Permanente Creek Flood Protection Project

Second Addendum to the
Final Subsequent Environmental Impact Report

State Clearinghouse No. 2007052074

Project Number 26244001

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Santa Clara Valley Water District
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Acronyms and Abbreviations

BAAQMD	Bay Area Air Quality Management District
BMP	Best management practice
CEQA	California Environmental Quality Act
County Parks	Santa Clara County Parks Department
dBA	A-weighted decibels
District	Santa Clara Valley Water District
DPM	Diesel particulate matter
EIR	Environmental Impact Report
GHG	Greenhouse gas
I-	Interstate
Leq	equivalent noise level
MMRP	Mitigation Monitoring and Reporting Program
NO_X	Nitrogen oxides
ROG	Reactive organic gases
SR	State Route
SWPPP	Stormwater Pollution Prevention Plan
USFWS	U.S. Fish and Wildlife Service

1. Background

The Santa Clara Valley Water District (District), lead agency for the project, proposes improvements along the Permanente Creek corridor to provide 1% flood protection for residents, businesses, and infrastructure within the cities of Cupertino, Los Altos, and Mountain View. The project currently includes construction of a 15-acre flood detention basin at Rancho San Antonio County Park, a 5-acre flood detention basin at McKelvey Park, wider and deeper concrete channels in select portions of Permanente and Hale Creeks, a floodwall along Permanente Creek from US 101 to Charleston Road, an embankment along Permanente Creek from Charleston Road to Amphitheatre Parkway, and a raised levee from Amphitheatre Parkway to Shoreline Golf Course. A location map for the proposed project is presented in Figure 1. The proposed Permanente Creek Flood Protection Project elements were included in a Final Environmental Impact Report (EIR), certified June 2010 (Santa Clara Valley Water District 2010).

After certification of the June 2010 EIR and approval of the project, it was determined during design development that modifications would be necessary. A Subsequent EIR was prepared to analyze the environmental effects of the modified project. The Final Subsequent EIR was certified in November 2012, hereby referred to as the "2012 EIR" (Santa Clara Valley Water District 2012b).

In May 2013, a first addendum was prepared to evaluate minor changes and additions to the project design. Modifications included changes in playing field orientation, acquisition and incorporation of a residential property adjacent to the proposed McKelvey Park Detention Facility, and revised tree impact estimates.

This second addendum is intended to address further changes to the proposed activities associated with the future Permanente Creek Flood Protection Project and amend the 2012 EIR. This second addendum has been prepared to document proposed minor changes to the project design, provide updated information about construction, and evaluate the potential environmental impacts of those changes. All proposed activities would occur within the area defined by the original project. Details about the environmental setting can be found in the 2012 EIR, cited above.

2. CEQA Considerations

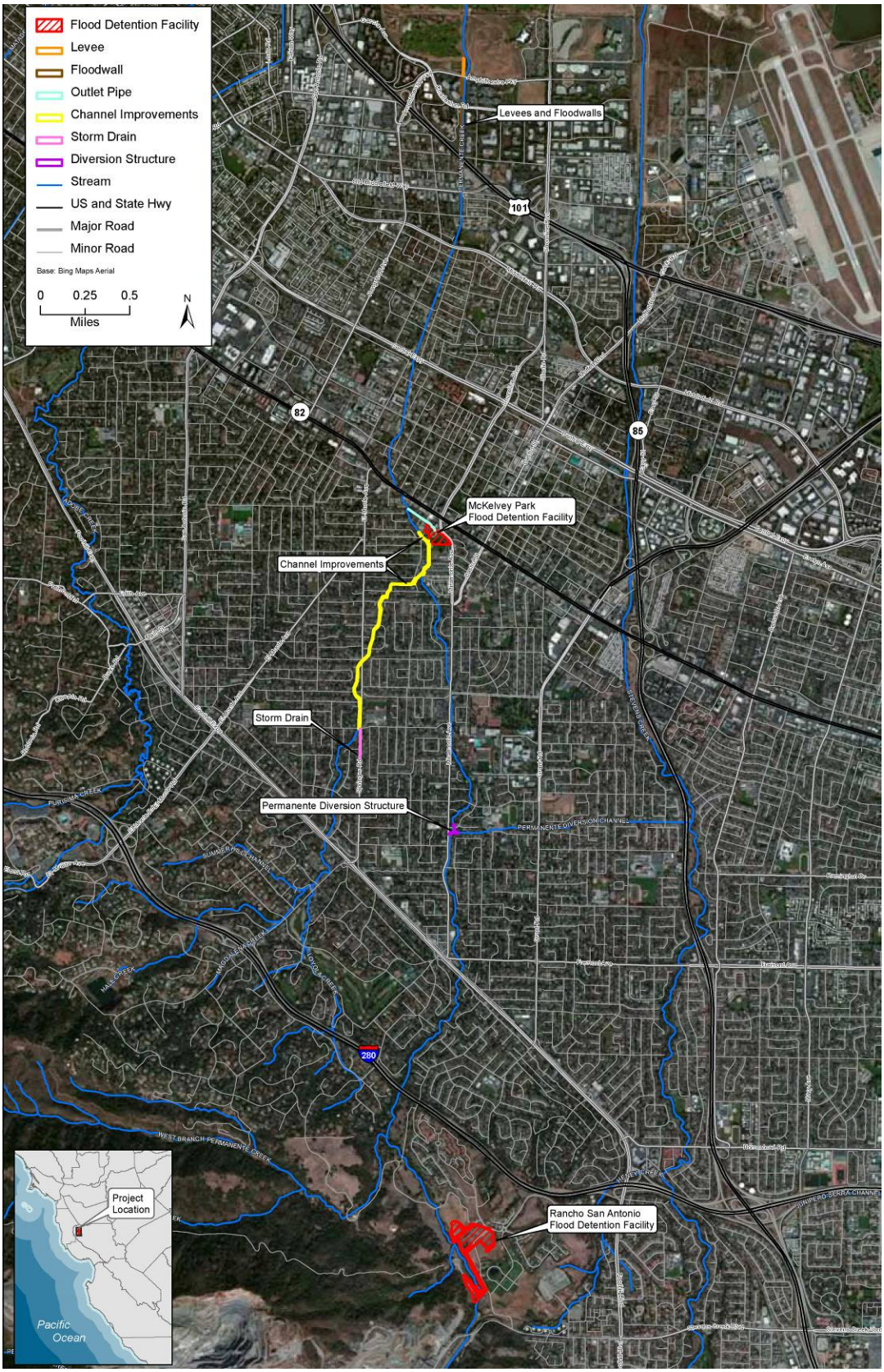
When there are changes to a project and the lead agency will be taking discretionary action, the California Environmental Quality Act (CEQA) (Public Resources Code §21000 *et seq.* and 14 California Code of Regulations §15000 *et seq.*]) provides various levels of documentation to indicate that the lead agency has adequately considered the changes in making its decision. The appropriate level of review is based on whether the changes to the project or project circumstances, resulting from new information that was not known at the time of approval of the original project, create new significant effects or result in a substantial increase in the severity of previously identified significant effects.

CEQA Guidelines §15164(a) provides for the use of an addendum to document the basis for a lead agency's decision not to require a Subsequent EIR for a project that is already covered under a previously certified EIR. The lead agency's decision to use an addendum must be supported by substantial evidence that the conditions that would trigger preparation of a Subsequent EIR, as provided in CEQA Guidelines §15162, are not present.

As described in detail in the following sections, the proposed project changes meet the criteria for an addendum. There are no significant changes to the project circumstances. The changes would result in no new significant impacts, nor would they substantially increase the severity of previously identified significant impacts.

An addendum need not be circulated for public review, but CEQA requires the decision-making body to consider the addendum, together with the certified 2012 EIR, prior to making a decision on the project.

Figure 1: Project Location



3. Description of Proposed Changes to the Project

Based on revised construction estimates, as clarified through further design work for the project, new information from soil sampling, and natural resource agency input obtained through the permitting process, the District proposes to modify construction and mitigation at the Rancho San Antonio County Park Flood Detention Facility.

The 2012 EIR states that construction at the Rancho San Antonio County Park Flood Detention Facility would export 40,000 cubic yards of soil from the site within a 9-month work period. Estimates for soil excavation quantities have been revised to accurately reflect final design. A total of 193,000 cubic yards of soil would be excavated; 38,000 cubic yards of soil would be reused on-site and 155,000 cubic yards of soil would be hauled from the site for reuse or disposal, as appropriate.

The District has been unable to acquire rights to dispose of soil at the nearby Lehigh Permanente Quarry. In lieu of soil disposal at Lehigh Permanente Quarry as originally planned, it is anticipated that excess soil produced from excavation activities at Rancho San Antonio County Park would be hauled to an approved landfill facility for reuse or disposal, as appropriate. The disposal site has been changed to possible receiving facilities located approximately 16 miles away from Rancho San Antonio County Park.

Subsequent to project approval, the District has coordinated with the City of Cupertino to develop a Traffic Management Plan in compliance with Mitigation Measure TT1.1 (Require a Site-Specific Traffic Control Plan) for work activities at Rancho San Antonio County Park. To align with City of Cupertino Traffic Management Plan requirements, normal hauling hours would be 9:30 a.m. to 7:00 p.m. Monday to Friday, unless required otherwise in case of emergency.

Review of final design indicates that geographical site constraints make concurrent construction of parking lot, inlet structure, and detention basins as originally planned infeasible. The park's configuration dictates a narrow access route between the adjacent cemetery and creek corridor, which prohibits unrestricted passage for heavy equipment. Continuous two-way traffic for normal excavation, stockpiling, and hauling activities through the narrow access corridor has been determined to be unsafe. Accounting for the increase in soil excavation quantities and construction phasing constraints, the revised Project schedule is anticipated to take 25 months to complete construction.

Upon detailed review of site soils during preparation of a Mitigation Monitoring Plan for the Project, the District discovered existing conditions on portions of the site may adversely affect soil productivity. Poor wetland soil productivity and a large non-native seed bank would retard native plant restoration. To improve conditions for restoration efforts at Rancho San Antonio County Park, District revegetation biologists recommend that undesirable portions of existing wetland and upland topsoils be substituted with alternate suitable soils obtained during the course of excavation activities in other portions of the construction area.

As of August 2016, the District has obtained all applicable natural resource agency permits for the Project. To align notification, monitoring, and mitigation execution with regulatory requirements secured through the permitting process, and to provide clarification in response to the above mentioned Project changes, four biological resources mitigation measures and one geology/soils mitigation measure have been revised as follows. Changes and updates made to the mitigation measures appear in <u>underline</u> (insertions) and ~~strikeout~~ (deletions). Modifications

to Mitigation Measure BIO2.1 update the dates used by U.S. Fish and Wildlife Service in their Biological Opinion. Modifications to Mitigation Measure BIO2.5 reflect precise accounting of impacts and associated mitigation requirements. Modifications to Mitigation Measure BIO14.2 address changes in the treatment of wetland soils. Modifications to Mitigation Measure BIO15.2 reflect a minor technical change in container stock size used for tree plantings. Modifications to Mitigation Measure GEO6.1 refine the treatment of soils that will be removed from the project site and soils that will be stockpiled and reused onsite.

Mitigation Measure BIO2.1—Avoid Work during Active Breeding and Dispersal Period for Special-Status Frogs

Unless approved by the U.S. Fish and Wildlife Service (USFWS), ~~S~~site preparation and construction activities that involve substantial earthwork, other ground disturbance, and/or vehicle traffic through frog-sensitive areas (grassland, pond, wetland, and riparian habitat) will not occur during the period when special-status frogs are actively breeding and dispersing, from the beginning of the wet season through early summer (~~October 15 – June 15~~ November 1–March 31). When ground-disturbing activities must take place between November 1 and March 31, the site will be monitored daily by a USFWS-approved biologist.

Mitigation Measure BIO2.5—Restore Areas of Impact at Rancho San Antonio County Park and Provide Suitable Habitat for California Red-Legged Frog

The District will mitigate ~~for~~ temporary and permanent impacts on aquatic and upland habitat for California red-legged frog through the creation or restoration of suitable California red-legged frog habitat within the Permanente Creek area and an outside mitigation bank. Temporary impacts on California red-legged frog will be mitigated through restoration of the disturbed annual grassland, coastal oak woodland, coyote bush scrub, valley foothill riparian, seasonal wetland, and open water creek habitats. In addition to site restoration efforts, the project will add 1.95 acres of suitable California red-legged frog aquatic and upland habitat at the site once construction is complete. Permanent impacts on 0.07 acre of aquatic habitat will be mitigated through the purchase of at least a 0.20-acre credit at an USFWS-approved off-site mitigation bank. Conservation credits will be purchased and documentation provided to USFWS at least 14 calendar days prior to the date of initial ground disturbance at the project site. ~~and preserved in perpetuity through a conservation easement.~~

In addition to the mitigation above, t~~T~~he District will develop a Mitigation and Monitoring Plan (MMP) to ensure that all removed habitat is replaced “in-kind” with the appropriate native riparian and upland species to maintain structural complexity and habitat value and provide suitable habitat for California red-legged frog. The MMP will be developed in the context of the federal and state permitting processes under the ~~CWA~~ Clean Water Act and California Fish and Game Code and will include success criteria as specified by the permitting agencies. The MMP will also include adaptive management guidelines for actions to be taken if the success criteria are not met. Additionally, the MMP will be developed in coordination with Santa Clara County Parks Department and Midpeninsula Regional Open Space District and submitted to USFWS prior to commencement of construction activities. Mitigation of permanent impacts on upland and aquatic habitat for California red-legged frog will be fully implemented within 1 year following the completion of construction activities. Vegetation used ~~to plant~~ in the restoration areas will comprise native species that commonly

occur~~ring~~ in the watershed and be suited to the proposed site and the surrounding landscape. The District will be responsible for planting and/or enhancing habitat to ensure that all habitat is fully restored to preconstruction conditions and the restoration areas provide suitable habitat for California red-legged frog. The initial annual monitoring will assess the progress of the plantings according to predetermined success criteria. If progress is not satisfactory, then adaptive management actions (including replanting, nonnative species removal, etc.) may be implemented. The MMP will remain in force until the success criteria are met.

Mitigation Measure BIO14.2—Compensate for Temporary Loss of Existing Wetlands and Other Waters, Consistent with State and Federal Agency Requirements

The District will ensure that all wetland habitat that is temporarily affected by project activities at Rancho San Antonio County Park is compensated for, consistent with the terms of applicable state and federal permits, at a minimum ratio of 1:1 to ensure no net loss of wetland habitat. ~~Prior to excavation of the flood detention basin, the District will salvage and stockpile topsoil from the work area to preserve the native wetland seed bank as well as the soils' existing biogeochemical characteristics.~~ The bottom of the basin will be graded to create swales that will collect surface runoff, as occurs under existing conditions and retain water to saturate soils, and create conditions suitable for the establishment and persistence of native wetland vegetation. Following excavation of the detention basin, ~~the salvaged material will be placed and~~ the surface will be fine graded to create natural contours. ~~It is anticipated with topsoil salvage and replacement, and enhancement of the natural hydrology through creation of the detention basin that the wetland will re-establish following construction.~~ Appropriate native wetland species will also be planted within the basin to ~~supplement the salvaged seed bank,~~ provide vegetative structure and enhance habitat value. The details of site restoration, monitoring, and adaptive management will be specified in a Mitigation and Monitoring Plan (MMP) prepared by the District, in compliance with the Clean Water Act and California ~~Department of~~ Fish and Game Code. The MMP will include success criteria for vegetation establishment, the extent and duration of seasonal ponding/soil saturation, evidence of erosion and/or sediment deposition, adaptive management guidelines for actions to be taken if the success criteria are not met, and other parameters specified by the permitting agencies. The MMP will be developed in coordination with Santa Clara County Parks Department and Midpeninsula Regional Open Space District. The District will conduct annual monitoring to assess re-establishment of wetland vegetation and hydrologic characteristics and, if necessary, implement adaptive management actions, including replanting, regrading, nonnative species removal, etc., to ensure that there is no net loss of wetland habitat. Wetland compensation habitat will be set aside and protected in perpetuity through appropriate legal means, consistent with agency requirements and as specified in permits. The District will be responsible for all associated costs and logistics.

Mitigation Measure BIO15.1—Transplant or Compensate for Loss of Protected Landscape Trees, Consistent with Applicable Tree Protection Regulations

Before ground-disturbing activities, including site preparation, begin, the District will retain an ISA- (International Society of Arboriculture) or ASCA- (American Society of Consulting Arborists) certified arborist to conduct a tree survey and identify protected landscape trees, including native trees, heritage trees, and other landscape trees, that are subject to local jurisdiction protection.

Protected landscape trees that are slated for removal and deemed good candidates for transplantation will be considered for transplanting in conjunction with the proposed landscaping plans. Transplanted trees will be located on-site if space permits. If the number of trees to be transplanted is too large to be accommodated on the project site, the District will prepare a landscaping plan that details other locations where transplanted trees will be planted, consistent with the requirements of the applicable tree protection ordinance or regulations. Transplanted trees will be subject to the monitoring and replacement requirements identified for replacement trees below.

Protected landscape trees that are not deemed good candidates for transplantation will be replaced. The landscaping plan for tree replacement will specifically identify the locations where replacement trees are to be planted; replacements will occur on-site if possible. The landscaping plan will be subject to review and approval by the agency with jurisdiction (California Department of Fish and Wildlife~~DFG~~, the County of Santa Clara, Midpeninsula Regional Open Space District, City of Los Altos, City of Mountain View, or City of Cupertino).

Tree removals within Mountain View will be compensated at a ratio of 1:1, or as determined by the City of Mountain View, with a minimum 24-inch box stock. The species and location of the replacement tree will be determined in consultation with the property owner and the City.

Tree removals within Los Altos will be compensated at a minimum ratio of 1:1, or as determined by the City of Los Altos, with a minimum 24-inch box stock.

Tree removals within Cupertino will be compensated according to size of tree removed. Tree replacement guidelines are:

- Trunk size of removed tree up to 12 inches: plant one 24-inch box tree.
- Trunk size of removed tree more than 12 inches and up to 18 inches: plant two 24-inch box trees.
- Trunk size of removed tree more than 18 inches and up to 36 inches: plant two 24-inch box trees or one 36-inch box tree.
- Trunk size of removed tree more than 36 inches: plant one 36-inch box tree.
- Removal of heritage tree: plant one 48-inch box tree.

If protected landscape trees are removed in the county of Santa Clara (at Rancho San Antonio County Park), such removals will be compensated in accordance with the County's Tree Preservation and Removal Ordinance (Section C16). Under Section C16, replacement trees must be of a like kind and species, if native and feasible, or a kind and species to be determined by the County's Planning Department. Replacement tree planting shall use ~~at least 5-gallon~~ direct seeding and treepot 4 size stock at a ratio determined by the Planning Department. A replanting and/or re-vegetation plan is required for all trees to be removed, and an erosion control plan may also be required where determined appropriate by the County.

Newly planted trees will be monitored by District staff members at least once a year for 3 years. Each year, any trees that do not survive will be replaced, consistent with the compensation required under the applicable tree ordinance. Any trees planted as

remediation for failed plantings will then be monitored for a period of 3 years in the same manner, and any trees that do not survive will be replaced.

Large boxed trees used as replacement for loss of landscape specimen trees will not be native species if these same species are found in the adjacent land. Commercially available native trees in these sizes are typically of unknown genetic origin but often originate in Southern California. Therefore, ecological sensitivity dictates that no commercial tree stock of native species present in the surrounding parkland will be used in this project. Suitable substitute species will be selected that cannot hybridize with resident natives or become invasive in the adjacent land. All activities in this mitigation measure will be conducted per the Guidelines and Standards for Land Use near Streams (Santa Clara Valley Water District 2007).

Mitigation Measure GEO6.1—Stockpile Topsoil and Reuse On-site
To minimize impacts on ~~top~~soil resources at Rancho San Antonio County Park, the District will require contractors to implement the following procedures:

- The area of disturbance will be limited to the minimum needed for construction, staging, and access.
- Where soil is removed from existing seasonal wetlands, the top 20 inches will be removed from the wetlands and a 25-foot buffer and legally disposed of.
- ~~Where topsoil is removed, it~~ Outside of existing seasonal wetlands, the top 3 inches of soil will be removed and legally disposed of. Remaining soil will be sidecast and stockpiled in segregated, non-compacted windrows, no taller than 6 feet, for on-site reuse during site finishing. The contractor shall provide signage for each stockpile type to ensure that the proper soil type is placed at its respective stockpile. Site finishing will include ~~top~~soil replacement and revegetation with appropriate native species. ~~Topsoil~~ These soils will be stockpiled separate from other excavated materials to facilitate effective reuse.
- Those excavated soils determined to be suitable for use as soil on-site will be used for lining the bottom of the detention basin and backfilling oak tree planting holes. Unsuitable soil will be defined as material that the District determines to be incapable of providing suitable conditions for plant growth.

4. Environmental Analysis

The following analysis summarizes changes in the project or the surrounding environment that are relevant to the assessment of environmental impacts. It discusses the impact of the currently proposed facility relative to the impacts identified in the 2012 EIR. Only those resource areas that have the potential to be affected by project changes are discussed below. The proposed changes to the project are not anticipated to affect aesthetics, agriculture, cultural and paleontological resources, energy, hazardous materials and public health, mineral resources, utilities and service systems, or growth inducement and related impacts. These sections remained unchanged from the 2012 EIR.

Potential impacts to air quality, biological resources, hydrology and water quality, noise, recreation, geology (topsoil), and traffic and transportation have been identified. Based on these analyses, implementation of the proposed flood protection modifications will not create

new significant environmental impacts or substantially increase the severity of significant impacts beyond that identified in the 2012 EIR.

AIR QUALITY

As discussed in the 2012 EIR, project-level criteria pollutant thresholds are used to address both project-level and cumulative impacts. During construction, the project's daily emissions would exceed the threshold for nitrogen oxides (NO_X). With implementation of mitigation measures, NO_X emissions would still exceed the threshold. Therefore, the project's contribution to cumulative air quality impacts during construction is considered considerable, resulting in a significant and unavoidable cumulative impact related to NO_X.

The proposed modifications would increase the volume of soil exported from the Rancho San Antonio County Park Flood Detention Facility and extend the duration of excavation activities. The maximum number of daily haul trips during site excavation would increase from 30 to 53. The excavated soil would be hauled to an approved landfill, such as the Guadalupe Recycling and Disposal Facility located 16 miles southeast of the park. Construction activities during site excavation at the Rancho San Antonio County Park Flood Detention Facility would occur over a period of 21 months, which is 15 months longer than anticipated under the adopted project. The additional haul trips and extended construction period would increase criteria pollutant emissions relative to what was analyzed in the 2012 EIR.

Construction Emissions

Construction-related emissions were quantified using updated project assumptions to analyze whether the revisions would create new significant impacts or substantially increase the severity of previously identified significant impacts. Table 10-5 from the 2012 EIR has been updated to present emissions without mitigation. Only the number of haul trips, the round-trip haul distance, and the duration for site excavation activities at the Rancho San Antonio County Park Flood Detention Facility were revised; all other assumptions, emissions factors, and quantification procedures from the 2012 EIR were maintained to ensure consistency among the analyses and isolate the effects of the new project assumptions.

As shown in the revised Table 10-5, construction changes to the Rancho San Antonio County Park element would generate higher emissions for all pollutants. However, the modifications would not substantially increase construction emissions to a point that would change the level of significance of air quality impacts identified in the 2012 EIR. In particular, changes to the Rancho San Antonio County Park element would individually generate construction emissions that would fall below the Bay Area Air Quality Management District's (BAAQMD's) thresholds of significance. Cumulatively, project construction emissions would continue to exceed the thresholds of significance for NO_x. Similar to the adopted project, exceedance for NO_X under the modified project would be considered significant before mitigation.

Table 10-5. Daily Construction Emissions

	Construction Emissions (pounds/day)						
Project Element	**ROGs[a]**	**NO_X[a]**	**CO**	**PM10 Fugitive Dust**	**PM10 Exhaust**	**PM2.5 Fugitive Dust**	**PM2.5 Exhaust**
Year 1 Elements							
Rancho San Antonio County	~~2.2~~	~~20.0~~	~~12.2~~	~~75.1~~	~~1.0~~	~~15.7~~	~~0.9~~
Park Flood Detention Facility[b]	3.2	45.8	16.6	75.3	1.7	15.8	1.5
New Permanente Diversion Structure[c]	1.7	17.7	8.6	0.5	0.7	0.1	0.7
Floodwalls and Levees downstream of US 101[c]	1.4	12.2	7.1	0.5	0.6	0.1	0.5
Permanente Creek Channel Improvements[c]	2.2	21.2	10.4	0.5	0.9	0.1	0.8
Year 1 Total Daily Emissions	**~~8~~ 8**	**~~71~~ 97**	**~~38~~ 43**	**~~76~~ 77**	**~~3~~ 4**	**~~16~~ 16**	**~~3~~ 4**
Year 2 Elements							
Rancho San Antonio County Park Flood Detention Facility[b]	3.2	45.8	16.6	75.3	1.7	15.8	1.5
Hale Creek Channel Improvements[c]	2.2	21.2	10.4	0.5	0.9	0.1	0.8
McKelvey Park Flood Detention Facility[c]	4.7	85.3	23.4	33.9	2.7	7.2	2.5
Year 2 Total Daily Emissions	**~~7~~ 10**	**~~107~~ 152**	**~~45~~ 50**	**~~34~~ 110**	**~~4~~ 5**	**~~7~~ 23**	**~~3~~ 5**
Year 3 Elements							
Hale Creek Channel Improvements[c]	2.2	21.2	10.4	0.5	0.9	0.1	0.8
Year 3 Total Daily Emissions	**2**	**21**	**10**	**1**	**1**	**0**	**1**
Year 4 Elements							
Hale Creek Channel Improvements[c]	2.2	21.2	10.4	0.5	0.9	0.1	0.8
Year 4 Total Daily Emissions	**2**	**21**	**10**	**1**	**1**	**0**	**1**
Significance Thresholds	**54**	**54**	**-**	**BMPs**	**82**	**BMPs**	**54**
Exceed Thresholds?	**No**	**Yes (Years 1 and 2)**	**-**	**-**	**No**	**-**	**No**

[a] Reactive organic gases (ROG) and NO_X are ozone precursors.
[b] The estimated construction emissions for the Rancho San Antonio County Park Flood Detention Facility have been revised, relative to the 2012 EIR, to assume a maximum of 53 haul trips per day (average of 32 trips per day) over a period of 12 months in Year 1 and 9 months in Year 2 (total of 21 months). The trip distance has also been revised to 16 miles (32 miles round trip).
[c] The estimated construction emissions for this project element remain the same as in the 2012 EIR.

By applying the previously adopted mitigation measures, impacts to NO_X would be reduced as shown in Table 10-6. As with the adopted project, implementation of Mitigation Measures AQ2.1 (Implement Tailpipe Emissions Reductions for Project), AQ2.2 (Implement BAAQMD Basic Construction Mitigation Measures to Reduce Construction-Related Dust), NV1.1 (Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents), and NV1.3 (Designate Noise and Air Quality Disturbance Coordinator to Address Resident Concerns) would reduce emissions for the modified project, but NO_X emissions would still exceed the significance threshold for project-level impacts. Consistent with the District findings of fact and statement of overriding considerations for the project (District 2012b), Mitigation Measure AQ2.2 employs all feasible NO_X emission reduction measures based on current-proven

technology based on BAAQMD and California Air Resources Board requirements. Further measures to reduce or mitigate this impact are currently unavailable. Exceedance of this threshold would not change the findings of fact for the project, and the significant and unavoidable air impact would not be substantially increased.

Table 10-6. Daily Construction Emissions with Mitigation[a]

	Construction Emissions (pounds/day)						
Project Element	**ROGs**	**NO_X**	**CO**	**PM10 Fugitive Dust**	**PM10 Exhaust**	**PM2.5 Fugitive Dust**	**PM2.5 Exhaust**
Year 1 Elements							
Rancho San Antonio County Park Flood Detention Facility[b]	~~2.2~~ 3.2	~~17.2~~ 43.0	~~12.2~~ 16.6	~~39.8~~ 40.0	~~0.6~~ 1.3	~~8.3~~ 8.4	~~0.6~~ 1.2
New Permanente Diversion Structure[c]	1.7	15.2	8.6	0.3	0.5	0.1	0.4
Floodwalls and Levees downstream of US 101[c]	1.4	10.3	7.1	0.3	0.4	0.1	0.3
Permanente Creek Channel Improvements[c]	2.2	18.1	10.4	0.3	0.6	0.1	0.5
Year 1 Total Daily Emissions	**~~8~~ 8**	**~~61~~ 87**	**~~38~~ 43**	**~~41~~ 41**	**~~2~~ 3**	**~~9~~ 9**	**~~2~~ 2**
Year 2 Elements							
Rancho San Antonio County Park Flood Detention Facility[b]	3.2	43.0	16.6	40.0	1.3	8.4	1.2
Hale Creek Channel Improvements[c]	2.2	18.1	10.4	0.3	0.6	0.1	0.5
McKelvey Park Flood Detention Facility[c]	4.7	82.5	23.4	18.3	2.3	3.9	2.1
Year 2 Total Daily Emissions	**~~7~~ 10**	**~~101~~ 144**	**~~34~~ 50**	**~~19~~ 59**	**~~3~~ 4**	**~~4~~ 12**	**~~3~~ 4**
Year 3 Elements							
Hale Creek Channel Improvements[c]	2.2	18.1	10.4	0.3	0.6	0.1	0.5
Year 3 Total Daily Emissions	**2**	**18**	**10**	**0**	**1**	**0**	**1**
Year 4 Elements							
Hale Creek Channel Improvements[c]	2.2	18.1	10.4	0.3	0.6	0.1	0.5
Year 4 Total Daily Emissions	**2**	**18**	**10**	**0**	**1**	**0**	**1**
Significance Thresholds	**54**	**54**	**-**	**BMPs**	**82**	**BMPs**	**54**
Exceed Thresholds?	**No**	**Yes (Years 1 and 2)**	**-**	**No**	**No**	**No**	**No**

[a] Emissions results include implementation of Mitigation Measures AQ2.1 and AQ2.2. Mitigation Measures NV1.1 and NV1.3 would also be required, but the emissions benefits are not readily quantifiable.
[b] The estimated construction emissions for the Rancho San Antonio County Park Flood Detention Facility have been revised, relative to the 2012 EIR, to assume a maximum of 53 haul trips per day (average of 32 trips per day) over a period of 12 months in Year 1 and 9 months in Year 2 (total of 21 months). The trip distance has also been revised to 16 miles (32 miles round trip).
[c] The estimated construction emissions for this project element remain the same as in the 2012 EIR.

Health Risk Assessment

Nearby land uses, especially those residences located to the south, could be adversely affected by dust and diesel particulate matter (DPM) generated during construction. Table 10-7 from the 2012 EIR has been updated to present the results of the health risk assessment without

mitigation. Note that Table 10-7 (as revised) incorporates information from Table 10-8 from the 2012 EIR; therefore, it replaces both Tables 10-7 and 10-8. Only the number of haul trips, the round-trip haul distance, and the duration of site excavation activities at the Rancho San Antonio County Park Flood Detention Facility were revised; all other assumptions, emissions factors, and quantification procedures from the 2012 EIR were maintained to ensure consistency among the analyses and isolate the effects of the new project assumptions.

Table 10-7. DPM and PM2.5 Health Risks Before Mitigation

	Project level			Cumulative Level[a]		
Project Element	**Non-Cancer Hazard Index**	**Cancer Risk (per million)**	**Annual PM2.5 Concentration ($\mu g/m^3$)**	**Non-Cancer Hazard Index**	**Increased Cancer Risk (per million)**	**Annual PM2.5 Concentration ($\mu g/m^3$)**
Rancho San Antonio County Park Flood Detention Facility[b]	~~0.04~~ 0.07	~~0.91~~ 4.46	~~0.18~~ 0.34	~~0.04~~ 0.07	~~0.91~~ 4.46	~~0.18~~ 0.34
New Permanente Diversion Structure[c]	0.13	1.97	0.53	0.13	1.97	0.53
Floodwalls and Levees Downstream of US 101[c]	0.04	0.80	0.20	0.07	29.67	0.38
Permanente and Hale Creek Channel Improvements[c]	0.07	3.01	0.30	0.07	3.01	0.30
McKelvey Park Flood Detention Facility[c]	0.09	2.86	0.43	0.11	14.53	0.57
McKelvey Park Outlet Pipe[c]	0.03	0.13	0.12	0.04	11.81	0.26
Significance Thresholds	**1**	**10**	**0.3**	**10**	**100**	**0.8**
Exceed Thresholds?	**No**	**No**	**Yes**	**No**	**No**	**No**

[a] Includes health risks from background stationary and highway sources and within 1,000 feet of each project element, as reported in the 2012 EIR.

[b] The estimated construction emissions for the Rancho San Antonio County Park Flood Detention Facility have been revised, relative to the 2012 EIR, to assume a maximum of 53 haul trips per day (average of 32 trips per day) over a period of 12 months in Year 1 and 9 months in Year 2 (total of 21 months). The trip distance has also been revised to 16 miles (32 miles round trip).

[c] The estimated construction emissions for this project element remain the same as in the 2012 SEIR.

As shown in Table 10-7, construction of the modified project would cause an exceedance of the significance threshold for annual PM2.5 concentrations for the Rancho San Antonio Detention Facility. Similar to the adopted project, exceedance for PM2.5 under the modified project would be significant before mitigation.

By applying the previously adopted mitigation measures, impacts to PM2.5 would be reduced to less than BAAQMD thresholds. The BAAQMD's *California Environmental Quality Act Air Quality Guidelines* (BAAQMD 2012) consider dust impacts to be less than significant if best management practices (BMPs) are employed. Therefore, implementation of Mitigation Measure AQ2.2 (Implement BAAQMD Basic Construction Mitigation Measures to Reduce Construction-Related Dust) would reduce construction-related fugitive dust impacts to less-than-significant levels for the modified project. Exposure to construction DPM emissions was assessed by predicting the health risks in terms of excess cancer risk, non-cancer hazard impacts, and elevated concentrations of particulate matter measuring 2.5 microns in diameter or less

(PM2.5). Implementation of Mitigation Measures AQ2.1 (Implement Tailpipe Emissions Reductions for Project), NV1.1 (Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents), and NV1.3 (Designate Noise and Air Quality Disturbance Coordinator to Address Resident Concerns) would further reduce health risks to a level below the significance threshold (see Table 10-9, as revised). Accordingly, the construction-related health risk impact would remain less than significant with mitigation. Appendix D of the Final Subsequent EIR is updated and included in this addendum as Appendix A (Updated to Appendix D, Construction Emissions). Table 10-9 shows health risk levels after implementation of mitigation.

Table 10-9. DPM and PM2.5 Health Risks with Mitigation[a]

	Project level			Cumulative Level[b]		
Project Element	**Non-Cancer Hazard Index**	**Cancer Risk (per million)**	**Annual PM2.5 Concentration (µg/m^3)**	**Non-Cancer Hazard Index**	**Increased Cancer Risk (per million)**	**Annual PM2.5 Concentration (µg/m^3)**
Rancho San Antonio County Park Flood Detention Facility[c]	~~0.02~~ 0.04	~~0.50~~ 2.45	~~0.10~~ 0.19	~~0.02~~ 0.04	~~0.50~~ 2.45	~~0.10~~ 0.19
New Permanente Diversion Structure[d]	0.07	1.08	0.29	0.07	1.08	0.29
Floodwalls and Levees Downstream of US 101[d]	0.02	0.44	0.11	0.05	29.31	0.29
Permanente and Hale Creek Channel Improvements[d]	0.04	1.66	0.17	0.04	1.66	0.17
McKelvey Park Flood Detention Facility[d]	0.05	1.57	0.24	0.07	13.25	0.37
McKelvey Park Outlet Pipe[d]	0.01	0.07	0.07	0.03	11.75	0.20
Significance Thresholds	**1**	**10**	**0.3**	**10**	**100**	**0.8**
Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

[a] Results assume implementation of Mitigation Measures AQ2.1 and AQ2.2.

[b] Includes health risks from background stationary and highway sources and within 1,000 feet of each project element, as reported in the 2012 EIR. Mitigation Measures NV1.1 and NV1.3 would also be required, but the emissions benefits are not readily quantifiable.

[c] The estimated construction emissions for the Rancho San Antonio County Park Flood Detention Facility have been revised, relative to the 2012 EIR, to assume a maximum of 53 haul trips per day (average of 32 trips per day) over a period of 12 months in Year 1 and 9 months in Year 2 (total of 21 months). The trip distance has also been revised to 16 miles (32 miles round trip).

[d] The estimated construction emissions for this project element remain the same as in the 2012 EIR.

BIOLOGICAL RESOURCES

As discussed in the 2012 EIR, construction of the Rancho San Antonio County Park Flood Detention Facility site would result in temporary impacts on wetlands and other waters as well as protected landscape trees. It would also have temporary and permanent impacts on upland and aquatic habitat for California red-legged frog. The schedule changes, hauling changes, and soil handling changes in the project would not result in an impact on biological resources that would be different from what was discussed in the 2012 EIR.

To improve conditions for revegetation efforts at the Rancho San Antonio County Park site, topsoil salvage and replacement activities within site wetlands would be modified to replace undesirable soils with suitable soils obtained elsewhere from the site. Mitigation Measure BIO14.2 (Compensate for Temporary Loss of Existing Wetlands and Other Waters, Consistent with State and Federal Agency Requirements) and GEO6.1 (Stockpile Topsoil and Reuse On-site) are revised to incorporate updated soil treatment and handling procedures. The changes in soil treatment and handling will not change the potential disturbance and loss of state- and federally protected wetlands and other waters.

Impacts on protected landscape trees would remain unchanged from those discussed in the 2012 EIR. However, Mitigation Measure BIO15.1 (Transplant or Compensate for Loss of Protected Landscape Trees, Consistent with Applicable Tree Protection Regulations) is updated to revise replanting techniques. Consistent with the latest revegetation biologist recommendations replanting would use direct seeding and treepot 4 instead of 5-gallon or box-stock trees. Modification of container stock size is considered a minor technical change. The number of trees mitigated would remain the same.

Subsequent to certification of the 2012 EIR, USFWS issued a Biological Opinion for the project. The USFWS Biological Opinion includes additional construction scheduling notification, biological monitoring, and mitigation execution requirements to avoid and minimize impacts on California red-legged frog. Mitigation Measure BIO2.1 (Avoid Work during Active Breeding and Dispersal Period for Special-Status Frogs) is revised in accordance with the USFWS Biological Opinion to document notification and biological monitoring procedures. Similarly, Mitigation Measure BIO2.5 (Restore Areas of Impact at the Rancho San Antonio County Park and Provide Suitable Habitat for California Red-Legged Frog) is modified in accordance with the USFWS Biological Opinion to document the specific amounts (acres) of mitigation habitat and more thoroughly describe how the restored habitat would be preserved. The changes to notification, monitoring, and mitigation execution are minor procedural alterations and will not change the impacts on California red-legged frogs, as discussed in the 2012 EIR. Therefore, the modified project would not result in any new significant biological resources impacts beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

GREENHOUSE GASES

As discussed in the 2012 EIR, greenhouse gases (GHGs) that contribute to climate change have global impacts and are therefore considered cumulative in nature. The BAAQMD does not recommend a GHG emissions threshold for construction-related emissions. Rather, it recommends incorporation of BMPs to reduce GHG emissions during construction. Accordingly, the project's construction emissions were not found to result in a significant and unavoidable cumulative impact with implementation of Mitigation Measure CU2 (Implement BMPs to Reduce GHG Emissions), consistent with BAAQMD guidance.

As discussed in the Air Quality section, the additional haul trips and extended duration for construction of the Rancho San Antonio County Park Flood Detention Facility would increase emissions relative to what was analyzed in the 2012 EIR. Construction-related GHG emissions were quantified using the updated project assumptions to analyze whether the revisions would create new significant impacts or substantially increase the severity of previously identified significant impacts. Table 15-2 from the 2012 EIR is updated below and presents the GHG emissions inventory. Only the number of haul trips, the round-trip haul distance, and the duration of site excavation activities at the Rancho San Antonio County Park Flood Detention

Facility were revised; all other assumptions, emissions factors, and quantification procedures from the 2012 EIR were maintained to ensure consistency among the analyses and isolate the effects of the new project assumptions.

Table 15-2. Construction GHG Emissions

Project Elements	GHGs (metric tons of CO_2e/year)
Year 1 Elements	
Rancho San Antonio County Park Flood Detention Facility[a]	~~225~~ 797
New Permanente Diversion Structure[b]	131
Floodwalls and Levees downstream of US 101[b]	223
Channel Improvements: Permanente Creek[b]	374
Year 1 Annual GHG Emissions	**~~953~~ 1,524**
Year 2 Elements	
Rancho San Antonio County Park Flood Detention Facility[a]	647
Channel Improvements: Hale Creek[b]	374
McKelvey Park Flood Detention Facility and Outlet Pipe[b]	912
Year 2 Annual GHG Emissions	**~~1,286~~ 1,933**
Year 3 Elements	
Channel Improvements: Hale Creek[b]	**374**
Year 3 Annual GHG Emissions	**374**
Year 4 Elements	
Channel Improvements: Hale Creek[b]	**374**
Year 4 Annual GHG Emissions	**374**
Total Construction Emissions (Years 1 through 4)	**4,206**
Significance Threshold	**None**
Exceeds Threshold?	**No**

[a] The estimated construction emissions for the Rancho San Antonio County Park Flood Detention Facility have been revised, relative to the 2012 EIR, to assume a maximum of 53 haul trips per day (average of 32 trips per day) over a period of 12 months in Year 1 and 9 months in Year 2 (total of 21 months). The trip distance has also been revised to 16 miles (32 miles round trip).
[b] The estimated construction emissions for this project element remain the same as in the 2012 EIR.

Construction of the modified project would generate 4,206 metric tons of carbon dioxide equivalent (CO_2e) over the course of 4 years. As discussed in the 2012 EIR, BAAQMD does not recommend a GHG emission threshold for construction-related emissions. However, BAAQMD recommends the incorporation of BMPs to reduce GHG emissions during construction, as feasible and applicable as possible. Applying the previously adopted Mitigation Measure CU2 (Implement BMPs to Reduce GHG Emissions) would reduce short-term construction emissions to the greatest extent feasible, consistent with BAAQMD guidance. Accordingly, the construction-related impact would remain less than significant with mitigation.

Based on the updated analysis, construction of the modified project would not result in any new significant impacts on GHG or climate change beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

HYDROLOGY AND WATER RESOURCES

Modifications to the project would increase the duration of construction by 16 months, including some activities during wet season, which generally occurs between October 1 and April 30. Lengthening the construction schedule would result in the extension of potential water quality impacts described in the 2012 EIR. However, as with the adopted project, a Stormwater Pollution Prevention Plan (SWPPP), including provisions to control erosion and sedimentation, as well as a Spill Prevention and Response Plan will be prepared for construction activities at Rancho San Antonio County Park. No disturbed surfaces would be left without erosion control measures in place during the wet season. Efforts would be made by the District to minimize the potential for large rain events to mobilize loose sediment during construction. With the SWPPP in place, impacts related to degradation of water quality during construction would be expected to remain less than significant. Therefore, the modified project would not result in any new significant hydrology and water resources impacts beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

NOISE

The proposed modifications to the construction schedule would result in 16 additional months of construction noise. However, the modified construction schedule and construction activities related to the treatment and handling of soil would not materially affect the assumptions used to evaluate environmental effects from construction noise. Proposed modifications are similar to those proposed the construction of the Rancho San Antonio County Park Flood Detention Facility. Equipment used to demolish and remove a portion of the parking lot, excavate the basin, and construct a new parking area would be the same as that used for construction of the proposed facility. Accordingly, noise from operation of construction equipment would be similar to the construction noise levels presented in the 2012 EIR. Consistent with the 2012 EIR, construction noise would be less than the most stringent applicable construction noise limit at the nearest sensitive receptors. Construction activity at this site would generate maximum noise levels of about 72 A-weighted decibels (dBA), equivalent noise level (L_{eq}), at the nearest homes, which is less than the most stringent applicable construction noise limit of 75 dBA. Therefore, noise impacts under the proposed project modifications, as under the project, would continue to be less than significant. Although mitigation is not required for this site because of the less-than-significant impact conclusion, the following mitigation measures would be implemented and would reduce impacts further: Mitigation Measures NV1.1 (Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents), NV1.2 (Implement Work Site Noise Control Measures), and NV1.3 (Designate Noise and Air Quality Disturbance Coordinator to Address Resident Concerns). Therefore, the modified project would not result in any new significant noise impacts beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

RECREATION

The proposed modifications to the construction schedule would result in the affected portions of Rancho San Antonio County Park trails being unavailable to recreationists for 22 months rather than 6 months. Three additional months in each scenario would be required for landscaping, for a total of 25 months versus 9 months, but landscaping activity would not interfere with recreational uses at the park.

Modifications to the construction duration would extend the anticipated temporary unavailability of a portion of Rancho San Antonio County Park's Hammond-Snyder Loop Trail. The Hammond-Snyder Loop Trail is a 2.3-mile loop with multiple points of access from the equestrian parking lot and Cristo Rey Drive. Portions of the Hammond-Snyder Loop Trail not directly affected by construction and staging would remain in use, with fencing and signage provided to ensure that recreational traffic remains safely outside the construction area. Rancho San Antonio County Park users are not expected to relocate, since only a small percentage of the available trail system as a whole would be affected by construction. The disruption to use would be temporary, and there would be no impact related to a need for new or expanded facilities during construction. As with the adopted project, impacts related to temporary reduction in availability of the Hammond-Snyder Loop Trail are expected to be less than significant.

Therefore, the modified project would not result in any new significant impacts on recreational resources beyond those identified in the 2012 EIR or a substantial increase of the severity of a significant impact, and no new mitigation measures would be required.

GEOLOGY (TOPSOIL)

Substantial loss of topsoil could result in diminished soil productivity and accelerated soil erosion. The 2012 EIR identified a potential loss of approximately 15 acres of topsoil from the Rancho San Antonio County Park Flood Detention Facility site. To mitigate potential impacts on soil productivity through loss of topsoil, Mitigation Measure GEO6.1 was adopted to ensure suitable soil material would be returned to the site by sidecasting and stockpiling existing topsoil where appropriate. Upon detailed review of site soils during preparation of a Mitigation Monitoring Plan for the Project, the District discovered existing conditions at the site that may adversely affect soil productivity. To improve conditions for revegetation efforts at Rancho San Antonio County Park, District revegetation biologists recommend that portions of existing wetland and upland soils be replaced with more desirable soils obtained during the course of excavation activities.

Changes to soil selection and placement protocols in compliance with the latest revegetation biologist recommendations would not change the impact to site topsoil—a potential loss of approximately 15 acres of topsoil. However, to comply with biologist recommendations, Mitigation Measure BIO14.2 would be modified to remove reference to wetland soil salvage and replacement, and Mitigation Measure GEO6.1 would be clarified with measures for removal of soils identified as less desirable for site restoration efforts. Further, Mitigation Measure GEO6.1 would include procedural stockpile management requirements for remaining soil to be reused on-site. Use of remaining soil for site finishing would ensure that soil productivity would not be substantially reduced and would prevent accelerated soil erosion, consistent with the findings of the 2012 EIR. Therefore, the modified project would not result in any new significant impacts on topsoil resources beyond those identified in the 2012 EIR or a substantial increase of the severity of a significant impact, and no new mitigation measures would be required.

TRAFFIC AND TRANSPORTATION

Consistent with the evaluation of traffic impacts in the 2012 EIR, construction-related traffic is presumed to have the potential to significantly affect traffic flow on local roadways, particularly if numerous trips occur during the afternoon peak traffic periods. Construction of the modified project would be undertaken by using substantially the same numbers and types of construction equipment and the same number of construction workers as the adopted project. The duration

of construction would be altered, but construction activities would still be considered temporary. As with the adopted project, implementation of Mitigation Measure TT1.1 (Require a Site-Specific Traffic Control Plan) would reduce potential traffic impacts to a less-than-significant level. Appendix H of the Subsequent EIR has been revised, showing revised maximum peak-hour trips and daily trips, and is attached as Appendix B (Updated Appendix H, Construction Traffic Calculations).

The proposed modifications to soil handling and disposal would increase the volume of off-hauled soil. The maximum number of vehicle trips per day would be 136, an increase from 90 vehicle trips per day under the adopted project. Under the adopted project, only 30 vehicle trips per day are assumed to access the site via regional and local streets; the remainder are assumed to travel between the project site and Lehigh Permanente Quarry, where excavated soil would be disposed of, via Permanente Road. Under the proposed modifications, excavated soil would be disposed of at an approved landfill, potentially Guadalupe Recycling and Disposal Facility, and vehicles would use Interstate (I-) 280 and State Route (SR) 85. Therefore, proposed project changes would increase the number of construction daily trips on regional access roadways (I-280 and SR 85) and local access roadways (Foothill Boulevard between I-280 and Stevens Creek Boulevard and Stevens Creek Boulevard west of Foothill Boulevard) from 30 to 136. The maximum number of peak-hour trips would increase from 11 under the adopted project to 25 under the proposed modifications. The addition of 106 daily truck trips during normal hauling hours is not expected to be enough to degrade the operation and level of service of regional and local access roadways. As mentioned above, construction-related traffic is presumed to have the potential to significantly affect traffic flow on local roadways, but implementation of Mitigation Measure TT1.1 (Require a Site-Specific Traffic Control Plan) would reduce potential traffic impacts to a less-than-significant level. Revisions, in underline and strikeout, to Tables 8-8 and 8-9 show the revised trip counts.

Based on the traffic level of service threshold, as defined by the Congestion Management Plan, the added vehicle trips under the project should not be more than 1% of the peak-hour freeway capacity (Santa Clara Valley Transportation Authority 2009). The proposed modifications would increase the maximum number of peak-hour trips by 14, which would result in an increase of less than 1% in peak-hour capacity on regional highways in the area. Therefore, the project is not expected to significantly degrade the operation of regional highways or conflict with any applicable Congestion Management Plan. The modified project would not result in any new significant traffic impacts beyond those identified in the 2012 EIR or a substantial increase in the severity of a significant impact, and no new mitigation measures would be required.

Table 8-8. Estimated Construction-Period Trip Distribution on Regional Access Roadways

Highway	Daily Trips	Peak-Hour Trips	Project Element
Year 1			
I-280	~~30~~ 136	~~11~~ 25	Rancho San Antonio County Park Flood Detention Facility
SR 85	~~30~~ 136	~~11~~ 25	Rancho San Antonio County Park Flood Detention Facility
US 101	30	11	Floodwalls
SR 82	30	12	Permanente Creek Channel
Foothill Expressway	30	12	Permanente Diversion Structure
Year 2, during the 3-month peak excavation period at McKelvey Park			
I-280	136	25	Rancho San Antonio County Park Flood Detention Facility
SR 85	136	25	Rancho San Antonio County Park Flood Detention Facility
SR 82	243	42	Hale Creek Channel, McKelvey Park Detention Facility
Foothill Expressway	15	6	Hale Creek Channel
Year 2, without the peak excavation period activities at McKelvey Park			
I-280	136	25	Rancho San Antonio County Park Flood Detention Facility
SR 85	136	25	Rancho San Antonio County Park Flood Detention Facility
SR 82	83	30	Hale Creek Channel, McKelvey Park Detention Facility and Pipe
Foothill Expressway	15	6	Hale Creek Channel
Year 3			
SR 82	15	6	Hale Creek Channel
Foothill Expressway	15	6	Hale Creek Channel
Year 4			
SR 82	15	6	Hale Creek Channel
Foothill Expressway	15	6	Hale Creek Channel

Table 8-9. Estimated Construction-Period Trip Distribution on Local Access Roadways

Local Street Segment	Daily Trips	Peak-Hour Trips	Project Element
Year 1			
Foothill Boulevard between I-280 and Stevens Creek Boulevard	~~30~~ 136	~~11~~ 25	Rancho San Antonio County Park Flood Detention Facility
Stevens Creek Boulevard west of Foothill Boulevard	~~30~~ 136	~~11~~ 25	Rancho San Antonio County Park Flood Detention Facility
Amphitheatre Parkway	30	11	Floodwalls
Charleston Road between Amphitheatre Parkway and Shoreline Boulevard	30	11	Floodwalls
Shoreline Boulevard between US 101 and Amphitheatre Parkway	30	11	Floodwalls
Miramonte Avenue south of Marilyn Drive	30	11	Permanente Diversion Structure
Mountain View Avenue	30	12	Permanente Creek Channel
Year 2, during the 3-month peak excavation period at McKelvey Park[a]			
I-280	136	25	Rancho San Antonio County Park Flood Detention Facility
SR 85	136	25	Rancho San Antonio County Park Flood Detention Facility
Mountain View Avenue	144	29	Hale Creek Channel, McKelvey Park Detention Facility
Miramonte Avenue north of Marilyn Drive	114	18	McKelvey Park Detention Facility
Park Drive between Mountain View Avenue and Miramonte Avenue	114	18	McKelvey Park Detention Facility
Arroyo Road between Springer Road and Mountain View Avenue	30	11	Hale Creek Channel
El Monte Avenue north of Springer Road	15	6	Hale Creek Channel
Springer Road south of El Monte Avenue	15	6	Hale Creek Channel
Year 2, without the peak excavation period activities at McKelvey Park			
I-280	136	25	Rancho San Antonio County Park Flood Detention Facility
SR 85	136	25	Rancho San Antonio County Park Flood Detention Facility
Mountain View Avenue	35	12	McKelvey Park Detention Facility and Pipe
Miramonte Avenue north of Marilyn Drive	35	12	McKelvey Park Detention Facility and Pipe
Park Drive between Mountain View Avenue and Miramonte Avenue	35	12	McKelvey Park Detention Facility and Pipe
Park Drive west of Mountain View Avenue	35	12	McKelvey Park Pipe
Arroyo Road between Springer Road and Mountain View Avenue	30	11	Hale Creek Channel
El Monte Avenue north of Springer Road	15	6	Hale Creek Channel
Marilyn Drive between Springer Road and	30	11	Hale Creek Channel

Local Street Segment	Daily Trips	Peak-Hour Trips	Project Element
Hale Creek Channel			
Sunshine Drive between Springer Road and Hale Creek Channel	30	11	Hale Creek Channel
Springer Road south of El Monte Avenue	15	6	Hale Creek Channel
Year 3			
El Monte Avenue north of Springer Road	15	6	Hale Creek Channel
Sunshine Drive between Springer Road and Hale Creek Channel	30	11	Hale Creek Channel
Cuesta Drive between Springer Road and Hale Creek Channel	30	11	Hale Creek Channel
Arboleda Drive between Springer Road and Hale Creek Channel	30	11	Hale Creek Channel
Springer Road south of El Monte Avenue	15	6	Hale Creek Channel
Year 4			
El Monte Avenue north of Springer Road	15	6	Hale Creek Channel
Arboleda Drive between Springer Road and Hale Creek Channel	30	11	Hale Creek Channel
Springer Road south of El Monte Avenue	15	6	Hale Creek Channel

5. Conclusion

Based on review of the Permanente Creek Flood Protection Project design modifications and updated information about construction, none of the situations described in CEQA Guidelines §15162 apply. Activities associated with the proposed minor changes would not create new significant environmental impacts or substantially increase the severity of significant impacts beyond that identified in the certified 2012 EIR. There are no significant changes to the project circumstances, and no new information is anticipated that will alter the previous CEQA findings. The proposed project changes meet the criteria of minor changes or additions for an addendum under CEQA Guidelines §15164.

Revisions to the MMRP represent minor technical modifications to conform the mitigation commitments to the current project design and regulatory requirements. A complete copy of the revised MMRP for the project is included in Appendix C (Revised Mitigation Monitoring and Reporting Program).

References

Bay Area Air Quality Management District. 2012. *California Environmental Quality Act Air Quality Guidelines*. May. Available: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: September 12, 2016.

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Santa Clara Valley Water District. 2010. *Certifying the Final Environmental Impact Report and Adopting the Mitigation Monitoring and Reporting Program, Findings of Fact, and Statement of Overriding Considerations for the Permanente Creek Flood Protection Project*. Board Resolution No. 10-58. June 17.

Santa Clara Valley Water District. 2012b. *Certifying the Final Subsequent Environmental Impact Report and Adopting the Mitigation Monitoring and Reporting Program, Findings of Fact, and Statement of Overriding Considerations for the Permanente Creek Flood Protection Project*. Board Resolution No. 12-76. November 20.

Appendix A

Updated Appendix D, Construction Emissions

Permanente Creek Flood Protection Project

Updated August 2016

Rancho San Antonio Flood Detention Facility - Year 1 and Year 2 (Unmitigated)

	Maximum Daily Emissions in lbs/day										Annual Emissions in tons, except GHGs in metric tons CO2e											
	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2 (MT)	Total GHGs (MT CO2e)
Project Element Total	**3.2**	**45.8**	**16.6**	**0.0**	**75.3**	**1.7**	**76.9**	**15.8**	**1.5**	**17.3**	**0.3**	**5.5**	**1.8**	**0.0**	**9.9**	**0.2**	**10.1**	**2.1**	**0.2**	**2.3**	**792.5**	**796.5**
											0.3	**4.4**	**1.5**	**0.0**	**7.5**	**0.2**	**7.6**	**1.6**	**0.1**	**1.7**	**643.0**	**646.7**

Site Excavation

							Daily Emissions in lbs/day										Annual Emissions in tons, except GHGs in metric tons CO2e											
Equipment	No. of Pieces	Maximum Vehicle Trips/day	Average Vehicle Trips/day	Roundtrip Miles	Disturbed Area (acre/day)	Duration (months/year)	Duration (year)	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2 (MT)	Total GHGs (MT CO2e)
Crane								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Excavator	3					12	2	0.7	5.4	4.1	0.0	0.0	0.3	0.3	0.0	0.3	0.3	0.1	0.5	0.4	0.0	0.0	0.03	0.0	0.0	0.0	0.0	89.3	90.2
Jackhammer								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Loader	2					12	2	0.5	3.6	2.4	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.3	0.2	0.0	0.0	0.02	0.0	0.0	0.0	0.0	52.2	52.7
Sweeper	1					12	2	0.3	1.6	1.2	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.01	0.0	0.0	0.0	0.0	23.3	23.5
Backhoe	1					12	2	0.2	1.4	1.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.01	0.0	0.0	0.0	0.0	20.9	21.1
Trencher								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Truck	1					12	2	0.2	2.2	0.7	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.2	0.1	0.0	0.0	0.01	0.0	0.0	0.0	0.0	37.9	38.3
On-Site Equipment Emissions								**1.9**	**14.2**	**9.4**	**0.0**	**0.0**	**0.8**	**0.8**	**0.0**	**0.8**	**0.8**	**0.2**	**1.3**	**0.8**	**0.0**	**0.0**	**0.08**	**0.1**	**0.0**	**0.1**	**0.1**	**223.6**	**225.7**
Haul Truck		53	32	32		12	2	1.0	27.4	4.7	0.0	0.2	0.7	0.9	0.1	0.7	0.7	0.1	3.6	0.6	0.0	0.0	0.09	0.1	0.0	0.1	0.1	471.7	472.1
Delivery Truck		5	3	50		12	2	0.2	4.0	0.7	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.5	0.1	0.0	0.0	0.01	0.0	0.0	0.0	0.0	69.1	69.2
Worker Commute		10	6	50		12	2	0.1	0.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.00	0.0	0.0	0.0	0.0	28.1	29.6
On-Road Vehicle Emissions								**1.3**	**31.6**	**7.2**	**0.0**	**0.3**	**0.8**	**1.1**	**0.1**	**0.7**	**0.9**	**0.2**	**4.2**	**1.0**	**0.0**	**0.0**	**0.11**	**0.1**	**0.0**	**0.1**	**0.1**	**568.9**	**570.8**
Dust Emissions					3.75	12	2	**0.0**	**0.0**	**0.0**	**0.0**	**75.0**	**0.0**	**75.0**	**15.7**	**0.0**	**15.7**	**0.0**	**0.0**	**0.0**	**0.0**	**9.9**	**0.00**	**9.9**	**2.1**	**0.0**	**2.1**	**0**	**0**
Total Emissions								**3.2**	**45.8**	**16.6**	**0.0**	**75.3**	**1.7**	**76.9**	**15.8**	**1.5**	**17.3**	**0.3**	**5.5**	**1.8**	**0.0**	**9.9**	**0.2**	**10.1**	**2.1**	**0.2**	**2.3**	**792.5**	**796.5**

Landscaping

							Daily Emissions in lbs/day										Annual Emissions in tons, except GHGs in metric tons CO2e											
Equipment	No. of Pieces	Maximum Vehicle Trips/day	Average Vehicle Trips/day	Roundtrip Miles	Disturbed Area (acre/day)	Duration (months/year)	Duration (year)	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2 (MT)	Total GHGs (MT CO2e)
Crane								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Excavator								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Jackhammer								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Loader								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Sweeper								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Backhoe	1					3		0.2	1.4	1.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	5.2	5.3
Trencher	2					3		0.6	3.6	2.1	0.0	0.0	0.3	0.3	0.0	0.3	0.3	0.0	0.1	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	9.7	9.8
Truck	1					3		0.2	2.2	0.7	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	9.5	9.6
On-Site Equipment Emissions								**1.0**	**7.2**	**3.9**	**0.0**	**0.0**	**0.5**	**0.5**	**0.0**	**0.5**	**0.5**	**0.0**	**0.2**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**24.4**	**24.6**
Haul Truck		2	2	50		3		0.1	2.7	0.5	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5
Delivery Truck		3	1	50		3		0.1	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	5.8
Worker Commute		10	6	50		3		0.1	0.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	7.4
On-Road Vehicle Emissions								**0.2**	**4.2**	**2.5**	**0.0**	**0.1**	**0.1**	**0.2**	**0.0**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**24.3**	**24.7**
Dust Emissions								**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0**	**0**
Total Emissions								**1.3**	**11.3**	**6.4**	**0.0**	**0.1**	**0.6**	**0.7**	**0.0**	**0.6**	**0.6**	**0.0**	**0.3**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**48.7**	**49.3**

Permanente Creek Flood Protection Project

Updated August 2016

Rancho San Antonio Flood Detention Facility - Year 1 and Year 2 (Mitigated)

Construction Emission with Mitigation

	Maximum Daily Emissions in lbs/day										Annual Emissions in tons, except GHGs in metric tons CO2e											
	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2 (MT)	Total GHGs (MT CO2e)	
Project Element Total	**3.2**	**43.0**	**16.6**	**0.0**	**40.0**	**1.3**	**41.3**	**8.4**	**1.2**	**9.6**	**0.3**	**5.2**	**1.8**	**0.0**	**5.3**	**0.1**	**5.4**	**1.1**	**0.1**	**1.2**	**792.5**	**796.5**	Year 1
											0.28	4.163	1.52	0	3.965	0.12179	4.087	0.833	0.11204	0.9449	643.04	646.661659	Year 2

Site Excavation

								Daily Emissions in lbs/day										Annual Emissions in tons, except GHGs in metric tons CO2e											
Equipment	No. of Pieces	Maximum Vehicle Trips/day	Average Vehicle Trips/day	Roundtrip Miles	Disturbed Area (acre/day)	Duration (months/year)	Duration (year)	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2 (MT)	Total GHGs (MT CO2e)
Crane								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Excavator	3					12	2	0.7	4.4	4.1	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.1	0.4	0.4	0.0	0.0	0.02	0.0	0.0	0.0	0.0	89.3	90.2
Jackhammer								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Loader	2					12	2	0.5	2.9	2.4	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.3	0.2	0.0	0.0	0.01	0.0	0.0	0.0	0.0	52.2	52.7
Sweeper	1					12	2	0.3	1.3	1.2	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.01	0.0	0.0	0.0	0.0	23.3	23.5
Backhoe	1					12	2	0.2	1.1	1.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.01	0.0	0.0	0.0	0.0	20.9	21.1
Trencher								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Truck	1					12	2	0.2	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.00	0.0	0.0	0.0	0.0	37.9	38.3
On-Site Equipment Emissions								**1.9**	**11.4**	**9.4**	**0.0**	**0.0**	**0.5**	**0.5**	**0.0**	**0.4**	**0.4**	**0.2**	**1.0**	**0.8**	**0.0**	**0.0**	**0.04**	**0.0**	**0.0**	**0.0**	**0.0**	**223.6**	**225.7**
Haul Truck		53	32	32		12	2	1.0	27.4	4.7	0.0	0.2	0.7	0.9	0.1	0.7	0.7	0.1	3.6	0.6	0.0	0.0	0.09	0.1	0.0	0.1	0.1	471.7	472.1
Delivery Truck		5	3	50		12	2	0.2	4.0	0.7	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.5	0.1	0.0	0.0	0.01	0.0	0.0	0.0	0.0	69.1	69.2
Worker Commute		10	6	50		12	2	0.1	0.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.00	0.0	0.0	0.0	0.0	28.1	29.6
On-Road Vehicle Emissions								**1.3**	**31.6**	**7.2**	**0.0**	**0.3**	**0.8**	**1.1**	**0.1**	**0.7**	**0.9**	**0.2**	**4.2**	**1.0**	**0.0**	**0.0**	**0.11**	**0.1**	**0.0**	**0.1**	**0.1**	**568.9**	**570.8**
Dust Emissions					3.75	12	2	**0.0**	**0.0**	**0.0**	**0.0**	**39.8**	**0.0**	**39.8**	**8.3**	**0.0**	**8.3**	**0.0**	**0.0**	**0.0**	**0.0**	**5.2**	**0.00**	**5.2**	**1.1**	**0.0**	**1.1**	**0**	**0**
Total Emissions								**3.2**	**43.0**	**16.6**	**0.0**	**40.0**	**1.3**	**41.3**	**8.4**	**1.2**	**9.6**	**0.3**	**5.2**	**1.8**	**0.0**	**5.3**	**0.1**	**5.4**	**1.1**	**0.1**	**1.2**	**792.5**	**796.5**

Landscaping

								Daily Emissions in lbs/day										Annual Emissions in tons, except GHGs in metric tons CO2e											
Equipment	No. of Pieces	Maximum Vehicle Trips/day	Average Vehicle Trips/day	Roundtrip Miles	Disturbed Area (acre/day)	Duration (months/year)	Duration (year)	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2 (MT)	Total GHGs (MT CO2e)
Crane								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Excavator								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Jackhammer								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Loader								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Sweeper								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Backhoe	1					3		0.2	1.1	1.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	5.2	5.3
Trencher	2					3		0.6	2.9	2.1	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.1	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	9.7	9.8
Truck	1					3		0.2	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	9.5	9.6
On-Site Equipment Emissions								**1.0**	**5.7**	**3.9**	**0.0**	**0.0**	**0.3**	**0.3**	**0.0**	**0.3**	**0.3**	**0.0**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**24.4**	**24.6**
Haul Truck		2	2	50		3		0.1	2.7	0.5	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5
Delivery Truck		3	1	50		3		0.1	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	5.8
Worker Commute		10	6	50		3		0.1	0.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	7.4
On-Road Vehicle Emissions								**0.2**	**4.2**	**2.5**	**0.0**	**0.1**	**0.1**	**0.2**	**0.0**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**24.3**	**24.7**
Dust Emissions								**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0**	**0**
Total Emissions								**1.3**	**9.9**	**6.4**	**0.0**	**0.1**	**0.4**	**0.4**	**0.0**	**0.3**	**0.4**	**0.0**	**0.3**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**48.7**	**49.3**

Permanente Creek Flood Protection Project

Revised August 2016

Health Risk Assessment

Project Level Analysis

Project Element	Average Hourly PM10 Concentration (ug/m3)	Average Hourly PM2.5 Concentration (ug/m3)	Average Annual PM10 Concentration (ug/m3)	DPM Non-Cancer Hazard Index (HI)	DPM Cancer Risk (per Million)	Average Annual PM2.5 Concentration (ug/m3)	Mitigated DPM Non-Cancer Hazard Index (HI)	Mitigated DPM Cancer Risk (per Million)	Mitigated Annual PM2.5 Concentration (ug/m3)
Rancho San Antonio Flood Detention Facility	15.2	14.0	0.37	0.07	4.46	0.34	0.04	2.45	0.19
Permanente Diversion Structure and Outlet Culvert	53.8	43.7	0.65	0.13	1.97	0.53	0.07	1.08	0.29
Floodwalls and Levees Improvement	9.3	8.4	0.22	0.04	0.80	0.20	0.02	0.44	0.11
Permanente and Hale Creek Channel Improvement	13.7	12.5	0.33	0.07	3.01	0.30	0.04	1.66	0.17
McKelvey Park Flood Detention Facility	19.5	17.8	0.47	0.09	2.86	0.43	0.05	1.57	0.24
McKelvey Park Outlet Pipe	32.0	29.5	0.13	0.03	0.13	0.12	0.01	0.07	0.07
			BAAQMD Threshold	**1**	**10**	**0.3**		**10**	**0.3**

Cumulative Level Analysis

Project Element	Background DPM Non-Cancer Hazard Index (HI)	Background DPM Cancer Risk (per Million)	Background Average Annual PM2.5 Concentration (ug/m3)	Cumulative DPM Non-Cancer Hazard Index (HI)	Cumulative DPM Cancer Risk (per Million)	Cumulative Average Annual PM2.5 Concentration (ug/m3)	Mitigated Cumulative DPM Non-Cancer Hazard Index (HI)	Mitigated Cumulative DPM Cancer Risk (per Million)	Mitigated Cumulative Average Annual PM2.5 Concentration (ug/m3)
Rancho San Antonio Flood Detention Facility				0.07	4.46	0.34	0.04	2.45	0.19
Permanente Diversion Structure and Outlet Culvert				0.13	1.97	0.53	0.07	1.08	0.29
Floodwalls and Levees Improvement	0.03	28.87	0.18	0.07		0.38	0.05	29.31	0.29
Permanente and Hale Creek Channel Improvement				0.07	3.01	0.30	0.04	1.66	0.17
McKelvey Park Flood Detention Facility	0.02	11.68	0.14	0.11	14.53	0.57	0.07	13.25	0.37
McKelvey Park Outlet Pipe	0.02	11.68	0.14	0.04	11.81	0.26	0.03	11.75	0.20
				10	**100**	**0.8**	**10**	**100**	**0.8**

Project SCREEN3 Inputs

Project Element	Annual On-site PM10 Exhaust (tons/year)	Annual On-site PM2.5 Exhaust (tons/year)	Construction hours/day	Construction days/year	Average Hourly PM10 Exhaust (lbs/hr)	Average Hourly PM2.5 Exhaust (lbs/hr)	Average Daily Construction Area (sqft)	Average Distance (ft)	Exposure year
Rancho San Antonio Flood Detention Facility	0.09	0.08	8	264	0.0828	0.0762	16500	500	2
Permanente Diversion Structure and Outlet Culvert	0.02	0.02	8	132	0.0403	0.0371	4800	150	1
Floodwalls and Levees Improvement	0.05	0.04	8	264	0.0442	0.0407	6000	500	1
Permanente and Hale Creek Channel Improvement	0.07	0.06	8	264	0.0658	0.0605	3600	500	1.5
McKelvey Park Flood Detention Facility	0.06	0.05	8	264	0.0563	0.0518	8000	350	1
McKelvey Park Outlet Pipe	0.01	0.01	8	44	0.0497	0.0457	4800	250	1

Cancer Risk Calculation Factors

Hourly to Annual Concentration Conversion Factor	0.1
Chronic Reference Exposure Level (REL) per OEHHA	5
Lifetime Years	70
Days per Year	350
Daily Breath Rate (L/kg)	302
Conversion Factor ([mg/ug] * [m3/L])	1.E-06
Average Age Sensitivity Factor (ASF) for Resident	1.7
Average Age Sensitivity Factor (ASF) for Office	1
Cancer Potency Factor ($[mg/kg\text{-}day]^{-1}$)	1.1

Appendix B

Updated Appendix H, Construction Traffic Calculations

Permanente Creek Flood Protection Project

Construction Trip Generation Estimates by Project Elements

Project Element	Year	Phase	Schedule	Peak Construction Duration	Area/ Length	Export Spoils/Import Material (cy)	Maximum Daily Truck Hauling Trucks	Maximum Delivery Trucks	Maximum Workers	Maximum Daily Trips	Maximum Daily Trips per Element	Maximum Peak Hour Truck Trips	Maximum Peak Hour Worker Trips	Maximum Peak Hour Trips	Maximum Peak Hour Trips per Element	Regional Access Highways	Local Project Access Roads
Rancho San Antonio Flood Detention Facility	1-2	Site excavation [1]	21 mo	10 mo	15 acres	Soil Export: 155,000 cy [2]	53	5	10	136	136	15	10	25	25	I-280, SR 85 [1]	Foothill Boulevard Stevens Creek Boulevard
		Landscaping	3 mo				2	3	10	30		1	10	11			
Permanente Diversion Structure	1	Demolition, Excavation, Construction	3 mo		7,000 sqft	Concrete Export: 200 cy Soil Export: 50 cy Soil Import: 50 cy	1	3	10	28	32	1	10	11	12	Foothill Expressway	Miramonte Avenue
		Outlet culvert excavation, construction	3 mo		200 ft	Export: 50 cy Import: 20 cy	1	5	10	32		2	10	12			
Floodwalls and Levees Downstream of US-101	1	Excavation, Floodwall construction	12 mo		1,600 ft	Soil Import: 1,000 cy Concrete Import: 600 cy	1	3	10	28	28	1	10	11	11	US 101	Amphitheatre Parkway Charleston Road Shoreline Boulevard
Permanente Creek Channel Improvements	1	Demolition, Excavation, Construction	12 mo		1,200 ft	Concrete Export: 2200 cy Soil Export: 200 cy Soil Import: 200 cy Concrete Import: 2,500 cy	1	5	10	32	32	2	10	12	12	SR 82	Mountain View Avenue
Hale Creek Channel Improvements [3]	2-4	Demolition, Excavation, Construction	36 mo		4,000 ft	Concrete Export: 2,600 cy Soil Export: 1,000 cy Soil Import: 1,000 cy Concrete Import: 2,600 cy	1	4	10	30	30	1	10	11	11	SR 82, Foothill Expressway [4]	El Monte Avenue Mountain View Avenue Arroyo Road Marilyn Drive Sunshine Drive Cuesta Drive Arboleda Drive Springer Road [4]
McKelvey Park Outlet Pipe [5]	2	Outlet Pipe excavation, construction	2 mo		1,500 feet	Export: 50 cy Import: 50 cy	2	5	10	34	228	2	10	12	36	SR 82	Miramonte Avenue Park Drive Mountain View Avenue [6]
McKelvey Park Flood Detention Facility	2	Site excavation [1]	6 mo	3 mo	5 acres	Soil Export: 100,000 cy [1]	99	5	10	228		26	10	36		SR 82	Miramonte Avenue Park Drive Mountain View Avenue [6]
		Retaining wall construction [5]	2 mo			Concrete Import: 2,600 cy	4	3	10	34		2	10	12			
		Landscaping	4 mo				2	3	10	30		1	10	11			

(1) Assumed that excavated soil would be hauled to the Guadalupe Landfill located 16 miles southeast of the park and will use SR 85 South.

(2) A bulking factor (soil expansion factor) of 30% is applied to volume to calculate haul truck trips.

(3) Assumed that Hale Creek Channel would be constructed from north to south. Hale Creek reach between Mountain View Avenue and Sunshine Drive would be built in Year 2, along with McKelvey Park project elements. Hale Creek reach between Sunshine Drive and Arboleda Drive would be built in Year 3; Hale Creek reach between Arboleda Drive and south end of the element on Springer Road would be built in Year 4.

(4) Assumed that vehicles would access the site via SR 82/El Monte Avenue and Foothill Expressway/Springer Road evenly.

(5) Assumed that McKelvey Park Outlet Pipe would be constructed at same time as the retaining wall construction of McKelvey Park Flood Detention Facility

(6) Assumed that vehicles would access the site and Park Drive via Miramonte Avenue and Mountain View Avenue evenly.

Permanente Creek Flood Protection Project

Construction Trip Distribution Estimates on Regional Roadways

Highways	Year 1				Year 2 ~~during~~ with the 3-month peak excavation at McKelvey Park				Year 2 without the peak excavation activities at McKelvey Park				Year 3				Year 4			
	Daily Trips	Peak Hour Trips	Duration (months)	Project Element	Daily Trips	Peak Hour Trips	Duration (months)	Project Element	Daily Trips	Peak Hour Trips	Duration (months)	Project Element	Daily Trips	Peak Hour Trips	Duration (months)	Project Element	Daily Trips	Peak Hour Trips	Duration (months)	Project Element
I-280	136	25	12	RSA Detention	136	25	9	RSA Detention	136	25	9	RSA Detention	0	0			0	0		
SR 85	136	25	12	RSA Detention	136	25	9	RSA Detention	136	25	9	RSA Detention	0	0			0	0		
US 101	28	11	12	Floodwalls	0	0			0	0			0	0			0	0		
SR 82	32	12	12	Permanente Creek Channel	243	42	3	Hale Creek Channel, McKelvey Park Detention	83	30	9	Hale Creek Channel, McKelvey Park Detention and Pipe	15	6	12	Hale Creek Channel	15	6	12	Hale Creek Channel
Foothill Expressway	32	12	6	Permanente Diversion Structure	15	6	3	Hale Creek Channel	15	6	9	Hale Creek Channel	15	6	12	Hale Creek Channel	15	6	12	Hale Creek Channel

Construction Trip Distribution Estimates on Local Roadways

Local Street Segments	Year 1				Year 2 ~~during~~ with the 3-month peak excavation at McKelvey Park				Year 2 without the peak excavation activities at McKelvey Park				Year 3				Year 4			
	Daily Trips	Peak Hour Trips	Duration (months)	Project Element	Daily Trips	Peak Hour Trips	Duration (months)	Project Element	Daily Trips	Peak Hour Trips	Duration (months)	Project Element	Daily Trips	Peak Hour Trips	Duration (months)	Project Element	Daily Trips	Peak Hour Trips	Duration (months)	Project Element
Foothill Boulevard between I-280 and Stevens Creek Boulevard	136	25	12	RSA Detention	136	25	9	RSA Detention	136	25	9	RSA Detention	0	0			0	0		
Stevens Creek Boulevard west of Foothill Boulevard	136	25	12	RSA Detention	136	25	9	RSA Detention	136	25	9	RSA Detention	0	0			0	0		
Amphitheatre Parkway	28	11	12	Floodwalls	0	0			0	0			0	0			0	0		
Charleston Road between Amphitheatre Parkway and Shoreline Boulevard	28	11	12	Floodwalls	0	0			0	0			0	0			0	0		
Shoreline Boulevard between US101 and Amphitheatre Parkway	28	11	12	Floodwalls	0	0			0	0			0	0			0	0		
Miramonte Avenue south of Marilyn Drive	32	12	6	Permanente Diversion Structure	0	0			0	0			0	0			0	0		
Mountain View Avenue	32	12	12	Permanente Creek Channel	144	29	3	Hale Creek Channel, McKelvey Park Detention	34	12	9	McKelvey Park Detention and Pipe	0	0			0	0		
Miramonte Avenue north of Marilyn Drive	0	0			114	18	3	McKelvey Park Detention	34	12	9	McKelvey Park Detention and Pipe	0	0			0	0		
Park Drive between Mountain View Avenue and Miramonte Avenue	0	0			114	18	3	McKelvey Park Detention	34	12	9	McKelvey Park Detention and Pipe	0	0			0	0		
Park Drive west of Mountain View Avenue	0	0			0	0			34	12	2	McKelvey Park Pipe	0	0			0	0		
Arroyo Road between Springer Road and Mountain View Avenue	0	0			30	11	3	Hale Creek Channel	30	11	3	Hale Creek Channel	0	0			0	0		
El Monte Avenue north of Springer Road	0	0			15	6	3	Hale Creek Channel	15	6	9	Hale Creek Channel	15	6	12	Hale Creek Channel	15	6	12	Hale Creek Channel
Marilyn Drive between Springer Road and Hale Creek Channel	0	0			0	0			30	11	3	Hale Creek Channel	0	0			0	0		
Sunshine Drive between Springer Road and Hale Creek Channel	0	0			0	0			30	11	3	Hale Creek Channel	30	11	3	Hale Creek Channel	0	0		
Cuesta Drive between Springer Road and Hale Creek Channel	0	0			0	0			0	0			30	11	3	Hale Creek Channel	0	0		
Arboleda Drive between Springer Road and Hale Creek Channel	0	0			0	0			0	0			30	11	3	Hale Creek Channel	30	11	3	Hale Creek Channel
Springer Road south of El Monte Avenue	0	0			15	6	3	Hale Creek Channel	15	6	9	Hale Creek Channel	15	6	12	Hale Creek Channel	15	6	12	Hale Creek Channel

Permanente Creek Flood Protection Project

Construction Trip Impacts on CMP Freeways

CMP Freeway	Segment	Number of Mixed Lanes/ Direction	Peak Hour Directional LOS [1]	Peak Hour Capacity/ Direction [2]	1% of Capacity [3]	Maximum Construction Trips	Project trips exeed 1% capacity
I-280	Between SR 85 and Foothill Boulevard	3	F	6,600	66	25	No
SR 85	Between Stevens Creek Boulevard and I-280	2	F	4,400	44	25	No
	Between Fremont Avenue and SR 82	2	F	4,400	44	25	No
	Between SR 82 and SR 237	2	F	4,400	44	25	No
	Between SR 237 and US-101	2	F	4,400	44	25	No
US-101	Between SR 85 to Middlefield Road Interchange	3	F	6,600	66	12	No

(1) VTA 2011 CMP Annual Monitoring & Conformance Report.

(2) Based on VTA Transportation Analysis Guidelines, freeway segment capacity is 2,200 vphpl for four-lane freeway segments.

(3) Based on TIA Guidelines, for freeway segments that operate at LOS F, the added vehicle trips by the Project should not be more than 1% of the freeway capacity.

Construction Trip Impacts on CMP Intersections

CMP Roadway	Cross Street	Maximum Construction Trips on CMP Roadway				Existing Peak Hour Intersection	LOS Standard	Exceed LOS Standard
		Year 1	Year 2	Year 3	Year 4			
SR 82 (El Camino Real)	El Monte Avenue	12	30 - 46	6	6	C	E	No
	Miramonte Avenue	12	30 - 46	6	6	D	E	No
	Grant Road	12	30 - 46	6	6	D-	E	No
Foothill Expressway	Springer Road	12	6	6	6	D	E	No
	Grant Road	12	6	6	6	D	E	No

(4) VTA 2010 CMP Annual Monitoring & Conformance Report.

Appendix C

Revised Mitigation Monitoring and Reporting Program

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Aesthetics				
Mitigation Measure AES1.1—Provide Visual Screening for Affected Construction Area: To buffer the effects of the affected construction areas, including equipment parking and materials storage, on aesthetic values for recreational uses and the adjacent neighborhood, the District will require contractors to provide visual screening around portions of the construction area. Screening will consist of 8-foot-high chain-link fence covered with fabric, or an equivalent. It will be put in place during the first week of construction, and will remain until construction is complete and equipment is demobilized. The location of the visual screening may be adjusted depending on construction activities.	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance; McKelvey Park Flood Detention Facility during construction.	Construction contractors.	Visual screening will be put in place during the first week of construction, and will be removed when construction is complete and equipment has been demobilized.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure AES1.2—Apply Aesthetic Design Treatments to Visible Structures: New structures that are associated with the proposed project that are not replacing similar existing structures will be designed in a manner that allows these features to blend with the surrounding built and natural environments so that project features complement and do not detract or stand out within the visual landscape. Such measures will include, but are not limited to, the following: • New structures, such as the proposed restroom at Rancho San Antonio County Park, will evaluate similar, local structures that are well designed and use these features as design precedent to develop designs for structures that complement the natural landscape, are aesthetically pleasing, and minimize the effects of visual intrusion of the proposed project on the landscape. Design precedent will be found in structures or features with local historic value, that are locally revered for their aesthetics, or for being in-keeping with or an improvement upon the existing visual landscape. Aesthetic treatments will be implemented on restrooms and other visible features, such as floodwalls and inlets/outlets, to help soften their visual intrusion upon the landscape, especially in areas of high use, and	Rancho San Antonio County Park and McKelvey Park flood detention facilities, Channel Improvements, and Floodwalls and Levees downstream of US-101 during operation/maintenance.	Construction contractors.	Construction materials identified in this measure will be determined before the final design process is complete. Measures will be included in the construction documents prior to or during the final design phase.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility

improve project aesthetics.

- New visible elements introduced into the viewshed will be constructed with low-sheen and nonreflective surface materials to reduce potential for glare. Unpainted metal surfaces will not be permitted.
- At a minimum, finishes will be matte and roughened and new structures that are visible to the public (e.g., restrooms, spillways, and floodwalls) will be painted or will use concrete colored integrally with a shade that is two to three shades darker than the general surrounding area. Colors will be chosen from the U.S. Department of the Interior Bureau of Land Management (BLM) Standard Environmental Colors Chart CC-001: June 2008. Because color selection will vary by location, the facility designer shall employ the use of color panels evaluated from key observation points during common lighting conditions (front versus backlighting) to aid in the appropriate color selection. Color selection will be made for the coloring of the most prevalent season. Panels will be a minimum of 3 by 2 feet in dimension and will be evaluated from various distances, but within 1,000 feet, to ensure the best possible color selection.
- All paints used for the color panels and structures will be color matched directly from the physical color chart, rather than from any digital or color-reproduced versions of the color chart. Paints will be of a dull, flat, or satin finish only to reduce potential for glare, and the use of glossy paints for surfaces should be avoided. Appropriate paint type will be selected for the finished structures to ensure long-term durability of the painted surfaces. The appropriate operating agency or organization will maintain the paint color over time.

The following guidance will be used to design visible structures and help ensure that operational aesthetic impacts are less than significant:

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
• Overview of BLM design fundamentals and strategies: http://www.blm.gov/wo/st/en/prog/Recreation/recreation_national/RMS/3.html. • Design fundamentals to lessen visual impacts: http://www.ntc.blm.gov/krc/uploads/35/Unit%206%20Design%20Fundamentals%2011%2005%2008.pdf. • Design strategies to lessen visual impacts through color charts/panels and siting: http://www.ntc.blm.gov/krc/uploads/35/Unit%207%20Design%20Strategies%2011%2005%2008.pdf. • Links to the BLM's Visual Resource Management (VRM) strategies: http://www.ntc.blm.gov/krc/viewresource.php?courseID=35&programAreaId=50. • The VRM Manual: http://www.ntc.blm.gov/krc/uploads/35/Master%20VRM%20Notebook%20%202008_9%20%2010%2010%2008%20ver.pdf. • Examples of mitigation using BLM VRM design strategies: http://www.ntc.blm.gov/krc/uploads/35/Unit%2014%20Experience%20Examples%20Oil%20Gas%2011%2005%2008.pdf.				
Mitigation Measure AES1.3—Work With Key Viewer Groups to Design Aesthetic Modifications to Floodwall Design: The District will conduct a focused outreach effort to identify the viewer groups most affected by the proposed floodwalls on the west bank of Permanente Creek between Charleston Road and Amphitheatre Parkway, and will conduct public meetings and/or charrette sessions with the City of Mountain View and stakeholder representatives to develop aesthetic modifications to reduce the visual impact of the proposed floodwalls. Modifications may include such approaches as planting screening vegetation, using decorative surface textures or treatments, and/or including artwork. This measure	Floodwalls and Levees downstream of US-101 during operation/maintenance.	Focused outreach efforts and public meetings and/or charrette sessions will be coordinated by the District's project manager. Design provisions will be incorporated into Project construction documents by the design team, at the direction of the District's project manager.	Outreach efforts identified in this measure will take place before design for the floodwalls element are complete, in order to incorporate agreed upon modifications into the project. Measures will be included in the construction documents during the final design phase.	The District's project manager will be responsible for implementing and maintaining the modifications agreed upon.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
will allow concerned viewers to aid in creating a floodwall that is visually appealing, while balancing the need for increased flood safety at these locations. The District will be responsible for implementing and maintaining the modifications agreed upon.				
Air Quality				
Mitigation Measure AQ2.1—Implement Tailpipe Emission Reduction for Project Construction: The District will require all construction contractors to minimize air quality impacts related to construction activities during site preparation, grading, and construction. Emission reduction will include at least the following measures and may include other measures identified as appropriate by the District and/or contractor. • Maintain construction equipment in good condition. • Minimize truck idling. • Set up stationary equipment as far as possible from residences. The District will be responsible for proper and effective implementation, including the following specific duties. • Conduct periodic inspections to confirm that appropriate BMPs are being implemented. • Take corrective action to resolve issues revealed by either routine inspections or incoming complaints. According to the Bay Area Air Quality Management District (BAAQMD) guidelines (2012), the District will require all construction contractors to implement the exhaust Basic Construction Mitigation Measures and Additional Construction Mitigation Measures recommended by the BAAQMD to control exhaust emissions. Emission reduction measures will include at least the following measures and may include other measures identified as appropriate by the District and/or contractor. • Idling times shall be minimized either by shutting	All project elements during construction.	Construction contractors.	This measure will remain in effect for the duration of project construction.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
equipment off when not in use or reducing the maximum idling time to 2 minutes. Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. • The Project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20% NO_X reduction and 45% PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. • Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_X and PM. • Require all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.				
Mitigation Measure AQ2.2— Implement BAAQMD Basic Construction Mitigation Measures to Reduce Construction-Related Dust: The District will require all construction contractors to implement the Basic Construction Mitigation Measures recommended by the BAAQMD to reduce dust emissions. Emission reduction measures will include at least the following measures and may include other measures identified as appropriate by the District and/or contractor.	All project elements during construction.	Construction contractors.	This measure will remain in effect for the duration of project construction.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
• 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. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (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. • Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.				
Biological Resources				
Mitigation Measure BIO2.1—Avoid Work during Active Breeding and Dispersal Period for Special-Status Frogs: Unless approved by the U.S. Fish and Wildlife Service (USFWS), site preparation and construction activities that involve substantial earthwork, other ground disturbance, and/or vehicle traffic through frog-sensitive areas (grassland, pond, wetland, and riparian habitat) will not occur during the period when special-status frogs are actively breeding and dispersing from the beginning of the wet season through early summer (~~October 15 - June 15~~ November 1–March 31). When ground-disturbing activities must take place between November 1 and March 31, the site will be monitored daily by a	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance.	The District's project manager will implement this measure.	This measure will remain in effect for the duration of the project (construction and operation/maintenance).	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the District's Stream Maintenance Program (SMP) program manager will be responsible for ensuring proper implementation, for enforcement, and for

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
USFWS-approved biologist.				documenting compliance.
Mitigation Measure BIO2.2—Conduct Preconstruction Surveys at Work Sites in and near Frog-Sensitive Areas; Relocate Individuals as Needed: At least 24 hours prior to the onset of site preparation and construction activity at each site, a qualified wildlife biologist will conduct a preconstruction survey for special-status frogs within the project footprint. The survey will cover all areas where special-status frogs may be present or concealed, including cracks, burrows, vegetation adjacent to wet areas, and other temporary refugia, as well as any riparian or wetland habitat affected. If special-status frogs are determined to be absent from the project footprint, no further action will be required with regard to these species. If any listed amphibians are found within the project footprint, whenever possible construction work and/or maintenance activities in their vicinity will be avoided until they have moved outside of the project area of their own volition. If relocation outside the work area is necessary, a USFWS- and DFG-approved biologist working in accordance with agency-approved protocols will conduct the relocation before site preparation and construction activities begin. Relocation sites will be approved by the USFWS and DFG.	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance.	The District will retain a qualified wildlife biologist to implement this measure.	The surveys and any needed relocation of individuals described in this measure will be performed before site preparation and construction activity begins. Fencing will remain in place for the duration of construction or maintenance activity.	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational/maintenance period, the District's SMP program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Relocation sites will be established in consultation with DFG and USFWS as necessary. A written report will be submitted to DFG and USFWS detailing the survey results of listed amphibians and subsequent relocation activities (if necessary).
Mitigation Measure BIO2.3—Provide Construction Worker Awareness Training for Special-Status Frogs: The District will provide, or require contractors to provide, worker awareness training for construction personnel to enable them to recognize special-status frogs and other aquatic and riparian wildlife. Trained construction personnel will also understand where sensitive resource areas are within the construction zone so they can minimize their impact on upland (dispersal and aestivation) habitat. Training will be presented by a qualified wildlife biologist experienced in training nonspecialists. The training program will include at least the following: a description of the special-status species likely to use the site, and their	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance.	The District will retain a qualified wildlife biologist to implement this measure for construction contractor crews. The District will provide inhouse training for District staff involved in maintenance activities.	Construction crew training will occur prior to any work on the site. The District's inhouse training is provided on an ongoing basis.	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the District's SMP program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
habitat needs; photographs of these species; an explanation of the legal status of these species and their protection under the ESA and other regulations; a list of measures being taken to reduce effects to these species during project construction; and distribution of a fact sheet summarizing training content. The District will also distribute, or require contractors to distribute, the training summary fact sheet to anyone else who may enter the project site. Upon completion of training, employees will sign a form stating they attended the training and understand all the conservation and protection measures.				
Mitigation Measure BIO2.4—Install Exclusion Fencing and Conduct Construction Monitoring for Special-Status Frogs: Once it has been determined that no special-status frogs are on the project site, barrier fencing will be installed along the perimeter of the work area where necessary to ensure that frogs do not enter the site during construction. Fencing will be installed promptly after clearance surveys are performed, to ensure that frogs do not reenter the work area. A qualified biologist will be present during the installation of exclusion fencing, will determine which areas need to be monitored on a daily basis during construction activities to avoid harm to red-legged frogs, and will be responsible for follow-up monitoring during all ground-disturbing activities as needed. The monitor will inspect and maintain the integrity of the exclusion fencing and check the fence each morning for trapped frogs and conduct a survey of suitable habitat within the area to undergo disturbance that day prior to the initiation ground-disturbing activities. If a special-status frog is found at the fencing or within the excluded area during monitoring or any project activity, work will cease until the individual has been safely removed and relocated by a USFWS-approved biologist. Relocation will follow all applicable USFWS and DFG protocols and relocation sites will be approved by the USFWS and DFG.	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance.	The District will retain a qualified wildlife biologist to implement this measure.	Exclusion fencing will be installed immediately after clearance surveys, and will remain in place for the duration of construction. Construction monitoring for biological resources will take place on a timeline determined by the supervising wildlife biologist.	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational/maintenance period, the District's SMP program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Exclusion will be established in consultation with DFG and USFWS as necessary. A written report will be submitted to DFG and USFWS detailing the survey results of listed amphibians and subsequent relocation activities (if necessary).

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure BIO2.5—Restore Areas of Impact at the Rancho San Antonio County Park and Provide Suitable Habitat for California Red-Legged Frog: The District will mitigate ~~for~~ temporary and permanent impacts on California red-legged frog aquatic and upland habitat through the creation or restoration of suitable California red-legged frog habitat within the Permanente Creek area and an outside mitigation bank. Temporary impacts on California red-legged frog will be mitigated through restoration of the disturbed annual grasslands, coastal oak woodland, coyote bush scrub, valley foothill riparian, seasonal wetlands, and open water creek habitats. In addition to site restoration efforts, the project will add 1.95 acres of suitable California red-legged frog aquatic and upland habitat at the site once construction is complete. Permanent impacts of 0.07 acre of aquatic habitat will be mitigated through the purchase of at least 0.20-acre credit at an USFWS-approved off-site mitigation bank. Conservation credits will be purchased and documentation provided to USFWS at least 14 calendar days prior to the date of initial ground disturbance at the project site. ~~and preserved in perpetuity through a conservation easement.~~ In addition to the mitigation above, t~~T~~he District will develop a Mitigation and Monitoring Plan (MMP) to ensure that all removed habitat is replaced "in-kind" with the appropriate native riparian and upland species to maintain structural complexity and habitat value and provide suitable habitat for California red-legged frog. The MMP will be developed in the context of the federal and state permitting processes under the ~~CWA~~ Clean Water Act and California Fish and Game Code and will include success criteria as specified by the permitting agencies. The MMP will also include adaptive management guidelines for actions to be taken if the success criteria are not met. Additionally, the MMP will be developed in coordination with Santa Clara County Parks Department and Midpeninsula Regional Open Space District and submitted to USFWS prior to commencement of construction activities. Mitigation of	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance.	The District's project manager will implement this measure.	This measure will be fully implemented within 1 year following the completion of construction activities.	The District's program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. The Mitigation and Monitoring Plan will be developed in consultation with resource agency staff.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
permanent impacts on California red-legged frog upland and aquatic habitat will be fully implemented within 1 year following the completion of construction activities. Vegetation used ~~to plant~~ in the restoration areas will comprise native species that commonly occur~~ring~~ in the watershed and be suited to the proposed site and the surrounding landscape. The District will be responsible for planting and/or enhancing habitat to ensure that all habitat is fully restored to preconstruction conditions and the restoration areas provide suitable habitat for California red-legged frog. The initial annual monitoring will assess the progress of the plantings according to predetermined success criteria. If progress is not satisfactory, then adaptive management actions (including replanting, nonnative species removal, etc.) may be implemented. The MMP will remain in force until the success criteria are met.				
Mitigation Measure BIO4.1—Implement Survey and Avoidance Measures to Decrease Disturbance to Western Pond Turtles: Prior to the start of construction activities at sites that may support western pond turtle, the District will retain a qualified biologist to conduct preconstruction surveys for pond turtles in all suitable habitats in the vicinity of the work site. Surveys will take place no more than 7 days prior to the onset of site preparation and construction activities with the potential to disturb turtles or their habitat. If preconstruction surveys identify active nests, the biologist will establish no-disturbance buffer zones around each nest using temporary orange construction fencing. The demarcation should be permeable to allow young turtles to move away from the nest following hatching. The radius of the buffer zone and the duration of exclusion will be determined in consultation with the DFG. The buffer zones and fencing will remain in place until the young have left the nest, as determined by the qualified biologist. If western pond turtles are found in the project footprint, a qualified biologist will remove and relocate them to suitable habitat outside of the project limits, consistent with DFG protocols and permits. Relocation sites will be subject to agency approval.	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance; and Floodwalls and Levees downstream of US-101 during operation/maintenance.	The District will retain a qualified wildlife biologist to implement this measure.	The surveys and avoidance measures described in this measure will be performed before site preparation and construction activity begin at each site. Exclusion fencing will remain in place for the duration of work at each site, or as determined during consultation with DFG.	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational/maintenance period, the District's SMP program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Exclusion fencing will be established in consultation with DFG and USFWS as necessary. A written report will be submitted to DFG detailing the survey results of any western pond turtles and subsequent relocation activities (if

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
				necessary).
Mitigation Measure BIO5.1—Establish Buffer Zones for Nesting Raptors and Migratory Birds: If an active nest is discovered, the District will retain a qualified wildlife biologist to establish a no-disturbance buffer zone around the nest tree (or, for ground-nesting species, the nest itself). The no-disturbance zone will be marked with flagging or fencing that is easily identified by the construction crew and will not impact the nesting bird. In general, the minimum buffer zone widths will be as follows: 50 feet (radius) for nonraptor ground- nesting species; 50 feet (radius) for nonraptor shrub- and tree-nesting species; and 300 feet (radius) for all raptor species. Buffer widths may be modified based on discussion with DFG, depending on the proximity of the nest, whether the nest would have a direct line of sight to construction activities, existing disturbance levels at the nest, local topography and vegetation, the nature of proposed activities, and the species potentially affected. Buffers will remain in place as long as the nest is active or young remain in the area. No construction presence or activity of any kind will be permitted within any buffer zone until the biologist determines that the young have fledged and moved away from the area and the nest is no longer active.	All project elements during construction; and Rancho San Antonio County Park and McKelvey Park flood detention facilities and Floodwalls and Levees downstream of US-101 during operation/maintenance.	A qualified wildlife biologist retained by the District will be responsible for conducting the surveys described in this measure. If any active nests are identified, s/he will coordinate with DFG to establish buffers, will install or oversee the installation of exclusion fencing, and will determine when the nests) are no longer active.	Any buffers that are established as a result of surveys will remain in place as long as the nest is active or young remain in the area, as determined by the qualified wildlife biologist.	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational/maintenance period, the District's SMP program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Buffer zones will be established in consultation with DFG as necessary.
Mitigation Measure BIO6.1—Implement Survey and Avoidance Measures for Western Burrowing Owls Prior to Construction Activities: Western burrowing owl will be included in the preconstruction worker awareness training required for all construction personnel. Construction-worker awareness training will be conducted by a qualified biologist in coordination with the City of Mountain View's biologist. Prior to any construction activity planned to begin during the fall and winter nonnesting season (September 1 through January 31) during the survey or at any time during the construction process, the District will retain a qualified wildlife biologist to conduct a preconstruction survey for burrowing owls. As part of the preconstruction survey, the District will consult with the City of Mountain View's biologist and use Shoreline Regional Parks' monthly monitoring	Floodwalls and Levees downstream of US-101 during construction and operation/maintenance.	A qualified wildlife biologist retained by the District will be responsible for conducting the surveys described in this measure. If individuals are observed outside the nesting period, s/he will coordinate with DFG and Mountain View's biologist to identify and implement appropriate measures. If active nests are identified, s/he will coordinate with DFG and Mountain View's biologist to establish buffers, will install or oversee the	During the nonnesting season (September 1-January 31), surveys will be conducted no more than 7 days prior to ground-disturbing activities. For sites where construction work is scheduled to occur between February 1 and August 31, surveys will be completed before any site preparation or construction activities begin. Surveys will take place no more	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Buffers will be established in consultation with DFG as necessary. A written report will be submitted to DFG detailing the survey results of any western burrowing owls found on the project site.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
reports to identify occupied burrows within 150 meters of the construction footprint. The existing nest burrow at Vista Slope would be considered an occupied burrow for a minimum of 3 years. Surveys will be conducted no more than 7 days prior to ground disturbing activities and will cover all suitable burrowing owl habitat subject to disturbance per the March 7, 2012 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012). If any western burrowing owls are found within the disturbance area, the District will notify DFG and will proceed under DFG direction. If construction is planned to occur during the nesting season (February 1 through August 31), surveys for nesting owls will be conducted by a qualified wildlife biologist in the year prior to construction to determine if there is breeding pair within 150 meters of the construction footprint. This will provide the project team advance notice regarding nesting owls in the project area and allow ample time to discuss with DFG regarding the appropriate course of action if nesting owls are found. In addition, same-year pre-construction surveys for nesting western burrowing owls will be conducted no more than 7 days prior to ground disturbance in all suitable burrowing owl habitat. If the biologist identifies the presence of a burrowing owl nest in an area scheduled to be disturbed by construction, a no-activity buffer will be established and maintained around the nest while it is active. Surveys and buffer establishment will be performed by qualified wildlife biologists, will be coordinated with DFG and the City of Mountain View's biologist, and will be subject to DFG review and oversight.		installation of exclusion fencing, and will determine when the nest(s) are no longer active.	than 7 days prior to ground-disturbing activities. Any buffers that are established as a result of the surveys will remain in place as long as the nest is active, as determined by the qualified wildlife biologist.	
Mitigation Measure BIO9.1—Implement Survey and Avoidance Measures for Special-Status Bats: Prior to the start of construction activities at sites offering suitable bat roosting, the District will retain a qualified biologist to conduct preconstruction surveys for pallid bat, hoary bat, and Yuma myotis. Surveys will take place no more than 7 days prior to the onset of site preparation and construction activities with the potential to disturb bats or their habitat and will include	Rancho San Antonio County Park Flood Detention Facility, New Permanente Diversion Structure, and Channel Improvements during construction and operation/maintenance.	A qualified biologist retained by the District will be responsible for the surveys described in this measure and for any needed consultation with DFG.	Surveys will take place no more than 7 days prior to the onset of work.	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational/maintenance period, the District's SMP

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
close inspection of potential bat roosts, such as trees and any built features within the work footprint. If special-status bats are found in the project footprint and avoidance of roosting areas is not possible, a qualified wildlife biologist will consult with DFG staff to identify the appropriate protection measures. The District will be responsible to ensure that DFG requirements are implemented.				program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Protection measures will be identified in consultation with DFG as necessary.
Mitigation Measure BIO10.1—Conduct Surveys for San Francisco Dusky-Footed Woodrat and Protect Nests with Young: Prior to the start of construction activities at sites offering suitable foraging and/or nesting habitat for San Francisco dusky-footed woodrat, the District will retain a qualified biologist to conduct preconstruction surveys for woodrat nests. Surveys will take place no more than 7 days prior to the onset of site preparation and construction activities with the potential to disturb woodrats or their habitat. If woodrat nests are found in the project footprint, a qualified biologist will determine whether the nests are occupied. If unoccupied, the biologist will dismantle and remove the nest so it cannot be reoccupied prior to construction. If the nest is occupied and young are present, the area will be protected as a sensitive resource during construction. If avoidance of active woodrat nests is not possible, a qualified wildlife biologist will consult with DFG staff to identify appropriate protection measures. The District will be responsible to ensure that DFG requirements are implemented.	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance.	A qualified biologist retained by the District will be responsible for the surveys described in this measure, and for any needed follow-up activities.	Surveys will take place no more than 7 days prior to the onset of work.	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational/maintenance period, the District's SMP program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. Protection measures will be identified in consultation with DFG as necessary.
Mitigation Measure BIO13.1—Survey, Identify, and Protect Riparian Habitats: To avoid unnecessary damage to or removal of riparian habitat, the District will retain a qualified biologist or ecologist to survey and demarcate riparian habitat on or adjacent to the proposed areas of construction at Rancho San Antonio County Park and in any additional areas identified for protection under the jurisdiction of the DFG and Regional Water Quality Control Board (RWQCB). Riparian areas not slated for trimming or removal to accommodate Project construction will be	Rancho San Antonio County Park Flood Detention Facility during construction.	A qualified botanist, ecologist retained by the District will establish the setback buffers (i.e., determine their location and extent). The qualified botanist/ecologist will either install the construction fencing to	Surveys will be conducted and setbacks will be established and fenced before work begins. Fencing will remain in place for the duration of construction, site finishing, and demobilization.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
protected from encroachment and damage during construction by installing temporary construction fencing to create a no-activity exclusion zone. Fencing will be bright-colored and highly visible and installed under the supervision of a qualified biologist experienced in implementing techniques which avoid/minimize construction impacts on trees to prevent damage to riparian habitat during installation. The fencing and other methods deemed necessary such as trunk wrapping, root mulching, access route gravelling, etc. will protect all potentially affected riparian habitat consistent with International Society of Arboriculture tree protection zone recommendations and any additional requirements of the resource agencies with jurisdiction; fencing will be installed far outside the tree's dripline. Fencing and other protecting techniques will be installed before any site preparation or construction work begins and will remain in place for the duration of construction. Construction personnel will be prohibited from entering the exclusion zone for the duration of project construction. Essential vehicle operation on existing roads will be permitted, but all other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zone.		protect riparian habitat within the setback, or will supervise installation by construction personnel.		
Mitigation Measure BIO13.2—Restore Riparian Habitat in Areas of Impact: Wherever feasible, the District will integrate inlet and outlet structures with existing infrastructure to avoid and/or minimize impacts on riparian habitat. The District will retain a qualified biologist to identify and map areas where Project construction requires trimming and/or removal of riparian habitat prior to trimming or removing such habitat for the purposes of project element construction. Temporary impacts on riparian habitat at Rancho San Antonio County Park will be mitigated through restoration of the disturbed area at a 1:1 ratio. The District will also mitigate for permanent impacts on riparian habitat at Rancho San Antonio County Park through restoration of riparian habitat on Permanente Creek at another location in the park. Permanent impacts on riparian habitat at Rancho San	Rancho San Antonio County Park Flood Detention Facility during construction.	A qualified biologist retained by the District will be responsible for identifying and mapping riparian areas and preparing the Mitigation and Monitoring Plan.	The Mitigation and Monitoring Plan will be developed and restoration will be planned during the permit process, prior to ground disturbance. The Mitigation and Monitoring Plan will remain in force until the success criteria described in the plan are met.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. The Mitigation and Monitoring Plan will be developed in consultation with resource agency staff.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Antonio County Park will be mitigated at a minimum 1:1 ratio. The precise mitigation ratio for permanent impacts will be determined at a later date through agency coordination. The District will develop an MMP to ensure that all removed habitat is replaced "in-kind" with the appropriate native overstory and understory species to maintain structural complexity and habitat value. The MMP will be developed in the context of the federal and state permitting processes under the CWA and California Fish and Game Code and will include success criteria as specified by the permitting agencies. The MMP will also include adaptive management guidelines for actions to be taken if the success criteria are not met. Additionally, the MMP for Rancho San Antonio County Park will be developed in coordination with Santa Clara County Parks Department and Midpeninsula Regional Open Space District. The initial annual monitoring will assess the progress of the plantings according to predetermined success criteria. If progress is not satisfactory, then adaptive management actions (including replanting, nonnative species removal, etc.) may be implemented. The MMP will remain in force until the success criteria are met.				
Mitigation Measure BIO14.1—Avoid and Protect Jurisdictional Wetlands during Construction: To avoid construction encroachment on jurisdictional wetlands, the District will ensure that a qualified resource specialist (biologist, ecologist, or soil scientist) clearly identifies wetland areas with temporary orange construction fencing before site preparation and construction activities begin at each site or will implement another suitable low-impact measure (e.g., construction monitoring by a qualified individual). The resource specialist will use the wetland delineation mapping prepared for the proposed project and will confirm or modify the location of wetland boundaries based on existing conditions at the time of the survey. Exclusion fencing will be installed before construction activities are initiated and maintained throughout the construction period. No construction activity, traffic, equipment, or materials will be permitted in fenced wetland areas.	Rancho San Antonio County Park Flood Detention Facility and Floodwalls and Levees downstream of US-101 during construction.	A qualified resource specialist (biologist, ecologist, or soil scientist) retained by the District will establish the setback buffers (i.e., determine their location and extent). The qualified resource specialist will either install the construction fencing to protect jurisdictional wetlands within the setback, or will supervise installation by construction personnel.	At each site, all setbacks will be established and fenced before work begins. Fencing will remain in place for the duration of construction, site finishing, and demobilization.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure BIO14.2—Compensate for Temporary Loss of Existing Wetlands and Other Waters, Consistent with State and Federal Agency Requirements: The District will ensure that all wetland habitat temporarily impacted by Project activities at Rancho San Antonio County Park is compensated for, consistent with the terms of applicable state and federal permits at a minimum ratio of 1:1 to ensure no net loss of wetland habitat. ~~Prior to excavation of the flood detention basin, the District will salvage and stockpile topsoil from the work area to preserve the native wetland seed bank as well as the soils' existing biogeochemical characteristics.~~ The bottom of the basin will be graded to create swales that will collect surface runoff, as occurs under existing conditions and retain water to saturate soils, and create conditions suitable for the establishment and persistence of native wetland vegetation. Following excavation of the detention basin, ~~the salvaged material will be placed and~~ the surface will be fine-graded to create natural contours. ~~It is anticipated with topsoil salvage and replacement, and enhancement of the natural hydrology through creation of the detention basin that the wetland will re-establish following construction.~~ Appropriate native wetland species will also be planted within the basin to ~~supplement the salvaged seed bank,~~ provide vegetative structure~~,~~ and enhance habitat value. The details of site restoration, monitoring, and adaptive management will be specified in a Mitigation and Monitoring Plan (MMP) prepared by the District in compliance with the ~~CWA~~ Clean Water Act and California ~~Department of~~ Fish and Game Code. The MMP will also include success criteria for vegetation establishment, extent and duration of seasonal ponding/soil saturation, evidence of erosion and/or sediment deposition, adaptive management guidelines for actions to be taken if the success criteria are not met, and other parameters specified by the permitting agencies. The MMP will be developed in coordination with Santa Clara County Parks Department and Midpeninsula Regional Open Space District. The District will conduct annual monitoring to	Rancho San Antonio County Park Flood Detention Facility and Floodwalls and Levees downstream of US-101 during construction.	The District's project manager will implement this measure.	Mitigation planning, including identification of the mitigation site, will take place during the permit process, prior to ground disturbance.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. The Mitigation and Monitoring Plan will be developed in consultation with resource agency staff.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
assess re-establishment of wetland vegetation and hydrologic characteristics, and if necessary, implement adaptive management actions (including replanting, regrading, nonnative species removal, etc.) to ensure that there is no net loss of wetland habitat. Wetland compensation habitat will be set aside and protected in perpetuity through appropriate legal means, consistent with agency requirements and as specified in permits. The District will be responsible for all associated costs and logistics.				
Mitigation Measure BIO15.1—Transplant or Compensate for Loss of Protected Landscape Trees, Consistent with Applicable Tree Protection Regulations: Before ground disturbing activities (including site preparation) begin, the District will retain an ISA- (International Society of Arboriculture) or ASCA- (American Society of Consulting Arborists) certified arborist to conduct a tree survey to identify protected landscape trees, including native trees, heritage trees, and other landscape trees subject to local jurisdiction protection. Protected landscape trees slated for removal and deemed good candidates for transplantation will be considered for transplanting in conjunction with the proposed landscaping plans. Transplanted trees will be located onsite if space permits. If the number of trees to be transplanted is too large to be accommodated on the project site, the District will prepare a landscaping plan detailing other locations where transplanted trees will be planted, consistent with the requirements of the applicable tree protection ordinance or regulations. Transplanted trees will be subject to the monitoring and replacement requirements identified for replacement trees below. Protected landscape trees not deemed good candidates for transplantation will be replaced. The landscaping plan for tree replacement will specifically identify the locations where replacement trees are to be planted; replacements will occur onsite if possible. The landscaping plan will be subject to review and approval by the agency with jurisdiction (~~DFG~~ California Department of Fish and Wildlife, the County	Rancho San Antonio County Park and McKelvey Park flood detention facilities and Channel Improvements during construction.	Surveys and reporting will be performed by an ISA- or ASCA-certified arborist retained by the District. Landscape plans will be developed by a licensed landscape architect and/or civil engineer in consultation with the arborist and District project manager. Transplantation and compensation plantings will be performed by contractor staff under the supervision of the certified arborist.	The arborist surveys will be performed during project design. The landscaping plan, which will determine the feasibility of transplanting protected landscape trees, will be completed prior to ground disturbance. Transplantation efforts, if determined feasible by the certified arborist, will take place during construction as protected landscape trees are removed. If transplantation is not feasible, compensation will be arranged, and if possible, completed prior to ground disturbance. Any onsite compensation plantings will be provided during project construction/ site finishing.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
of Santa Clara, Midpeninsula Regional Open Space District, City of Los Altos, City of Mountain View, or City of Cupertino). Tree removals within the City of Mountain View will be compensated at a ratio of 1:1, or as determined by the City, with minimum 24-in box stock. Species and location of the replacement tree will be determined in consultation with the property owner and the City. Tree removals within the City of Los Altos will be compensated at a minimum ratio of 1:1, or as determined by the City, with minimum 24-inch box stock. Tree removals within the City of Cupertino will be compensated according to size of tree removed. Tree replacement guidelines are: • Trunk size of removed tree up to 12 inches; plant one 24-inch box tree. • Trunk size of removed tree over 12 inches and up to 18 inches; plant two 24-inch box trees. • Trunk size of removed tree over 18 inches and up to 36 inches; plant two 24-inch box trees or one 36-inch box tree. • Trunk size of removed tree over 36 inches; plant one 36-inch box tree. • Removal of heritage tree; plant one 48-inch box tree. If protected landscape trees are removed in the County of Santa Clara (at Rancho San Antonio County Park), such removals will be compensated in accordance with the County's Tree Preservation and Removal Ordinance (Section C16). Under Section C16, replacement trees must be of a like kind and species of trees removed, if native and feasible, or of a kind and species to be determined by the County's Planning Department. Replacement tree planting shall use ~~at least 5-gallon~~ direct seeding and treepot 4 size stock at a ratio determined by the Planning Department. A replanting and/or re-vegetation plan is				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
required for all trees to be removed and an erosion control plan may also be required where determined appropriate by County staff. Newly planted trees will be monitored by District staff at least once a year for 3 years. Each year, any trees that do not survive will be replaced consistent with the compensation required under the applicable tree ordinance. Any trees planted as remediation for failed plantings will then be monitored for a period of 3 years in the same manner, and any trees that do not survive will be replaced. Large boxed trees used as replacement for loss of landscape specimen trees will not be native species if these same species are found in the adjacent land. Commercially available native trees in these sizes are typically of unknown genetic origin, but often originate in southern California. Therefore, ecological sensitivity dictates that no commercial tree stock of native species present in the surrounding park land will be used in this project. Suitable substitute species will be selected that cannot hybridize with resident natives nor become invasive in the adjacent land. All activities in this Mitigation Measure will be conducted per the Guidelines and Standards for Land Use near Streams (Santa Clara Valley Water District 2007).				
Mitigation Measure BIO15.2—Protect Remaining Trees from Construction Impacts: Trees not designated for removal will be protected from damage during construction by installing temporary fencing and other methods determined necessary such as trunk wrapping, root mulching, access route gravelling, etc. consistent with International Society of Arboriculture tree protection zone recommendations. Fencing will be installed outside of the tree's dripline to keep construction equipment away from trees and prevent unnecessary damage to or loss of protected trees on the project site. Any protected trees retained on the site and located adjacent to construction activities will be monitored as specified for newly planted trees (see Mitigation Measure BIO15.1) and replaced if they do not survive through the monitoring period.	Rancho San Antonio County Park and McKelvey Park flood detention facilities and Channel Improvements during construction.	An ISA- or ASCA-certified arborist retained by the District will either install the construction fencing to protect remaining trees within the setback, or will supervise installation by construction personnel. Follow up monitoring will also be performed by a certified arborist.	At each site, all setbacks will be established and fenced before any site preparation or construction activities are permitted to commence.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Geology, Soils, and Mineral Resources				
Mitigation Measure GEO6.1—Stockpile Topsoil and Reuse Onsite: To minimize impacts on ~~top~~soil resources at Rancho San Antonio County Park, the District will require contractors to implement the following procedures. • The area of disturbance will be limited to the minimum needed for construction, staging, and access. • Where soil is removed from existing seasonal wetlands, the top 20 inches will be removed from the wetlands and a 25-foot buffer and legally disposed of. • ~~Where topsoil is removed, it~~ Outside of existing seasonal wetlands, the top 3 inches of soil will be removed and legally disposed of. Remaining soil will be sidecast and stockpiled in segregated, non-compacted windrows, no taller than 6 feet, for onsite reuse during site finishing. The contractor shall provide signage for each stockpile type to ensure that the proper soil type is placed at its respective stockpile. Site finishing will include ~~top~~soil replacement and revegetation with appropriate native species. ~~Topsoil~~ These soils will be stockpiled separate from other excavated materials to facilitate effective reuse. • Those excavated soils determined to be suitable for use as soil on-site will be used for lining the bottom of the detention basin and backfilling oak tree planting holes. Unsuitable soil will be defined as material that the District determines to be incapable of providing suitable conditions for plant growth.	Rancho San Antonio County Park and McKelvey Park flood detention facilities (topsoil loss) during construction.	Contractor staff will implement this measure, in consultation with the engineering geologist and civil engineer of record.	This measure will remain in effect for the duration of construction.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure GEO6.2—Provide Appropriate Topsoil Materials for Site Finishing: The District will consult with the architects responsible for design and construction of the restored athletic fields to identify site finishing needs. If the architect identifies it as beneficial to stockpile existing site soils for reuse, where existing amended topsoil is removed, it will be	McKelvey Park Flood Detention Facility (topsoil loss) during construction.	Contractor staff will implement this measure, in consultation with the engineering geologist of record and the landscape architect responsible for site design.	This measure will remain in effect for the duration of construction.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
sidecast and stockpiled for onsite reuse during restoration of the athletic fields. Topsoil will be stockpiled separate from other excavated materials to facilitate effective reuse. Alternatively, if recommended by the architect, the District will provide suitable imported materials to ensure appropriate site finishing, consistent with the design for the restored fields and current applicable standards for playing fields.				
Hazardous Materials and Public Health				
Mitigation Measure PHS2.1—Stop Work and Implement Hazardous Materials Investigations and Remediation in the Event that Unknown Hazardous Materials Are Encountered: In the event that unknown hazardous materials are encountered during construction or maintenance activities, all work in the area of the discovery will stop and the District will conduct a Phase II hazardous materials investigation to identify the nature and extent of contamination and evaluate potential impacts on project construction and human health. If no Phase I investigation was previously conducted and is identified as appropriate, it may be done concurrent with or prior to Phase II. If necessary, based on the outcomes of the Phase II investigation, the District will implement Phase III remediation measures consistent with all applicable local, state, and federal codes and regulations. Construction in areas known or reasonably suspected to be contaminated will not resume until remediation is complete. If waste disposal is necessary, the District will ensure that all hazardous materials removed during construction are handled and disposed of by a licensed waste-disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted disposal or recycling facility, in accordance with local, state, and federal requirements.	All project elements during construction and operation/maintenance.	All District and contractor staff will adhere to this measure. During the construction period, the District's project manager will be responsible for identifying and coordinating any needed follow-up. During maintenance, the District's SMP manager will be responsible for identifying and coordinating any needed follow-up. Any needed investigations, remediation, haulage, and/or disposal will be carried out by appropriately qualified and licensed personnel.	This measure will remain in effect for the duration of construction and operational/maintenance activities.	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational period, the District's SMP program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure PHS2.2—Implement Recommended Phase II Hazardous Materials Investigation and Any Required Follow-Up (Remediation): Prior to groundbreaking at sites for which a Level I/Phase I investigation has identified the need for a Phase II investigation, the District will conduct a Phase II hazardous materials investigation consistent with all applicable federal, state, and local codes and regulations. The District will also be responsible for ensuring that all recommendations of the Phase II investigation, including site remediation and/or additional coordination with regulatory agencies, are implemented consistent with the Phase II and all applicable codes, standards, and regulations. If waste disposal is necessary, the District will ensure that all hazardous materials removed during construction are handled and disposed of by a licensed waste-disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted disposal or recycling facility, in accordance with local, state, and federal requirements.	All project elements during construction and operation/maintenance.	The District project manager will be responsible for meeting the requirements of this measure. Any needed investigations, remediation, haulage, and/or disposal will be carried out by appropriately qualified and licensed personnel.	This measure will be implemented prior to ground-disturbing activities, and will remain in effect for the duration of construction and maintenance activities.	For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure PHS5.1—Prepare and Implement a Mosquito and Vector Control Plan: Prior to construction, the District will retain a qualified professional to prepare a mosquito and vector control plan for the proposed project facility. The plan will be developed in coordination with the SCCVCD and will be subject to SCCVCD approval. The plan will comply with requirements of the County's Integrated Pest Management Ordinance (NS-517.70). The approved plan will be implemented as part of the proposed project. The plan will identify areas where mosquito larvae are likely to be present onsite (e.g., in areas with standing water) and will specify mosquito management methods. The management methods may include the use of chemicals (e.g., pesticides), biological methods (e.g., use of mosquito fish *Bacillus thuringiensis* in water bodies), and/or control of excess runoff and areas where water can accumulate.	Rancho San Antonio County Park Flood Detention Facility during operation/maintenance.	The mosquito and vector control plan will be prepared by a qualified professional retained by the District. The plan will be prepared in consultation with SCCVD and the SCVWD's project manager and SMP program manager. The District's SMP program manager will be responsible for ensuring that the plan is implemented.	The plan will be prepared before construction begins, and will be implemented as soon as feasible following project construction.	The District's project manager will be responsible for ensuring proper implementation. For the construction period, the District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. For the operational/maintenance period, the District's SMP program manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure PHS6.1—Implement Wildland Fire Safety Measures: Consistent with the California Public Resources Code the following measures will be implemented. The District will be responsible for ensuring proper implementation. • All vehicles, heavy equipment, and portable equipment with internal combustion engines will be equipped with properly functioning spark arrestors. • Appropriate fire suppression equipment will be provided on the job site, and will be kept in a clearly marked and accessible location. • All personnel will be made aware of the location of fire suppression equipment and trained in its use. • No portable tools powered by internal combustion engines will be used within 25 feet of any flammable materials unless appropriate fire suppression equipment is provided within 25 feet of the location of the activity. • Flammable materials will not be stored within 10 feet of any equipment that could produce a spark, fire, or flame.	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance.	Contractors will implement this measure at the direction of the District project manager.	This measure will remain in effect for the duration of construction.	The District's project manager will be responsible for ensuring proper implementation.
Hydrology and Water Resources				
Mitigation Measure HWR2.1—Provide Alternate Water Supply during Construction: If requested, the District will ensure that a temporary source of alternate water supply is provided for the Gate of Heaven Cemetery to replace supply from the well decommissioned for construction at Rancho San Antonio County Park.	Rancho San Antonio County Park Flood Detention Facility (Septic System/Drain Fields) during construction.	The District project manager will liaise with Gate of Heaven Cemetery to assess the need for alternate water supply during construction, and will ensure that any needed designs and permitting are accomplished during the project design phase. Contractor or District staff will provide the alternate water supply (temporary well or truck watering) at	If requested by Gate of Heaven Cemetery, the temporary alternate water supply will be in place prior to decommissioning of the existing well at Gate of Heaven cemetery, and will remain in place for the duration of construction, until the permanent supply provided in Mitigation Measure HWR2.2 below is operational.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
		the direction of the District project manager.		
Mitigation Measure HWR2.2—Replace Groundwater Supply Well Decommissioned to Accommodate Construction: As soon as feasible, the District will replace the water supply well decommissioned for construction at Rancho San Antonio County Park. The replacement well will be sited and constructed to provide supply equal to that provided by the decommissioned well.	Rancho San Antonio County Park Flood Detention Facility (Septic System/Drain Fields) during construction.	The District project manager will liaise with Gate of Heaven Cemetery during design of the permanent replacement water supply (presumed to be a new groundwater well), to ensure that its location and design will meet the Cemetery's needs. Contractor or District staff will install and develop the new well at the direction of the District project manager.	This measure will be implemented as soon as feasible during or following construction of the flood detention facility at Rancho San Antonio County Park.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure HWR2.3—Septic System and Drain Field Design: The following measures shall be completed prior to the General Permit issuance to ensure compliance with regulatory requirements and prevent significant water quality impacts: • A Piezometer test to be conducted at the proposed drain field to identify groundwater levels. • A percolation test shall be conducted at the site to determine expected percolation rates. Percolation rates are required to be within the range of 1 to 120 minutes per inch. Based on the results of the test, the contractor may be required to amend the soil and retest the percolation rate until required rate is achieved. • The septic system design shall be submitted to the District for review and approval, demonstrating compliance with County and State (i.e., San Francisco Bay RWQCB, County of Santa Clara, and Uniform Plumbing Code) septic system requirements regarding location, sizing, installation and maintenance of facilities. The septic system design must be approved by the	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance.	Soil testing shall be conducted by the contractor staff and submitted to the District for review and approval. The septic system design must be approved by the County prior to permit issuance.	These measures shall be completed prior to issuance of the General Permit.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
County prior to permit issuance.				
Mitigation Measure HWR2.4—Ensure that Artificial Turf Infill Composition Meets Water Quality Objectives and Agency Requirements: The District will ensure that infill material composition will meet the water quality objectives for groundwater and Permanente Creek established in the San Francisco Water Quality Control Board's Basin Plan. The District will submit artificial turf material composition for approval by the City of Mountain View, RWQCB, and DFG. If a suitable material that meets City, RWQCB, and DFG requirements cannot be found, then natural grass playing fields will be installed.	McKelvey Park Flood Detention Facility during construction and operation/maintenance.	The District's project manager will implement this measure.	This measure shall be completed prior to implementation of the artificial turf.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Noise and Vibration				
Mitigation Measure NV1.1—Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents: The District will provide advance written notification of the proposed construction activities to all residences and other noise- and air quality–sensitive uses within 750 feet of the construction site. Notification will include a brief overview of the proposed project and its purpose, as well as the proposed construction activities and schedule. It will also include the name and contact information of the District's project manager or another District representative or designee responsible for ensuring that reasonable measures are implemented to address the problem (the construction noise and air quality disturbance coordinator; see Mitigation Measure NV1.3).	McKelvey Park Flood Detention Facility, New Permanente Structure, and Channel Improvements during construction.	District staff will implement this measure at the direction of the District project manager.	Advance written notification of proposed construction activities will be provided at least one month and not more than three months in advance of site work. The 24-hour hotline will be in operation for the duration of construction at each site, including site finishing and demobilization.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure NV1.2—Implement Work Site Noise Control Measures: To reduce noise impacts, the District will require all contractors to adhere to the following measures. The District will be responsible for ensuring implementation. • All construction equipment will be equipped with manufacturer's standard noise control devices or with equally effective replacement devices consistent with manufacturer specifications. • Stationary noise-generating equipment will be	McKelvey Park Flood Detention Facility, New Permanente Diversion Structure, and Channel Improvements during construction.	The construction manager/ foreperson will implement this measure.	This measure will remain in effect for the duration of construction at each site.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
located as far as possible from sensitive receptors, and, if feasible, will be shielded by placement of other equipment or construction materials storage. • Contractors will be required to use ambient-sensitive backup alarms. • In Los Altos, construction will be limited to between 7 a.m. to 5:30 p.m., Monday through Friday, between 9 a.m. and 3 p.m. on Saturdays, and will not occur on City-observed holidays, except for emergency work of public utilities or by special exception. • In Cupertino, construction will be limited to between 7 a.m. and 8 p.m. on weekdays and will not occur on Saturday or Sunday or holidays, except for emergency work. • In Mountain View, construction will be limited to between 7 a.m. and 6 p.m. on weekdays and will not occur on weekends or holidays unless prior written approval is granted by a building official.				
Mitigation Measure NV1.3—Designate Noise and Air Quality Disturbance Coordinator to Address Resident Concerns: The District will designate a representative to act as construction noise and air quality disturbance coordinator, responsible for resolving construction noise and air quality concerns. The disturbance coordinator's name and contact information will be included in the preconstruction notices sent to area residents (see Mitigation Measure NV1.1). She or he will be available during regular business hours to monitor and respond to concerns; if construction hours are extended, the disturbance coordinator will also be available during the extended hours. In the event an air quality or noise complaint is received, she or he will be responsible for determining the cause of the complaint and ensuring that all reasonable measures are implemented to address the problem.	McKelvey Park Flood Detention Facility, New Permanente Diversion Structure, and Channel Improvements during construction.	The District's project manager will designate a noise disturbance coordinator. The noise disturbance coordinator will be responsible for receiving and responding to noise complaints, and will coordinate with the District project manager to implement timely solutions.	This measure will remain in effect for the duration of project construction. Resolutions to noise complaints will be provided as rapidly as possible.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure NV1.4—Install Temporary Noise Barriers: As described in Mitigation Measures NV1.1, NV1.2, and NV1.3, the District will notify noise-sensitive land uses near the site of upcoming activity before construction begins, will require construction-site noise reduction measures, and will provide a 24-hour complaint hotline. If a resident submits a complaint about construction noise and the District is unable to reduce noise levels to below the significance threshold through other means, the District will install temporary noise barriers, where feasible, to reduce noise levels below the applicable construction noise standard. Barriers will be installed as promptly as possible, and, if possible, work responsible for the disturbance will be suspended or modified until barriers have been installed. The District will include a construction bid item to provide noise barriers onsite and install noise barriers immediately in response to noise or dust concerns from the community. Following are the relevant specifications. • The barrier will be 10 feet tall. It will surround the work area to block the line of sight for all diesel-powered equipment on the ground, as viewed from any private residence or any building. • The barrier will be constructed of heavyweight plywood (at least 5/8 inch thick) or other material providing a Sound Transmission Classification of at least 25 dBA. (As above, note that 5/8 inch is sufficiently thick to provide optimal noise buffering; increasing the thickness of the barrier above 5/8 inch would not provide a noticeable improvement in noise reduction.) • The barrier will be constructed with no gaps or holes that would allow noise to transmit through the barrier. • To minimize reflection of noise toward workers at the construction site, the surface of the barrier facing the workers will be covered with sound-absorbing material that meets a Noise Reduction Coefficient of at least 0.70.	McKelvey Park Flood Detention Facility and New Permanente Diversion Structure during construction.	Noise barriers will be installed by contractor staff at the direction of the District project manager	This measure will remain in effect for the duration of construction. Noise barriers will be installed as promptly as possible, and, if possible, work responsible for the disturbance will be suspended or modified until barriers have been installed.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure NV2.3—Conduct Construction Vibration Assessment and Implement Recommended Vibration Control Approach(es) for Shoring Installation: Prior to final design of the shoring system, the District will retain a qualified, state-licensed geotechnical professional to determine site-specific soil stratigraphy and engineering properties and model anticipated vibration levels based on soil properties. If the anticipated vibration level at any home exceeds 80 VdB, the District will modify the design of the shoring system to achieve the 80 VdB threshold (for example, by prohibiting use of impact pile driving; using vibratory pile driving; or using drilled piles).	Channel Improvements during construction.	A qualified, state-licensed geotechnical professional retained by the District will conduct the vibration assessment. If modifications to project design are required to meet the thresholds in this mitigation measure, they will be developed by the design team in consultation with the geotechnical professional, at the direction of the District project manager.	This measure will be implemented prior to final design, and will remain in effect for the duration of construction.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure NV2.4—Conduct Construction Vibration Monitoring for Shoring Installation: The District will retain a qualified acoustical consultant or engineering firm to conduct vibration monitoring at the nearest vibration-sensitive receptor during periods of temporary construction where construction equipment for shoring installation is located within 100 feet of occupied buildings or other vibration-sensitive structures. If at any point the measured PPV is in excess of 0.1 in/sec, construction activity will cease and alternative methods of construction and excavation will be considered to prevent possible exposure of vibration-sensitive buildings and structures to levels of 0.2 in/sec PPV or higher. Prior to construction activity, a preconstruction survey will be conducted which documents any existing cracks or structural damage at vibration-sensitive receptors by means of black and white photography or video. Additionally, a designated complaint coordinator will be responsible for handling and responding to any complaints received during such periods of construction. The District will also implement a reporting program that documents complaints received, actions taken, and the effectiveness of these actions in resolving disputes.	Channel Improvements during construction.	A qualified acoustical consultant or engineering firm retained by the District will conduct the monitoring described in this measure and will issue stop work orders if needed. The District's project manager will be responsible for designating the complaint coordinator and implementing a reporting program. The District's project manager will be responsible for evaluating the need for alternate construction methods.	Pre-construction baseline surveys will be completed with property owner permission, before construction activity begins. Occupied buildings and other vibration-sensitive structures within 100 feet of areas where shoring is to be installed will be identified before construction activity begins. The complaint coordinator will be designated and the reporting system will be defined before construction activity begins; the complaint response program will remain in operation for the duration of construction. Vibration monitoring will be carried out for all work periods when construction	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
			equipment is located within 15 feet of occupied buildings or other vibration-sensitive structures.	
Paleontological Resources				
Mitigation Measure PALEO1.1—Provide Preconstruction Worker Awareness Training: The District will ensure that all construction personnel receive paleontological resources awareness training that includes information on the possibility of encountering fossils during construction; the types of fossils likely to be seen, based on finds in the site vicinity; and proper procedures in the event fossils are encountered. Worker training will be prepared and presented by a qualified paleontologist as defined by the SVP (Society of Vertebrate Paleontology Conformable Impact Mitigation Guidelines Committee 1995) or other appropriate personnel (e.g., California licensed professional geologist with appropriate experience and expertise) experienced in teaching nonspecialists. It may be delivered at the same time as other preplanned construction worker education or it may be presented separately.	All project elements during construction.	The District will retain a qualified paleontologist or California-licensed professional geologist experienced in training nonspecialists to deliver the required training.	Training will occur prior to ground disturbance.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure PALEO1.2—Conduct Preconstruction Survey, with Salvage if Needed: For sites where native substrate materials of high paleontological sensitivity are exposed, the District will retain a qualified professional paleontologist as defined by the SVP's Conformable Impact Mitigation Guidelines Committee (1995) to conduct a pedestrian surface survey before site preparation and project earthwork begin to assess whether paleontological materials are exposed at the surface and should be salvaged. If salvage is required, this will also take place before ground-disturbing activities begin. The goal of the survey and follow-up activities will be to ensure that paleontological materials exposed at the surface are protected, recovered, and properly prepared and curated. If materials must be protected in place until they can be excavated, protection will be designed and installed in consultation with the	Rancho San Antonio County Park Flood Detention Facility and Channel Improvements.	A qualified paleontologist retained by the District will be responsible for conducting the survey. If salvage and/or protection are required, measures will be designed and implemented by the qualified paleontologist in consultation with the District's project manager.	Surveys will be conducted prior to ground disturbance, and with enough lead time to allow for salvage and/or protection. If salvage or protection is needed, these operations will also be completed prior to construction ground disturbance.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
District's project manager to ensure that it is appropriate and effective but does not unduly impede construction activities.				
Mitigation Measure PALEO1.3—Retain a Qualified Professional Paleontologist to Monitor during Ground-Disturbing Activities: The District will retain a qualified professional paleontologist as defined by the SVP's Conformable Impact Mitigation Guidelines Committee (1995) to monitor during any activities with the potential to disturb substrate units identified as highly sensitive for paleontological resources. Paleontological monitoring will consist of observing operations and periodically inspecting disturbed, graded, and excavated surfaces. The monitor will have authority to divert grading or excavation away from exposed surfaces temporarily in order to examine disturbed areas more closely and/or recover fossils. The qualified paleontologist responsible for monitoring will coordinate with the construction manager to ensure that monitoring is thorough but does not result in unnecessary delays.	All project elements during construction.	The District will retain a qualified paleontologist to conduct the construction monitoring described in this measure.	This measure will remain in effect for the duration of construction and site finishing (all ground-disturbing activities) unless determined otherwise by the supervising paleontologist.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure PALEO1.4—Stop Work if Vertebrate Remains Are Encountered during Project Activities; Conduct Treatment and Curation as Appropriate: If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist as defined by the SVP's Conformable Impact Mitigation Guidelines Committee (1995) can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The District will be responsible for ensuring that the recommendations of the paleontological monitor regarding treatment and reporting are implemented.	All project elements during construction.	Stop work orders may be issued by the qualified paleontologist, or by the construction foreperson in response to discoveries by construction workers. All District and contractor staff will be responsible for adhering to stop work orders. Any follow-up (evaluation, treatment) will be performed by or under the supervision of the qualified paleontologist.	This measure will remain in effect for the duration of construction.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure PALEO1.5—Assess Potential for Project Excavation to Disturb Pleistocene Strata: For sites where materials of Holocene age are present at the surface, before ground-disturbing activities begin, the District will retain a California-licensed professional geologist (PG) with appropriate experience to evaluate the potential for project earthwork to disturb Pleistocene or other strata identified as highly sensitive for paleontological resources. Based on the professional judgment of the responsible PG, this assessment may also include an evaluation of the age/stratigraphic affinity of surface-exposed materials identified as Holocene. The evaluation may rely on the published literature, geotechnical data collected to support project design, or other sources deemed appropriate by the responsible PG.	McKelvey Park Flood Detention Facility during construction.	This evaluation will be performed by California-licensed professional geologist with (1) expertise in the Pleistocene and Holocene stratigraphy and paleontology of the Santa Clara Valley, and (2) familiarity with current best practices for paleontological resources impact assessment and protection.	Site evaluation will take during the design process, and will be completed prior to ground disturbance.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Recreation				
Mitigation Measure REC3.1—Provide Advance Notice for Limited Access or Closure of Recreation Facilities: Prior to the commencement of construction that necessitates limited access or closure of recreational facilities, the District will notify and coordinate with the agency that oversees the affected facilities. The purpose of notification/coordination will be to provide timely notice allowing agencies to provide the public with adequate information on alternate recreational facilities. The District will also post signage at affected facilities to inform the public of alternate recreational facilities.	McKelvey Park Flood Detention Facility during construction.	The District's project manager will coordinate written notification and posting of signage.	Notification will occur and signs will be posted at least 30 days before construction begins at each site. Signage will remain in place for the duration of project construction.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure REC3.2—Provide Alternate Site for McKelvey Park Sports Activities during Construction: The District will work with the City of Mountain View and stakeholders to provide an existing alternate site for McKelvey Park sports activities displaced during construction.	McKelvey Park Flood Detention Facility during construction.	The District's project manager will coordinate written notification and posting of signage with the City of Mountain View.	Notification will occur and signs will be posted at least 30 days before construction begins at each site. Signage will remain in place for the duration of project construction.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure REC3.3—Minimize Disruption or Loss of Recreational Activity: The District will coordinate with the County of Santa Clara and Midpeninsula Regional Open Space District to avoid disruption of ongoing flying activities and minimize the loss of available flying area.	Rancho San Antonio County Park Flood Detention Facility during construction and operation/maintenance	The District's project manager will coordinate with the Midpeninsula Regional Open Space District.	Coordination with Midpeninsula Regional Open Space District will be initiated before any construction activity begins, and will remain in effect for the duration of the project.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Transportation and Traffic				
Mitigation Measure TT1.1—Require a Site-Specific Traffic Control Plan: For each work site, the District will work with a design engineer to develop a site-specific traffic control plan to minimize the effects of construction activities and traffic on surrounding roadways, bicycle and pedestrian facilities, transit services, and emergency access. The plan will be prepared with oversight by a licensed traffic engineer and with input from school, park, and community stakeholders and local neighborhood residents to ensure that all concerns are appropriately addressed. The plans will be subject to review and approval by the District and, as applicable, the Cities of Mountain View, Cupertino, and Los Altos (including local Police and Fire Departments), the County of Santa Clara, and the Midpeninsula Regional Open Space District prior to bidding. The District will be responsible for ensuring that the plan is effectively implemented. All traffic control plans will include, at a minimum, information regarding working schedules and hours, allowable and restricted streets, allowable times for lane closures, emergency vehicle access, detours, access to private and public properties, and protocol and format for providing construction updates to local agencies as agreed upon by individual agencies. All construction traffic control plans will contain the following general requirements. • Restrict work site access to the roadways indicated on the traffic control plan. • Prohibit access via residential streets unless expressly approved by the city with jurisdiction.	All project elements during construction.	The District's project manager will liaise with the Cities during project design to identify issues that should be addressed in the site-specific traffic control plan for each work site, and will oversee contractors developing the individual plans. Each plan will be developed with oversight from a licensed traffic engineer. All District and contractor staff will adhere to the plans.	Coordination with local jurisdictions will be initiated before any construction activity begins, and will remain in effect for the duration of the project. The traffic control plan for each site will be completed and approved by the local jurisdiction prior to ground disturbance; draft traffic control plans will be submitted for review and approval for each work site. Traffic control plans will be in effect for the entire duration of construction at each site.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance. The local jurisdiction for each work site will have review and approval authority over the applicable traffic control plan.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
• Maintain two-way traffic flow on arterial roadways accessing active work sites except where closure is needed to accommodate construction of project facilities, or unless otherwise allowed by the city having jurisdiction. Where temporary lane closures cannot be avoided, two-way flow may be provided as flow in alternating directions, controlled by flaggers. Provide advance construction warning signage for lane closures. • Limit lane closures to the duration and area required for safety. • Provide a minimum of 72-hour advance notification if access to driveways or private roads will be affected. Limit effects on driveway and private roadway access to working hours and ensure that access to driveways and private roads is uninterrupted during non-work hours. If necessary, use steel plates, temporary backfill, or another accepted measure to provide access. When special needs or events require unimpaired access for local businesses and residents, 7 days advance notification will be provided. • Include an emergency contact number for the public in the notification to provide an opportunity for the District to promptly address any access issues that arise during construction. • Provide 30-day advance notification of necessary closures on pedestrian/bicycle trails or paths. The detour routes will be designed in conformance with the VTA Bicycle Technical Guidelines (BTG). • Provide clearly marked pedestrian and/or trail detours if any sidewalk or pedestrian walkway or trail closures are necessary. • Provide clearly marked bicycle detours if heavily used bicycle routes must be closed or if bicyclist safety would be otherwise compromised. • Provide crossing guards and/or flagpersons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
• Use nonskid traffic plates over open trenches to minimize hazards. • Locate all stationary equipment as far away as possible from areas used by vehicles, bicyclists, and pedestrians. • Notify and consult with emergency service providers, and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles. Ensure clear emergency access to all existing buildings and facilities at all times. The District will submit emergency access plans for approval by emergency service providers in the affected areas (including local Police and Fire Departments) as part of the overall Traffic Control Plan to ensure satisfaction that normal response time parameters for emergency calls in the area can be achieved. • Queue trucks only in areas allowed by the city having jurisdiction. • Provide adequate parking for construction vehicles, equipment, and workers within the designated staging areas throughout the construction period. If adequate space for parking is not available at a given work site and staging area, provide an offsite parking area at another suitable location, and coordinate the daily transport of construction vehicles, equipment, and personnel to and from the work site as needed. • Fences, barriers, lights, flagging, guards, and signs will be installed as determined appropriate by the public agency having jurisdiction to give adequate warning to the public of the construction and of any dangerous condition to be encountered as a result thereof.				

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
Mitigation Measure TT1.2—Require All Construction Traffic to Avoid the Springer Road/El Monte Avenue and Springer Road/Fremont Avenue Intersections at Peak Traffic Hours: The District will require all construction traffic to avoid the Springer Road/El Monte Avenue and Springer Road/Fremont Avenue intersections at peak traffic hours. Impacts at these intersections are adequately minimized by the selection of alternate routes included in the Traffic Control Plan described in Mitigation Measure TT1.1.	Channel Improvements during construction.	The District's project manager will oversee contractors developing the individual traffic control plans. Each plan will be developed with oversight from a licensed traffic engineer. All District and contractor staff will adhere to the plans, including this measure.	This stipulation will be included in all traffic control plans for Project construction. The traffic control plan for each site will be completed and approved by the local jurisdiction prior to ground-disturbing activities; draft traffic control plans will be submitted for review and approval for each work site. Traffic control plans will be in effect for the entire duration of construction at each site.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure TT1.3—Provide Detour Plan to Reroute Traffic, Bicyclists, and Pedestrians on Existing Bridges during Construction of Creek Crossings: The District will work with the Cities of Mountain View and Los Altos to develop a detour plan for vehicle traffic, bicyclists, and pedestrians rerouted from bridges crossing on Mountain View Avenue, Arroyo Drive, Marilyn Drive, north and south Sunset Drive, Springer Road, Cuesta Drive, and Arboleda Drive during construction of these culvert crossings over Hale Creek. The detour plan will be subject to approval by the Police and Fire Departments to ensure satisfaction that normal response time parameters for emergency calls in the area can be achieved. The detour plan will be included in the traffic control plan(s) for these project elements, and the District will be responsible for proper implementation. The detour route(s) will be designed to provide efficient access and ensure that emergency service is not impaired, while minimizing corollary impacts on other area roadways. Detour route(s) will be clearly marked with signage. Signage announcing the closure and detour will be posted at least 2 weeks in advance of closure. An emergency contact number for the public will be included in the notification to provide an opportunity for the District to promptly address any	All project elements during construction.	The District's project manager will oversee contractors developing the individual traffic control plans. Each plan will be developed with oversight from a licensed traffic engineer. All District and contractor staff will adhere to the plans, including this measure.	The Mountain View Avenue detour plan will be included in the traffic control plan(s) for Hale and Permanente Creek channel improvements. The traffic control plan for each site will be completed and approved by the local jurisdiction prior to ground-disturbing activities; draft traffic control plans will be submitted for review and approval for each work site. Traffic control plans will be in effect for the entire duration of construction at each site.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.

Mitigation Measure	Required for the Following Sites/Project Phases	Implementation Responsibility	Implementation Timing	Monitoring, Enforcement, and Reporting Responsibility
access or travel delay issues along the detour routes during the closures.				
Cumulative Impacts				
Mitigation Measure CU1—Coordinate Haul Traffic with Local Jurisdictions: The District will coordinate construction haul and delivery traffic with the affected cities to identify overlap with other area construction and roadway improvement projects. As appropriate, and per agreement with the affected jurisdictions, the District will limit construction haul and delivery trips to off-peak hours and may also require contractors to avoid particular roadways or intersections.	All project elements during construction.	The District's project manager will oversee contractors developing the individual traffic control plans. Each plan will be developed with oversight from a licensed traffic engineer. All District and contractor staff will adhere to the plans, including this measure.	Coordination will be initiated before any construction activity begins, and will remain in effect for the duration of construction. Agreements made during the coordination process (routing constraints, hours constraints, etc.) will be included in the traffic control plans for Project construction. The traffic control plan for each site will be completed and approved by the local jurisdiction prior to ground-disturbing activities; draft traffic control plans will be submitted for review and approval for each work site. Traffic control plans will be in effect for the entire duration of construction at each site.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.
Mitigation Measure CU2—Implement BMPs to Reduce GHG Emissions: The District will require all construction contractors to implement the following measures to the extent they are feasible. • Using local building materials. • Recycling or reusing construction waste or demolition materials.	All project elements during construction.	Construction contractors.	Specifics for each work site will be negotiated with contractors during the construction contracting process.	The District's project manager will be responsible for ensuring proper implementation, for enforcement, and for documenting compliance.