Coordination Act Report (CAR) native tree and shrub replacement formula, and was agreed to by the two agencies to move forward without formally revising the CAR:

- 1) Use seeds or cuttings collected at or near the project area, or higher in the watershed if on-site collection is not feasible, for replanting.
- 2) Replace the 53 affected native tree and shrubs at the following rates:



- Native tree trees greater than 2 inches and up to 8 inches dbh: plant 1 native tree for each tree removed;
- Native trees greater than 8 inches and up to 20 inches dbh: plant 2 native trees for each tree removed;
- Native trees greater than 20 inches in dbh: plant 3 native trees for each native tree removed;
- Native shrubs: plant 2 native shrubs for each native shrub removed.

This would result in replanting about 60 native trees and 46 native shrubs.

**BIO-C. USE NATIVE GRASS AND FORBS MIX TO HYDROSEED AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.** The District will work with the USACE to require the construction contractor to implement the following measure. Disturbed areas will be hydroseeded using a seed mix containing only native California grass and forbs seeds. This measure is consistent with Recommendation 4 contained in the USFWS CAR.

**BIO-D. PROVIDE BUFFER AROUND RIPARIAN TREES.** The District will work with the USACE to require the construction contractor to implement the following measures. Tree protection will be included in the project construction plans and specifications and will specify a buffer area around the bases of riparian trees located on the southwest corner of the upstream bend in Reach 4. The buffer area will protect roots of the trees by establishing a zone from the base of the trees within which potentially damaging actions will not occur, including excavation, placement of rock revetment or other bank stabilizing features. In cases where there are multiple trees that would be protected in this way, a single buffer zone may be established to encompass all trees in that area.

#### *Mitigation Effectiveness*

Implementing Mitigation Measure BIO-B would reduce impacts to trees and shrubs to less than significant by requiring replacement of native trees and shrubs with dbh of 2 in or greater. Although impacts to grasslands are less than significant, and mitigation is not required, Mitigation Measure BIO-C would further reduce this impact by requiring use of native grass and forbs seeds during hydroseeding of disturbed areas. Mitigation Measure BIO-D would further reduce impacts to riparian habitat in Reach 4 by providing buffers around riparian trees.

#### *Finding*

The Board finds that Mitigation Measures BIO-B, BIO-C, and BIO-D are feasible and will adopt them. These measures will be incorporated into the project. With these measures in place, impacts to riparian habitat and other sensitive natural communities would be less than significant.

**BIO-4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.**

#### *Impact*

As described in Chapter 3 (Section 3.5.5.1) of the EIR, forty-five native trees and shrubs would be removed in Reaches 1 to 3 during construction of the proposed project. Trees provide foraging, roosting, and nesting habitat for migratory birds, a category which includes most of the birds identified in the existing conditions section, as well as resident birds. Although there are numerous other trees in the

area that can provide this function, destruction of migratory bird nests during construction would result in a significant impact.

#### *Mitigation Measures*

**BIO-A: PERFORM PRE-CONSTRUCTION NESTING BIRD SURVEYS AND ESTABLISH APPROPRIATE BUFFERS.** The District will work with the USACE to require the construction contractor to implement the following measures. Prior to construction and during the nesting season (generally mid-April to late July), a qualified biologist will perform nesting bird surveys following established protocols. If nests are detected at staging areas and construction sites during these surveys, a 50-foot no-construction buffer will be delineated around the nest until young have fledged (300-foot buffer for raptors). This measure is consistent with Recommendation 3 contained in the USFWS CAR.

#### *Mitigation Effectiveness*

By establishing buffers during construction to prevent disruption of active nests, this measure would reduce impacts to nesting migratory bird species to less than significant levels.

#### *Finding*

The Board finds that Mitigation Measure BIO-A is feasible and will adopt it. This measure will be incorporated into the project. With this measure in place, Impact BIO-4 would be less than significant.

**BIO-5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

#### *Impact*

As described in Chapter 3 (Section 3.5.5.1) of the EIR, forty-five native trees and shrubs would be removed during construction of the enlarged channel and access road on the east bank of the channel in Reaches 1 through 3. The proposed project would remove two trees consisting of one native elderberry and one non-native pine tree, of sufficient size to be covered by the City of Milpitas Tree Ordinance, which protects trees with circumference of 37 inches or greater. Trees may also be harmed by damage to the roots during construction, either directly or by compaction of soils around the root zone. USACE would be constructing the project and as a federal agency it would not be obtaining a tree removal or development permit from the City of Milpitas. Removal of trees covered by the City of Milpitas tree ordinance without City approval would be inconsistent with the ordinance's underlying tree protection policy, and therefore would be a significant impact.

#### *Mitigation Measures*

Mitigation Measure BIO-B (described under Impact BIO-2) requires that removed native trees and shrubs with dbh equal to or greater than 2 inches dbh would be replaced.

Mitigation Measure BIO-D (described under Impact BIO-2) requires the establishment of buffer zones around the base of riparian trees, in which excavation would not occur, to protect the tree roots from construction damage.

#### *Mitigation Effectiveness*

Because Mitigation Measure BIO-B applies to trees that are smaller than those covered by the City of Milpitas tree ordinance, implementation of the measure would result in planting of a greater number of native trees than the trees removed by the project and covered by the City ordinance. Planting of native trees and shrubs to replace those removed as required by Mitigation Measure BIO-B would further the

tree protection policies underlying the City ordinance and reduce this impact to a less than significant level. Mitigation Measure BIO-D would reduce impacts to existing trees by providing buffers to prevent root damage to riparian trees in Reach 4.

*Finding*

The Board finds that Mitigation Measures BIO-B and BIO-D are feasible and will adopt them. These measures will be incorporated into the project. With these measures in place, Impact BIO-5 would be less than significant.

**Cultural Resources**

**CUL-1. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.**

**CUL-2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.**

**CUL-4. Disturb any human remains, including those interred outside of formal cemeteries.**

*Impact*

Archaeological and geoarchaeological data suggest a moderate to high potential for exposing subsurface archaeological materials within the project area. As described in Chapter 3 (Section 3.6) of the EIR, historic site CA-SCL-593 which contains Native American human remains and associated artifacts, is located within the project area. USACE and the State Historic Preservation Office (SHPO) executed a Memorandum of Agreement (MOA) concerning that historic site. The MOA defines an area of potential effect, requires development of a Historic Property Management Plan (HPMP) for data recovery of CA-SCL-593, and specifies requirements relating to reporting, construction monitoring, and Native American consultation, and identifies steps to take when addressing any unanticipated discoveries during construction. In compliance with the MOA, USACE prepared an HPMP. In keeping with the MOA and HPMP, Phase 1A investigations, including removal of the known Native American human remains for proper reburial, were completed at Historic Site CA-SCL-593. Construction activities along Upper Berryessa Creek may result in impacts on the known archaeological site CA-SCL-593 as well as unidentified subsurface archaeological and potential historical resources. These impacts would be significant.

*Mitigation Measures*

**CUL-A. IMPLEMENT THE MOA AND CA-SCL-593 HPMP.** The District will work with the USACE to implement the following measures contained in the MOA between the USACE and the California SHPO. In accordance with stipulation 2 of the MOA which requires development of an HPMP, USACE prepared an HPMP. Prior to and during construction of the proposed project, the HPMP will be implemented. The CA-SCL-593 HPMP (Stradford 2013) requires workforce training and archaeological monitoring of ground disturbing activities associated with the project.

**CUL-B. PREPARE AND IMPLEMENT AN ARCHAEOLOGICAL MONITORING AND UNANTICIPATED DISCOVERY PLAN.** The District will work with the USACE to implement the following measures. Construction activities that involve ground disturbance will be monitored by a professional archaeologist. Archaeological monitoring protocols and standards for the project, including "halt work"

areas surrounding unanticipated discoveries, will be documented in an Archaeological Monitoring and Unanticipated Discovery Plan, to be approved by the District, USACE, and UPRR prior to construction. At a minimum, the plan will include:

- A cultural and archaeological context for the project and any unanticipated discoveries;
- Definitions of areas and depths to be monitored;
- Identification of archaeological resources;
- Protocols to be completed in the event of an unanticipated discovery, including notifications and assessment of the find's significance; and
- Protocols for treatment of human remains.

#### *Mitigation Effectiveness*

Impacts associated with adverse changes to historical and archaeological resources, and disturbance of human remains, would be less than significant after implementation of Mitigation Measures CUL-A and CUL-B because the MOA and HPMP for CA-SCL-593 contain measures to prevent a substantial adverse change in the significance of this site, and because an archeological monitoring and unanticipated discovery plan would prevent substantial adverse changes to the significance of undiscovered resources.

#### *Finding*

The Board finds that Mitigation Measures CUL-A and CUL-B are feasible and will adopt them. These measures will be incorporated into the project to ensure implementation of the HPMP during construction, including monitoring of construction activities by qualified archaeologists. With these measures in place, impacts CUL-1, CUL-2, and CUL-4 would be less than significant.

### Geology, Soils, and Mineral Resources

**GEO-1. Expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving:**

- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault zoning map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
- Strong seismic ground shaking;
- Seismic related ground failure including liquefaction; or
- Landslides.

#### *Impact*

As described in Chapter 3 (Section 3.7.5.2) of the EIR, potential risks to people or property would occur if new structures in which people would work or live, or which house significant resources, were built and which may fail during a seismic event. If failure of the floodwall occurred, it is unlikely to result in injury or death, given that it does not support occupied structures and is not likely to topple during an earthquake. However, the proposed project also includes construction of a new concrete culvert to replace the existing UPRR trestle, concrete aprons and transition structures, and the floodwalls. Failure of the culvert at the existing UPRR trestle site during a large seismic event could result in loss, injury, or death. This impact would be significant.

#### *Mitigation Measure*

**GEO-A. IMPLEMENT GEOTECHNICAL RECOMMENDATIONS.** The District will work with the USACE to incorporate into project design recommendations of the project Geotechnical Report to minimize

geological hazards. Recommendations from this report will guide design of foundations, earthwork, and site preparation. The recommendations shall become part of the construction specifications and be consistent with standard engineering practice within California and California Building Code and be consistent with any local policies. Specific recommendations from the project Geotechnical Report (see Final EIR Appendix D):

#### Site Preparation and Fill Placement

- The surface will be cleared of any topsoil, pavement, structures, vegetation, trash, and debris prior to commencement of any earthwork or foundation construction.
- Where new engineered fill will be placed on an existing slope, the fill will be supported by a shear key constructed at the base of the toe of slope. The key will extend to a minimum depth of 3 feet below existing grade, have a minimum bottom width of 5 feet, and side slopes of 1H:1V.
- Existing slopes to receive fill will be benched with 2-foot-high vertical cuts prior to fill placement. In order to adequately compact the face of fill slopes, fill slopes will be overbuilt by a foot or so and trimmed back to the final configuration.
- Fill will be placed in horizontal lifts not more than 8 inches in loose, uncompacted thickness.
- Soils excavated from the project site that are reused as compacted fill will be free of organics, deleterious materials, debris and particles over 3 inches in largest dimension. Locally, particles up to 4 inches in largest dimension may be incorporated in the fill soils. Wet soils will be spread, disked, and dried before they are reused for fill.

#### Shoring

- Sides of temporary excavations greater than 4 feet in depth will be sloped back at an inclination of 1:1 or flatter. Where space for sloped sides is lacking, the side slopes will be shored with cantilevered or anchored steel sheet pile walls.
- Shoring for the UPRR culvert will be designed based on the appropriate requirements in the American Railway Engineering and Maintenance Association Manual for Railway Engineering, Chapter 8.

#### Excavation and Construction Slopes

- Temporary and short-term excavations shallower than 4 feet may be excavated with vertical sides. Sides of temporary excavation deeper than 4 feet will be sloped back at an inclination of 1H:1V or flatter. Where space for sloped sides is not available, the slopes will be shored.
- Stockpiled (excavated) materials will be placed no closer to the edge of a trench excavation than a distance defined by a line drawn upward from the bottom of the trench at an inclination of 1H:1V, but no closer than 4 feet.
- In areas where excavation occurs below the groundwater level, temporary control and diversion of both surface water and groundwater seepage will occur.

#### Mitigation Effectiveness

Mitigation Measure GEO-A would ensure that designs of all proposed structures, including the proposed concrete box culvert at the existing UPRR trestle site, are prepared in accordance with seismic safety standards established by the State of California. In addition, the District will work with USACE to incorporate recommendations of the project Geotechnical Report into project design to minimize any potential geological hazards. Incorporating the Geotechnical Report's recommendations into the project design and compliance with seismic safety standards would ensure that the potential for damage or loss of life during an earthquake or other seismic events would not significantly increase as a result of the proposed project.

*Finding*

The Board finds that Mitigation Measure GEO-A is feasible and will adopt it. This measure will be incorporated into the project. With this measure in place, Impact GEO-1 would be less than significant.

**GEO-2. Result in substantial soil erosion or the loss of topsoil.**

*Impact*

Ground-disturbing activities during construction such as excavation, grading, and use of heavy equipment could result in soil erosion. The potential for soil erosion would be much greater during periods of substantial rainfall when the amount of water flowing in the creek would increase greatly. This could result in substantial erosion of disturbed and denuded work areas which would be particularly vulnerable to erosion during high creek flows. This impact would be significant.

*Mitigation Measure*

Significant soil erosion or loss of topsoil would be mitigated by implementing Mitigation Measure WAQ-C, described under Impacts WAQ- 1 and WAQ-6. Mitigation Measure WAQ-C requires the construction contractor to suspend in-channel construction activities and implement a project-specific Rain Event Action Plan (REAP) if substantial rainfall is forecast. The REAP will include measures to prevent adverse effects of water flows at construction areas such as removal of equipment vehicles and materials from the channel, protection of exposed and disturbed areas, and isolation of uncured concrete from water flows.

*Mitigation Effectiveness*

This mitigation measure would prevent substantial soil erosion and loss of topsoil during substantial rain events by stabilizing soil at disturbed areas and prevent the washing of stockpiled material into waterways.

*Finding*

The Board finds that Mitigation Measure WAQ-C is feasible and will adopt it. This measure will be incorporated into the project. With this measure in place, Impact GEO-2 would be less than significant.

**Hazardous Materials**

**HWM-1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or hazardous wastes.**

*Impact*

As described in Chapter 3 (Section 3.9.5.1) of the EIR, project construction and maintenance activities would involve transport and use of hazardous materials such as fuels, oils/lubricants, and cleaners which are commonly used in construction. The construction contractor would be required to comply with all applicable laws and regulations relating to storage and transportation of hazardous materials. However, accidental spills of hazardous or regulated materials could occur during construction, which would create a significant hazard to the public or environment. This hazard would be increased during periods of substantial rainfall which could result in increased flow of water within the creek channels. Hazardous materials being used or stockpiled during construction could be washed away by creek waters, resulting in downstream transport of those materials. This would be a significant impact.

#### *Mitigation Measures*

**HWM-A. PREPARE AND IMPLEMENT A SPILL PREVENTION AND RESPONSE PLAN.** To avoid and minimize potential accidental spills during construction, the District will work with the USACE to prepare a project-specific Spill Prevention and Response Plan (SPRP) that conforms to applicable local, State, and Federal requirements. The SPRP will be kept on-site during construction and distributed to all workers and managers prior to construction. The SPRP will include measures that ensure the safe handling, use, storage, transport, and disposal of hazardous materials used or encountered during construction. The construction contractors will be required to comply with the SPRP and applicable Federal, State, and local laws. The plan will outline measures for specific handling and reporting procedures for hazardous materials and disposal of hazardous materials removed from the site at an appropriate off-site disposal facility.

**HWM-B. PREPARE AND IMPLEMENT EMERGENCY EVACUATION PLAN.** Prior to construction, the District will work with the USACE to develop an emergency response plan in consultation with the Milpitas and San Jose emergency response agencies, including Fire and Police Departments. The emergency response plan will identify locations where traffic may be restricted due to project activities, and will include but not be limited to the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments. The plan will also include provisions for expediting emergency vehicles through construction zones, particularly during periods when partial lane closures are scheduled.

Also, this impact would be mitigated by implementing Mitigation Measure WAQ-C, described under Impacts WAQ- 1 and WAQ-6. Mitigation Measure WAQ-C requires the construction contractor to suspend in-channel construction activities and implement a project-specific Rain Event Action Plan (REAP) if substantial rainfall is forecast. The REAP will include measures to prevent adverse effects of water flows at construction areas such as removal of equipment vehicles and materials from the channel, protection of exposed and disturbed areas, and isolation of uncured concrete from water flows.

#### *Mitigation Effectiveness*

These mitigation measures would prevent significant hazards to the public or the environment associated with the routine transport, use, or disposal of hazardous materials by ensuring the safe handling, use, storage, transport, and disposal of hazardous materials used or encountered during construction (Mitigation Measure HWM-A); ensuring efficient emergency response and evacuation if needed (Mitigation Measure HWM-B); and minimizing the likelihood of water entraining hazardous substances and flowing into the creek (Mitigation Measure WAQ-C).

#### *Finding*

The Board finds that Mitigation Measures HWM-A, HWM-B, and WAQ-C are feasible and will adopt them. These measures will be incorporated into the project. With these measures in place, Impact HWM-1 would be less than significant.

**HWM-2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.**

*Impact*

As described in Chapter 3 (Section 3.9.5.2) of the EIR, two contaminated groundwater plumes are present within Reaches 1-3 in the vicinity of the project area. These two plumes are associated with the Great Western and the Jones Chemical, Inc. (JCI) sites. The EIR concludes that the hazard risks to workers and the public from the Great Western plume would be less than significant. However, at the JCI groundwater plume area, samples from groundwater monitoring wells have indicated that volatile organic compounds (VOC) levels in groundwater in this area are greater than environmental screening levels (ESLs). If groundwater is encountered during project excavation in this area, the level of VOCs in the groundwater may be above RWQCB ESLs. Because workers or members of the public could be exposed to groundwater contaminated with VOCs above ESLs, this impact would be significant.

*Mitigation Measures*

Mitigation measures HWM-A, HWM-B, and WAQ-C, as described under Impact HWM-1, would be implemented to reduce the risk and severity of accidental releases of hazardous materials during construction. In addition, the following mitigation measure would also be implemented:

**HWM-C. TREAT VOC-CONTAMINATED GROUNDWATER ENCOUNTERED AT JCI OFF-SITE AREA.** USACE will implement the project Groundwater Management Plan during project construction. If groundwater is encountered at the JCI groundwater plume area during project construction, USACE will collect and containerize groundwater encountered in the JCI VOC plume area. USACE will treat that groundwater to remove contamination before discharge to the creek channel. The treated groundwater will meet discharge standards specified in San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Order No. R2-2012-0012 National Pollutant Discharge Elimination System No. CAG912002. The treatment method will consist of pre-filtration to remove solids from the extracted groundwater, followed by sand and carbon adsorption. Sand and carbon adsorption can be implemented by use of mobile equipment, and has been approved for use by the SFBRWQCB.

*Mitigation Effectiveness*

These mitigation measures would prevent significant hazards to the public or the environment associated with accidental releases of hazardous materials by ensuring the safe handling, use, storage, transport, and disposal of hazardous materials used or encountered during construction (Mitigation Measure HWM-A); ensuring efficient emergency response and evacuation if needed (Mitigation Measure HWM-B); minimizing the likelihood of water entraining hazardous substances and flowing into the creek (Mitigation Measure WAQ-C); and requiring collection and treatment of groundwater encountered during project excavation in the JCI groundwater plume area to reduce levels of VOCs to levels complying with regulatory standards before discharge to the environment (Mitigation Measure HWM-C).

*Finding*

The Board finds that Mitigation Measures HWM-A, HWM-B, HWM-C, and WAQ-C are feasible and will adopt them. These measures will be incorporated into the project. With these measures in place, impact HWM-2 would be less than significant.



## Land Use

**LND-2. Conflict with any applicable land use plan, policy, or regulations of an agency with jurisdiction over the project (including but not limited to the General Plan, Specific Plan, local coastal plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.**

### *Impact*

As described in Chapter 3 (Section 3.10.5.2), the proposed access roads in Reaches 1 through 3 could physically accommodate the planned trail for most of the length included in the City of Milpitas' Trails Master Plan. However, the proposed project would include fencing and locked gates at the entrances to the creek access road from the paved streets (i.e. Calaveras Boulevard, Los Coches Street, Yosemite Drive, and Ames Avenue) which would prevent public access to the creek right of way in the event that a trail is built in the future. The proposed project would therefore conflict with the Milpitas Trails Master Plan, which would be a significant impact.

### *Mitigation Measure*

**LND-A. ALLOW PUBLIC ACCESS TO CREEK RIGHT OF WAY.** The District will work with the City of Milpitas to execute a Joint Use Agreement (JUA) to allow public access to a trail on the creek right of way.

### *Mitigation Effectiveness*

A joint use agreement (JUA) would allow public access to a trail on the Berryessa Creek right of way and resolve the potential conflict with the Milpitas Trails Master Plan.

### *Finding*

The Board finds that Mitigation Measure LND-1 is feasible and will adopt it. This measure will be implemented by the District. With this measure in place, Impact LND-2 would be less than significant.

## Noise

**NOI-4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project**

### *Impact*

As described in Chapter 3 (Section 3.11.5.2 of EIR), truck traffic may generate up to 77-84 dBA during construction, and construction equipment may generate up to 74-90 dB at 50 feet. Noise from truck traffic would be sporadic and spread out during the normal business hours, and noise from construction at any given location would likely last less than 2 months; however, based on the estimated current ambient noise (between 55 and 65 dBA) and given their distances from the project area, the temporary increase in ambient noise levels experienced by residents and businesses in the project area could be substantial and this impact would therefore be significant.

### *Mitigation Measures*

**NOI-A. ALERT NEIGHBORS.** The District will notify residents in the vicinity of proposed project construction activities about the type and schedule of construction. Prior to construction, USACE will require the contractor to place signs throughout the proposed project area alerting neighbors to pending construction.

**NOI-B. USE NOISE SUPPRESSION TECHNIQUES.** The District will work with the USACE to assure the following mitigation measure is implemented. The construction contractor will use available noise suppression devices and techniques. Construction equipment noise will be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools. Noise-reduction measures specified in the City of San Jose's Noise Ordinance are described below, and will be implemented.

- Utilize 'quiet' models of air compressors and other stationary noise sources where technology exists;
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses;
- Locate staging areas and construction material areas as far away as possible from adjacent land uses;
- Prohibit all unnecessary idling of internal combustion engines;
- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

**NOI-C. LIMIT CONSTRUCTION HOURS.** The District will work with the USACE to assure the following mitigation measure is implemented whenever possible. Construction hours will be consistent with both the City of Milpitas Municipal Code and the San Jose Municipal Code to the maximum extent possible. Specifically, the Milpitas City Code Municipal Code, Section V-213-3 allows construction in residential areas to 7 a.m. and 7 p.m. on weekdays and weekends. Construction in residential areas is not permitted on holidays. The San Jose Municipal Code limits construction to between 7 a.m. and 7 p.m. Monday thru Saturday except within 500 feet of residential units, when construction is limited to Monday through Friday, 7 a.m. to 7 p.m. (Municipal Code 20.100.450).

#### *Mitigation Effectiveness*

Mitigation Measures NOI-A, NOI-B, and NOI-C would reduce construction noise impacts so that they are not substantial. Mitigation Measure NOI-A requires that the District inform residents in the vicinity of the proposed project about the type and schedule of construction. Mitigation Measure NOI-B requires the use of noise suppression devices to reduce noise levels, and NOI-C places limits on construction hours to reduce noise impacts on sensitive receptors.

#### *Finding*

The Board finds that Mitigation Measures NOI-A, NOI-B, and NOI-C are feasible and will adopt them. These measures will be incorporated into the project. With these measures in place, Impact NOI-4 would be less than significant.

### **Traffic and Transportation**

**TRA-1. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.**

### *Impact*

As described in Chapter 3 (Section 3.15.5.1 of EIR), the proposed project would generate about 48 truck trips (i.e. 20 round trips) per day for disposal of excavated materials. There would be an additional 6 to 8 daily truck trips for importing materials as well as moving construction equipment. Assuming 10-hour work days, approximately 5 trucks per hour would either enter or exit the access roads and staging areas in Reaches 1-3. These trucks would enter or exit at multiple points, so the effects would be spread throughout Reaches 1-3. Additional temporary and intermittent delays to the smooth flow of traffic may occur when slow-moving construction trucks impede faster-moving passenger vehicles. Because this type of impedance to traffic flow during the weekday peak traffic hours is less predictable than temporary lane closures on side streets, and would occur over the course of the construction period, it would be a short-term significant impact.

In Reach 4, the primary impact from construction truck traffic would be a temporary and intermittent reduction of roadway capacities due to the slower movements of trucks compared to passenger vehicles. Drivers could experience delays if they were traveling behind a construction truck. Impedance to traffic flow during the weekday peak traffic hours in Reach 4 would be a short-term significant impact.

### *Mitigation Measure*

**TRA-A. PREPARE AND IMPLEMENT A TRANSPORTATION MANAGEMENT PLAN AND TRAFFIC CONTROL PLAN.** The District will work with the USACE to implement the following mitigation measure. As required by Caltrans to mitigate impacts to SR-237 (Calaveras Boulevard), the construction contractor will develop a Transportation Management Plan in accordance with the Caltrans' Manual of Uniform Traffic Control Devices. The plan will conform to professional traffic engineering standards and will prescribe methods for maintaining traffic flows on roadways directly affected by construction. The plan will be submitted to Caltrans for approval before the start of construction. Mitigation measures, such as use of flaggers and timing of deliveries, will be incorporated into the construction plans in order to reduce effects to traffic.

The construction contractor will also be required to develop a Traffic Control Plan prior to construction, and coordinate all use of public roads with the Cities of Milpitas and or San Jose, local and regional planning agencies, emergency service providers, air quality management districts, or other responsible agencies. This plan will include the following measures:

- Construction vehicles will not be permitted to block any roadways or driveways.
- Truck trips will be scheduled outside of peak morning and evening commute hours, as well as during peak school circulation times, to the extent possible.
- Signs and flagmen will be used, as needed, to alert motorists, bicyclists, and pedestrians to the presence of haul trucks and construction vehicles at all access points.
- Vehicles will be required to obey all speed limits, traffic laws, and transportation regulations during construction. Vehicles will not exceed 15 miles per hour on unpaved roads.
- Construction workers will be encouraged to carpool and park in designated staging areas.
- Closure of roads, staging areas, and construction sites will be clearly fenced and delineated with appropriate closure signage.
- Any roads damaged by construction will be repaired.
- Circulation plans will be developed to minimize impacts on local street circulation. Flaggers and/or signage will be used to guide vehicles through and/or around the construction zone.

- The construction contractor will notify all emergency service providers in advance of construction to inform them of the construction activities. Traffic control staff will be trained in specific methods to prioritize and ensure access for emergency vehicles. Access will be provided for emergency vehicles at all times.
- Truck routes will be identified in the Traffic Control Plan. Haul routes will utilize City of Milpitas, City of San Jose, and Caltrans designated haul routes and minimize truck traffic on local roadways and residential streets to the extent possible.
- Sufficient staging areas will be provided for trucks accessing construction zones to minimize disruption of access to adjacent land uses.
- Access to driveways and private roads will be maintained. If access must be restricted for brief periods, property owners shall be notified in advance.
- The construction contractor will coordinate with UPRR for work within the right-of-way and avoid disruption to the rail corridor.
- Construction will be coordinated with local traffic agencies, VTA, and AC Transit to minimize disruption to service on local bus routes.
- Construction will be coordinated with police and fire stations, transit stations, hospitals, and schools. Facility operators shall be notified in advance of the timing, location, and duration of construction activities.
- Pedestrian and bicycle access and circulation will be maintained during construction where safe to do so. If construction activities encroach on a bicycle lane, warning signs will be posted.
- Work site(s) will be appropriately fenced off from adjacent properties, roadways, and sidewalks to ensure safety of nearby residents and pedestrians.
- All construction equipment and materials will be stored in designated contractor staging areas on or adjacent to the worksite, in such a manner as to minimize obstruction of traffic.

#### *Mitigation Effectiveness*

Implementation of this mitigation measure would reduce transportation impacts relating to conflicts with transportation plans, policies, and ordinances during project construction to a less than significant level by scheduling truck trips outside of peak morning and evening commute hours as needed to avoid adverse impacts on traffic flow, ensuring that flaggers are on-site to direct traffic and minimize delays, minimizing disruption to local bus routes by coordinating with all local traffic agencies, VTA, and AC Transit prior to construction, identifying haul routes and detour routes, and establishing adequate measures to reduce traffic hazards.

#### *Finding*

The Board finds that Mitigation Measure TRA-A is feasible and will adopt it. This measure will be incorporated into the project. With this measure in place, Impact TRA-1 would be less than significant.

**TRA-4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or construction traffic.**

#### *Impact*

As described in Chapter 3 (Section 3.15.5.1 of EIR), during partial road and sidewalk closures, pedestrians may need to cross the street to access the nearest sidewalk, creating a hazard to pedestrians. Increased hazard may also result from wear and tear on surface streets caused by heavy construction vehicles, causing dangerous conditions for bicyclists and motorcyclists. Construction vehicles on the access roads would cross active railroad tracks that are not equipped with warning

devices, creating a significant impact by exposing truck and train operators to a potentially harmful situation. These impacts would be significant.

*Mitigation Measure*

Under Mitigation Measure TRA-A, described above, a transportation management plan and a traffic control plan would be prepared and implemented during construction to meet Caltrans and local agency needs.

*Mitigation Effectiveness*

The plans would contain measures to ensure safe passage at crosswalks and sidewalks and measures to ensure that safety hazards are addressed prior to and during construction. All vehicles would be required to comply with standards for vehicular safety, including showing adequate maintenance and workability of safety features including brakes, horns, flashers, back-up beepers, and mirrors, and would be required to comply with all speed regulations. These measures would ensure that increases in safety hazards would not be substantial and this impact would be less than significant.

*Finding*

The Board finds that Mitigation Measure TRA-A is feasible and will adopt it. This measure will be incorporated into the project. With this measure in place, Impact TRA-4 would be less than significant.

**TRA-5. Result in inadequate emergency access.**

*Impact*

As described in Chapter 3 (Section 3.15.5.1 of EIR), temporary lane closures on Los Coches Street, Ames Avenue, and Yosemite Drive during project construction would have the potential to create inadequate emergency access, resulting in a significant impact.

*Mitigation Measure*

Under Mitigation Measure TRA-A, described above, a transportation management plan and a traffic control plan would be prepared and implemented during construction. These plans would be prepared in coordination with agencies which may administer local or regional plans to manage traffic congestion, transit, non-motorized transit, traffic safety, emergency response, and other concerns. Under Mitigation Measure HWM-B, described under Impact HWM-1, an emergency evacuation plan would be prepared in consultation with local public safety agencies and would detail measures to further facilitate emergency response.

*Mitigation Effectiveness*

These mitigation measures would ensure that emergency access is adequate by requiring transportation management and traffic control plans to be prepared in coordination with the agencies which administer plans for emergency response (Mitigation Measure TRA-A), and by requiring an emergency evacuation plan to detail measures to further facilitate emergency response (Mitigation Measure HWM-B).

*Finding*

The Board finds that Mitigation Measures TRA-A and HWM-B are feasible and will adopt them. These measures will be incorporated into the project. With these measures in place, Impact TRA-5 would be less than significant.

**TRA-6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.**

*Impact*

As described in Chapter 3 (Section 3.15.5.1 of EIR), sidewalks on one side of Los Coches Street, Yosemite Avenue, and Ames Avenue may also be closed for up to 10 days, although sidewalks on the other side of the street would remain open or other pedestrian routes would be provided, thus not requiring detours to other streets. Construction vehicles entering and exiting public streets would cross bike routes and sidewalks at these streets and at Montague Expressway, potentially endangering pedestrians and bicyclists. This impact would be significant because construction of the proposed project would increase safety hazards for pedestrian and bicycle facilities.

*Mitigation Measure*

Under Mitigation Measure TRA-A described above, transportation management and traffic control plans would be prepared and implemented during construction to meet pedestrian and bicyclist needs.

*Mitigation Effectiveness*

Mitigation Measure TRA-A would reduce transportation impacts associated with potential conflicts with plans, policies, and programs related to bicyclists and pedestrians to a less than significant level during construction. The transportation management and traffic control plans called for by Mitigation Measure TRA-A would ensure safe passage at crosswalks and sidewalks, and ensure that safety hazards to pedestrians and bicyclists are addressed prior to and during construction.

*Finding*

The Board finds that Mitigation Measure TRA-A is feasible and will adopt it. This measure will be incorporated into the project. With this measure in place, Impact TRA-6 would be less than significant.

**Utilities and Service Systems**

**UTL-1 EXCEED WASTEWATER TREATMENT REQUIREMENTS OF THE APPLICABLE REGIONAL WATER QUALITY CONTROL BOARD**

*Impact*

As described in Chapter 3 (Section 3.16.5.2 of EIR), a potential source of wastewater is contaminated groundwater from the existing JCI groundwater plume in Reach 3, which may be encountered during project excavation. It is assumed that VOC concentrations in the plume exceed levels established by the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) requirements for downstream discharge. Based on current design plans and studies showing depth to groundwater, it is likely that groundwater would be encountered within the JCI groundwater plume area during construction. Downstream discharge of groundwater with pollutant levels higher than allowable thresholds established by the SFBRWQCB would be a significant impact.

*Mitigation Measure*

Mitigation measure HWM-C, described above under Impact HWM-2, requires on-site treatment of groundwater encountered during project excavation in the JCI groundwater plume area to meet SFBRWQCB standards before downstream discharge to the creek.

### *Mitigation Effectiveness*

Implementation of Mitigation Measure HWM-C would ensure that groundwater encountered during construction meets RWQCB water quality standards prior to discharge. Therefore, impacts after mitigation would be less than significant.

### *Finding*

The Board finds that Mitigation Measure HWM-C is feasible and will adopt it. This measure will be incorporated into the project. With this measure in place, Impact UTL-1 would be less than significant.

## Hydrology and Water Quality

### **WAQ-1 VIOLATE ANY WATER QUALITY STANDARD OR WASTE-DISCHARGE REQUIREMENT, AND WAQ-6 OTHERWISE SUBSTANTIALLY DEGRADE WATER QUALITY**

#### *Impact*

Significant impacts associated with water quality standards violations or substantial degradation of water quality could occur due to the following reasons.

As described in Chapter 3 (Section 3.17.5.2 of EIR), project construction activities would use heavy equipment and associated hazardous materials, such as fuels (gasoline and diesel), oils and lubricants, and cleaners (e.g., solvents, corrosives, soaps, detergents), which are commonly used in construction projects. During construction, accidental spills could occur, potentially causing a discharge of hazardous materials to surface or groundwater and violating water quality standards. Preparation of the site prior to construction would require clearing and grubbing, which may require the use of herbicides which could be sprayed or spilled into surface waters. Several components of the project would include construction with concrete within the channel. Uncured concrete is extremely alkaline, and if it spilled or came into contact with creek water during the curing period, it would degrade water quality and could cause a violation of water quality standards.

Additionally, soils in the area would be disturbed during construction as a result of material excavation along the creek bed and banks, and during construction and use of access roads. Erosion may also occur at staging areas, during initial grading, and subsequent disturbance by construction equipment would destabilize soils, leaving them vulnerable to erosion. Soils stockpiled for reuse or before they are hauled off for disposal would be especially vulnerable to erosive effects of wind and rain. As soils in the project area are relatively easily erodible, even soils that are stockpiled properly may erode as a result of rain or high winds. Impacts associated with excessive erosion include degraded water quality and excessive sedimentation.

As discussed under Impacts HWM-2 and UTL-1 above, groundwater encountered at the JCI groundwater plume area may be contaminated with VOCs and discharge of the contaminated water to the environment unless treated would adversely affect water quality.

#### *Mitigation Measures*

**WAQ-A: IMPLEMENT MEASURES FOR PROTECTING WATER QUALITY** The District, working with the USACE, will require the construction contractor to implement the following measures:

- **Limit impact of concrete near waterways.** Concrete will be poured only where it is separated from natural water flows during placement for a period of 30 days afterwards. Fresh concrete will be isolated until it no longer poses a threat to water quality using the following appropriate measures:
  1. Poured concrete will be excluded from the wetted channel for a period of four weeks after it is poured. During that time, the poured concrete will be kept moist, and runoff from the wet concrete will not be allowed to enter a live stream. Commercial sealants (e.g., Deep Seal, Elasto-Deck Reservoir Grade) may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If a sealant is used, water will be excluded from the site until the sealant is dry.
  2. Dry sacked concrete will not be used in any channel.
  3. An area outside of the channel and floodplain will be designated to clean out concrete transit vehicles used in project construction.
- **Maintain clean conditions at work sites.** 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 on a daily basis. Personnel will not sweep, grade, or flush surplus materials, rubbish, debris, or dust into storm drains or waterways. For activities that last more than one day, materials or equipment left on the site overnight will be stored as inconspicuously as possible, and will be neatly arranged. Any materials and equipment left on the site overnight will be stored to avoid erosion, leaks, or other potential impacts to water quality. Upon completion of work, all building materials, debris, unused materials, concrete forms, and other construction-related materials will be removed from the work site.

**WAQ-B. PREPARE AND IMPLEMENT A DEWATERING PLAN.** USACE will prepare a plan for dewatering the creek and the return of diverted water to the creek downstream of the construction area. The dewatering plan will specify the size and materials to be used in coffer dams, the size of the dewatering pipes, water sampling and testing protocols, energy dissipation methods to prevent bed scour, and water quality standards to be met before water can be reintroduced to the creek.

**WAQ-C. PREPARE AND IMPLEMENT A RAIN EVENT ACTION PLAN.** The District, working with the USACE, will require the construction contractor to implement the following measures. In-channel construction activities will be suspended and a project-specific Rain Event Action Plan (REAP) will be implemented if substantial rainfall, defined as 0.5 inch or greater precipitation, is forecast by the National Weather Service in their 72-hour forecast for the project area. The REAP will be prepared by a qualified SWPPP practitioner and will comply with standards of the California Stormwater Quality Association Best Management Practices Handbook. The REAP will include measures to prevent adverse effects of water flows at construction areas, such as removal of equipment, vehicles, and materials from the channel; protection of exposed and disturbed areas; and isolation of uncured concrete from water flows. Additionally, start of construction phases taking more than 72 hours to complete will not occur if substantial rainfall is forecast.

Also, Mitigation Measure HWM-A, described under Impact HWM-1, includes preparation of a spill prevention and response plan in advance of construction to reduce the likelihood of spills, and minimize water quality impacts if a spill were to occur. Mitigation Measure HWM-C, described under Impact HWM-2, would require treatment of groundwater encountered in the JCI groundwater plume area to meet water quality standards before discharge to the creek.



#### *Mitigation Effectiveness*

With the implementation of Mitigation Measures WAQ-A, WAQ-B, WAQ-C, HWM-A, and HWM-C the project would be in compliance with water quality and waste discharge requirements, so impacts associated with violation of water quality standards or substantial water quality degradation would be reduced to a less than significant level.

Significant water quality impacts from construction site runoff would be reduced to less than significant levels through implementation of Mitigation Measures WAQ-A and WAQ-C. Mitigation Measure WAQ-A requires isolation of concrete from runoff or creek water after pouring and maintaining a clean work site. Mitigation Measure WAQ-C requires measures to prevent washing of contaminants into the creek channel during substantial rain events.

Significant water quality impacts of dewatering activities would be mitigated to a less than significant level by implementing Mitigation Measure WAQ-B. The dewatering plan would include specific measures to prevent significant increases in water temperature, lower dissolved oxygen levels, and increased turbidity.

Significant water quality impacts of spills would be mitigated to a less than significant level by implementing Mitigation Measure HWM-A, because the spill prevention and response plan would reduce the likelihood of spills, and minimize water quality impacts if a spill were to occur.

Significant water quality impacts from discharge of contaminated groundwater if encountered would be mitigated to a less than significant level through treatment of the groundwater as required by Mitigation Measure HWM-C. The treated groundwater would meet water quality standards before discharge to the creek.

#### *Finding*

The Board finds that Mitigation Measures HWM-A, HWM-C, WAQ-A, WAQ-B, and WAQ-C are feasible and will adopt them. These measures will be incorporated into the project. With these measures in place, Impacts WAQ-1 and WAQ-6 would be less than significant.

**WAQ-5 CREATE OR CONTRIBUTE RUN-OFF WATER, WHICH WOULD EXCEED THE CAPACITY OF EXISTING OR PLANNED STORM WATER DRAINAGE SYSTEMS, OR PROVIDE SUBSTANTIAL ADDITIONAL SOURCES OF POLLUTED RUN-OFF**

#### *Impact*

As described in Chapter 3 (Section 3.17.5.2 of EIR), construction of the project in itself would not generate large volumes of runoff or stormwater, but the use of construction equipment, vehicles, and materials in the creek channel would create the potential for substantial increases in polluted runoff during rain events. This impact would be significant.

#### *Mitigation Measures*

Mitigation Measures WAQ-A and WAQ-C, described above, would reduce the potential for creation of polluted runoff by specifying the removal of potential pollutants from the creek channel or securing them when substantial rain is forecast, thereby preventing storm runoff from entraining pollutants.

### *Mitigation Effectiveness*

Implementing Mitigation Measures WAQ-A and WAQ-C would reduce the potential for stormwater to entrain pollutants at the construction area, reducing the potential for creation of polluted runoff.

### *Finding*

The Board finds that Mitigation Measures WAQ-A and WAQ-C are feasible and will adopt them. These measures will be incorporated into the project. With these measures in place, Impact WAQ-5 would be less than significant.

## **Cumulative Impacts (Less than Cumulatively Considerable with Mitigation)**

As described in EIR Chapter 4, implementation of the proposed project and other closely related past, present, and reasonably foreseeable probable future projects could result in significant cumulative impacts in the following areas:

- Biological resources (EIR Section 4.4.4)
- Cultural resources (EIR Section 4.4.5)
- Geology and soils (EIR Section 4.4.6)
- Traffic and transportation (EIR Section 4.4.14)
- Utilities and service systems (EIR Section 4.4.15)
- Hydrology and water quality (EIR Section 4.4.16)

However, the Board finds that the proposed project's mitigation measures described above for each of these resource topics would reduce the contribution of the project to these significant cumulative impacts to less than cumulatively considerable, and therefore less than significant, level.

## **Significant Impacts that Cannot Be Mitigated to a Less than Significant Level**

The proposed project would result in significant impacts in the areas of air quality, greenhouse gas emissions, and construction noise. These impacts would be reduced by the application of feasible mitigation measures described in the Final EIR, but not to a less than significant level, and are therefore considered significant and unavoidable.

### **Air Quality**

**AIR-2. VIOLATE ANY AIR QUALITY STANDARD OR CONTRIBUTE SUBSTANTIALLY TO AN EXISTING OR PROJECTED AIR QUALITY VIOLATION, AND**

**AIR-3. RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS IN NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD (INCLUDING RELEASING EMISSIONS WHICH EXCEED QUANTITATIVE THRESHOLDS FOR OZONE PRECURSORS).**

### *Impact*

As described in Chapter 3 (Section 3.3.5.2 of EIR), emissions of NO<sub>x</sub>, a precursor to ozone, during construction of the proposed project would exceed significance thresholds established by the Bay Area

Air Quality Management District. Because the Bay Area air basin is in non-attainment of National Ambient Air Quality Standards (NAAQS) for ozone, emissions of NO<sub>x</sub> exceeding thresholds established by the BAAQMD would contribute substantially to an existing air quality violation. The increase in NO<sub>x</sub> emissions would also represent a cumulatively considerable net increase in emissions of an ozone precursor. These would be significant impacts.

#### *Mitigation Measures*

**AIR-A: REDUCE CONSTRUCTION-PERIOD DUST EMISSIONS** The District will work with the USACE to require the construction contractor to implement the following measures during construction to reduce particulate emissions. Many of these measures would also reduce NO<sub>x</sub> emissions.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Water used to wash the various exposed surfaces (e.g., parking areas, staging areas, soil piles, and graded areas) would not be allowed to enter waterways.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Idling times shall 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 California Code of Regulations), and this requirement shall be clearly communicated to construction workers (such as verbiage in contracts and clear signage at all access points).
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications, and all equipment shall be checked by a certified visible emissions evaluator.
- Correct tire inflation shall be maintained in accordance with manufacturer's specifications on wheeled equipment and vehicles to prevent excessive rolling resistance.
- Post a publicly visible sign with a telephone number and contact person at the lead agency to address dust complaints; any complaints shall be responded to and corrective action shall be taken within 48 hours. In addition, a BAAQMD telephone number with any applicable regulations would be included.
- Install one or more of the following track-out prevention measures:

- A gravel pad designed using good engineering practices to clean the tires of exiting vehicles,
- A tire shaker,
- A wheel wash system,
- Pavement extending for not less than 50 feet from the intersection with the paved public road,
- Suspend any excavation operations when wind speeds are high enough to result in dust emissions across the property line, despite the application of dust mitigation measures.
- Any other measure(s) as effective as the measures listed above.

**AIR-B: REDUCE CONSTRUCTION EQUIPMENT EMISSIONS.** The District will work with the USACE to require the construction contractor to implement the following measures during construction:

- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
- Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation.
- Use on-road heavy-duty trucks that meet CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation.
- All on and off-road diesel equipment (except diesel generators) shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit.
- Diesel idling within 1,000 feet of sensitive receptors is not permitted.
- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors.
- Use electric equipment when feasible.
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible.
- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.
- All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for reductions of NO<sub>x</sub> and PM emissions.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications, and all equipment shall be checked by a certified visible emissions evaluator.
- Correct tire inflation shall be maintained in accordance with manufacturer's specifications on wheeled equipment and vehicles to prevent excessive rolling resistance.

#### *Mitigation Effectiveness*

Mitigation measures AIR-A and AIR-B specify construction practices that would reduce the amount of NO<sub>x</sub> emissions during project construction by about 20%. However, a 20% reduction in NO<sub>x</sub> emissions would not be sufficient to reduce project emissions below the BAAQMD significance threshold. Therefore, impacts AIR-2 and AIR-3 would remain significant after application of these measures.

#### *Finding*

The Board finds that Mitigation Measures AIR-A and AIR-B are feasible and will adopt them. These measures will be incorporated into the project. Since no other feasible mitigation measures or

alternatives have been found to reduce Impacts AIR-2 and AIR-3 to a less than significant level, these impacts remain significant and unavoidable.

### **Greenhouse Gases and Energy Use**

**GHG-1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment**

#### *Impact*

As described in Chapter 3 (Section 3.8.5 of EIR), construction of the project would result in temporary greenhouse gas (GHG) emissions from combustion associated with on- and off-road equipment. Project GHG emissions would exceed the annual significance threshold for GHG emissions established by the Sacramento Metropolitan Air Quality Management District (SMAQMD), and the District has determined that significance threshold is supported by substantial evidence. Emissions of GHGs during project construction would be a significant impact.

#### *Mitigation Measures*

Mitigation measures AIR-A and AIR-B, described under Impacts AIR-2 and AIR-3, specify construction practices that would reduce GHG emissions during project construction.

#### *Mitigation Effectiveness*

Mitigation measures AIR-A and AIR-B would reduce the amount of CO<sub>2</sub> emissions during project construction by about 20%. However, a 20% reduction would not be sufficient to reduce project emissions below the SMAQMD significance threshold. Therefore, Impact GHG-1 would remain significant after application of these measures.

#### *Finding*

The Board finds that Mitigation Measures AIR-A and AIR-B are feasible and will adopt them. These measures will be incorporated into the project. Since no other feasible mitigation measures or alternatives have been found to reduce Impact GHG-1 to a less than significant level, this impact remains significant and unavoidable.

### **NOISE**

**NOI-1. EXPOSURE OF PERSONS TO OR GENERATION OF NOISE LEVELS IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARD OF OTHER AGENCIES**

#### *Impact*

As described in Chapter 3 (Section 3.11.5.2 of EIR), project construction would generally occur during normal business hours. However, the existing Union Pacific railroad (UPRR) trestle would be replaced with a double barrel concrete box culvert. The culvert would be a precast structure, and would be placed over the course of three days, during which time the UPRR rail line would be closed. The timing of the replacement would be coordinated with UPRR and may require continuous work over a 72-hour period to minimize line closure time and disruption of rail service. Additionally, because this area is within the JCI groundwater plume area, groundwater encountered during earthwork would be collected and treated to remove VOCs before discharge to the creek. The groundwater collection and treatment system would be powered by one or more diesel generators which would operate up to 24 hours per

day for a period estimated at 2 to 3 weeks. Construction of the UPRR replacement culvert and groundwater collection and treatment (including operation of power generators) would occur outside the 7 AM to 7 PM window allowed by the City of Milpitas Noise Abatement Ordinance. This would be a significant impact because construction noise would occur outside of the allowable construction times of 7:00 am to 7:00 pm identified in the City of Milpitas Noise Abatement Ordinance.

#### *Mitigation Measures*

Mitigation measures NOI-A and NOI-B, described under Impact NOI-4, would include advance notification to neighbors of planned construction, and use of noise-suppression techniques during construction.

#### *Mitigation Effectiveness*

Mitigation measures NOI-A and NOI-B would reduce construction noise impacts, but impacts NOI-1 would remain significant because construction noise would still occur outside of the allowable construction times identified in the City of Milpitas Noise Abatement Ordinance.

#### *Finding*

The Board finds that Mitigation Measures NOI-A, NOI-B are feasible and will adopt them. These measures will be incorporated into the project. Since no other feasible mitigation measures or alternatives have been found to reduce Impact NOI-1 to a less than significant level, this impact remains significant and unavoidable.

### **Cumulative Impacts (Cumulatively Considerable Post-Mitigation)**

As described in EIR Chapter 4, implementation of the proposed project and other closely related past, present, and reasonably foreseeable probable future projects could result in significant cumulative impacts, and the project would result in a cumulatively considerable contribution to significant cumulative impacts in the following areas<sup>1</sup>:

- Air Quality, NOx emissions (EIR Section 4.4.2)
- Greenhouse Gas Emissions (EIR Section 4.4.7)
- Noise, Construction Noise (EIR Section 4.4.10)

The Board finds that the proposed project's mitigation measures described above for each of these three impacts would not reduce the project's contribution to a less than cumulatively considerable level. Since no feasible mitigation measures or alternatives have been found to reduce the project's incremental contribution to these impacts to a less-than-cumulatively considerable level, these cumulative impacts remain significant and unavoidable.

---

<sup>1</sup> These areas are in addition to biological resources; cultural resources; geology, soils, and mineral resources; traffic and transportation; utilities and service systems; and hydrology and water quality; for which findings were previously made above.

## Findings Regarding Alternatives Analyzed in EIR

The Board has reviewed and considered the information on alternatives provided in the EIR, including the information provided in comments on the Draft EIR, the responses to those comments in the Final EIR and all comments received up to the date of adoption of these findings.

Public Resources Code § 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives...which would substantially lessen the significant environmental effects of such projects.” “Feasible” means “capable of being accomplished in a reasonable period of time taking into account economic, environmental, legal, social, and technological factors” (CEQA Guidelines § 15364). The concept of feasibility also encompasses whether a particular alternative promotes the Project’s underlying goals and objectives, and whether an alternative is impractical or undesirable from a policy standpoint. (See *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957.)

### Alternatives Description

As described in EIR Chapter 5, in accordance with CEQA Guidelines § 51526.6(a), the EIR analyzes four alternatives to the proposed project. They are intended to provide a range of alternative actions that could feasibly achieve the project objectives while avoiding or substantially reducing significant environmental impacts. The alternatives are as follows:

- No Project Alternative: This alternative assumes that the proposed project would not be constructed. No improvements to the Berryessa Creek within the project area would occur.
- Alternative 2A, U.S. Army Corps of Engineers Selected Project: Alternative 2A was authorized as the USACE’s selected plan. This alternative would increase flood conveyance relative to current conditions and would meet the USACE’s goal of containing the 100-year flood. However, it would not meet FEMA certification requirements, and therefore would not fully meet the District’s objectives for the proposed project.
- Alternative 2B, Expanded Incised Trapezoidal Channel: Alternative 2B proposes an earthen trapezoidal channel section with varying bottom widths. Most of the construction components are similar to those described for the proposed project, with the primary differences being the length of floodwalls, amount of material excavation, and construction of new bridges at Calaveras Boulevard and Los Coches Street. This alternative design assumes a bypass structure would be constructed in the future through the greenbelt reach of Berryessa Creek upstream of I-680, with the intent to reduce flooding in the upper watershed.
- Alternative 4, Walled Trapezoidal Channel: Alternative 4 would be similar to features under the proposed project, with the primary differences being the longer and taller floodwalls, greater channel excavation, and replacement of bridges at Los Coches Street, Yosemite Drive, and Ames Avenue. Alternative 4 proposes the construction of floodwalls along nearly the complete length of the project area, for a total of approximately 11,600 feet. Similar to Alternative 2B, this alternative design assumes a bypass structure would be constructed in the future through the greenbelt reach of Berryessa Creek upstream of I-680. Alternative 4 also includes vegetated floodplain terraces that would be constructed in Reach 4.

## Comparison of Alternatives

EIR Chapter 5 (Section 5.2.3) compares the ability of the alternatives to achieve the project objectives, as well as the impacts of the alternatives.

The No Project Alternative would avoid significant construction-related impacts related to air quality, biological resources, cultural resources, geology and soils, hazardous materials and wastes, noise, traffic and transportation, utilities and service systems, and hydrology and water quality that would result from the proposed project. However, the No Project Alternative would not meet any of the project objectives. In addition, implementing mitigation measures identified in the EIR would decrease all of the significant impacts of the proposed project to less than significant with mitigation, with the exception of air quality, greenhouse gas emissions, and noise.

Alternative 2A would result in similar significant impacts as the proposed project. Significant impacts in the areas of biological resources, cultural resources, geology and soils, hazardous materials and wastes, traffic and transportation, utilities and service systems, and hydrology and water quality would be the same as for the proposed project, and would be mitigated to less than significant through application of mitigation measures contained in the final EIR. Alternative 2A, like the proposed project, would result in significant, unavoidable impacts to air quality, greenhouse gases, and noise, but these impacts would be slightly less than for the proposed project. Alternative 2A would meet project objectives other than Objective 1: Achieving FEMA certification. Under this alternative, flood protection in Reaches 1 and 4 would meet FEMA requirements, but parts of Reaches 2 and 3 would be short of meeting FEMA requirements due to the lower floodwall.

Alternative 2B would have a slightly larger footprint than the proposed project, and although most of the construction actions would be similar, they would also be more extensive. Because Alternative 2B would require greater excavation than the proposed project, and, when compared to the proposed project, would result in greater construction period impacts to air quality, biological resources, cultural resources, geology and soils, hazardous materials, noise, hydrology, traffic and transportation, and water quality. Alternative 2B would also require more bridge modification and lane closures than the proposed project, resulting in increased impacts to traffic and transportation and emergency access. As would be the case for the proposed project, all impacts would be mitigated to less than significant levels, except construction period impacts to air quality, greenhouse gases, and noise, which would be significant and unavoidable. The USACE General Re-Evaluation Report / Environmental Impact Statement (GRR/EIS) estimated that the cost to implement Alternative 2B would be more than twice that of the proposed project. Alternative 2B would meet Objectives 1 and 2, but would conflict with the USACE-selected plan and would not meet Project Objective 3.

Alternative 4 would not avoid any of the significant impacts that would occur under the proposed project, but would create in-channel riparian habitat which the proposed project would not. This project feature would provide increased habitat for wildlife of the area, although special status species would not benefit because they do not occur at the project area. Alternative 4 includes floodwalls located on both banks of the channel through the entire project area, resulting in substantially more impacts to visual resources than the proposed project. The floodwalls would form a low barrier between the overbank area and the channel, which would be a barrier for smaller wildlife such as skunks, mice, and possums that may enter the channel to forage or find water. This effect is not expected to impact special status species. Alternative 4 would require replacement of the existing UPRR culvert upstream of Ames



Avenue, which would generate after-hours construction noise. The proposed project would retain the existing culvert. Alternative 4 would also replace the Los Coches Street and Calaveras Boulevard bridges, while the proposed project would not replace those bridges. Impacts to traffic and transportation and emergency response would be greater than for the proposed project. Alternative 4 would require greater excavation than the proposed project and would result in greater impacts than the proposed project to air quality, biological resources, cultural resources, geology and soils, greenhouse gases, hazardous materials, noise, public services, traffic and transportation, utilities and service systems, and hydrology and water quality. Alternative 4 would generate greater emissions of NO<sub>x</sub> and greenhouse gases than the proposed project, although emissions from both the proposed project and Alternative 4 would exceed significance thresholds. As would be the case for the proposed project, all impacts could be mitigated to less than significant levels, except construction period impacts to air quality, greenhouse gases, and noise, which would be significant and unavoidable. Alternative 4 would meet Project Objectives 1 and 2, but would not meet Objective 3. The USACE GRR/EIS estimates that the cost to implement Alternative 4 would be over triple that of the proposed project.

### Findings Regarding Alternatives

The Board finds that specific economic, financial, legal, social, technological or other considerations make the alternatives evaluated in the EIR infeasible and rejects these alternatives for the reasons explained below. Substantial evidence supporting these findings is included in EIR Chapter 5 (in particular Section 5.2.3 and 5.2.4).

The No Project Alternative would not meet any of the project objectives. Also, without implementation of the proposed project, flooding would likely occur on regular intervals between 5 and 10 years, resulting in substantial adverse economic and environmental impacts.

Alternative 2A would not avoid or substantially lessen any of the significant impacts of the proposed project. Alternative 2A would meet Objectives 2 and 3, but would not meet Objective 1, a fundamental project objective, because it would not provide flood protection meeting FEMA certification standards.

Alternative 2B would not avoid or substantially lessen any of the significant impacts of the proposed project. Alternative 2B would result in substantially greater emissions of NO<sub>x</sub> and greenhouse gases and greater after-hours construction noise than the proposed project, and these impacts would be significant and unavoidable. Alternative 2B would also result in greater impacts to traffic system performance and emergency response than the proposed project, although these impacts could be mitigated to a less than significant level. Alternative 2B would meet Objectives 1 and 2, but would conflict with the USACE-selected plan and would not meet Project Objective 3. Because this Alternative would require additional analysis and approval by the USCAE, it could not be implemented in time to provide flood protection for the BART Silicon Valley Extension at its opening, making this alternative logistically infeasible. Alternative 2 would also cost substantially more to construct than the proposed project, making it economically infeasible because federal and local funds are not available to pay for these additional costs.

Alternative 4 would cost more to construct than the proposed project. Alternative 4 would not avoid or substantially lessen any of the significant impacts of the proposed project. Alternative 4 would result in substantially greater emissions of NO<sub>x</sub> and greenhouse gases and greater after-hours construction noise than the proposed project, and these impacts would be significant and unavoidable. Alternative 4 would

also result in greater impacts to traffic system performance and emergency response than the proposed project, although these impacts could be mitigate to a less than significant level. Alternative 4 would meet Objectives 1 and 2, but would conflict with the USACE-selected plan and would not meet Project Objective 3. Because this Alternative would require additional analysis and approval by the USCAE, it could not be implemented in time to provide flood protection for the BART Silicon Valley Extension at its opening, making this alternative logistically infeasible. Alternative 4 would also substantially cost more to construct than the proposed project, making it economically infeasible because federal and local funds are not available to pay for these additional costs.

The proposed project is the only alternative considered in the EIR that would meet all project objectives. The proposed project would also result in less environmental impacts than any of the alternatives (except the no-project alternative), and is therefore the environmentally superior alternative as defined in CEQA guidelines Section 15126.6(e)(2).

### Findings Regarding Additional Mitigation Measures and Alternatives Proposed in Draft EIR Comments

Some comments on the Draft EIR suggested additional mitigation measures and/or project alternatives. However, where the suggestions requested minor modifications or variations in adequate mitigation measures or alternatives or components of alternatives analyzed in the Draft EIR, or requested mitigation measures or alternatives that were too vague or speculative to be addressed, these requests were declined as unnecessary. The Board adopts and incorporates by reference the specific rationales contained in the responses to comments in the Final EIR for rejecting such measures or alternatives.

Additionally, certain mitigation measures and alternatives suggested in Draft EIR comments could reduce impacts, but implementation of these mitigation measures and alternatives would be infeasible. The Board finds that specific economic, legal, social, technological, or other considerations make those mitigation measures or alternatives infeasible. The Board adopts and incorporates by reference the specific reasons contained in the responses to comments in the Final EIR for finding such measures or alternatives infeasible.

### Finding Regarding Location and Custodian of Record

The documents and other materials that constitute the record of proceedings on which the District's findings are based are located at 5750 Almaden Expressway, San Jose CA 95118. The custodian of these documents is James Manidakos, Environmental Planner II. This information is provided in compliance with Public Resources Code § 21081.6(a)(2) and 14 Cal. Code Regs. § 15091(e).

### Statement of Overriding Considerations

The Board adopts and makes this statement of overriding considerations concerning the proposed project's unavoidable significant impacts to explain why the proposed project's benefits override and outweigh its unavoidable impacts.

The Final Environmental Impact Report (EIR) has identified and discussed significant effects that would occur as a result of the proposed project. As set forth in these findings, the District has made a reasonable and good faith effort to eliminate or substantially mitigate the impacts resulting from the proposed project and has made specific findings on each of the proposed project's significant impacts and on mitigation measures and alternatives. Even with implementation of all feasible mitigation, however, the proposed project will result in significant and unavoidable impacts, both direct and cumulative, to air quality, greenhouse gases, and noise.

In accordance with Section 15093 of the CEQA Guidelines, and having reduced the adverse significant environmental effects of the proposed project to the extent feasible, having considered the entire administrative record on the proposed project, and having weighed the benefits of the proposed project against its unavoidable adverse impacts after mitigation, the Board hereby finds that the benefits of the proposed project outweigh its unavoidable adverse impacts and render them acceptable based upon the following considerations. Each benefit set forth below constitutes an overriding consideration warranting approval of the proposed project, independent of the other benefits, despite each and every unavoidable impact.

1. The proposed project will reduce flood damages from Berryessa Creek upstream of Calaveras Boulevard throughout the study reach.
2. The proposed project will protect from the 1% flood event portions of the Bay Area Rapid Transit Silicon Valley Extension, including the Berryessa Station, tracks serving the station, and supporting infrastructure.
3. The proposed project will achieve FEMA certification of flood protection improvements.
4. The proposed project is consistent with the USACE-selected plan and will benefit the local area by harnessing federal resources and expertise to implement the project and federal funds to defray project costs.
5. The proposed project will use environmentally sustainable design practices to achieve flood risk reduction.
6. The proposed project will facilitate an increased length of public recreational trail along the Berryessa Creek, thereby enhancing noncontact water recreation in the project area.
7. The proposed project will reduce future sedimentation of Berryessa Creek in the project area, thereby reducing the costs and environmental impacts resulting from periodic sediment removal.

EXHIBIT 2 TO BOARD RESOLUTION 2016- 04

Upper Berryessa Creek Flood Risk Management Project  
Santa Clara County, California

Mitigation Monitoring and Reporting Program



January 2016

Prepared for the:  
Santa Clara Valley  
Water District



Prepared by



TETRA TECH

*This page left blank intentionally*

## CONTENTS

1. Introduction .....	1
2. Purpose .....	1
3. Roles and Responsibilities .....	1
4. Future Changes to Mitigation Measures .....	1
5. Mitigation Measures .....	2
5.1 Aesthetics .....	2
5.2 Air Quality .....	2
5.3 Biological Resources .....	4
5.4 Cultural Resources .....	5
5.5 Geology, Soils, and Mineral Resources .....	6
5.6 Greenhouse Gases and Energy Use .....	7
5.7 Hazardous Materials .....	7
5.8 Land Use .....	7
5.9 Noise .....	8
5.10 Public Services .....	8
5.11 Recreation .....	9
5.12 Traffic and Transportation .....	10
5.13 Utilities and Service Systems .....	10
5.14 Hydrology and Water quality .....	11
6. Mitigation Summary Table .....	11
7. Reporting .....	11

*This page left blank intentionally*

## **1. INTRODUCTION**

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. It provides for the monitoring of mitigation measures required of the Santa Clara Valley Water District (District) in the Upper Berryessa Creek Flood Risk Management Project (proposed project), as set forth in the Environmental Impact Report (EIR).

Section 21081.6 of the California Public Resources Code and Sections 15091(d) and 15097 of the State CEQA Guidelines require public agencies "to adopt a reporting or monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment."

An MMRP is required for the proposed project because the EIR identified significant impacts and identified mitigation measures to reduce most of those impacts to less than significant levels. The District Board of Directors adopted these mitigation measures concurrently with the adoption of this MMRP.

## **2. PURPOSE**

This MMRP has been prepared to ensure that all mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner throughout implementation of the proposed project. The MMRP may be modified by the District in response to changing conditions or circumstances.

Table A below provides a summary of the individual mitigation measures, and for each measure identifies the agency responsible for implementation, schedule timing, and verification of implementation. Specific impacts for which mitigation measures are proposed are provided in the EIR. The order in which mitigation measures are presented (by resource category) follows the sequence in the EIR. As the local non-Federal sponsor, the District will coordinate with the USACE, the Federal lead agency, to ensure that the mitigation measures listed herein are carried out during project implementation.

## **3. ROLES AND RESPONSIBILITIES**

Unless otherwise specified herein, the District and USACE as project sponsors are responsible for taking all actions necessary to implement the mitigation measures according to the provided specifications and demonstrating that each action has been successfully completed. The project sponsors, at their discretion, may directly implement the measures described herein, or may delegate implementation responsibility or portions thereof to a licensed contractor or other responsible party.

## **4. FUTURE CHANGES TO MITIGATION MEASURES**

Any substantive change to the mitigation measures or MMRP shall be documented in writing. Modifications to mitigation measures may be made by the District subject to one of the following findings:



1. The measure included in the EIR and the MMRP is no longer required because the significant environmental impact identified in the EIR has been found not to exist, or to occur at a level which makes the impact less than significant as a result of changes in the project, changes in conditions of the environment, or other factors.

OR

2. A modified or substitute mitigation measure to be included in the MMRP provides a level of environmental protection equal to or greater than that afforded by the mitigation measure included in the EIR and the MMRP.

AND

3. The modified or substitute mitigation measures do not have significant adverse effects on the environment in addition to or greater than those which were considered by the District in its decisions regarding the EIR and the proposed project.

AND

4. The modified or substitute mitigation measures are feasible, and the District, through measures included in the MMRP or other established procedures, can assure their implementation.

Findings involving modifications to mitigation measures, and related documentation supporting the findings, shall be maintained in the project file with the MMRP..

## **5. MITIGATION MEASURES**

A total of 24 mitigation measures have been identified as necessary to reduce significant impacts. These mitigation measures have been described within the Upper Berryessa Creek Final EIR, are to be adopted by the District Board, and are reproduced here. A summary of mitigation is provided in Table A below. In cases where resources will experience No Impact or Less Than Significant Impact, no mitigation measures were necessary. The resource areas with no mitigation required include Aesthetics, Agriculture and Forestry, Population and Housing, Public Services, and Recreation. In some cases, mitigation measures have been identified for one resource area, but may also apply to other resources as well.

### **5.1 AESTHETICS**

Mitigation measure BIO-B, described below under the Biological Resources section, will further reduce less than significant impacts to aesthetics.

### **5.2 AIR QUALITY**

#### **AIR-A: REDUCE CONSTRUCTION-PERIOD DUST EMISSIONS**

The District will work with the USACE to require the construction contractor to implement the following measures during construction to reduce particulate emissions. Many of these measures would also reduce NO<sub>x</sub> emissions.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Water used to wash the various exposed surfaces (e.g., parking areas, staging areas, soil piles, and graded areas) would not be allowed to enter waterways.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Idling times shall 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 California Code of Regulations), and this requirement shall be clearly communicated to construction workers (such as verbiage in contracts and clear signage at all access points).
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications, and all equipment shall be checked by a certified visible emissions evaluator.
- Correct tire inflation shall be maintained in accordance with manufacturer's specifications on wheeled equipment and vehicles to prevent excessive rolling resistance.
- Post a publicly visible sign with a telephone number and contact person at the lead agency to address dust complaints; any complaints shall be responded to and corrective action shall be taken within 48 hours. In addition, a BAAQMD telephone number with any applicable regulations would be included.
- Install one or more of the following track-out prevention measures:
  - A gravel pad designed using good engineering practices to clean the tires of exiting vehicles,
  - A tire shaker,
  - A wheel wash system,
  - Pavement extending for not less than 50 feet from the intersection with the paved public road,
  - Suspend any excavation operations when wind speeds are high enough to result in dust emissions across the property line, despite the application of dust mitigation measures.
  - Any other measure(s) as effective as the measures listed above.

**AIR-B: REDUCE CONSTRUCTION EQUIPMENT EMISSIONS.** The District will work with the USACE to require the construction contractor to implement the following measures during construction:

- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
- Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation.
- Use on-road heavy-duty trucks that meet CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation.
- All on and off-road diesel equipment (except diesel generators) shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the 5 minute idling limit.
- Diesel idling within 1,000 feet of sensitive receptors is not permitted.
- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors.
- Use electric equipment when feasible.
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible.
- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.
- All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for reductions of NOx and PM emissions.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications, and all equipment shall be checked by a certified visible emissions evaluator.
- Correct tire inflation shall be maintained in accordance with manufacturer's specifications on wheeled equipment and vehicles to prevent excessive rolling resistance.

### 5.3 BIOLOGICAL RESOURCES

**BIO-A: PERFORM PRE-CONSTRUCTION NESTING BIRD SURVEYS AND ESTABLISH APPROPRIATE BUFFERS.** The District will work with the USACE to require the construction contractor to implement the following measures. Prior to construction and during the nesting season (generally mid-April to late July), a qualified biologist will perform nesting bird surveys following established protocols. If nests are detected at staging areas and construction sites during these surveys, a 50-foot no-construction buffer will be delineated around the nest until young have fledged (300-foot buffer for raptors). This measure is consistent with Recommendation 3 contained in the USFWS Coordination Act Report.

**BIO-B: COMPENSATE FOR TREES AND SHRUBS REMOVED DURING CONSTRUCTION.** The following measure to mitigate for removal of native trees and shrubs has been coordinated between USACE and USFWS. This measure represents a variation on the CAR native tree and shrub replacement formula, and was agreed to by the two agencies to move forward without formally revising the CAR:

- 1) Use seeds or cuttings collected at or near the project area, or higher in the watershed if on-site collection is not feasible, for replanting.
- 2) Replace the 53 affected native tree and shrubs at the following rates:
  - Native tree greater than 2 inches and up to 8 inches dbh: plant 1 native tree for each tree removed;
  - Native trees greater than 8 inches and up to 20 inches dbh: plant 2 native trees for each tree removed;

- Native trees greater than 20 inches in dbh: plant 3 native trees for each native tree removed;
- Native shrubs: plant 2 native shrubs for each native shrub removed.

This would result in replanting about 60 native trees and 46 native shrubs.

**BIO-C. USE NATIVE GRASS AND FORBS MIX TO HYDROSEED AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.** The District will work with the USACE to require the construction contractor to implement the following measure. Disturbed areas will be hydroseeded using a seed mix containing only native California grass and forbs seeds. This measure is consistent with Recommendation 4 contained in the USFWS CAR (USFWS, 2013).

**BIO-D. PROVIDE BUFFER AROUND RIPARIAN TREES.** The District will work with the USACE to require the construction contractor to implement the following measures. Tree protection will be included in the project construction plans and specifications and will specify a buffer area around the bases of riparian trees located on the southwest corner of the upstream bend in Reach 4. The buffer area will protect roots of the trees by establishing a zone from the base of the trees within which potentially damaging actions will not occur, including excavation, placement of rock revetment or other bank stabilizing features. In cases where there are multiple trees that would be protected in this way, a single buffer zone may be established to encompass all trees in that area.

#### 5.4 CULTURAL RESOURCES

**CUL-A. IMPLEMENT THE MOA AND CA-SCL-593 HPMP.** The District will work with the USACE to implement the following measures contained in the MOA between the USACE and the California SHPO. In accordance with stipulation 2 of the MOA which requires development of an HPMP, USACE prepared an HPMP. Prior to and during construction of the proposed project, the HPMP will be implemented. The CA-SCL-593 HPMP requires workforce training and archaeological monitoring of ground disturbing activities associated with the project.

**CUL-B. PREPARE AND IMPLEMENT AN ARCHAEOLOGICAL MONITORING AND UNANTICIPATED DISCOVERY PLAN.** The District will work with the USACE to implement the following measures. Construction activities that involve ground disturbance will be monitored by a professional archaeologist. Archaeological monitoring protocols and standards for the project, including "halt work" areas surrounding unanticipated discoveries, will be documented in an Archaeological Monitoring and Unanticipated Discovery Plan, to be approved by the District, USACE, and UPRR prior to construction. At a minimum, the plan will include:

- A cultural and archaeological context for the project and any unanticipated discoveries;
- Definitions of areas and depths to be monitored;
- Identification of archaeological resources;
- Protocols to be completed in the event of an unanticipated discovery, including notifications and assessment of the find's significance; and
- Protocols for treatment of human remains.

## 5.5 GEOLOGY, SOILS, AND MINERAL RESOURCES

**GEO-A. IMPLEMENT GEOTECHNICAL RECOMMENDATIONS.** The District will work with the USACE to incorporate into project design recommendations of the project Geotechnical Report to minimize geological hazards. Recommendations from this report will guide design of foundations, earthwork, and site preparation. The recommendations shall become part of the construction specifications and be consistent with standard engineering practice within California and CBC and be consistent with any local policies. Specific recommendations from the project Geotechnical Report include the following:

### *Site Preparation and Fill Placement*

- The surface will be cleared of any topsoil, pavement, structures, vegetation, trash, and debris prior to commencement of any earthwork or foundation construction.
- Where new engineered fill will be placed on an existing slope, the fill will be supported by a shear key constructed at the base of the toe of slope. The key will extend to a minimum depth of 3 feet below existing grade, have a minimum bottom width of 5 feet, and side slopes of 1H:1V.
- Existing slopes to receive fill will be benched with 2-foot-high vertical cuts prior to fill placement. In order to adequately compact the face of fill slopes, fill slopes will be overbuilt by a foot or so and trimmed back to the final configuration.
- Fill will be placed in horizontal lifts not more than 8 inches in loose, uncompacted thickness.
- Soils excavated from the project site that are reused as compacted fill will be free of organics, deleterious materials, debris and particles over 3 inches in largest dimension. Locally, particles up to 4 inches in largest dimension may be incorporated in the fill soils. Wet soils will be spread, disked, and dried before they are reused for fill.

### *Shoring*

- Sides of temporary excavations greater than 4 feet in depth will be sloped back at an inclination of 1:1 or flatter. Where space for sloped sides is lacking, the side slopes will be shored with cantilevered or anchored steel sheet pile walls.
- Shoring for the UPRR culvert will be designed based on the appropriate requirements in the American Railway Engineering and Maintenance Association Manual for Railway Engineering, Chapter 8.

### *Excavation and Construction Slopes*

- Temporary and short-term excavations shallower than 4 feet may be excavated with vertical sides. Sides of temporary excavation deeper than 4 feet will be sloped back at an inclination of 1H:1V or flatter. Where space for sloped sides is not available, the slopes will be shored.
- Stockpiled (excavated) materials will be placed no closer to the edge of a trench excavation than a distance defined by a line drawn upward from the bottom of the trench at an inclination of 1H:1V, but no closer than 4 feet.
- In areas where excavation occurs below the groundwater level, temporary control and diversion of both surface water and groundwater seepage will occur.

Measure WAQ-C, described below under the Hydrology and Water Quality section, will also reduce project impacts to geology and soils.

## 5.6 GREENHOUSE GASES EMISSIONS AND ENERGY USE

Measures AIR-A and AIR-B, described under the Air Quality section above, would also reduce project impacts relating to greenhouse gases emissions.

## 5.7 HAZARDOUS MATERIALS

**HWM-A. PREPARE AND IMPLEMENT A SPILL PREVENTION AND RESPONSE PLAN (SPRP).** To avoid and minimize potential accidental spills during construction, the District will work with the USACE to prepare a project-specific SPRP that conforms to applicable local, State, and Federal requirements. The SPRP will be kept on-site during construction and distributed to all workers and managers prior to construction. The SPRP will include measures that ensure the safe handling, use, storage, transport, and disposal of hazardous materials used or encountered during construction. The construction contractors will be required to comply with the SPRP and applicable Federal, State, and local laws. The plan will outline measures for specific handling and reporting procedures for hazardous materials and disposal of hazardous materials removed from the site at an appropriate off-site disposal facility.

**HWM-B. PREPARE AND IMPLEMENT EMERGENCY EVACUATION PLAN.** Prior to construction, the District will work with the USACE to develop an emergency response plan in consultation with the Milpitas and San Jose emergency response agencies, including Fire and Police Departments. The emergency response plan will identify locations where traffic may be restricted due to project activities, and will include but not be limited to the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments. The plan will also include provisions for expediting emergency vehicles through construction zones, particularly during periods when partial lane closures are scheduled.

**HWM-C. TREAT VOC-CONTAMINATED GROUNDWATER ENCOUNTERED AT JONES CHEMICAL INC. (JCI) OFF-SITE AREA.** USACE will implement the project Groundwater Management Plan during project construction. If groundwater is encountered at the JCI groundwater plume area during project construction, USACE will collect and containerize groundwater encountered in the JCI VOC plume area. USACE will treat that groundwater to remove contamination before discharge to the creek channel. The treated groundwater will meet discharge standards specified in SFBWQCB Order No. R2-2012-0012 National Pollutant Discharge Elimination System No. CAG912002. The treatment method will consist of pre-filtration to remove solids from the extracted groundwater, followed by sand and carbon adsorption. Sand and carbon absorption can be implemented by use of mobile equipment, and has been approved for use by the SFBWQCB.

Measures TRA-A and WAQ-C, described below under the Traffic and Transportation and Hydrology and Water Quality sections, respectively, will also reduce project impacts relating to hazardous materials.

## 5.8 LAND USE

**LND-A. ALLOW PUBLIC ACCESS TO CREEK RIGHT OF WAY.** The District will work with the City of Milpitas to execute a Joint Use Agreement to allow public access to a trail on the creek right of way.

## 5.9 NOISE

**NOI-A. ALERT NEIGHBORS.** The District will notify residents in the vicinity of proposed project construction activities about the type and schedule of construction. Prior to construction, USACE will require the contractor to place signs throughout the proposed project area alerting neighbors to pending construction.

**NOI-B. USE NOISE SUPPRESSION TECHNIQUES.** The District will work with the USACE to assure the following mitigation measure is implemented. The construction contractor will use available noise suppression devices and techniques. Construction equipment noise will be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools. Noise-reduction measures specified in the City of San Jose's Noise Ordinance are described below, and will be implemented.

- Utilize 'quiet' models of air compressors and other stationary noise sources where technology exists;
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses;
- Locate staging areas and construction material areas as far away as possible from adjacent land uses;
- Prohibit all unnecessary idling of internal combustion engines;
- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

**NOI-C. LIMIT CONSTRUCTION HOURS.** The District will work with the USACE to assure the following mitigation measure is implemented whenever possible. Construction hours will be consistent with both the City of Milpitas Municipal Code and the San Jose Municipal Code to the maximum extent possible. Specifically, the Milpitas City Code Municipal Code, Section V-213-3 allows construction in residential areas to 7 a.m. and 7 p.m. on weekdays and weekends (Hom, 2015). Construction in residential areas is not permitted on holidays. The San Jose Municipal Code limits construction to between 7 a.m. and 7 p.m. Monday thru Saturday except within 500 feet of residential units, when construction is limited to Monday through Friday, 7 a.m. to 7 p.m. (Municipal Code 20.100.450).

## 5.10 PUBLIC SERVICES

Mitigation Measure TRA-A, described in the Traffic and Transportation section below, will mitigate for project impacts to fire and police protection as well as emergency medical services.

## 5.11 RECREATION

**REC-A: PREPARE AND PROVIDE DETOUR SIGNAGE FOR PEDESTRIANS AND CYCLISTS.** The District, working with the USACE, will require the construction contractor to implement the following measures.

In order to mitigate the effects of displacing the unauthorized use of the access roads by pedestrians and cyclists, signs would be placed identifying the duration of construction and potential detour routes.

## 5.12 TRAFFIC AND TRANSPORTATION

**TRA-A. PREPARE AND IMPLEMENT A TRANSPORTATION MANAGEMENT PLAN AND TRAFFIC CONTROL PLAN.** The District will work with the USACE to implement the following mitigation measure. As required by Caltrans to mitigate impacts to SR-237 (Calaveras Boulevard), the construction contractor will develop a Transportation Management Plan in accordance with the Caltrans' Manual of Uniform Traffic Control Devices. The plan will conform to professional traffic engineering standards and will prescribe methods for maintaining traffic flows on roadways directly affected by construction. The plan will be submitted to Caltrans for approval before the start of construction. Mitigation measures, such as use of flaggers and timing of deliveries, will be incorporated into the construction plans in order to reduce effects to traffic.

The construction contractor will also be required to develop a Traffic Control Plan prior to construction, and coordinate all use of public roads with the Cities of Milpitas and or San Jose, local and regional planning agencies, emergency service providers, air quality management districts, or other responsible agencies. This plan will include the following measures:

- Construction vehicles will not be permitted to block any roadways or driveways.
- Truck trips will be scheduled outside of peak morning and evening commute hours, as well as during peak school circulation times, to the extent possible.
- Signs and flagmen will be used, as needed, to alert motorists, bicyclists, and pedestrians to the presence of haul trucks and construction vehicles at all access points.
- Vehicles will be required to obey all speed limits, traffic laws, and transportation regulations during construction. Vehicles will not exceed 15 miles per hour on unpaved roads.
- Construction workers will be encouraged to carpool and park in designated staging areas.
- Closure of roads, staging areas, and construction sites will be clearly fenced and delineated with appropriate closure signage.
- Any roads damaged by construction will be repaired.
- Circulation plans will be developed to minimize impacts on local street circulation. Flaggers and/or signage will be used to guide vehicles through and/or around the construction zone.
- The construction contractor will notify all emergency service providers in advance of construction to inform them of the construction activities. Traffic control staff will be trained in specific methods to prioritize and ensure access for emergency vehicles. Access will be provided for emergency vehicles at all times.
- Truck routes will be identified in the Traffic Control Plan. Haul routes will utilize City of Milpitas, City of San Jose, and Caltrans designated haul routes and minimize truck traffic on local roadways and residential streets to the extent possible.
- Sufficient staging areas will be provided for trucks accessing construction zones to minimize disruption of access to adjacent land uses.
- Access to driveways and private roads will be maintained. If access must be restricted for brief periods, property owners shall be notified in advance.
- The construction contractor will coordinate with UPRR for work within the right-of-way and avoid disruption to the rail corridor.
- Construction will be coordinated with local traffic agencies, VTA, and AC Transit to minimize disruption to service on local bus routes.



- Construction will be coordinated with police and fire stations, transit stations, hospitals, and schools. Facility operators shall be notified in advance of the timing, location, and duration of construction activities.
- Pedestrian and bicycle access and circulation will be maintained during construction where safe to do so. If construction activities encroach on a bicycle lane, warning signs will be posted.
- Work site(s) will be appropriately fenced off from adjacent properties, roadways, and sidewalks to ensure safety of nearby residents and pedestrians.
- All construction equipment and materials will be stored in designated contractor staging areas on or adjacent to the worksite, in such a manner as to minimize obstruction of traffic.

Measure HWM-B, described above under the Hazardous Materials section, will reduce project impacts to emergency response.

### 5.13 UTILITIES AND SERVICE SYSTEMS

Measures HWM-C, described above under the Hazardous Materials section, would also reduce project impacts to utilities and service systems.

### 5.14 HYDROLOGY AND WATER QUALITY

**WAQ-A: IMPLEMENT MEASURES FOR PROTECTING WATER QUALITY** The District, working with the USACE, will require the construction contractor to implement the following measures:

- Limit impact of concrete near waterways. Concrete will be poured only where it is separated from natural water flows during placement for a period of 30 days afterwards. Fresh concrete will be isolated until it no longer poses a threat to water quality using the following appropriate measures:
    1. Poured concrete will be excluded from the wetted channel for a period of four weeks after it is poured. During that time, the poured concrete will be kept moist, and runoff from the wet concrete will not be allowed to enter a live stream. Commercial sealants (e.g., Deep Seal, Elasto-Deck Reservoir Grade) may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If a sealant is used, water will be excluded from the site until the sealant is dry.
    2. Dry sacked concrete will not be used in any channel.
    3. An area outside of the channel and floodplain will be designated to clean out concrete transit vehicles used in project construction.
  - Maintain clean conditions at work sites. 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 on a daily basis. Personnel will not sweep, grade, or flush surplus materials, rubbish, debris, or dust into storm drains or waterways.
- For activities that last more than one day, materials or equipment left on the site overnight will be stored as inconspicuously as possible, and will be neatly arranged. Any materials and equipment left on the site overnight will be stored to avoid erosion, leaks, or other potential impacts to water quality. Upon completion of work, all building materials, debris, unused materials, concrete forms, and other construction-related materials will be removed from the work site.

**WAQ-B. PREPARE AND IMPLEMENT A DEWATERING PLAN.** USACE will prepare a plan for dewatering the creek and the return of diverted water to the creek downstream of the construction area. The dewatering plan will specify the size and materials to be used in coffer dams, the size of the dewatering pipes, water sampling and testing protocols, energy dissipation methods to prevent bed scour, and water quality standards to be met before water can be reintroduced to the creek.

**WAQ-C. PREPARE AND IMPLEMENT A RAIN EVENT ACTION PLAN.** The District, working with the USACE, will require the construction contractor to implement the following measures. In-channel construction activities will be suspended and a project-specific Rain Event Action Plan (REAP) will be implemented if substantial rainfall, defined as 0.5 inch or greater precipitation, is forecast by the National Weather Service in their 72-hour forecast for the project area. The REAP will be prepared by a qualified SWPPP practitioner and will comply with standards of the California Stormwater Quality Association Best Management Practices Handbook. The REAP will include measures to prevent adverse effects of water flows at construction areas, such as removal of equipment, vehicles, and materials from the channel; protection of exposed and disturbed areas; and isolation of uncured concrete from water flows. Additionally, start of construction phases taking more than 72 hours to complete will not occur if substantial rainfall is forecast.

Measures HWM-A and HWM-C, described above under the Hazardous Materials section, will also reduce project impacts to water quality.

## 6. MITIGATION SUMMARY TABLE

Table A will guide the District in evaluating and documenting implementation of mitigation measures. For each mitigation measure the following have been identified:

- **Party Responsible for Implementation.** Identifies the party responsible for implementing the mitigation measure.
- **Timing.** Identifies the time frame or milestone at which the mitigation measure will be implemented.
- **Party responsible for Monitoring.** Identifies the party responsible for monitoring the Implementation Party's compliance with the mitigation measure.
- **Verification.** Identifies the action to be taken to verify implementation of the mitigation measure

## 7. REPORTING

The District's Planner of Record (POR) for the project will prepare annual reports summarizing the progress of mitigation measures implementation and submit the annual reports to the Deputy Operating Officer (DOO) of Watersheds Design and Construction Division.

**TABLE A. MITIGATION MONITORING AND REPORTING PROGRAM**

<b>Mitigation Measures</b>	<b>Party Responsible for Implementation</b>	<b>Timing</b>	<b>Party responsible for Monitoring</b>	<b>Verification</b>
<p>AI-R-A. Reduce Construction-period Dust Emissions</p> <p>AI-R-B. Reduce Construction Equipment Emissions</p>	USACE and its construction contractor	During project design and construction	District	District Planner of Record (POR) to verify measure is included in project plans and specifications, construction occurs in compliance with plans and specifications
<p>BIO-A: Perform Pre-Construction Nesting Bird Surveys and Establish Appropriate Buffers</p> <p>BIO-B: Compensate for Trees and Shrubs Removed During Construction</p> <p>BIO-C: Use Native Grass and Forbs Mix to Hydroseed Areas Disturbed by Construction</p> <p>BIO-D: Provide Buffer Around Riparian Trees</p>	USACE or District will have a qualified biologist conduct pre-construction surveys. Construction contractor to hydroseed disturbed areas with proper seed mixes and plant native trees and shrubs.	Prior to and during project construction	District	District POR to verify pre-construction biological surveys and replanting are performed
<p>CUL-A. Implement the MOA and CA-SCL-593 HPMP</p> <p>CUL-B. Prepare and Implement an Archeological Monitoring and Unanticipated Discovery Plan</p>	USACE and its construction contractor	Plans prepared prior to construction and implemented during construction	District	District POR to verify that monitoring occurs during project ground-disturbing activities and CUL-B is implemented if archaeological find occurs
GEO-A. Implement Geotechnical Recommendations	USACE and its construction contractor	During project design and construction	District	District POR to verify measure is included in project plans and specifications, construction occurs in compliance with plans and specifications
<p>HWM-A. Prepare and Implement a Spill Prevention and Response Plan</p> <p>HWM-B. Prepare and Implement an Emergency Evacuation Plan</p>	USACE and its construction contractor	Plans prepared prior to construction and implemented during construction	District	District POR to review and approve plans, verify plans are implemented during construction

**TABLE A. MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measures	Party Responsible for Implementation	Timing	Party responsible for Monitoring	Verification
HWM-C. Treat VOC-Contaminated Groundwater Encountered at JCI Off-site Area	USACE and its construction contractor	During construction	District	District POR to verify treatment system is included in project plans and specifications, system is properly installed and operated during construction
LND-A: Allow Public Access to Creek Right of Way	District	During and after construction	District	District POR to verify execution of JUA
NOI-A. Alert Neighbors	District	Prior to start of construction.	District	District POR to verify notifications are sent to neighbors
NOI-B. Use Noise Suppression Techniques	USACE and its construction contractor	During construction.	District	District POR to verify measure is included in project plans and specifications, construction occurs in compliance with plans and specifications
NOI-C. Limit Construction Hours	USACE and its construction contractor	Prior to and during construction	District	District POR to verify measure is included in project plans and specifications, signs are installed and maintained in compliance with plans and specifications
REC-A. Prepare and Provide Detour Signage for Pedestrians and Cyclists	USACE and its construction contractor	TMP and TCP to be approved by USACE, District, Caltrans and City of Milpitas prior to construction. TMP and TCP to be implemented during construction.	District	District POR to verify that plan is adequate and is implemented during construction
TRA-A. Prepare and Implement a Transportation Management Plan (TMP) and Traffic Control Plan (TCP)	USACE and its construction contractor			

TABLE A. MITIGATION MONITORING AND REPORTING PROGRAM				
Mitigation Measures	Party Responsible for Implementation	Timing	Party responsible for Monitoring	Verification
WAQ-A. Implement Measures for Protecting Water Quality WAQ-B. Prepare and Implement a Dewatering Plan WAQ-C. Prepare and Implement a Rain Event Action Plan	USACE and its construction contractor	Prepare plans prior to construction. Implement during construction	District	District POR to verify that plans are adequate, and that the measures are implemented during construction