INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
for Calcine Roads Remediation Project

PREPARED BY:

URS
1333 Broadway, Suite 800
Oakland, California, 94612

PREPARED FOR:

County of Santa Clara
Parks and Recreation Department 298
Garden Hill Drive
Los Gatos, California 95023
INITIAL STUDY
Environmental Evaluation Checklist for Santa Clara County

Project Title: Calcine Roads Remediation Project  Date: March 2015
File Number: None  APN(s): 575-10-005
500" Map #: 141
Zoning: ‘HS-sr-h1’ Hillside with a Scenic Road and Historic New Almaden Combining District
General Plan Designation: Regional Park, Existing New Almaden Historical Area
Project Type: Calcine Pavement Removal  USA (if any): None
Lead Agency Name & Address: County of Santa Clara, Parks and Recreation Department
298 Garden Hill Drive, Los Gatos, CA 95032-7669
Applicant Name & Address: County of Santa Clara, Parks and Recreation Department
298 Garden Hill Drive, Los Gatos, CA 95032-7669
Owner Name & Address: County of Santa Clara, Parks and Recreation Department
298 Garden Hill Drive, Los Gatos, CA 95032-7669
Telephone: Reem Assaf, P.E, Capital Projects Manager II
408-355-2208

Project Location (address or description): Almaden Quicksilver County Park
21785 Almaden Road, San Jose, CA 95196

Project Description: The project would remove calcine pavement used as surface cover on fire roads and trails (for purposes of this document, roads and trails shall be used interchangeably) in Almaden Quicksilver County Park (AQ County Park) that are identified as containing calcine pavements. The project would include removal of all calcine pavement and replacement with clean soil; the repair of inboard drainage ditches; and stabilization of existing slumps and over steepened road edges.

Environmental Setting / Surrounding Land Uses: The project site is located within AQ County Park and the New Almaden Historic District. The project area, which includes eleven different project sites, is surrounded by open space hillside areas except to the north, where AQ County Park is adjacent to residential neighborhoods within the City of San Jose.

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement): Permits, agreements and consultations may be required from the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the City of San Jose.
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ABAG  Association of Bay Area Governments
ASA  Architecture and Site Approvals
AQ County Park  Almaden Quicksilver County Park
BAAQMD  Bay Area Air Quality Management District
BMPs  Best Management Practices
CAAQS  California Ambient Air Quality Standards
CalOSHA  California Division of Occupational Safety and Health
CARB  California Air Resources Board
CCR  California Code of Regulations
CDFW  California Department of Fish and Wildlife
CEQA  California Environmental Quality Act
CESA  California Endangered Species Act
CNDDB  California Natural Diversity Database
CNPS  California Native Plant Society
CRHR  California Register of Historical Resources
CRLF  California red-legged frog (*Rana draytonii*)
CO  carbon monoxide
County  County of Santa Clara
County Parks  Santa Clara County Parks and Recreation Department
CTS  California tiger salamander (*Ambystoma californiense*)
CWA  Clean Water Act
DBH  Diameter at Breast Height
DCP  Dust Control Plan
DTSC  California Department of Toxic Substances Control
EIR  Environmental Impact Report
ESA  Endangered Species Act
ESLs  Environmental Screening Levels
GHG  greenhouse gas
IS/MND  Initial Study/Mitigated Negative Declaration
MBTA  Migratory Bird Treaty Act
mg/kg  milligrams/kilogram
NAAQS  National Ambient Air Quality Standards
NAHC  California Native American Heritage Commission
NPDES  National Pollutant Discharge Elimination System
NMFS  National Marine Fisheries Service
NO₂  nitrogen dioxide
NOₓ  nitrogen oxides
NRHP  National Register of Historic Places
NWIC  Northwest Information Center
ROG  reactive organic gases
RWQCB  Regional Water Quality Control Board (San Francisco Bay Region)
SCVWRPC  Santa Clara Valley Water Resources Protection Collaborative
SO₂  sulfur dioxide
SOD  Sudden Oak Death Syndrome
SWPPP  Stormwater Pollution Prevention Plan
SWRCB  California State Water Resources Control Board
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>TAC</td>
<td>Toxic Air Contaminant</td>
</tr>
<tr>
<td>TMDL</td>
<td>Total Maximum Daily Load</td>
</tr>
<tr>
<td>USACE</td>
<td>United States Army Corps of Engineers</td>
</tr>
<tr>
<td>U.S. EPA</td>
<td>U.S. Environmental Protection Agency</td>
</tr>
<tr>
<td>USFWS</td>
<td>United States Fish and Wildlife Service</td>
</tr>
<tr>
<td>WDRs</td>
<td>Waste Discharge Requirements</td>
</tr>
</tbody>
</table>
SECTION 1: INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

In the early 1970s, the County of Santa Clara (County) acquired approximately 3,600 acres within the New Almaden Mining District from the New Idria Mining and Chemical Company. The area subsequently became Almaden Quicksilver County Park (AQ County Park) and opened for public use in 1975.

In 1987, the California Department of Toxic Substances Control (DTSC) issued a Remedial Action Order to evaluate mercury contamination within AQ County Park and take corrective action. In response, the County conducted an Environmental Mercury Assessment of AQ County Park in 1988 (Dames and Moore 1989), following a Sampling and Monitoring Plan that was approved by the California Department of Health Services (Woodward-Clyde Consultants 1988). The corrective action was conducted in 1999 and in January 2000, DTSC accepted that the County was in full compliance with the Remedial Action Order and normal use of AQ County Park was resumed.

In 1998, concerns were raised about the erosion, mobilization, and methylation of mercury originating from AQ County Park when several water bodies in the Guadalupe River watershed were identified by the San Francisco Bay Regional Water Quality Control Board (RWQCB) as being impaired by the presence of mercury according to provisions in the Clean Water Act Section 303(d). Being placed on the 303(d) list triggered the total maximum daily load (TMDL) process, requiring the development of a TMDL\(^1\) for mercury. The Guadalupe River Watershed Mercury TMDL was approved by the Office of Administrative Law on February 24, 2010.

The purpose of the project is to reduce mercury laden sediment that may be transported from calcine paved roads in AQ County Park, downstream into the Guadalupe River Watershed. The proposed project may cause environmental impacts and would require the issuance of multiple discretionary permits and is therefore subject to requirements of the California Environmental Quality Act (CEQA).

The County of Santa Clara, the lead agency under CEQA, must evaluate the potential environmental impacts of a project when considering whether to approve a project. This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the County of Santa Clara Parks and Recreation Department (County Parks). The purpose of the Draft IS/MND is to evaluate the potential environmental effects of the proposed Calcine Roads Remediation Project (project) at AQ County Park.

This Draft IS/MND provides the environmental review for the project’s proposed actions, which would be to remove calcine pavement on existing AQ County Park trails to reduce run-off from soils with elevated mercury concentration into the Guadalupe River Watershed. The project area includes seven distinct named trails, three unnamed areas and the access road leading to the San Francisco Open Cut, which have been identified as sites for remediation, and are described in Section 2.4. The sites were identified for remediation in the May 16, 2011 Almaden Quicksilver County Park and Santa Teresa County Park Mine Material Evaluation (URS 2011a). The project

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\(^1\) A TMDL, or Total Maximum Daily Load, is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.
March 2015  Calcine Roads Remediation Project
Santa Clara County, USA  Initial Study/Mitigated Negative Declaration

The area also includes two temporary construction staging areas. All calcine pavement removed from the trails would be disposed of at the existing San Francisco Open Cut, a pre-approved calcine disposal site, within AQ County Park.

The Draft IS/MND provides information to the public and permitting agencies on the potential environmental effects of the project. This document has been prepared in accordance with CEQA, Public Resources Code section§21000 et seq., and the State CEQA Guidelines, California Code of Regulations (CCR), Title 14, section§15000 et seq.

1.2 DECISION TO PREPARE A MITIGATED NEGATIVE DECLARATION

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines §15063(a)). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines the impacts are to a less than significant level, a Negative Declaration or Mitigated Negative Declaration may be prepared instead of an EIR (CEQA Guidelines §15070(b)).

This Initial Study identifies potentially significant impacts on environmental and cultural resources. The Mitigated Negative Declaration proposes a range of mitigation measures to reduce all such effects to less than significant levels. County Parks has prepared this IS/MND for the project because all impacts resulting from the project are reduced to less than significant levels by adoption and implementation of mitigation measures that are incorporated into the project. This IS/MND conforms to the content requirements of a Negative Declaration under CEQA Guidelines §15071. A Mitigated Negative Declaration for this project is consistent with CEQA Guidelines §15070 which indicate that a Mitigated Negative Declaration is appropriate when:

“The project’s Initial Study identifies potentially significant effects, but:

a. Revisions to the project plan were made that would avoid or reduce the effects to a point where clearly no significant effects would occur, and
b. There is no substantial evidence that the project, as revised, may have a significant effect on the environment.”

1.3 INTERAGENCY COLLABORATION, REGULATORY REVIEW AND PERMITTING

The CEQA review process is intended to inform the public, government agencies and responsible agencies about the potential environmental effects of the proposed project and provide them with an opportunity to comment. Because parts of the project occur in a “water of the United States” and have the potential to affect both regulated wetland areas under the federal Clean Water Act (CWA) and special-status species under the federal Endangered Species Act (ESA), the project will need to meet certain federal requirements. Specifically, if the project requires a dredge and fill permit (CWA §404), the United States Army Corps of Engineers (USACE) will have the responsibility to determine the conditions of issuance. This federal action under the CWA cannot be taken until USACE receives certification from the RWQCB (CWA §401) and has consulted with the United States Fish and Wildlife Service (USFWS) and/or
National Marine Fisheries Service (NMFS) under Section 7 of the ESA as to whether its action or the project could impact a federally protected endangered species.

At the state level, the San Francisco Bay RWQCB has regulatory authority over wetlands and waterways under both the federal CWA and the State of California’s Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the RWQCB has regulatory authority over actions in waters of the state, through the issuance of water quality certifications (certifications) under Section 401 of the CWA. Activities that lie outside of USACE jurisdiction may also require the issuance of either individual or general waste discharge requirements (WDRs) from the RWQCB. This IS/MND is intended to assist federal, state and local agencies to carry out their responsibilities for permit review or approval authority over various aspects of the project (See Table 1.1: Summary of Agency Permits).

### Table 1.1: Summary of Agency Permits

<table>
<thead>
<tr>
<th>Agency</th>
<th>Permit Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>CWA §404 (33 U.S.C. 1344) Permit</td>
</tr>
<tr>
<td>U.S. Fish &amp; Wildlife Service</td>
<td>ESA §7 (50 CFR part 402) consultation, as determined by USACE</td>
</tr>
<tr>
<td>National Oceanic and Atmospheric Administration National Marine Fisheries Service</td>
<td>ESA §7 consultation, as determined by USACE</td>
</tr>
<tr>
<td>California Office of Historic Preservation</td>
<td>Section 106 consultation under the National Historic Preservation Act, as determined by USACE</td>
</tr>
<tr>
<td>California Regional Water Quality Control Board, San Francisco Bay Region</td>
<td>CWA §401 (33 U.S.C. 1341) Water Quality Certification</td>
</tr>
<tr>
<td>California Department of Fish and Wildlife</td>
<td>Streambed Alteration Agreement (Code §1602), and compliance with the State Endangered Species Act (Fish and Game Code §2080) and Nesting Bird Protection Codes (Fish and Game Code §3503)</td>
</tr>
<tr>
<td>City of San Jose</td>
<td>Transportation Permit for hauling clean material through the City of San Jose streets (depending on final quantity of material)</td>
</tr>
</tbody>
</table>

### 1.4 PUBLIC REVIEW PROCESS

This draft IS/MND will be circulated to local, state and federal agencies, interested organizations and individuals who may wish to review and provide comments on the project description, the proposed mitigation measures, or other aspects of the report. The publication will commence the 30-day public review period per CEQA Guidelines §15105(b).

Written comments regarding the correctness, completeness, or adequacy of the draft IS/MND should be submitted to the name and address indicated below. Such comments should be based on specific environmental concerns and must be received on or before the close of the public review period.
Submittal of written comments via e-mail would greatly facilitate the response process.

Reem Assaf, P.E., Capital Projects Manager II
County of Santa Clara, Parks and Recreation Department
298 Garden Hill Drive
Los Gatos, CA 95032-7669
408-355-2208
Email: Reem.Assaf@prk.sccgov.org

The Draft IS/MND is available for review at:

- County of Santa Clara Parks and Recreation Department
  298 Garden Hill Drive
  Los Gatos, CA 95032-7669
- County of Santa Clara Clerk Recorders Office
  70 West Hedding, E. Wing, 1st Floor
  San Jose, CA 95110
- Calero County Park Park Ranger’s Office
  23201 McKean Road
  San Jose, CA 95120
- Almaden Branch Library
  6445 Camden Avenue
  San José, CA 95120

The draft IS/MND is also posted on the County of Santa Clara Parks and Recreation Department’s website: [http://www.parkhere.org/](http://www.parkhere.org/)

1.5 ORGANIZATION OF THE DOCUMENT

The purpose of this document is to evaluate the potential environmental effects of the Calcine Roads Remediation Project. This document is organized to provide the public and agencies with clear, direct information on the potential environmental impacts resulting from the project.

This document is organized as follows:

a. **Section 1 – Introduction.** This chapter provides an introduction to the project, describes the purpose under CEQA, summarizes the state and federal regulatory requirements, sets forth the public participation process and details the organization of this document.

b. **Section 2 – Project Description.** This chapter describes the location, project objectives, and characteristics of the project. It provides the level of detail needed to analyze the impacts of the Project.

c. **Section 3 – Environmental Setting.** This chapter describes the general site history and current physical and biological resources in the area in which the project will occur.

d. **Section 4 – Environmental Checklist and Responses.** This chapter contains the Initial Study Checklist that describes potential impacts, identifies the significance of potential environmental impacts, and details proposed mitigations to reduce significant impacts to non-significance. This chapter also contains the Mandatory Findings of Significance.

e. **Section 5 – Report Preparation.** This chapter identifies the preparers of this document.

f. **Section 6 – References.** This chapter identifies the references and sources used in the preparation of this IS/MND.
SECTION 2: PROJECT DESCRIPTION

2.1 LOCATION

The Calcine Roads Remediation Project (project) is located within AQ County Park in unincorporated central Santa Clara County, south of the City of San Jose and east of the unincorporated community/town of New Almaden (Figure 2.1: Project Site Location). AQ County Park is located along a northeast ridge of the Santa Cruz Mountains, called the Los Capitancillos Ridge, a line of hills running northwest to southeast. Elevations in the project area vary from approximately 900 feet to 1,700 feet NAVD 88.

The park is located in the headwaters of the approximately 170-square mile Guadalupe River Watershed. The Guadalupe River Watershed drains portions of the eastern foothills of the Santa Cruz Mountains, a northwest-trending range in the California Coast Ranges geomorphic province. The watershed drains into the southern San Francisco Bay through Alviso Slough. Guadalupe River begins at the confluence of Guadalupe Creek and Alamitos Creek and downstream from this point the watershed is heavily urbanized.

Part of AQ County Park is located within the New Almaden National Historic Landmark District, one of 120 such places in California and only one of five in Santa Clara County recognized as being of national historical significance. The County of Santa Clara has established a historic preservation zoning district for New Almaden. The boundaries of the zoning district coincide with the boundaries of the National Historic Landmark District described by the National Register listing. The project area is located within the National Historic Landmark District.

HISTORY OF THE SITE

The New Almaden Mercury Mining District in the AQ County Park was one of the largest mercury producing mining areas in the western hemisphere. It produced 38 million kilograms of mercury during its years of production from 1846 until 1975, 95% of which was produced from the New Almaden mine proper, the southernmost mine in the Mining District (Cox 1985). During operation, mining waste, including processed/roasted mercury ore (calcines) were disposed of on nearby lands, often near creeks where sediment high in mercury would eventually flow downstream. In addition, calcines, when cooled and mixed with water, become cemented and were used as surface cover (pavement) on trails/roads in AQ County Park. Calcine pavements are relatively durable, and are therefore still present throughout the park on former mine roads, some of which are still actively used primarily as trails.
FIGURE 2.1
Project Site Location
In the 1980s and 1990s, the County of Santa Clara, under the direction of DTSC, assessed mercury contamination in the New Almaden Mining District and remediated many of the former ore reduction and processing areas, including those in the Guadalupe River Watershed. The remedial efforts in the Guadalupe River Watershed focused on reducing the threat to human health resulting from possible direct exposure to mining waste within AQ County Park. Remediation conducted within the Guadalupe River Watershed was based on the Remedial Design for the Mine Hill Remediation Project, approved by DTSC on December 15, 1997 and completed by September 27, 1999. In January 2000, DTSC accepted that the County of Santa Clara was in full compliance with DTSC’s Remedial Action Order and removed AQ County Park from the State Category No. 1 List of Contaminated Sites. Restrictions on normal use of AQ County Park by the public and County staff were also removed.

In 1998, concerns were raised about the erosion, mobilization, and methylation of mercury originating from AQ County Park when several water bodies in the Guadalupe River Watershed were identified by the California State Water Resources Control Board (SWRCB) and the RWQCB as being impaired by the presence of mercury, according to provisions in the Clean Water Act, section 303(d). Placement on this list triggered the TMDL process for the watershed, resulting in the need for County Parks to address the source of this mercury loading to San Francisco Bay.

On October 8, 2008, an amendment to the RWQCB’s Water Quality Control Plan was adopted to amend mercury water quality objectives and incorporate TMDLs for mercury in the Guadalupe River Watershed. The TMDL was approved in late November 2009 by the SWRCB and by the Office of Administrative Law on February 24, 2010. TMDL projects that reduce erosion of sediment associated with mercury mining waste with concentrations of greater than 0.2 milligram mercury per kilogram of erodible sediment would decrease the amount of mercury leaving the upper Guadalupe River Watershed in runoff, and would therefore reduce mercury loading (RWQCB 2008, 2008a, 2008b and 2009).

As part of its effort to comply with the mercury TMDL implementation requirements, County Parks commissioned a report to prioritize trails for remediation based on characterization of mercury concentrations in surficial soils at the sites (Woodward-Clyde Consultants 1998). The May 16, 2011 Almaden Quicksilver County Park and Santa Teresa County Park Mine Material Evaluation report identified areas with a high erosion potential and high calcine content. The report identified that the calcine paved roads and trails are largely concentrated around Mine Hill and include much of the Randol Trail, Castillero Trail, Yellow Kid Trail, April Trail, San Cristobal Mine Trail and portions of the Mine Hill Trail between the Hacienda park entrance and Bull Run, as well as a water service road and two unknown trails. These seven trails and three unnamed features make up the project area.

### 2.2 GOALS AND OBJECTIVES

The overall goal of the project is to remove calcine pavement on existing trails and construct erosion control measures within the Guadalupe River Watershed, which would reduce mobilization and methylation of mercury originating from AQ County Park into the Guadalupe River Watershed. The project objectives are as follows:
a. Remove calcine pavement on seven existing trails, a water service road, the road to the San Francisco Open Cut and two unused historic trails.

b. Regrade and replace materials on project site trails to prevent erosion.

c. Revegetate and hydrosed seed disturbed area to further reduce erosion.

d. Repair inboard drainage ditches along the trails and replace aging culverts to prevent erosion.

2.3 CALCINE ROADS REMEDIATION PROJECT

The project consists of calcine removal on seven distinct named trails, two unused historic trails, a water service road, and the access road to the San Francisco Open Cut within AQ County Park, as follows: a portion of Castillero Trail, a portion of Mine Hill Trail, Hidalgo Cemetery Trail, Yellow Kid Trail, Randol Trail, April Trail, and San Cristobal Trail. The two unused historic trails will be referred to as Unknown Trail #1 and Unknown Trail #2 in this document (Figure 2.2: Area of Proposed Calcine Removal). The trails are located in the southeast portion of the park and are interconnected, creating a network of multi-use recreational trails throughout AQ County Park. The seven named trails connect park users to different historic features in the New Almaden National Historic Landmark District. The seven AQ County Park trails in the project area are also used as emergency fire roads and maintenance roads, and are subsequently referred to as trails in this document.

The San Francisco Open Cut, located in the eastern section of AQ County Park, near the intersection of Wood Road and Castillero Trail, would be used for the disposal of removed calcine material. The San Francisco Open Cut is a preapproved consolidation site for calcines removed within AQ County Park.

Calcine pavement in AQ County Park generally consists of a pale red to reddish brown, moderately well cemented gravel with sand and silt between three and six inches in thickness. Throughout AQ County Park, calcine pavement was used on various trails and fire roads as surface cover.

Project actions would include: removal of calcine pavements, replacement of removed material with clean materials; regrading of the trails; revegetation and hydrosed seeding of the disturbed areas, where needed; construction of rolling dips; temporary stockpiling of materials, if necessary; and repairs to inboard drainage ditches and replacement of several aging culverts.

Table 2.1: Calcine Roads Remediation Project Activities, provides the proposed total disturbed acreages, the volume of calcine removed, and a summary of project remediation activities at each project site.
FIGURE 2.2

Area of Proposed Calcine Removal

Data Source
Esri, NAIP, URS

Project Site
San Jose

Gudalupe Reservoir
Calero Reservoir
Abadon Reservoir

Parks Roads and Trails
Area of Proposed Calcine Removal

Calcine Paved Roads Remediation Project

User: Ashleigh_Kubokawa | Map location: L:\Projects\Calcine_Roads\Maps\MXD\Figure_2_2_Calcine_Roads_Project_Site_20140714.mxd
Table 2.1: Calcine Roads Remediation Project Activities

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Disturbed Area (sq ft)</th>
<th>Total Volume of Calcine Removed (cubic yards)</th>
<th>Remediation Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trails</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Castillero Trail</td>
<td>79,000</td>
<td>1,450</td>
<td>• Remove calcine pavement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regrade road and fill as required</td>
</tr>
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<td></td>
<td></td>
<td>• Construct new rolling dips</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Construct collection ditch</td>
</tr>
<tr>
<td>Mine Hill Trail</td>
<td>39,000</td>
<td>720</td>
<td>• Remove calcine pavement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regrade road and fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Construct rolling dips</td>
</tr>
<tr>
<td>San Cristobal Mine Trail</td>
<td>4,300</td>
<td>80</td>
<td>• Remove calcine pavement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regrade road and fill as required</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Construct new rolling dip</td>
</tr>
<tr>
<td>Hidalgo Cemetery Trail</td>
<td>21,000</td>
<td>400</td>
<td>• Remove calcine pavement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regrade road and fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Construct new rolling dip</td>
</tr>
<tr>
<td>Yellow Kid Trail</td>
<td>21,000</td>
<td>400</td>
<td>• Remove calcine pavement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regrade road and fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Construct rolling dips</td>
</tr>
<tr>
<td>Randol Trail</td>
<td>10,500</td>
<td>190</td>
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<td></td>
<td>• Regrade road and fill</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Construct rolling dip</td>
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<tr>
<td>April Trail</td>
<td>30,000</td>
<td>560</td>
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<td></td>
<td></td>
<td></td>
<td>• Regrade road and fill</td>
</tr>
<tr>
<td></td>
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<td>• Construct new rolling dip</td>
</tr>
<tr>
<td>San Francisco Open Cut Access Road</td>
<td>7,800</td>
<td>170</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regrade road and fill</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Construct new rolling dip</td>
</tr>
<tr>
<td><strong>Unnamed Calcine Pavement Features</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Service Road</td>
<td>8,400</td>
<td>160</td>
<td>• Remove calcine pavement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regrade road and fill as required</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Construct rolling dips</td>
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<tr>
<td>Unknown Trail #1</td>
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<td>• Regrade road and fill as required</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>• Construct rolling dips</td>
</tr>
<tr>
<td>Unknown Trail #2</td>
<td>3,200</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Regrade road and fill as required</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Construct rolling dips</td>
</tr>
</tbody>
</table>
2.3.1 Calcine Pavement Removal

Calcine pavement would be physically removed using mechanical excavation and scrapping. Calcine thicknesses range from approximately three to six inches. The calcine pavement has a distinct color and density, and the removal of the calcines would be confirmed and verified in the field based on observation of these characteristics. Table 2.2, Calcine Pavement Thickness Removed, provides the approximate calcine pavement thickness at the areas proposed for calcine removal.

Table 2.2: Calcine Pavement Thickness Removed

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Calcine Pavement Thickness (thickness varies based on location)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trails</strong></td>
<td></td>
</tr>
<tr>
<td>Castillero Trail</td>
<td>4 to 6 inches</td>
</tr>
<tr>
<td>Mine Hill Trail</td>
<td>4 inches</td>
</tr>
<tr>
<td>Hidalgo Cemetery Trail</td>
<td>3 inches</td>
</tr>
<tr>
<td>Yellow Kid Trail</td>
<td>3 inches</td>
</tr>
<tr>
<td>Randol Trail</td>
<td>3 to 5 inches</td>
</tr>
<tr>
<td>April Trail</td>
<td>4 to 5 inches</td>
</tr>
<tr>
<td>San Cristobal Mine Trail</td>
<td>4 to 5 inches</td>
</tr>
<tr>
<td>San Francisco Open Cut Access Road</td>
<td></td>
</tr>
<tr>
<td><strong>Unnamed Features</strong></td>
<td></td>
</tr>
<tr>
<td>Water Service Road</td>
<td>6 inches</td>
</tr>
<tr>
<td>Unknown Trail #1</td>
<td>4 inches</td>
</tr>
<tr>
<td>Unknown Trail #2</td>
<td>6 inches</td>
</tr>
</tbody>
</table>

2.3.2 Disposal of Materials

Removed calcine pavement materials would be disposed at the San Francisco Open Cut, which is located in the eastern sections of the AQ County Park, near the intersection of Wood Road and Castillero Trail. The San Francisco Open Cut is an existing, dedicated disposal facility constructed for the purpose of calcine disposal within AQ County Park. Calcine pavements would be buried at this location and then capped. The square footage of disturbed areas and volume of material to be disposed is included above in Table 2.1: Calcine Roads Remediation Project Activities.

2.3.3 Regrading and Replacement of Materials

The project trails would be regraded to promote sheet flow drainage \(^2\) wherever possible, using outslope grading and rolling dips in accordance with the County Parks trail manual, under the direction of the County Parks Natural Resource Management staff (SCCPRD 2003 and 2005). Some stretches of road would continue to have existing collection ditches on the upslope side filled with rock and lined with geotextile fabric.

\(^2\) Sheet flow is the process by which water flows off the trails over surfaces (like grassy areas) rather than being diverted into channels, culverts or pipes.
After removal of the calcine layer, an aggregate base material will be placed, scarified to mix with existing soil, moisture conditioned as needed, and compacted. In areas where replacement materials are needed to build up the road bed, clean fill would be used.

2.3.4 **Drainages and Culverts**

Five seasonal stormwater drainages occur throughout the project area. Four of the five drainages have existing culverts that are typically 12 to 18 inch corrugated metal pipe and are placed at trail crossing locations. The project would replace and resize three of these existing, aging culverts, as well as build rock-slope protection and headwalls at all five drainages to reduce erosion and sediment transport at these locations.

2.3.5 **Common Project Elements**

The following design and construction details would be common to all features of the proposed project unless specified:

1. **Clean Fill Requirement** - Fill would be used from offsite sources and would be required to meet RWQCB’s environmental screening levels (ESLs) for shallow soils (RWQCB 2008). The imported fill would be in compliance with the County’s Natural Resources Management guidelines, and the contractor would comply with County’s Natural Resource Management’s guidelines/best management practices (BMPs) to ensure that Sudden Oak Death (SOD) fungus and other diseases would not be introduced in the project area and to prevent the spread of invasive plant species.

2. **Installation of Erosion Control BMPs** - Immediately after grading activities, upland sites would be stabilized with erosion control BMPs.

3. **Vegetation Establishment** - Revegetation of disturbed areas would take place and would follow specification of County Natural Resources Management staff. If rains are not sufficient to establish vegetative cover, water trucks would be used for maintaining the vegetation cover.

4. **Disposal of Excavated Soils** - Excavated calcines would be disposed of at the San Francisco Open Cut.

5. **Compaction Requirements** - Trails where soils have been removed would be filled with clean, imported structural fill, scarified, moisture conditioned, and compacted.

2.3.6 **Project Construction**

**Access**

The project sites would be accessed from Almaden Road through the Hacienda Gate (see Figure 2.2). Since the areas around Almaden Road are residential, construction traffic would be scheduled to avoid peak traffic times, including school pick-up and drop-off times.

For importation of clean fill materials and to bring in other construction materials and equipment, construction vehicles would use a City of San Jose approved haul route. The haul route would utilize surface streets through the City of San Jose, and where possible, City of San Jose approved truck routes. Disposal of calcine materials would utilize AQ County Park trails only, such as Mine Hill Trail and Castillero Trail.
Staging

The project would include two planned staging areas: Staging Area 1 at the Hacienda entrance and Staging Area 2 at the intersection of Castillero Trail and Mine Hill Trail. The staging areas would be used for construction equipment set up and employee parking. Notices to the public regarding closure of staging areas will be posted 30 days in advance of utilization. Staging areas will be returned to pre-construction condition upon project termination.

Schedule

Construction would occur over an approximately twelve week period during the non-rainy season, approximately June 15 to October 15. One contractor crew would be used for all sites. Construction would take place from 7 a.m. to 7 p.m. during weekdays only. No weekend or nighttime construction would occur. The contractor would work on one site at a time, only starting a new site when the current site is completed.

Construction Equipment

The project would require the use of heavy equipment, such as excavators, loaders, backhoe, water trucks, dump trucks, and fuels tanks.
SECTION 3: ENVIRONMENTAL SETTING

3.1 PROJECT WATERSHED

AQ County Park is located in the headwaters of the approximately 170-square mile Guadalupe River watershed. Steep hillside and mountaintop flatlands typify the topography of the project vicinity. The Guadalupe River Watershed drains portions of the eastern foothills of the Santa Cruz Mountains, a northwest-trending range in the California Coast Ranges geomorphic province. The watershed drains into the southern San Francisco Bay through Alviso Slough. Guadalupe River begins at the confluence of Guadalupe Creek and Alamitos Creek; downstream from this point the watershed is heavily urbanized. Important tributaries include Ross Creek, Canoas Creek, and Los Gatos Creek.

The southern portion of the project area drains towards Jacques Gulch, which discharges to Almaden Reservoir (USGS 2013). The Jacques Gulch watershed encompasses an area of approximately 1.4 square miles. The eastern portion of the project area drains towards Deep Gulch, a tributary to Alamitos Creek. The confluence of Deep Gulch and Alamitos Creek is located approximately 0.7 miles downstream of Almaden Reservoir. The Deep Gulch watershed is approximately 0.4 square miles in area. The northern portion of the project area drains towards Randol Creek, which flows towards urban areas north of AQ County Park. The Randol Creek watershed encompasses an area of approximately 2.3 square miles. The western portion of the project area drains towards Los Capitancillos Creek, which is a tributary to Guadalupe Creek upstream of Guadalupe Reservoir. Los Capitancillos Creek watershed is approximately 0.8 square miles in area. Alamitos Creek and Guadalupe Creek are tributaries to Guadalupe River, which drains to southern San Francisco Bay through Alviso Slough.

3.2 BIOLOGICAL RESOURCES

Natural communities in the project area include California bay forest, mixed oak forest, poison oak scrub; coyote brush scrub, purple needle grass grassland, and yellow star thistle field.

a. **California Bay Forest**: California bay forest is present within portions of the project area that contain a thick canopy. The dominant trees in this community as observed within the project footprint are California bay laurel (*Umbellularia californica*) and coast live oak (*Quercus agrifolia*). The shrub layer is dominated by poison oak (*Toxicodendron diversilobum*), California rose (*Rosa californica*), California blackberry (*Rubus ursinus*), and blue elderberry (*Sambucus nigra ssp. caerulea)*.

b. **Mixed Oak Forest**: Mixed oak forest is located ubiquitously throughout the project area, particularly in areas of steep slopes. This community is dominated by coast live oak, blue oak (*Quercus douglasii*), and valley oak (*Quercus lobata*). The canopy is generally dense and the understory is composed of poison oak and hairy vetch (*Vicia villosa*), rose clover (*Trifolium hirtum*), and non-native annual grasses including ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and wild oats (*Avena spp.*).

c. **Poison Oak Scrub**: Poison oak scrub occurs as dense stands on slopes within the project area. Along with poison oak, scattered coyote brush (*Baccharis pilularis*) grows along the edges of the stands. A few oak trees also provide sparse canopy around the edges of the
community. Annual non-native grasses, including rip gut brome, soft chess, and wild oats make up the herbaceous understory.

d. **Coyote Brush Scrub:** Coyote brush scrub occurs throughout the project area, typically on south facing slopes. This community is common in areas lacking a tree canopy where it grows in patches surrounded by a yellow star-thistle community and adjacent to poison oak scrub. While coyote brush is the dominant shrub, California sagebrush (*Artemisia californica*), deerweed (*Acmispon glaber*), sticky monkeyflower (*Mimulus aurantiacus*), and chick lupine (*Lupinus microcarpus*) are common associate species.

e. **Purple Needlegrass Grassland:** Purple needle grass grassland occurs on flat areas of the fill site located north of Castillero Trail. Purple needle grass (*Stipa pulchra*) occurs as a dominant with ripgut brome, soft chess, and fescues (*Festuca* spp.). Annual herbs associated with this community, as observed in the project footprint, include weakstem cryptantha (*Cryptantha flaccida*), filaree (*Erodium* ssp.), sky lupine (*Lupinus nanus*), and blue-eyed grass (*Sisyrinchium bellum*).

f. **Arroyo Willow:** A willow stand occurs within a small depression north of the Castillero Trail. Arroyo willow (*Salix lasiolepis*) occurs as a dominant species with coyote brush, poison oak, and buckeye (*Aesculus californicus*).

g. **Elderberry:** Blue elderberry (*Sambucus nigra spp. caerulea*) shrubs are present within the northwest portion of the project area along the Randol Trail. Dominant tree species in this community include valley oak, and California sycamore (*Platanus racemosa*). Understory species include California rose (*Rosa californica*) and poison oak.

h. **Annual Grassland:** Non-native annual grassland habitat is dominant in the borrow site, which is no longer part of the project area. Dominant grasses include ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and wild oats (*Avena spp.*).

i. **Broom Semi-Natural Shrubland Stands:** Spanish broom (*Spartium junceum*) grows in thick, monotypic stands on roadside edges, eroding slopes, and other disturbed locations. This vegetation community is particularly pronounced on the roadside edge of the Castillero trail from approximately the junction of Castillero trail with the Yellow kid trail west to the fill site at the former San Cristobal mine.

Three species of rare plants, smooth lessingia (*Lessingia micradenia var. glabrata*), most-beautiful jewelflower (*Streptanthus albidus ssp. peramoenus*) and Santa Clara Valley dudleya (*Dudleya abramsii ssp. setchellii*) were identified during the 2013 pedestrian surveys, in April and July. The area containing Santa Clara Valley dudleya during the April 2013 survey is 0.30 acres in size. A single population of most beautiful jewelflower was identified and mapped during the April 2013 survey, and the area containing it is also 0.30 acres and occupies the same serpentine outcrop as the Santa Clara Valley dudleya. Six separate populations of the smooth lessingia were identified and mapped during the July 2013 survey. The sum of the six areas containing smooth lessingia is 0.74 acres.

The populations of Santa Clara Valley dudleya and most beautiful jewelflower are located in the southern portion of the project area along Castillero Trail where plants were found along serpentine rock outcrops lining the northern shoulder of the trail. The highest concentrations of the smooth lessingia were also located in the southern portion of the project area along the
Castillero Trail, co-located with Santa Clara Valley dudleya and most beautiful jewelflower where plants were found along the disturbed trail shoulder and on south-facing slopes above the trail. Smooth lessingnia populations were also located along the fringe of the flat open fill site just north of the Castillero Trail.

Multiple wildlife habitat assessments were conducted in the project area during different times of the year to maximize detections, and document habitat use during under differing conditions. A biological reconnaissance survey was conducted on December 11, 2012 to document habitats on site during the “wet” season, and to identify aquatic features for later delineation. Subsequent habitat assessments occurred in the spring (April 17, 2013), and summer (July 19, 2013) of 2013.

Prior to performing field surveys, a desktop review was conducted that consisted of a 10-mile radius search of the California Natural Diversity Database (CNDDB), a review of published reports on listed species found in the region, and a review of USFWS listed species, Designated Critical Habitat, and Recovery Units in the region. USFWS listed species that occur in the region, but that we consider functionally absent from the project area include: California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), and bay checkerspot butterfly (*Euphydryas editha bayensis*). No protected fish species are known to occur in the project area. The results of the desktop review and field survey indicate that the only State Species of Special Concern in the project area is the San Francisco dusky footed woodrat (*Neotoma fuscipes annectens*).

The project area is capable of supporting a wide array of California coastal mountain species, such as bobcat (*Felix rufus*), western scrub jay (*Aphelocoma californica*), alligator lizard (*Elgaria multicarinata*) and dusky-footed woodrat. Notably absent from the project area are aquatic habitats such as streams, perched wetlands, or stock ponds. Due to the absence of open water habitats, fish and amphibian species are assumed to be generally absent. Amphibians such as slender salamander (*Batrachoseps* sp.) are likely present on north facing slopes under heavy leaf litter, but this habitat type is mainly absent from the project area.
SECTION 4: ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

The environmental factors checked below would be potentially affected by this project, involving at least one impact as indicated by the checklist on the following pages.

<table>
<thead>
<tr>
<th>ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Aesthetics</td>
</tr>
<tr>
<td>✗ Biological Resources</td>
</tr>
<tr>
<td>✗ Geology / Soils</td>
</tr>
<tr>
<td>✗ Hydrology / Water Quality</td>
</tr>
<tr>
<td>✗ Noise</td>
</tr>
<tr>
<td>✗ Recreation</td>
</tr>
<tr>
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<tr>
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<td>□ Greenhouse Gas Emissions</td>
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<td>□ Mineral Resources</td>
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<tr>
<td>□ Public Services/ Utilities</td>
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<tr>
<td>□ Mandatory Findings of Significance</td>
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### 4.1 AESTHETICS

**A. AESTHETICS**

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>IMPACT</th>
<th>SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Less Than Significant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Impact</td>
</tr>
<tr>
<td>1. If subject to ASA, be generally in non-compliance with the Guidelines for Architecture and Site Approval?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>2. Create an aesthetically offensive site open to public view?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Substantially damage scenic resources, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
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<tr>
<td>4. Obstruct scenic views from existing residential areas, public lands, public water body or roads?</td>
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<td></td>
</tr>
<tr>
<td>5. Be located on or near a ridgeline visible from the valley floor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Adversely affect the architectural appearance of an established neighborhood?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
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</tbody>
</table>

**DISCUSSION:**

The project area is located in AQ County Park, which is a county park located in Santa Clara County. AQ County Park encompasses 4,152 acres occupying a majority of Los Capitancillos Ridge, and includes facilities such as: Casa Grande historic site, multiuse trails for hiking, equestrian, and bicycling, picnic facilities, regional trail routes, historic mining areas and interpretive sites. AQ County Park is bordered by the City of San Jose to the north, the Town of Los Gatos to the west, and other County parks and open space areas to the south and east. Land uses in the general vicinity of AQ County Park are residential to the north and open space to the east and south. The New Almaden Historic District is located within AQ County Park, and the project area is located within the historic district.

The mountains where AQ County Park is located are visible from surrounding neighborhoods and other areas of San Jose. Hicks Road, a Santa Clara County Scenic Road, extends along the southern border of AQ County Park; while Alamitos Road, also a Santa Clara County Scenic Road, extends on the eastern border. Due to topography and vegetation, most of the trails in the project area are not visible from scenic roads or surrounding neighborhoods. Some casual, short term views of the ridgelines on Castillero Trail and Yellow Kid Trail are visible from adjacent neighborhoods and roads located on surrounding ridges. These views would be visible in the background of the AQ County Park viewshed.
The visual character of the project site is one of rolling hills covered with various types of vegetation. Features in the project area consists of old mine installations such as former furnaces, former mine residences and former mercury processing sites. The project site is immediately visible from adjacent trails in AQ County Park. The main viewers of the project area are park users, including hikers, equestrians and bicyclists. The viewshed of the project area is made up of vegetated rolling hills and historic mining facilities. The expectations of viewers in the area are of an open space park with historic mining facilities.

IMPACTS AND MITIGATION:

1. **If subject to ASA (Architecture and Site Approvals), be generally in non-compliance with the Guidelines for Architecture and Site Approval?**

   The project is the removal of calcine pavement on AQ County Park trails. Architecture and Site Approvals are required when altering buildings or signs or changing the use of a facility in a historic preservation zoning district. Although the project is located in a historic preservation zoning district it would not result in any of these actions; therefore the project would have **no impact**.

2. **Create an aesthetically offensive site open to public view?**

   The project would remove calcine pavements in AQ County. BMPs would be implemented to prevent future erosion in Guadalupe River Watershed. Historic installations would not be removed as part of the project. The majority of the project site is not visible from Hicks Road or Alamitos Road, which are County of Santa Clara, designated scenic roads, or adjacent residential neighborhoods. Portions of the project area on Castillero Trail and Yellow Kid Trail are located on ridgelines that are visible in the background of the AQ County Park viewshed, from surrounding ridges. The main scenic views from residential areas are distant views of AQ County Park; therefore, views from surrounding ridges are too distant to provide any level of detail of the construction activities.

   The project site is visible from several other trails within AQ County Park. General construction activities may include excavation, grading, and revegetation activities. Construction activities would temporarily reduce the aesthetic qualities of the site by introducing construction equipment, materials and work crews into the viewshed. However, these construction activities would be short-term in duration and impacts to the viewshed would be temporary. The project area is not currently paved and the project would not change or permanently disturb the natural character of the area. Therefore, the project would not create an aesthetically offensive site open to public view and this impact would be **less than significant**.

3. **Substantially damage scenic resources, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

   Hicks Road and Alamitos Road are considered County of Santa Clara scenic roads; however, they are not state scenic highways (SCC 2008a). The project site is not visible from either of the two roads due to distance, intervening topography, and vegetation cover. Further, the project would not remove any rock outcroppings or modify any historic buildings. Although trees may be removed or pruned as part of the project, the removal and pruning would not be substantial as outlined in Section 4.4, Biological Resources. Therefore, the project would have a **less than significant impact**.
4. *Obstruct scenic views from existing residential areas, public lands, public water body or roads?*

The project would remove calcine pavements and restore areas from seven trails, a water service road, and two unknown trails within AQ County Park. The project would not result in construction of any elements that would obstruct views from other areas of AQ County Park. Therefore, the project would have *no impact*.

5. *Be located on or near a ridgeline visible from the valley floor?*

Castillero Trail and portions of Yellow Kid Trail are located on ridgelines, but due to varying topography and vegetation are not visible from a valley floor. The project would not result in the construction of any new/permanent features that would be visible from the valley floor.

Construction activities would temporarily be located on a ridgeline. The project would temporarily introduce construction equipment, materials and work crews into the viewshed. However, these construction activities would be short-term in duration and impacts to the viewshed would be temporary in nature. Therefore, the impact would be *less than significant*.

6. *Adversely affect the architectural appearance of an established neighborhood?*

The project includes calcine removal and earthmoving within AQ County Park. No structures are located within the project area and no established neighborhoods would be affected. Therefore, the project would have *no impact*.

7. *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The project would remove calcine pavements and does not propose any new permanent sources of night lighting that would impact light and glare in the area. Further, construction activities would take place during the day only and no construction night lighting would be used. Therefore, the project would have *no impact*. 
### 4.2 AGRICULTURE AND FOREST RESOURCES

**B. AGRICULTURE AND FOREST RESOURCES**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project, and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>NO Impact</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Potentially Significant Impact</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3, 20, 21</td>
</tr>
<tr>
<td>2. Conflict with existing zoning for agricultural use?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9, 21</td>
</tr>
<tr>
<td>3. Conflict with an existing Williamson Act Contract or the County's Williamson Act Ordinance?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1, 49</td>
</tr>
<tr>
<td>4. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3, 4, 26</td>
</tr>
<tr>
<td>5. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526) or timberland zoned Timberland Production (as definite by Government Code section 51104(g))?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5, 33</td>
</tr>
<tr>
<td>6. Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

**DISCUSSION**

The project would be located within AQ County Park. The project site is in a county park bordered by residential areas to the north. According to the Farmland Mapping and Monitoring Program the project site does not contain any agricultural or forest uses.
IMPACTS AND MITIGATION:

1. **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

There are no Prime Farmlands, Unique Farmlands, Farmlands of Statewide importance or Forest or Timberland Production lands on or near the project area, as indicated in the 2010 Department of Conservation Farmland Mapping and Monitoring Program map for Santa Clara County (CDC 2010 and 2013). Therefore the project would have **no impact**.

2. **Conflict with existing zoning for agricultural use?**

The project is within an existing County park and not zoned as farmland. Therefore, the project would not affect any farmland or areas zoned for agricultural uses or timberland production and forest and would have **no impact**.

3. **Conflict with an existing Williamson Act Contract or the County’s Williamson Act Ordinance?**

The project is within an existing County park and not under a Williamson Act Contract and would not conflict with the County’s Williamson Act Ordinance. Therefore the project would have **no impact**.

4. **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

No agricultural or farmlands exist in the project area that would be converted to another use. A portion of the project area is forested. The areas surrounding the project site is covered by mixed oak forest and California Bay forest. The other dominant vegetation in the area surrounding the project site is coyote brush scrub and poison oak scrub. The project would not convert any forest land to non-forest use. Therefore, the project would have **no impact**.

5. **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526) or timberland zoned Timberland Production (as definite by Government Code section 51104(g)?**

The area is not currently zoned as Timberland or Timberland Production, and the project would not conflict with existing zoning nor would any rezoning of any type occur. Therefore, the project would have **no impact**.

6. **Result in the loss of forest land or conversion of forest land to non-forest use?**

The project would not convert any land to non-forest use. Therefore, the project would have **no impact**.
### 4.3 AIR QUALITY

#### C. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

<table>
<thead>
<tr>
<th>IMPACT</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>YES</td>
</tr>
</tbody>
</table>

#### WOULD THE PROJECT:

<table>
<thead>
<tr>
<th>NO</th>
<th>YES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMPLICATION</strong></td>
<td><strong>LESS THAN SIGNIFICANT IMPACT</strong></td>
<td><strong>LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED</strong></td>
</tr>
<tr>
<td>1. Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>2. Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>4. Expose sensitive receptors to substantial pollutant concentrations?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>5. Create objectionable dust or odors affecting a substantial number of people?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>6. Alter air movement, moisture, or temperature, or cause any change in climate?</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

### DISCUSSION:

#### Criteria Pollutants

Air quality is determined by measuring ambient concentrations of six criteria pollutants, which are air pollutants for which acceptable levels of exposure can be determined and for which standards have been set. The ambient concentration is then compared to the current National and California Ambient Air Quality Standards (NAAQS and CAAQS). Historic differences of opinion by medical panels established by the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (U.S. EPA) cause considerable diversity between State and Federal air quality standards in California. In general, the California Ambient Air Quality Standards (CAAQS) are more stringent than the corresponding NAAQS. The air quality standards currently in effect in California are shown in Table 4.1: Ambient Air Quality Standards.
Table 4.1: Ambient Air Quality Standards

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>California Standards</th>
<th>National Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Primary</td>
</tr>
<tr>
<td>Ozone</td>
<td>8-hour</td>
<td>0.07 ppm</td>
<td>0.075 ppm</td>
</tr>
<tr>
<td></td>
<td>1-hour</td>
<td>0.09 ppm</td>
<td>--</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>8-hour</td>
<td>9 ppm</td>
<td>9 ppm</td>
</tr>
<tr>
<td></td>
<td>1-hour</td>
<td>20 ppm</td>
<td>35 ppm</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>Annual</td>
<td>0.03 ppm</td>
<td>100 ppb</td>
</tr>
<tr>
<td></td>
<td>1-hour</td>
<td>0.18 ppm</td>
<td>0.053 ppm</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>Annual</td>
<td>--</td>
<td>0.030 ppm</td>
</tr>
<tr>
<td></td>
<td>24-hour</td>
<td>0.04 ppm</td>
<td>0.14 ppm</td>
</tr>
<tr>
<td></td>
<td>3-hour</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>1-hour</td>
<td>0.25 ppm</td>
<td>75 ppb</td>
</tr>
<tr>
<td>PM10</td>
<td>Annual</td>
<td>20 μg/m³</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>24-hour</td>
<td>50 μg/m³</td>
<td>150 μg/m³</td>
</tr>
<tr>
<td>PM2.5</td>
<td>Annual</td>
<td>12 μg/m³</td>
<td>12 μg/m³</td>
</tr>
<tr>
<td></td>
<td>24-hour</td>
<td>--</td>
<td>35 μg/m³</td>
</tr>
<tr>
<td>Lead</td>
<td>3-month rolling</td>
<td>--</td>
<td>0.15 μg/m³</td>
</tr>
<tr>
<td></td>
<td>30 day average</td>
<td>1.5 μg/m³</td>
<td>--</td>
</tr>
</tbody>
</table>

ppm - parts per million  
μg/m³ – micrograms per cubic meter

Attainment Status and Air Quality Plans

The U.S. EPA, CARB, and the local air district classify an area as attainment, unclassified, or nonattainment, depending on whether or not the monitored ambient air quality data show compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively.

The project site is located within the County of Santa Clara under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). This portion of the Bay Area is downwind of many urban sources of pollution, including the City of San Jose, and the Counties of San Francisco, San Mateo, and Alameda. The project area is in nonattainment for ozone (1-hour), PM10 and PM2.5 CAAQS. The area is in attainment for carbon monoxide (CO), nitrogen dioxide (NO₂) and sulfur dioxide (SO₂).

Rules and Regulations

The responsibility for developing regional air quality plans within the project area lies with BAAQMD; which exercises permit authority through its Rules and Regulations. Mobile and portable sources and temporary activities, which pertains to the project, that cause emissions of air contaminants are managed through a range of State and Federal programs briefly described below.

- U.S. EPA/CARB Off-Road Mobile Sources Emission Reduction Program. The California Clean Air Act mandates CARB achieve the maximum degree of emission reductions from all off-road mobile sources in order to attain the state ambient air quality standards. Off-road mobile sources include construction equipment. Tier 1, Tier 2, and Tier 3 standards for large compression-ignition engines used in off-road mobile sources went into effect in California in 1996 and were updated for year 2000 or later engines. Tier 4 standards went into effect in 2008, and were updated for year 2011 or later engines.
• CARB Portable Equipment Registration Program. This program allows owners or operators of portable engines and associated equipment commonly used for construction or farming to register their units under a statewide portable program to operate their equipment throughout California without having to obtain individual permits from local air districts.

• BAAQMD Regulation 2 Rule 1 – General Requirements. This regulation prohibits any source from causing a public nuisance and defines what equipment is subject to permitting/new source review requirements and exempts portable stationary equipment (e.g., generators or soil screeners) from permitting if they comply with all applicable requirements of the Statewide Portable Equipment Registration Program.

Other general rules such as Regulation 6 – Particulate Matter and Visible Emissions (for dust control) would also apply to all project activities.

The CEQA Guidelines recommend that the criteria established by the local air district should be relied upon to make determinations of significance. BAAQMD has developed CEQA guidelines to assist local jurisdictions in evaluating potentially adverse impacts on air quality. The most recent CEQA guidelines were updated in 2012 (BAAQMD 2012a). BAAQMD developed quantitative thresholds of significance for their CEQA guidelines in 2010 (BAAQMD 2010). However, BAAQMD’s adoption of these 2010 thresholds of significance (2010 Thresholds) was challenged in court, on the basis that BAAQMD adopted the 2010 Thresholds without having evaluated them under CEQA. The Court did not specifically address whether the Thresholds were supported by substantial evidence. BAAQMD later appealed the ruling, and the judgment was reversed on August 13, 2013 by the Court of Appeal of the State of California, First Appellate District. The Court of Appeal's decision was appealed to the California Supreme Court, which granted limited review, and the matter is currently pending there. At this time, BAAQMD is no longer recommending use of the 2010 Thresholds to determine whether a project’s air quality impacts would be significant. BAAQMD instead recommends that lead agencies should determine appropriate air quality thresholds of significance based on substantial evidence in the record.

For this air quality analysis, the 2010 Thresholds were used because they were established based on the substantial evidence. BAAQMD released the “Proposed Thresholds of Significance” in 2009, which listed the proposed thresholds for criteria pollutants; greenhouse gases (GHGs), community risk and hazards, and odors. BAAQMD researched existing and projected sources of air quality contaminants and designed the 2010 Thresholds to comply with state and federal standards. The report “provides the substantial evidence in support of the thresholds of significance…” (emphasis added) (BAAQMD 2009). The thresholds for criteria pollutants were developed through a quantitative examination of the efficacy of fugitive dust mitigation measures and a quantitative examination of statewide non-attainment emissions.

The usage of the 2010 Thresholds is consistent with BAAQMD’s direction that thresholds should be based on substantial evidence.
IMPACTS AND MITIGATION:

1. Conflict with or obstruct implementation of the applicable air quality plan?

The latest Clean Air Plan, which was adopted in September 2010 (BAAQMD 2010b), is an update to the Bay Area 2005 Ozone Strategy (BAAQMD 2006). The 2010 Clean Air Plan includes comprehensive strategy to reduce ozone, particulate matter, air toxics and GHGs from stationary, mobile and transportation sources. The plan builds on the main objective of the 2005 Ozone Strategy which was to comply with state air quality planning requirements as mandated by the California Clean Air Act. The Bay Area Ozone Attainment Plan was adopted by BAAQMD in 2001 in response to EPA’s finding of failure of the Bay Area to attain the national ambient air quality standard for ozone. The plan includes a control strategy for ozone and its precursors to ensure reduction in emissions from stationary sources, mobile sources, and the transportation sector.

The project would not lead to population or job growth such as housing or commercial development, and would not cause an increase in long-term employment. Further, construction activities would be temporary and short term; therefore there would be no growth in employment from the project. The 2010 Thresholds for construction emissions were established to be consistent with the air quality attainment plans. Emissions from project construction activities would not exceed these thresholds, and would therefore be consistent with the applicable plans. The proposed project would not impact or obstruct the implementation of the applicable air quality plans and the impact would be less than significant.

2. Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation?

The project would involve earthmoving and construction-type activities including the removal of calcines, land grading, construction of swales, and installation of culverts. Construction activities would require the use of equipment such as excavators, loaders, water trucks, fuel trucks, backhoes, compactors, and graders. Construction would be temporary, lasting approximately twelve weeks.

Project construction activities would generate emissions at the work sites and along the haul routes. The impacts would principally consist of exhaust emissions from heavy-duty diesel construction equipment (e.g., ozone precursors such as nitrogen oxides [NOx] and reactive organic gases [ROG], other criteria pollutants such as CO and particulate matter -PM10 and PM2.5, and toxic exhaust emissions) and fugitive particulate matter (dust) generated by earthmoving activities and travel on unpaved surfaces. Beyond the project area, exhaust emissions would also be caused by hauling trips and workers commuting to and from the work sites. Emissions from these sources were calculated using the Road Construction Emissions Model version 7.1.4, an emission estimation software developed and maintained by the Sacramento Metropolitan Air Quality Management District (SMAQMD 2009). Cut material would be hauled and disposed within the project area at the SF Open Cut, and emissions from these trips are assumed to be negligible. Round base material may be imported from off-site locations, and may generate exhaust emissions from these hauling trips. For this analysis, emissions were calculated assuming all round base material would be imported from off-site locations using haul trucks.

Construction emissions are shown in Table 4.2. Emissions from these construction activities would not exceed the BAAQMD daily mass emissions threshold. BAAQMD does not have mass emissions thresholds for fugitive PM10 and PM2.5 dust, but recommends the implementation of BMPs, as listed in
BAAQMD Air Quality Guidelines (BAAQMD 2010). Incorporation of Mitigation Measure AIR-1 would require the implementation of these BMPs.

**Table 4.2: Project Construction Criteria Pollutant Emissions**

<table>
<thead>
<tr>
<th>Source</th>
<th>ROG</th>
<th>NOx</th>
<th>PM₁₀ (exhaust)</th>
<th>PM₂.₅ (exhaust)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-Road Construction Equipment</td>
<td>3.04</td>
<td>31.61</td>
<td>1.53</td>
<td>1.41</td>
</tr>
<tr>
<td>Water Trucks</td>
<td>0.03</td>
<td>0.92</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>On-Road Worker Commuting</td>
<td>0.46</td>
<td>0.54</td>
<td>0.09</td>
<td>0.04</td>
</tr>
<tr>
<td>On-Road Hauling</td>
<td>0.15</td>
<td>5.51</td>
<td>0.13</td>
<td>0.09</td>
</tr>
<tr>
<td>Total Construction Emissions</td>
<td>3.67</td>
<td>38.58</td>
<td>1.78</td>
<td>1.56</td>
</tr>
<tr>
<td>BAAQMD Significance Thresholds</td>
<td>54</td>
<td>54</td>
<td>82</td>
<td>54</td>
</tr>
</tbody>
</table>

**Mitigation Measure AIR-1:**

Implement the following BAAQMD BMPs (as described in BAAQMD, 2010) to reduce this impact to a less than significant level:

a. BAAQMD Basic Construction Mitigation Measures for dust control (all construction sites) (from Table 8-2, BAAQMD 2010)

b. BAAQMD Optional Dust Control Measures (from Table 8-3, BAAQMD 2010)

**Implementation:** County Parks staff and Construction contractor to include BMPs in construction documents and contractor to implement measures on site

**Timing:** During design and construction

**Monitoring:** County Parks Construction Inspector to inspect contractor work for compliance with dust control measures

With implementation of the above measures, this impact would be **less than significant with mitigation incorporated.**

3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Construction activities, including haul truck traffic and worker vehicle trips, would generate emissions during temporary construction activities. Emissions that do not exceed the BAAQMD mass emissions thresholds are not considered to have a cumulatively considerable impact. As shown above, emissions from the project construction activities would not exceed BAAQMD mass emissions thresholds. Upon completion of project construction, project-related emissions would cease. Because emissions would be temporary and below the thresholds, the project construction emissions would not result in a cumulatively considerable net increase in criteria air pollutants that could impede attainment or maintenance of the ambient air quality standards. Therefore, the contribution of the project to cumulative air quality impacts would be **less than significant.**
4. *Expose sensitive receptors to substantial pollutant concentrations?*

The project site is located within the AQ County Park. Construction-related activities would result in temporary on-site emissions of toxic air contaminants (TACs), specifically diesel particulate matter, from off-road heavy duty equipment exhaust. Construction activities would not occur near land uses that would be considered sensitive to air quality impacts (residences, schools, children’s day care centers, hospitals, and convalescent homes where population groups may have increased susceptibility to respiratory distress). The nearest residence is over 0.6 miles (approximately 3,000 feet) from the project area with woodlands and grasslands between, and the nearest school is 1.5 miles away. Since the nearest sensitive receptors are over 1,000 feet from the project area, it is unlikely that emissions from construction would impact these sensitive receptors. Additionally, construction impacts are most significant adjacent to the construction area and the impacts decrease rapidly with distance. While the project would generate TAC emissions during construction, the distance to the nearest sensitive receptors is such that impacts would be *less than significant.*

5. *Create objectionable dust or orders affecting a substantial number of people?*

The project area is located in a regional park, away from residential, commercial, or other land uses with large numbers of users. Normally occurring odors from diesel equipment operation would not have the potential to affect a substantial number of people, and the proposed project’s construction activities odor impacts would be *less than significant.*

6. *Alter air movement, moisture, or temperature, or cause any change in climate?*

The project would not significantly alter the existing topography. This project may temporarily effect air movement, soil moisture and ground temperature over the project site, but the total area disturbed by the project would be approximately 4.5 acres and would not be substantial enough to have an impact on climate; therefore the project would have *no impact.*
### 4.4 BIOLOGICAL RESOURCES

#### D. BIOLOGICAL RESOURCES

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>NO</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Potentially Significant Impact</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or tributary to an already impaired water body, as defined by section 303(d) of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>4. Have a substantial adverse effect on oak woodland habitat as defined by Oak Woodlands Conservation Law (conversion/loss of oak woodlands) – Public Resource Code 21083.4?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>5. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>7. Impact a local natural community, such as a fresh water marsh, oak forest or salt water tide land?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>8. Impact a watercourse, aquatic, wetland, or riparian area or habitat?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>9. Adversely impact unique or heritage trees or a large number of trees over 12” in diameter?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>10. Conflict with any local policies or ordinances protecting biological resources: i) Tree Preservation Ordinance?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>ii) Wetland Habitat?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>iii) Riparian Habitat?</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
</tbody>
</table>
DISCUSSION:

Project activities would include removing calcine pavement, regrading existing trails with clean soil, revegetating disturbed areas, as needed, replacing culverts and constructing runoff collection swales along the trails. The total disturbance area of removing calcine pavement and regrading is approximately 4.5 acres (Table 2.1: Calcine Roads Remediation Activities).

Natural communities in the project area include mixed oak forest, poison oak scrub, coyote brush scrub/chaparral, purple needlegrass grassland, arroyo willow, elderberry, California bay forest, annual grassland, and broom semi-natural shrubland stands. The potential for special-status species, both plants and wildlife, which are protected by law, exists within these communities.

REGULATORY CONTEXT

Stream and wetland communities are protected by Section 404 of the CWA and/or Section 10 of the Rivers and Harbors Act. California Department of Fish and Wildlife (CDFW) Code Section 1602 requires that lead agencies work with CDFW to develop a Lake and Streambed Alteration Agreement when stream habitats and riparian zones are impacted by a project. Riparian zone protection is also required by the County of Santa Clara General Plan (SCC 1994).

The RWQCB has regulatory authority over wetlands and waterways under both the CWA and the State of California’s Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the RWQCB has regulatory authority over actions in waters of the United States, through the issuance of water quality certifications under Section 401 of the CWA, which are issued in combination with permits issued by the USACE, under Section 404 of the CWA. When the RWQCB issues Section 401 certifications, it simultaneously issues general WDRs for the project, under the Porter-Cologne Water Quality Control Act. Activities in areas that are outside the jurisdiction of the USACE (e.g., isolated wetlands, vernal pools, or stream banks above the ordinary high water mark) are regulated by the RWQCB under the authority of the Porter-Cologne Water Quality Control Act. Activities that lie outside of USACE jurisdiction may require the issuance of either individual or general WDRs from the Water Board.

The Federal Endangered Species Act requires agencies to consult with the Secretary of the Interior through the USFWS for terrestrial listed species and NOAA, NMFS, for aquatic listed species to ensure that projects do not jeopardize the continued existence of endangered or threatened species or destroy or adversely modify critical habitats that support such species. California Endangered Species Act (CESA) under the jurisdiction of CDFW protects state listed and sensitive species.

The USFWS protects migratory birds and their nests through the Migratory Bird Treaty Act. The State Fish and Game Code protects birds and their nests (CDFW Code 3503.5). Trees with a diameter of 6 inches or larger are protected under provisions of the New Almaden Historic Conservation Zoning District. Impacts to oaks and woodlands must be mitigated as per Public Resources Code 21083.4

SANTA CLARA VALLEY HABITAT PLAN

The Santa Clara Valley Habitat Plan (“Habitat Plan”) was designed “to protect, enhance, and restore natural resources in specific areas of Santa Clara County, while improving and streamlining the environmental permitting process for impacts on threatened and endangered species”. The County is one of the local partners for the Habitat Plan, which also include the City of San Jose, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority. This
Habitat Plan, which is a Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), was developed in collaboration with the USFWS and the CDFW.

“Covered activities” in the Habitat Plan include projects or ongoing activities that will receive incidental take authorization for potential impacts to covered species (SCC 2006). The Habitat Plan provides conservation measures to protect and maintain habitat areas to support 18 special-status “covered species”: nine wildlife species and nine plant species, within the project area. In addition, the Habitat Plan sets forth a comprehensive, coordinated, and standardized mitigation and compensation program that would ensure that conservation actions, which include the creation, management, and monitoring of a new Reserve System in Santa Clara County, will be accomplished to streamline future mitigation requirements and achieve the biological goals and objectives of the Habitat Plan.

The Calcine Roads Remediation Project at AQ County Park is not considered a covered activity since mercury removal/remediation projects are not covered under the Habitat Plan and HCP/NCCP permits, as described in Chapter 2 of the Habitat Plan. This project would require informal consultation under Section 7 (USFWS) and Section 10 (CDFW) of the ESA.

The project design and analysis process included a review of the conditions for covered activities under the Habitat Plan (Conditions 1, 3 and 4), ensuring that the project design practices and features would incorporate special-status resource impact avoidance and minimization measures directly into plans for the project. Most conditions on covered activities that are applicable to the project would be met by standard BMPs regularly followed by County Parks Resource Management and Maintenance staff, and included in the Habitat Plan. To protect natural resources within its parks, County Parks follows established Natural Resource Management Guidelines for different resource categories, such as wetlands, special-status species, non-native and invasive plant/pest management, etc.

County Parks would apply the applicable Habitat Plan’s conditions on this project. During project implementation, construction activities will be designed to avoid and minimize impacts to sensitive habitat communities. Once further refinements in the field have been identified with the specific development footprint, it is anticipated that the conditions will be applied if potential impacts are anticipated to the species covered under the Habitat Plan.

**HABITAT TYPES AND COMMON SPECIES**

**Mixed Oak Forest**

Mixed oak forest is located universally throughout the project area, particularly in areas of steep slopes. This community is dominated by coast live oak, blue oak (*Quercus douglasii*), and valley oak (*Quercus lobata*). The canopy is generally dense and the understory is composed of poison oak and hairy vetch (*Vicia villosa*), rose clover (*Trifolium hirtum*), and non-native annual grasses including ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and wild oats (*Avena spp.*).

**Poison Oak Scrub**

Poison oak scrub occurs as dense stands on slopes within the project area. Along with poison oak, scattered coyote brush (*Baccharis pilularis*) grows along the edges of the stands. A few oak trees also provide sparse canopy around the edges of the community. Annual non-native grasses, including rip gut brome, soft chess, and wild oats make up the herbaceous understory.
Coyote Brush Scrub
Coyote brush scrub occurs throughout the project area, typically on south facing slopes. This community is common along the slopes above the creek where it grows in patches surrounded by a yellow star-thistle community and adjacent to poison oak scrub. While coyote brush is the dominant shrub, California sagebrush (Artemisia californica), deerweed (Acmispon glaber), sticky monkeyflower (Mimulus aurantiacus), and chick lupine (Lupinus microcarpus) are common associate species.

Purple Needle Grass Grassland
Purple needle grass grassland occurs on flat area of the fill site located north of Castillero Trail. Purple needle grass (Stipa pulchra) occurs as a dominant with ripgut brome, soft chess, and fescues (Festuca spp.). Annual herbs associated with this community, as observed in the project footprint, include weakstem cryptantha (Cryptantha flaccida), filaree (Erodium ssp.), sky lupine (Lupinus nanus), and blue-eyed grass (Sisyrinchium bellum).

Arroyo Willow
A willow stand occurs within a small depression north of the Castillero Trail. Arroyo willow (Salix lasiolepis) occurs as a dominant species with coyote brush, poison oak, and buckeye (Aesculus californicus).

Elderberry
Blue elderberry (Sambucus nigra spp. caerulea) shrubs are present within the northwest portion of the project area along the Randol Trail. Dominant tree species in this community include valley oak, California sycamore (Platanus racemosa). Understory species include California rose (Rosa californica) and poison oak.

California Bay Forest
California bay forest is present within portions of the project area that contain a thick canopy. The dominant trees in this community as observed within the project footprint are California bay laurel (Umbellularia californica) and coast live oak (Quercus agrifolia). The shrub layer is dominated by poison oak (Toxicodendron diversilobum), California rose (Rosa californica), California blackberry (Rubus ursinus), and blue elderberry (Sambucus nigra ssp. caerulea).

Broom Semi-Natural Shrubland Stands
Spanish broom (Spartium junceum) grows in thick, monotypic stands on roadside edges, eroding slopes, and other disturbed locations. This vegetation community is particularly pronounced on the roadside edge of the Castillero trail from approximately the junction of Castillero Trail with the Yellow Kid Trail west to the fill site at the former San Cristobel mine.

Upland habitat within the project area consists of mixed oak forest, poison oak scrub, coyote brush scrub/chaparral, purple needlegrass, willow stands, elderberry shrubs, California bay forest, annual grassland, and broom semi-natural shrubland. Aquatic habitat within the project area consists of one small seasonal wetland and several unnamed intermittent drainage channels that have formed in canyons throughout the hilly topography of AQ County Park. All aquatic features within the project area are seasonal. (Table 4.3: Rare and Sensitive Wildlife Species Occurring or Potentially-Occurring in the Project Area).
Table 4.3: Rare and Sensitive Wildlife Species Occurring or Potentially-Occurring in the Project Area

<table>
<thead>
<tr>
<th>Listed or Sensitive Species Present or Potentially Present¹</th>
<th>Species Legal Status</th>
<th>Natural Communities where Found</th>
<th>Potential to Occur in Project Area</th>
<th>Mitigations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fish</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coho salmon – central California coast evolutionary significant unit</td>
<td>USFWS Endangered (ESA); CDFW Endangered</td>
<td>Stream/aquatic</td>
<td>None – no perennial water features or suitable habitat present.</td>
<td>--</td>
</tr>
<tr>
<td>Steelhead – central California coast distinct population segment</td>
<td>USFWS Threatened (ESA)</td>
<td>Stream/aquatic</td>
<td>None – no perennial water features or suitable habitat present.</td>
<td>--</td>
</tr>
<tr>
<td>Steelhead – south/central California coast distinct population segment</td>
<td>USFWS Threatened (ESA)</td>
<td>Stream/aquatic</td>
<td>None – no perennial water features or suitable habitat present.</td>
<td>--</td>
</tr>
<tr>
<td><strong>Amphibians</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>California red-legged frog</td>
<td>USFWS Endangered (ESA)</td>
<td>Stream/aquatic freshwater wetland; not below dams</td>
<td>Highly unlikely. Possible upland dispersal habitat; no persistent water on site.</td>
<td>--</td>
</tr>
<tr>
<td>California tiger salamander</td>
<td>USFWS Threatened (ESA); CDFW Threatened</td>
<td>Ponds and grasslands (abundant ground squirrels)</td>
<td>Highly unlikely. Possible upland dispersal habitat; no persistent water on site.</td>
<td>--</td>
</tr>
<tr>
<td><strong>Invertebrates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bay checkerspot butterfly</td>
<td>USFWS Threatened (ESA)</td>
<td>Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay.</td>
<td>Habitat present within the project area.</td>
<td>--</td>
</tr>
<tr>
<td>Ohlone tiger beetle</td>
<td>USFWS Endangered (ESA)</td>
<td>Remnant native grasslands with California oatgrass &amp; purple needle grass in Santa Cruz county.</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
<tr>
<td>Zayante band-winged grasshopper</td>
<td>USFWS Endangered (ESA)</td>
<td>Isolated sandstone deposits in the Santa Cruz mountains</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
</tbody>
</table>
Table 4.3: Rare and Sensitive Wildlife Species Occurring or Potentially-Occurring in the Project Area

<table>
<thead>
<tr>
<th>Listed or Sensitive Species Present or Potentially Present¹</th>
<th>Species Legal Status</th>
<th>Natural Communities where Found</th>
<th>Potential to Occur in Project Area</th>
<th>Mitigations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Joaquin kit fox</td>
<td>USFWS Endangered (ESA); CDFW Threatened</td>
<td>Annual grasslands or grassy open stages with scattered shrubby vegetation.</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
<tr>
<td>San Francisco dusky-footed woodrat</td>
<td>CDFW Species of Special Concern (CESA)</td>
<td>Foothill riparian</td>
<td>Possible-suitable habitat exists</td>
<td>BIO-1, BIO-3</td>
</tr>
<tr>
<td><strong>Birds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golden eagle</td>
<td>Federally-protected (The Bald and Golden Eagle Act); State Endangered (CESA)</td>
<td>Nests on ledges, cliffs, overhanging, sometimes in tall trees in oak woodlands</td>
<td>Possible-suitable habitat exists</td>
<td>BIO-1, BIO-3</td>
</tr>
<tr>
<td>Nesting raptors</td>
<td>State Protected (CDFW Code 3503.5)</td>
<td>Foothill riparian, foothill oak woodland</td>
<td>Possible-suitable habitat exists</td>
<td>BIO-1, BIO-3</td>
</tr>
<tr>
<td>Nesting birds</td>
<td>Federally Protected (Migratory Bird Treaty Act); State Protected (CDFW Code 3503)</td>
<td>Foothill riparian, stream banks, oak woodland</td>
<td>Possible-suitable habitat exists</td>
<td>BIO-1, BIO-3</td>
</tr>
</tbody>
</table>

¹ Based on review of CNDDB Inventory of Rare and Endangered species (CDFW 2013)

**Special Status Plants**

Two special status plant surveys were conducted as a part of this planning process. A spring survey was conducted on April 17, 2013, and a late season follow up survey was conducted on July 18, 2013. A review of the CNDDB database (CDFW 2013) and Inventory of Rare and Endangered Plants database (CNPS 2013) provided five species with potential to occur in the project area (Table 4.4: Rare Plants with Potential to Occur in the Project Area).
Table 4.4: Rare Plants Occurring or Potentially-Occurring in the Project Area

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Listing Status¹</th>
<th>Potential to Occur</th>
<th>Mitigations</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Castilleja affinis</em> ssp. neglecta</td>
<td>Tiburon paintbrush</td>
<td>FE, ST, CRPR 1B.2</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
<tr>
<td><em>Ceanothus ferrisiae</em></td>
<td>Coyote ceanothus</td>
<td>FE, CRPR 1B.1</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
<tr>
<td><em>Chorizanthe robusta</em> var. hartwegii</td>
<td>Scotts Valley spineflower</td>
<td>FE, CRPR 1B.1</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
<tr>
<td><em>Cirsium fontinale</em> var. campylon</td>
<td>Mt. Hamilton fountain thistle</td>
<td>CRPR 1B.2</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
<tr>
<td><em>Collinsia multicolor</em></td>
<td>San Francisco collinsia</td>
<td>CRPR 1B.2</td>
<td>Present nearby;</td>
<td>BIO-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>suitable habitat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>not present in the</td>
<td></td>
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<td></td>
<td>project area</td>
<td></td>
</tr>
<tr>
<td><em>Dudleya abramsii</em> ssp. setchellii</td>
<td>Santa Clara Valley dudleya</td>
<td>FE, CRPR 1B.1</td>
<td>Present in the</td>
<td>BIO-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>project area</td>
<td></td>
</tr>
<tr>
<td><em>Fritillaria liliacea</em></td>
<td>Fragrant fritillary</td>
<td>CRPR 1B.2</td>
<td>Suitable habitat</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>present in the</td>
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<td>project area</td>
<td></td>
</tr>
<tr>
<td><em>Hoita strobilina</em></td>
<td>Loma Prieta hoita</td>
<td>CRPR 1B.1</td>
<td>Present nearby;</td>
<td>--</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>suitable habitat</td>
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<td></td>
<td></td>
<td></td>
<td>not present in the</td>
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<td>project area</td>
<td></td>
</tr>
<tr>
<td><em>Holocarpha macradenia</em></td>
<td>Santa Cruz tarplant</td>
<td>FT, SE, CRPR 1B.1</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
<tr>
<td><em>Lessingia micradenia</em> var. glabrata</td>
<td>smooth lessingia</td>
<td>CRPR 1B.2</td>
<td>Present in the</td>
<td>BIO-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>project area</td>
<td></td>
</tr>
<tr>
<td><em>Malacothamnus aboriginum</em></td>
<td>Indian Valley bush-mallow</td>
<td>CRPR 1B.2</td>
<td>Present nearby;</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>suitable habitat</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>not present in the</td>
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<td></td>
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<td></td>
<td>project area</td>
<td></td>
</tr>
<tr>
<td><em>Malacothamnus arcuatus</em></td>
<td>arcuate bush-mallow</td>
<td>CRPR 1B.2</td>
<td>Present nearby;</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>suitable habitat</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>not present in the</td>
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</tr>
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<td></td>
<td></td>
<td></td>
<td>project area</td>
<td></td>
</tr>
<tr>
<td><em>Malacothamnus halii</em></td>
<td>Hall’s bush-mallow</td>
<td>CRPR 1B.2</td>
<td>Present nearby;</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>suitable habitat</td>
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<td></td>
<td></td>
<td></td>
<td>not present in the</td>
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<td></td>
<td>project area</td>
<td></td>
</tr>
<tr>
<td><em>Monolopia gracilens</em></td>
<td>woodland woolythreads</td>
<td>CRPR 1B.2</td>
<td>Present nearby;</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>suitable habitat</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>not present in the</td>
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<td></td>
<td></td>
<td></td>
<td>project area</td>
<td></td>
</tr>
<tr>
<td><em>Pentachaea bellidiflora</em></td>
<td>white-rayed pentachaeta</td>
<td>FE, SE, CRPR 1B.1</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
<tr>
<td><em>Polygonum hickmanii</em></td>
<td>Scotts Valley polygonum</td>
<td>FE, SE, CRPR 1B.1</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
<tr>
<td><em>Sanicula saxatilis</em></td>
<td>rock sanicle</td>
<td>SR, CRPR 1B.2</td>
<td>Highly unlikely</td>
<td>--</td>
</tr>
</tbody>
</table>
### Table 4.4: Rare Plants Occurring or Potentially-Occurring in the Project Area

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Listing Status¹</th>
<th>Potential to Occur</th>
<th>Mitigations</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Streptanthus albidus</em> ssp. <em>albidus</em></td>
<td>Metcalf Canyon jewelflower</td>
<td>FE, 1B.1</td>
<td>Suitable habitat present in the project area</td>
<td>--</td>
</tr>
<tr>
<td><em>Streptanthus albidus</em> ssp. <em>peramoenus</em></td>
<td>most beautiful jewelflower</td>
<td>CRPR 1B.2</td>
<td>Present in the project area</td>
<td>BIO-4</td>
</tr>
</tbody>
</table>

¹ Based on review of Inventory of Rare and Endangered Plants (CNPS 2013) and CNDDDB (CDFW 2013)

FE – Federally Endangered  
FT – Federally Threatened  
SE – State Endangered  
ST – State Threatened  
SR – State Rare  
CRPR - California Rare Plant Rank  
1B.1 – plants rare, threatened or endangered in California and elsewhere, seriously threatened in California  
1B.2 - plants rare, threatened or endangered in California and elsewhere, moderately threatened in California

Three species of rare plants, smooth lessingia (*Lessingia micradenia* var. *glabrata*), most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*) and Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*) were identified in the project area during the 2013 botanical survey effort.

A single population of Santa Clara Valley dudleya was identified and mapped during the April 2013 survey, as shown in Figure 4.1: 2013 Special Status Plant Occurrences within the Project Area. The area containing Santa Clara Valley dudleya during the 2013 survey is 0.30 acres in size. A single population of most beautiful jewelflower was identified and mapped during the April 2013 survey, as shown on Figure 4.1: 2013 Special Status Plant Occurrences within the Project area. The area containing most beautiful jewelflower during the 2013 survey is also 0.30 acres in size and occupies the same serpentine outcrop as the Santa Clara Valley dudleya.

Six separate populations of the smooth lessingia were identified and mapped during the July 2013 survey, as shown on Figure 4.1: 2013 Special Status Plant Occurrences within the Project Area. The sum of the six areas containing smooth lessingia is 0.74 acres. The populations of Santa Clara Valley dudleya and most beautiful jewel flower are located in the southern portion of the project area along the Castillero Trail where plants were found along the serpentine rock outcrops lining the northern shoulder of the trail. The highest concentrations of the smooth lessingia were also located in the southern portion of the project area along the Castillero Trail and are co-located with Santa Clara Valley dudleya and most beautiful jewelflower where plants were found along the disturbed trail shoulder and on south-facing slopes above the trail. Smooth lessingia populations were also located along the fringe of the flat open fill site just north of the Castillero Trail.
2013 Special Status Plant Occurrences within the Project Area
SPECIAL STATUS WILDLIFE

Multiple wildlife habitat assessments were conducted in the project area during different times of the year to maximize detections and document habitat use during under differing conditions. A biological reconnaissance survey was conducted on December 11, 2012 to document habitats on site during the “wet” season, and to identify aquatic features for later delineation. Subsequent habitat assessments occurred in the spring (April 17, 2013), and summer (July 19, 2013) of 2013. Prior to performing field surveys, a desktop review was conducted that consisted of a 10-mile radius CNDDB search of, a review of published reports on listed species found in the region, and a review of USFWS listed species, Designated Critical Habitat, and Recovery Units in the region.

USFWS listed species that occur in the region, but that were considered functionally absent from the project area include: California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), and bay checkerspot butterfly (*Euphydryas editha bayensis*) (USFWS, 2004). No protected fish species are known to occur in the project area or would be impacted by the proposed project. The results of the desktop review and field survey indicate that State Species of Special Concern presence in the project area is restricted to the San Francisco dusky footed woodrat (*Neotoma fuscipes annectens*).

The project area is dominated by unpaved trails, Spanish-gorse (*Spartium junceum*) dominated roadside edge habitat, non-native annual grassland, occasional serpentine outcrops, coyote brush scrub (particularly dense around the open cut), oak and California bay laurel dominated woodlands, and minor patches of arroyo willow riparian habitat. The project area is capable of supporting a wide array of California coastal mountain species, such as bobcat (*Felix rufus*), western scrub jay (*Aphelocoma californica*), alligator lizard (*Elgaria multicarinata*) and dusky-footed woodrat. Notably absent from the project area are aquatic habitats such as streams, perched wetlands, or stock ponds. Due to the absence of open water habitats, fish and amphibian species are assumed to be generally absent. Amphibians such as slender salamander (*Batrachoseps* sp.) are likely present on north facing slopes under heavy leaf litter, but this habitat type is mainly absent from the project area.

Federally Listed Amphibians

Breeding habitat for special-status amphibians is entirely absent from the project area. Breeding habitat for the federally threatened California red-legged frog (CRLF) occurs approximately 2 miles southeast of the project area (USFWS 2004); breeding habitat for federally threatened California tiger salamander (CTS) occurs approximately 1.5 miles east of the project area. Aquatic habitats with known populations or documented records for these species are found in significantly different habitats downslope of the project area. Suitable aquatic breeding habitats are isolated from the project area by significant barriers to movement, such as steep, dry hillsides, absence of typical aestivation habitat, roads, and housing development. Because of the overall absence of breeding habitat and significant barriers to migration, the above species are not likely to occur in the project area.

Despite these significant constraints on presence, it is impossible to absolutely preclude the presence of these species from the project area. Though extremely unlikely, migratory CRLF or CTS may occupy marginal aestivation habitat that occurs in the project area. Because the likelihood of such individuals successfully migrating to the project area from known breeding habitat is extremely low, the project is not likely to result in take to either of these species.
Bay Checkerspot Butterfly

The federally endangered bay checkerspot butterfly (bay checkerspot) is found in patches of native serpentine grassland habitat primarily south and east of the project area. Though patches of serpentine grassland that support the host plant species for the butterfly do occur within AQ County Park, the bay checkerspot butterfly was not detected during the field survey. Published technical reports and agency guidance documents indicate that AQ County Park is outside occupied habitat for the bay checkerspot.

The predominantly steep, dry slopes of AQ County Park are largely covered by dense scrub thickets, oak savanna, north facing closed-canopy bay laurel and oak woodlands, dense thickets of Spanish gorse in disturbed areas, and non-native dominated annual grasslands. Serpentine outcrops are scattered throughout the park, oftentimes occurring on road edges or exposed mining scars. Serpentine grassland habitat that supports the primary host plant for Bay checkerspot, California plantain (*Plantago erecta*), occurs in patches throughout AQ County Park, including an area north of the San Francisco Open Cut (Figure 4.2: Serpentine Grasslands in the Project Area). In general, these patches are too small and isolated to be of value as habitat for this endangered species. The closest known population of Bay checkerspot is located approximately 9-10 miles east of the action area, at the Coyote Ridge Open Space Preserve near Morgan Hill (USFWS 2009).

San Francisco Dusky Footed Woodrat

Multiple woodrat nests in denser stands of oak (*Quercus* sp.) and California bay-laurel (*Umbellularia californica*) woodland were observed in the project area. As a State Species of Special Concern, this species is considered in this CEQA evaluation. Construction activity that encroaches on occupied woodrat nests may necessitate coordination with the CDFW.

Listed Bird Species

Wide ranging bird species such as the State Fully Protected Golden Eagle (*Aquila chrysaetos*) are known to occur in the region and may occasionally forage or roost on suitable structures within AQ County Park. Nesting records for this species are absent however, so this species should be considered as a sporadic visitor within the project area. Native birds and their nests are protected under the Migratory Bird Treaty Act (MBTA) of 1918. Due to the abundance of birds in the AQ County Park, it is presumed that preconstruction nesting bird surveys and temporary construction buffers would be necessary to ensure that birds protected under the MBTA are not adversely affected by implementation of the project.

Common Wildlife Detections

The following non-listed wildlife species were detected over the course of the field survey effort:

- Birds (based on direct visual observation or song/call): wrentit (*Chamea fasciata*), northern flicker (*Colaptes auratus*), mourning dove (*Zenaida macroura*), turkey vulture (*Cathartes aura*), spotted towhee (*Pipilo maculatus*), dark-eyed junco (*Junco hyemalis*), California thrasher (*Toxostoma redivivum*), California gull (*Larus californicus*), western scrub jay (*Aphelocoma californica*), orange-crowned warbler (*Vermivora celata*), sharp shinned hawk (*Accipiter striatus*), feral cat (*Felis cattis*), acorn woodpecker (*Melanerpes formicivorus*), California towhee (*Melozone crissalis*), American crow (*Corvus brachyrhynchos*), Anna’s hummingbird (*Calypte anna*), California quail (*Callipepla californica*), American goldfinch (*Spinus tristis*), American kestrel (*Falco sparverius*), chestnut-backed chickadee (*Poecile rufescens*), red-tailed hawk (*Buteo jamaicensis*).
• Mammals (based on direct visual observation, scat, and/or tracks): brush rabbit (*Sylvilagus bachmani*), bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargentus*), and black-tailed deer (*Odocoileus hemionus*).

• Reptiles: gopher snake (*Pituophis catenifer*), coast garter snake (*Thamnophis elegans*), alligator lizard (*Elgaria multicarinata*), western fence lizard (*Sceloporus occidentalis*), and Sierran tree frog (*Pseudacris sierra*).

**IMPACTS AND MITIGATION:**

1. **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

A number of sensitive species and biological resources have the potential to occur in the area (URS, 2011b). Nesting birds, wetlands and stream quality can be indirectly disturbed by construction activities and personnel who are not aware of the presence of these species, their protected status, and the methods to protect them. Therefore, the following Mitigation Measure BIO-1 shall be implemented.

**Mitigation Measure BIO-1:**

a. **Employees and Contractor Education Program:** An employee education program shall be conducted prior to the initiation of construction activities. The program shall consist of a brief presentation by a qualified biologist knowledgeable in special-status species biology and regulations. The presentation shall include: a description of special-status species with the potential to occur within the project area and their habitat needs, information on their status and protection under state and/or federal laws, and a list of measures required during the project to reduce impacts to natural communities to protect species habitat. Contractors and their employees shall be instructed on what to do if an animal is found, which includes notifying the project foreman and County Parks staff immediately. County Park staff shall notify the appropriate wildlife agency. Educational materials shall also provide information on avoiding project impacts on creeks and wetlands. All contractors and their employees working in the project area shall attend the presentation and sign training materials indicating attendance in the education program.

b. **Vehicle Safety:** Vehicles shall remain on designated roads and staging areas within the project area. Vehicles shall not drive more than 5 miles per hour within the construction area. Parked vehicles shall be thoroughly inspected underneath before they are moved to ensure that no animals are on the ground below the vehicle.

**Implementation:** Qualified County Parks natural resources staff or qualified biologist

**Timing:** During a pre-construction field meeting with contractors and subcontractors

**Monitoring:** County Parks Staff shall require contractor and subcontractors to have each employee attend training session and sign training materials indicating attendance at education program.

Access to Unknown Trails #1 and #2 may require tree trimming or removal. Nesting birds within project area or in the immediate vicinity of project activities may be impacted through disturbances caused by project construction activities. Therefore, Mitigation Measure BIO-2 is required.
Mitigation Measure BIO-2:

Prior to any vegetation removal or disturbance including trimming occurring within the nesting bird season (February 1 to August 31), a qualified biologist shall conduct pre-construction surveys no more than 3 days prior to the start of construction activities. If more than 3 days elapse between the final nest search and the beginning of construction activities, another nest survey shall be conducted. If any active nests are detected, a qualified biologist shall determine the appropriate buffer to be established around the nest and monitor the nest until the chicks have fledged or until the nest has been determined to be inactive. CDFW generally accepts a 50-foot radius buffer around passerine and non-passerine land bird nests, and up to a 250-foot radius for most raptors; however, the qualified biologist, in consultation with County Parks’ Natural Resource staff, shall have flexibility to reduce or expand the buffer depending on the species and specific site circumstances.

Implementation: Qualified biologist

Timing: Before project implementation

Monitoring: If active nests are found during pre-construction survey, the qualified biologist shall ensure that an adequate buffer is maintained until chicks have fledged. The biologist shall provide a memo report on the results of the nest survey and protection to the County Parks representative.

Woodrat nests have been found in the vicinity of the project area. The San Francisco dusky-footed woodrat is a protected species. These mammals live year round in their nests, which are essential for their survival. Woodrats dwell in moderately-dense to dense woodland habitat, similar to that found adjacent to trails throughout the project area. Woodrats or their nests present at the time of construction could be disturbed by project activities. Therefore, Mitigation Measure BIO-3 is required.

Mitigation Measure BIO-3:

A qualified biologist shall conduct a pre-construction survey for San Francisco dusky-footed woodrat nests within the project footprint and a 50 foot buffer. If any nests are detected, work shall be delayed and County Parks staff and CDFW will be notified. County Parks Natural Resource staff or authorized representative will complete one of the following avoidance/minimization measures, listed in order of priority and implementation:

a. Project activities would be rerouted to avoid woodrat nests by at least 50 feet, if feasible. If the work cannot be rerouted at least 50 feet from the nest, it shall be rerouted as far away from the nest as possible but not closer than 5 feet from the nest. Safety and/or silt perimeter fencing shall be erected 25 feet from the nest. The fencing shall not surround the woodrat nest but would be erected between the nest and the construction activities.

b. If the project footprint must go directly through or within 5 feet of a nest, CDFW shall be consulted with one of the two following options:
   i. If the nest appears inactive (e.g., no scat or fresh leaves and twigs), seek approval from CDFW to dismantle the nest and replace the lost resource by building an artificial nest. One artificial nest shall be built for every one existing inactive nest.
   ii. If the nest appears active, approval shall be sought from CDFW to: 1) trap the occupant(s) of the nest, 2) dismantle the nest: 3) construct a new artificial nest with the materials from the dismantled nest, and 4) release the occupant into the new artificial nest. The new nest shall preferably be placed no more than 20 feet from its original location but as far from the project footprint as necessary to be protected from
construction activities. If the nest is to be moved downslope of the project footprint, extra precautions shall be taken, such as erecting silt fencing or a plywood barrier, to stop falling/sliding materials from impacting the new nest. Nests should only be moved in the early morning during the non-breeding season (October through February). If trapping has occurred for 3 consecutive nights and no woodrats have been captured, the nests shall be dismantled and a new nest constructed.

Implementation: Qualified biologist or County Parks Natural Resource staff

Timing: Before project implementation

Monitoring: If woodrat nests are found, the qualified biologist shall ensure that all protection measures are implemented. The biologist shall provide a memo report on the results of the nest survey and protection to County Parks representative.

Small patches of serpentine grassland with plant species that could be used by the Bay checkerspot butterfly are present within the project at serpentine outcrops located along the Castillero Trail and near the San Francisco Open Cut area. The species itself is not expected to be present. Though Bay checkerspot butterflies are unlikely to be present, potential habitat could be disturbed in the area north of the San Francisco Open Cut in gaining access to Unknown Trails #1 and #2. Mitigation Measure BIO-4(a) would be implemented to minimize any impact to potential Bay checkerspot habitat.

The smooth lessingia (Lessingia micradenia var. glabrata), most beautiful jewel flower (Streptanthus albidus ssp. peramoenus), special status plants (CNPS 1B) and Santa Clara Valley dudleya (CNPS 1B.1/FE), occur in the project area. Because these plants are known to occur within the project area they could be impacted during project activities. Therefore, Mitigation Measure BIO-4(b) is required.

Mitigation Measure BIO-4:

a. Bay Checkerspot Butterfly and its habitat:

   i. To avoid impacts to Bay checkerspot butterflies, access through potential habitat (serpentine grassland supporting the butterfly’s host plant, California plantain) would be allowed during the dry period only, June through October, when the butterfly has entered dormancy.

   ii. In the unlikely event that Bay checkerspot butterflies are found, all work that could result in direct injury, disturbance, or harassment of the species would immediately cease. A County Parks representative would contact the USFWS to determine the appropriate course of action.

   iii. The following activities would be restricted to areas outside serpentine grassland habitat: clearing and grubbing, excavation and grading, and/or contouring.

b. Before project work begins, a qualified biologist shall conduct a pre-construction survey and designate exclusion areas where feasible to avoid and minimize impacts to serpentine grassland, populations of smooth lessingia, most beautiful jewel flower, and Santa Clara Valley dudleya from construction activities. Where impacts to these species cannot be avoided, a qualified biologist shall develop a plan that includes transplanting techniques, and a monitoring program acceptable to CDFW. The biologist will provide a memo report documenting the results to County Parks annually throughout the monitoring period.
**Implementation:** Qualified biologist

**Timing:** Before project implementation

**Monitoring:** A qualified biologist will check that all protection measures are implemented as outlined in the plan. The biologist would provide a memo report on the results and protection to the County Parks representative, and would implement any site restoration as needed.

With implementation of the above measures, this impact would be **less than significant with mitigation incorporated.**

2. **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?**

Two stands of riparian vegetation are present within the project area. A stand of arroyo willows is located in the southern portion of the project area in a small depression just north of the Castillero Trail. A second stand of arroyo willows is located on the edge of a drainage channel just east of the Mine Hill Trail. Both stands of willows are located just outside of the project area, and would be protected by exclusionary fencing. These areas would be avoided by project activities; therefore, there would be no impact to riparian habitat.

3. **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or tributary to an already impaired water body, as defined by section 303(d) of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?**

A wetland delineation of the project area determined a total of 0.002 acres of wetlands and 0.105 acres (1883 linear feet) of potential other waters of U.S. (intermittent drainages, concrete-lined channels), as shown in Figure 4.3: Map of Delineated Features are present in or around the project area. Project activities would not impact wetlands adjacent to trails, as they would be protected by exclusionary fencing. Five seasonal stormwater drainages occur throughout the project area. Four of the five drainages have existing culverts that are typically 12 to 18-inch corrugated metal pipe and are placed at trail crossing locations. The project would replace and resize three of the existing culverts, as well as build rock-slope protection and headwalls at all five drainages to reduce erosion and sediment transport from these potential sources. Installation of replacement culverts, rock-slope protection, and headwalls would result in permanent fill and direct impacts in potential waters of the U.S. Project activities are anticipated to place a total of 54.34 cubic yards of fill (0.018 acre) in potential waters of the U.S. The replacement of culverts and installation of headwalls and rock slope protection would have a beneficial impact on water quality in the area, as it would prevent future erosion and downstream contamination. Further, construction would take place during the dry season to avoid indirect effects from project construction. Although the replacement culverts would be wider than the existing culverts, they would be the same length, and the additional width would expand capacity within the roadbed of compacted trails, thus not impacting flow patterns or hydrological functions of potential waters of the U.S. in the project area.

As such, there would be no substantial adverse effects on wetlands or potential waters of the U.S. in the project area. Further, to prevent any project impacts, implementation of Mitigation Measure BIO-5 would be required.
FIGURE 4.3
Delineated Waters of the U.S.
Mitigation Measure BIO-5:

The following BMPs shall be implemented to mitigate for impacts to the Wetlands and Waters of the U.S. in order to achieve a minimum of no-net loss:

a. Clearing within the project site shall be confined to the minimal area necessary to facilitate construction activities. To ensure that construction equipment and personnel do not affect sensitive aquatic habitat outside of the project boundary. Exclusion fencing shall be installed to clearly delineate habitat to be avoided.

b. Standard stormwater BMPs shall be implemented throughout construction in order to avoid and minimize adverse effects to water quality within the project area, as outlined in Section 4.10 Hydrology and Water Quality. Appropriate erosion control measures shall be used (e.g., straw wattles) to reduce siltation and manage potential runoff from the project area.

c. Construction vehicles and equipment shall be maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease.

d. Jurisdictional Wetlands and Waters of the U.S. will be retained where feasible. Impacts to the unnamed intermittent drainages as a result of the calcine removal shall be restored to its previous condition, with additional runoff swales to collect water and reduce future erosion.

Implementation: Qualified biologist

Timing: Before project implementation

Monitoring: The qualified biologist shall ensure that all standard construction BMPs are implemented. With the implementation of this mitigation measure, the impact would be less than significant with mitigation incorporated.

4. Have a substantial adverse effect on oak woodland habitat as defined by Oak Woodlands Conservation Law (conversion/loss of oak woodlands) – Public Resource Code 21083.4?

Oak woodland habitat is present within the project area; however few trees would potentially be removed or trimmed as a result of project activities. Impacts to the root zones may occur from the removal of calcines during project construction. These impacts would occur to a small number of trees present along the access path and at Unknown Trail #1 and #2. Project activities would not result in the conversion or loss of oak woodland habitat. Impacts to the potential loss of oak and other native tree species are addressed below in Mitigation Measure BIO-6. Thus impacts to oak woodland habitat as defined by Oak Woodlands Conservation Law are less than significant with mitigation incorporated.

5. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Project activities may require tree pruning or tree removal activities. Nonetheless, tree removal or pruning would be minimal and would not create a break in the canopy of the woodland corridor that would impede the movement of species such as birds and woodrats through the canopy zone/corridor.
No fish or other wildlife species movement including woodrat movement between nests would be impacted by project activities; therefore, the project would have a less than significant impact.

6. **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?**

The project area is within the permit area boundaries of the Santa Clara Valley Habitat Plan. Although the project is not a covered activity under the HCP/NCCP permit, the project has been designed to implement HCP conditions, where appropriate. The purpose of this project is to improve habitat quality and restore natural communities by the removal of calcines while improving the flow of water to reduce erosion and control runoff. These outcomes would be consistent with the goals and objectives of the Habitat Plan, and the potential impacts to special-status species covered by the Habitat Plan would be less than significant.

7. **Impact a local natural community, such as a fresh water marsh, oak forest or salt water tide land?**

8. **Impact a watercourse, aquatic, wetland, or riparian area or habitat?**

Impacts to natural communities on site, including oak woodlands, riparian, and aquatic features are discussed above in Thresholds 2 and 4. No impacts to riparian or oak woodlands are expected. Mitigation Measure BIO-5 would be required for impacts to aquatic and wetland habitat; therefore, this impact would be less than significant with mitigation incorporated.

9. **Adversely impact unique or heritage trees or a large number of trees over 12" in diameter?**

Project activities at Unknown Trail #1 and #2 may require pruning of trees and may result in damage within the root zone, as discusses in thresholds 4 and 10. Mitigation Measure BIO-6 would be required and this impact would be less than significant with mitigation incorporated.

10. **Conflict with any local policies or ordinances protecting biological resources:**

   i) **Tree Preservation Ordinance?**
   
   ii) **Wetland habitat?**
   
   iii) **Riparian habitat?**

   i. The County of Santa Clara Tree Preservation and Removal Ordinance (Ord. No. NS-1203-107, Division C16) requires mitigation for any tree present on a property owned or leased by the County that is twelve (12) inches or more in diameter measured at four and one-half feet above the ground, or which exceeds twenty (20) feet in height; 2) any multi-trunk trees totaling 24 inches or more in diameter measured at four and one-half feet above the ground; and 3) any tree designated as heritage by the County Board of Supervisors.

Oaks and large trees are valuable aesthetic and biological resources found in the project area. Calcine access and removal at Unknown Trail #1 and Unknown Trail #2, may require pruning of trees and may result in the damage within the root zones. The species may include willows (*Salix* sp.), California bay laurel (*Umbellularia californica*), and coast live oak trees (*Quercus agrifolia*). Some of these trees are potentially greater than 12 inches diameter at breast height (DBH). It is possible that trees may not need to be removed based on the extent of the calcine pavements and access to the site. This would be determined when conditions are revealed in the field during construction.

A certified arborist would be on-site to determine how to prune trees, determine if trees can be saved, and guide tree protection and, if necessary, removal in the field. Public Resources Code 21083.4 requires mitigation if a project under its jurisdiction may result in a conversion of oak woodlands that
would have a significant effect on the environment. Incorporating the following mitigations would reduce this impact to less than significant.

**Mitigation Measure BIO-6:**

a. A certified arborist shall make a site visit prior to construction to determine which trees may be affected, and the health of the trees within the project area. The arborist will make decisions, in consultation with the Project Manager, on tree pruning, removal, and preservation. Whenever possible, mature trees shall be preserved while still achieving the calcine removal goals of the project.

b. All trees to be retained shall be protected with exclusion fencing at the dripline of the trees prior to any construction activities.

c. For project activities within the tree dripline, the following measures shall be implemented:

   i. A certified arborist shall be present at the project site during excavation within the dripline.

   ii. All excavation within tree root zone shall be done by hand.

   iii. Root pruning, as needed, shall be guided by a certified arborist.

   iv. The trees shall be watered before, during and after construction to reduce stress on the trees.

   v. A certified arborist shall monitor and assess the health of impacted trees before and after construction.

d. If tree removal is necessary, replacement trees shall be planted of a like kind and species of tree removed, preferably native trees found in the same watershed, or of a kind and species to be determined by the County Parks. Replacement tree planning shall utilize at least five-gallon size stock. The replacement ratio for trees removed shall be determined by County Parks in consultation with CDFW.

**Implementation:** Certified arborist and qualified biologist

**Timing:** Prior to construction and during project work (monitor tree pruning, removal, preservation)

**Monitoring:** None

With incorporation of Mitigation Measure BIO-6, this impact would be *less than significant with mitigation incorporated*.

*ii.* The County has no specific policies or ordinances relating to wetland habitat; therefore the project would have *no impact.*

*iii.* No riparian habitat is present within the project area. Therefore, the project would have *no impact.*
## 4.5 CULTURAL/HISTORICAL/ARCHAEOLOGICAL RESOURCES

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<th>E. CULTURAL/ HISTORICAL/ ARCHAEological RESOURCES</th>
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1. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines, or the County’s Historic Preservation Ordinance (i.e., relocation, alterations or demolition of historic resources)?  
   - No Impact: ☒  
   - Less Than Significant Impact: ☐  
   - Less Than Significant Impact With Mitigation Incorporated: ☐  
   - Potentially Significant Impact: ☒  
   - Cumulative: 3, 16, 19, 40, 41, 49

2. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5 of the CEQA Guidelines?  
   - No Impact: ☐  
   - Less Than Significant Impact: ☐  
   - Less Than Significant Impact With Mitigation Incorporated: ☒  
   - Potentially Significant Impact: ☐  
   - Cumulative: 3, 19, 40, 41

3. Disturb any human remains, including those interred outside of formal cemeteries?  
   - No Impact: ☐  
   - Less Than Significant Impact: ☐  
   - Less Than Significant Impact With Mitigation Incorporated: ☐  
   - Potentially Significant Impact: ☒  
   - Cumulative: 2, 40, 41

4. Be located in a Historic District (e.g., New Almaden Historic District)?  
   - No Impact: ☐  
   - Less Than Significant Impact: ☐  
   - Less Than Significant Impact With Mitigation Incorporated: ☒  
   - Potentially Significant Impact: ☐  
   - Cumulative: 7, 10a

5. Disturb a historic resource or cause a physical change which would affect unique ethnic cultural values or restrict existing religious or sacred uses within the potential impact area?  
   - No Impact: ☐  
   - Less Than Significant Impact: ☒  
   - Less Than Significant Impact With Mitigation Incorporated: ☐  
   - Potentially Significant Impact: ☐  
   - Cumulative: 3, 25, 42

6. Disturb potential archaeological resources?  
   - No Impact: ☐  
   - Less Than Significant Impact: ☐  
   - Less Than Significant Impact With Mitigation Incorporated: ☒  
   - Potentially Significant Impact: ☐  
   - Cumulative: 3, 10d, 41, 42

7. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?  
   - No Impact: ☐  
   - Less Than Significant Impact: ☒  
   - Less Than Significant Impact With Mitigation Incorporated: ☐  
   - Potentially Significant Impact: ☐  
   - Cumulative: 2, 3, 4, 40, 41

### DISCUSSION:

A cultural resource study was conducted by URS Cultural Resources staff for the Calcine Roads Remediation project area (URS 2013). The study was conducted to meet CEQA requirements and planning directives of Santa Clara County. It consisted of the following: a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System; communication with the California Native American Heritage Commission (NAHC) requesting a search of its Sacred Lands File and a list of potentially interested Native American parties; communication with Native American groups and individuals listed by the NAHC; an archaeological field survey of the project footprint; and an assessment of California Register of Historical Resources (CRHR)/National Register of Historic Places (NRHP) eligibility for the historic era roads that make up the project area.

### REGULATORY CONTEXT

**CEQA:** CEQA Guidelines (California Code of Regulations, Title 14, Section 15064.5) provide specific guidance for determining the significance of impacts on historic and unique archaeological resources.
Under CEQA these resources are called “historical resources” whether they are of historic or prehistoric age. CEQA (Public Resources Code Section 21084.1) defines historical resources as those listed, or eligible for listing, in the CRHR, or those listed in the historical register of a local jurisdiction (county or city). NRHP-listed historic properties located in California are considered historical resources for the purposes of CEQA and are also listed in the CRHR. The CRHR criteria for listing such resources are based on, and are very similar to, the NRHP criteria. These criteria are as follows:

1) [resources] that are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States; or

2) [resources] that are associated with the lives of persons important to local, California, or national history; or

3) [resources] that embody the distinctive characteristics of a type, period, region, or method of construction, or that represent the work of a master; or that possess high artistic values; or

4) [resources] that have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Section 21083.2 and CEQA Guidelines Section 15064.5(c) provide further definitions and guidance for archaeological sites and their treatment. Section 15064.5 also prescribes a process and procedures for addressing the existence of, or probable likelihood, of Native American human remains, as well as the accidental discovery of any human remains within the project area. This includes consultations with appropriate Native American tribes about the treatment of known or found Native American human remains, before such remains are recovered.

Guidelines for CEQA implementation define procedures, types of activities, persons, and public agencies required to comply with CEQA. The list of questions in this IS/MND are tailored by County Park Staff in accordance with Appendix G Section 15023 of the CEQA Guidelines. Although CEQA does not define what “a unique paleontological resource or site” is, Section 21083.2 defines “unique archaeological resources” as “any archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and show that there is a demonstrable public interest in that information.
- It has a special and particular quality, such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event.”

This definition is considered equally applicable to recognizing a unique paleontological resource or site. CEQA Section 15064.5 (a)(3)(D), which indicates “generally, a resource shall be considered historically significant if it has yielded, or may be likely to yield, information important in prehistory or history,” provides additional guidance.

**California Register of Historical Resources (PRC Section 5024.1 and 14 CCR Section 4850):** Public Resources Code Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed or determined
eligible for listing in the NRHP, including properties evaluated under Section 106. The criteria for listing are similar to those of the NRHP. CRHR regulations govern the nomination of resources to the CRHR (14 CCR Section 4850). The regulations set forth the criteria for eligibility, as well as guidelines for assessing historical integrity and resources that have special considerations.

**California Public Resources Code Section 5097.5** - Regulates excavation, destruction or defacing of any historical, or prehistoric ruins, Native American burial or sacred grounds, archaeological or paleontological sites including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands. Prohibits disturbance or destruction of historical, prehistoric, and sacred sites. This section also prohibits anyone from knowingly engaging in these activities except with the express written permission of the public agency having jurisdiction over the lands.

**California Public Resources Code Section 5097.99** - Regulates disturbance or possession of any Native American artifacts, grave sites, or human remains. It is a felony for any person to knowingly or willfully obtain or possess any Native American artifacts or human remains taken from a Native American grave or cairn.

**California Public Records Act Sections 6250 – 6270.** - Regulates public disclosure of records. Section 6254 – Stipulates exemptions of public disclosure of records requirements.

- Section 6254 (r) pertains to records of Native American sites, places, features and objects; and
- Section 6254.10 pertains to archaeological site information and reports.

**California Health and Safety Code Section 7050.5** -

- Prohibits disturbance or willful removal of any human remains from any location other than a dedicated cemetery without authority of law.
- Regulates procedures in the event of discovery or recognition of human remains in any location other than a dedicated cemetery. These procedures include restrictions on further excavation or disturbance of the site or any nearby area reasonably suspected to overlay adjacent remains until the Coroner of the county where they are discovered has been notified. The Coroner determines that the remains are not subject to other provisions of the law, and makes recommendation as to the disposition of the remains.
- Regulates discovery of Native American burial sites, graves or human remains. If, in accordance with the provisions of Section 7050.5 noted above, the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact the Native American Heritage Commission.
- Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 of the State Health and Safety Code.

**California Native American Graves Protection and Repatriation Act (California Health & Safety Code Section 8010 et seq.):** The California Native American Graves Protection and Repatriation Act establishes a state repatriation policy consistent with, and facilitates implementation of, the federal Native American Graves Protection and Repatriation Act. The act strives to ensure that all California Native American human remains and cultural items are treated with dignity and respect, and asserts
intent for the state to provide mechanisms for aiding California Native American tribes, including non-
federally recognized tribes.

**Santa Clara County General Plan:** The Santa Clara County General Plan calls for the protection of heritage resources. Heritage resources are defined as, “those particular types of resources, both natural and man-made, which due to their vulnerability or irreplaceable nature deserve special protection if they are able to be preserved for current and future generations.” The types of resources include “historical sites, structures, and areas” and “archaeological and paleontological sites and artifacts.” The General Plan outlines three basic strategies for protecting heritage resources: 1) inventory and evaluate heritage resources; 2) prevent or minimize adverse impacts on heritage resources; and 3) restore, enhance and commemorate resources.

**CULTURAL RESOURCE FINDINGS**

Findings from the NWIC records search, NAHC and Native American communication, and archaeological field survey are summarized below.

- The NWIC records search identified one previously recorded cultural resource, the New Almaden Historic District (CA-SCL-405), within the project area and one previously recorded cultural resource, Mine Hill (CA-SCL-271), within the 1/2-mile search radius. The New Almaden Historic District is a National Historic Landmark District (NHL 66000236) and is listed in the NRHP/CRHR under Criterion A/1.
- No previously recorded prehistoric cultural resources were identified in or adjacent to the project area by the records search or the literature review.
- The project area is situated on various bedrock formations that date between the lower Jurassic (201.6 million years ago [Ma]) and the Miocene (5.3 Ma). These landforms are overlain by Santerhill-Xerolls-Mouser, Footpath-Mouser, and Katykat-Mouser-Sanikara complex soils as well as Montara Sandy loam. These surface sediments are too old to contain buried archaeological deposits and, thus, are not considered sensitive for buried prehistoric archaeology.
- Two previous cultural resource studies have previously surveyed the entire project area: 1) Preliminary Recordation and Assessment of Historic Resources in New Almaden Quicksilver National Historic Landmark District (Allen and Crosby 2002) (S-29851); and 2) New Almaden Historic District, Santa Clara County (Snell and Everhart 1964) (S-4665). While both of these studies document resources associated with the New Almaden Historic District, neither study identified cultural resources within the current project area.
- The Native American Heritage Commission was contacted on September 11, 2013 to request a search of the Sacred Lands File for sacred lands or other cultural properties of significance to Native Americans within or near the project area. Ms. Debbie Pilas-Treadway responded on September 18, 2013 with a faxed letter stating that the “record search of the sacred land file has failed to indicated the presence of Native American cultural resources” in the project area. Included with the database results was a list of Native American groups and individuals who may have knowledge of cultural resources in the project. URS contacted these groups and individuals via email on September 23, 2013 and provided information on proposed project activities. Two of the individuals...
responded with questions/comments and were provided clarification regarding overall subsurface project impacts; neither has voiced further concerns.

- A thorough reconnaissance survey of the project area was conducted on September 26, 2013 by URS archaeologists Annamarie Guerrero and Kathleen Kubal. Surface visibility was excellent with 100% ground visibility in most areas. Due to the developed nature of the project area, the majority of the survey was a “windshield” survey (or conducted from a vehicle); however certain portions, not accessible by car, were conducted on foot. The survey was documented in field notes, maps, and photographs.

- With the exception of the roads themselves, no cultural materials or evidence of archaeological deposits were observed. The project area has been extensively disturbed by historic mining activities, including the use of calcine fill deposits to cap road surfaces.

- The roads that make up the project area are historic mining roads associated with the New Almaden Historic Landmark District. They include Castillero Trail, a portion of Mine Hill Trail, Hidalgo Cemetery Trail, Yellow Kid Trail, Randol Trail, and April Trail. These roads (located in the vicinity of Mine Hill) connect Spanish Town to English Town. Historically, the roads were used by miners to access the many mines and processing facilities within the mining district.

The New Almaden Historic Landmark District is listed in the NRHP and the CRHR. Based on the survey and analysis of the resources within the project area, the roads within the project area associated with the New Almaden district are considered eligible for NRHP/CRHR listing as contributors to this district (URS 2013). The roads are considered significant due their location and setting—they provided a connection between the various mine elements—rather than their specific design, materials, or craftsmanship. Removal of calcine pavement and construction of erosion control measures would not alter road alignment or width, and would therefore not affect the roads’ ability to convey their significance as transportation routes between various mining and habitation features associated with the New Almaden Mining District in second half of the 19th century and the early 20th century.

IMPACTS AND MITIGATION:

1. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines, or the County’s Historic Preservation Ordinance (i.e., relocation, alterations or demolition of historic resources)?

The removal of calcine pavement on several existing trails in AQ County Park would involve regrading; replacement of removed material with clean materials, revegetation and hydroteeading of the disturbed areas, where needed. No built environment resources (buildings or structures), including those associated the New Almaden District, would be altered or changed as a result of the proposed project activities. Although the roads that make up the project area are considered significant historical resources, the project would not affect the ability of the roads to convey their significance and would have no impact.

2. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5 of the CEQA Guidelines?

6. Disturb potential archaeological resources?
No archaeological resources have been recorded within ½-mile of the project area. The potential to encounter previously unrecorded archaeological resources during removal of calcine pavement or construction of access paths is considered low. However, the following mitigation measures are included to address any unanticipated discoveries of archaeological resources.

**Mitigation Measure CUL-1:**

Prior to the initiation of construction or ground disturbing activities, County Parks staff or designee shall conduct a tailgate meeting to inform all construction personnel of the potential for exposing subsurface cultural resources and to recognize possible buried cultural resources. Personnel shall be informed of the procedures that shall be followed upon the discovery or suspected discovery of archaeological materials, including human remains.

**Implementation:** County Parks Staff

**Timing:** During a pre-construction field meeting with contractors and subcontractors

**Monitoring:** County Parks staff shall require contractor and subcontractors to have each employee attend training session and sign training materials indicating attendance at education program.

**Mitigation Measures CUL-2:**

Pursuant to CEQA Guidelines 15064.5 (f), “provisions for historical or unique archaeological resources accidentally discovered during construction” shall be instituted. Therefore, if previously unidentified archaeological resources are unearthed during construction, work shall be halted in the area (within 50-feet of the discovery) and County Parks staff or representative notified. County Parks staff or project manager will determine if an assessment of the significance of the find will be conducted.

**Implementation:** County Parks Staff

**Timing:** During construction

**Monitoring:** Construction contractor and County Parks Staff

With the application of the mitigation measure above, this impact would be less than significant with mitigation incorporated.

3. *Disturb any human remains, including those interred outside of formal cemeteries?*

The project area has been subject to extensive cut and fill associated with historic era mining operations. Project activities primarily involve the excavation and remediation of historic and modern fill. As such, the potential to encounter human remains during removal of calcine materials is considered very low. However, the following mitigation measure is included to address any unanticipated discoveries of human remains.

**Mitigation Measure CUL-3:**

In the event human remains, including skeletal remains, graves, or Native American burial sites or graves, are discovered, such as during the course of any ground disturbing activities (grading, excavating, trenching, digging, disk), construction or maintenance activities, the following procedures shall be followed:

a. All work in the area shall immediately cease and there shall be no further excavation or disturbance of the site or area in the vicinity of the discovery.
b. Notify the County Parks staff immediately.

c. County Parks staff shall immediately notify the County Medical Examiner/Coroner (County Ordinance No. B6-18).

d. Secure the area until the Coroner determines that the remains are not subject to any related provisions of law or are not subject to the Coroners authority, and make recommendations for the treatment and disposition of the remains.

e. If the County Coroner determines that the remains are or may be of a Native American, the Coroner shall contact the California Native American Heritage Commission pursuant to subdivision (c) of the State Health and Safety Code. The Native American Heritage Commission has various powers and duties to provide for the ultimate disposition of Native American remains.

f. If the Coroner determines that the remains are not those of a Native American, the Coroner would make recommendations for the treatment and disposition of the remains.

Construction work shall not begin again until the County Medical Examiner/Coroner has examined the remains, assessed their significance, and offered recommendations for any additional exploratory measures deemed necessary for the further evaluation of, and/or mitigation of adverse impacts. Human remains including archaeological sites known to contain human remains shall be treated in accordance with County Ordinance (Ordinance NS-508.2, § 3, 10-7-75; Ord. No. NS-508.3, § 1, 8-11-87 Sections B6-16 through 23. Section B6-18) and State law (Section 7050.5 of the State Health and Safety Code).

Implementation: County Parks Staff

Timing: During construction

Monitoring: Construction contractor and County Parks Staff

With the application of the mitigation measure above, this impact would be less than significant with mitigation incorporated.

4. Be located in a Historic District (e.g., New Almaden Historic District)?

The project area is within the New Almaden National Historic Landmark District. The County of Santa Clara has established a historic preservation zoning district for New Almaden. The boundaries of the zoning district coincide with the boundaries of the National Historic Landmark District described by the NRHP listing. While the roads that make up the project area are likely contributing elements to the landmark district, the project would not affect the roads’ ability to convey their significance as part of the district. Additionally, mitigations measures CUL-1 and CUL-2 would guide construction activities and specify actions to protect and evaluate any potentially significant unknown cultural resources discovered during construction. The impact of construction on the New Almaden Historic District would be less than significant with mitigation incorporated.

5. Disturb a historic resource or cause a physical change which would affect unique ethnic cultural values or restrict existing religious or sacred uses within the potential impact area?

The project would not affect the topography and would help restore the habitat to pre-mining conditions. This work would not impact or restrict unique ethnic cultural values, existing religious or sacred uses of the land and the project would have no impact.

7. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
The project area is underlain by bedrock of the Franciscan Melange of the Central belt; a formation known to contain paleontological resources (fossils). However, the project’s vertical disturbance is limited to the overlying sediment, soil, and imported fill and would not extend into the underlying bedrock and therefore the project would have **no impact.**
4.6 ENERGY

<table>
<thead>
<tr>
<th>WOULD THE PROJECT</th>
<th>IMPACT</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use non-renewable resources in large quantities or in a wasteful manner?</td>
<td>No Impact</td>
<td>Less Than Significant Impact</td>
</tr>
<tr>
<td>2. Involve the removal of vegetation capable of providing summer shade to a building or significantly affect solar access to adjacent property?</td>
<td></td>
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DISCUSSION:

According to the Santa Clara County General Plan, energy increases and limited availability of non-renewable energy resources, such as gasoline, could have adverse impacts on the economy of the County. Measures to reduce non-renewable energy usage are largely focused on reducing transportation energy demand, and include conservation measures for the industrial, commercial and residential sectors. Guidance for energy conservation is part of the Santa Clara County General Plan (SCC 1994).

IMPACTS AND MITIGATION:

1. Use non-renewable resources in large quantities or in a wasteful manner?

Construction of the project would require the use of non-renewable fossil fuel resources to power construction equipment for this project. Fuel use would be as efficiently as possible for this equipment. Measures to ensure efficiency are specified in the Greenhouse Gases and Air Quality sections. Operation of the project would not require the use of any energy (non-renewable or renewable); therefore the impact would be less than significant.

2. Involve the removal of vegetation capable of providing summer shade to a building or significantly affect solar access to adjacent property?

No buildings or adjacent properties are located in the vicinity of the project site; therefore, shade would not be removed from any buildings and there would be no impact to solar access to adjacent properties. Therefore, the project would have no impact.
### 4.7 GEOLOGY AND SOILS

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>NO</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Potentially Significant Impact</th>
<th>Cumulative</th>
</tr>
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#### 1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

#### 2. Result in substantial soil erosion or siltation or the loss of topsoil?

#### 3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, collapse, shrink/swell potential, soil creep, or serve erosion?

#### 4. Be located on expansive soil, as defined in the report, Soils of Santa Clara County or California Building Code, creating substantial risks to life or property?

#### 5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

#### 6. Cause substantial compaction or over-covering of soil either on-site or off-site?

#### 7. Cause substantial change in topography or unstable soil conditions from excavation, grading, or fill?

#### 8. Be located in an area designated as having a potential for major geological hazard?

#### 9. Be located on, or adjacent to a known earthquake fault?

#### 10. Be located in a Geologic Study Zone?

#### 11. Involve construction of a building, road or septic system on a slope of:

<table>
<thead>
<tr>
<th>Slope</th>
<th>NO</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Potentially Significant Impact</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 30% or greater?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.3, 10j, 11c</td>
</tr>
<tr>
<td>b. 20% to 30%?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.3, 10j, 11c</td>
</tr>
<tr>
<td>c. 10% to 20%?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.3, 10j, 11c</td>
</tr>
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</table>
DISCUSSION:

Geology

The project area is located in the Santa Teresa Hills Quadrangle (USGS 2012). The Santa Teresa Hills define the southern margin of the Santa Clara Valley in the northern third of the quadrangle. The Santa Cruz Mountains lie in the southern half of the quadrangle. According to geologic mapping of Santa Teresa Hills Quadrangle (USGS 2012) the project area is situated on various bedrock formations that date between the lower Jurassic (201.6 million years ago [Ma]) and the Miocene 5.3 Ma). Much of the upland area of the Santa Teresa Hills Quadrangle is underlain by Franciscan Complex rocks, including extremely sheared and chaotic mélange of the Central belt terrane and more coherent rocks of the Permanente and Marin Headland terranes (McLaughlin and others 2001). According to historic descriptions of the mining operations, mercury mineralization within the project area occurred primarily as sulfide mineral cinnabar within the silica-carbonate bedrock, thought to have formed by hydrothermal alteration of serpentine (Bailey and Everhart 1964).

Topography

The existing topography of areas adjacent to the project site has been thoroughly altered by grading associated with mining facilities, park service trails, and remedial efforts. Elevation in the project vicinity ranges from approximately 900 feet to 1700 feet above sea level (NAVD 88). Steep hillsides and mountaintop flatlands typify the topography of the project vicinity. The existing topography suggests that at least portions of the ridge located near Castillero Trail have been modified. The surrounding slopes are moderately steep to steep and are dissected by a network of drainages. Access to the project area is provided by a network of unpaved roads and hiking trails extending from several park entrances.

Seismicity

Active faults have not been mapped across the project area and the site is not located within the Alquist-Priolo Earthquake Fault Zone. Consequently, the risk of primary fault rupture through the project area is low. The nearest known active fault is the San Andreas Fault is located approximately 6 miles south of the project site (ABAG 2013a). Strong and moderate seismic ground shaking should be anticipated at the project site in response to a major local earthquake (ABAG 2009). Seismic ground shaking could trigger potential liquefaction within young alluvial deposits located near nearby creeks. Liquefaction could result in sand boils, lateral spreading, and settlement.

Seismicity of the project region has resulted in several major earthquakes during the historic period, including the 1868 Hayward Earthquake, the 1906 San Francisco Earthquake, and most recently, the 1989 Loma Prieta Earthquake (Working Group on California Earthquake Probabilities 2007). According to Association of Bay Area Governments (ABAG), very strong ground shaking, Modified Mercalli Intensity (MMI) IX violent is possible in response to a large earthquake along the nearby San Andreas Fault, similar to the 1906 earthquake (ABAG 2013b).

Soils

Soils in the project vicinity generally consist of montara sandy loam (15 to 50% slopes), katykamouser-sanikara complex (30 to 50% slopes), footpath-mouse complex (30 to 50% slope) and santherhill-xerolls-mouser complex (15 to 30% slope) mined land (USDA 2012). Site soils have a moderate to high potential for erosion when unvegetated, and allow for water to travel easily. Calcine materials are
typically associated with artificial fill (mining spoil deposits). In addition, calcine materials have been mixed with local soils by water transport and by gravity mixing on slopes with colluvial soil deposits.

**IMPACTS AND MITIGATION:**

1. **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**
   
   i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**
   
   No active faults are known to pass through the project area, and the proposed project is not located within Alquist-Priolo Earthquake Fault Zone (CGS 2010). Consequently, fault rupture through the project area is not likely to occur. Implementation of the proposed project would not result in the construction of any structures for human habitation, nor would it significantly increase long-term human use of the project area. Consequently, there is no anticipated impact on humans or structures from fault rupture and the project would have no impact.
   
   ii) **Strong seismic ground shaking?**
   
   Although no known active faults have been identified within the project area, violent ground shaking can be expected to occur at the project area during major earthquakes in the region, according to ABAG earthquake scenarios. However, implementation of the proposed project would not result in the construction of any structures for human habitation, nor would it significantly increase long-term human use of the project area. Impacts to the project resulting from anticipated seismic ground shaking would be less than significant.
   
   iii) **Seismic-related ground failure, including liquefaction?**
   
   The project would remove calcine pavement and is located in an area with a low potential for liquefaction according to USGS liquefaction hazard maps and the Santa Teresa Hills Quadrangle Hazard Zone Map prepared by the California Geologic Survey (CGS 2003). The nearest area of potential liquefaction is located along Alamitos Roads to the east of the project area. The proposed project would not increase potential hazards from liquefaction and planned calcine removal would not be impacted by potential liquefaction. Implementation of the proposed project would not result in the construction of any structures for human habitation, nor would it significantly increase long-term human use of the project area. Therefore, the project would have no impact.
   
   iv) **Landslides?**
   
   According to the Santa Teresa Hills Quadrangle Hazard Zone Map prepared by the California Geologic Survey (CGS 2003) the grand majority of the project area is underlined by an area where past earthquake induced landslides have taken place. This area is underlain by pervasively sheared mélange and other Franciscan terranes that are structurally interleaved with fault bounded bodies of serpentine. These are weak, hydrothermally altered rocks that have been subject to widespread, deep-seated landsliding especially in the area between Guadalupe and Almaden Reservoirs, where the project area is located. There are several dormant mature and dormant young landslide
features in the project area (CGS 2003). Nonetheless, the project activities are not of sufficient volume to result in potential reactivation of the massive landslide deposit. Although some of the calcine pavement removal would be located on ridges, the ridges have been previously reinforced and modified. Further, project activities would be located on preexisting trails. All disturbed slopes would be revegetated and stabilized if necessary. The project would further implement BMPs that would prevent erosion and the impacts would be less than significant.

2. Result in substantial soil erosion or siltation or the loss of topsoil?

Construction would involve temporary ground disturbing activities, including excavation and removal of calcine pavements, and construction of temporary access routes. These impacts would be reduced to less than significance with implementation of a Stormwater Pollution Prevention Plan as outlined in Section 4.10 Hydrology and Water Quality.

Vegetation removal and reggrading would result in areas that could erode after construction. These activities would expose un-vegetated soils, which would accelerate erosion and sedimentation and could expose native slopes to scour during high flow or flood events. Areas disturbed during the construction phase would be addressed by revegetation with native understory and ground cover vegetation, as well as measures given in the Guidelines and Standards for Land Use Near Streams (SCVWD 2006), such as natural fiber netting/erosion control blanket installation on steeper slopes.

Disturbed slope areas within the limits of seasonal flooding would be addressed by placement bioengineering structures (SCVWD 2006) and more traditional engineering methods such as riprap, when required. All erosion protection mitigation measures are to be completed prior to initiation of seasonal rainfall (October 15). Construction of the project could accelerate erosion; therefore Mitigation Measure GEO-1 shall be implemented.

**Mitigation Measure GEO-1:**

The following shall be incorporated during project construction:

- a. Stormwater Pollution Prevention Plan
- b. Surface Erosion Control Treatments (Hydroseeding and/or Fiber Netting)
- c. Replacement Planting
- d. Drainage control improvements to mitigate the potential for erosion resulting from culvert discharge in the project area

**Implementation:** County Parks Staff and Construction contractor

**Timing:** Integrate measures into construction documents and implement during construction

**Monitoring:** County Parks Staff

With the implementation of the mitigation measure above the impact would be less than significant with mitigation incorporated.

3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, collapse, shrink/ swell potential, soil creep or serve erosion?

As indicated above the project is located in an area with a low potential for liquefaction, and on an area with earthquake induced landslides. The project would not be located on unstable soils or soils that
would become unstable due to the project. The project actions would include revegetation of exposed areas and slope stabilization where necessary. The project would not result in the aggravation of any preexisting conditions on the site and the impact would be *less than significant*.

4. **Be located on expansive soil, as defined in the report, Soils of Santa Clara County or California Building Code, creating substantial risks to life or property?**

The project area is located in an area with a very low potential for liquefaction. The project would not create any substantial risks related to expansive soils and the impact would be *less than significant*.

5. **Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

The proposed project would not involve the construction or operation of septic tanks or other waste disposal systems. Therefore, the project would have *no impact*.

6. **Cause substantial compaction or over-covering of soil either on-site or off-site?**

The proposed project includes removal of calcine pavements. This material would be disposed of in the designated San Francisco Open Cut area that was previously utilized for the Jacques Gulch Restoration Project and the Hacienda and Deep Gulch Remediation Project, and is a pre-approved disposal area. The project would not result in substantial compaction or over-covering of on-site soil and the impact would be *less than significant*.

7. **Cause substantial change in topography or unstable soil conditions from excavation, grading, or fill?**

The project includes excavation, grading and fill and it may include isolated areas of change in topography. These changes would result from removal of calcine fill and replacement with clean fill. Substantial grading, beyond what is necessary for calcine removal, is not part of the project and impacts to native slopes are not anticipated; therefore the impact would be *less than significant*.

8. **Be located in an area designated as having a potential for major geological hazard?**

The project area is located in an area identified as having potential for major geological hazards like liquefaction or landslides. As discussed above, the project area contains dormant young and dormant mature landslide areas (CGS 2006). These areas are located near Castillero and Yellow Kid Trails, as well as portions of Randol Trail and Mine Hill Trail. The slopes near the project area, if disturbed, would be revegetated and stabilized. Further, construction crews would implement BMPs when working on ridges. Therefore, there the project would have a *less than significant impact*.

9. **Be located on, or adjacent to a known earthquake fault?**

The closest active geologic fault is located approximately 6 miles from the site. The project area is not located on a known earthquake fault and the potential for fault rupture is low. Therefore, the project would have *no impact*.

10. **Be located in a Geologic Study Zone?**

The project is not located within a special Geologic Study Zone. The project area is not within a special landslide or liquefaction area and therefore there would be *no impact*. 
11. Involve construction of a building, road or septic system on a slope of:
   a. 30% or greater?
   b. 20% to 30%?
   c. 10% to 20%?

The project includes grading of existing trails. Although, portions of some of the project trails have grades 10% or higher, the project does not include the construction of a new building, road or septic system. The project would be located on existing trails and would remove calcine pavements, replace them with clean fill and regrade existing trails. The project would include construction BMPs for working on slopes and ridgelines. Therefore, the project impact would be less than significant.
4.8 GREENHOUSE GAS EMISSIONS

### DISCUSSION:

Through the adoption of AB 32 (California Global Warming Solutions Act of 2006), the State of California has set the goal of reducing GHGs production to 1990 levels by 2020. Currently, neither the Office of Planning and Research nor BAAQMD have developed thresholds for evaluating significant impacts from GHGs resulting from construction impacts. CEQA guidelines encourage the development of thresholds, but the absence of an adopted threshold does not relieve the agency from the obligation to determine significance.

BAAQMD adopted CEQA Air Quality Guidelines in 2010, with the most recent updates adopted in 2012. BAAQMD developed quantitative thresholds of significance for their CEQA guidelines in 2010. However, BAAQMD’s adoption of these 2010 thresholds of significance (2010 Thresholds) was challenged in court, on the basis that BAAQMD adopted the 2010 Thresholds without having evaluated them under CEQA. BAAQMD later appealed the ruling, and the judgment was reversed on August 13, 2013 by the Court of Appeal of the State of California, First Appellate District. The Court of Appeal's decision was appealed to the California Supreme Court, which granted limited review, and the matter is currently pending there.

At this time, BAAQMD is no longer recommending use of the 2010 Thresholds to determine whether a project’s air quality impacts would be significant. BAAQMD instead recommends that lead agencies should determine appropriate air quality thresholds of significance based on substantial evidence in the record.

Based on this recommendation, this analysis uses the 2010 Thresholds and guidelines where applicable, as the guidance is still based on substantial evidence. While the 2010 and 2012 guidelines do not set thresholds for construction-related GHGs, the guidelines state that the Lead Agency should quantify and

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<tr>
<th>WOULD THE PROJECT</th>
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<th>Less Than Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Potentially Significant Impact</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.</td>
<td>☑️</td>
<td>☐️</td>
<td>☐️</td>
<td>☐️</td>
<td>☐️</td>
</tr>
<tr>
<td>2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>☐️</td>
<td>☑️</td>
<td>☐️</td>
<td>☐️</td>
<td>☐️</td>
</tr>
<tr>
<td>3. Would the project increase greenhouse gas emissions that hinder or delay the State’s ability to meet the reduction target (25% reduction by 2020) contained in CA Global Warming Solutions Act of 2006 (AB 32)?</td>
<td>☐️</td>
<td>☐️</td>
<td>☑️</td>
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disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals, as required by the Public Resources Code, Section 21082.2. The Lead Agency is encouraged to incorporate BMPs to reduce GHG emissions during construction, as feasible and applicable (BAAQMD 2010). A relevant standard for judging for GHG emissions is the BAAQMD 2010 threshold for operational-related GHG emissions of 1,100 Metric Tons (MT) of carbon dioxide equivalents (CO₂e) per year. In applying this operational threshold to project construction, the construction emissions should be amortized over the lifetime of the project (assumed to be 30 years) and compared to the operational threshold of 1,100 MT of CO₂e per year.

**IMPACTS AND MITIGATION:**

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

The project would generate GHG emissions from construction equipment and vehicle activity related to haul and worker trips. The consumption of fuel by vehicles and equipment related to construction activity would generate a total of approximately 154 MT of CO₂e over the duration of the construction phase. GHG emissions would cease after the completion of construction activities. Amortized over the life of the project, emissions would be 5.1 MT of CO₂e per year. This is below the 1,100 MT of CO₂e significance thresholds; therefore, impact would be less than significant.

The project has no long-term operational GHG impacts since the site would return to parkland with natural habitats once remediation activities are complete. There would be no impact from GHG after remediation activities are complete.

2. *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Santa Clara County does not currently have an adopted Climate Action Plan. The project would be consistent with applicable local plans, policies, and regulations and would not conflict with the provisions of AB 32, the applicable air quality plan, or any other State or regional plan, policy or regulation of an agency adopted for the purpose of reducing greenhouse gas emissions. Therefore, the project would have no impact.

3. *Would the project increase greenhouse gas emissions that hinder or delay the State’s ability to meet the reduction target (25% reduction by 2020) contained in Global Warming Solutions Act of 2006 (AB 32)?*

The project would not conflict with the provisions of AB 32. Remediation activities would be complete by the end of 2015, at which point GHG emissions from the project would cease. Therefore, the project would not hinder the State’s ability to meet the AB 32 reduction target for 2020, and this impact would be less than significant.

---

3 Total construction emissions of CO₂ were calculated to be 146 metric tons. Emissions of CH₄ and N₂O from fuel combustion would also contribute to the total CO₂e. To account for these other GHGs, CO₂e was estimated by conservatively assuming that CO₂ only accounts for 95% of the total CO₂e.
### 4.9 HAZARDS & HAZARDOUS MATERIALS

<table>
<thead>
<tr>
<th>WOULD THE PROJECT</th>
<th>IMPACT</th>
<th>SOURCE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>No Impact: ☐</td>
<td>Less Than Significant Impact: ☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 3, 4, 5</td>
</tr>
<tr>
<td>2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>No Impact: ☐</td>
<td>Less Than Significant Impact: ☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 3, 4, 5</td>
</tr>
<tr>
<td>3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td>4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 3, 4, 5</td>
</tr>
<tr>
<td>5. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td>6. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 3, 4, 5, 33</td>
</tr>
<tr>
<td>7. Involve risk of explosion or release of hazardous substances (including pesticides, herbicides, toxic substances, oil, chemicals or radioactive materials)?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 3, 4, 5</td>
</tr>
<tr>
<td>8. Provide breeding grounds for vectors?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 3, 5</td>
</tr>
<tr>
<td>9. Proposed site plan result in a safety hazard (i.e., parking layout, access, closed community, etc.)?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>10. Involve construction of a building, road or septic system on a slope of 30% or greater?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 2, 3,</td>
</tr>
<tr>
<td>11. Involve construction of a roadway greater than 20% slope for a distance of 300’ or more?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 2, 3,</td>
</tr>
<tr>
<td>12. Be located within 200’ of a 230KV or above electrical transmission line</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>1, 2, 4</td>
</tr>
</tbody>
</table>
I. HAZARDS & HAZARDOUS MATERIALS

<table>
<thead>
<tr>
<th>WOULD THE PROJECT</th>
<th>IMPACT</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO</td>
<td>Less Than Significant Impact</td>
</tr>
<tr>
<td>13. Create any health hazard?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14. Expose people to existing sources of potential health hazards?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15. Be located in an Airport Land Use Commission Safety Zone?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>16. Increase fire hazard in an area already involving extreme fire hazard?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>17. Be located on a cul-de-sacs over 800 ft. in length and require secondary access which will be difficult to obtain?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>18. Employ technology which could adversely affect safety in case of a breakdown?</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

DISCUSSION:

The project area is located within the New Almaden Mercury Mining District. The New Almaden Mercury Mining District, in AQ County Park, was one of the largest mercury producing mining areas in the western hemisphere. It produced 38 million kilograms of mercury during its years of production from 1846 until 1975, 95% of which was produced from the New Almaden mine proper, the southernmost mine in the Mining District (Cox 1995). During operation, mining waste, including processed/roasted mercury ore (calcines) were often disposed in or near creeks. In addition, calcines were often used to pave roads.

Mercury from calcine deposits is the primary hazardous material on the project site. Although a naturally-occurring element, mercury in the environment is a concern for both people and wildlife because exposure can result in many lethal and sublethal effects. Mercury is one of the primary pollutants causing impairment of San Francisco Bay and in the Guadalupe River watershed, both of which are listed on the State 303(d) list in compliance with the Clean Water Act. Mercury was extracted by heating the ore in retorts and furnaces to volatilize the mercury which was then condensed to liquid mercury. Processed ore (calcines) from the furnaces and retorts was dumped near the processing areas and used to pave the roads within the mining district. All mining related operations ceased in 1975 when Santa Clara County purchased the property for use as a park. The Mine Hill area, the Hacienda Furnace Yard, the Enriquita Mine Retort, the San Mateo Mine Retort, and Senador Mine were all areas that were investigated for mercury contamination. The project area is located within the Mine Hill area.

Due to increased levels of mercury escaping into soils and waters from calcines, AQ County Park was included on the list of hazardous waste sites (Cortese List) compiled by the Department of Toxic Substances Control pursuant to Government Code Section 65962.5 (Cal EPA, 2013 http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=43100001). This project would
remove calcine pavement, which is expected to reduce levels of mercury runoff in the Guadalupe Watershed below current levels, decreasing mercury risks to wildlife and people from methylmercury. During the project, calcine pavements would be excavated and transported to the San Francisco Open Cut, a preapproved repository within AQ County Park, using park trails. Calcine removal and transport could add mercury-contaminated dust to the air. This project would remove approximately 3,900 cubic yards (CY) of calcines and contaminated material. The calcine removal actions are expected to occur during the dry season, from June 15 to October 15, 2014, over approximately 12 weeks.

The May 16, 2011 *Almaden Quicksilver County Park and Santa Teresa County Park Mine Material Evaluation* report states the total mercury concentration in soils, road materials and creek sediments around the project area. Samples were analyzed for total mercury concentrations using EPA Method 7471A. The reported mercury concentrations within the project area soils ranged from 22 mg/kg to 233 mg/kg wet weight (URS 2010).

**IMPACTS AND MITIGATION:**

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

13. Create any health hazard?

14. Expose people to existing sources of potential health hazards?

These three thresholds focus on the exposure of people to hazards either existing or created by the project, therefore they are discussed together. Excavation of calcine and trucking to San Francisco Open Cut during project construction has the potential to increase the amount of mercury-contaminated dust in the vicinity over the short-term. Dust from the excavation work could increase the opportunity for inhalation, potentially creating a health risk. This dust could expose construction workers, park visitors, and local residents to increased amounts of mercury, as compared to current conditions. To prevent fugitive dust from creating a health risk, the implementation of Mitigation Measures HAZ-1 and HAZ-2, below is required.

Further, sediment could enter nearby creeks as a result of calcine pavement removal, temporary stockpiling of materials and transport activities during construction. This sediment could pose a hazard to the environment. These hazards would be prevented by implementing Mitigation Measures HAZ-1, 2 and 3 below, which include a Stormwater Pollution Prevention Plan, as described in Section 4.10 Hydrology and Water Quality. Therefore Mitigation Measures HAZ-1 and HAZ-2 are required.

**Mitigation Measure HAZ-1:**

A worker safety and health program, as required by California Division of Occupational Safety and Health (CalOSHA) shall be implemented during calcine and soil removal, transport, and consolidation at the San Francisco Open Cut. It is anticipated, that Level D Personal Protective Equipment (lowest) would be worn by all workers involved in or near soils disturbance and movement (CalOSHA 2013). However, the necessary level of protection shall be determined based on field conditions at the time of project execution. The worker safety and health program shall:

a. Minimize human contact with contaminated soils, inhalation of dust, and contact with ground or surface water.

b. Inform workers and AQ County Park visitors of the relevant aspects of the safety and health program.
c. The responsible contractor shall monitor and enforce compliance.

d. Require visitors and other non-essential personnel to stay a distance adequate to ensure their safety during construction activities like excavation. Authorized personnel shall use appropriate Personal Protective Equipment, during construction hours.

e. The active calcine removal area shall be open only to workers and individuals required to undertake or inspect work. Park users would not be allowed in the project area during the construction period.

f. Active calcine removal areas shall be fenced with temporary construction-type chain link fences adequate to prevent unauthorized entry, if deemed necessary. The fence shall be maintained for the duration of soil disturbance activities.

Implementation: County Parks staff or qualified expert

Timing: During project work monitor for compliance with worker safety program

Monitoring: County Parks Staff shall report compliance with HAZ-1 measure to lead agency and other relevant agencies.

With the implementation of the mitigation measure above, the impact would be less than significant impact with mitigation incorporated.

Mitigation Measure HAZ-2:

To ensure workers and visitors are not exposed to dust containing calcines; a fugitive dust control program shall be developed and implemented by the contractor, and approved by the County. This program shall include a periodical on site air quality monitor as required by County Parks, a Dust Control Plan (DCP), and periodic monitoring of the project sites and the transport route for visible dust plumes. Dust control measures, as described in the Hacienda and Deep Gulch Remediation Project (SCCPRD 2010) and the Jacques Gulch Restoration Project (SCVWD 2008) are cited here as they are relevant and adequate for the Calcine Roads Remediation Project.

A DCP shall be developed and implemented to minimize the generation of dust during soils movement. The plan shall include measures to ensure the following:

a. All unpaved roads and disturbed areas in the project area shall be watered as frequently as necessary to comply with the dust mitigation objectives. The frequency of watering can be reduced or eliminated during periods of precipitation.

b. No vehicle shall exceed 15 miles per hour within the project area or on any unpaved road along the transport route to the soils repository.

c. All project area entrances shall be posted with visible speed limit signs.

d. All vehicles leaving the project area that have ridden on contaminated soil shall have their tires inspected and dirt removed and/or washed as necessary to be cleaned free of dirt prior to leaving the site and/or entering paved roadways. This can be done with metal pikes, large wire brushes, and water. The volume of water shall be kept at a minimum and kept contained. Decontamination of vehicle tires shall be conducted. This can be done on top of 50-mil Visqueen plastic sheets with small berms on the perimeter to keep the water/soil from flowing off except into collection areas, or, if Visqueen plastic is not used, gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
e. All soil storage piles and disturbed areas that remain inactive for longer than 2 days, or if high wind conditions exist, shall be covered or shall be treated with appropriate dust suppressant compounds.

f. Excavated materials transported to the San Francisco Open Cut and that have potential to cause visible dust emissions shall be covered or sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.

g. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all areas of soil that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.

h. Observations of visible dust plumes that have the potential to be transported: (1) off the project site; (2) 100 feet beyond the centerline of the transport route; (3) within 25 feet downwind of any soil removal/excavation activity; (4) within the presence of onsite workers such that they would become exposed to an inhalation hazard shall be an indication that existing dust suppression/control measures are not resulting in effective mitigation. The following mitigation measures shall be implemented as additional mitigation measures in the event that such visible dust plumes are observed:

   o Step 1: More intensive application of the existing mitigation methods within 15 minutes of making such a determination shall take place.
   o Step 2: Implementation of additional methods of dust suppression if Step 1 specified above fails to result in adequate mitigation within 30 minutes of the original determination.

Implementation: County Parks Staff or qualified expert

Timing: During project work monitor for compliance with fugitive dust control program

Monitoring: County Parks Staff Inspector will report compliance with HAZ-2 measure to lead agency and other relevant agencies.

With the implementation of the mitigation measure above, the impact would be less than significant impact with mitigation incorporated.

Mitigation Measure HAZ-3:

If stockpiling is necessary, sediments shall be stored to prevent stockpiled sediments from entering nearby creeks and transported in a manner that minimizes water quality impacts as follows:

   a. Wet sediments shall be stockpiled in a manner that prevents any material or water from draining into nearby creeks, as outlined in the project SWPPP.
   b. Follow measures in Section 4.10, Hydrology and Water Quality for construction and post-construction control of sediments and prevention of soil erosion.

Implementation: County Parks Staff or qualified expert

Timing: During project work monitor for compliance with measures to prevent sediment from moving into adjacent creeks.
Monitoring: County Parks Staff Inspector will report compliance with HAZ-3 measure to lead agency and other relevant agencies.

With the implementation of the mitigation measures above, the impact would be **less than significant with mitigation incorporated**.

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

While no foreseeable upset could release hazardous materials that would endanger the public, there are a few ways by which hazardous materials could accidentally be released into the environment. Equipment on site could leak diesel, gasoline, oil, and other lubricants onto soils. Nonetheless, these materials would be onsite only in quantities sufficient to operate the equipment and only during the construction period. The contractor shall implement standard BMPs for ensuring these materials do not leak into waters on site. Additionally, implementation of Mitigation Measures HAZ-4 would be required.

**Mitigation Measure HAZ-4:**

Standard County of Santa Clara BMPs for controlling oil, grease and fuel from construction vehicles shall be implemented.

**Implementation:** County Parks Staff or qualified expert

**Timing:** During project work, monitor for compliance with BMPs for controlling oil, grease and fuel runoff

**Monitoring:** County Parks Staff Inspector will report compliance with HAZ-4 measure to lead agency and other relevant agencies.

With the implementation of the mitigation measure above, the impact would be **less than significant impact with mitigation incorporated**.

3. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

The project would not emit any hazardous materials nor would it handle such materials. Further, there are no schools located within a quarter mile of the project site; therefore the project would have **no impact**.

4. *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

AQ County Park is included on the list of hazardous waste sites (Cortese List) compiled by the Department of Toxic Substances Control (DTSC) pursuant to Government Code Section 65962.5. AQ County Park is listed as certified/operation and maintenance as of 12/29/1999. There are four identified lead agencies: DTSC as lead, RWQCB, Santa Clara County and Santa Clara Valley Water District.

AQ County Park is listed because of the increased levels of mercury escaping into the environment from processed ores (calcines). Calcines from the furnaces and retorts was disposed of near the processing areas as part of the mercury mining and ore processing operations and used as calcine pavement on roads within the mining district. As discussed in Section 2, previous actions were undertaken within AQ County Park to remediate soils with high mercury content. All calcine materials are slated to be transported to the San Francisco Open Cut, a preapproved disposal site.
As part of its effort to comply with the mercury TMDL implementation requirements, County Parks commissioned studies to prioritize areas for remediation based on characterization of mercury concentrations in surficial soils at the site. The project would disturb areas identified in the May 16, 2011 Almaden Quicksilver County Park and Santa Teresa County Park Mine Material Evaluation as having high erosion potential and high calcine content. Materials in the project area would be excavated and consolidated at the San Francisco Open Cut. This material would be removed to prevent further erosion and contamination into the Guadalupe Watershed and the San Francisco Bay. The exposed portion of this remediation area would be removed, replaced with clean fill, and revegetated.

Removed calcines would be transported to an existing consolidation site at the San Francisco Open Cut, where calcine materials have been previously consolidated and capped during remedial actions implemented elsewhere in AQ County Park. Therefore, hazardous waste from this project would be added directly to an existing hazardous waste depository. No disturbance of the existing waste at the San Francisco Open Cut would occur. The project would disturb existing mine waste. Therefore, due to the previous remediation efforts in AQ County Park and in the project areas this project impact would be less than significant.

5. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Increased truck and vehicle traffic along haul routes could temporarily increase response times for emergency response providers along affected roadways. This impact could occur on public roads, but only very briefly during the movement of construction equipment. This impact is addressed in Section 4.10, Transportation and Traffic; and with incorporation of Mitigation Measure TRA-2 this impact would be less than significant with mitigation incorporated.

6. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The project would not include any structures; therefore it would not expose any people or structures to a significant risk involving wildland fires. The project would have no impact.

7. Involve risk of explosion or release of hazardous substances (including pesticides, herbicides, toxic substances, oil, chemicals or radioactive materials)?

The project does not require the use of explosives; therefore there is no risk of explosion. The project would not require the use of pesticides, herbicides, or radioactive materials; therefore, there is no risk of release hazardous substances. The project would require the use of construction equipment using oil and gasoline. This impact is discussed in Threshold 2. The project would have no impact.

8. Provide breeding grounds for vectors?

The project would not increase standing water on site and it would not provide breeding grounds for vectors; therefore the project would have no impact.

9. Proposed site plan result in a safety hazard (i.e., parking layout, access, closed community, etc.)?

The project does not include a site plan and therefore it would not result in a safety hazard from the plan (i.e., parking layout, access, closed community, etc.). The project would have no impact.
10. **Involve construction of a building, road or septic system on a slope of 30% or greater?**

This project does not include construction of a building, new road or septic system; therefore it would have **no impact**.

11. **Involve construction of a roadway greater than 20% slope for a distance of 300' or more?**

The project would remove calcine pavements from the existing trails in AQ County Parks, which are also used as fire roads. The trails would be regard and the project would not include the construction of any new road. Further, the project would not modify existing trail grades. Therefore the project would have **no impact**.

12. **Be located within 200' of a 230KV or above electrical transmission line?**

The project location is not within 200 feet of a 230kv or above transmission line; therefore the project would have **no impact**.

15. **Be located in an Airport Land Use Commission Safety Zone?**

The project is not located within 2 miles of any airports or within an Airport Land Use Commission Safety Zone; therefore there would be no impact to public safety associated with aircraft operations or any safety hazard for workers or nearby residents. The project would have **no impact**.

16. **Increase fire hazard in an area already involving extreme fire hazard?**

According to CAL Fire, the project is located in a high fire hazard severity zone (Cal Fire 2007). The project would be conducted during the dry season when fire danger increases due to dry leaves, downed wood and other dry plant material that could serve as fuel. Construction equipment on site could increase the risk of fire; therefore, Mitigation Measure HAZ-5 would be required.

**Mitigation Measure HAZ-5:**

a. A water truck shall remain on site equipped with a hose that can be used to spray water on fires.

b. Each construction vehicle shall be equipped with a fire extinguisher.

c. Workers shall be instructed of the need to stay alert to the start of fires and shall be given instruction in using fire extinguishers; the construction manager shall be informed immediately if a fire starts.

d. Storm Water Pollution Prevention Plan (SWPPP) measures shall ensure that water and chemicals required to stop fires shall not enter nearby creeks.

**Implementation:** Construction contractors

**Timing:** During all phases of project work

**Monitoring:** County Parks Staff

With the implementation of the mitigation measure above, the impact would be **less than significant with mitigation incorporated**.

17. **Be located on a cul-de-sacs over 800 ft. in length and require secondary access which will be difficult to obtain?**

The project is not located in a cull-de-sac and would not require secondary access; therefore it would have **no impact**.
18. Employ technology which could adversely affect safety in case of a breakdown?

This project does not employ technology which could adversely affect safety in case of a breakdown. Construction equipment is the only technology associated with the project and it includes excavators, loaders, backhoe, water trucks, dump trucks and fuels tanks. Therefore, the project would have no impact.
### 4.10 HYDROLOGY AND WATER QUALITY

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>IMPACT</th>
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</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>Less Than Significant Impact</td>
<td>Potentially Significant Impact</td>
</tr>
<tr>
<td>YES</td>
<td>Less Than Significant Impact With Mitigation Incorporated</td>
<td></td>
</tr>
</tbody>
</table>

#### J. HYDROLOGY AND WATER QUALITY

1. Violate any water quality standards or waste discharge requirements?
   - [ ] No Impact
   - [ ] Less Than Significant Impact
   - [x] Potentially Significant Impact
   - [ ] Cumulative

2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?)
   - [x] No Impact
   - [ ] Less Than Significant Impact
   - [ ] Potentially Significant Impact With Mitigation Incorporated
   - [ ] Cumulative

3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial erosion or siltation on or off site?
   - [ ] No Impact
   - [ ] Less Than Significant Impact
   - [x] Potentially Significant Impact
   - [ ] Cumulative

4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
   - [x] No Impact
   - [ ] Less Than Significant Impact
   - [ ] Potentially Significant Impact With Mitigation Incorporated
   - [ ] Cumulative

5. Create or contribute increased impervious surfaces and associated runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
   - [x] No Impact
   - [ ] Less Than Significant Impact
   - [ ] Potentially Significant Impact With Mitigation Incorporated
   - [ ] Cumulative

6. Degrade surface or ground water quality or public water supply? (Including marine, fresh and wetland waters.)
   - [ ] No Impact
   - [ ] Less Than Significant Impact
   - [x] Potentially Significant Impact
   - [ ] Cumulative

7. Place a structure within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
   - [x] No Impact
   - [ ] Less Than Significant Impact
   - [ ] Potentially Significant Impact With Mitigation Incorporated
   - [ ] Cumulative

8. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
   - [x] No Impact
   - [ ] Less Than Significant Impact
   - [ ] Potentially Significant Impact With Mitigation Incorporated
   - [ ] Cumulative

9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
   - [x] No Impact
   - [ ] Less Than Significant Impact
   - [ ] Potentially Significant Impact With Mitigation Incorporated
   - [ ] Cumulative

10. Result in an increase in pollutant discharges to receiving waters?
    - [ ] No Impact
    - [ ] Less Than Significant Impact
    - [x] Potentially Significant Impact With Mitigation Incorporated
    - [ ] Cumulative

Source:
- 34, 36
- 3, 4
- 1, 3, 5, 36, 21a
- 1, 3, 11b, 21, 46
- 3, 18b, 18d
- 3, 18b, 18d
- 2, 3, 4
## J. HYDROLOGY AND WATER QUALITY

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>NO</th>
<th>YES</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Impact</td>
<td>Less Than Significant Impact</td>
<td>Less Than Significant With Mitigation Incorporated</td>
</tr>
<tr>
<td>11. Be located in an area of special water quality concern (e.g., Los Gatos or Guadalupe Watershed)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>12. Result in use of well water previously contaminated by nitrates, mercury, asbestos, etc. existing in the groundwater supply?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13. Result in a septic field being constructed on soil with severe septic drain field limitations or where a high water table extends close to the natural land surface?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14. Result in a septic field being located within 50 feet of a drainage swale; 100 feet of any well, water course or water body or 200 feet of a reservoir at capacity?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15. Conflict with Water Resources Protection Collaborative Guidelines and Standards for Land Uses near Streams?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>16. Result in extensions of a sewer trunk line with capacity to serve new development?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>17. Require a NPDES permit for construction [Does it disturb one (1) acre or more]?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>18. Result in significant changes to receiving waters quality during or following construction?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>19. Is the project a tributary to an already impaired water body? If so will the project result in an increase in any existing pollutants?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>20. Substantially change the direction, rate of flow, or quantity, or quality of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>21. Interfere substantially with ground water recharge or reduce the amount of groundwater otherwise available for public water supplies?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>22. Involve a surface water body, natural drainage channel, streambed or water course such as to alter the amount, location, course, or flow of its waters?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

### DISCUSSION:

The project area is located within AQ County Park, along a northeast ridge of the Santa Cruz Mountains called the Los Capitancillos Ridge. Los Capitancillos Ridge is composed of a series of hills that run...
northwest to southeast, approximately 12 miles south of downtown San Jose. AQ County Park is located in the headwaters of the approximately 170-square mile Guadalupe River watershed. The Guadalupe River watershed experiences a Mediterranean-type climate generally characterized by wet, mild winters and dry summers. About 85 percent of the measurable precipitation, rainfall, occurs between November and April (RWQCB 2008). Elevation in the project vicinity ranges from approximately 900 feet to 1700 feet above sea level (NAVD 88). Steep hillsides and mountaintop flatlands typify the topography of the project vicinity. The mean annual precipitation is 33 inches.

The southern portion of the project area drains towards Jacques Gulch, which discharges to Almaden Reservoir (USGS 2013). The Jacques Gulch watershed encompasses an area of approximately 1.4 square miles. The eastern portion of the project area drains towards Deep Gulch, a tributary to Alamitos Creek. The confluence of Deep Gulch and Alamitos Creek is located approximately 0.7 miles downstream of Almaden Reservoir. The Deep Gulch watershed is approximately 0.4 square miles in area. The northern portion of the project area drains towards Randol Creek, which flows towards urban areas north of AQ County Park. The Randol Creek watershed encompasses an area of approximately 2.3 square miles. The western portion of the project area drains towards Los Capitancillos Creek, which is a tributary to Guadalupe Creek upstream of Guadalupe Reservoir. Los Capitancillos Creek watershed is approximately 0.8 square miles in area. Alamitos Creek and Guadalupe Creek are tributaries to Guadalupe River. Guadalupe River drains to southern San Francisco Bay through Alviso Slough (UC Davis 2013).

Regulations and Agencies

CWA (33 USC 1251 et seq.) is the primary federal law that protects the quality of the nation’s surface waters, including lakes, rivers, and coastal wetlands. The primary principle is that any discharge of pollutants into the nation’s waters is prohibited unless specifically authorized by a permit. Applicable sections of the CWA are discussed below.

Permit for Fill Material in Waters and Wetlands (Section 404). CWA Section 404 establishes a permit program administered by USACE, which regulates the discharge of dredged or fill material into waters of the United States. For regulatory purposes, the project area falls within the jurisdiction of the USACE, San Francisco District.

Water Quality Certification (Section 401). CWA Section 401 requires that an applicant for a federal license or permit allowing activities that would result in a discharge to waters of the United States obtain a State certification that the discharge complies with other provisions of the CWA. The SWRCB and RWQCBs administer the certification program in California.

National Pollutant Discharge Elimination System (NPDES) Program (Section 402). CWA Section 402 establishes a permitting system for the discharge of any pollutant (except dredge or fill material) into waters of the United States. These permits are issued by the SWRCB and the RWQCBs. The SWRCB has adopted the statewide General Permit for stormwater discharges associated with construction activity that applies to projects resulting in 1 or more acres of soil disturbance (Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended by Order 2012-006-DWQ). For projects disturbing more than 1 acre of soil, a SWPPP is required that specifies site management activities to be implemented during site development. These management activities include construction stormwater BMPs, erosion and sedimentation controls, dewatering (nuisance-water removal), runoff controls, and construction equipment maintenance.
Water Quality Impairments (Section 303(d)). CWA Section 303(d) requires each State to provide a list of impaired waters that do not meet or are expected not to meet state water quality standards. It also requires the State to develop TMDLs for the pollution sources for these impaired waterbodies. The SWRCB and RWQCBs, with approval from EPA, list waterbodies whose water quality is considered impaired and where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. Table 4.5 Section 303(d) Water Quality Limited Surface Waters lists the 303 (d)-designated surface waterbodies in the Guadalupe River watershed.

<table>
<thead>
<tr>
<th>Waterbody</th>
<th>Pollutants</th>
<th>TMDL Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guadalupe River</td>
<td>Mercury, Diazinon, Trash</td>
<td>2008, 2007, and 2021, respectively</td>
</tr>
<tr>
<td>Alamitos Creek</td>
<td>Mercury</td>
<td>2008</td>
</tr>
<tr>
<td>Guadalupe Creek</td>
<td>Mercury</td>
<td>2008</td>
</tr>
</tbody>
</table>

Source: SWRCB 2011

The Porter-Cologne Water Quality Act (California Water Code Section 13000 et seq.) requires projects that are discharging or proposing to discharge waste that could affect the quality of the State’s water, to file a Report of Waste Discharge with the appropriate RWQCB. This requirement can also be fulfilled through the federal NPDES permitting process. The act also provides for the development and periodic reviews of Water Quality Control Plans or “Basin Plans” that designate beneficial uses of California’s major rivers and groundwater basins and establish water quality objectives for those waters. Projects primarily implement basin plans using the NPDES permitting system.

The RWQCB has developed the Water Quality Control Plan (Basin Plan) for the San Francisco Bay region (RWQCB 2011). The Basin Plan designates beneficial uses for specific surface water and groundwater resources, establishes water quality objectives to protect those uses, and sets forth policies to guide implementation programs to attain the objectives. Table 4.6: Beneficial Uses lists the existing beneficial uses identified in the Basin Plan for the surface waters and groundwater in the project vicinity.

<table>
<thead>
<tr>
<th>Waterbody</th>
<th>Type</th>
<th>Existing Beneficial Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guadalupe River</td>
<td>Surface Water</td>
<td>Groundwater recharge, cold freshwater habitat, fish migration, preservation of rare and endangered species, fish spawning, warm freshwater habitat, wildlife habitat, water contact recreation, and noncontact recreation</td>
</tr>
<tr>
<td>Alamitos Creek</td>
<td>Surface Water</td>
<td>Freshwater replenishment, groundwater recharge, cold freshwater habitat, fish migration, preservation of rare and endangered species, fish spawning, warm freshwater habitat, wildlife habitat, water contact recreation, and noncontact recreation</td>
</tr>
<tr>
<td>Almaden Reservoir</td>
<td>Surface Water</td>
<td>Municipal and domestic water supply, groundwater recharge, cold freshwater habitat, preservation of rare and endangered species, fish spawning, warm freshwater habitat, wildlife habitat, water contact recreation, and noncontact recreation</td>
</tr>
<tr>
<td>Guadalupe Creek</td>
<td>Surface Water</td>
<td>Freshwater replenishment, groundwater recharge, cold freshwater habitat, fish migration, preservation of rare and endangered species, fish spawning, warm freshwater habitat, wildlife habitat, water contact recreation, and noncontact recreation</td>
</tr>
<tr>
<td>Guadalupe Reservoir</td>
<td>Surface Water</td>
<td>Municipal and domestic water supply, groundwater recharge, cold freshwater habitat, fish spawning, warm freshwater habitat, wildlife habitat, water contact recreation, and noncontact recreation</td>
</tr>
</tbody>
</table>
### Table 4.6: Beneficial Uses

<table>
<thead>
<tr>
<th>Waterbody</th>
<th>Type</th>
<th>Existing Beneficial Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Capitancillos Creek</td>
<td>Surface Water</td>
<td>Freshwater replenishment, groundwater recharge, cold freshwater habitat, warm freshwater habitat, wildlife habitat, water contact recreation, and noncontact recreation</td>
</tr>
<tr>
<td>Santa Clara subbasin</td>
<td>Groundwater Basin</td>
<td>Municipal and domestic water supply, industrial process water supply, industrial service water supply, and agricultural water supply</td>
</tr>
</tbody>
</table>

RWQCB 2011

In 1998, several water bodies in the Guadalupe River watershed were identified by the SWRCB and the RWQCB as being impaired by the presence of mercury according to provisions in the CWA Section 303(d). Being placed on this list triggered the TMDL process for the watershed to address mercury loading to San Francisco Bay. In October 2008, an amendment to the RWQCB’s Basin Plan was adopted to amend mercury water quality objectives and incorporate TMDLs for mercury in the Guadalupe River watershed. The TMDL was approved by the Office of Administrative Law in February 2010 and by the U.S. EPA in June 2010. The TMDL for the Guadalupe River watershed established mercury allocations for the following sources (RWQCB 2008):

- Mercury mining waste discharged from mercury mines into surface waters – 0.2 milligrams per kilogram (mg/kg) mercury of erodible soil fines (dry weight, median)\(^4\)
- Mercury-laden sediment discharged from depositional areas in creeks and tributaries that drain mercury mines and/or convey urban stormwater runoff (e.g., Alamitos Creek, Guadalupe Creek, and tributaries) – 0.2 mg/kg mercury of erodible soil fines (dry weight, median)

In addition, the TMDL includes an implementation plan to reduce mercury loads in the watershed. Phase I of the implementation plan focuses on erosion control at former mine sites, methylmercury controls at reservoirs, and stream assessments. Phase II focuses on creek remediation and remediation with the objective to reduce fish tissue concentrations in 20 years.

Streambed Alteration Agreements, as defined in Section 1602 of the California Fish and Game Code, protect the natural flow, bed, channel, and bank of any river, stream, or lake designated by CDFW in which there is, at any time, an existing fish or wildlife resource, or benefit for the resource. Section 1602 requires an agreement between the CDFW and a public agency proposing a project that would:

- Divert, obstruct, or change a streambed
- Use material from the streambed
- Result in the disposal, or deposition of debris, waste, or other material containing crumbed, flaked, or ground pavement where it can flow into a stream.

\(^4\) “Erodible” material is readily available for transport by stormwater runoff to surface waters (RWQCB 2008).
IMPACTS AND MITIGATION:

1. **Violate any water quality standards or waste discharge requirements?**

6. **Degrade surface or ground water quality or public water supply? (Including marine, fresh and wetland waters.)**

10. **Result in an increase in pollutant discharges to receiving waters?**

11. **Be located in an area of special water quality concern (e.g., Los Gatos or Guadalupe Watershed)?**

18. **Result in significant changes to receiving waters quality during or following construction?**

19. **Is the project a tributary to an already impaired water body? If so will the project result in an increase in any existing pollutants?**

The intent of the project is to reduce the presence of mercury contaminated soils and to improve the quality of runoff by removing calcine materials from trails. Long-term effects from removing calcines from trails and other areas would be beneficial to water quality.

Construction activities would include removal of calcines along the seven identified trails, the road to the San Francisco Open Cut, a water service road and two unknown trails, regrading existing trails with clean soil, construction of runoff collection swales along the trails, and revegetation and hydroseeding of disturbed areas. Calcines would be physically removed using mechanical excavation and scrapping. Project trails would be regraded to promote sheet flow drainage wherever possible using outslope grading and rolling dips. In areas where replacement materials are needed to build up the road bed, clean fill would be used. Replacement materials would meet the RWQCB’s environmental screening levels for shallow soils (RWQCB 2008). Fill materials would also comply with County Parks’ Natural Resources Management guidelines.

Temporary earthmoving operations could result in short-term, limited erosion. The project could introduce contaminated soil into drainage areas during removal of calcine material from trails and from stockpiling of these excavated materials, if stockpiling is necessary. However, calcine pavement would be removed from drainage areas after mechanical excavation and scrapping and upland sites would be stabilized with erosion control BMPs immediately after grading activities. Furthermore, construction activities would occur during dry months in the summer and fall (typically mid-June to mid-October) and therefore the potential contact between excavated calcine pavement and rainfall runoff would be minimal.

The project would require the use of heavy equipment, such as excavators, loaders, backhoe, water trucks, dump trucks, and fuels tanks. Use of this heavy equipment has the potential to cause contamination from fuels, oils, and greases. The project would implement proper construction site management and routine and standard erosion control BMPs as outlined in Mitigation Measure HYD-1. The project would implement BMPs that would reduce potential erosion, prevent and minimize contamination of stormwater runoff, and prevent and minimize transport of contaminated materials in drainages. A SWPPP would be developed and implemented as part of this process. In addition, County Parks would implement measures recommended in Chapter 4 of the Santa Clara Valley Water Resources Protection Collaborative (SCVWRPC) Guidelines and Standards for Land Use Near Streams for temporary erosion control (Guide 5) and trail design (Guide 16) (SCVWD 2006), per Mitigation Measure HYD-2. Therefore, Mitigation Measures HYD-1 and HYD-2 are required.
Mitigation Measure HYD-1:

Develop and implement a SWPPP to prevent and minimize transport of contaminated materials by water. Suitable stormwater BMPs shall be implemented consistent with California Stormwater Quality Association — Stormwater Best Management Practices Handbook, Construction 2003. For example, silt fencing and/or fiber rolls will be placed, as appropriate to minimize direct and indirect sediment transport to drainages.

Implementation: County staff or qualified expert

Timing: During project work, monitor for compliance with SWPPP

Monitoring: County of Santa Clara Inspector shall report compliance with HYD-1 measures to lead agency and other relevant agencies.

Mitigation Measure HYD-2:

Implement measures consistent with the range of recommendations provided in Chapter 4 of the Guidelines and Standards for Land Use near Streams (SCVWRPC 2007) for temporary erosion control (Guide 5) and trail design (Guide 16).

Implementation: County Parks Staff or qualified expert

Timing: During project work, monitor for compliance with Guidelines and Standards for Land Use near Streams

Monitoring: County Parks Staff Inspector shall report compliance with HYD-2 measures to lead agency and other relevant agencies.

With implementation of mitigation measures above the project impacts would be less than significant with mitigation incorporated.

2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

20. Substantially change the direction, rate of flow, or quantity, or quality of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?

21. Interfere substantially with ground water recharge or reduce the amount of groundwater otherwise available for public water supplies?

The project area is located near the Santa Clara Valley groundwater basin (Santa Clara subbasin). The project does not include local groundwater extraction, activities that interfere with groundwater recharge, excavations that would intersect and influence groundwater movement, or reductions in groundwater otherwise available for public use. The project would not deplete local groundwater supplies because the project would not extract groundwater for use at the site. The project would not interfere with groundwater recharge because the project would not create structures or new impervious areas that would interfere with groundwater infiltration. Therefore there would be no impact.
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial erosion or siltation on or off site?

The project would change existing drainage patterns by construction of runoff collection swales along the trails and by redirecting overland flow through rolling dip crossings, but these changes would not substantially increase erosion on- or off-site. Changes to drainage networks would be localized and are intended to isolate calcine materials from surface water runoff and reduce overall erosion. During construction, approximately 4.5 acres of calcine materials would be disturbed outside of the expected rainy season during summer and fall months. However, temporary sediment and erosion control measures, such as silt fencing or fiber rolls, would be implemented prior to any forecasted rain events to prevent potentially significant increases in erosion and sediment transport from project run-off (see HYD-1, HYD-2). After construction is complete, post-construction BMPs, such as soil and slope stabilization, would be implemented to stabilize disturbed areas and reduce erosion from the site. Therefore impacts would be less than significant with mitigation incorporated.

4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The project would change existing drainage patterns by construction of runoff collection swales along the trails and by redirecting overland flow through rolling dip crossings, but these changes would not cause additional flooding on- or off-site. Runoff from drainage areas upgradient of the project site would be directed through the project area to tributary drainages. Local ponding would be similar to existing conditions.

Local drainages could contribute to flooding in downstream urban areas. A FEMA-designated 100-year floodplain area is located on Randol Creek approximately 1.3 miles downstream of the project area and on Alamitos Creek at the confluence with Deep Gulch. However, the project would not substantially change runoff conditions within the project area (such as increasing runoff rates or changing peak flow conditions) and therefore downstream flooding would not change because of project features. Therefore impacts would be less than significant.

5. Create or contribute increased impervious surfaces and associated runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project would not increase the amount of impervious surfaces or substantially increase runoff from the site. The project would reduce the long-term amount of potentially contaminated sediment in the project area, thereby decreasing the amount of polluted runoff. The project would have no impact.

7. Place a structure within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

8. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The project area is not within a FEMA-designated special flood hazard area (FEMA, 2012). The project would not create new structures within the 100-year floodplain or expose people or existing structures to increased flood risk. Therefore, the project would have no impact.
12. Result in use of well water previously contaminated by nitrates, mercury, asbestos, etc. existing in the groundwater supply?

No well water, beyond that which is part of the County water supply, would be used by this project. The only use of water on-site will be for airborne dust abatement, revegetation watering and, if needed, fire suppression. Therefore, the project would have **no impact**.

13. Result in a septic field being constructed on soil with severe septic drain field limitations or where a high water table extends close to the natural land surface?

14. Result in a septic field being located within 50 feet of a drainage swale; 100 feet of any well, water course or water body or 200 feet of a reservoir at capacity?

16. Result in extensions of a sewer trunk line with capacity to serve new development?

The project would not include the construction of septic fields or sewer line extensions. Therefore, the project would have **no impact**.

15. Conflict with Water Resources Protection Collaborative Guidelines and Standards for Land Uses near Streams?

As described in Mitigation Measure HYD-2, the project would incorporate methods and techniques given in Chapter 4 of the *Guidelines and Standards for Land Uses near Streams* (SCVWRPC 2007) to control erosion and stabilize slopes (Guide 5), where feasible, and as part of the trail design (Guide 16). This impact would be **less than significant with mitigation incorporated**.

17. Require a NPDES permit for construction [Does it disturb one (1) acre or more]?

The project would disturb approximately 4.5 acres of soil, and therefore the provisions of the Construction General Permit (Order 2009-0009-DWQ, as amended by Order 2012-006-DWQ) would apply to the project. BMPs and design measures would be implemented consistent with Mitigation Measures HYD-1 and HYD-2. Therefore, this impact would be **less than significant with mitigation incorporated**.

22. Involve a surface water body, natural drainage channel, streambed or water course such as to alter the amount, location, course, or flow of its waters?

Project trails would cross intermittent drainages and channelized drainages. Project features would not alter the amount, location, course, or flow of its waters. Therefore, impacts would be **less than significant**.
### 4.11 LAND USE AND PLANNING

#### K. LAND USE AND PLANNING

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>NO</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Potentially Significant Impact</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Impact</td>
<td>YES</td>
<td>Source</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Physically divide an established community?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>3. Conflict with general plan designation or zoning?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>4. Conflict with special policies?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. San Martin and/or South County</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b. Los Gatos Specific Plan or Lexington Watershed</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c. East Foothills Policy Area</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d. New Almaden Historic Area/Guadalupe Watershed</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>e. Stanford</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>f. San Jose</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>5. Be incompatible with existing land use in the vicinity?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

**DISCUSSION:**

The project site is located within AQ County Park. Land uses surrounding AQ County Park include residential uses to the north (City of San Jose 2007); open space and other public lands to the east and south; and rural residential to the west. AQ County Park is located approximately 12 miles south of downtown San Jose. The New Almaden Historical Area (NAH) is located in the southeast portion of AQ County Park, and continues east of AQ County Park borders (SCC 2008a). The project area is located within the NAH special planning area.

The project site is within the New Almaden National Historic Landmark District, one of 120 such places in California and only one of five in Santa Clara County recognized as being of such national historical significance. The County of Santa Clara General Plan identifies the project site as having a Regional Park land use designation with special land use policies applying to the New Almaden Historical Area (SCC 2008a). The adjacent community of New Almaden is designated a Rural Residential Area with the New Almaden Historical Area. County of Santa Clara has established a historic preservation zoning
district for New Almaden. The boundaries of the zoning district coincide with the boundaries of the National Historic Landmark District described by the National Register listing. The majority of the land area within the National Historic Landmark District is contained within the AQ County Park (SCC 2008a). The project site is accessed from Alamitos Road, a County designated scenic road (SCC 2008b).

The County of Santa Clara General Plan identifies the project area as Regional Park, Existing (SCC, 2008a & 2012). The project site is zoned as Hillside with a Scenic Road and historic New Almaden combining districts in the Santa Clara County Zoning Ordinance. Existing land uses surrounding the project area are currently zoned as Residential to the north; Open Space to the west; and Rural Residential to the east; and Parks to the south. The project site is within the boundaries of the proposed County of Santa Clara Habitat Conservation Plan/Natural Community Conservation Plan. This plan was completed and adopted in August 2012. The project site is also located within the AQ County Park Master Plan adopted in October 1998, which recommends guidelines and implementation priorities for the design, use and management of AQ County Park trail system (SCC 1995).

**IMPACTS AND MITIGATION:**

1. **Physically divide an established community?**

   The project site is located within AQ County Park and no established communities are present within the park itself. Furthermore, the project is a remediation project and would not result in the construction of features that would divide an established community. Therefore, the project would not divide an established community and would have **no impact**.

2. **Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

   The project would remove calcine pavement and regrade trails to reduce soil erosion and run-off from soils with elevated mercury concentration into the Guadalupe River Watershed. The project would help implement the RWQCB’s Water Quality Control Plan and TMDL requirements for mercury in the Guadalupe River Watershed. The project would also help meet AQ County Park goals regarding design and usage of park trails (SCCPRD 2005). Therefore, the project would not conflict with any regulation and would have **no impact**.

3. **Conflict with general plan designation or zoning?**

   The project would be in compliance with the County General Plan designation (SCC 1994). The project does not propose any changes to general plan designations or zoning, therefore the project would have **no impact**.

4. **Conflict with special policies?**
   
   a. San Martin and/or South County  
   b. Los Gatos Specific Plan or Lexington Watershed  
   c. East Foothills Policy Area  
   d. New Almaden Historic Area/Guadalupe Watershed  
   e. Stanford  
   f. San Jose

   The project site is not located within any of these special policy areas and therefore would have **no impact**.
5. *Be incompatible with existing land use in the vicinity?*

The project would remove calcine pavements on AQ County Park trails and would regrade them to reduce soil erosion and run-off from soils with elevated mercury concentration into Guadalupe River Watershed. The project does not propose any construction or land use changes that would be incompatible with the existing land use. Therefore the project would have *no impact.*
4.12 MINERAL RESOURCES

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>IMPACTS</th>
<th>YES</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO Impact</td>
<td>Less Than Significant Impact</td>
<td>Less Than Significant Impact With Mitigation Incorporated</td>
</tr>
<tr>
<td>1. Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the state?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Result in substantial depletion of any non-renewable natural resource?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

DISCUSSION:

The project site is located in the New Almaden Mercury Mining District. The New Almaden Mercury Mining District, in the AQ County Park, was one of the largest mercury producing mining areas in the western hemisphere. It produced 38 million kilograms of mercury during its years of production from 1846 until 1975, 95% of which was produced from the New Almaden mine proper, the southernmost mine in the Mining District (Cox 1995). The mine was closed in 1975 and taken out of use.

The project area has not been classified as a Mineral Resource Zone (MRZ) because it is located outside the urbanization lines set by the California Office of Planning and Research (CGS 2012). The closest classified mineral resource zone is located over two miles west from the project site.

IMPACTS AND MITIGATION:

1. Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the state?

2. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The project area does not contain any known or locally important mineral resources defined by the County of Santa Clara General Plan (SCC 1994). Further, the project area is not located within the eight operational mine resources recovery operations in the County of Santa Clara General Plan. Therefore, the project would have no impact.

3. Result in substantial depletion of any non-renewable natural resource?

The project would use non-renewable fuel resources in the amounts typically associated with earth moving construction activities, and only for a temporary amount of time. The project would not utilize a substantial amount any non-renewable natural resource and thus would have no impact.
### 4.13 NOISE

**M. NOISE**

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>IMPACTS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WOULD THE PROJECT:</strong></td>
<td>NO</td>
<td>Less Than Significant Impact</td>
</tr>
<tr>
<td>No Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less Than Significant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Mitigation Incorporated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potentially Significant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### DISCUSSION:

Noise impacts are considered significant based on their levels and proximity to sensitive receptors, including schools, hospitals, religious facilities, and parks. AQ County Park is an undeveloped open space with low levels of ambient noise. A developed neighborhood is located on the border of AQ County Park. The main area of the project site is located approximately one mile from the nearest residences. There are no schools located within a one mile radius from the project area.

County Municipal Code Chapter VIII §B11-152 is intended to control unnecessary, excessive and annoying noise and vibration and to prohibit noise and vibration generated by multiple sources. Section B11-152 establishes noise limits for exterior areas. Noise limits for residential public spaces are set at 55 dBA (A-weighted decibels\(^5\)) from 7:00 a.m. to 10:00 p.m. Construction noise is allowed on weekdays and Saturday hours of 7:00 a.m. to 7:00 p.m. The ordinance states that where technically and economically feasible construction activities will be conducted in a manner that the maximum noise levels at affected properties will not exceed those listed in Table 4.7: Maximum Noise Levels for Nonscheduled, Intermittent, Less Than Ten Days Operation of Mobile Equipment and Table 4.8: Maximum Noise Levels for Repetitively Scheduled, Periods of Ten Days or more of Stationary Equipment. The Public Health and Safety Chapter of the County General Plan establishes a land use compatibility standard of 55 dB Ldn\(^6\) for uses near residential areas. This noise level limit is considered

---

\(^5\) A-weighting accounts for the relative loudness perceived by the human ear

\(^6\) Day-night average sound level
“satisfactory” for residential and other noise-sensitive uses, and is generally measured at outdoor activity areas.

Table 4.7: Maximum Noise Levels for Nonscheduled, Intermittent, Less Than Ten Days Operation of Mobile Equipment

<table>
<thead>
<tr>
<th></th>
<th>Single- and Two-Family Dwelling Residential Area</th>
<th>Multifamily Dwelling Residential Area</th>
<th>Commercial Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily, except Sundays and legal holidays 7:00 a.m.--7:00 p.m.</td>
<td>75 dBA</td>
<td>80 dBA</td>
<td>85 dBA</td>
</tr>
<tr>
<td>Daily, 7:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays</td>
<td>50 dBA</td>
<td>55 dBA</td>
<td>60 dBA</td>
</tr>
</tbody>
</table>

Table 4.8: Maximum Noise Levels for Repetitively Scheduled, Periods of Ten Days or more of Stationary Equipment

<table>
<thead>
<tr>
<th></th>
<th>Single- and Two-Family Dwelling Residential Area</th>
<th>Multifamily Dwelling Residential Area</th>
<th>Commercial Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily, except Sundays and legal holidays 7:00 a.m.--7:00 p.m.</td>
<td>60 dBA</td>
<td>65 dBA</td>
<td>70 dBA</td>
</tr>
<tr>
<td>Daily, 7:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays</td>
<td>50 dBA</td>
<td>55 dBA</td>
<td>60 dBA</td>
</tr>
</tbody>
</table>

IMPACTS AND MITIGATION:

1. Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

2. Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

4. Result in a substantial temporary increase in ambient noise levels in the project vicinity above levels existing without the project?

5. Increase substantially the ambient noise levels for adjoining areas during and/or after construction?

Project activities would require the short-term use (12 weeks) of trucks, excavators, loaders, backhoe, and other equipment for project construction activities. Construction activities on the trails include calcine excavation, grading of trails, and replacement with clean fill. Project activities would create temporary intermittent and continuous noises. Intermittent noise would result from periodic, short-term equipment operation, and more continuous noise would result from equipment running over longer periods. The maximum intermittent equipment noise levels would range from 85 to 92 dBA at 50 feet
for pieces of equipment operating simultaneously, based on US Federal Highway Administration studies (FHWA 2006).

Construction equipment, material haul trucks, and construction crews, would use Almaden Expressway, Almaden Road and enter AQ County Park and the Hacienda Gate entrance. The project would require the hauling of calcine materials for burial within AQ County Park at the San Francisco Open Cut using AQ County Park trails. The project would require the importation of clean soils and aggregate base material. Trucks transporting clean soil would utilize City of San Jose approved truck routes and haul routes.

Noise would occur off site from commuting workers and from trucks needed to bring equipment and materials to the project site. The peak noise levels associated with passing trucks and commuting worker vehicles would be approximately 70 to 75 dBA at 50 feet. Noise would be generated for up to 12 weeks (June 15 to October 15) by equipment on-site, by traffic accessing the project site, and by trucking material to the San Francisco Open Cut. Noise levels for typical pieces of equipment (at 50 feet) that would be used for the project are listed in Table 4.9: Typical Operation Noise Levels (50 feet) and are adapted from the US Federal Highway Administration standards and measurements (FTA 2006).

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Typical Noise Levels (dBA at 50 feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Loaders</td>
<td>80</td>
</tr>
<tr>
<td>Backhoes, excavators</td>
<td>80</td>
</tr>
<tr>
<td>Tractors, dozers</td>
<td>85</td>
</tr>
<tr>
<td>Graders, Scrapers</td>
<td>85</td>
</tr>
<tr>
<td>Flat Bed Truck</td>
<td>84</td>
</tr>
<tr>
<td>Pumps</td>
<td>77</td>
</tr>
<tr>
<td>Generator</td>
<td>82</td>
</tr>
</tbody>
</table>

Earth moving and remediation activities would occur approximately one mile from the nearest residences. Noise attenuation would result in noise levels declining by approximately 10 dBA at 200 feet, 20 dBA at 500 feet, and 26 dBA at 1,000 feet from construction equipment. During construction park visitors would be directed to use adjacent hiking trails. Although some of the project area is located on ridge lines, the distance to residences and the positioning on the ridgelines would minimize noise impacts to the surrounding areas.

The noise from construction equipment (80 to 90 dBA) exceeds levels for residential and park uses (55 to 75 dBA) within 50 feet of the equipment. Although, park trails would be closed during construction, some park users could be within 1,000 feet of construction site, depending on where the work would take place. Therefore, Mitigation Measure NOISE-1 shall be implemented.

**Mitigation Measure NOISE-1:**

The County shall ensure that the construction contractor implements these practices to minimize disturbances to residential neighborhoods surrounding work sites:

a. No construction on weekends and legal holidays, or between the hours of 7:00 p.m. and 7:00 a.m. on weekdays
b. Engine-powered equipment will be outfitted with standard noise control devices, such as mufflers, in good working condition.

c. Vehicles shall not idle longer than 5 minutes.

d. The arrival and departure of trucks hauling material shall be limited to the hours of construction.

e. The County shall place a sign at the entrance of the site providing contact information for the County of Santa Clara, Department of Parks and Recreation regarding noise complaints.

f. If specific noise complaints are received during construction, one or more of the following noise mitigation measures shall be implemented in a more rigorous fashion:
   i. Use hydraulically or electrically powered impact tools (e.g., jack hammers) when possible. If the use of pneumatically powered tools is unavoidable, use an exhaust muffler on the compressed air exhaust.
   ii. Locate stationary construction equipment as far from noise-sensitive properties as possible.
   iii. Notify nearby property users whenever extremely noisy work shall occur.
   iv. Utilize stock piles as effective noise barriers when feasible.

**Implementation:** Construction contractors

**Timing:** During all phases of project work

**Monitoring:** County Parks Staff

These noise levels would be temporary and occur only during construction. With the implementation of the mitigation measures above impacts would be less than significant with mitigation incorporated.

3. **Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

The project would not result in any substantial permanent increase in ambient noise levels in the project area above levels existing without the project. The project is a remediation project; therefore, noise would only occur for a short duration during earthmoving activities, and would not entail any long term actions that would create noise; therefore, the project would have no impact.
4.14 POPULATION AND HOUSING

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>NO</th>
<th>YES</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Impact</td>
<td>Less Than Significant Impact</td>
<td>Less Than Significant Impact With Mitigation Incorporated</td>
</tr>
<tr>
<td>1. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

DISCUSSION:

All background information about population and housing for the proposed project was obtained from the U.S. Census Bureau. The project area is entirely located within AQ County Park, which is located in Santa Clara County. Between 1980 and 1990, Santa Clara County grew by 202,506 people. This growth represents a 16% increase in population. Similarly, between 1990 and 2000, the County grew by an additional 185,008, which accounts for a 12% change in population. It is predicted that the County's population will continue to grow, but at a slower rate. Moderate rates of growth in employment and housing development may account for this slowdown in population growth (SCC 2013b). Based on ABAG projections, an estimated population of 1,788,300 in 596,760 households resided within the County in 2005. By 2025, ABAG projects the number of people residing within the County will increase to 2,064,200 in 695,170 households. This represents a 13% increase in population and a 14% increase in the number of households over a 20-year period (SCC 2013b).

The proposed project area is located near the City of San Jose, Santa Clara County. The population makeup of the area is presented in the Table 4.10: Population and Housing Indicators 2010.
Table 4.10: Population and Housing Indicators 2010

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Santa Clara County</th>
<th>City of San Jose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>1,781,642</td>
<td>945,942</td>
</tr>
<tr>
<td>Nonwhite Persons</td>
<td>49%</td>
<td>54.0%</td>
</tr>
<tr>
<td>Persons of Hispanic Origin</td>
<td>26.9%</td>
<td>33.0%</td>
</tr>
<tr>
<td>Persons Aged 65 Years and Over</td>
<td>11.1%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Poverty Status for individuals, percent, 2006-2010</td>
<td>9.2%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Median Home Values</td>
<td>$681,100</td>
<td>$605,400</td>
</tr>
</tbody>
</table>

All data from U.S. Bureau of the Census, 2010 Census

**IMPACTS AND MITIGATION:**

1. *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

2. *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

3. *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

There is no residential or commercial development proposed as part of the project and the project would not result in any type of population growth. The project would not displace any existing housing or residents, and housing is not present in the project area. Further, the project would not provide for or create any additional roads or road capacity.

The project would not displace any people or necessitate any new construction. The project area would continue to be used and designated as AQ County Park. Therefore, the project would not directly or indirectly induce population growth and the project would have **no impact.**
4.15 PUBLIC SERVICES

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Source</td>
<td>Impact</td>
</tr>
<tr>
<td></td>
<td>No Impact</td>
<td>Less Than Significant Impact</td>
</tr>
</tbody>
</table>

1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

   i) Fire Protection?  ☒ ☐ ☐ ☐ ☐ 1, 3, 5
   ii) Police Protection?  ☒ ☐ ☐ ☐ ☐ 1, 3, 5
   iii) School facilities?  ☒ ☐ ☐ ☐ ☐ 1, 3, 5
   iv) Parks?  ☒ ☐ ☐ ☐ ☐ 1, 3, 5
   v) Other public facilities?  ☒ ☐ ☐ ☐ ☐ 1, 3, 5

2. Induce substantial growth or concentration of population? (Growth inducing?)  ☒ ☐ ☐ ☐ ☐ 1, 3, 5

3. Employ equipment which could interfere with existing communications or broadcast systems?  ☒ ☐ ☐ ☐ ☐ 1, 3, 5

4. Increase the need for new systems or supplies, or cause substantial alterations to the following utilities:

   a. Electricity or Natural gas  ☒ ☐ ☐ ☐ ☐ 1, 3, 5
   b. Local or regional water treatment or distribution facilities  ☒ ☐ ☐ ☐ ☐ 1, 3, 5
   c. Local or regional water supplies  ☒ ☐ ☐ ☐ ☐ 1, 3, 5
   d. Sewage disposal  ☒ ☐ ☐ ☐ ☐ 1, 3, 5
   e. Storm water drainage  ☒ ☐ ☐ ☐ ☐ 1, 3, 5
   f. Solid waste or litter  ☒ ☐ ☐ ☐ ☐ 1, 3, 5

DISCUSSION:

The project area is served by the County of Santa Clara Fire Department with support from the California Department of Forestry and Fire Protection. The department includes 15 fire stations, an administrative headquarters, a maintenance facility, five other support facilities, 19 pieces of apparatus and 3 command vehicles, to cover 103 square miles and a population of over 213,000. The department employs over 288 fire prevention, suppression, investigation, administration, and maintenance personnel; daily emergency response consists of 64 employees.

The project area is in the County of Santa Clara Sheriff’s Department jurisdiction, which provides police services in the project area. The Santa Clara County Sheriff’s Office operates a Parks Patrol, which responds to calls from Park Rangers. Two private water companies (Great Oaks Water Company and San Jose Water Company) and one city-owned supply network (San Jose Municipal Water System) serve the areas surrounding the project site. There is no potable water service or sewer service in the
project area. There are no schools within the project area and no schools are located within a one mile radius.

**IMPACTS AND MITIGATION:**

1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*
   
   i. Fire Protection?
   
   ii. Police Protection?
   
   iii. School facilities?
   
   iv. Parks?
   
   v. Other public facilities?

   The project would remove calcine pavements and regrade trails within AQ County Park and would not create an increase in demand for fire or police protection services. The project does not propose any new uses that would increase the use of AQ County Park to the extent that it would require new or physically altered park facilities. Further, the project would not increase response times for emergency services and would not require new public service facilities like parks or schools. The project would not create a need for new or physically altered governmental or public facilities and therefore, the project would have **no impact.**

2. *Induce substantial growth or concentration of population? (Growth inducing?)*

   The project is intended to improve the health of the environment for humans and wildlife, and would not create infrastructure to support growth or concentration of population. The project does not propose any structures, roadways, utility infrastructure, or housing that would be growth inducing in Santa Clara County and therefore the project would have **no impact.**

3. *Employ equipment which could interfere with existing communications or broadcast systems?*

   The project would require the use of construction equipment, the use of which does not interfere with any communications or broadcast systems. The project would have **no impact.**

4. *Increase the need for new systems or supplies, or cause substantial alterations to the following utilities:*
   
   a. Electricity or Natural gas
   
   b. Local or regional water treatment or distribution facilities
   
   c. Local or regional water supplies
   
   d. Sewage disposal
   
   e. Storm water drainage
   
   f. Solid waste or litter

   The project would remove calcine pavement and regrade trails within AQ County Park and would not increase the use of AQ County Park. Although the project would require the disposal of contaminated soil it would not increase future demand for solid waste or litter disposal. Contaminated soil would be disposed of at the San Francisco Open Cut, and therefore not have any impact on local or regional solid
waste disposal facilities. The San Francisco Open Cut is a preapproved disposal site for removed calcines within AQ County Park.

Hydroseeding and revegetation of impacted areas adjacent to the trails would be necessary. Native annual grass hydoseed would be applied with a tackifier (as permitted) to exposed soils and jute-covered areas just prior to the first rain of the season (September, October, November) to establish vegetation. If seeded prior to a rain event, annual grasses would not require irrigation. If rains are not sufficient to establish vegetative cover, water trucks would be used to maintaining vegetation cover. Water would be used in small to moderate quantities if necessary.

The project would not increase the need for new systems or supplies or cause substantial alterations on utilities. The project impact would be less than significant.
4.16 RECREATION

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>NO</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Potentially Significant Impact</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>3. Be on, within or near a public or private park, wildlife reserve, or trail (includes those proposed for the future) or affect existing or future recreational opportunities?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>4. Result in loss of open space rated as high priority for acquisition in the “Preservation 20/20” report?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

DISCUSSION:

The project area is located within AQ County Park. AQ County Park includes over 34.2 miles of multi-use trails, including 23 miles of equestrian trails and 10 miles of mountain bike trails. A number of picnic tables are scattered throughout AQ County Park, which is open to day users. There are four main entrances to the park: Webb Canyon, located east of McAbee Road; Mocking Bird Hill Lane, located near Almaden Expressway; Hacienda, located at the north end of the town of New Almaden; and Hicks/Wood Road, located at the intersection of Hicks Road and Wood Road. All trails in the park are open to hikers, while only some are open to bicyclists and equestrians. Pets are allowed on leash. Remnants of mining structures are found throughout AQ County Park, including some located in the project area.

During construction the project area would be mainly accessed from the Hacienda entrance. The Hicks Road/Wood Road entrance would be used as secondary construction access, as needed. Importation of clean fill materials would require the use of construction vehicles on City of San Jose approved haul routes. The haul route would utilize surface streets in the City of San Jose and Almaden Road and several trails through AQ County Park to import clean fill. The disposal of calcine materials would require the use of construction vehicles on AQ County Park trails, like Castillero and Mine Hill Trails. The trails would be closed during construction times and open on the weekends.

Portions of the trails within the project area would be closed during the 12 week construction period on a rotating basis as work progresses. Work would be staged to minimize the number of trails closures and to maintain access to other trails and features in AQ County Park.
IMPACTS AND MITIGATION:

1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The project would require temporary closure of portions of seven trails due to construction activities. Construction activities would be phased to minimize the number of trail closures. Construction would take place on weekdays from 7 a.m. to 7 p.m., when park use is at its lowest. The portion of the trails that would undergo remediation activities would be closed to park users for the construction period on the particular segment. Construction activities and times would be posted at the Hacienda and Hicks/Wood Road AQ County Park entrance. Construction activities may encourage park users to access alternate park entrances and/or alternate trails during construction. Displaced trail users would be directed towards other AQ County Park trails and entrances; nonetheless it is possible that some may elect to utilize other existing neighborhood or regional parks. Appropriate signs would be placed at trailheads and trail junctions warning the public of construction vehicles and providing information on the project status and current trail closures. Park users who elect to use alternate park entrances or other park trails would not result in substantial increases in the use of other areas of the park or other park facilities during the temporary construction period. Therefore, this impact would be less than significant.

2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project would remove calcine pavement and regrade trails within AQ County Park and does not propose the construction or expansion of recreational facilities. Therefore, the project would have no impact.

3. Be on, within or near a public or private park, wildlife reserve, or trail (includes those proposed for the future) or affect existing or future recreational opportunities?

The project would require temporary closure of portions of seven trails due to construction activities. Construction activities would be scheduled in a way that would minimize trial closures. Work on trails would be staged in a manner to maintain access to other trails as much as possible. Portions of Castillero and Mine Hill Trails would be closed while calcine pavements are removed from these two trails. Mine Hill Trail would be used as a haul route within AQ County Park. These two trails serve as access to other trails in AQ County Park. It is anticipated that only one trail at a time would be closed for remediation. Appropriate signs would be placed at trailheads and trail junctions warning the public of construction vehicles and providing information on the project status and trail closures. Signs would also be placed at AQ County Park entrances indicating park trail closures and alternate routes for park users electing to use alternate park entrances.

There is a designated parking lot at the Hacienda entrance with a large overflow parking lot. Construction vehicles and construction crew would utilize the Hacienda parking lot; however, the parking capacity would be sufficient to accommodate park users. Further, the parking lot would not be used on the weekend when park usage is at its peak.

Construction noise, dust, traffic and trail closures may encourage park users to access alternate park entrances and/or alternate trails during construction. The project impact on recreational opportunities would be temporary and short term; therefore this impact would be less than significant.
4. *Result in loss of open space rated as high priority for acquisition in the “Preservation 20/20” report?*

The project is a calcine removal project within AQ County Park and would not result in the loss of any open space. The proposed project is in compliance with “Preservation 20/20” report and would reduce erosion Mine Hill area; therefore the project would have **no impact**.
### 4.17 TRANSPORTATION/TRAFFIC

<table>
<thead>
<tr>
<th>Q. TRANSPORTATION / TRAFFIC</th>
<th>IMPACT</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOULD THE PROJECT:</td>
<td>NO</td>
<td>LESS THAN SIGNIFICANT IMPACT</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>CUMULATIVE</td>
</tr>
<tr>
<td>No Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less Than Significant Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Mitigation Incorporated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potentially Significant Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to intersections, streets, highways and freeway, pedestrian and bicycle paths and mass transit.

   SOURCE: 4, 6, 26, 27, 28, 6, 49, 50, 5, 6, 7, 3, 5, 6, 7, 1, 3, 5, 48, 1, 3, 30, 1, 3, 30

2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

   SOURCE: 5, 6, 7

3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

   SOURCE: 3, 5, 6, 7

4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

   SOURCE: 1, 3, 5, 48, 1, 3, 30

5. Result in inadequate emergency access?

   SOURCE: 2, 3, 5

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

   SOURCE: 1, 3, 30

7. Not provide safe access, obstruct access to nearby uses or fail to provide for future street right of way?

   SOURCE: 3, 4

8. Cause increases in demand for existing on or off-street parking because of inadequate project parking?

   SOURCE: 1, 3, 30

DISCUSSION:

The project proposes removal of calcine pavements, regrade trails, and construct erosion control measures on existing trail routes in unincorporated Santa Clara County within AQ County Park. Construction would involve the excavation and removal of approximately 3,900 CY of calcine pavements and associated soils on seven named trails, a water service road, and Unknown Trail #1 and #2 (see Table 2.1: Calcine Roads Remediation Project Activities). Trails would be regraded and
 revegetated, where necessary. Contaminated soil would be replaced with imported clean fill. All of these activities would require hauling materials through AQ County Park or City of San Jose streets on an approved hauling route. In addition, equipment, haul trucks and personnel vehicles would be driven to the project area using City of San Jose streets and where available approved haul routes.

Construction staging including equipment and materials storage, temporary calcine stockpiling (if necessary) and personnel parking would be accommodated within one designated area within AQ County Park. Construction crew would park in the overflow lot at the Hacienda entrance. No lane or road closures would occur on any roadways as a result of implementation of the proposed project.

**Local Roads**

Almaden Expressway and Almaden Road would be used for project site access by construction crews and to bring in construction equipment, as well as clean fill. The San Francisco Open Cut consolidation site for contaminated soils is located on Castillero Trail, near the intersection of Mine Hill Trail and Castillero Trail. The repository area in AQ County Park would be accessed via Castillero and Mine Hill trails within AQ County Park.

Almaden Road would be used for importation of clean fill to the project area. Haul truck routes must be approved by the City of San Jose for usage. Almaden Road has been used as a haul route for previous remediation efforts in the area including the 1998-2000 Hacienda Furnace Yard Remediation and the 2009 Jacques Gulch Remediation, as well as the 2010 Hacienda and Deep Gulch Remediation Project.

Beyond the project site, Almaden Road becomes Almaden Expressway and serves as an expressway providing regional connectivity to the area. The City of San Jose General Plan defines an expressway as being designated primarily for traffic movement by serving high volumes and high-speed regional traffic including trucks (City of San Jose 2009 and 2013).

Within AQ County Park, trails would be used as haul routes for removed calcine pavements and associated soils.

**Regional Access**

Regional access to the project area is provided by U.S. Highway 101, State Route 85 (SR 85) and State Route 17 (SR 17). These routes are within approximately 5 to 8 miles of the project site. The Hacienda entrance to AQ County Park may be reached from Highway 101 or SR 85 by traveling along streets in the southern portion of the City of San Jose to Almaden Expressway. The primary access is via either SR 85 or Almaden Expressway.

**Transit and Rail Service**

The Santa Clara Valley Transportation Authority (VTA) operates bus and light rail transit routes throughout the county. Bus line 13 travels along Almaden Expressway and ends approximately 2 miles north from the Hacienda entrance. The nearest stop to the project area is located at Almaden Expressway and McKean Road, approximately 2 miles north from the project area (VTA 2011). The nearest rail facility is the VTA light rail Almaden Station about 6 miles north of the project site. The VTA does not provide direct transit service to any location within the AQ County Park. No bus lines routes exist along Almaden Road near the project area.

**Pedestrian, Bicycle and Equestrian Facilities**

AQ County Park offers a variety of trails and roads that provide open space access to pedestrian, equestrian, horse-cart and bicycle users.
Regulations, Plans, and Standards

Operation and maintenance of local roads in the project area is the responsibility of the County of Santa Clara Roads and Airports Department. County of Santa Clara transportation policies and standards for roadways are discussed in the Santa Clara County General Plan. The proposed project would involve work along several trails within AQ County Park and hauling along Almaden Expressway and Hicks Road.

IMPACTS AND MITIGATION:

1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to intersections, streets, highways and freeway, pedestrian and bicycle paths and mass transit.

Project activities may slightly increase traffic on Almaden Road, Hicks Road and the unpaved single lane Mine Hill Trail and Castillero Trail within AQ County Park. The project is expected to generate up to 21 personnel round trips and 8 hauling round trips per day during project construction, for up to approximately 12 weeks. Traffic to the project area would arrive on Almaden Road after traveling through the City of San Jose and along highways that provide regional access. Trucks for hauling water for dust control and construction materials would also access the site daily. The activities would be temporary over the 12 weeks of construction activities, which are proposed to occur outside of the rainy season (June 15 to October 15, 2014).

Construction activities would include excavation of existing calcines pavement, placing of clean fill and revegetation. Construction work hours are planned for 7 a.m. through 7 p.m. It is estimated that during peak work operations up to 21 construction workers may be on-site each day, with one roundtrip per day each. The number of personnel would vary between 9 and 21 during construction. Assuming single-occupancy per vehicle the project would generate maximum 42 personnel trips per day to the site (21 trips to the job site, 21 trips leaving the job site).

The project would also generate trips for importation of clean fill. It is anticipated that hauling of clean fill would be carried by dump trucks resulting in 8 round trips per day (approximately one trip per hour). The total project construction traffic may reach 29 round trips per day (21 personnel trips and 8 truck trips) during peak work operations.

Local roadways in the project area have relatively low traffic volumes. Average Daily Traffic (ADT) on Almaden Expressway near the project area, around Via Valiente and Capitol Expressway, ranges from 12,000 to 58,000 vehicles\(^7\) (SCC 2013a). ADT on Almaden Road is approximately 1,600 vehicles\(^8\) (SCC 2013a). Project related traffic would not increase traffic on the local roads to a level that is substantial in relation to the existing traffic load and capacity of the street system (SCC 2013a). Therefore, congestion caused by construction vehicles accessing the work areas from local roads would be minimal and limited to the short-term duration of the project. To further minimize impacts from project construction Mitigation Measure TRA-1 would be required.

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\(^7\) Vehicle counts in 2012
\(^8\) Vehicle counts in 2009
Mitigation Measure TRA-1:

Implement County Roads and Airports and City of San Jose BMPs requiring the installation of lights, flagging, guards, and signs 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.

Implementation: Contractor and County Parks Staff

Timing: During construction

Monitoring: County Parks Staff

With implementation of this mitigation measure, this impact would be less than significant with mitigation incorporated.

2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The County of Santa Clara adopted its current Congestion Management Plan in 2011. The traffic levels for local roadways in the project area have medium to high traffic volumes and operate at acceptable levels of service. Further, as discussed in Threshold 1 above, the project would not add a substantial amount of truck trips over an extended period of time to current roads; therefore, impact would be less than significant.

3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No operating airports or heliports are located within two miles of the proposed project. Helicopters would not be used during project construction. The proposed project would not include any features that would disrupt or affect air traffic; therefore the project would have no impact.

4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project does not include any roadway design features. Truck hauling to the project site and to the San Francisco Open Cut on Almaden Road, and Castillero and Mine Hill trails has been successfully undertaken in previous remediation projects. Although this is not a typical use of Castillero and Mine Hill trails, one lane access routes, they can accommodate ranger vehicles and dump trucks. Trails would be temporary closed during hauling, if deemed necessary, and traffic control measures including signage, flagmen with radios and a possible loop haul route may be implemented to reduce the potential for travel conflict. With implementation Mitigation Measure TRA-1, this impact would be less than significant with mitigation incorporated.

5. Result in inadequate emergency access?

Construction related truck and vehicle traffic along haul routes would follow all vehicular rules and regulations, including making way for emergency vehicles. The project would not add significant congestion to local roads. Because of this, emergency response times are not expected to be significantly affected.

Within AQ County Park, truck traffic would fully occupy the single lanes of Wood Trail and Castillero and Mine Hill trails during trips to the San Francisco Open Cut. To the extent these routes are used for
emergency services, the presence of haul trucks on these facilities could temporarily disrupt response to wildfires or other emergencies within the park. Therefore Mitigation Measure TRA-2 would be required.

**Mitigation Measure TRA-2:**

Prior to the start of the project, County of Santa Clara shall develop and communicate to the construction contractor an emergency response procedure for emergency access to Mine Hill Trail. The contractor will implement the procedures.

**Implementation:** County Parks Staff and construction contractor

**Timing:** Prior to construction

**Monitoring:** County Parks Staff

With the implementation of the mitigation measure above, this impact would be less than significant with mitigation incorporated.

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

7. Not provide safe access, obstruct access to nearby uses or fail to provide for future street right of way?

8. Increase traffic hazards to pedestrians, bicyclists and vehicles?

Construction on the seven trails and the use of Castillero and Mine Hill trails as haul routes would temporarily restrict the recreation use of these trails during construction. Work would be staged so that the number of trails to be closed at one time would be minimized.

Trail users may not be able to see haul trucks on Castillero and Mine Hill trails, resulting in safety hazards if trucks were also using the trails. As a consequence, these two trails would be closed to users during hauling times. Hauling would be limited to weekdays when park use is lower compared to weekends. Appropriate signage alerting park users of trail closure would be placed at the Hacienda and Hicks/Wood Road entrances. The Hacienda and Hicks/Wood Road park entrances would have limited access during construction activities. Construction would take place only during weekdays when park use is at its lowest from 7 a.m. to 7 p.m. Due to the temporary nature of activities, and the traffic management plan measures outlined in Mitigation Measure TRA-1 above, this impact would be less than significant with mitigation incorporated.

9. Cause increases in demand for existing on or off-street parking because of inadequate project parking?

Construction crews would park in the overflow lot at the Hacienda entrance during project construction. Construction crews would vary in size from 9 to 21 persons. The Hacienda entrance parking areas contains sufficient capacity to accommodate the increase in parking demand during the construction period. Construction crew parking would not impact levels of existing on or off street parking. Further, the parking areas at the Hacienda entrances would be affected by turning movements, idling and temporary parking of construction trucks or equipment at these entrances. The proposed project would largely involve weekday activity when the entrances would be lightly used. Due to the temporary nature of project construction, this impact would be less than significant.
### 4.18 UTILITIES AND SERVICE SYSTEMS

<table>
<thead>
<tr>
<th>WOULD THE PROJECT:</th>
<th>IMPACT NO</th>
<th>IMPACT YES</th>
<th>SOURCE</th>
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<td>No Impact</td>
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<td></td>
<td>Significant Impact</td>
<td>Significant With Mitigation</td>
<td>Significant Impact</td>
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<tr>
<td>1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
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<tr>
<td>2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
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<tr>
<td>3. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
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<tr>
<td>4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
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<tr>
<td>5. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?</td>
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<td>☐</td>
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<tr>
<td>6. Not be able to be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>☒</td>
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<tr>
<td>7. Comply with federal, state, and local statutes and regulations related to solid waste?</td>
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**DISCUSSION:**

Utilities include wastewater treatment plants, potable water treatment facilities, storm water drainage system, water supply systems, and solid waste landfill. The project site is located within AQ County Park and it is not served by sewer, stormwater, or water services.

**IMPACTS AND MITIGATION:**

1. *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

2. *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

The project would not discharge wastewater; therefore it would not exceed any treatment requirements for wastewater as established by the RWQCB. The project does not propose the construction of uses.
served by a wastewater provider and would not create a need for new wastewater treatment facilities or expansion of existing facilities. Therefore the project would have no impact.

3. **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The project does not propose the construction of storm water drainage facilities that empty into municipal stormwater facilities. The project would regrade the seven named trails within the project area with rolling dips to facilitate runoff. The redirecting of stormwater would prevent the formation of erosional features. Outdated culverts would be replaced and all disturbed areas would be regraded to blend with adjacent topography; stabilized with erosion control BMPs and revegetated. Compaction requirements, erosion control BMPs and hydroseeding would be used at all erosional features project sites.

The new rolling dips to direct stormwater flow and the replaced culverts would not expand any existing facilities and would help control erosion and runoff. The project impact would be **less than significant.**

4. **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

The project would use water for dust control and for short-term irrigation of native plantings. Over the long term, the project would rely on naturally occurring sources of water including precipitation and local surface water to support the vegetation. The project would not result in impacts to water supplies; therefore the impact would be **less than significant.**

5. **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?**

The project would not require any new wastewater treatment facilities; therefore the project would have **no impact.**

6. **Not be able to be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?**

7. **Comply with federal, state, and local statutes and regulations related to solid waste?**

The excavated calcine and contaminated soil would be consolidated and capped within AQ County Park, in the San Francisco Open cut, a preapproved site for disposal of removed calcines. Therefore, the project would not contribute material to area landfills. The project would not require use of landfill for solid waste needs and complies with regulations related to solid waste. Therefore, the project would have **no impact.**
4.19 MANDATORY FINDINGS OF SIGNIFICANCE

<table>
<thead>
<tr>
<th>DOES THE PROJECT:</th>
<th>NO</th>
<th>YES</th>
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<tbody>
<tr>
<td>S. MANDATORY FINDINGS OF SIGNIFICANCE</td>
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<tr>
<td>a. Have the potential to substantially degrade the quality of the environment,</td>
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<td>substantially reduce the habitat of a fish or wildlife species, cause a fish or</td>
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<td>wildlife population to drop below self-sustaining levels, threaten to eliminate</td>
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<td>a plant or animal community, reduce the number or restrict the range of a rare</td>
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<td>or endangered plant or animal or eliminate important examples of the major</td>
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<td>periods of California history or prehistory?</td>
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<td>b. Have the potential to achieve short-term environmental goals, to the</td>
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<td>disadvantage of long-term environmental goals? (A short-term impact on the</td>
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<td>environment is one which occurs in a relatively brief, definitive period of</td>
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<td>time, while long-term impacts will endure well into the future.)</td>
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<td>c. Have environmental impacts which are individually limited, but cumulatively</td>
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<td>considerable? (“Cumulatively considerable” means that the incremental effects</td>
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<td>of an individual project are considerable when viewed in connection with the</td>
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<td>effects of past projects, the effects of other current projects, and the</td>
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<td>effects of probably future projects.)</td>
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<td>d. Have environmental effects which will cause substantial adverse effects on</td>
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<tr>
<td>human beings, either directly or indirectly?</td>
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IMPACTS AND MITIGATION:

Item a: Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

This project would benefit the environment by removing calcine pavements remaining from former mercury mining operations, and thereby, reduce mercury loads to the Guadalupe River Watershed and the San Francisco Bay. A number of biological resources, such as oak and riparian woodlands could potentially be impacted by the work. Although the trails located in the project area are a historic resource, the historical significance would not be impacted by the road remediation work. Based on the findings provided in this Initial Study, the project would not substantially degrade the quality of the environment. The project would not substantially reduce fish and wildlife habitat or populations to below sustainable levels and would not eliminate or restrict the range of any plant or animal community (see Section 4.4). The project would not eliminate historic or prehistoric resources (see Section 4.5). The overall impacts of the project would be less than significant.

Item b: Have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)
This project would benefit the environment by removing calcine pavements remaining from former mercury mining operations, and thereby, reduce mercury loads to Guadalupe River Watershed and the San Francisco Bay. Some short-term environmental impacts could occur to biological resources. However, these impacts would be temporary and mitigation measures are included that would reduce any impact to less than significant. The project is designed provide long-term benefits to the environment, especially water quality and stream and riparian species along the several creeks in the project area, Guadalupe River, and the San Francisco Bay. Therefore, project impacts would be less than significant.

Item c: Have environmental impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects.)

A cumulative effect is defined as the impact on the environment that results from the incremental effect of the proposed project when added to other past, present, and reasonably foreseeable actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

As discussed in this Initial Study, the proposed project would not result in significant impacts that cannot be mitigated to less than significant. The potential for cumulative effects of the project in combination with other planned or anticipated improvements is low. Since the project is (1) generally limited to construction effects in AQ County Park, and/or (2) no significant impacts were identified that could be considered in a cumulative assessment of effects, the following issue areas would not be significantly affected, either from the project alone or cumulatively with other projects: Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Public Services, Recreation, Transportation and Traffic, and Utilities and Service Systems.

In general, individual GHG emissions do not have a large impact on climate change. However, once added with all other GHG emissions in the past and present, they combine to create a perceptible change to climate. Because of the extended amount of time that GHGs remains in the atmosphere, any amount of GHG emissions can be reasonably expected to contribute to future climate change impacts. The amount of CO2 emissions from the proposed project, although measurable, would be minor. On a global scale, the proposed project is expected to contribute a negligible amount to global cumulative effects to climate change due to its temporary nature and its location near major urban centers.

Therefore, the cumulative impact from the proposed project and the foreseeable local projects would be considered less than significant.

Item d: Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Humans will benefit from the removal of calcines and reduction of mercury in San Francisco Bay. Short-term potential impacts to workers, park visitors and residents that could arise from mercury on airborne dust particles are reduced to less than significant with mitigations provided in the Initial Study/Environmental Checklist (See Section 4.9). The project impact on humans would be temporary and thus would be less than significant.
DISCUSSION OF ENVIRONMENTAL EVALUATION

Discuss on attached sheet(s) all "yes" answers and any "no" answers that are potentially controversial or require clarification. Describe any potential impacts and discuss possible mitigations. For source, refer to attached "Initial Study Source List". When a source is used that is not listed on the form or an individual is contacted, that source and/or individual should be cited in the discussion.

DETERMINATION: (To be completed by the Lead Agency) On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because mitigation measures are included as part of the proposed project. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature ____________________________ date 3/2/2015

Print name & title: Antoinette Romeo, Planner III
### INITIAL STUDY RECOMMENDED SOURCE LIST

1. Field Inspection
2. Project Plans
3. Planner’s Knowledge of Area
4. Experience With Other Project of This Size and Nature
5. County General Plan
6. The South County Joint Area Plan
7. County Zoning Regulations (Ordinance)
8. Second Amendment to Agreement [with San Jose] for Allocation of Tax Increment Funds
9. MAPS (various scales)
   a. County Zoning (500’ or 1,000’)
   b. ABAG “On Shaky Ground”-Santa Clara County Map Set (2 miles)
   c. Barclay’s Santa Clara County Locaide Street Atlas (2631’)
   d. County Regional Parks, Trails and Scenic Highways Map (10,000’)
10. 5000’ or one mile Scale MAPS
    a. County General Plan Land Use
    b. Natural Habitat Areas
    c. Relative Seismic Stability
    d. Archaeological Resources
    e. Water Resources & Water Problems
    f. Viewshed and Scenic Road
    g. Fire Hazard
    h. Parks and Public Open Space
    i. Heritage Resources
    j. Slope Constraint
    k. Serpentine soils
11. 2000’ Scale MAPS
    a. State of California, Special Studies Zones [Revised Official Map]
    b. Water Problem/Resource
    c. USGS Topo Quad (7-1/2 minutes)
    d. Dept. of Fish & Game, Natural Diversity Data Base Map Overlays & Textual Reports
    e. Natural Resources [Key to map found in: Natural Resource Sensitivity Areas-Locality Data, Harvey & Stanley Associates-Contact County staff]
12. 1000’ Scale MAPS/Air Photos
    a. Geologic Hazards
    b. Color Air Photos (MPSI)
    c. Santa Clara valley Water District-Maps of Flood Control Facilities & Limits of 1% Flooding
    d. Soils Overlay Air Photos
    e. “Future Width Line” map set
13. County Lexington Basin Ordinance Relating to Sewage Disposal
14. Los Gatos Hillsides Specific Area Plan
15. Stanford University General Use Permit and Environmental Impact Report [EIR]
17. County Geologist
18. Site Specific Geologic Report
19. State Department of Mines and Geology, Special Report #146
20. USDA, SCS, “Soils of Santa Clara County”
22. County Environmental Health/Septic Sewage Disposal System - Bulletin “A”
23. San Martin Water Quality Study
24. County Environmental Health Department Tests and Reports
25. Santa Clara County Heritage Resource (including Trees) Inventory [computer database]
26. Official County Road Book
27. County Transportation Agency
29. Public Works Departments of Individual Cities
30. County Off-street Parking Standards
31. ALUC Land Use Plan for Areas Surrounding Airports [1992 version]
32. County Fire Marshal
33. California Department of Forestry
35. Architectural and Site Approval Committee Secretary
36. County Guidelines for Architecture and Site Approval
37. County Development Guidelines for Design Review
40. Section 21151.4 of California Public Resources Code.
41. Site Specific Archaeological Reconnaissance Report
42. State Archaeological Clearinghouse, Sonoma State University
44. Design Guidelines for Non-residential Development in San Martin.
45. Southwest San Martin Area Interim Development Guidelines
46. 2009 NPDES Storm Water Discharge Permit
47. 2002 Clean Water Act Section 303(d)
49. County of Santa Clara Ordinance Code
50. Santa Clara Countywide Trails Master Plan Update, November 1995
51. Santa Clara Valley Water District Water Resources Protection Collaborative Guidelines and Standards for Land Use Near Stream
SECTION 5: REPORT PREPARATION

This section lists those individuals who contributed to the preparation of the Initial Study.

5.1 URS

Bill Martin, Principal in Charge
Katrina Hardt–Holoch, Senior Environmental Planner
Florentina Craciun, Environmental Planner
Kathleen Kubal, Archaeologist
Shannon Lindquist, Biologist
Elizabeth Neilson, Hydrology and Water Quality Specialist
David Joe, Air Quality Specialist

5.2 COUNTY PARKS STAFF

Reem Assaf, P.E, Capital Projects Manager II
Antoinette Romeo, Planner III
SECTION 6: REFERENCES


______. 2010b. Bay Area Clean Air Plan: Executive Summary.


_____. 2003b. Seismic Hazard Zones Santa Teresa Hills Quadrangle.

_____. and Mark O. Wiggers. 2006. Landslide Inventory Map of the Santa Teresa Hills Quadrangle Santa Clara County, California.


City of San Jose. 2007. Envision San Jose 2040 General Plan.


_____. 2003. Santa Clara County Parks Strategic Plan.


_____. 2007. San Francisco Bay Regional Water Quality Control Board. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater


______. 2012. Santa Teresa Hills Quadrangle California-Santa Clara County 7.5 Minute Series.


SECTION 7: MITIGATION MONITORING AND REPORTING PROGRAM

The following Mitigation, Monitoring and Reporting Plan (MMRP), has been prepared for this project pursuant to CEQA Guidelines. According to the Guidelines:

“In order to ensure that the mitigation measures and project revisions identified in the EIR or Negative Declaration (Initial Study/Mitigated Negative Declaration) are implemented, the Lead Agency, shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects.” (§15097(a)) The County of Santa Clara (County), Parks and Recreation Department is the lead agency for this project.

“The Lead Agency may choose whether its program will monitor mitigation, report on mitigation, or both. Reporting generally consists of a written compliance review that is presented to the decision making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. Monitoring is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both.” (§15097 (c))

The MMRP lists the Environmental Impacts, Mitigation Measures, and Timing of the Mitigation Measure (when the measure will be implemented) related to the implementation of the proposed Site Plan project. The responsibility for ensuring that the mitigation measure has been implemented would be the responsibility of the County of Santa Clara Parks & Recreation Department. All of the mitigation measures listed in the MMRP would be implemented by the County or by its appointees.

According to CEQA Guidelines Section 15126.4 (a) (2), “Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments.” Therefore, all mitigation measures listed in this MMRP would be adopted by the County when the project is approved.
### Air Quality

**Air Quality 2:** BAAQMD has determined that projects emitting less than the mass emission thresholds would not cause or contribute to an air quality violation. BAAQMD does not have mass emissions thresholds for fugitive PM10 and PM2.5 dust, but recommends the implementation of BMPs, as listed in BAAQMD Air Quality Guidelines (BAAQMD, 2010). Therefore, Mitigation Measure AIR-1 is required.

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| AIR-1  | Implement the following BAAQMD BMPs (as described in BAAQMD, 2010) to reduce this impact to a less than significant level:  
   a. BAAQMD Basic Construction Mitigation Measures for dust control (all construction sites) (from Table 8-2, BAAQMD, 2010)  
   b. BAAQMD Optional Dust Control Measures (from Table 8-3, BAAQMD, 2010) | Implementation: County Parks Staff and Construction contractor would include BMPs in construction documents and the contractor would be required to implement measures on site.  
Timing: During design and construction | Monitoring: County Parks Construction Inspector to inspect contractor work for compliance with dust control measures. | Initials Date |

### Biological Resources

**Biological Resources 1: Impacts to candidate, sensitive, or special status species.** A number of sensitive species and biological resources have the potential to occur in the area. Nesting birds, wetlands and stream quality, can be damaged by construction activities and personnel who are not aware of the presence of these species, their protected status, and the methods to protect them. Therefore, Mitigation Measure BIO-1 is required.

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| BIO-1  | Employees and Contractor Education Program: An employee education program will be conducted prior to the initiation of construction activities. The program shall consist of a brief presentation by a qualified biologist knowledgeable in special-status species biology and regulations. The presentation shall include: a description of special-status species with the potential to occur within the project area and their habitat needs, information on their status and protection under state and/or federal laws, and a list of measures required during the project to reduce impacts to natural communities to protect species habitat. Contractors and their employees shall be instructed on what to do if an animal is found, which includes notifying the project foreman and County Parks staff immediately. County Park staff shall | Implementation: Qualified County Parks natural resources staff or qualified biologist.  
Timing: During a pre-construction field meeting with contractors and subcontractors | Monitoring: County Parks staff will require contractor and subcontractors to have each employee attend training session and sign training materials indicating attendance at education program. | Initials Date |
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<tr>
<td>Biological Resources -1: Impacts to candidate, sensitive, or special status species. Access to Unknown Trails #1 and 2 may require tree removal or tree trimming. Nesting birds within project area or in the immediate vicinity of project activities may be impacted through disturbances caused by project construction activities. Therefore, Mitigation Measure BIO-2 is required.</td>
<td>BIO-2: Prior to any vegetation removal or disturbance including trimming occurring within (February 1 to August 31) or outside of the nesting bird season (February 1 to August 31), a qualified biologist will conduct pre-construction surveys no more than 3 days prior to the start of construction activities. If more than 3 days elapse between the final nest search and the beginning of construction activities, another nest survey shall be conducted. If any active nests are detected, a qualified biologist shall determine the appropriate buffer to be established around the nest and monitor the nest until the chicks have fledged or until the nest has been determined to be inactive. CDFW generally accepts a 50-foot radius buffer around passerine and non-passerine land bird nests, and up to a 250-foot radius for most raptors; however, the qualified biologist, in consultation with County Parks’ Natural Resource staff, shall have flexibility to reduce or expand the buffer depending on the species and specific site circumstances.</td>
<td>Implementation: Qualified biologist</td>
<td>Monitoring: If active nests are found during pre-construction survey, the qualified biologist shall ensure that an adequate buffer is maintained until checks chicks have fledged. The biologist shall provide a memo report on the results of the nest survey and protection to the County Parks representative.</td>
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| Biological Resources - 1: Impacts to candidate, sensitive, or special status species. | BIO-3: A qualified biologist shall conduct a pre-construction survey for San Francisco dusky-footed woodrat nests within the project footprint and a 50 foot buffer. If any nests are detected, work shall be delayed and County Parks staff and CDFW will be notified. County Parks Natural Resource staff or authorized representative will complete one of the following avoidance/minimization measures, listed in order of priority and implementation:  
  a. Project activities would be rerouted to avoid the woodrat nests by at least 50 feet, if feasible. If the work cannot be rerouted at least 50 feet from the nest, it shall be rerouted as far away from the nest as possible but not closer than 5 feet from the nest. Safety and/or silt perimeter fencing shall be erected 25 feet from the nest. The fencing shall not surround the woodrat nest but would be erected between the nest and the construction activities.  
  b. If the project footprint must go directly through or within 5 feet of a nest, CDFW shall be consulted with one of the two following options:  
    i. If the nest appears inactive (e.g., no scat or fresh leaves and twigs), seek approval from CDFW to dismantle the nest and replace the lost resource by building an artificial nest. One artificial nest shall be built for every one existing inactive nest.  
    ii. If the nest appears active, approval shall be sought from CDFW to: 1) trap the occupant(s) of the nest, 2) dismantle the nest; 3) construct a new artificial nest with the | Implementation: Qualified biologist, or County Parks Natural Resource staff  
  Timing: Before project implementation | Monitoring: If woodrat nests are found, the qualified biologist shall ensure that all protection measures are implemented. The biologist shall provide a memo report on the results of the nest survey and protection to County Parks representative. | Initials  
  Date |
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<td>Biological Resources - 1: Impacts to candidate, sensitive, or special status species. Although small patches of serpentine grassland habitat for the Bay checkerspot butterfly are present within the project area where serpentine outcrops are located along the Castillero Trail and serpentine grassland near the San Francisco Open Cut area, the species itself is not expected to be present. Though Bay checkerspot butterflies are unlikely to be present, potential habitat could be disturbed in the area above the</td>
<td>BIO-4: a. Bay Checkerspot Butterfly Habitat: i. To avoid impacts to Bay checkerspot butterflies access through its habitat (serpentine grassland, supporting the butterfly’s host plant, California plantain) would be allowed during the dry period only, June through October, when the butterfly has entered dormancy. ii. In the unlikely event that Bay checkerspot butterflies are found, all work that could result in direct injury, disturbance, or harassment of the species would immediately</td>
<td>Implementation: Qualified biologist Timing: Before project implementation</td>
<td>Monitoring: A qualified biologist will check that all protection measures are implemented as outlined in the plan. The biologist would provide a memo report on the results and protection to the County Parks representative and would implement any site restoration as needed.</td>
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<td>San Francisco Open Cut in gaining access to Unknown Trails #1 and #2. Mitigation Measure BIO-4(a) would be implemented to minimize any impact to potential Bay checkerspot habitat. The smooth lessingia (Lessingia micradenia var. glabrata), and most beautiful jewel flower (Streptanthus albidus ssp. peramoenus), special status plants (CNPS 1B) and Santa Clara Valley dudleya (CNPS 1B.1/FE), occur in the project area. Because these plants are known to occur within the project area they could be impacted during project activities. Therefore, Mitigation Measure BIO-4(b) is required.</td>
<td>cease. A County Parks representative would contact the USFWS to determine the appropriate course of action. iii. The following activities would be restricted to areas outside serpentine grassland habitat: clearing and grubbing, excavation and grading, and/or contouring.</td>
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<td>Biological Resources -3, 7 and 8: The replacement of culverts and installation of headwalls and rock slope protection would have a beneficial impact on water quality in the area, as it would prevent future erosion and downstream contamination. Further, construction would take place during the dry season to avoid indirect effects from project construction. Although the replacement culverts would be wider than the existing culverts, BIO-5: The following Best Management Practices will mitigate for impacts to the Waters of the U.S. in order to achieve a minimum of no-net loss: a. Clearing within the project site will be confined to the minimal area necessary to facilitate construction activities. To ensure that construction equipment and personnel do not affect sensitive aquatic habitat outside of the project boundary, exclusion fencing will be installed to clearly delineate habitat to be avoided. b. Standard stormwater BMPs will be</td>
<td>Implementation: Qualified biologist Timing: Before project implementation</td>
<td>Monitoring: The qualified biologist will ensure that all standard construction BMPs are implemented.</td>
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they would be the same length, and the additional width would expand capacity within the roadbed of compacted trails, thus not impacting flow patterns or hydrological functions of potential waters of the U.S. in the project area. As such, there would be no substantial adverse effects on wetlands or potential waters of the U.S. in the project area. Further, to prevent any project impacts, implementation of Mitigation Measure BIO-5 would be required. | implemented throughout construction in order to avoid and minimize adverse effects to water quality within the project area, as outlined in Section 4.10 Hydrology and Water Quality. Appropriate erosion control measures shall be used (e.g., straw wattles) to reduce siltation and manage potential runoff from the project area. c. Construction vehicles and equipment will be maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. d. Jurisdictional Wetlands and Waters of the U.S. will be retained where feasible. Impacts to the unnamed intermittent drainages as a result of the calcine removal shall be restored to its previous condition, with additional runoff swales to collect water and reduce future erosion. | | |

**Biological Resources -4, 9 and 10:** Oak woodland habitat is present within the project area; however few trees would potentially be removed or trimmed as a result of project activities. Impacts to the root zones may occur from the removal of calcines pavement materials or access paths to some of the sites during project construction. Project activities would not result in the conversion or loss of oak woodland habitat. Oaks and large trees are valuable aesthetic and biological resources found in the project area. Calcine access and removal at Unknown | BIO-6: a. A certified arborist will make a site visit prior to construction to determine which trees may be affected, and the health of the trees within the project area. The arborist will make decisions, in consultation with the Project Manager, on tree pruning, removal, and preservation. Whenever possible, mature trees shall be preserved while still achieving the calcine removal goals of the project. b. All trees to be retained shall be protected with exclusion fencing at the dripline of the trees prior to any construction activities. c. For project activities within the tree | Implementation: Certified arborist and qualified biologist | Monitoring: None | Initials Date
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<td>Trails #1 and #2, may require pruning of trees and may result in the damage within the root zones. The species may include willows (<em>Salix</em> sp.), California bay laurel (<em>Umbellularia californica</em>), and coast live oak trees (<em>Quercus agrifolia</em>). Some of these trees are potentially greater than 12 inches diameter at breast height (DBH). It is possible that trees may not need to be removed based on the extent of the calcine pavements and access to the site. This would be determined when conditions are revealed in the field during construction. The County of Santa Clara Tree Preservation and Removal Ordinance (Ord. No. NS-1203-107, Division C16) requires mitigation for any tree present on a property owned or leased by the County that is twelve (12) inches or more in diameter measured at four and one-half feet above the ground, or which exceeds twenty (20) feet in height; 2) any multi-trunk trees totaling 24 inches or more in diameter measured at four and one-half feet above the ground; and 3) any tree designated as heritage by the County Board of Supervisors. There are no designated heritage trees in the project area. A certified arborist would be on-site to determine how to prune trees, determine if trees can be dripline, the following measures shall be implemented:</td>
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<td>i.</td>
<td>A certified arborist shall be present at the project site during excavation within the dripline.</td>
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<td>ii.</td>
<td>All excavation within tree root zone shall be done by hand.</td>
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<td>iii.</td>
<td>Root pruning, as needed, shall be guided by a certified arborist.</td>
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<td>iv.</td>
<td>The trees shall be watered before, during and after construction to reduce stress on the trees.</td>
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<td>v.</td>
<td>A certified arborist shall monitor and assess the health of impacted trees before and after construction.</td>
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<td>d.</td>
<td>If tree removal is necessary, replacement trees shall be planted of a like kind and species of tree removed, preferably native trees found in the same watershed, or of a kind and species to be determined by the County Parks. Replacement tree planning shall utilize at least five-gallon size stock. The ratio of trees removed shall be determined by County Parks in consultation with CDFW.</td>
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<td>saved, and if necessary guide tree removal and protection in the field. Public Resources Code 21083.4 requires mitigation if a project under its jurisdiction may result in a conversion of oak woodlands that would have a significant effect on the environment. Incorporation of Mitigation Measure BIO-6 would reduce potential impacts to less than significant.</td>
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**Cultural Resources**

**Cultural Resources -2, 4 and 6:**
The potential to encounter previously unrecorded archaeological resources during removal of calcine pavement materials is considered low. However, the following mitigation measures are included to address any unanticipated discoveries of archaeological resources and are required.

The project area is within the New Almaden National Historic Landmark District. The County of Santa Clara has established a historic preservation zoning district for New Almaden. The boundaries of the zoning district coincide with the boundaries of the National Historic Landmark District described by the NRHP listing. While the roads that make up the project area are likely contributing elements to the landmark district, the project would not affect the roads’ ability to convey their significance as

**CUL-1:**
Pursuant to CEQA Guidelines 15064.5 (f), “provisions for historical or unique archaeological resources accidentally discovered during construction” shall be instituted. Therefore, if previously unidentified archaeological resources are unearthed during construction, work shall be halted in the area (within 50-feet of the discovery) and County Parks staff or representative notified. County Parks staff or project manager will determine if an assessment of the significance of the find will be conducted.

**Implementation:** County Parks Staff

**Timing:** During construction

**Monitoring:** Construction contractor and County Parks Staff

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| Cultural Resources 3: The project area has been subject to extensive cut and fill associated with historic era mining operations. Project activities primarily involve the excavation and remediation of historic and modern fill. As such, the potential to encounter human remains during removal of mercury-enriched soils is considered very low. However, the following mitigation measure is included to address any unanticipated discoveries of human remains. | CUL-3: In the event human remains, including skeletal remains, graves, or Native American burial sites or graves, are discovered, such as during the course of any ground disturbing activities (grading, excavating, trenching, digging, disk ing), construction or maintenance activities, the following procedures shall be followed:  
   a. All work in the area shall immediately cease and there shall be no further excavation or disturbance of the site or area in the vicinity of the discovery.  
   b. Notify the County Parks staff immediately.  
   c. County Parks staff shall immediately notify the County Medical Examiner/Coroner (County Ordinance No. B6-18).  
   d. Secure the area until the Coroner determines that the remains are not subject to any related provisions of law or are not subject to the Coroners authority, and make recommendations for the treatment and disposition of the remains.  
   e. If the County Coroner determines that the remains are or may be of a Native | Implementation: County Parks Staff  
Timing: During construction | Monitoring: Construction contractor and County Parks Staff | Initials Date |
**Impact** | **Mitigation Measure** | **Implementation, Responsibility & Timing** | **Monitoring Responsibility** | **Verified Implementation**
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| American, the Coroner shall contact the California Native American Heritage Commission pursuant to subdivision (c) of the State Health and Safety Code. The Native American Heritage Commission has various powers and duties to provide for the ultimate disposition of Native American remains. | | | |
| f. If the Coroner determines that the remains are not those of a Native American, the Coroner would make recommendations for the treatment and disposition of the remains. | | | |
| Construction work shall not begin again until the County Medical Examiner/Coroner has examined the remains, assessed their significance, and offered recommendations for any additional exploratory measures deemed necessary for the further evaluation of, and/or mitigation of adverse impacts. Human remains including archaeological sites known to contain human remains shall be treated in accordance with County Ordinance (Ordinance NS-508.2, § 3, 10-7-75; Ord. No. NS-508.3, § 1, 8-11-87 Sections B6-16 through 23. Section B6-18) and State law (Section 7050.5 of the State Health and Safety Code). | | | |

**Geology and Soils**

<p>| Geology and Soils -2: Construction would involve temporary ground disturbing activities, including excavation and removal of calcine pavements, and construction of temporary access routes. These impacts would be reduced to less than significance with implementation of a Stormwater Pollution Prevention Plan. Vegetation removal and regrading | GEO-1: The following shall be incorporated during project construction: a. Stormwater Pollution Prevention Plan b. Surface Erosion Control Treatments (Hydroseeding and/or Fiber Netting) c. Replacement Planting d. Drainage control improvements to mitigate the potential for erosion resulting from culvert discharge in the project area | Implementation: County Parks Staff and Construction contractor | Monitoring: County Parks Staff | Initials Date |
| | | Timing: Integrate measures into construction documents and implement during construction | | | |</p>
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<td>would result in areas that could erode after construction. These activities would expose unvegetated soils, which would accelerate erosion and sedimentation and could expose native slopes to scour during high flow or flood events. Areas disturbed during the construction phase would be addressed by revegetation and hydroseeding, as well as measures given in the Guidelines and Standards for Land Use Near Streams (SCVWD 2006). Disturbed slope areas within the limits of seasonal flooding would be addressed by placement of bioengineering structures (SCVWRPC 2006) and more traditional engineering methods such as riprap, when required. All erosion protection mitigation measures are to be completed prior to initiation of seasonal rainfall (October 15). Construction of the project could accelerate erosion; therefore Mitigation Measure GEO-1 is required.</td>
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### Hazards and Hazardous Materials

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<th>Hazards and Hazardous Materials 1, 13 and -14: To prevent fugitive dust from creating a health risk, the Mitigation Measures HAZ-1 and HAZ-2, are required.</th>
<th>HAZ-1: A worker safety and health program, as required by CalOSHA shall be implemented during calcine and soil removal, transport, and consolidation at the San Francisco Open Cut. It is anticipated, that Level D Personal Protective Equipment (lowest) would be worn by all workers involved in or near soils disturbance.</th>
<th>Implementation: County Parks Staff or qualified expert</th>
<th>Monitoring: County Parks Staff shall report compliance with HAZ-1 measure to lead agency and other relevant agencies, as needed.</th>
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<td>Timing: During project work monitor for compliance with worker safety program</td>
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<td>Further, sediment could enter nearby creeks as a result of calcine removal and transport activities during construction. This sediment could pose a hazard to the environment. These hazards would be prevented by implementing Mitigation Measures HAZ-1, 2 and 3, which include a Stormwater Pollution Prevention Plan.</td>
<td>and movement. It is anticipated, that Level D Personal Protective Equipment (lowest) would be worn by all workers involved in or near to soils disturbance and movement. However, the necessary level of protection shall be determined based on field conditions at the time of project execution. The worker safety and health program shall:</td>
<td>County Parks Staff or qualified expert</td>
<td>County Parks Staff Inspector will report compliance with HAZ-2 measure to lead agency</td>
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<td>a. Minimize human contact with contaminated soils, inhalation of dust, and contact with ground or surface water.</td>
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<td>b. Inform workers and AQ County Park visitors of the relevant aspects of the safety and health program.</td>
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<td>c. Require that the responsible contractor shall monitor and enforce compliance.</td>
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<td>d. Require visitors and other non-essential personnel to stay a distance adequate to ensure their safety during construction activities like excavation. Authorized personnel to the site shall be provided appropriate Personal Protective Equipment, during construction hours. The site shall be open only to workers and individuals required to undertake or inspect work only. Park users would not be allowed at the work site during the construction period.</td>
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<td>e. Active removal areas shall be fenced with temporary construction-type chain link fences adequate to prevent unauthorized entry, if deemed necessary. The fence shall be maintained for the duration of soil disturbance activities.</td>
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<td>HAZ-2:</td>
<td>To ensure workers and visitors are not exposed to dust containing calcines, a fugitive dust control program shall be developed and</td>
<td>Implementation: County Parks Staff or qualified expert</td>
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<td>Monitoring: County Parks Staff Inspector will report compliance with HAZ-2 measure to lead agency</td>
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### Impact | Mitigation Measure | Implementation, Responsibility & Timing | Monitoring Responsibility | Verified Implementation
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implemented by the contractor, and approved by the County. This program shall include a periodical on site air quality monitor as required by County Parks, a Dust Control Plan (DCP), and periodical monitoring of the project sites and the transport route for visible dust plumes. Dust control measures, as described in the Hacienda and Deep Gulch Remediation Project (2010) are cited here as they are relevant and adequate for the Calcine Roads Remediation Project (SCCPRD 2010) (SCVWD 2008).

A DCP shall be developed and implemented to prevent the generation of dust during soils movement. The plan shall include measures to ensure the following:

a. All unpaved roads and disturbed areas in the project area shall be watered as frequently as necessary to comply with the dust mitigation objectives and BMPs. The frequency of watering can be reduced or eliminated during periods of precipitation.

b. No vehicle shall exceed 15 miles per hour within the project area or on any unpaved road along the transport route to the soils repository.

c. All project area entrances shall be posted with visible speed limit signs.

d. All vehicles leaving the project area that have ridden on contaminated soil shall have their tires inspected and dirt removed and/or washed as necessary to be cleaned free of dirt prior to leaving the site and/or entering paved roadways. This can be done with metal pikes, large wire brushes, and water. The volume of water shall be kept at a minimum and kept contained. Decontamination of vehicle tires shall be conducted. This can

**Timing:** During project work monitor for compliance with fugitive dust control program and other relevant agencies.
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<td>be done on top of 50-mil Visqueen plastic sheets with small berms on the perimeter to keep the water/soil from flowing off except into collection areas, or, if Visqueen plastic is not used, gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.</td>
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<td>e. All soil storage piles and disturbed areas that remain inactive for longer than 2 days, or if high wind conditions exist, shall be covered or shall be treated with appropriate dust suppressant compounds.</td>
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<td>f. Excavated materials transported to the San Francisco Open Cut and that have potential to cause visible dust emissions shall be covered or sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.</td>
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<td>g. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all areas of soil that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.</td>
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<td>h. Observations of visible dust plumes that have the potential to be transported: (1) off the project site; (2) 100 feet beyond the centerline of the transport route; (3) within 25 feet downwind of any soil removal/excavation activity; (4) within the presence of onsite workers such that they would become exposed to an inhalation hazard shall be an indication that existing dust suppression/control measures are not resulting in effective mitigation. The following mitigation measures shall be implemented as</td>
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### Impact | Mitigation Measure | Implementation, Responsibility & Timing | Monitoring Responsibility | Verified Implementation
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**Impact** | **Mitigation Measure** | **Implementation, Responsibility & Timing** | **Monitoring Responsibility** | **Verified Implementation**
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**HAZ-3:**
If stockpiling is necessary, to prevent stockpiled sediments from entering nearby creeks, sediments shall be stored and transported in a manner that minimizes water quality impacts as follows:

- Wet sediments shall be stockpiled in a manner that prevents any material or water from draining into nearby creeks.
  
- Follow measures in Section 4.10 of the IS/MND, Hydrology and Water Quality for construction and post-construction control of sediments and prevention of soil erosion.

- **Implementation:** County Parks Staff or qualified expert

- **Timing:** During project work, monitor for compliance with measures to prevent sediment from moving into nearby creeks.

- **monitoring:** County Parks Staff Inspector will report compliance with HAZ-3 measure to lead agency and other relevant agencies.

- **Initials** | **Date**
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<td><strong>Hazards and Hazardous Materials -2</strong>:</td>
<td>HAZ-4: Standard County of Santa Clara BMPs for controlling oil, grease and fuel from construction vehicles shall be implemented.</td>
<td>Implementation: County Parks Staff or qualified expert</td>
<td>Monitoring: County Parks Staff Inspector will report compliance with HAZ-4 measure to lead agency and other relevant agencies.</td>
<td>Initials Date</td>
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<td><strong>Implementation</strong>:</td>
<td><strong>Timing</strong>: During project work, monitor for compliance with BMPs for controlling oil, grease and fuel runoff.</td>
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<td><strong>Monitoring</strong>: County Parks Staff Inspector will report compliance with HAZ-4 measure to lead agency and other relevant agencies.</td>
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<td><strong>Hazards and Hazardous Materials -5</strong>:</td>
<td>TRA-2: Prior to the start of the project, County of Santa Clara staff shall develop and communicate to the construction contractor an emergency response procedure for emergency access to Mine Hill Trail. The contractor will implement the procedures.</td>
<td>Implementation: County Parks Staff and construction contractor</td>
<td>Monitoring: County Parks Staff</td>
<td>Initials Date</td>
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<td><strong>Implementation</strong>:</td>
<td><strong>Timing</strong>: Prior to construction</td>
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<td><strong>Monitoring</strong>: County Parks Staff</td>
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| **Hazards and Hazardous Materials -16:** Construction equipment on site could increase the risk of fire; therefore, Mitigation Measure HAZ -5 would be implemented | **HAZ-5:**  
  a. A water truck shall remain on site equipped with a hose that can be used to spray water on fires.  
  b. Each construction vehicle shall be equipped with a fire extinguisher.  
  c. Workers shall be instructed of the need to stay alert to the start of fires and shall be given instruction in using fire extinguishers; the construction manager shall be informed immediately if a fire starts.  
  d. SWPPP measures shall ensure that water and chemicals required to stop fires shall not enter nearby creeks. | **Implementation:** Construction contractors  
  **Timing:** During all phases of project work | **Monitoring:** County Parks Staff | **Initials**  
  **Date** |

| Hydrology and Water Quality | **HYD-1:**  
  Develop and implement a SWPPP to prevent and minimize transport of contaminated materials by water. Suitable stormwater BMPs shall be implemented consistent with California Stormwater Quality Association — Stormwater Best Management Practices Handbook, Construction 2003. For example, silt fencing and/or fiber rolls will be placed, as appropriate to minimize direct and indirect sediment transport to drainages. | **Implementation:** County staff or qualified expert  
  **Timing:** During project work, monitor for compliance with SWPPP | **Monitoring:** County of Santa Clara Inspector will report compliance with HYD-1 measures to lead agency and other relevant agencies | **Initials**  
  **Date** |
| **HYD-2:**  
  Implement measures consistent with the range of recommendations provided in Chapter 4 of the Guidelines and Standards for Land Use near Streams (SCVWRPC 2007) for temporary erosion control (Guide 5) and trail design (Guide 16). | **Implementation:** County Parks Staff or qualified expert  
  **Timing:** During project work, monitor for compliance with Guidelines and Standards for Land Use near Streams | **Monitoring:** County Parks Staff Inspector will report compliance with HYD-2 measures to lead agency and other relevant agencies | **Initials**  
  **Date** |
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| NOISE-1, 2, 4, and 5: The noise from construction equipment (80 to 90 dBA) exceeds levels for residential and park uses (55 to 75 dBA) within 50 feet of the equipment. Park users and nearby residents within 500 to 1,000 feet of the construction zone would be exposed to ground-borne noise levels in excess of applicable standards. Therefore, Mitigation Measure NOISE-1 shall be implemented. | NOISE-1:  
  a. No construction on weekends and legal holidays, or between the hours of 7:00 p.m. and 7:00 a.m. on weekdays  
  b. If specific noise complaints are received during construction, one or more of the following noise mitigation measures shall be implemented in a more rigorous fashion:  
  i. Use hydraulically or electrically powered impact tools (e.g., jack hammers) when possible. If the use of pneumatically powered tools is unavoidable, use an exhaust muffler on the compressed air exhaust.  
  ii. Install manufacturer’s standard noise control devices, such as mufflers, on engine-powered equipment.  
  iii. Locate stationary construction equipment as far from noise-sensitive properties as possible.  
  iv. Notify nearby property users whenever extremely noisy work shall occur.  
  v. Utilize stock piles as effective noise barriers when feasible.  
  c. Vehicles shall not idle longer than 5 minutes.  
  d. The arrival and departure of trucks hauling material shall be limited to the hours of construction.  
  e. The County shall place a sign at the entrance of the site providing contact information for the County of Santa Clara, Department of Parks and Recreation regarding noise complaints. | Implementation:  
  Construction contractors  
  Timing: During all phases of project work | Monitoring: County Parks Staff | |
### Impact

Transportation and Traffic

### Mitigation Measure

**TRA-1:** Implement County Roads and Airports and City of San Jose BMPs requiring the installation of lights, flagging, guards, and signs 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.

### Implementation, Responsibility & Timing

**Implementation:** Contractor and County Parks Staff

**Timing:** During construction

### Monitoring Responsibility

Monitoring: County Parks Staff

### Verified Implementation

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<td><strong>Transportation</strong> -5: Truck traffic would fully occupy the single lane of Mine Hill and Castillero Trail during trips to the San Francisco Open Cut. To the extent these routes are used for emergency services, the presence of haul trucks on these facilities could temporarily disrupt response to wildfires or other emergencies within the park; therefore Mitigation Measure TRA-2 would be implemented.</td>
<td><strong>TRA-2:</strong> Prior to the start of the project, County of Santa Clara staff shall develop and communicate to the construction contractor an emergency response procedure for emergency access to Mine Hill Trail. The contractor will implement the procedures.</td>
<td><strong>Implementation:</strong> County Parks Staff and construction contractor <strong>Timing:</strong> Prior to construction</td>
<td><strong>Monitoring:</strong> County Parks Staff</td>
<td><strong>Initials</strong> <strong>Date</strong></td>
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