



**Santa Clara Valley Water District  
Penitencia Water Treatment Plant (PWTP)  
Residuals Management Project  
Draft Initial Study/Mitigated Negative Declaration**

**August 2024**

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**Penitencia Water Treatment Plant (PWTP)**  
**Residuals Management Project**  
**Draft Initial Study/Mitigated Negative Declaration**

**August 2024**

**Prepared for:**

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5750 Almaden Expressway  
San Jose, California 95118-3614

**Prepared by:**

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# 1 Introduction

## 1.1 Organization of the Document

This document is organized to assist the reader in understanding the potential impacts that the project may have on the environment and to fulfill the California Environmental Quality Act (CEQA) (Public Resources Code §§ 21000 et seq.). Section 1 describes the purpose of the project under CEQA, sets forth the public participation process, and summarizes applicable state and federal regulatory requirements. Section 2 describes the location and features of the project, and Section 3 describes the environmental setting. Section 4 evaluates the potential impacts of the project through the application of the CEQA Initial Study Checklist questions. Section 5 lists the contributors, and Section 6 supplies the references used in the document preparation.

## 1.2 Purpose of the Mitigated Negative Declaration

The Santa Clara Valley Water District (Valley Water), acting as the Lead Agency, prepared this draft Mitigated Negative Declaration (MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed Penitencia Water Treatment Plant Residuals Management Project (project).

This MND was prepared consistent with CEQA Guidelines (Title 14, California Code of Regulations §§ 15000 et seq.) and Valley Water procedures for implementation of CEQA (Environmental Quality and Management System – Environmental Planning Q520D01). CEQA requires that public agencies such as Valley Water to identify significant effects of a project, avoid or minimize those impacts or, in cases where avoidance and minimization of impacts are not possible, mitigate impacts.

In addition to its obligations as the Lead Agency under CEQA for its projects, Valley Water, as a steward of Santa Clara Valley watersheds, is committed through its mission to conducting activities in an environmentally sensitive manner. Valley Water strives to preserve the natural qualities, scenic beauty, and recreational uses of Santa Clara Valley's waterways by using methods that reflect an ongoing commitment to conserving the environment.

## 1.3 Decision to Prepare a Mitigated Negative Declaration for this Project

The Initial Study for the project, included in Section 4 of this document, identifies potentially significant effects on Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, and Noise. Mitigation measures have been

# 1 INTRODUCTION

proposed for the project to reduce such effects to less-than-significant levels; therefore, the proposed MND is consistent with CEQA Guidelines section 15070(b), which indicates that a MND is appropriate when the project 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.

## 1.4 Public Review Process

This draft MND will be circulated to local, responsible, and trustee 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 section 15105(b).

The draft MND and supporting documents are available for review at:

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

Copies of the report are also posted on Valley Water's website:

<https://www.valleywater.org/public-review-documents>

Via written request for a copy from Valley Water.

Written comments or questions regarding the draft MND should be submitted to the name and address indicated below. Submittal of written comments via e-mail would greatly facilitate the response process.

Michael F. Coleman, AICP  
Environmental Planner  
Santa Clara Valley Water District (Valley Water)  
5750 Almaden Expressway  
San Jose, CA 95118-3614  
email: PWTPcomments@valleywater.org.

The proposed MND, along with any comments, will be considered by the Valley Water Board of Directors prior to a decision on the project.

## 1 INTRODUCTION

### 1.5 Interagency Collaboration and Regulatory Review

The CEQA review process is intended to provide trustee and responsible agencies, as well as the public, with an opportunity to provide input on a project. Trustee agencies are state agencies that have authority by law for the protection of natural resources held in trust for the public. Responsible agencies are those that have some responsibility or authority for carrying out or approving a project; in many instances, these public agencies must make a discretionary decision to issue a local permit and provide right-of-way, funding, or resources that are critical to the project proceeding. Trustee and responsible agencies are listed in Table 1.5-1

**Table 1.5-1 Summary of Agency Approvals**

Agency	Permit/Review
California Department of Fish and Wildlife	Review of MND For compliance with California Endangered Species Act
San Francisco Bay Regional Water Quality Control Board	Clean Water Action Section 402 Stormwater General Permit Review of Clean Water Act Section 402(p) Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit
Bay Area Air Quality Management District	Permit for emergency standby generator rated 50 horse break power or greater
City of San Jose Fire Department	Review of Hazardous Materials Business Plan

## 2 Project Description

### 2.1 Overview

Santa Clara Valley Water District (Valley Water or District) is proposing the Penitencia Water Treatment Plant (PWTP) Residuals Management Project (project). The project includes improvements to the following components of the PWTP Residuals Management System (RMS):

- Washwater handling and treatment;
- Sludge handling and dewatering; and
- Sedimentation basin sludge withdrawal.

The project is proposed to address age, capacity, efficiency, and reliability issues with the existing RMS, ensure the PWTP efficiently and reliably provides potable water to water retailers in Valley Water's service area and meets current regulatory standards. The total PWTP site is 21.58 acres in size. Construction within the main PWTP site will focus on demolition of existing facilities and new improvements within an approximate 3-acre portion (130,000 sq. ft.) of the total PWTP site. A 0.52-acre portion interior to the main PWTP site will be used for construction staging. Valley Water also owns a separate parcel along the upper portion Whitman Way of which 0.33 acre will be used for construction staging.

### 2.2 Project Objectives

The overall objective of the project is to improve components of the existing PWTP RMS to support operations of the PWTP, at the permitted and design capacity of 42 million gallon per day (MGD). The existing PWTP operations are constrained due to inefficiencies of the RMS in meeting current regulatory standards. The improvements aim to address aging infrastructure and associated maintenance issues; improve operational efficiency, capacity, and reliability; and to ensure that the PWTP efficiently and reliably provides potable water to water retailers in the Valley Water's service area while meeting applicable regulatory requirements. The project objectives are intended to fulfill the goal set forth in the District's Board of Directors Ends Policy Number E2.3., which states, "[p]rotect and maintain existing water infrastructure" (Valley Water's Water Supply (WS) Services 2021).

The specific objectives of the project are as follows:

- Ensure the upgraded RMS meets applicable regulatory requirements;
- Provide a washwater handling and treatment system that can process multiple waste streams, segregate flows (e.g. filter-to-waste) to maximize handling capacity

## 2 PROJECT DESCRIPTION

and minimize size of treatment facilities, and improve the overall quality of flows returned to the plant headworks;

- Provide a sludge handling and dewatering system that can accommodate hydraulic load from multiple sludge streams, provide storage up to 4 days per week, improve sludge dewatering, and be operated by one operator during a normal work shift, 3-4 days per week;
- Replace manual telescoping valves with automated submersible pumps in the sedimentation basins;
- Provide automation of the RMS to remove the need for manual operation and allow for minimized staff intervention; and
- Ensure all ancillary equipment that supports the RMS (e.g., chemical, electrical, and instrument and control systems) is properly sized and upgraded.

### 2.3 Project Scope of Work

#### 2.3.1 Scope of Work

The proposed project would provide improvements at the PWTP located in the City of San Jose. The proposed improvements would cover approximately 130,000 square feet (3 acres) within the existing plant. A figure showing the location of the plant and current condition of existing facilities is provided in Figure 2.3-1. The project proposes to make improvements to include the following main components:

- Sedimentation Basins:
  - Remove and replace manual sludge removal equipment and pumps with new automated sludge removal equipment and pumps
  - Add electrical, instrumentation and controls
  - Modify process piping to support new equipment and pump operations
- Washwater Handling and Treatment:
  - Modify washwater diversion structure
  - Remove and replace two washwater equalization basins
  - Install two new flocculation/sedimentation basins with plate settlers (i.e., clarifiers)
  - Install a new Filter-to-Waste (FTW) equalization basin
  - Remove and replace a washwater return pump station
  - Remove and replace a washwater sludge transfer pump station
  - Install a new washwater pump station for inter-process pumping
  - Install a new electrical, instrumentation and controls building, equipment, and conduits to supply power to the washwater handling and treatment facilities
  - Install a new chemical building and chemical/polymer systems

## 2 PROJECT DESCRIPTION

- Solids Handling and Dewatering:
  - Remove and replace four sludge holding ponds with two new gravity thickeners
  - Remove and replace a sludge storage/mixing tank with two new sludge storage/mixing tanks
  - Remove and replace a dewatering building (belt press building) with a new dewatering building (centrifuge building), including electrical, instrumentation and controls, and chemical/polymer system(s)
  - Remove and replace a decant and overflow pump station
  - Install a new centrate pump station for inter-process pumping
  - Install a new sludge transfer and centrifuge feed pump station for inter-process pumping
  - Install a new electrical transformer and conduits for electrical, instrumentation and controls
- Yard piping to connect new facilities
- Service road extension, resurfacing, and paving inside the plant process area
- Landscape revegetation and improvements

Figure 2.3-1 shows the location of the proposed demolition areas, work areas and staging areas. Figure 2.3-2 shows the location of the project improvements. Project components are discussed in detail as follows.



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Figure 2.3-1 Project Demolition, Staging, and Work Areas



Source: (Esri 2012; Maxar 2021)



## 2 PROJECT DESCRIPTION

### Figure 2.3-2 Project Improvements



*Source: (Esri 2012; Maxar 2021)*



## **2 PROJECT DESCRIPTION**

### **2.3.2 Background**

#### **PWTP Residuals Management System**

The PWTP, commissioned in 1975, has a peak treatment capacity of 42 million MGD. The plant uses a conventional treatment process including coagulation, flocculation, sedimentation, and filtration with chemical application. The RMS is one of the major treatment components of the PWTP, that receives, and processes recovered washwater and diluted sludge produced from the PWTP's daily operations.

#### **Previous PWTP Planned Improvements**

Valley Water initiated the Water Treatment Improvement Project (WTIP) in 1990 in response to the 1986 amendments to the Safe Drinking Water Act and the Surface Water Treatment Rule in order to bring its treated water production facilities into compliance with said amendments. In 1998, Valley Water approved an Engineer's Report and a Mitigated Negative Declaration (MND) for the Water Treatment Improvement Project Stage 2 at the PWTP (WTIP Stage 2) and an Addendum to the MND in 2002. Valley Water ultimately reduced the WTIP Stage 2 scope of work by deferring the proposed washwater clarifier facility to be completed in a future project. This proposed project would construct the washwater clarifier facility and other facilities identified in Section 2.3.1.

#### **Existing PWTP Residuals Management Process and Infrastructure**

Residuals management includes the processing, handling, and treatment of waste streams, along with, the process, handling, and disposal of solids from sludge produced by the primary water treatment process. At the PWTP, the primary water treatment process generates sludge in the sedimentation basins and filters. As the raw (untreated) water supply flows through the sedimentation basins, heavier solids along with clarification treatment chemicals settle to the bottom as sludge. The water supply then flows through the filters, where additional solids are captured, before beginning secondary treatment in preparation for storage and delivery.

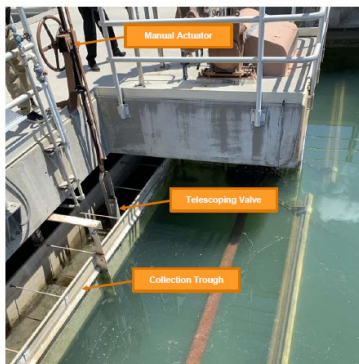
The sludge is removed from the sedimentation basins using manual telescoping valves and underflow pumps. The sludge from the sedimentation basins is pumped to two sludge holding basins, located on the southwest end of the plant in the sludge holding and dewatering area, that also receive sludge pumped from the washwater recovery basins. The thickened sludge from the sludge basins is then transferred to a sludge storage/blending tank where polymer is added to further treat the sludge before it is pumped to the belt press for dewatering. The belt press is a mechanical process that squeezes the treated sludge separating the liquid, called filtrate, and producing dewatered solids. The filtrate is collected along with supernatant from the sludge holding basins and pumped to the washwater recovery basins for further processing. The dewatered solids are collected on a belt conveyor and deposited onto the pavement, on the north side of the belt press building, and an end loader tractor is used to periodically load the dewatered solids onto semi-trailer dump trucks for off-site landfill disposal.

The plant periodically reverses the flow of water through the filters to wash captured solids, creating a waste stream of washwater from the filter backwashes. Additional major waste

## 2 PROJECT DESCRIPTION

streams are produced as part of the daily operations of the PWTP and include filter-to-waste (FTW) discharge generated during the ripening period of the granular filter media, filtrate and supernatant resulting from sludge handling, leakage from filter valves, and plant drains. These waste streams are sent to the two washwater recovery basins, located on the southeast end of the plant in the washwater handling and treatment area. The washwater recovery basins provide gravity settling of heavier solids in the combined waste stream and manage return of recycled water pumped back up to the head of the plant where it merges with raw water and goes back through the primary water treatment process. The settled sludge is periodically collected from the washwater basins and pumped to the sludge holding basins for processing. Existing RMS equipment and infrastructure are shown in the photos in Figure 2.3-3, below. The existing RMS is continually operated to support the daily, 24 hour, operations of the plant. This includes periodic operation of pumps to transfer sludge and major waste streams between processes and return processed water to the head of the plant. However, the transfer of thickened sludge from the sludge holding ponds for mechanical dewatering and the mechanical dewatering process is typically operated 3 to 4 days per week during a normal work shift. If more economical or if required by operational conditions, the mechanical dewatering process could operate more days of the week for the same hours as a standard work shift or outside of the normal work shift hours.

**Figure 2.3-3 Existing PWTP Equipment and Infrastructure**



Sedimentation telescoping Valve and collection trough



Washwater recovery basins



Sludge holding basins

## 2.4 Project Construction

To accommodate the proposed project, major components of the existing RMS would be demolished and the proposed project improvements would be constructed within the general footprint of those existing components (Figure 2.3-1 and Figure 2.3-2). The construction would be phased to keep the PWTP in service during construction. The phasing would allow for a portion of existing facilities to be demolished while the remaining facilities continue the RMS operations, until which time, new facilities constructed can be placed in operation and the remaining existing facilities can be removed from operation and demolished.

## 2 PROJECT DESCRIPTION

### 2.4.1 Preconstruction/Site Preparation/Construction Staging

Construction areas would be delineated with stakes and fenced as appropriate. Construction staging and stockpiling would occur within the staging areas shown in Figure 2.3-1 including 0.52 acre within the PWTP site and 0.33 acre adjacent to the PWTP site on Valley Water owned parcels. The contractor would also stage equipment within one or more disturbed or developed areas within 10 miles of the PWTP, or potentially an undeveloped site, to allow additional space for material delivery and staging and accommodate the limited work area within the operational PWTP. Limited parking would be provided on-site within the PWTP along the access road adjacent to the south side of the sedimentation and filter basin facility.

Construction stockpiling would also occur within existing paved areas of the PWTP such as the paved areas surrounding the existing washwater basins and sludge handling basins as well as undeveloped areas within the PWTP and adjacent Valley Water property that are available at the time of construction. Excess excavation stockpiles would be hauled off site periodically as needed. Foundation and engineered backfill materials would be imported, temporarily stockpiled in designated staging and stockpile areas, or deposited adjacent to the immediate work area.

### 2.4.2 Demolition, Excavation, and Dewatering

#### Demolition

In the sedimentation basins, the existing telescoping valves, underflow pumps, and some process piping would be demolished. The major components of the washwater handing and treatment and the sludge holding and dewatering would be demolished in their entirety. The major components include the existing washwater recovery basins, washwater return and sludge pump station, sludge holding basins, sludge storage/mixing basin, belt press building (including electrical, instrumentation and controls, and chemical system), decant pump station, polymer system, yard and process mechanical piping, and decant and sludge transfer pump station. The facilities that would be demolished area shown in Figure 2.3-1. All demolition debris would be removed from the site. The volume of demolition waste generated is summarized in Table 2.4-1. Demolition waste would be handled in compliance with City of San Jose requirements.

**Table 2.4-1 Demolition Waste Volume**

Demolition Material Type	Quantity (Cubic Yards)
Concrete	100
Asphalt	850
Piping	50
Metals	50
Wood Waste	Negligible

## **2 PROJECT DESCRIPTION**

### **Excavation**

Excavation would occur for each of the proposed structures that would extend subsurface. The maximum depth of excavation would be approximately 35 feet deep. Temporary cross bracing may be required to support shoring in the excavated areas until foundations and walls are formed and poured. A structural bottom slab may be used to seal the bottom of the excavation to prevent groundwater related uplift of the excavation bottoms. The project would generate a total export volume of approximately 16,000 cubic yards of soil during excavation. Suitable excavated soil would be reused on-site, and remaining materials would be recycled or disposed of as appropriate at a landfill.

### **Dewatering**

Dewatering would be required throughout the excavation stage so as to create a dry work area in any areas where groundwater is encountered during excavation. Temporary groundwater wells would be installed around the areas of deep excavation. Pumps would be used to extract the groundwater continuously during the earthwork and concrete form construction phase to create a dry work area for the excavations. Dewatered groundwater would be treated in accordance with state and federal regulations before discharged to the storm drain.

### **2.4.3 Structural Foundation and Wall Installation**

#### **Foundations**

Foundations would be installed on spread footings. The recommendations that are developed from the geotechnical investigation results, including the design groundwater levels during excavation for construction, foundation types and construction methods, and shoring systems would be incorporated into the final design.

#### **Structural Walls**

Structural walls would be cast-in-place reinforced concrete or concrete masonry units. Concrete structural wall construction would include installation of a form and structural reinforcement (e.g., rebar) for the wall, concrete pouring within the form, curing of the concrete, testing, and removal of the form. Following construction of each concrete structure, the open excavation around the structure would be backfilled to meet engineering specifications. The structure walls would be constructed and attached to the subsurface foundation or as an extension of the subsurface structure.

### **2.4.4 Install Structures and Equipment**

#### **Sedimentation Basin Sludge Withdrawal Facilities**

After demolition of the telescoping valves, the project would install twelve submersible pumps in the sedimentation basin. As well as six control panels to automate and control the pumps and associated electrical, instrumentation and controls. The process piping would be modified to support the new equipment and pump operations.

## 2 PROJECT DESCRIPTION

### Wastewater Handling and Treatment

The project would construct replacement wastewater handling and treatment components as further described below. A summary of the major components and their approximate dimensions is provided in Table 2.4-2.

**Table 2.4-2 Summary of the Wastewater Handling Treatment Components**

Structure	Base (Length x Width or Diameter) (ft)	Max Depth of Excavation Below Ground (ft)	Height Above Ground (ft)
Wastewater equalization basins (2, each)	73 x 40	25 to 30	5 to 10
Clarifier basins (2, each)	50 x 28	25 to 30	5 to 10
Filter-to-waste equalization basin	50 x 28	25 to 30	5 to 10
Chemical building	50 x 26	5 to 10	20 to 25
Electrical building	30 x 10	5 to 10	15 to 20
Wastewater process pump station	25 x 15	25 to 30	5 to 10
Wastewater return pump station	22 x 70	25 to 30	5 to 10
Wastewater sludge pump station	10 diameter and 20 x 20	25 to 30	5 to 10

### Wastewater Diversion Structure

The existing wastewater diversion structure would be modified to support and connect to new facilities. Modifications include removal and replacement of hydraulic weir, pipes and appurtenances, and access and safety equipment.

### Wastewater Equalization Basins

Two adjoining wastewater equalization basins, 330,000 gal each, would be constructed of reinforced concrete. Each basin would be approximately 73 feet by 40 feet, extend 5 to 10 feet above ground, and 25 to 30 feet below ground. The basins would have a common top access deck (including applicable safety railings) and stairways.

### Clarifier Basins

Two adjoining clarifier basins would be constructed of reinforced concrete. Each basin would be further segmented approximately into a flocculation basin 7 feet by 26 feet, a sedimentation basin (with plate settlers) 28 feet by 26 feet, extend 5 to 10 feet above ground, and 25 to 30 feet below ground. The clarifier basins would have a top access deck (including applicable safety railings) and stairway.

## **2 PROJECT DESCRIPTION**

### **Filter-to-Waste Equalization Basin**

A FTW equalization basin would adjoin the clarifier basins and be constructed of reinforced concrete. The basin would be approximately 50 feet by 28 feet, extend 5 to 10 feet above ground, and 25 to 30 feet below ground. The basins would have a top access deck (including applicable safety railings) and stairways.

### **Chemical Building**

A chemical building would be constructed adjacent to the north side of the washwater equalization basins. The chemical building would be constructed of concrete masonry units, approximately 50 feet by 26 feet, extending 20 to 25 feet above ground, and 5 to 10 feet below finish ground. The roof would have a raised metal finish. The new chemical building would contain polymer and hypochlorite systems and ancillary equipment including chemical and metering pumps to support the systems.

### **Electrical Building**

An electrical building would be constructed east of the FTW equalization basin. The electrical building would be constructed of concrete masonry units, approximately 30 feet by 10 feet, extending 15 to 20 feet above ground, and 5 to 10 feet below ground. The roof would have a raised metal finish. The new electrical building would contain electric systems, instrumentation and controls for the washwater and handling and treatment components.

### **Washwater Process Pump Station**

A washwater process pump station, including wet well, would be constructed adjoining the north side of the washwater equalization basins. The wet well would be constructed of reinforced concrete with access hatches, approximately 25 feet by 15 feet, extending 5 to 10 feet above ground, and 25 to 30 feet below ground. The pump station would contain 3 submersible pumps (2 duty, 1 stand-by) each rated at 1,400 gallons per minute (gpm).

### **Washwater Return Pump Station**

A washwater return pump station, including wet well, would be constructed adjoining the east side of the clarifier and FTW basins. The wet well would be constructed of reinforced concrete with access hatches, approximately 20 feet by 70 feet, extending 5 to 10 feet above ground, and 25 to 30 feet below ground. The wet well would be partitioned in two to provide for the collection, metering, and return of processed (clarified) water and FTW equalized flow separately. The processed water return side would include four submersible pumps (3 duty, 1 stand-by) each rated at 1,400 gpm. The equalized FTW return side would include two submersible pumps (1 duty, 1 stand-by) each rated at 1,400 gpm. The pump motors would be installed on the top deck of the station in an unenclosed area. The station would return both flows to the head of the plant.

### **Washwater Sludge Pump Station**

A washwater sludge pump station, including wet well and valve vault, would be located near the washwater equalization basins. The wet well would be constructed of reinforced concrete with access hatches provided in the top, approximately 10- feet in diameter, extending 0 to 5 feet above ground, and 25 to 30 feet below ground. The pump station would contain 2



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submersible pumps (1 duty, 1 stand-by) rated at 100 gpm. A separate valve vault would be constructed of reinforced concrete with top access hatches, approximately 20 feet by 20 feet, extend 0 to 5 feet above ground, and 35 to 30 feet below ground.

### Sludge Holding and Dewatering

The project would construct replacement sludge holding and dewatering components as further described below. A summary of the major components and their approximate dimensions is provided in Table 2.4-3.

**Table 2.4-3 Summary of the Sludge Handling and Dewatering Major Facilities**

Structure	Base size (length x width or diameter) (ft)	Max depth of excavation (ft)	Height above ground (ft)
Gravity thickeners (2)	54 diameter	30 to 35	5 to 10
Storage/Mixing tanks (2)	45 diameter	25 to 30	5 to 10
Centrifuge building	80 x 30	5 to 10	40 to 45
Load-out Platform	40 x 45	5 to 10	20 to 25
Transfer pump station	60 x 35	5 to 10	15 to 20
Centrate pump station	10 diameter	30 to 35	0 to 5
Decant pump station	15 diameter	30 to 35	5 to 10
Valve vaults (3)	25 x 15	5 to 10	0 to 5

*Source: (Valley Water and Stantec Consulting Services 2024)*

### Gravity Thickeners

Two cylindrical gravity thickeners would be constructed of reinforced concrete. Each gravity thickener would be approximately 54 feet in diameter, extend 5 to 10 feet above ground, and 25 to 30 feet below ground. The gravity thickeners would have a shared stairway and connecting catwalk (including applicable safety railings) installed between them to provide access.

### Sludge Storage/Mixing Tanks

Two sludge storage/mixing tanks would be constructed of reinforced concrete. Each sludge storage/mixing tank would be approximately 45 feet in diameter, extend 5 to 10 feet above ground, and 25 to 30 feet below finish ground. The sludge storage/mixing tanks would have a shared stairway and connecting catwalk (including applicable safety railings) installed between them to provide access to the tanks and mixers.

### Centrifuge Building and Load-out Platform

The centrifuge building would house the centrifuges, chemical storage and pumping systems, electrical system, instrumentation and controls, operator control room, restroom, a bridge crane, and portions of the solids conveyors. The building would be approximately 2,500 square feet, extend 40 to 45 feet above ground, and be constructed of reinforced concrete with a steel-framed

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structure with concrete plaster facing extending as the last level of the building. The concrete structure would have a form liner or sandblasted finish, and the metal extension would have a stucco exterior. The roof would have a raised metal finish.

A load-out platform would be constructed adjoining the eastside of the centrifuge building to support the remaining portion of the solids conveyors. The loadout platform would be a steel-framed structure with a concrete deck, approximately 40 feet by 45 feet and 20 to 25 feet tall. The conveyors would be set on top of the platform. The platform would be fitted with applicable safety railings and stairways.

### **Transfer Pump Station**

Adjoining the westside of the centrifuge building a steel-framed canopy approximately 15 to 20 feet tall would be placed to provide cover over the transfer pump station. The pump station would consist of six pumps installed on a concrete slab approximately 60 feet by 35 feet and 0 to 5 feet below grade, under an unenclosed canopy. Three pumps (2 duty, 1 stand-by) would be rated 175 gpm and transfer sludge between the gravity thickeners and sludge storage/mixing tanks. The other three pumps (2 duty, 1 stand-by) would be rated 400 gpm and transfer sludge between the storage/mixing tanks and centrifuges.

### **Centrate Pump Station**

A centrate pump station, including wet well and valve vault, would be located north of the centrifuge building. The wet well would be constructed of reinforced concrete with access hatches provided in the top, approximately 10 feet in diameter, extending 0 to 5 feet above ground, and 30 to 35 feet below ground. The pump station would contain 2 submersible pumps (1 duty, 1 stand-by) rated at 800 gpm.

### **Decant Pump Station**

A decant pump station, including wet well and valve vault, would be constructed west of the gravity thickeners. The wet well would be constructed of reinforced concrete, approximately 15 feet in diameter, extending 5 to 10 feet above ground, and 30 to 35 feet below ground. The pump station would contain 2 submersible pumps (1 duty, 1 stand-by) rated at 1,200 gpm.

### **Valve Vaults**

Three separate valve vaults to support the pump stations and gravity thickeners would be constructed of reinforced concrete with access hatches provided on top. The vaults vary in size, and are approximately 25 feet by 15 feet, extend 0 to 5 feet above ground, and 30 to 35 feet below ground.

### **2.4.5 Yard Piping and Utilities**

New yard piping would consist of process and utility pipelines to inter-connect the new RMS facilities and to connect these new facilities to existing PWTP water treatment facilities for transfer of solids, return of recycled water to the PWTP treatment process, and connection to utilities including water, stormwater and sewer. The new pipelines would generally be located within the RMS area and would connect to existing PWTP process and utility pipelines. The new pipelines would generally be between 4 and 20 inches in diameter. New electrical lines and

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instrumentation and control cabling would also be installed to provide power and network to the new facilities, equipment (e.g., pumps, meters, motors etc.), and instrumentation and controls within the RMS process.

New process and utility pipelines, as well as, underground electrical duct banks for the new facilities would be installed below grade via trenching. Trenches would extend up to 35 feet deep from existing grade, for deep buried pipelines. Temporary trench shields and shoring would be used, as applicable, in trenching. After the trench has been constructed, the pipeline or electrical duct bank would be installed within the trench. Duct banks would be constructed with poured concrete, and electrical and instrumentation cabling would be installed within the buried duct bank. The area underneath and surrounding the pipeline or duct bank would be backfilled with engineered fill material to meet engineering specifications. The remainder of the open trench would be backfilled with excavated soil materials to final grade.

### **2.4.6 Site Grading and Drainage**

Grading would occur in the areas of and around new facilities, temporary staging, the extended access road, milling and paving of existing access road, and within areas that are proposed for paving to create a stable surface for construction and final tie into the existing hill slopes and grades. A retaining wall would be constructed along the edge of the new paving area, west of the sludge storage tank. The project would require import of approximately 4,000 cubic yards of fill materials. The existing paved access road around the existing sludge holding ponds and the existing washwater ponds, would be partially or totally removed and replaced to meet current construction standards.

The drainage gradient on the site would be maintained. The project is designed to comply with provision C.3 of the Municipal Regional Permit (MRP), which requires measures to both treat and prevent increases in stormwater runoff. The existing stormwater system would be modified within the project site to achieve compliance with the MRP

### **2.4.7 Site Paving**

The existing paved access roads around the washwater handling and treatment, the sludge handling area, and the centrifuge building area would be replaced or repaired after construction of proposed facilities. The existing access road around the sludge handling facilities would be expanded by approximately 30,000 square feet to provide access for the solids hauling trucks (Figure 2.3-2). Paving would also occur in the areas around new facilities to create a stable surface similar to the existing conditions for access, operation, and maintenance of facilities and final tie into existing pavement.

### **2.4.8 Lighting, Landscaping, and Site Cleanup**

Lights would be installed on and around the facilities to allow safe use and observation of facilities during non-daylight hours. The lights would be cutoff type that illuminate the area below them but do not illuminate the sides or areas above the lighting. The top access deck of the washwater basins, clarifier basins, FTW basins, gravity thickeners, and sludge storage

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mixing tanks, and the centrifuge building access platform would be fitted with localized light fixtures to allow safe use and observation during non-daylight hours.

Landscaping would be planted in areas north and south of the new facilities to provide visual screening. Temporary irrigation for trees and shrubs would be installed for plant establishment. All temporary fencing, construction signage, and any excess materials or debris would be removed from the site at construction completion. Temporary construction trailers would be removed at the completion of construction.

### **2.4.9 Construction Access, Vehicle Trips, and Workers**

No changes to site access to the PWTP are needed to implement the project. Access is provided via the existing Valley Water security gates and driveway at the intersection of Whitman Way and Vista Del Mar, in San Jose, CA. Non-gated access to the staging areas along Whitman Way are provided.

Construction would generate approximately 3,000 heavy-duty haul truck trips for delivery of equipment, excavation, and import of fill material. The project would generate approximately 3 truck trips per day on average during construction and 25 truck trips at peak of excavation and removal of material. An average of approximately 30 workers would be on site each day, with a maximum of 50 workers on a given day.

### **2.4.10 Construction Schedule and Work Hours**

The project construction is proposed to begin between 2025 to 2030 and would be completed in approximately 5 years with the first 6 to 9 months consisting of mobilization and staging. The first 3 to 4 years would involve near continuous construction activities. Facility outages would occur in the low-demand months (November to March) when possible. Construction activities would be conducted from 7 a.m. to 7 p.m. Monday through Friday and from 8:00 a.m. to 5:00 p.m. on Saturday. Construction could also occur during early morning hours or outside normal working hours for specified construction activities such as concrete delivery and pours, during outages, or to respond to unplanned disruptions in plant operations. The extended workdays would be approximately 16 hours long, and the total number of extended workdays would occur for a total of 3 weeks, intermittently over the course of the construction period.

### **2.4.11 Construction Equipment**

Equipment that would be used during construction includes:

- Pickup trucks
- Generators
- Forklift
- Welders
- 10-yard dump trucks
- Excavators
- Haul trucks

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- Water trucks
- Plate compactors
- Backhoe/tractor/loaders
- Pyle driver or drill rig
- Dozer
- Compactor
- Paving equipment
- Compactor/roller
- Asphalt haul truck
- Cement and mortar mixers
- Cranes

### 2.5 Operations and Maintenance

#### 2.5.1 Operations

The future operations of the sedimentation basin sludge withdrawal pumps and the primary controls of the washwater and treatment facilities and sludge handling and dewatering facilities would be automated, monitored and controlled by the PWTP operators. Equipment would be operated and maintained in a manner similar to existing conditions, no changes in staffing levels are anticipated.

#### Chemical Use

The future operations would include an increase in chemicals currently used for sludge flocculation and dewatering (polymer) and treatment and disinfection (i.e., sodium hypochlorite [ $\text{NaClO}$   $\text{NaOCl}$ ]).

An 800-gallon bulk polymer tank would provide 30 calendar days of storage at the maximum usage rate. The maximum volume of sodium hypochlorite would be approximately 180 gallons per day.

#### Solids Hauling

The upgrades to the RMS would improve sludge dewatering, resulting in a reduction in volume of solids produced, fewer truck trips would be generated for removal of solids, for off-site landfill disposal, during future operation of the project than under existing conditions.

#### Power Required for Operations

The project would require a power increase of approximately 300,000 kwh/year for operation. In addition, a new separate standby generator, using up to 500 horsepower motors, would provide backup power for critical equipment in the event of power interruptions, for the sludge holding and dewatering facilities. An existing on-site standby generator would provide backup power for the sedimentation basin and washwater handling and treatment facilities.

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The current PWTP power infrastructure is anticipated to have sufficient capacity to support the project improvements. The Pacific Gas and Electric Company's distribution system that currently serves PWTP is anticipated to have sufficient capacity to supply the additional loads under all future scenarios. The standby generator would be tested monthly for 2 hours.

### Maintenance

Under existing conditions, the PWTP is inspected routinely, and maintenance activities are conducted as needed to ensure proper function of the facility. Under the proposed project, new facilities and equipment would be maintained similar to existing conditions. The level of maintenance would be similar to or slightly reduced in comparison with the maintenance of the existing facilities and equipment, since the proposed improvements include replacement of aged infrastructure and equipment. Maintenance for new and existing landscaping would include mowing, pruning of trees, and potential replacement of plants as needed to maintain the function of the landscaping. Maintenance activities would be conducted by existing staff, no changes in staffing levels are anticipated.

## 2.6 Valley Water BMPs

Best management practices (BMPs) are practices that prevent, avoid, or minimize potentially adverse effects associated with construction and other activities. Project BMPs reflect the BMPs in the 2014 *Best Management Practices Handbook: Santa Clara Valley Water District Comprehensive List* and are included in Table 2.6-1. Additional environmental measures developed to mitigate specific impacts associated with project implementation and not avoidable through standard construction BMPs are identified in Chapter 3 of this MND. All BMPs and mitigation measures are provided in the draft Mitigation Monitoring and Reporting Program (MMRP) table, included as Appendix A.

All BMPs would be incorporated into the project construction documents (plans and specifications) such that contractors employed on the project would be contractually required to adhere to them.

**Table 2.6-1 Best Management Practices**

BMP	Description
AQ-1 Use Dust Control Measures	<p>The following Bay Area Air Quality Management District (BAAQMD) Dust Control Measures will be implemented:</p> <ul style="list-style-type: none"><li>• All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li><li>• All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li><li>• All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li></ul>

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BMP	Description
	<ul style="list-style-type: none"> <li>• Water used to wash the various exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, etc.) will not be allowed to enter waterways.</li> <li>• All vehicle speeds on unpaved roads shall be limited to 15 mph.</li> <li>• All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</li> <li>• Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure CCR Title 13, Section 2485), and this requirement shall be clearly communicated to construction workers (such as verbiage in contracts and clear signage at all access points).</li> <li>• All construction equipment shall be maintained and properly tuned in accordance with manufacturers specifications, and all equipment shall be checked by a certified visible emissions evaluator.</li> <li>• Correct tire inflation shall be maintained in accordance with manufacturers specifications on wheeled equipment and vehicles to prevent excessive rolling resistance.</li> <li>• Post a publicly visible sign with a telephone number and contact person at the lead agency to address dust complaints; any complaints shall be responded to and take corrective action within 48 hours. In addition, a BAAQMD telephone number with any applicable regulations will be included.</li> </ul>
AQ-2 Avoid Stockpiling Odorous Materials	<p>Materials with decaying organic material, or other potentially odorous materials, will be handled in a manner that avoids impacting residential areas and other sensitive receptors, including:</p> <ol style="list-style-type: none"> <li>1. Avoid stockpiling potentially odorous materials within 1,000 feet of residential areas or other odor sensitive land uses; and</li> <li>2. Odorous stockpiles will be disposed of at an appropriate landfill.</li> </ol>
BI-5 Avoid Impacts to Nesting Migratory Birds	<p>Nesting birds are protected by state and federal laws. The District will protect nesting birds and their nests from abandonment, loss, damage, or destruction. Nesting bird surveys will be performed by a qualified biologist prior to any activity that could result in the abandonment, loss, damage, or destruction of birds, bird nests, or nesting migratory birds. Inactive bird nests may be removed with the exception of raptor nests. Birds, nests with eggs, or nests with hatchlings will be left undisturbed</p>
BI-6 Avoid Impacts to Nesting Migratory Birds from Pending Construction	<p>Nesting exclusion devices may be installed to prevent potential establishment or occurrence of nests in areas where construction activities would occur. All nesting exclusion devices will be maintained throughout the nesting season or until completion of work in an area makes the devices unnecessary. All exclusion devices will be removed and disposed of when work in the area is complete.</p>
BI-8 Choose Local Ecotypes of Native Plants and Appropriate	<p>Whenever native species are prescribed for installation, the following steps will be taken by a qualified biologist or vegetation specialist:</p> <ul style="list-style-type: none"> <li>• Evaluate whether the plant species currently grows wild in Santa Clara County.</li> </ul>

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BMP	Description
Erosion- Control Seed Mixes	<ul style="list-style-type: none"> <li>• If so, the qualified biologist or vegetation specialist will determine if any need to be local natives, i.e. grown from propagules collected in the same or adjacent watershed, and as close to the Project site as feasible.</li> <li>• Also, consult a qualified biologist or vegetation specialist to determine which seeding option is ecologically appropriate and effective, specifically the following:</li> <li>• For areas that are disturbed, an erosion control seed mix may be used consistent with the Valley Water Guidelines and Standards for Land Use Near Streams, Design Guide 5, Temporary Erosion Control Options.</li> <li>• In areas with remnant native plants, the qualified biologist or vegetation specialist may choose an abiotic application instead, such as an erosion control blanket or seedless hydro-mulch and tackifier to facilitate passive revegetation of local native species</li> <li>• Temporary earthen access roads may be seeded when site and horticultural conditions are suitable</li> <li>• If a gravel or wood mulch has been used to prevent soil compaction, this material may be left in place [if ecologically appropriate] instead of seeding.</li> <li>• Seed selection shall be ecologically appropriate as determined by a qualified biologist, per <i>Guidelines and Standards for Land Use Near Streams, Design Guide 2: Use of Local Native Species</i>.</li> </ul>
BI-10 Avoid Animal Entry and Entrapment	<p>All pipes, hoses, or similar structures less than 12 inches diameter will be closed or covered to prevent animal entry. All construction pipes, culverts, or similar structures greater than 2 inches diameter stored at a construction site overnight will be inspected thoroughly for wildlife by a qualified biologist or properly trained construction personnel before the pipe is buried, capped, used, or moved. If inspection indicates presence of sensitive or State or federally listed species inside stored materials or equipment, work on those materials will cease until a qualified biologist determines the appropriate course of action.</p> <p>To prevent entrapment of animals, all excavations, steep-walled holes, or trenches more than 6 inches deep will be secured against animal entry at the close of each day. Any of the following measures may be employed, depending on the size of the hole and method feasibility:</p> <ul style="list-style-type: none"> <li>• Hole will be securely covered (no gaps) with plywood or similar materials at the close of each working day, or any time the opening will be left unattended for more than one hour.</li> <li>• In the absence of covers, the excavation will be provided with escape ramps constructed of earth or untreated wood, sloped no steeper than 2:1, and located no farther than 15 feet apart.</li> <li>• In situations where escape ramps are infeasible, the hole or trench will be surrounded by filter fabric fencing or a similar barrier with the bottom edge buried to prevent entry.</li> </ul>
BI-11 Minimize Predator-Attraction	Remove trash daily from the worksite to avoid attracting potential predators to the site.
CU-1 Accidental Discovery of	If historical or unique archaeological artifacts or tribal cultural resources are accidentally discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Work at the location of the find will halt immediately within 100 feet of the find. A “no work” zone shall be established utilizing appropriate flagging to delineate



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BMP	Description
Archaeological Artifacts, Tribal Cultural Resources, or Burial Remains	<p>the boundary of this zone. A Consulting Archaeologist will visit the discovery site as soon as practicable for identification and evaluation pursuant to PRC section 21083.2 and CCR section 15126.4. If the archaeologist determines that the artifact is not significant, construction may resume. If the archaeologist determines that the artifact is significant, the archaeologist will determine if the artifact can be avoided and, if so, will detail avoidance procedures. If the artifact cannot be avoided, the archaeologist will develop within 48 hours an Action Plan, which will include provisions to minimize impacts and, if required, a Data Recovery Plan for recovery of artifacts in accordance with PRC section 21083.2 and Section 15126.4 of the CEQA Guidelines. If a tribal cultural resource cannot be avoided, the Action Plan will include notification of the appropriate Native American tribe and consultation with the tribe regarding acceptable recovery options.</p> <p>If burial finds are accidentally discovered during construction, work in affected areas will be restricted or stopped until proper protocols are met. Upon discovering any burial site as evidenced by human skeletal remains, the County Coroner will be immediately notified, and the field crew supervisor shall take immediate steps to secure and protect such remains from vandalism during periods when work crews are absent. No further excavation or disturbance within 100 feet of the site or any nearby area reasonably suspected to overlie adjacent remains may be made except as authorized by the County Coroner, California Native American Heritage Commission, and/or the County Coordinator of Indian Affairs.</p>
HM-7 Restrict Vehicle and Equipment Cleaning to Appropriate Locations	Vehicles and equipment may be washed only at approved areas. No washing of vehicles or equipment will occur at job sites.
HM-8 Ensure Proper Vehicle and Equipment Fueling and Maintenance	<ul style="list-style-type: none"> <li>• No fueling or servicing will be done in a waterway or immediate flood plain unless equipment stationed in these locations is not readily relocated (i.e., pumps, generators).</li> <li>• For stationary equipment that must be fueled or serviced on site, containment will be provided in such a manner that any accidental spill will not be able to come in direct contact with soil, surface water, or the storm drainage system.</li> <li>• All fueling or servicing done at the site will provide containment to the degree that any spill will be unable to enter any waterway or damage riparian vegetation.</li> <li>• All vehicles and equipment will be kept clean. Excessive build-up of oil and grease will be prevented.</li> <li>• All equipment used in the bay or flood basin will be inspected for leaks each day prior to initiation of work. Maintenance, repairs, or other necessary actions will be taken to prevent or repair leaks, prior to use.</li> <li>• If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location will be done in a waterway or flood plain.</li> </ul>
HM-9 Ensure Proper Hazardous Materials Management	<ul style="list-style-type: none"> <li>• Measures will be implemented to ensure that hazardous materials are properly handled and the quality of water resources is protected by all reasonable means.</li> <li>• Prior to entering the work site, all field personnel will know how to respond when toxic materials are discovered.</li> </ul>

## 2 PROJECT DESCRIPTION

BMP	Description
	<ul style="list-style-type: none"> <li>• Contact of chemicals with precipitation will be minimized by storing chemicals in watertight containers with appropriate secondary containment to prevent any spillage or leakage.</li> <li>• Petroleum products, chemicals, cement, fuels, lubricants, and non-storm drainage water or water contaminated with the aforementioned materials will not contact soil and not be allowed to enter surface waters or the storm drainage system.</li> <li>• All toxic materials, including waste disposal containers, will be covered when they are not in use and located as far away as possible from a direct connection to the storm drainage system or surface water.</li> <li>• Quantities of toxic materials, such as equipment fuels and lubricants, will be stored with secondary containment that is capable of containing 110 percent of the primary container(s).</li> <li>• The discharge of any hazardous or non-hazardous waste as defined in Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations will be conducted in accordance with applicable State and federal regulations.</li> <li>• In the event of any hazardous material emergencies or spills, personnel will call the Chemical Emergencies/Spills Hotline at 1-800-510-5151.</li> </ul>
HM-10 Utilize Spill Prevention Measures	<p>To prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water, the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>• Field personnel will be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills.</li> <li>• Equipment and materials for cleanup of spills will be available on site, and spills and leaks will be cleaned up immediately and disposed of according to applicable regulatory requirements.</li> <li>• Field personnel will ensure that hazardous materials are properly handled and natural resources are protected by all reasonable means.</li> <li>• Spill prevention kits will always be in close proximity when using hazardous materials (e.g., at crew trucks and other logical locations), and all field personnel will be advised of these locations.</li> <li>• The work site will be routinely inspected to verify that spill prevention and response measures are properly implemented and maintained.</li> </ul>
HM-12 Incorporate Fire Prevention Measures	<p>All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors.</p> <ul style="list-style-type: none"> <li>• During the high fire danger period (April 1–December 1), work crews will have appropriate fire suppression equipment available at the work site.</li> <li>• An extinguisher shall be available at the work site at all times when welding or other repair activities that can generate sparks (such as metal grinding) is occurring.</li> <li>• Smoking shall be prohibited except in designated staging areas and at least 20 feet from any combustible chemicals or vegetation.</li> </ul>
HM-13 Avoid Impacts from Naturally	<p>The District will comply with and implement BAAQMD dust control measures and notification requirements when working in serpentine soils.</p>

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BMP	Description
Occurring Asbestos	
WQ-4 Limit Impacts from Staging and Stockpiling Materials	<ul style="list-style-type: none"> <li>To protect on-site vegetation and water quality, staging areas should occur on access roads, surface streets, or other disturbed areas that are already compacted and only support ruderal vegetation. Similarly, all equipment and materials (e.g., road rock and spoils) will be contained within the existing access roads or other pre-determined staging areas.</li> <li>Building materials and other project-related materials, including chemicals and sediment, will not be stockpiled or stored where they could spill into water bodies.</li> <li>No runoff from the staging areas shall be allowed to enter water ways without being subjected to adequate filtration (e.g., vegetated buffer, swale, hay wattles or bales, silt screens).</li> <li>The discharge of decant water to water ways from any on site temporary sediment stockpile or storage areas is prohibited.</li> <li>During the wet season, no stockpiled soils will remain exposed unless surrounded by properly installed and maintained silt fencing or other means of erosion control. During the dry season, exposed, dry stockpiles will be watered, enclosed, covered, or sprayed with non-toxic soil stabilizers.</li> </ul>
WQ-5 Stabilize Construction Entrances and Exits	<p>Measures will be implemented to minimize the tracking of soil onto streets near work site:</p> <ol style="list-style-type: none"> <li>Methods used to prevent mud from being tracked out of work sites onto roadways will include installing a layer of geotextile mat followed by a 4-inch-thick layer of 1-to-3-inch diameter gravel on unsurfaced access roads.</li> <li>Access will be provided as close to the work area as possible, using existing ramps where available and planning work site access so as to minimize disturbance to the water body bed and banks as well as the surrounding land uses.</li> </ol>
WQ-9 Use Seeding for Erosion Control, Weed Suppression, and Site Improvement	<p>Disturbed areas shall be seeded with native seed as soon as is appropriate after activities are complete. An erosion control seed mix will be applied to exposed soils down to the ordinary high water mark in streams.</p> <ol style="list-style-type: none"> <li>The seed mix should consist of California native grasses, (for example <i>Hordeum brachyantherum</i>; <i>Elymus glaucus</i>; and annual <i>Vulpia microstachyes</i>) or annual, sterile hybrid seed mix (e.g., Regreen™, a wheat x wheatgrass hybrid).</li> <li>Temporary earthen access roads may be seeded when site and horticultural conditions are suitable, or have other appropriate erosion control measures in place.</li> </ol>
WQ-11 Maintain Clean Conditions at Work Sites	<ul style="list-style-type: none"> <li>The work site, areas adjacent to the work site, and access roads will be maintained in an orderly condition, free and clear from debris and discarded materials on a daily basis. Personnel will not sweep, grade, or flush surplus materials, rubbish, debris, or dust into storm drains or waterways.</li> <li>For activities that last more than one day, materials or equipment left on the site overnight will be stored as inconspicuously as possible, and will be neatly arranged. Any materials and equipment left on the site overnight will be stored to avoid erosion, leaks, or other potential impacts to water quality</li> </ul>

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BMP	Description
	<ul style="list-style-type: none"> <li>Upon completion of work, all building materials, debris, unused materials, concrete forms, and other construction-related materials will be removed from the work site.</li> </ul>
<p>WQ-15</p> <p>Prevent Water Pollution</p>	<p>Oily, greasy, or sediment laden substances or other material that originate from the project operations and may degrade the quality of surface water or adversely affect aquatic life, fish, or wildlife will not be allowed to enter, or be placed where they may later enter, any waterway.</p> <p>The project will not increase the turbidity of any watercourse flowing past the construction site by taking all necessary precautions to limit the increase in turbidity as follows:</p> <ol style="list-style-type: none"> <li>where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases will not exceed 5 percent;</li> <li>where natural turbidity is greater than 50 NTU, increases will not exceed 10 percent;</li> <li>where the receiving water body is a dry creek bed or storm drain, waters in excess of 50 NTU will not be discharged from the project.</li> </ol> <p>Water turbidity changes will be monitored. The discharge water measurements will be made at the point where the discharge water exits the water control system for tidal sites and 100 feet downstream of the discharge point for non-tidal sites. Natural watercourse turbidity measurements will be made in the receiving water 100 feet upstream of the discharge site. Natural watercourse turbidity measurements will be made prior to initiation of project discharges, preferably at least 2 days prior to commencement of operations.</p>
<p>WQ-16</p> <p>Prevent Storm Water Pollution</p>	<p>To prevent stormwater pollution, the following measures will be implemented:</p> <ol style="list-style-type: none"> <li>Soils exposed due to project activities will be seeded and stabilized using hydroseeding, straw placement, mulching, and/or erosion control fabric. These measures will be implemented such that the site is stabilized and water quality protected prior to significant rainfall. Areas below the ordinary high-water mark of the flood basin or below the mean higher high water line of the bay are exempt from this BMP.</li> <li>The preference for erosion control fabrics will be to consist of natural fibers; however, steeper slopes and areas that are highly erodible may require more structured erosion control methods. No non-porous fabric will be used as part of a permanent erosion control approach. Plastic sheeting may be used to temporarily protect a slope from runoff, but only if there are no indications that special status species would be impacted by the application.</li> <li>Erosion control measures will be installed according to manufacturer specifications.</li> <li>To prevent stormwater pollution, measures to be implemented as appropriate will include, but not be limited to, the following: <ul style="list-style-type: none"> <li>Silt fences</li> <li>Straw bale barriers</li> <li>Brush or rock filters</li> <li>Storm drain Inlet protection</li> <li>Sediment traps or sediment basins</li> <li>Erosion control blankets and/or mats</li> <li>Soil stabilization (e.g., tackified straw with seed, jute, or geotextile blankets)</li> <li>Straw mulch</li> </ul> </li> </ol>

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BMP	Description
	<ul style="list-style-type: none"><li>5. All temporary construction-related erosion control methods shall be removed at the completion of the project (e.g. silt fences).</li><li>6. Surface barrier applications installed as a method of animal conflict management, such as chain link fencing, woven geotextiles, and other similar materials, will be installed no longer than 300 feet, with at least an equal amount of open area prior to another linear installation.</li></ul>
WQ-17 Manage Sanitary and Septic Waste	Temporary sanitary facilities will be located in compliance with California Division of Occupational Safety and Health (Cal/OSHA) regulation 8 California Code of Regulations section 1526. All temporary sanitary facilities will be located where overflow or spillage will not enter a watercourse directly (overbank) or indirectly (through a storm drain).

### 2.7 Permits and Approvals

Under section 53091 of the California Government Code, local agency building and zoning ordinances do not apply to projects involving the location or construction of facilities for the production, generation, storage, treatment, or transmission of water by a local agency. However, Valley Water's practice is to work with local jurisdictions and neighboring communities during project planning and to consider local environmental protection policies for guidance. The project would comply with the State of California Construction Stormwater General Permit (Order 2022-0057-DWQ) by preparing a SWPPP and submitting a Notice of Intent (NOI) to the State Water Resources Control Board.

The Municipal Regional Stormwater Permit (MRP), adopted by the San Francisco Bay Regional Water Quality Control Board in November 2015 includes requirements for incorporating post-construction stormwater control measures into new development and redevelopment projects which are included in Provision C.3 of the MRP. The project would comply with the MRP C.3 provision by preparing and submitting a Stormwater Management Plan with the permit application.

Other permits and approvals are noted in Table 1.5-1.

### 3 Environmental Setting

#### 3.1 Environmental Setting

The project site is located at the PWTP at 3959 Whitman Way in the City of San Jose (as shown in Figure 3.2-1). The project facilities would be located entirely within the PWTP. Potential staging areas for the project would be located within the PWTP site and adjacent areas, as shown above in Figure 2.3-1. Additionally staging could occur offsite within a 10-mile radius of the PWTP in previously disturbed areas or undisturbed areas. Valley Water or the construction contractor would obtain any required permits or authorizations for temporary staging activities prior to use of any off-site staging area.

#### 3.2 Physical Environment

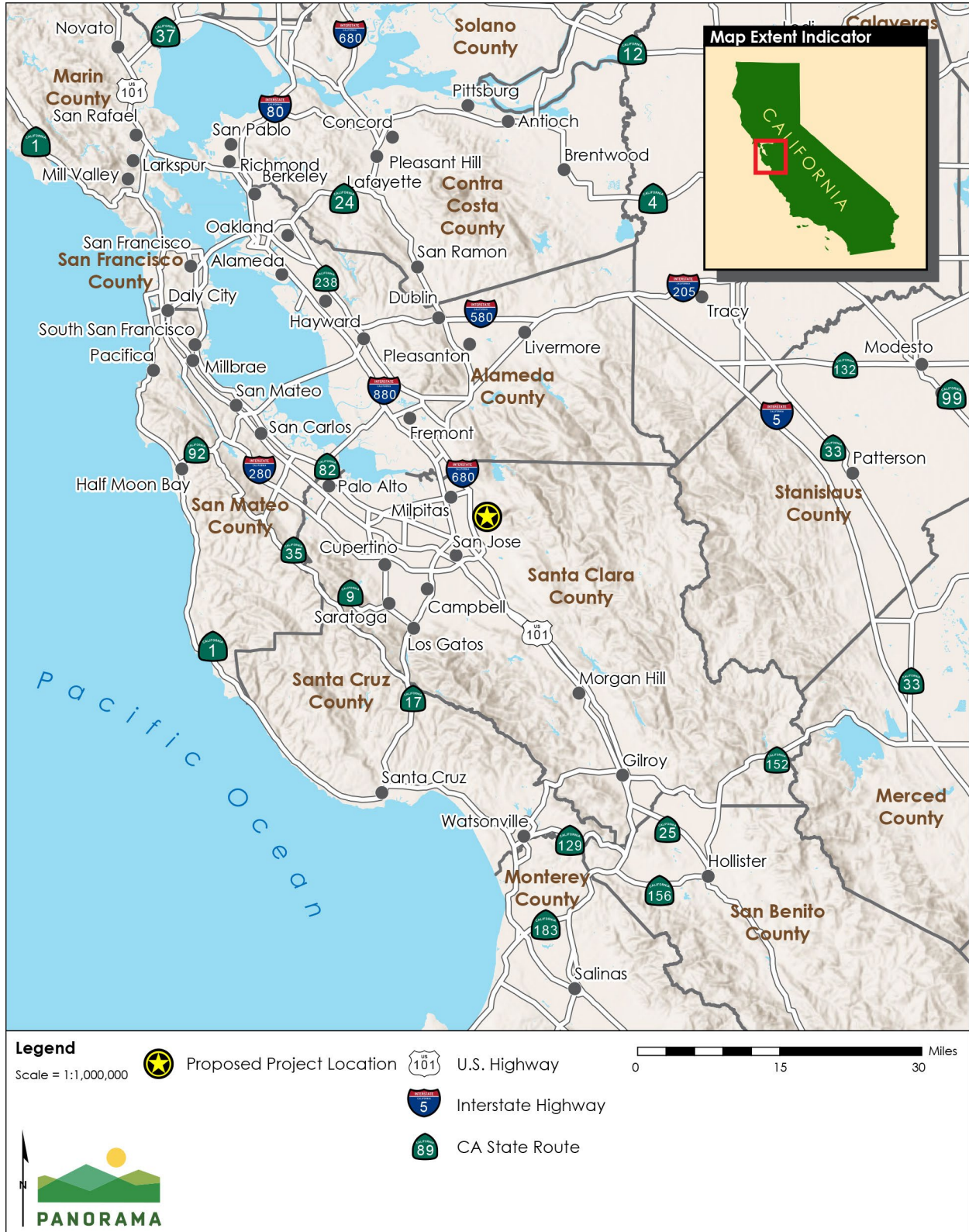
The PWTP is located in the northeastern portion of the City of San Jose, in the County of Santa Clara as shown in Figure 3.2-1. The PWTP is located in the western foothills of the Diablo Mountain range, on a west-facing hillside. The PWTP is located within a residential area and is bounded by Vista del Mar to the west and Suncrest Avenue to the north. Private residences along El Granada Drive abut the PWTP to the south. Undeveloped land owned by San Jose Water Company is located east of the PWTP.

The majority of the PWTP site is developed with buildings, parking lots, roads, water treatment and storage facilities, and other structures. The PWTP contains ornamental trees and shrub vegetation as well as a fence that rings the facilities. Photovoltaic (PV) solar facilities are located within the PWTP site at the western edge of the property. The PV solar facilities are operated by a third party, and the power is produced to offset Valley Water energy demand.



### 3 ENVIRONMENTAL SETTING

**Figure 3.2-1 Project Location**



Source: (U.S. Geological Survey 2020; Tele Atlas North America, Inc. 2018)

# 4 Environmental Evaluation

## 4.1 Initial Study Checklist

In accordance with CEQA, the following Initial Study Checklist is an analysis of the project's potential environmental effects to determine whether an Environmental Impact Report is needed. Answers to the checklist questions provide factual evidence and Valley Water rationale for determinations of the potential significance of impacts resulting from the project.

The Initial Study checklist shows that the project may have potentially significant effects on Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, and Noise. Mitigation measures have been proposed for the project to reduce such effects to less-than-significant levels; therefore, the proposed MND is consistent with CEQA Guidelines section 15070. Descriptions of the BMPs and/or mitigation measures to be incorporated in the project are included.

### 4.1.1 Background

- |                           |  |
|---------------------------|--|
| 1. Project Title          | Penitencia Water Treatment Plant Residuals Management Project  |
| 2. Lead Agency Name       | Santa Clara Valley Water District (Valley Water)<br>5750 Almaden Expressway<br>San Jose, CA 95118-3614 |
| 3. Contact Person and     | Michael F. Coleman, AICP, Environmental Planner  |
| 4. Project Location       | 3959 Whitman Way, San Jose, CA   |
| 5. Project Sponsor's Name | Santa Clara Valley Water District (Valley Water)<br>5750 Almaden Expressway<br>San Jose, CA 95118-3614 |
| 6. General Plan           | Public/Quasi Public (PQP)  |
| 7. Zoning                 | Low to Medium Residential Based District<br>(R-1-8)  |



## 4 ENVIRONMENTAL EVALUATION

- |   |   |
|---|---|
| 8. Description of the Project   | The project would replace the residuals management facilities at the PWTP with modern and more efficient residuals management facilities.           |
| 9. Surrounding Land Uses and Setting  | Lower Hillside (LH) and Residential Neighborhood (RN)   |
| 10. Other public agencies whose approval is required  | San Francisco Bay Regional Water Quality Control Board; Bay Area Air Quality Management District; City of San Jose Fire Department                  |
| 11. Have California Native Americans affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? | No. California Native American tribes culturally affiliated with the project area have not requested consultation pursuant to PRC Section 21080.3.1 |

### 4.1.2 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Aesthetics                             | <input type="checkbox"/> Agricultural and Forestry Resources | <input checked="" type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources        | <input checked="" type="checkbox"/> Cultural Resources       | <input type="checkbox"/> Energy Use                                    |
| <input type="checkbox"/> Geology and Soils                      | <input type="checkbox"/> Greenhouse Gas Emissions            | <input checked="" type="checkbox"/> Hazards and Hazardous Materials    |
| <input checked="" type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning               | <input type="checkbox"/> Mineral Resources                             |
| <input checked="" type="checkbox"/> Noise                       | <input type="checkbox"/> Population and Housing              | <input type="checkbox"/> Public Services                               |
| <input type="checkbox"/> Recreation                             | <input type="checkbox"/> Transportation                      | <input type="checkbox"/> Utilities and Service Systems                 |
| <input type="checkbox"/> Tribal Cultural Resources              | <input type="checkbox"/> Wildfire                            | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

## 4 ENVIRONMENTAL EVALUATION

### 4.1.3 Environmental Determination

On the basis of this initial evaluation:

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

☐

I find that although the Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒

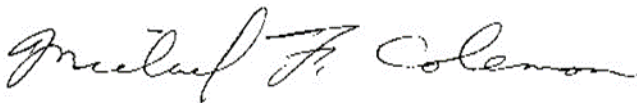
I find that the Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐

I find that the Project MAY have a “potentially significant impact” or “potentially significant impact 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 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 project, nothing further is required.

☐

8-29-24

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Michael F. Coleman, AICP, Environmental Planner

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Date

### 4.1.4 Approach to Environmental Analysis

This IS checklist evaluates the potential environmental impacts of the project. The level of significance for each resource topic is determined by considering the predicted magnitude of the impact. Four levels of impact significance are evaluated in this IS checklist:

## 4 ENVIRONMENTAL EVALUATION

**No Impact.** The project would not have the impact described. The project may have a beneficial effect, but there is no potential for the project to create or compound the impact described.

**Less Than Significant Impact.** The project would have the impact described, but the impact would not be significant. Mitigation is not required; however, the project applicant may choose to modify the project to avoid the impacts.

**Less Than Significant with Mitigation.** The project would have the impact described, and the impact could be significant. One or more mitigation measures have been identified that will reduce the impact to a less-than-significant level.

**Potentially Significant Impact.** The project would have the impact described, and the impact could be significant. The impact cannot be reduced to a less-than-significant level by incorporating mitigation measures. An environmental impact report must be prepared for this project.

## 4 ENVIRONMENTAL EVALUATION

### 4.2 Environmental Checklist

#### 4.2.1 Aesthetics

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>1. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Environmental Setting

##### Scenic Vistas

There are no designated scenic vistas in the city of San Jose (California Department of Transportation (Caltrans) 2021). The city of San Jose's scenic resources include the broad sweep of the Santa Clara Valley, the hills and mountains on either side of the Valley floor, the Baylands, and the urban skyline. As defined in the City of San Jose General Plan, Scenic Gateways in the City of San Jose are locations that "announce to a visitor or resident that they are entering the city, or a unique neighborhood." Such locations in the city include Coleman Avenue at Interstate 880, 13th Street at US 101, and Highway 101 in the vicinity of the Highway 85 Interchange (City of San Jose 2011). There are no Scenic Gateways in close proximity to the project.

##### Scenic Highways

The only State Scenic Highway in the City of San Jose is State Route 280, which is an eligible State Scenic Highway (Caltrans, n.d.-a). As defined in the City of San Jose General Plan, the

## 4 ENVIRONMENTAL EVALUATION

designation of a scenic route in the City of San Jose applies to routes that afford especially aesthetic views (City of San Jose 2011). The roads surrounding the project site include views of residential development and the existing water treatment plant and open space to the north of the project site.

### **Visual Quality**

#### ***Views of Project Site***

The project is located in the City of San Jose (City), surrounded by residential and undeveloped private land use. The project site and the surrounding land is zoned as Single-Family Residential R-1-8 (up to eight dwelling units per acre). Residences surrounding the project site include a mix of single- and two-story structures. The topography of the project site and surroundings slopes from east to west towards the San Francisco Bay. The project site abuts existing residential development to the south, and there are no public vantage points of the project site from the south. The project site is screened by vegetation and topography from areas along Bay Laurel Lane, Whitman Way, and Vista del Mar, located west of the site due to the hill slope and existing landscaping around the site. There are relatively open views of the project site from Suncrest Avenue directly north and northwest of the project site. The project site is screened by topography and residential development or visible in the distance as an extension of the existing urban development from public vantage points along Suncrest Avenue and areas east of the project site. The project site is not visible from Alum Rock Park or Inspiration Point due to intervening hill slopes.

The visual quality of the project site and surroundings is characteristic of urban development. The project site consists of a water treatment plant with industrial water treatment infrastructure. The surrounding area contains residential development characteristic of urban and suburban areas within the city of San Jose. Areas to the north of the project site include undeveloped hill sides.

#### ***Viewer Sensitivity***

Viewer sensitivity is another consideration in assessing the effects of visual change. Sensitivity is a function of factors such as the visibility of resources in the landscape, proximity of viewers to the visual resource, elevation of viewers relative to the visual resource, frequency and duration of views, number of viewers, and types and expectations of individuals and viewer groups. Private views are not considered within the context of CEQA. The only publicly accessible vantage point with open views of the project site is Suncrest Avenue. Viewer groups on Suncrest Avenue include bicyclists using the bicycle lane along the roadway and motorists traveling along the roadway. Motorists would have a view of the project site for less than 1 minute as they travel along Suncrest Avenue. Bicyclists would have a view of the project site for a few minutes as they travel uphill on Suncrest Avenue or approximately 1 minute traveling downhill. Both viewer groups would be expected to be focused on the roadway and would not be very sensitive to visual changes within the project site.

## 4 ENVIRONMENTAL EVALUATION

### Light and Glare

Nighttime lighting is necessary to provide and maintain safe environments. Light that falls beyond the intended area of illumination is referred to as “light trespass.” The most common cause of light trespass is spillover light, which occurs when a lighting source illuminates surfaces beyond the intended area, such as when building security lighting or parking lot lights shine onto neighboring properties. Spillover light can adversely affect light-sensitive uses, such as residences, at night. Both light intensity and fixtures can affect the amount of light spillover. Modern, energy-efficient fixtures that face downward, such as shielded light fixtures, are typically less obtrusive than older, upward-facing light fixtures.

Glare is caused by light reflections from pavement, vehicles, and building materials, such as reflective glass, polished surfaces, or metallic architectural features. During daylight hours, the amount of glare depends on the intensity and direction of sunlight.

The most notable sources of light near the project are from streetlights on the surrounding residential roads, located west and south/southeast of the project. Noble Elementary School and the Noble Park and Berryessa Branch Library are located approximately 0.39 mile and 0.5 mile southeast of the project, respectively. These facilities are assumed to use nighttime lighting during certain times of the year. There are no major highways in the project site vicinity that would be an additional source of nighttime lighting.

### Discussion

#### a) **Would the project have a substantial adverse effect on a scenic vista?**

No, the project would not have the impact described. There are no designated scenic vistas in the project vicinity. Consequently, the project would not affect a scenic vista, nor would the project block any scenic views. The project’s existing facilities and structures are visible from nearby roads, including Suncrest Avenue. The project would replace and improve water treatment process facilities at the existing PWTP. The proposed replacement facilities would not block any views of scenic vistas or have an adverse effect on a scenic vista. As such, **no impacts** on a scenic vista would occur.

#### b) **Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?**

No, the project would not have the impact described. The project is not visible from any officially designated or eligible to be designated state scenic highway as defined by the Caltrans Scenic Route Program. The nearest State Scenic Highway routes are Highway 680 and Highway 280, which are approximately 6 miles north and 8 miles southwest, respectively (Caltrans, n.d.-b). Additionally, the project site is not located in a scenic resource area as identified by the City of San Jose. As such, **no impacts** on scenic resources would occur.

#### c) **Would the project conflict with applicable zoning and other regulations governing scenic quality?**

The project would have a less than significant impact on zoning and other regulations governing scenic quality. The project site is an existing and active water treatment plant located

## 4 ENVIRONMENTAL EVALUATION

within the City of San Jose, surrounded by residential zoned areas. The City of San Jose Zoning Ordinance (Title 20 of the San Jose Municipal Code) does not specify regulations regarding the visual aesthetics of construction sites or water supply facilities.

### Construction

As described in Section 2.4.2, project construction would include demolition, excavation, dewatering, stockpiling of material, and use of heavy equipment. Equipment and staging for construction of the new project facilities would be accessed from the existing PWTP entrance on Whitman Way. The contractor would also stage equipment within one or more disturbed or developed areas, or potentially an undeveloped site, within 10 miles of the PWTP to allow for additional space for material delivery and staging and to accommodate the limited work area within the operational PWTP.

Construction activities, including construction debris and soil disturbances, for the new dewatering building and retaining wall, staging area and construction equipment would be visible to drivers from Suncrest Avenue and Whitman Way. Construction would last approximately 5 years and is estimated to commence in 2025 and conclude in 2030.

To ensure project work sites are properly maintained, Valley Water would implement BMP WQ-11, which requires the work site to be maintained in an orderly condition, free and clear of debris, on a daily basis for the entirety of the construction. Upon project completion, all building materials, debris, unused materials, concrete forms, and other construction-related materials would be removed from the project site. With implementation of BMP WQ-11, impacts from construction activities on scenic quality would be **less than significant**.

### Operation

Upon project completion, project facilities would be publicly visible from both Suncrest Avenue and Whitman Way. The existing view, view immediately following project construction, and view after landscape establishment are provided in Figure 4.2-1, Figure 4.2-2, and Figure 4.2-3. The project landscaping would establish over a period of approximately 10 years and would obscure most of the project facilities from view, aligning with the existing surrounding vegetation.

The visual simulations below demonstrate that trees and other plants will be strategically placed between the new project facilities and the road. Initially, as shown in Figure 4.2-2, the facilities would be partially visible, resulting in a moderate visual impact. However, over a period of approximately 10 years, the vegetation would grow to heights that will effectively screen most of the facilities, as shown in Figure 4.2-3. Impacts on visual quality from these public roadways would be further reduced due to the distance of these roads to the project site and the minimal change represented by the existing visible project elements from these public vantage points. Because of the limited viewer duration of the facilities and the effective landscape screening of the facilities, the project impact on scenic quality would be **less than significant**.



## 4 ENVIRONMENTAL EVALUATION

**Figure 4.2-1 Existing View of Project Site from Suncrest Avenue**



**Figure 4.2-2 View of Project After Implementation (Year 0)**



**Figure 4.2-3 View of Project After Landscape Establishment (Year 10)**





## 4 ENVIRONMENTAL EVALUATION

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

### Construction

Project construction would have a less than significant impact from glare during daytime or nighttime views in the area. As stated in Section 2.4.10, construction activities would be conducted from 7 a.m. to 7 p.m. Monday through Friday and from 8:00 a.m. to 5:00 p.m. on Saturday. Construction could also occur during early morning hours or outside normal working hours for specified construction activities such as concrete delivery and pours, during outages, or to respond to unplanned disruptions in plant operations. The extended workdays would be approximately 16 hours long, and the total number of extended workdays would occur for a total of 3 weeks, intermittently, over the course of the construction period. During periods of nighttime work activity, vehicles associated with project construction could introduce additional light sources on the project site and on nearby roads. Depending on the time of year, longer durations of lighting would be required for active construction activities.

Project construction would introduce temporary sources of nighttime lighting, primarily from construction activities and equipment operation. These light sources are expected to be confined to the project site and immediate vicinity. Depending on the time of year, additional lighting may be required due to shorter daylight hours during the fall and winter months. Lighting used during construction would be short-term (up to 3 weeks total of nighttime work) and the night lighting would be focused on the active work area. The construction activities would not create a source of glare into the community.

While project construction may introduce new sources of light at and near the project site, given the temporary nature of construction and intermittent nighttime work, impacts from temporary nighttime lighting would be **less than significant**.

### Operation

Project operation would have a less than significant impact from glare on daytime or nighttime views in the area. As described in Section 2.4.8, lights would be installed on and around the project facilities to allow safe use and observation of facilities during non-daylight hours. Facilities such as the sludge storage tanks, thickeners, flocculation/sedimentation basins, and equalization basins as well as near the centrifuge building entrances would be fitted with localized light fixtures to allow safe use and observation during non-daylight hours. The lights would be cutoff type that would illuminate the area below them but not to the sides or above, minimizing light spillage on the surrounding neighborhood while still providing sufficient light for operations staff and security purposes.

New project facilities may be visible from the surrounding areas; however, the lighting design, type, and placement would minimize any additional new sources of light on surrounding neighborhoods and would ensure that project facilities do not contribute to a new substantial source of glare.

## 4 ENVIRONMENTAL EVALUATION

The water surface at the basins would produce a level of glare similar to that of a natural water body and would not disturb viewers in nearby areas. The glare and any new light sources from the project would not adversely impact day or nighttime views in the area and, therefore, project impacts from new sources of light and glare would be **less than significant**.

### **Mitigation Measures**

No mitigation required.

## 4 ENVIRONMENTAL EVALUATION

### 4.2.2 Agricultural and Forestry Resources

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>2. AGRICULTURE AND FORESTRY RESOURCES.</b> 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. Would the project:				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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 defined by Government Code Section 51104[g])?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The project site is located in an urban area that is not zoned or used for agricultural or forestry activities. The project site is located on land designated "urban and built-up land" according to the Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDOC) (California Department of Conservation, n.d.-a). No land in the vicinity of the project site is mapped as Important Farmland or under a Williamson Act Contract (California Department of Conservation, n.d.-a; Santa Clara County Department of

## 4 ENVIRONMENTAL EVALUATION

Planning and Development, n.d.). No Forest Land or Timberland Production Zones are located on the project site or vicinity.

### Discussion

- a) **Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

No, the project would not have the impact described. The project site is currently developed as a water treatment plant and located within a developed, urbanized area. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is located on the project site or vicinity. Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. As such, there would be **no impact**.

- b) **Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

No, the project would not have the impact described. The project site is not located on land zoned for agricultural use. The project site is zoned as Low to Medium Residential Based District (R-1-8) and is not part of any Williamson Act contract. Therefore, the project would not conflict with zoning for agricultural use or a Williamson Act contract. As such, **no impact** would occur.

- c) **Would the project 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 defined by Government Code Section 51104(g))?**

No, the project would not have the impact described. The project site is in a residential area. No forest land as defined in PRC section 12220(g) or timberland as zoned by Government Code section 51104(g) is located in the project site. Therefore, the project would not conflict with zoning for forest land, timberland, or timberland zoned Timberland Production. As such, **no impact** would occur.

- d) **Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

No, the project would not have the impact described. No forest land is located on the proposed project site or within the immediate vicinity. Therefore, there would be no conversion of forest land to a non-forest use as a result of the project. As such, **no impact** would occur.

- e) **Would the project 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, the project would not have the impact described. See discussions under impact discussions a, c, and d, above. The project site would be located within the PWTP site, and any off-site staging would occur within previously developed or disturbed areas. The project would not involve other changes in the environment that could convert farmland to non-agricultural use or forest land to non-forest use. As such, **no impact** would occur.

### Mitigation Measures

No mitigation required.

## 4 ENVIRONMENTAL EVALUATION

### 4.2.3 Air Quality

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</b>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

This section describes construction and operational air quality impacts associated with the project. The project is located within the San Francisco Bay Area Air Basin (SFBAAB). SFBAAB covers roughly 5,340 square miles and consists of Napa, Marin, San Francisco, Contra Costa, Alameda, San Mateo, and Santa Clara counties, as well as the southern portion of Sonoma County, and the western portion of Solano County. The Bay Area Air Quality Management District (BAAQMD) is the State regulatory body responsible for air quality-related activities in SFBAAB. BAAQMD has adopted guidelines for quantifying and determining the significance of air quality emissions in its 2022 *CEQA Guidelines* (BAAQMD 2022).

The air quality analysis included a review of criteria pollutant emissions, such as carbon monoxide (CO), nitrogen oxide (NO<sub>x</sub>), sulfur oxide (SO<sub>x</sub>), volatile organic compounds (VOCs) as reactive organic gases (ROGs), particulate matter less than 10 micrometers (coarse particulates or PM<sub>10</sub>), and particulate matter less than 2.5 micrometers (fine particulates or PM<sub>2.5</sub>). Diesel particulate matter (DPM) was included in a health risk assessment (HRA). Potential odor impacts were also evaluated.

### Air Quality Standards

EPA has established National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA) for criteria pollutants, and the California Air Resources Board (CARB) has established California Ambient Air Quality Standards (CAAQS). Air basins where NAAQS and/or CAAQS are exceeded are designated as a “nonattainment” area. If standards are met, the area is designated as an “attainment” area.

## 4 ENVIRONMENTAL EVALUATION

**Table 4.2-1 SFBAAB Attainment Status**

Pollutant	USEPA Designation	CARB Designation
O <sub>3</sub>	Marginal Nonattainment	Nonattainment
CO	Attainment	Attainment
NO <sub>2</sub>	Attainment	Attainment
SO <sub>2</sub>	Attainment	Attainment
Pb	Attainment	Attainment
PM <sub>10</sub>	Unclassified	Nonattainment
PM <sub>2.5</sub>	Moderate Nonattainment a	Nonattainment
Sulfates	N/A	Attainment
H <sub>2</sub> S	N/A	Unclassified
Visibility Reducing Particles	N/A	Unclassified

*Source: (BAAQMD 2022)*

### Sensitive Receptors

BAAQMD defines sensitive receptors as land uses and facilities where sensitive populations are likely to be located (BAAQMD 2022). Sensitive receptors can be categorized as follows:

- Residences (e.g., houses, apartments, retirement homes)
- Active recreational land uses (e.g., sports fields)
- Medical facilities (e.g., hospitals, long-term health care facilities)
- Eldercare facilities (e.g., convalescent homes)
- Schools and playgrounds
- Childcare centers

BAAQMD recommends identifying sensitive receptors generally within 1,000 feet of a project site (BAAQMD 2022). Active recreationalists are not considered sensitive receptors because of their mobility, which limits their exposure duration.

The project site is within 1,000 feet of residences to the south, west, and northwest. Noble Elementary School is located 0.2 mile to the southwest of the project site. Figure 4.2-4 shows the sensitive receptors within 1,000 feet of the project site.

### Air Quality Emission Thresholds

BAAQMD adopted thresholds of significance and their latest 2022 *CEQA Guidelines* on April 20, 2022, to assist lead agencies in determining when potential air quality impacts would be considered significant under CEQA and to advise lead agencies on how to evaluate potential air quality impacts with the adopted new thresholds of significance. The emission thresholds for construction and operation are shown in Table 4.2-2

## 4 ENVIRONMENTAL EVALUATION

**Table 4.2-2 BAAQMD Criteria Pollutant Thresholds of Significance**

Pollutant/Precursor	Construction Related Average Daily Emissions (lb/day)	Operational Average Daily Emissions (lb/day)	Operational Maximum Annual Emissions (tpy)
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub>	82 (exhaust)	82	15
PM <sub>2.5</sub>	54 (exhaust)	54	10
PM <sub>10</sub> /PM <sub>2.5</sub> (fugitive dust)	Best management practices	None	None
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)

*Sources: (BAAQMD 2022)*

The BAAQMD also maintains thresholds of significance for toxic air contaminants, as shown in Table 4.2-3 (BAAQMD 2022). These thresholds apply to both permitted and non-permitted sources. Carcinogenic (cancer) risk is expressed as cancer cases per one million. Noncarcinogenic (acute or chronic) hazard indices are expressed as a ratio of expected exposure levels to acceptable exposure levels. DPM has a cancer potency factor and a chronic hazard index, but no acute hazard index (OEHHA 2015). The significance of the impacts of toxic air contaminant emissions from both permitted and non-permitted equipment and activities is evaluated under a single threshold.

**Table 4.2-3 Toxic Air Contaminants Thresholds of Significance**

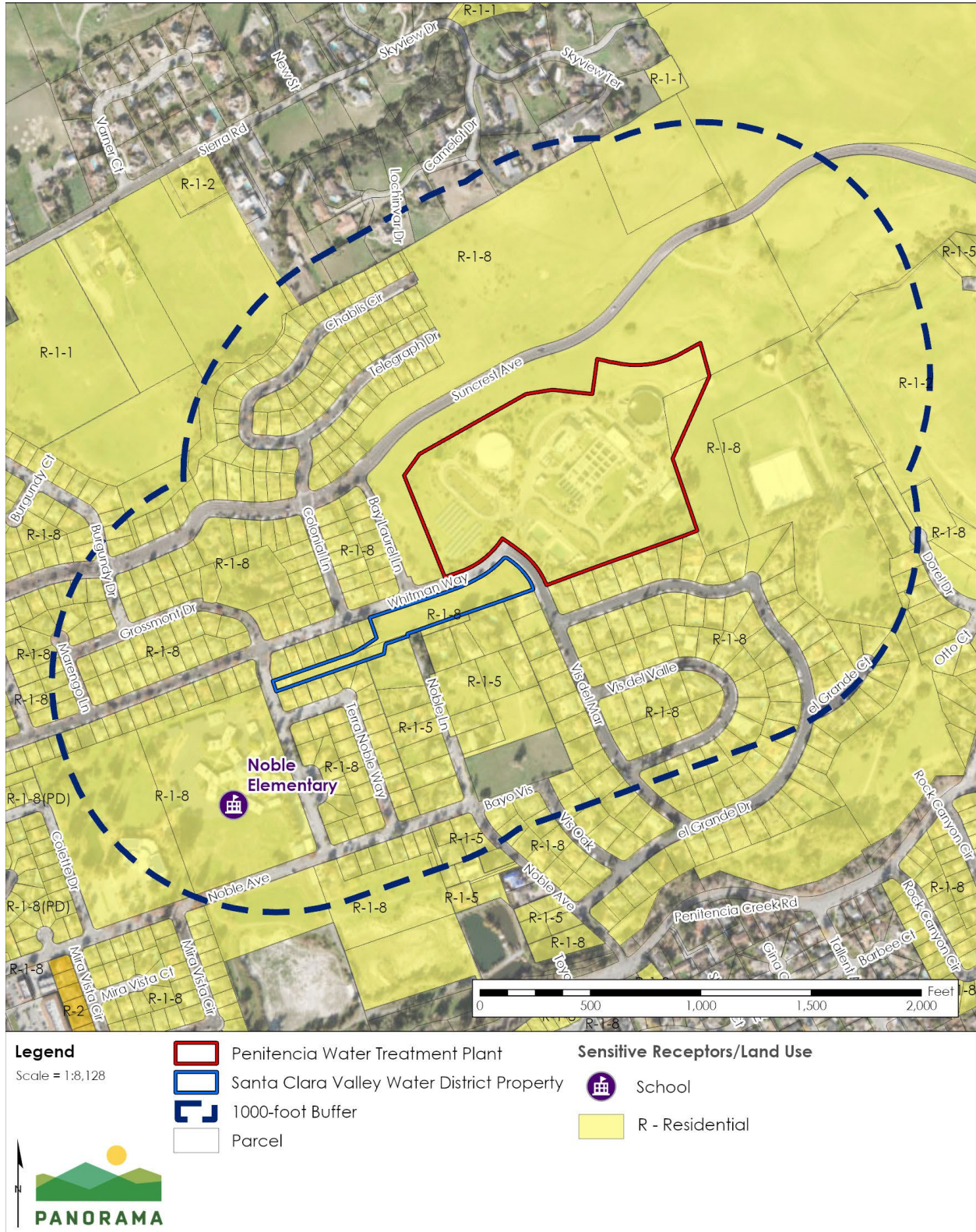
Pollutant	Threshold
<b>Project Health Risk and Hazards</b>	
Excess Cancer Risk	10 per million
Chronic Hazard Index	1.0
Acute Hazard Index	1.0
Incremental Annual Average PM <sub>2.5</sub>	0.3 µg/m <sup>3</sup>
<b>Cumulative Health Risk and Hazards</b>	
Excess Cancer Risk	100 per million
Chronic Hazard Index	10.0
Acute Hazard Index	10.0
Incremental Annual Average PM <sub>2.5</sub>	0.8 µg/m <sup>3</sup>

*Sources: (BAAQMD 2022)*



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**Figure 4.2-4 Sensitive Receptors in the Vicinity of the Project Site**





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### Health Risk Assessment

An HRA was prepared for the project in accordance with the California Office of Environmental Health Hazard Assessment's (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2015). The HRA was conducted to determine the health impacts, in terms of excess cancer risk and non-cancer hazards, using the significance levels identified by the BAAQMD.

### Air Quality Emissions Modeling

Emissions associated with the project were calculated using the California Emissions Estimator Model (CalEEMod, version 2022.1). Intermittent (short-term construction emissions that occur from activities, such as removal of structures, site-grading, and construction of structures) and long-term air quality impacts related to the operation of the project were evaluated. The analysis focuses on daily and annual emissions from construction and operational (mobile, area, stationary, and fugitive sources) activities. The air quality analysis is consistent with the methods described in the *BAAQMD 2022 CEQA Air Quality Guidelines* (BAAQMD 2022). The results of the air quality emissions modeling are provided in Appendix B.

The air quality analysis includes a review of criteria pollutant emissions such as carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC) as reactive organic gases (ROG), particulate matter less than 10 micrometers (coarse particulate or PM<sub>10</sub>), and particulate matter less than 2.5 micrometers (fine particulate or PM<sub>2.5</sub>). Other regulatory models used to estimate air quality impacts include, CARB EMFAC emissions inventory model, CARB OFFROAD emissions inventory model, and AERMOD (American Meteorological Society/USEPA Regulatory Model, Version 23132) for atmospheric dispersion modeling.

### Discussion

#### a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project would have a less than significant effect on the impact described. The project is within the SFBAAB, which is under the BAAQMD's jurisdiction. The most recently adopted air quality plan for the SFBAAB is the *2017 Clean Air Plan*, which includes 85 control measures aimed at reducing air pollution in the SFBAAB. The *2017 Clean Air Plan* provides a roadmap for BAAQMD's efforts over the next few years to reduce air pollution and protect public health and the global climate. In determining consistency with the applicable air quality plan, the analysis considered whether the project would (1) support the primary goals of the plan, (2) include applicable control measures, if any, and (3) avoid disrupting or hindering implementation of control measures. If it can be concluded with substantial evidence that a project would be consistent with the above three criteria, then the BAAQMD considers it to be consistent with air quality plans prepared for the Bay Area.

The measures most applicable to the project are transportation control measures and energy and climate control measures (the project's impacts with respect to GHG emissions are discussed in Section 4.2.8, Greenhouse Gas Emissions). Workers and contractors would commute to and from the project site during construction, and heavy equipment and vehicles

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would be required to conduct various construction activities. The following transportation control measure would be applicable to the project:

- Deploy construction and farm equipment with Tier III or IV off-road engines (TR22).

Construction vehicles and equipment would comply with federal standards for vehicle fuel efficiency because all vehicles and machinery that are sold in the U.S. must meet those standards. Furthermore, as discussed in Section 4.2.8, Greenhouse Gas Emissions, Valley Water implements actions in accordance with the Valley Water CCAP and Ends Policies, such as increasing fleet efficiency, increasing use of renewable energy, and encouraging use of efficient equipment. These actions would be implemented by Valley Water or contractors as part of the project and would be consistent with the *2017 Clean Air Plan* transportation control measure. Thus, the use of vehicles and equipment proposed as part of the project would not conflict with the measure, and the project would not conflict with or obstruct implementation of the control measures identified to achieve the goals of the *2017 Clean Air Plan*.

Vehicles and equipment used during construction would emit DPM and criteria air pollutants. As discussed in detail under Impact AIR-2, estimated emissions during implementation of the construction would not exceed the BAAQMD significance thresholds for particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and ozone precursors (NO<sub>x</sub> and ROG), as shown in Table 4.2-2. Because the project would not conflict with the control strategies in the 2017 Clean Air Plan or exceed the project-level air quality thresholds for attaining the air quality standards, project implementation would not conflict with or obstruct implementation of the applicable air quality plan. As such, the impact would thus be **less than significant**.

- b) Would the project 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?**

### Construction

#### *Criteria Air Pollutants*

The project would have a less than significant effect on the impact described. Project construction would generate emissions of air pollutants from combustion exhaust emissions. The project construction is proposed to begin between 2025 to 2030 and would be completed in approximately 4 to 8 years with the first 6 to 9 months consisting of mobilization and staging. For the purpose of this analysis and to provide a worst-case scenario for maximum pollutant emissions, it was assumed that construction would be completed in approximately 4 years with near continuous construction activities.

Table 4.2-4 provides the estimated average daily construction emissions that would be associated with the project, compared against the BAAQMD's significance thresholds for construction emissions. All construction-related combustion exhaust emissions would be below the BAAQMD significance thresholds. Because all criteria air pollutant emissions would be below the BAAQMD significance thresholds, the impact from construction equipment exhaust emissions would be **less than significant**.

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**Table 4.2-4 Estimated Average Daily Construction Emissions (pounds)**

Condition/Year	ROG	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO
2025	16.3	4.32	46.0	9.76	6.23
2026	16.4	3.25	45.9	9.72	5.90
2027	16.2	3.37	45.9	9.72	6.40
2028	16.3	2.17	45.9	9.66	5.11
Significance Threshold	54	54	82	54	---
Significant? (yes/no)	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: (RCH 2024)

### ***Fugitive Dust***

The project would have a less than significant effect on the impact described after the implementation of mitigation. Fugitive dust in the form of PM<sub>10</sub> and PM<sub>2.5</sub> would be generated from construction activities including site preparation, grading, soil movement, demolition, temporary staging and other ground-disturbing activities. For a project to have a less-than-significant impact for construction-related fugitive dust emissions, it must implement all of the best management practices identified in Table 5-2 of the 2022 BAAQMD CEQA Air Quality Guidelines. To control fugitive dust, Valley Water would implement BMP AIR-1, which requires routine watering of exposed surfaces where construction equipment and vehicle use would occur, covering haul trucks transporting loss sediment and materials, removal of visible mud or dirt track-out on public roads, and limiting vehicle speeds on unpaved roads. The dust control requirements in BMP AQ-1 are somewhat consistent with the standard fugitive dust control measures in the 2022 BAAQMD CEQA Air Quality Guidelines shown in Table 4.2-5; however, the BMP does not include the limitation on work when wind speeds exceed 20 mph, washing of tires, or use of gravel for travel off road. Mitigation Measure AQ-1 specifies limitation on work when wind speeds exceed 20 mph and requires washing of tires and gravel for travel off road consistent with BMP AQ-1 and 2022 BAAQMD CEQA Air Quality Guidelines. The Project would also implement BMP WQ-16, which includes installing erosion control measures to prevent runoff to public roadways, as well as hydroseeding and planting in previously graded areas consistent with Enhanced Dust Control Measures E-3, E-4, and E-6. Because the project would implement the aforementioned BMPs and mitigation measure to control fugitive dust, which collectively are consistent with the dust control requirements of the 2022 BAAQMD CEQA Air Quality Guidelines, the impact from fugitive dust emissions would be **less than significant with mitigation**.

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**Table 4.2-5 BAAQMD Basic Best Management Practices for Construction-Related Fugitive Dust Emissions**

BMP ID	Basic Best Management Practice
<b>B-1</b>	All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
<b>B-2</b>	All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
<b>B-3</b>	All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
<b>B-4</b>	All vehicle speeds on unpaved roads shall be limited to 15 mph.
<b>B-5</b>	All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
<b>B-6</b>	All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
<b>B-7</b>	All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
<b>B-8</b>	Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
<b>B-9</b>	Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

*(Source: (BAAQMD 2022))*

### Operation

Project operations would have a less than significant effect on the impact described. Project operations would generate combustion emissions of air pollutants (ROG, NO<sub>x</sub>, CO, sulfur dioxide, PM<sub>10</sub>, and PM<sub>2.5</sub>), primarily from emergency generator use and electrical use.

The project would require a power increase of approximately 300,000 kilowatts-hours (kwh) per year for operations after construction is completed. The 300,000 kwh per year is based on operation of the centrifuge and sludge storage tank mixers as well as the additional small motors and pumps for the sludge handling and washwater facilities. No additional natural gas usage is planned for the project. No changes are anticipated in solid waste generation for project operations. No new employee vehicle trips are expected to increase. The proposed upgrades would provide thicker solids which would therefore require fewer truck trips for the removal of solids during operation of the project.

A new 500-kilowatt standby generator would provide backup power for critical equipment in the event of power interruptions, for the sludge holding and dewatering facilities. The standby generators would be tested monthly for two hours (and up to 100 hours per year). The new standby generator would be required to obtain an Authority to Construct/Permit to Operate, which could require source testing prior to startup and annually afterwards, as well as other

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permit conditions from the BAAQMD. Using standard fuel consumption estimates, the generator would require 3,475 gallons of diesel fuel per year.<sup>1</sup>

Table 4.2-6 provides the estimated daily and annual emissions from project operations compared to BAAQMD thresholds of significance. As indicated in Table 4.2-5, the project operational emissions would be below the BAAQMD's significance thresholds and would therefore be **less than significant**.

**Table 4.2-6 Estimated Operational Emissions**

Condition	ROG	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO
Project Daily Emissions	0.56	1.48	0.09	0.09	7.68
Significance Threshold	54	54	82	54	---
Significant? (yes/no)	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Project Annual Emissions	0.01	0.04	<0.01	<0.01	0.19
Significance Threshold	54	54	82	54	---
Significant? (yes/no)	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

*Source: (RCH 2024)*

Based on the air emissions analysis conducted, long-term operation of the project would not exceed applicable significance thresholds intended to protect regional and local air quality conditions and public health. Project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard. As such, the impact would be **less than significant**.

### c) Would the project expose sensitive receptors to substantial pollutant concentrations?

#### Construction

The project would have a less than significant effect on the impact described after the implementation of mitigation. The project site has residential communities within 1,000 feet of residences to the south, west, and northwest, as well as Noble Elementary School located within

<sup>1</sup> Fuel usage is estimated using the CalEEMod output for CO<sub>2</sub>, and a 8.91 kgCO<sub>2</sub>/gallon (gasoline) and 10.15 kgCO<sub>2</sub>/gallon (diesel) conversion factor (U.S. Environmental Protection Agency 2018).

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0.2 mile to the southwest of the project site. Due to the presence of sensitive receptors within 1,000 feet of the project and construction duration lasting more than 6 months, an HRA was conducted following methodologies in OEHHA's *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Because construction activities will last more than 6 months, the project would constitute a new emission source of DPM and PM<sub>2.5</sub>. Studies have demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk.

In accordance with OEHHA *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, the HRA was accomplished by applying the highest estimated concentrations of TAC at the nearest receptors to the established cancer potency factors and acceptable reference concentrations for non-cancer health effects. Increased cancer risks were calculated using the modeled DPM concentrations and OEHHA-recommended methodologies for both child exposure (3rd trimester through two years of age) and adult exposure. The cancer risk calculations were based on applying the OEHHA-recommended age sensitivity factors and breathing rates, as well as fraction of time at home and an exposure duration of 30 years, to the DPM concentration exposures. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing air pollutants.

The conservative methodologies applied in the HRA overestimate both non-carcinogenic and carcinogenic health risk, possibly by an order of magnitude or more. Therefore, for carcinogenic risks, the actual probabilities of cancer formation in the populations of concern due to exposure to carcinogenic pollutants are likely to be lower than the risks derived using the HRA methodology. The extrapolation of toxicity data in animals to humans, the estimation of concentration prediction methods within dispersion models; and the variability in lifestyles, fitness and other confounding factors of the human population also contribute to the overestimation of health impacts. Therefore, the results of the HRA are highly overstated. Because an HRA overestimates cancer risk, the results should not be interpreted as the expected rates of cancer or other potential human health effects, but rather as estimates of potential risk or likelihood of adverse effects based on current knowledge, under a number of highly conservative assumptions and the best assessment tools currently available.

The maximum cancer risk, chronic hazard impacts, and concentrations of PM<sub>2.5</sub> from project construction emissions are shown in Table 4.2-7 and further details are provided in the HRA in Appendix B.

### ***Cancer Risk***

As shown in Table 4.2-7 the maximum cancer risk from unmitigated project construction emissions for a residential-adult receptor would be 1.17 per million and for a residential-child receptor would be 16.9 per million. The maximum exposed individual residence (MEIR) due to project construction is located along El Grande Drive (south of the washwater ponds). The cancer risk for a child due to unmitigated construction activities are greater than the BAAQMD threshold of 10 per million.

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**Table 4.2-7 Estimated Construction Health Impacts at Existing Receptors**

Source	Cancer Risk (child)	Cancer Risk (adult)	Hazard Impact	PM2.5 Concentration
<b>Unmitigated Proposed Project Construction</b>	17.1 per million	1.12 per million	0.01	0.24
Significance Threshold	10.0 per million	10.0 per million	1.00	0.30
Significant? (yes/no)	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Mitigated Proposed Project Construction</b>	5.19 per million	0.37 per million	<0.01	0.11 <sup>a</sup>
Significance Threshold	10.0 per million	10.0 per million	1.00	0.30 per
Significant? (yes/no)	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

<sup>a</sup> While the PM2.5 concentration would not exceed the significance threshold, application of Mitigation Measure AQ-1 would further reduce emissions.

Source: (BAAQMD 2022)

Valley Water would implement Mitigation Measure AQ-2, which requires use of USEPA certified Tier 4 construction with CARB Tier 3 diesel particulate filters equipment for any construction equipment operating more than two continuous days or 20 hours total during construction, use of electric power where feasible, location of any generators more than 100 feet from sensitive land uses, and using equipment that meets CARB's 2010 engine emission standards or cleaner. With implementation of Mitigation Measure AQ-2, the maximum cancer risk from project construction would be reduced to 0.39 per million for a residential-adult receptor and 5.15 per mission for a residential-child receptor. The impact from DPM emissions would not exceed the BAAQMD significance threshold of 10 per million and the impact would **be less than significant after implementation** of MM AQ-2.

### **Hazard Index DPM**

In the HRA, both acute (short-term) and chronic (long-term) adverse health impacts unrelated to cancer are measured against a hazard index (HI). The HI is defined as the ratio of the predicted incremental DPM exposure concentration from the project to a reference exposure level (REL) that could cause adverse health effects. The impact is considered significant if the overall HI for the highest-impacted organ system is greater than 1.0.

As shown in Table 4.2-7, the unmitigated chronic HI would be 0.01, based on a project-related maximum annual diesel concentration of 0.06 µg/m<sup>3</sup> (per dispersion modeling analysis). The chronic HI would be below the project-level significance threshold of 1 and the hazard impact of the project would therefore be **less than significant**.

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### *Hazard Index PM<sub>2.5</sub>*

. The HRA also estimates the exposure of sensitive receptors to project-related concentrations of PM<sub>2.5</sub>. The 2022 BAAQMD *Air Quality Guidelines* requires inclusion of PM<sub>2.5</sub> exhaust and fugitive dust emissions in the HI analysis. The project's unmitigated annual PM<sub>2.5</sub> concentration from construction activities with implementation of BMP AQ-1 would be 0.19 µg/m<sup>3</sup>, which would be below the BAAQMD threshold of 0.3 µg/m<sup>3</sup> and would be considered **less than significant**.

### **Operation**

Project operation would have a less than significant effect on the impact described. The project operations would include a new standby diesel generator for emergency use. The maximum cancer risk from project operational emissions (i.e., standby generator) for an adult residential receptor would be 0.4 per million. The maximum cancer risk from operational emissions for a child receptor would be 5.2 per million. As such, the cancer risk due to operational activities is less than the BAAQMD threshold of 10 per million and would be less than significant.

#### **d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

The project would have a less than significant effect on the impact described. Other emissions potentially associated with the project would be predominantly associated with the generation of odors during project construction and operation. The occurrence and severity of odor impacts would depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. However, odors disperse less quickly during inversions or during calm conditions, which hamper vertical mixing and dispersion. The BAAQMD's significance criteria for odors are subjective and are based on the number of odor complaints generated by a project. Generally, the BAAQMD considers any project with the potential to frequently expose members of the public to objectionable odors to cause a significant impact. The BAAQMD significance threshold for odor impacts is five confirmed complaints per year averaged over three years.

### **Construction**

The project would have a less than significant effect on the impact described. Project construction would involve the use of a variety of gasoline or diesel-powered equipment that would emit exhaust fumes, while project operations would involve the use of a diesel emergency generator. There is a small hill that separates the project construction site from the nearest sensitive receptors directly to the south. The distance to the nearest residence is approximately 90 feet from the construction area. The hillslope to the east of the construction area intercepts the project site from residents to the southeast. The prevailing wind direction in the San Jose area is north-northwest and receptors to the south would be most affected by any odors generated.

Exhaust fumes, particularly diesel-exhaust, may be considered objectionable by some people. In addition, architectural coatings would also emit temporary odors. However, these emissions would occur intermittently throughout the workday due to intermittent heavy equipment use and limited use of architectural coatings and would dissipate rapidly within increasing distance



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from the source. Therefore, construction activities would not be likely to expose a substantial number of people to frequent odorous emissions. As such, the impact would be less than significant.

### **Operation**

The project would have a less than significant effect on the impact described. The existing PWTP RMS involves use of open ponds to condense solids and has a dewatering building for thickening of sludge. Sludge is then stockpiled in the open air. The project would improve the RMS system by including use of gravity thickeners to further thicken the sludge. The sludge would be transferred from the gravity thickeners to enclosed sludge storage/mixing tanks. Because the thickened sludge would be enclosed within a sludge storage/mixing tanks and would not be open to the air, the project would reduce the odors generated during operation compared to the existing RMS process.

Only two odor complaints were issued to the BAAQMD for the period from January 1, 2017, to June 1, 2022 for the PWTP. Given the project design elements would reduce odors and the very limited odor complaint history, the project would not result in significant odor impacts.

### **Mitigation Measures**

#### **Mitigation Measure AQ-1: Dust Control**

The contractor shall implement the following dust control measures consistent with BAAQMD Guidelines:

- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted wood chips, mulch, or gravel.

#### **Mitigation Measure AQ-2: Construction Equipment Air Quality Standards**

The contractor shall implement the following measures during construction to reduce construction exhaust emissions:

- All construction equipment larger than 50 horsepower used at the project site for more than two continuous days or 20 hours total shall utilize diesel engines that are USEPA certified "Tier 4 final" emission standards for particulate matter and equipped with CARB-certified Level 3 Diesel Particulate Filters. The construction contractor shall submit specifications of the equipment to be used during construction and Valley Water shall confirm the equipment meets this requirement/standard.
- Equipment such as air compressors, concrete/industrial saws, forklifts, light stands, manlifts, pumps, and welders shall be electric or alternative-fueled (i.e.,

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non-diesel), where feasible. Pole power shall be utilized at the earliest feasible point in time and shall be used to the maximum extent feasible in lieu of generators. If stationary construction equipment, such as diesel-powered generators, must be operated continuously, such equipment must be Tier 4 Final construction equipment or better and located at least 100 feet from air quality sensitive land uses (e.g., residences, schools, childcare centers, hospitals, parks, or similar uses), whenever possible.

- At a minimum, construction vendors, contractors, and/or haul truck operators commit to using 2010 model year trucks (e.g., material delivery trucks and soil import/export with a gross vehicle weight rating of at least 14,001 pounds), that meet CARB's 2010 engine emissions standards or newer, cleaner trucks.

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### 4.2.4 Biological Resources

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>4. BIOLOGICAL RESOURCES. Would the project:</b>				
a) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The environmental setting was informed by the Biological Resources Report prepared for this project and is included in Appendix C.

### Project Site

The project site consists of developed lands with buildings and other structures, access roads, water treatment infrastructure, and other cleared areas that do not support vegetation.

Residential uses surround the project site to the north, west, and south and include mostly single-family homes. In these areas, there are small undeveloped grassy areas between the

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project and nearby residential neighborhoods. To the north/northeast of the project site are additional grassland areas.

### **Vegetation Communities and Land Cover Types**

#### ***California Annual Grassland***

The primary vegetation type/community on the project site is California annual grassland (1.68 acres). Wildlife use of this habitat on the project site is limited due to the relatively small extent of the grassland, the existing water treatment facilities and paved areas and its position on the periphery of the project site, and the developed, residential land uses that surround the project site on three sides.

#### ***Serpentine Bunchgrass Grassland***

Patches of serpentine bunchgrass grassland (0.44 acre) are present on the project site, primarily along the northwestern margin. Native plants present within this habitat include nodding needlegrass, which provides greater than 30 percent cover within this land cover type. Nodding needlegrass is occasionally present, but much more sparsely, throughout surrounding areas mapped as California annual grassland. Additionally, unlike areas mapped as California annual grassland, there is little to no tree or shrub canopy layer within the serpentine bunchgrass grassland on the project site. Serpentine bunchgrass grassland is a sensitive vegetation community.

#### ***Urban-Suburban***

A 1.33-acre portion of the project site consists of existing developed areas that fall within the Santa Clara Valley Habitat Plan's (VHP's) urban-suburban land cover type. These areas include paved roadways and existing infrastructure, such as buildings and associated equipment, within the project site.

### **Wetlands and Riparian Areas**

No wetlands or riparian areas occur within the project site.

### **Wildlife Movement**

The project site is located along the eastern boundary of suburban development associated with the city of San Jose. The project's open habitats are contiguous with extensive open habitats of the Diablo Range to the east and some dispersal of animals between the project site and the immediate adjacent undeveloped areas. However, to the west of the project site, the City of San Jose and the larger metropolitan complex of South Bay cities form a nearly impassable barrier to long-range, east-west movements by non-flying animals. Although the Diablo Range to the east of the project site provides extensive natural habitats that support long-range movements by a variety of animals, the project site is not situated within this movement corridor. Therefore, the project site is not located within a particularly important area for regional wildlife movement.

Most larger animals that stray into the suburban matrix near the project site during their movement or migration events are not likely to remain there for long, as many of these species, including bobcats, coyotes, and mountain lions, are averse to human interaction. In contrast, wildlife residing on or near the project site are accustomed to human disturbance, such as the

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numerous black-tailed deer (including fawns, does, and bucks) observed on the project site. Many of these species will navigate readily through the matrix of suburban, agricultural, and rural-residential landscapes. Thus, while small-scale, local movement of wildlife may occur throughout the project site, it not expected that animals would use the project site during regionally important, landscape-level movements or migration.

### **Special Status Species**

The following databases were reviewed for a 5-mile radius surrounding the project site, and queries were conducted of the Calaveras Reservoir, California USGS 7.5-minute quadrangle and surrounding eight quadrangles (La Costa Valley, Mendenhall Springs, Mount Day, Lick Observatory, San Jose East, San Jose West, Milpitas, and Niles) to evaluate the potential for special status species to occur in the project site (H.T. Harvey and Associates 2024b):

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB)
- Habitat and species information from the VHP
- The VHP Geobrowser
- iNaturalist
- eBird
- California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, 3, and 4 lists

### ***Special Status Plant Species***

The CNPS (California Native Plant Society 2024) and CDFW (California Department of Fish and Wildlife 2024) identify 70 special status plant species as potentially occurring in at least one of the nine USGS 7.5-minute quadrangles containing or surrounding the project site (Appendix C). Of the 70 potentially occurring special status plant species, 65 were determined to be absent from the project site due to either: (1) absence of suitable habitat types, (2) lack of specific microhabitat or edaphic requirements, (3) the elevation range of the species is outside of the range of the project site, and/or (4) the project site is outside the species' known geographic range and/or there are no nearby extant records. Of the 5 special status plant species for which suitable habitat is present on the site, focused surveys conducted during the on May 21, 2024, determined that all are absent from the site (H.T. Harvey and Associates 2024b) .

### ***Special Status Wildlife***

Special status animal species with potential to occur on the project site based on the results of the database search and May 2024 site survey are presented in Table 4.2-8, below. Most of the special status species listed in Table 4.2-8 are not expected to occur on the project site because it lacks suitable habitat, is outside the known range of the species, and/or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat.



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**Table 4.2-8. Special-Status Animal Species, Their Status, and Potential for Occurrence on the Project Site**

Name	Status	Habitat	Potential for occurrence on project site
Crotch's bumble bee ( <i>Bombus crotchii</i> )	SC	Open grassland and scrub habitats with abundant flowers providing nectar and pollen and with subterranean nest sites (such as animal burrows).	<b>May be present.</b> Since 2019, there have been a number of records of small numbers of individuals from scattered locations in Santa Clara County as close to the project site as Sierra Vista Open Space, approximately 2.1 miles to the east, where the species was recorded in June 2023 and May 2024 (Bumble Bee Watch 2024), indicating that the species is still extant in the county. The project site does not provide high-quality habitat for this species as the project site is dominated by non-native grasses, and flowering plants are not abundant. However, individuals may occur occasionally and in small numbers as foragers, and the possibility that nesting could occur on the site (e.g., in a ground squirrel burrow) cannot be ruled out.
Northwestern pond turtle ( <i>Actinemys marmorata</i> )	CSSC, FT(P), VHP	Permanent or intermittent/seasonal water in a variety of habitats. Nests in uplands surrounding aquatic habitats, typically within 600 feet, but up to 0.25 mile away, depending on habitat conditions.	<b>May be present.</b> Northwestern pond turtles are known in the project vicinity, with the closest CNDDDB-mapped occurrence in a pond approximately 0.32 mile west-southwest of the project site (California Department of Fish and Wildlife 2024).
California red-legged frog ( <i>Rana draytonii</i> )	FT, CSSC, VHP	Streams, freshwater pools, and ponds with emergent or overhanging vegetation	<b>May be present.</b> California red-legged frogs are known in the project site vicinity; the closest records of the species to the project site are from Sierra Vista Open Space Preserve, approximately 1.63 miles to the east (California Department of Fish and Wildlife 2024). While the closest known occurrences to the project site near the limits of the dispersal capabilities of the species, there are no substantial barriers to dispersal between these known populations and the project site. The project site lacks suitable breeding habitat although ostensibly suitable dispersal and foraging habitat is present on the project site. Given that populations exist within the known dispersal distance of this species and that dispersal from nearby ponds or creeks is possible, the presence of California red-legged frogs, at least occasionally and in small numbers, cannot be ruled out.

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Name	Status	Habitat	Potential for occurrence on project site
Tricolored blackbird ( <i>Agelaius tricolor</i> )	ST, VHP	Highly colonial nester that establishes dense breeding colonies in emergent vegetation, grain fields, fallow fields, extensive thickets of blackberry, ruderal vegetation such as mustard or thistle, and occasionally in early-successional riparian habitat. Nesting colonies usually are located near fresh water. Tricolored blackbirds are itinerant nesters and, because their nesting habitat is ephemeral, it is possible for this species to colonize or recolonize an area as suitable breeding habitat becomes available.	<b>May be present as nonbreeder.</b> In Santa Clara County, the species has bred in only a few scattered locations and is absent from, or occurs only as a nonbreeder in, most of the County (Rottenborn 2007b). The species typically nests in flooded, thorny, or spiny vegetation such as blackberry, cattails, willows, thistles, or nettles, none of which is present on or adjacent the project site. No cattails are present at either pond, and no large patches of thistles or other spiny vegetation are present on the project site. The scattered trees present on the project site do not provide suitable nesting habitat for this species. Therefore, suitable nesting habitat is absent from the project site. Tricolored blackbirds forage in agricultural fields, grasslands, and other open habitats, and small numbers could occasionally forage in the grassland and wetland habitats on the project site during either the breeding or nonbreeding season.
Mountain lion (Southern California/Central Coast ESU) ( <i>Puma concolor</i> )	SC	Has a large home range size and occurs in a variety of habitats. Natal dens are typically located in remote, rugged terrain far from human activity. May occasionally occur in areas near human development, especially during dispersal.	<b>May be present as nonbreeder.</b> In the project site vicinity, there are verified sightings and numerous unpublished reports. Occurs widely, though at low densities, throughout the Santa Cruz Mountains and Diablo Range, and may disperse into lowland/valley floor areas. Mountain lions are not expected to regularly use the project site or establish a den on the site due to high levels of human activity and a lack of suitable denning habitat, but individuals may occur on the site as rare dispersants due to the site's location on the periphery of the Valley floor as well as during hunting events as multiple deer were observed using the project site during the reconnaissance survey.
Northern harrier ( <i>Circus hudsonius</i> )	CSSC nesting	Nests in marshes and moist fields with tall vegetation and sufficient moisture to inhibit accessibility of nest sites to predators. Forages over open areas.	<b>May be present as nonbreeder.</b> This species, which is considered special status only when breeding, occurs year-round in the project site vicinity. There are no wetlands present on the project site, and this precludes this species' presence as a breeder. However, the species may occur as an occasional forager.
Burrowing owl ( <i>Athene cunicularia</i> )	CSSC, VHP	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those	<b>May be present as nonbreeder.</b> Burrows of California ground squirrels on the project site provide ostensibly suitable nesting and roosting habitat for this species, and grasslands on the site provide ostensibly suitable foraging habitat.

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Name	Status	Habitat	Potential for occurrence on project site
		made by California ground squirrels.	However, only three ground squirrel burrows were observed during the survey. Burrowing owls are not known to occur on the project site, and no individuals were observed during the May 2024 reconnaissance surveys. It is possible, however, that burrowing owls may occur on the site as infrequent transients or foragers in low numbers during winter and migration, and nonbreeders could occasionally roost in the handful of ground squirrel burrows on the project site.
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	CSSC nesting	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats.	<b>May be present as breeder.</b> Loggerhead shrikes are known to nest in the project vicinity where open grassland, ruderal, or agricultural habitat with scattered brush, chaparral, or trees providing perches and nesting sites are present (Bousman 2007a). Moderately suitable nesting habitat is present within the project site, and up to one pair may nest in trees on or adjacent to the project site. However, due to recent declines in this species' South Bay populations, the probability of nesting is low.
Yellow warbler ( <i>Setophaga petechia</i> )	CSSC nesting	Nests in riparian woodlands.	<b>May be present as nonbreeder.</b> Yellow warblers are not known to breed in the vicinity of the project site, and no suitable habitat is present on the project site. However, migrants may occur on the project site during spring and fall migration.
Grasshopper sparrow ( <i>Ammodramus savannarum</i> )	CSSC nesting	Nests and forages in grasslands, meadows, fallow fields, and pastures.	<b>May be present as nonbreeder.</b> Known to occur in the region primarily in grasslands and less frequently disturbed agricultural habitats, mostly in the foothills. This species does not breed in grasslands on the Santa Clara Valley floor. Small numbers of individuals may forage in grasslands in the project site during migration. No suitable nesting habitat occurs on the project site, and no individuals were observed during the reconnaissance survey in May 2024.
Bryant's savannah sparrow ( <i>Passerculus sandwichensis alaudinus</i> )	CSSC	Nests in pickleweed dominant salt marsh and adjacent ruderal habitat.	<b>May be present as nonbreeder.</b> In the South San Francisco Bay, nests primarily in short pickleweed-dominated portions of diked/muted tidal salt marsh habitat and in adjacent ruderal habitats though small numbers nest in extensive grasslands within the Santa Cruz Mountains as well. No suitable nesting habitat occurs on the project site, and no individuals were observed during the reconnaissance survey in May 2024.

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Name	Status	Habitat	Potential for occurrence on project site
Pallid bat ( <i>Antrozous pallidus</i> )	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	<b>May be present as nonbreeder.</b> The species is not known in the project site vicinity. The closest record is a 2007 record in the vicinity of Vista Point Court, located approximately 5.87 miles south-southeast of the project site (CNDDDB 2024). No known maternity colonies of this species are present in the vicinity of the project site. No suitable roosting habitat was identified during the May 2024 reconnaissance survey. No large tree cavities or suitable artificial structures suitable to support a roost of this species were observed during the reconnaissance survey. It is unlikely that the species occurs on the site at all due to nearby urbanization; however, individuals from distant colonies (especially in the Diablo Range to the east) could occasionally forage on the project site.
San Francisco dusky-footed woodrat ( <i>Neotoma fuscipes annectens</i> )	CSSC	Nests in a variety of habitats including riparian areas, oak woodlands, and scrub.	<b>Present.</b> Suitable habitat for this species is present in the southern side of the PWTP site, where at least one occupied nest was observed during the May 2024 reconnaissance survey. Food plants (e.g., toyon ( <i>Heteromeles arbutifolia</i> ) and coast live oak ( <i>Quercus agrifolia</i> ) are also present within the PWTP.
American badger ( <i>Taxidea taxus</i> )	CSSC	Burrows in grasslands and occasionally in infrequently disked agricultural areas.	<b>May be present as nonbreeder.</b> Known to occur in the project site vicinity as close as Sierra Vista Open Space Preserve, located approximately 1.88 miles east of project site. Found primarily in extensive grasslands and agricultural habitats in the Diablo Range. Badgers are not expected to regularly use the project site or establish a den on the site due to high levels of human activity, but individuals may occur on the site as infrequent dispersants or foragers due to the site's location in close proximity to known populations.
Golden eagle ( <i>Aquila chrysaetos</i> )	SP	Breeds on cliffs or in large trees (rarely on electrical towers); forages in open areas.	<b>May be present as nonbreeder.</b> No suitable nesting habitat for golden eagles is present on the project site. This species occurs in the project vicinity as an occasional forager, primarily during migration and winter. The project site provides only very limited foraging habitat for this species due to its small size as well as the lack of suitable prey (no California ground squirrels were observed, and only three old CAGS burrows were found), and golden eagles are expected to forage on the site rarely, if at all.
White-tailed kite ( <i>Elanus leucurus</i> )	SP	Nests in tall shrubs and trees; forages in	<b>May be present as breeder.</b> White-tailed kites are common residents in open areas in the project

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Name	Status	Habitat	Potential for occurrence on project site
		grasslands, marshes, and ruderal habitats.	vicinity. Some of the larger trees along the project site (e.g., along the fence line) may provide suitable nesting habitat for this species. No white-tailed kites or nests of this species were observed on or adjacent the site during the May 2024 reconnaissance surveys; however, up to one pair of white-tailed kites may nest in trees on or adjacent the project site. Individuals may forage in open habitats on and adjacent to the site year-round.

Key to Abbreviations: Status: Federally Endangered (FE); Federally Threatened (FT); Federally Proposed as Threatened [FT(P)]; Federal Candidate for Listing (FC); State Endangered (SE); State Threatened (ST); State Candidate for Listing (SC); State Fully Protected (SP); California Species of Special Concern (CSSC); Santa Clara Valley Habitat Plan Covered Species (VHP).

*Source: (H.T. Harvey and Associates 2024a)*

### Discussion

- a) **Would the Project 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?**

### Special Status Plant Species

#### *PWTP Site*

No, the project would not have the impact described. No special status plant species were observed within the project site during surveys during the appropriate blooming season in 2024 (H.T. Harvey and Associates 2024a). As such, Due to the absence of special-status plants from the project disturbance area, the project would have **no impact** on special status plants at the PWTP site.

#### *Off-site Staging Areas*

The project would have a less than significant effect on the impact described following the implementation of mitigation. Off-site staging in developed or disturbed sites would not impact special status plant species. Where there is vegetation, any removal of a special status plant species due to staging activities would be a significant impact. Accordingly, for off-site staging that contains vegetation, Mitigation Measure BIO-1 would be implemented. Mitigation Measure BIO-1 requires a pre-activity survey within any staging area that contains vegetation or habitat and avoidance of any special status species or habitats that occur in the area. Because special status plant species would be avoided if encountered, the impact would be **less than significant with mitigation**.

### Special-Status Wildlife – PWTP Site

Special-status species with a potential to occur on the project site are listed in Table 4.2-8. The probability of any special status wildlife species occurring on the project site is low considering the extent of development on the site and the surrounding area.

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### *VHP Covered Species*

The project would have a less than significant effect on the impact described. Northwestern pond turtle, California red-legged frog, burrowing owl, and tricolored blackbird are covered under the VHP. The PWTP is covered under the Santa Clara Valley Habitat Plan (VHP) and Valley Water has paid VHP permanent impact fees for the entire PWTP property. The project would need to comply with the conditions of the VHP relevant to the project. Specific conditions that would apply to the project include Condition 1, which requires that actions conducted under the Plan must comply with the provisions of the Migratory Bird Treaty Act (MBTA) and avoid killing or possessing covered migratory birds, their young, nests, feathers, or eggs; Condition 3, Maintain Hydrologic Conditions and Protect Water Quality which includes compliance with Valley Water stormwater management plan; and Condition 13, Serpentine and Associated Covered Species Avoidance and Minimization, which requires avoidance of serpentine grassland where feasible. Condition 13 includes the following requirements for impacts on serpentine grassland where avoidance is not feasible:

- Conduct surveys of the serpentine vegetation to inventory for covered species and evaluate habitat quality for covered species.
- For portions of the development area that are in Bay checkerspot butterfly habitat units identified in Appendix D, survey the site for the presence of larval host plants of Bay checkerspot butterfly. If larval host plants are found, conduct reconnaissance level surveys for adult butterflies during the peak of the flight period to determine species presence or absence.
- Locate the project footprint as far from the covered species or the highest quality serpentine habitat as is feasible. Utilize applicable buffers as identified in this chapter.
- If covered plants occur on the site and cannot be avoided, notify the Implementing Entity of the construction schedule so that plant salvage can be considered and potentially implemented (see Condition 19).

While the project includes grading within 0.09 acre of serpentine bunchgrass grassland, the project complies with the requirements of VHP Condition 13 because surveys were conducted of the serpentine grassland, no covered plants occur in the project site, and the project site does not contain habitat for Bay checkerspot butterfly. The project is also a replacement of existing infrastructure and the minor expansion of the access road would not substantially change habitat conditions in the area. As such, because the project would comply with the conditions of the VHP and the impacts on VHP covered species were previously addressed in the VHP Environmental Impact Report (EIR) and would be less than significant with implementation of VHP conditions, the impact on VHP covered species would be **less than significant**.

### *Crotch's Bumble Bee*

The project would have a less than significant effect on the impact described following the implementation of mitigation. The project site contains burrows which could be habitat for Crotch's bumble bee. The habitat for Crotch's bumble bee on the project site is limited due to the presence of non-native grasses, and flowering plants are not abundant. However, small



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numbers and individuals of Crotch's bumble bee may enter the site as foragers and the possibility that nesting could occur on the site cannot be ruled out. If a nest of Crotch's bumble bee were to occur in the project site, the impact from ground disturbing activities including excavation on Crotch's bumble bee would be significant. The project will implement Mitigation Measure BIO-2, which requires pre-construction surveys for Crotch's bumble bee if construction starts during the flight season and avoidance of any nest until the nest is no longer active. As such, because Crotch's bumble bee would be avoided with the implementation of Mitigation Measure BIO-2, the impact on Crotch's bumble bee would be **less than significant with mitigation**.

### *Mountain Lion*

The project would have a less than significant effect on the impact described. The project site is not located within suitable breeding habitat for mountain lion and would have no impact on a mountain lion den. The project is located within the dispersal range of mountain lion. As such, because the project is located within the fenced PWTP and involves replacement of infrastructure within a developed area, the project impact on mountain lions would be **less than significant**.

### *San Francisco Dusky Footed Woodrat*

The project would have a less than significant effect on the impact described following the implementation of mitigation. San Francisco dusky-footed woodrat is present within the PWTP site in proximity to the project site. If the project grading and roadway improvements required removal of a tree containing an active San Francisco dusky footed woodrat, the impact on San Francisco dusky footed woodrat would be significant. Mitigation Measure BIO-3 requires pre-construction surveys for dusky footed woodrats and avoidance of any active nests. As such, because any active nests of San Francisco dusky-footed woodrat would be avoided, the impact on San Francisco dusky footed woodrat would be **less than significant with mitigation**.

### *American Badger*

The project would have a less than significant effect on the impact described. The project site contains grasslands, which are suitable foraging habitat for American badger. The project site does not contain suitable breeding habitat for American badger due to the existing level of disturbance, and development of the project would thus not impact any den of American badger. As such, the limited area of new grading and development within the PWTP site would not result in a substantial loss of foraging habitat/grassland for American badger, and the impact on American badger would be **less than significant**.

### *Migratory Birds and Golden Eagle*

The project would have a less than significant effect on the impact described. With the exception of white-tailed kite, the project site does not provide breeding/nesting habitat for special status birds. The limited area of new pavement at the project site (less than 1 acre) would not cause a substantial loss of foraging habitat that would affect any migratory bird species or golden eagle. Additionally, construction-related noise, dust, and vibration could disrupt nesting behavior and young rearing of adjacent nests and potentially lead to reduced nest success and/or

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abandonment. As part of the project, Valley Water would implement BMP BI-5, which requires nesting bird surveys and avoidance of any active nests as well as BMP BI-6, which allows for use of nest exclusion devices to prevent nesting. Valley Water would also implement Condition 1 of the VHP, which requires avoidance of any species protected under the MBTA. As such, the impact on migratory birds and golden eagles would be **less than significant** with implementation of Valley Water BMPs, and no mitigation is required.

### **Special-Status Wildlife – Off-site Staging Areas**

The project would have a less than significant effect on the impact described following the implementation of mitigation. Off-site staging in developed or disturbed sites would not impact special status species. If staging occurs off-site in an area that contains vegetation, there is the potential for the area to contain special status wildlife. Impacts on any nest or den of a special status wildlife species from temporary staging activities would be significant. Loss of active nests would be considered a significant impact. Valley Water would implement BMP BI-5, which requires nesting bird surveys and avoidance of any active nests, as well as BMP BI-6, which allows for use of nest exclusion devices to prevent nesting. Valley Water would also implement Condition 1 of the VHP, which requires avoidance of any species protected under the MBTA. While the Valley Water BMPs would avoid significant impacts on migratory birds at off-site staging, the potential for impacts on other special status wildlife species remains. Mitigation Measure BIO-1 requires a pre-activity survey within any staging area that contains vegetation or habitat and avoidance of any suitable habitat for special status wildlife species that occur in the area. As such, because special status wildlife species would be avoided through avoidance of any suitable habitat areas, the impact would be **less than significant with mitigation**.

- b) Would the Project 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?**

### **Riparian Areas**

#### *PWTP Site*

No, the project would not have the impact described. Riparian areas are not present on the project site or in proximity to the project site. As such, the project would **not impact** any riparian areas.

#### *Off-site Staging Areas*

The project would have a less than significant effect on the impact described following the implementation of mitigation. Off-site staging in developed areas would have no impact on riparian habitat. Off-site staging in undeveloped areas has the potential to encounter and impact riparian habitat. If the staging activity were to remove riparian vegetation, the impact would be significant. Mitigation Measure BIO-1 requires avoidance of riparian areas. As such, because the staging activities would avoid riparian habitat, the impact would be less than significant with mitigation.

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### Sensitive Natural Communities

#### *PWTP Site*

The project would have a less than significant effect on the impact described. Serpentine bunchgrass grassland is a sensitive natural community and occurs within the southwestern portion of the project site. Serpentine bunchgrass grassland is located within the extent of project grading as shown on Figure 4.2-5. The total area of project impact on serpentine bunchgrass grassland would be 0.21 acre, including 0.09 acre of access road intersection, 0.09 acre of grading intersection, and 0.03 acre of staging area intersection. The project is currently covered under the VHP. Valley Water would be required to comply with the conditions of the VHP during implementation of the project, including Condition 13 for serpentine bunchgrass grassland (Santa Clara Valley Habitat Agency 2012).

“In cases where serpentine areas are part of a project site in a developed area, the project will be designed to preserve larger patches of serpentine outside the development area and limit impacts to the smallest patches feasible and to the edges of serpentine patches regardless of their size” (Santa Clara Valley Habitat Agency 2012).

The project grading would consist of a minor extension of grading within the existing PWTP site. The development would minimize impacts on serpentine bunchgrass to the extent feasible by locating development as an extension of the existing PWTP. Serpentine bunchgrass grassland located outside of the project site would not be impacted by project activities. As such, because the project is covered under the VHP and would comply with VHP conditions, which were determined to reduce impacts on biological resources to a less than significant level in the VHP EIR, the impacts of the project on serpentine bunchgrass grassland would be **less than significant**.

#### *Off-site Staging Areas*

The project would have a less than significant effect on the impact described following the implementation of mitigation. Off-site staging in developed areas would have no impact on sensitive natural communities. Off-site staging in undeveloped areas has the potential to encounter and impact sensitive natural communities. If the staging activity were to remove a sensitive natural community, the impact would be significant. Mitigation Measure BIO-1 requires avoidance of any sensitive natural communities. As such, because the staging activities would avoid sensitive natural communities, the impact would be less than significant with mitigation.



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Figure 4.2-5 Vegetation Communities on Project Site



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- c) **Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

### PWTP Site

No, the project would not have the impact described. Federal and state protected wetlands are not present on the project site and as such, **no impacts** on wetlands would occur.

### Off-Site Staging Areas

The project would have a less than significant effect on the impact described following the implementation of mitigation. Off-site staging in developed areas would have no impact on wetlands. Off-site staging in undeveloped areas has the potential to encounter and impact wetlands. If a wetland occurred within the offsite staging area, the impact of staging activities within the wetland would be significant. Mitigation Measure BIO-1 requires avoidance of any wetland areas within the staging areas. As such, because the staging activities would avoid wetlands, the impact would be less than significant with mitigation.

- d) **Would the Project 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?**

### Wildlife Movement

No, the project would not have the impact described. The project site is located within the PWTP and involves replacement of existing water treatment infrastructure. The project site is generally disturbed/developed and the PWTP property is fenced. As such, because the project site is currently developed and fenced, the project improvements at the PWTP would have **no impact** on wildlife movement.

### Wildlife Nursery Sites

The project would have a less than significant effect on the impact described. The PWTP is not a wildlife nursery site. The project is located within the developed PWTP site, which contains water treatment infrastructure and on-going noise and disturbance from operation of the existing water treatment plant. While the project would involve grading into areas containing serpentine bunchgrass grassland, the area of grading is directly adjacent to the area of existing development which is subject to routine disturbance and noise from the existing PWTP operations. As such, because the area does not support wildlife nursery sites, the impact on a wildlife nursery site is **less than significant**.

### Offsite Staging Areas

The project would have a less than significant effect on the impact described following the implementation of mitigation. The offsite staging activities would be temporary and would not affect a native or migratory wildlife corridor. Off-site staging in developed areas would have no impact on wildlife nursery sites. Off-site staging in undeveloped areas has the potential to impact a wildlife nursery site. If the staging activity were to occur in a native wildlife nursery

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site, the impact would be significant. Mitigation Measure BIO-1 requires avoidance of any wildlife nursery sites. As such, because the staging activities would avoid native wildlife nursery sites, the impact would be less than significant with mitigation.

**e) Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

No, the project would not have the impact described. The Project site includes trees. The City of San Jose requires permits to remove street trees, heritage trees, ordinance-size trees, or any tree located on multifamily, commercial industrial, or mixed use property in a common area (City of San Jose, n.d.-b). No street trees, heritage trees, or ordinance trees occur in the project site and the project is not a commercial industrial or mixed use property in a common area. No trees would be removed for temporary staging activities. As such, the project would not conflict with the City's tree removal requirements and **no impact** would occur.

**f) Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

### **PWTP Site**

No, the project would not have the impact described. The Project site is within the planning area of the VHP (Santa Clara County Planning Office, n.d.), which is a Habitat Conservation Plan and Natural Community Conservation Plan. Santa Clara Valley Water District is a permittee under the VHP (ICF International 2012). Valley Water previously paid impact fees for the entire PWTP site including the project site. Valley Water would comply with all VHP conditions a) applicable to the proposed project activities as discussed in a) above. As such, the project would be consistent with the VHP and **no impact** would occur.

### **Off-Site Staging Areas**

No, the project would not have the impact described. The Project site is within the planning area of the VHP (Santa Clara County Planning Office, n.d.), which is a Habitat Conservation Plan and Natural Community Conservation Plan. Santa Clara Valley Water District is a permittee under the VHP (ICF International 2012). Off-site staging would be a temporary activity and would not create any new infrastructure or land uses. Valley Water would also comply with all VHP conditions a) applicable to the proposed project activities. As such, the project would be consistent with the VHP and **no impact** would occur.

## **Mitigation Measures**

### **Mitigation Measure BIO-1: Off-Site Staging Areas**

Valley Water shall conduct a pre-activity biological resource survey of any off-site staging area containing vegetation. The pre-activity survey will document the presence or absence of suitable habitat for special status plants and wildlife, riparian areas, sensitive vegetation communities, or native wildlife nursery sites. Any suitable habitat for special status plants or wildlife, riparian areas, sensitive vegetation communities, wetlands, or wildlife nursery sites



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within the staging area shall be delineated for avoidance by staging activities. If any breeding activity for special status wildlife species is observed within or in proximity to the staging area, a no activity buffer from the special status species shall be defined by a qualified biologist. Staging activities shall not be allowed within the no activity buffer until the nesting activity has ceased as documented by a qualified biologist.

### **Mitigation Measure BIO-2: Crotch's Bumble Bee Avoidance**

Two nesting surveys shall be conducted for Crotch's bumble bee with focus on detecting active nesting colonies within one week and 24-hours immediately prior to ground disturbing activities during the flight season (February to October). If an active Crotch's bumble bee nest is detected, an appropriate no disturbance buffer zone (including foraging resources and flight corridors essential for supporting the colony) shall be established around the nest to reduce the risk of disturbance or accidental take. Nest avoidance buffers may be removed at the completion of the flight season and/or once the qualified biologist deems the nesting colony is no longer active and CDFW has provided concurrence of that determination. If no nests are found but the species is present, a full-time qualified biological monitor shall be present during vegetation removal or ground disturbing activities that are scheduled to occur during the queen flight period (February through March), colony active period (March through September), and/or gyne flight period (September through October).

### **Mitigation Measure BIO-3: San Francisco Dusky Footed Woodrat Avoidance**

A preconstruction survey will be performed by a qualified biologist within seven days prior to the start of ground-disturbing activities to identify the locations of active San Francisco dusky-footed woodrat nests within the project boundary. Any woodrat nests detected will be mapped and flagged for avoidance by the qualified biologists. If active nests are determined to be present, avoidance measures will be implemented first. Because San Francisco dusky-footed woodrats are year-round residents, avoidance mitigation is limited to restricting project activities to avoid direct impacts to San Francisco dusky-footed woodrats and their active nests to the extent feasible. A minimum 10-foot buffer should be maintained between project construction activities and each nest to avoid disturbance. In some situations, a smaller buffer may be allowed if, in the opinion of the qualified biologist, removing the nest would be a greater impact than that anticipated as a result of project activities.

If an unoccupied woodrat nest is found within the site and it cannot be avoided, the nest should be disassembled by hand by the qualified biologist. The nest materials should be relocated off site outside of the wildlife exclusion fencing to prevent rebuilding. If occupied nests are found within the site, and a litter of young is found or suspected, the nest shall be left alone for two to three weeks before a recheck to verify that young are capable of independent survival before proceeding with nest dismantling. Dismantling shall be done by hand, allowing any animals to escape either along existing woodrat trails or toward other available habitat. Valley Water will notify CDFW of any nests, unoccupied or occupied, before they are dismantled.

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### 4.2.5 Cultural Resources

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>5. CULTURAL RESOURCES. Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

#### Record Search

Far Western completed a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System on July 31, 2023 (IC File No.: 23-0030). The archaeological inventory Study Area included the existing PWTP site and a quarter-mile buffer surrounding the site's perimeter, totaling approximately 21 acres. The archaeological inventory included a review of background information relevant to the Study Area, a records search, archival review, assistance for Native American outreach, and a geoarchaeological buried site sensitivity analysis, which includes the Study Area and the surrounding quarter-mile buffer (Far Western Anthropological Research Group, Inc. 2023). The records search identified 44 prior cultural resources studies within the records search area. These past studies documented one cultural resource, a precontact human burial site with four known burials, approximately 672 feet west of the project site (Far Western Anthropological Research Group, Inc. 2023).

#### Field Survey

A site survey of the project site was conducted by Far Western Anthropological Research Group on May 6, 2024. The survey encompassed all areas of potential disturbance within the PWTP site and staging areas on Valley Water property directly west of the PWTP. Designated archaeologists conducting the survey examined areas for any indication of cultural materials. No cultural resources were identified within the Study Area (Far Western Anthropological ResearchGroup, Inc. 2024). No cultural resources were recorded on the project site during the field survey. In addition, none of the existing buildings on the PWTP site qualify as historical structures (Far Western Anthropological ResearchGroup, Inc. 2024).

#### Archaeological Sensitivity

To assess the potential for buried archaeological deposits within the survey area, a sensitivity study was conducted that considers factors that either encouraged or discouraged human use or occupation of certain landforms (i.e., age, geomorphic setting, distance to water and other

## 4 ENVIRONMENTAL EVALUATION

resources), combined with those that affected the subsequent preservation of those landforms (i.e., erosion or burial).

The project site has a low sensitivity for buried resources and a high sensitivity for surface resources near the flocculation/sedimentation basins. However, given previous development in this area for the existing PWTP, the probability of identifying unknown precontact resources in this location is low.

### Discussion

#### a) Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5?

CEQA Guidelines section 15064.5 requires the Lead Agency to consider the effects of a project on historical resources. *Historical resource* is defined as any building, structure, site, object, or district listed in or determined to be eligible for listing in the California Register of Historical Resources (California Register) or determined by a lead agency to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California. The following discussion focuses on architectural and structural resources. Archaeological resources, including archaeological resources that are potentially historical resources according to Section 15064.5, are addressed under impact discussion b, below.

### Project Site

No, the project would not have the impact described. Based on the results of the record search and field survey, the project site does not contain any historic resources. As such, the project would therefore not impact any historic resources, and **no impact** would occur.

### Off-site Staging Area

The project would have a less than significant effect on the impact described following the implementation of mitigation. Off-site staging in previously developed or disturbed areas would have no impact on historic resources. If off-site staging occurs in an undeveloped area, there is the potential that the staging activities could affect historical resources. The impact on historical resources would be potentially significant. Mitigation Measure CUL-1 requires a pre-construction survey of any undeveloped off-site staging area and avoidance of any historic resources documented within the staging area. Historic resources within any undeveloped off-site staging area would be identified for protection by a pre-construction survey and therefore would not be disturbed by project construction. As such, the impact of off-site staging on historical resources would be **less than significant with mitigation**.

#### b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

This section discusses archaeological resources, both as historical resources according to section 15064.5, as well as unique archaeological resources as defined in section 21083.2(g). A significant impact would occur if the project would cause a substantial adverse change to an

## 4 ENVIRONMENTAL EVALUATION

archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

### Project Site

The project would have a less than significant effect on the impact described. The project would not impact any known archaeological resources due to the absence of archaeological resources in the project site according to both the record search results and field survey results. The project involves excavation in areas that are currently developed and, while the potential to encounter archaeological resources is low, unanticipated discovery of archaeological resources cannot be completely ruled out. Inadvertent disturbances of archaeological resources could impact such resources. To minimize potential impacts on previously undiscovered archaeological resources, Valley Water would implement BMP CU-1, which requires avoidance measures and appropriate treatment of archaeological resources if they are discovered during project construction. As such, with implementation of BMP CU-1, impacts associated with the unanticipated discovery of archaeological resources during project construction would **be less than significant**.

### Off-Site Staging Areas

The project would have a less than significant effect on the impact described following the implementation of mitigation. Off-site staging in previously developed or disturbed areas would have no impact on historic resources. Off-site staging in undeveloped areas has the potential to affect archaeological resources. The impact on archaeological resources would be potentially significant. Mitigation Measure CUL-1 requires a pre-construction survey of any undeveloped off-site staging area and avoidance of any archaeological resources documented within the staging area. As such, the impact of off-site staging on archaeological resources would be **less than significant with mitigation**.

### c) Would the Project disturb any human remains, including those interred outside of formal cemeteries?

#### Project Site

The project would have a less than significant effect on the impact described. One burial has been recorded within 0.25 mile of the project site. The burial was 670 feet from the project site, and the burial is not anticipated to extend into the project site. While there are no records of burials within the project site, there remains a low potential for the project excavation to disturb human remains. To minimize impacts associated with the inadvertent discovery and disturbance of buried human remains, Valley Water would implement BMP CU-1 which requires avoidance measures and appropriate treatment of archaeological resources, including human remains during project construction. As such, with implementation of BMP CU-1, impacts associated with the inadvertent discovery and disturbance of buried human remains would **be less than significant**.

#### Off-site Staging Areas

Staging activities do not involve excavation and would not disturb human remains.

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### **Mitigation Measures**

**Mitigation Measure CUL-1 Pre-Activity Survey of Off-Site Staging Area:** Prior to use of any undeveloped off-site staging area, a qualified archaeologist shall conduct a pedestrian cultural resource survey of the staging area. If any archaeological resources including historic era or pre-contact resources are identified within the staging area, an environmentally sensitive area, including a minimum 15-foot buffer from the outer limits of any cultural resource, shall be delineated and excluded from staging activities. The environmentally sensitive area shall be staked and marked for avoidance to ensure avoidance of damage to cultural resources.

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### 4.2.6 Energy

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>6. ENERGY. Would the project:</b>				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

In 2020, California's energy mix totaled approximately 272,576 gigawatt hours (GWh) of electricity, of which 70 percent was from in-state electricity generation and the remaining was imported from the northwestern and southwestern United States (U.S.). About 37 percent of the total energy used in California was produced by natural gas, with other sources including solar (13 percent), hydroelectric (12 percent), wind (11 percent), nuclear (9 percent), and coal (less than 3 percent). The remaining energy was produced by other sources such as geothermal and biomass sources (California Energy Commission, n.d.).

Valley Water buys electricity from the Power and Water Resources Pooling Authority (PWRPA) using the PG&E power network to supply energy to Valley Water's treatment plants. The PWRPA is subject to the State of California Renewables Portfolio Standard (RPS) mandate whereby electric utilities must serve an RPS percentage of retail sales with renewable resources within a given compliance period. The solar PV systems at Valley Waters treatment plants, including at PWTP, contribute to the sale of solar energy to meet the PWRPA RPS requirements. PWTP produces around 409 MWh of solar energy annually (Valley Water 2015).

Valley Water's Climate Change Action Plan (CCAP) also builds on its existing climate change efforts by identifying the ways in which Valley Water is vulnerable to climate change and providing goals, strategies, and possible actions (Santa Clara Valley Water District [Valley Water] 2021). Applicable goals include reducing direct GHG emissions (e.g., by increasing fleet fuel efficiency), expanding renewable energy, improving energy efficiency, and reducing indirect GHG emissions. Valley Water has been successful in achieving carbon neutrality since 2014. Each subsequent year, Valley Water's quantity of offset or sequestered emissions have been greater than the quantity of reported emissions (Santa Clara Valley Water District [Valley Water] 2021).



## 4 ENVIRONMENTAL EVALUATION

### Discussion

- a) **Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?**

### Construction

The project would have a less than significant effect on the impact described. Construction of the project would require the use of fuels (primarily gasoline, diesel, and motor oil) for excavation, grading, and vehicle travel. Fuel would be used for construction worker commute trips, for material hauling trips to and from the project site including from off-site staging areas, and by construction equipment. Energy also would be used indirectly for production of construction materials.

Although the precise amount of construction energy consumption is uncertain, use of fuels would be consistent with typical construction and manufacturing practices. Fuels would not be used wastefully because doing so would not be economically sustainable for contractors. Fuel consumption by construction vehicles and equipment would comply with federal and State standards for vehicle fuel efficiency because all vehicles and machinery that are sold in the U.S. and used in California must meet such standards<sup>2</sup>. Construction activities would minimize energy use as much as possible. Project construction impacts related to energy use and impacts on energy resources would not be wasteful, inefficient, or unnecessary, and the impact would be **less than significant**.

### Operation

The project would have a less than significant effect on the impact described. Operation of the project would have a total estimated increase in the PWTP energy use of 300,000 kilowatt hours (kWh) annually relative to existing operating conditions. Because the project would result in increased efficiency in dewatering of solids, the number of trucks required for hauling of the dewatered solids would decrease due to the dryer and more concentrated solids for hauling.

Although the project would require additional energy annually for operation and maintenance, the energy use would improve the efficiency of the overall treatment process at PWTP and would increase the dewatering of solids, which is more efficient in the long term. With the exception of the emergency standby generator, which would only be used when line power is not available, the operational energy for the project would be supplied from the PWRPA. The

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<sup>2</sup> On July 26, 2007, the CARB adopted the Regulation for *In-Use Off-Road Diesel-Fueled Fleets* (Off-Road Diesel Regulation) to reduce diesel particulate matter (PM) and oxides of nitrogen (NOx) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The Off-Road Diesel Regulation imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; requires all vehicles to be reported to CARB in the online reporting system, DOORS, and labeled; restricts the adding of older vehicles into fleets starting on January 1, 2014; and requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies, VDECS (i.e., exhaust retrofits) (CARB, n.d.).

## 4 ENVIRONMENTAL EVALUATION

energy purchased from the PWRPA for the project will continue to become more efficient and use increased renewable energy to meet RPS mandates over time. Valley Water will also continue to contribute solar energy to the PWRPA, including energy produced at the PWTP. Thus, the increase in energy use by the project would not be wasteful, inefficient, or unnecessary, and the impact would be **less than significant**.

**b) Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?**

The project would have a less than significant effect on the impact described. Applicable plans for renewable energy and energy efficiency include the CARB 2022 Scoping Plan Update (CARB 2022), Valley Water's CCAP and Ends Policies.

The CARB 2022 Scoping Plan Update (CARB 2022) focuses on transportation, electricity generation, manufacturing, and natural and working lands. The project would neither involve an increase in new vehicle trips nor propose any land use change that would result in an increase in vehicle trips, such as urban sprawl, and would not conflict with the CARB 2022 Scoping Plan Update. The project would result in increased efficiency in operation including increased dewatering of solids, which would reduce the amount of truck hauling required during the operational life of the project.

Valley Water's CCAP and Ends Policies focus on reducing energy and emissions from Valley Water as an organization. In accordance with the CCAP and Ends Policies, Valley Water implements actions such as increasing fleet efficiency, increasing use of renewable energy, reducing vehicle travel, and encouraging use of efficient equipment. These actions would extend to the vehicles and equipment used for the project, energy used at the PWTP facility, and construction and maintenance practices by Valley Water or contractors. The PWTP site contains PV panels that generate renewable energy to offset Valley Water's energy use. The PV panels at the PWTP would not be impacted by the project, and the project would not conflict with production of renewable energy on the PWTP site.

The CCAP complements and supports California's targets for renewable energy use and GHG emissions reductions. Therefore, implementation of the project would not conflict with the Valley Water CCAP or State plans for renewable energy or energy efficiency and the impact would be **less than significant**.

### **Mitigation Measures**

No mitigation required.

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### 4.2.7 Geology and Soils

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>7. GEOLOGY AND SOILS. Would the project:</b>				
a) Directly or indirectly cause 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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### Environmental Setting

#### Geotechnical Investigation

A project-specific geotechnical investigation was conducted within the project site in 2023. The discussion of geologic conditions and hazards present within the project site is derived from the *Geotechnical Report for Final Design*. The geotechnical investigation report is provided in Appendix D.

#### Geology

The project site is located in the Coast Range geomorphic province of California. The Coast Range forms a nearly continuous topographic barrier between the California coastline and the San Joaquin Valley.

The project site is underlain by quaternary age landslide deposits due to landslides in the project site and surroundings (see discussion under “Landslide,” below). The Quaternary age landslide deposits at the project site comprise locally derived bedrock materials that range from rubble to nearly intact rock displaced downslope by slumping and sliding (Kleinfelder, Inc. 2023).

#### Seismicity

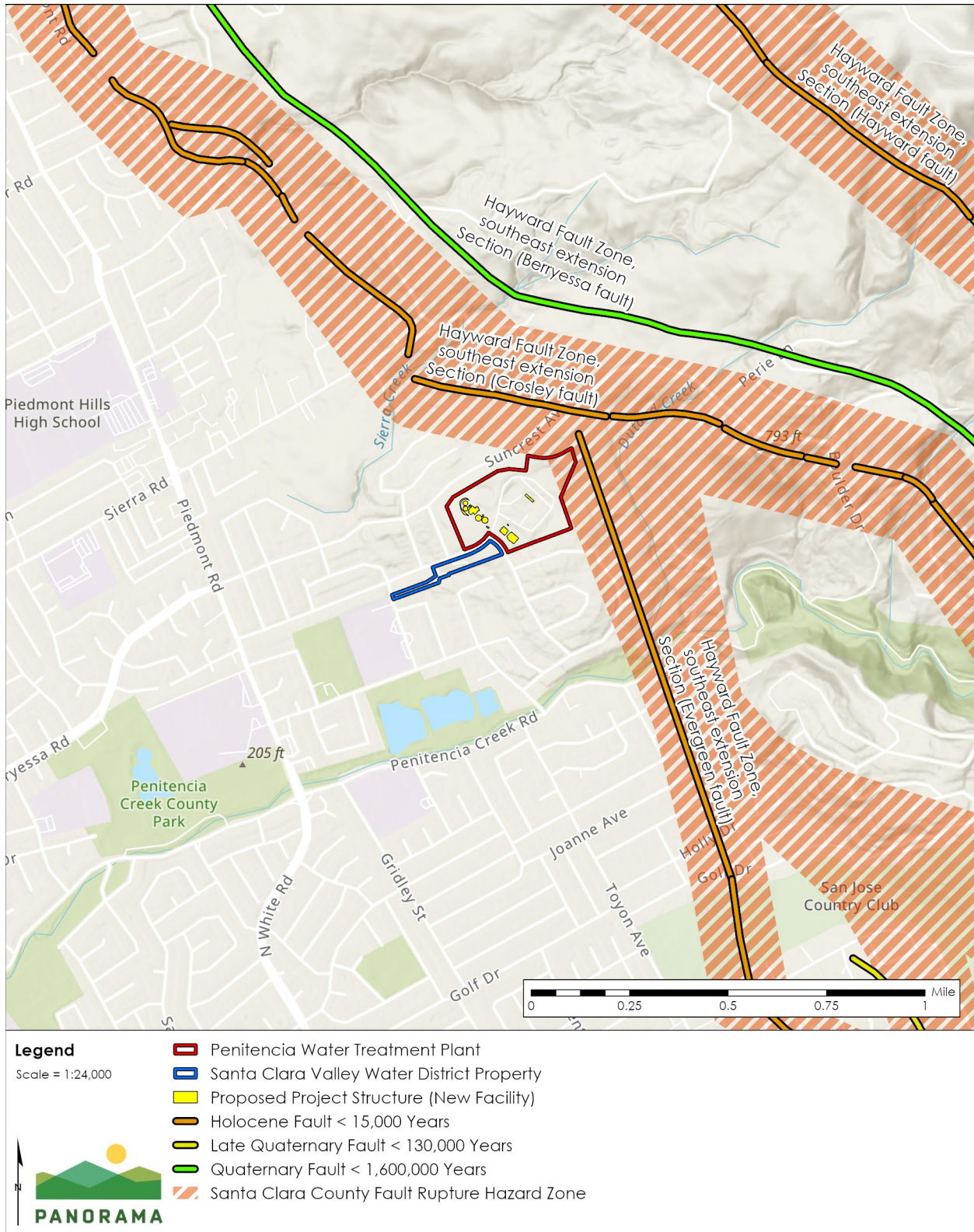
The following section describes several aspects of seismicity, including ground shaking, liquefaction, landslide, slope failure, and lateral spreading.

#### Ground Shaking

The San Francisco Bay Area is situated in one of the most geologically active regions in North America. The nearest zoned active fault as defined by the California Geological Survey and in accordance with the Alquist-Priolo Earthquake Fault Zone Act of 1972 is the Crosley trace of the Hayward fault zone, located approximately 0.2 mile north of the project site Figure 4.2-6. Surface rupture occurs when the ground surface is broken due to fault movement during earthquakes. Such hazards generally occur in the vicinity of an active fault trace. The project site is located approximately 570 feet south and 570 feet west of the Santa Clara County Fault Rupture Hazard Zone boundary for the Hayward fault (i.e., outside the zone of County ordinance required investigation) (California Department of Conservation (CDOC), n.d.-a; Kleinfelder, Inc. 2023; Santa Clara County, n.d.).

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**Figure 4.2-6 Faults and Fault Hazard Zones**



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Seismic risk is not isolated to active faults within a project site; ground shaking could result from displacement of other major regional faults (i.e., Central Calaveras and San Andreas faults). The chance of a magnitude 6.7 or larger earthquake to occur in the greater Bay Area within the next 30 years is 72 percent (U.S. Geological Survey (USGS), n.d.-b). Earthquakes of magnitude 6.7 or larger are capable of causing considerable damage depending on epicenter proximity. The Hayward fault system near the project site is capable of producing an earthquake larger than 7.0 magnitude, which would cause severe shaking (Metropolitan Transit Commission [MTC] and Association of Bay Area Governments [ABAG], n.d.).

### *Liquefaction*

Soil liquefaction is a phenomenon that occurs when saturated sandy or silty soils lose strength during cyclic loading, such as that caused by earthquakes. During the loss of strength, the soil acquires mobility sufficient to permit both horizontal and vertical movements, essentially behaving like a liquid. The factors known to influence liquefaction potential are soil type and depth, grain size, density, groundwater level, degree of saturation, and both the intensity and duration of ground shaking. According to the CDOC, the project is not located on or near a liquefaction zone (California Department of Conservation, n.d.-b). The geotechnical investigation also indicated that the potential for liquefaction and seismically-induced ground failure is low based on relative density, soil type, and groundwater levels encountered in the borings drilled for the study (Kleinfelder, Inc. 2023).

### *Landslide*

The term *landslide* describes a wide range of ground movements, such as rock falls, deep failure of slopes, and shallow debris flows (USGS, n.d.). Landslide movements are interpreted from the geomorphic expression of the landslide deposit and source area and are categorized as falls, topples, spreads, slides, or flows (CDOC, n.d.)

The project site is located within a landslide zone, according to the CDOC, and within an area considered to have the largest and most concentrated area of landslides in the landslide hazard area according to the Municipal Transportation Commission/Association of Bay Area Governments (MTC/ABAG) (CDOC, n.d.-b; MTC and ABAG, n.d.). The entire PWTP is located within the large and deep-seated Penitencia Creek Landslide (PCL). The PCL occupies about 240 acres at the base of the eastern foothills of the Santa Clara Valley. Based on monitoring and analysis of the PCL, approximately 12 inches of creep movement is expected to occur at the project site over the 50-year life of the project. Additional geotechnical evaluation and modeling of seismic induced landslides at the project site indicate that seismic creep of up to 4 feet is possible in a seismic-induced landslide (ENGEO 2024).

### *Lateral spreading*

Lateral spreading can occur on flat or gently sloping ground, but it usually induced from liquefaction. Because the project site is at low risk of liquefaction, it is unlikely that lateral spreading would occur.



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### Soils

According to the Natural Resources Conservation Service (NRCS), the project site is predominantly within Montara-Santerhill complex, 15 to 30 percent slopes (NRCS 2023). The geotechnical investigation borings at the project site found that within the upper 20 to 30 feet below ground surface, the project site is underlain by predominantly very stiff fat and lean clay with varying amounts of sand and gravel (ENGEO 2024).

#### *Expansive Soil*

Expansive soils undergo volume changes (shrinkage and swelling) with changes in moisture content. The shrinking and swelling cycles have the potential to cause distress and damage to structures that are constructed on or within expansive soils unless mitigation measures are implemented. Laboratory testing results indicate that the shallow soil at the project sites generally has a plasticity index (PI) between 22 and 47. PI between 25 and 35 is considered highly expansive, and a PI above 35 is considered critically expansive. Expansive soil shrinks and swells when subjected to fluctuations in moisture content. Expansive soils can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations (ENGEO 2024). Recent geotechnical borings encountered highly plastic clays (plasticity index greater than about 15) in the upper approximately 5 to 15 feet of the soil profile, with measured liquid limits of 52 to 68 and plasticity index ranging from 34 to 47. Within one of the borings on the western end of the project site, potentially expansive clay soils extends to a depth of about 29 feet below ground surface (Kleinfelder, Inc. 2023).

#### *Subsidence and Collapse*

Subsidence occurs when a large land area settles because of over-saturation or extensive withdrawal of groundwater, oil, or natural gas. These areas are typically composed of open -textured soils high in silt or clay content that become saturated. Groundwater was not encountered during the geotechnical investigation, which was conducted to the maximum depth of about 50 feet below ground surface. A groundwater level measurement in 1993 from a piezometer located on the northeast side of the solid handling and dewatering facilities indicated a groundwater level of about 92 feet below ground surface. Groundwater conditions at the site could change due to variations in rainfall, groundwater withdrawal or recharge, construction activities, well pumping, or other factors not apparent at the time the explorations were performed (Kleinfelder, Inc. 2023). Because there is no groundwater pumping at the site, the risk of subsidence is considered low.

### Paleontological Resources

*Paleontological resources* are defined as fossilized remains of vertebrate and invertebrate organisms, fossil tracks, and plant fossils. In California, paleontological resources are generally observed in sedimentary and metasedimentary deposits. Based on a database query of the University of California Museum of Paleontology in search of paleontological discoveries, 191 recorded collections are known from Santa Clara County, 30 of which are from Quaternary era geologic units (University of California Museum of Paleontology Localities (UCMP), n.d.). The fill soils within the project site are imported and have no potential to contain paleontological resources.

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### Discussion

In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District* (CBIA v. BAAQMD, 2015, 62 Cal.4th 369) held that CEQA generally does not require a lead agency to consider the impacts of existing environmental conditions on the future occupants or users of a project. However, if a project could exacerbate pre-existing environmental hazards or conditions, the lead agency must analyze the impact of that exacerbated condition on the environment, which may include future occupants and users within the project site.

- a) **Would the project directly or indirectly cause 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?**

### PWTP Site

The project would have a less than significant effect on the impact described. The project site is not located within a fault rupture hazard zone or within an active fault zone. The Santa Clara County Fault Rupture Hazard Zone is located 570 feet south and 570 feet west of the project site. Although fault rupture is not necessarily bound by the limits of a fault hazard zone and movement along an unknown fault is possible, it is considered unlikely to occur in areas outside of the mapped fault rupture hazard zone, and the possibility of surface fault rupture at the project site is low. Therefore, based on the locations of known faults relative to the project location, the potential for fault rupture to directly or indirectly cause substantial adverse effects at the project site, including the risk of loss, injury, or death would be **less than significant**.

### Off-site Staging Area

The project would have a less than significant effect on the impact described. There is a possibility that an off-site staging area could occur within a fault rupture zone because there are fault rupture zones within 10 miles of the project site. Temporary staging activities would be temporary and would not involve any earth disturbance or introduce any new land uses. Temporary staging activities would thus not cause potential substantial adverse effects such as loss, injury, or death as a result of fault rupture and the impact would be **less than significant**.

- ii. **Strong seismic ground shaking?**

### Construction

The project would have a less than significant effect on the impact described. As described above, the project is in a seismically active area and there is high probability of a 6.7 magnitude earthquake occurring during the lifetime of the project, including during construction. In the event of an earthquake occurring during construction of the project, the construction workers could be exposed to hazards from strong seismic ground shaking. Construction workers would be required to be comply with federal and state occupational safety standards and laws that minimize worker safety risks from both physical and chemical hazards in the workplace, including during emergency situations such as earthquakes. Because construction workers

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would receive training to address earthquake hazards, the impact during construction would be **less than significant**.

### Operation

The project would have a less than significant effect on the impact described. Moderate to major earthquakes generated on the Hayward, San Andreas, and other faults in the region can be expected to cause strong ground shaking at the project site (Kleinfelder, Inc. 2023). The project would be designed and constructed to comply with all applicable federal, State, and local requirements and seismic design criteria. Compliance with California Building Code seismic standards would ensure the project facilities are designed to withstand the seismic hazards present in the project site. As a result, the project would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death from ground shaking. Additionally, the project facilities are primarily subsurface and located a minimum of 80 feet from the nearest private property line. The project site is fenced and restricted from public access, which reduces the risk of project impacts on people or structures from seismic ground shaking. Therefore, the exposure of people or structures to potential substantial adverse effects due to strong seismic ground shaking would be **less than significant**.

### iii. Seismic-related ground failure, including liquefaction?

#### Construction

The project would have a less than significant effect on the impact described. The project site is located in an area where liquefaction potential is low. Off-site staging areas could be located in areas with moderate or high liquefaction potential. Due to the temporary nature of off-site staging activities and because off-site staging would not create any new structures, the impact of off-site staging activities on liquefaction risk would be **less than significant**.

#### Operation

The project would have a less than significant effect on the impact described. Structures founded on or above potentially liquefiable soils may experience bearing capacity failures due to the temporary loss of foundation support and vertical settlements, which can experience ground failure including liquefaction during seismic events. Based on conditions from the geotechnical investigation conducted within the project site, the potential for liquefaction and seismically induced ground failure at the project site is considered low. Due to the low risk of liquefaction or seismically induced ground failure at the project site, the project would not expose people or structures to substantial adverse effects from seismic-related ground failure and liquefaction and the impact would be **less than significant**.

### iv. Landslides?

#### Construction

##### *PWTP Site*

The project would have a less than significant effect on the impact described. The project site is located within a large landslide feature. Construction of the project would require excavation up to 35 feet below grade during construction of the solids storage basins and the washwater

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equalization basins. The entire PWTP is situated on the large deep-seated PCL that has experienced ongoing slow and relatively steady creep movement since the construction of the PWTP in the 1970s. The PCL creep movement has been monitored by Valley Water and landslide displacement of up to 2.2 feet could occur at the project site (for a seismic event with a 5 percent probability in a 50-year period). Differential lateral movement within the project site, such as beneath new facility foundations, or between adjacent facilities that have structural, pipeline, or other utility connections could be as high as 6 inches over the project site with differential vertical movement of 0.5 inch over a 50-foot span. While the seismic induced landslide has the potential to affect the project site, project construction would not affect or exacerbate the existing landslide underlying the project or increase the risk of seismic induced landslide. Because construction of the project would not exacerbate the risk of seismic induced landslide and the project construction methods incorporates geotechnical recommendations, the impact from a seismic induced landslide during construction would be **less than significant**.

### *Off-site Staging Areas*

The project would have a less than significant effect on the impact described. Off-site staging areas have the potential to be located on areas with high landslide hazard potential. Due to the temporary nature of the staging activities and the lack of any excavation or introduction of new structures to the staging area, the use of the staging area would not increase the risk of landslides. The impact on landslides would thus be **less than significant**.

### **Operation**

The project would have a less than significant effect on the impact described. The project structures would be located on a deep-seated landslide over the operational life of the facilities as discussed above. The differential vertical movement of 2.2 feet over the project site in the event of a seismic induced landslide has the potential to damage project structures (ENGEO 2024). The geotechnical investigation includes recommendations for over excavation, use of engineered fill material below the new structure foundations, use of slab or mat foundations, use of spread footings, and shear keys to address the risk of seismic induced landslide over the project site and protect the new project infrastructure (ENGEO 2024). The project design will incorporate the recommendations of the geotechnical investigation in compliance with current California Building Code standards. Because the project design will reflect decades of study of the PCL underlying the project site and will incorporate modern engineering standards to address the risk of seismic induced landslides, the project will overall reduce the potential for a seismic induced landslide when compared to the existing infrastructure that was constructed prior to modern design principals and understanding of the landslide risk. In addition, the presence of the project infrastructure would not exacerbate the risk of a seismic-induced landslide and would not expose any structures or people off site to impacts from seismic-induced landslides. Due to proper design of the project facilities to address the potential for seismic-induced landslides, the project would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death from landslides and the impact would be **less than significant**.

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### b) Result in substantial soil erosion or the loss of topsoil?

#### Construction

The project would have a less than significant effect on the impact described. Construction activities associated with the project would require ground disturbing activities such as excavation, trenching, and grading that could increase the susceptibility of soils to erosion by wind and/or water, which could result in soil loss or erosion.

The project is required to comply with the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance (Order No. 2022-0057-DWQ – Construction General Permit), which requires preparation of a Storm Water Pollution Prevention Plan (SWPPP). Construction contractor(s) are responsible for the design and implementation of the SWPPP throughout the construction period. As described in the project description, the project would implement BMPs described in Table 2.7-1 to avoid and minimize impacts on water quality and soil erosion. The project would implement BMPs WQ-4, WQ-5, WQ-9, WQ-11 and WQ-16. BMP WQ-4 would ensure that staging and stockpiled materials are properly contained and maintained to avoid any soil erosion from stockpiles, including impacts at any off-site staging areas. BMPs WQ-5, BMP WQ-9, BMP WQ-11, and BMP WQ-16 would ensure that the overall construction site is properly maintained and in clean condition and that construction entrances/exits and all other disturbed ground would be stabilized to prevent sedimentation or erosion. With the implementation of the required BMPs in addition to implementation of the SWPPP, the impacts related to soil erosion or loss of topsoil would be **less than significant**.

#### Operation

The project would have a less than significant effect on the impact described. After construction of the project is complete, the areas of temporary soil disturbance would be stabilized as required by the Construction General Permit and project-specific SWPPP. Landscaping would also be installed around the project site at the end of construction. Additionally, the project would comply with provision C.3 of the Municipal Regional Permit (MRP), which requires that new and redeveloped projects include measures to both treat and prevent increases in stormwater runoff. By complying with the requirement in provision C.3 of the MRP, the project would avoid substantial soil erosion and loss of topsoil. The project operations would not substantially impact soil erosion or topsoil loss. Regardless, the project would still implement BMP WQ-9, which requires that all disturbed areas shall be seeded with native seed as soon as is appropriate after activities are complete. Through compliance with the Construction General Permit, C.3 of the MRP, and BMP WQ-9, the proposed project is required to stabilize disturbed soil areas to prevent soil erosion from occurring during storm events after construction is complete. Therefore, there would be no exposed or disturbed soil during the operational phase of the project that would allow for substantial soil erosion or topsoil loss to occur. Accordingly, the impacts of soil erosion and topsoil loss during the operation and of the project would be **less than significant**.

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- c) **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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?**

### Construction

#### *PWTP Site*

The project would have a less than significant effect on the impact described. The project site is on sloped land and within a landslide zone. The project site is not located in an area of high risk for liquefaction, lateral spreading, subsidence, or collapse. According to the geotechnical report, the potential active sliding plane underlying the project site is situated well below the proposed excavation depth for the replacement and upgrade of the existing facilities (Kleinfelder, Inc. 2023). As such, the impact would be **less than significant**.

#### *Off-site Staging Areas*

The project would have a less than significant effect on the impact described. Off-site staging activities could be located in areas that have a risk for landslide, lateral spreading, subsidence, liquefaction, or collapse. The temporary staging of construction equipment and materials at the off-site staging areas would not increase the risk of any geological hazard occurring on the site. As such, the impact would be **less than significant**.

### Operation

The project would have a less than significant effect on the impact described. The geotechnical report indicated that the project site is not at risk for lateral spreading, subsidence, liquefaction or collapse. See the discussion under impact a(iv) for landslide impacts. Any potential impacts related to geological instability including lateral spreading, subsidence, liquefaction, or collapse would be addressed by the project design as the facilities would be designed to meet California Building Code seismic design criteria. Therefore, impacts related to soil instability resulting in landslide, lateral spreading, subsidence, liquefaction, or collapse would not be substantial as a result of implementation of the project. The impact would be **less than significant**.

- d) **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

The project site is located in an area dominated by Montara-Santerhill complex, with 15 percent to 30 percent slopes (NRCS 2023), which is considered an expansive soil. Engineered fill soils were observed within the project site during geotechnical investigation at depths up to 29 feet. (Kleinfelder, Inc. 2023).

### Construction

#### *PWTP Site*

The project would have a less than significant effect on the impact described. The project site contains highly and critically expansive soils (ENGEO 2024). Expansive soil shrinks and swells when subjected to fluctuations in moisture content. Such soil movement may cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. As described in the project description, the excavation depths for the project facilities would extend up to 35 feet deep. The construction phase involves excavation of expansive soil materials,



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allowing for more stability at the site. Therefore, the project would not exacerbate or create a risk to life or property from expansive soils as the expansive soils would be excavated. As such, impacts related to expansive soil during construction would be **less than significant**.

### *Off-site Staging Areas*

No, off-site staging would not have an impact related to expansive soils. Temporary staging of materials within off-site staging area has the potential to occur in areas that have expansive soils. The temporary staging of materials would not introduce any new structures within areas containing expansive soils. The staging of materials would thus not affect any expansive soils. As such, there would be no impact related to expansive soils.

### **Operation**

The project would have a less than significant effect on the impact described. The project would construct facilities in areas containing expansive soil material. The geotechnical investigation recommends over excavation of potentially expansive subgrade soil and replacement with compacted non-expansive fill and moisture conditioning for below-grade structures. The geotechnical report also provides recommendations for the foundations and subgrade preparation for the centrifuge building, the solids load-out structure, and the sludge transfer pump station structure to address impacts from expansive soils on those structures. The project facilities are primarily subsurface and located a minimum of 80 feet from the nearest private property line. The project site is fenced and restricted from public access, which reduces the risk of project impacts on people or structures. Because the project would implement geotechnical design measures to protect the structure integrity and there is no public access to the facility, the impacts from expansive soils would be **less than significant**.

#### **e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

No, the project would not require the use of a septic or other alternative wastewater system. Therefore, there would be **no impact** related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

#### **f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

### **Construction**

The project would have a less than significant effect on the impact described with implementation of mitigation. There are no known paleontological resources or unique geologic features at the proposed project site. Most of the site was previously disturbed for construction of the existing PWTP facilities, and imported fill soils were detected at depths up to 29 feet. Temporary staging activities would have no impact on geological resources as no excavation into geologic units that could contain paleontological resources would be required for temporary staging activities. The imported fill soils within the PWTP stie have no potential to contain paleontological resources. Nonetheless, the project would involve excavation up to 35 feet into geologic units, which have the potential to contain paleontological resources. Paleontological resources could be encountered during excavation. Directly or indirectly destroying a unique paleontological resource would constitute a significant impact. To reduce

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the impact of a discovered paleontological resource, MM GEO-1 would be implemented and requires that construction crews receive environmental awareness training for paleontological discovery and protocols. In addition, it requires that in the event of an accidental discovery, work must halt and the find must be evaluated by a qualified paleontologist, who will determine appropriate treatment for the find. With implementation of MM GEO-1, potential impacts to paleontological resources or a unique geologic feature would be reduced to **less than significant with mitigation**.

### Operation

No, the project would not have the impact described. During the operation of the project, no excavation or ground disturbance would occur. Without any excavation or ground disturbance proposed during operation of the project, no paleontological resource, site or unique geologic feature could be directly or indirectly destroyed. As such, **no impact** would occur.

### Mitigation Measures

#### MM GEO-1: Unanticipated Discovery of Paleontological Resources

Preconstruction worker awareness training will be conducted for the awareness and accidental discovery of paleontological resources during construction. If paleontological resources are discovered during construction, all work must halt within a 100-foot radius of the discovery, and a qualified paleontologist will be retained to evaluate the find. The paleontologist shall notify Valley Water if the find is significant. The paleontologist shall evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The qualified paleontologist will evaluate the significance of the find and recommend appropriate measures for the disposition of the find (e.g., fossil recovery, curation, data recovery, monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

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### 4.2.8 Greenhouse Gas Emissions

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>8. GREENHOUSE GAS EMISSIONS. Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Settings

Gases that trap heat in the atmosphere are called GHGs. The process by which heat is held in the atmosphere is similar to the effect greenhouses have in raising internal temperature, and thus the name GHGs. The accumulation of GHGs is the driving force for global climate change, which can result in increased temperatures; changes in snow and rainfall patterns; and an increase in droughts, tropical storms, and heavy rain events. The primary GHGs are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), ozone, and water vapor.

Although GHGs occur naturally in the atmosphere, CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O are also emitted from human activities, accelerating the rate at which these compounds occur in Earth's atmosphere. Emissions of CO<sub>2</sub> are mainly by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices, coal mines, and landfills. Other GHGs include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and they are generated in certain industrial processes.

CO<sub>2</sub> is the reference gas for climate change effects because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO<sub>2</sub>. CH<sub>4</sub> and N<sub>2</sub>O are substantially more potent GHGs than CO<sub>2</sub>, with GWPs of 28 and 265 times that of CO<sub>2</sub>, respectively.

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons of CO<sub>2</sub> equivalents (CO<sub>2</sub>e). CO<sub>2</sub>e is calculated as the product of the mass emitted of a given GHG and its specific GWP. Although CH<sub>4</sub> and N<sub>2</sub>O have much higher GWPs than CO<sub>2</sub>, CO<sub>2</sub> is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO<sub>2</sub>e (CARB 2022; IPCC 2015).

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### **Assembly Bill 32 (California Global Warming Solutions Act of 2006)**

AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction is in the process of being accomplished by enforcing a statewide cap on GHG emissions that was phased in starting in 2012. Towards this progress, in 2018, California emitted approximately 425 million metric tons of CO<sub>2</sub>e, 6 million metric tons of CO<sub>2</sub>e below the 2020 GHG limit of 431 million metric tons of CO<sub>2</sub>e and 2 million metric tons of CO<sub>2</sub>e below the 1990 GHG limit of 427 million metric tons of CO<sub>2</sub>e. To effectively implement the cap, CARB developed and has implemented regulations to reduce statewide GHG emissions from stationary sources. The State has taken these measures because no project individually could have a major impact (either positively or negatively) on the global concentration of GHG emissions.

AB 32 required the CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; instituted a schedule to meet the emissions cap; and developed tracking, reporting, and enforcement mechanisms to ensure that the State would reduce GHG emissions sufficient to meet the cap. AB 32 also included guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers were not unfairly affected by the reductions. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 represented an approximate 25 to 30 percent reduction in emissions levels. However, the CARB had discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that were not anticipated to significantly increase emissions.

### **Climate Change Scoping Plan**

AB 32 required the CARB to develop a scoping plan describing the approach for California to take to reduce GHG emissions, to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by the CARB in 2008, with an update every five years. The initial AB 32 Scoping Plan contained the main strategies for California to use to reduce the GHG emissions that cause climate change. The initial Scoping Plan had a range of GHG emissions reduction actions, including direct regulations, alternative compliance mechanisms, monetary and nonmonetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation fee regulation to fund the program. In August 2011, the initial Scoping Plan was approved by the CARB.

The *2013 Scoping Plan Update* (2013 Update) built on the initial Scoping Plan with new strategies and recommendations. The 2013 Update identified opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The 2013 Update defined the CARB climate change priorities for the next five years and set the groundwork to reach California's long-term climate goals as set forth in Executive Orders S-3-05 and B-16-2012. The 2013 Update highlighted California's progress toward meeting the near-term 2020 GHG emissions reduction goals that were defined in the initial Scoping Plan. In the 2013 Update, nine key focus areas were identified—energy,

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transportation, agriculture, water, waste management, and natural and working lands, short-lived climate pollutants, green buildings, and the cap-and-trade program. On May 22, 2014, the *First Update to the Climate Change Scoping Plan* was approved by the CARB, along with the finalized environmental documents. On November 30, 2017, the *Second Update to the Climate Change Scoping Plan* was approved by the CARB (CARB 2017).

The CARB's 2022 *Scoping Plan* was adopted in December 2022 (CARB 2022). The three previous scoping plans focused on specific GHG emissions reduction targets for the state's industrial, energy, and transportation sectors—first to meet 1990 levels by 2020, then to meet the more aggressive target of 40 percent below 1990 levels by 2030. The 2022 *Scoping Plan* addresses legislation and direction from Governor Newsom, with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045.

### **BAAQMD 2022 CEQA Guidelines**

In 2023, BAAQMD adopted its 2022 *CEQA Guidelines*, which updated and superseded prior BAAQMD 2017 CEQA Guidelines. The 2022 *CEQA Guidelines* provide BAAQMD recommended procedures for evaluating climate impacts in CEQA documents.

The 2022 *CEQA Guidelines* recommend GHG thresholds of significance for land use plans and projects, but do not recommend GHG thresholds of significance directly relevant to the program (i.e., ongoing maintenance activities for water projects such pipelines). Even though the 2022 *CEQA Guidelines* do not set a GHG threshold for such projects, to minimize GHG and air pollutant emissions, the Guidelines recommend that projects incorporate 18 BMPs for reducing construction emissions, including BMPs related to engine emissions, use of electric equipment, and materials recycling. For a project to have a less-than-significant impact related to stationary source GHG emissions, it must fall below the bright-line threshold of producing 10,000 MT CO<sub>2</sub>e per year (BAAQMD 2022).

### **Valley Water Climate Change Action Plan**

Valley Water's Climate Change Action Plan (CCAP) builds on Valley Water's existing climate change efforts, by identifying the ways in which Valley Water and Santa Clara County are vulnerable to climate change and providing goals, strategies, and possible actions (Santa Clara Valley Water District (Valley Water) 2021b). Relevant goals and strategies are as follows:

- Goal 1.* Reduce Direct Greenhouse Gas Emissions
- Action 1.2.3.* Develop a Valley Water-wide soil management plan to reduce truck hauling trips and encourage more efficient use of sediment/soil/spoils.
- Action 1.2.6.* Improve awareness of existing off-road diesel engine idling policy and consider expanding idling policy to other vehicles.
- 1.3 Strategy 3.* Reduce GHG emissions associated with Valley Water-owned equipment.
- Action 1.3.1.* Replace diesel forklifts with electric forklifts (currently 60% of forklifts are electric)

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- Action 1.3.2.* Update diesel engines to comply with the Tier 4 diesel emissions government mandate. (Currently, Valley Water is one year ahead of the mandate's schedule).
- Action 1.3.3.* Continue to replace less efficient equipment with more fuel-efficient Class 4 equipment (ex. generators, boats, other equipment, etc.) or devices that are powered by renewable energy (e.g., solar powered gages and monitoring devices).
- 1.4 Strategy 4.* Minimize GHG emissions associated with planning, design, construction, operation, and maintenance of capital projects.
- Action 1.4.1.* Incorporate new energy, water, and fuel-efficient technologies into capital project planning and design. Minimize construction-related vehicle miles traveled.
- Action 1.4.2.* Update internal capital project work instructions to incorporate GHG reduction measures, such as LEED/ Envision certification elements, and considerations for continued maintenance with input from capital project staff and O&M staff.
- Action 1.4.3.* Provide recommendations to change internal capital project specifications through the Technical Review Committee to reduce GHGs and add fleet and equipment specifications for contractors.
- Goal 2.* Expand Renewable Energy Portfolio and Improve Energy Efficiency
- 2.2 Strategy 2.* Improve energy efficiency at agency facilities.
- Goal 4.* Water Supply Adaptation
- 4.2 Strategy 2.* Improve demand management and increase water conservation efforts.
- Action 4.2.1.* Support programs to reduce pipeline leakage.
- 4.6 Strategy 6.* Increase flexibility and resilience of water utility operations and assets.

### Valley Water Board of Directors Policies

Valley Water also maintains governance policies of the Board of Directors, known as Ends Policies. Policy E-5 includes the following goal and objectives related to energy efficiency and renewable energy:

- Goal 5.1.* Minimize greenhouse gas emissions from Valley Water's operations.
- Objective 5.1.1.* Expand the use of clean technology in vehicles, equipment, and buildings, and develop carbon-efficient construction and service delivery practices.
- Objective 5.1.2.* Optimize energy use and expand renewable energy portfolio.



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*Objective 5.1.3.* Incentivize low carbon practices, projects, and efforts by employees, contractors, and partners.

### **Methodology and Significance Thresholds**

California Air Pollution Officers Association (CAPCOA) CalEEMod (California Emissions Estimator Model Version 2022.1) was used to quantify GHG emissions associated with project construction activities, as well as long-term operational emissions produced by motor vehicles, emergency generator use, and electricity use. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The emissions model results are provided in Appendix B.

The project includes construction activities and the operation of a new backup generator. The majority of the operational GHG emissions generated would be through electricity usage. CalEEMod incorporates GHG emission factors for PG&E and uses an intensity rate of 203 pounds of CO<sub>2</sub> per megawatt of electricity produced for PG&E.<sup>3</sup> The project operations (2029) intensity rates of approximately 87 pounds of CO<sub>2</sub> per megawatt of electricity produced for PG&E are based on Renewable Portfolio Standard (RPS) mandates.<sup>4</sup> The electricity delivered by PG&E and consumed by the project would be subject to SB 100 and the state's RPS, which requires increasing renewable energy to 60 percent by 2030 and 100 percent by 2045. The associated emissions rate is nearly 90 percent cleaner than the latest national average among energy providers. It would be expected that PG&E's GHG intensity for electricity continues to decrease over time and is estimated to be net zero by 2045. The Power and Water Resources Pooling Agency (PWRPA) is subject to the State of California RPS mandate whereby electric utilities must serve an RPS percentage of retail sales with renewable resources. PWRPA plans to meet its RPS mandate with a combination of renewable resources, including existing landfill gas and small hydro projects, as well as new solar projects and short-term contracts with wind energy providers.

Valley Water has not adopted GHG emissions significance thresholds and defers to BAAQMD's adopted thresholds for GHG emissions. BAAQMD's thresholds of significance consist of three options for project-level impacts:

12. Land use project design elements that must be included in a project,
13. Consistency with a local GHG reduction strategy, and
14. A stationary source threshold of 10,000 metric tons of CO<sub>2</sub>e per year.

The significance threshold used to determine whether the project would cause a significant impact from GHG emissions is 10,000 metric tons of CO<sub>2</sub>e per year as well as compatibility with

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<sup>3</sup> As of 2021, PG&E had decreased its carbon intensity to 98 pounds of CO<sub>2</sub> per megawatt of electricity produced, <https://www.pge.com/assets/pge/docs/account/billing-and-assistance/bill-inserts/1022-Power-Content-Label.pdf>

<sup>4</sup> A renewable portfolio standard is a regulatory mandate to increase production of energy from renewable sources such as wind, solar, biomass and other alternatives to fossil and nuclear electric generation.

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Valley Water's climate change action plan. Project emissions of less than 10,000 metric tons of CO<sub>2</sub>e per year would also indicate that the project's contribution to global climate change would be less than cumulatively considerable (cumulative impacts are further discussed in Section 4.2.21).

### Discussion

- a) **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

### Construction

The project would have a less than significant effect on the impact described. The project's estimated construction and operational GHG emissions are shown in Table 4.2-9. GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions and operational emissions represent the vast majority of project GHG emissions. Construction emissions are a one-time release. The estimated total construction GHG emissions over the entire construction phase is 2,485 metric tons of CO<sub>2</sub>e. In order to capture construction GHG emissions in the analysis, construction GHG emissions were amortized over 30 years and added to the operational GHG emissions consistent with SCAQMD's *Interim CEQA GHG Significance Threshold for Stational Sources, Rules and Plans* (SCAQMD 2008). The project's 30-year amortized annual construction-related GHG emissions would be approximately 82.8 metric tons of CO<sub>2</sub>e.

BAAQMD does not have a policy regarding GHG emissions from construction, but recommends use of BMPs to reduce GHGs during construction. The project would implement several GHG reduction BMPs contained in the 2022 BAAQMD CEQA Guidelines. Valley Water BMPs AQ-1 requires minimizing idling of vehicles and maintaining and properly tuning vehicles for efficiency. The project would also comply with Title 24 of the building code and all BMPs and mitigation. While the project would generate very minimal and less than significant greenhouse gas emissions, Mitigation Measure AQ-2 would implement additional BAAQMD recommended BMPs for GHG reduction. Given the limited GHG emissions generated during construction and with implementation of BAAQMD BMPs, the impact from GHG emissions would be less than significant.

**Table 4.2-9 Estimated GHG Emissions**

Year/Source	Annual CO <sub>2</sub> e (metric tons)
<b>Construction Emission</b>	
2025	903
2026	430
2027	727
2028	424
Total Construction Emissions	2,485 cumulative (82.8 amortized)

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Year/Source	Annual CO2e (metric tons)
<b>Operational Emission</b>	
Generator	7.1
Electrical	27.8
Total Operations Emissions	34.9
Total Amortized Construction Emissions	82.8
Total Construction + Operation Emissions	117.7
Significant Threshold	10,000
<b>Potentially Significant?</b>	<b>No</b>

Source: (RCH 2024)

### Operation

The project would have a less than significant effect on the impact described. The project operations would require an electrical usage increase of approximately 300,000 kwh/year and the addition of a standby generator.

The project would not increase the use of natural gas, nor would it increase the number of employees (and their vehicle miles traveled) nor increase the use of onsite equipment such as loaders and forklifts.

As shown in Table 4.2-9 the estimated operational GHG emission would be approximately 35 metric tons of CO2e, which when added to the construction GHG emissions is 117.7 metric tons of CO2e and well below the significance threshold of 10,000 metric tons of CO2e per year. In addition, the project would be consistent with Valley Water's Climate Change Action Plan, as discussed in part b) below. As such, because the project would generate fewer than 10,000 metric tons CO2e per year and is consistent with a climate change action plan, the project construction and operational GHG emissions would be **less than significant**.

#### **b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

The project would have a less than significant effect on the impact described. Plans and policies adopted for reducing GHG emissions in the project site would include AB 32, the CARB's 2022 *Scoping Plan*, and Valley Water's *Climate Change Action Plan*. Consistency with each of these plans is discussed in Table 4.2-10.

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**Table 4.2-10 Project Consistency with GHG Reduction Plans**

Plan	Evaluation
AB 32	The CARB implements AB 32 via California’s program to collect fees from sources of GHG emissions. These apply to large sources of GHG emissions, including oil refineries, electricity power plants, cement plants, and other industrial sources. AB 32 serves to reduce GHG emissions statewide and does not carry specific requirements with which Valley Water or the project would be required to comply. The project would not conflict with AB 32.
CARB 2022 Scoping Plan	The 2022 Scoping Plan is implemented at the State level, and compliance at a specific plan or project level is not addressed in the plan. The project would use vehicles that would meet current standards at the time of construction and operation and would not conflict with the statewide programs designed to address GHG emissions reduction goals. The project would not conflict with the 2022 Scoping Plan.
Valley Water’s Climate Change Action Plan	<p>The Valley Water Climate Change Action Plan sets goals, strategies, and actions aimed at reducing GHG emissions organization wide. The project would upgrade PWTP facilities to become more efficient and therefore use less energy in its everyday operations, including the reduction of the number of truck trips hauling spoils off the site by improving the dewatering process. The following describes how the project would be consistent with and comply with the goals of the Climate Change Action Plan that are relevant to the proposed project:</p> <p><b>Goal 1. Reduce Direct Greenhouse Gas Emissions:</b> The project would comply with Action 1.2.3 of Goal 1, which states that Valley Water will develop a plan to reduce truck hauling trips for more efficient use of sediment/soil/spoils, because the project would ultimately reduce the amount of truck trips hauling spoils off site due to the improved efficiency of the PWTP operations.</p> <p><b>Goal 2. Expand Renewable Energy Portfolio and Improve Energy Efficiency:</b> The project would comply with the 2.2 Strategy 2 by improving the overall efficiency of the PWTP operations by addressing aging infrastructure and associated maintenance issues, capacity, and reliability.</p> <p><b>Goal 4 Water Supply Adaptation:</b> The project would comply with 4.6 Strategy 6 of Goal 4 by increasing the flexibility and resiliency of the PWTP RMS operations by improving the operational efficiency, capacity, and reliability of the currently constrained plant.</p> <p>The project would not conflict with the Valley Water Climate Change Action Plan.</p>
Valley Water Board of Directors Policies	Valley Water Board of Directors Policies, commonly referred to as the Ends Policies, includes Goal 5.1: Minimize greenhouse gas emissions from Valley Water’s operations. The project would support this goal by improving the efficiency of the PWTP RMS and reducing the number of truck trips hauling spoils off site.

The project would also be subject to all relevant provisions of the most recent Building Energy Efficiency Standards (Title 24) and the California Green Building Standards Code (CALGreen), which are implemented to improve efficiency and reduce GHG emissions statewide. As shown in Table 4.2-10, the project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. As such, the impact would be less than significant.

### Mitigation Measures

No mitigation is required.

## 4 ENVIRONMENTAL EVALUATION

### 4.2.9 Hazards and Hazardous Materials

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>9. HAZARDS AND HAZARDOUS MATERIALS. Would the project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Settings

#### Existing Hazards and Hazardous Materials

According to the Department of Toxic Substances Control (DTSC) EnviroStor, and State Water Resources Control Board (SWRCB) Geotracker databases, there is one previous leaking underground storage tank (LUST) site with diesel as the potential contaminants of concern on Valley Water property west of Whitman Way. The remediation was completed and the case (T0608501227) has been closed since 1990 (DTSC, n.d.).

## 4 ENVIRONMENTAL EVALUATION

A hazardous materials site was previously located approximately 1,300 feet east from the project site, on San Jose Water Company – Dutard Station (60001158), where elemental mercury was found during an excavation for a project. The site was remediated and in 2010 certified to no longer pose a threat to human health or the environment (DTSC 2010).

A Hazardous Substance Liability Assessment (Phase 1 HSLA) was conducted in July 2023 for the project to inform and support preparation of other environmental documents for the project (Locus Technologies [Locus] 2023) (Appendix E). The Phase 1 HSLA identified the following environmental concerns:

- Potential release of chemicals involved in the water treatment process and the potential migration of Sodium Hypochlorite and other halogenated VOCs into the soil, soil vapor, and groundwater underlying the project site.
- Potential for hazardous materials such as asbestos to be present within demolition materials (existing buildings).
- Potential for naturally occurring chrysotile asbestos to be present due to weathering of the serpentine rock, during excavation work.
- Potential for lead to be present due to previous lead findings in the area and the fact that the treatment system was built before lead paint was regulated (pre-1978).
- Potential for agricultural chemicals such as pesticides and herbicides to be present due to the historical agricultural use of the area.

### Schools

The closest school to the project site is Noble Elementary School, located approximately 0.2 mile to the southwest of the project site.

### Airports

The Reid-Hillview Airport is located at 2500 Cunningham Avenue, approximately 4 miles south of the project. The Norman Y. Mineta San Jose International Airport is located at 1701 Airport Boulevard, approximately 6 miles west of the project. The project site is not within an airport land use plan area.

### Emergency Response and Evacuation

The PWTP is listed as a critical facility with Valley Water's Local Hazard Mitigation Plan (Hazard Mitigation Plan). The Hazard Mitigation Plan is a blueprint for how Valley Water may reduce the threats posed by natural hazards that could impact Valley Water's property or facilities. The Hazard Mitigation Plan identifies Highway 101, Interstate 280, Interstate 680, and Interstate 880 as the major freeways that serve as Valley Water's evacuation routes. It also includes the lower-capacity freeways such as State Routes 130 and 152 that are the primary evacuation routes for the PWTP.

The City of San Jose Fire Department provides emergency response services, including hazardous materials response services within the vicinity of the project site.



## 4 ENVIRONMENTAL EVALUATION

### Wildfire Hazards

The project site is located in urban and developed area and is not within a Very High Fire Hazard Severity Zone (CAL FIRE 2024). The project site is within a Local Responsibility Area and is within the City of San Jose's Wildland-Urban Interface (WUI) (Santa Clara County Planning Department, n.d.) as shown in Figure 4.2-7. The project is located approximately 0.4 mile from the nearest high fire hazard severity zone.

The nearest fire station is the City of San Jose Fire Department's Fire Station 19, located at 3292 Sierra Road, San José, CA 95132 (approximately 0.7 mile west of the project site), approximately 4-minutes driving time to the project site.

### Discussion

- a) **Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

and

- b) **Would the project 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?**

### Construction

#### *Transport and Use of Hazardous Materials*

The project would have a less than significant effect on the impact described. Construction of the project would involve the use of materials that are defined as hazardous, such as paints and other types of coatings, fuels, hydraulic fluids, and coolants for construction equipment. All these materials are commonly used in the construction industry and construction process and their transport, handling, use, and disposal would occur within specifications outlined by their respective manufactures. The project construction may also result in a potential risk of upset or accidental release of fuel (e.g., diesel, gasoline) and/or hydraulic fluid during the use of heavy construction equipment on the project site. Release of fuel or other hazardous materials to the environment during construction could be significant without the BMPs identified below.

As described in the project description, the project would implement BMPs described in Table 2.7-1 to minimize hazardous materials from being released through routine transport, use, and disposal. BMPs HM-7, HM-8, HM-9, and HM-10 would restrict vehicles and equipment from being cleaned, maintained, or refueled in areas that could impact water quality and define procedures to prevent spills from occurring during construction and to address proper cleanup of hazardous materials if a spill does occur. The implementation of the BMPs would avoid a significant hazard to the public or environment and the impact would be **less than significant**.

#### *Hazardous Materials in Excavated Soils*

The project would have a less than significant effect on the impact described with implementation of mitigation. The project will require excavation up to 35 feet deep for the new facilities. The excavated soils could contain hazardous materials such as pesticide residue and other hazardous materials based on the results of the Phase I ESA. Mitigation Measure HAZ-1

## 4 ENVIRONMENTAL EVALUATION

requires implementation of a Sampling and Analysis Plan to characterize the excavated soil materials that would be in the waste stream and support proper handling, transport, and disposal. With the implementation of Mitigation Measures HAZ-1, the excavated soils would not cause a significant hazard to the public or environment and the impact would be **less than significant with mitigation**.

### *Naturally Occurring Asbestos*

The project would have a less than significant effect on the impact described. The project is located in areas that could contain serpentine soils, which could be a source of naturally occurring asbestos (Locus 2023). To confirm whether naturally occurring asbestos is within the range of excavation for the project, soil samples were obtained from eleven exploration borings around the proposed project excavation areas and analyzed. The results of the soil analysis determined that no naturally occurring asbestos was detected, and therefore naturally occurring asbestos exceeding regulatory thresholds is not anticipated to occur within the excavated soils/materials (Kleinfelder, Inc. 2024). Because a site specific analyses indicated naturally occurring asbestos is not anticipated to occur above any regulatory threshold, the impact from naturally occurring asbestos on the public would be **less than significant**.

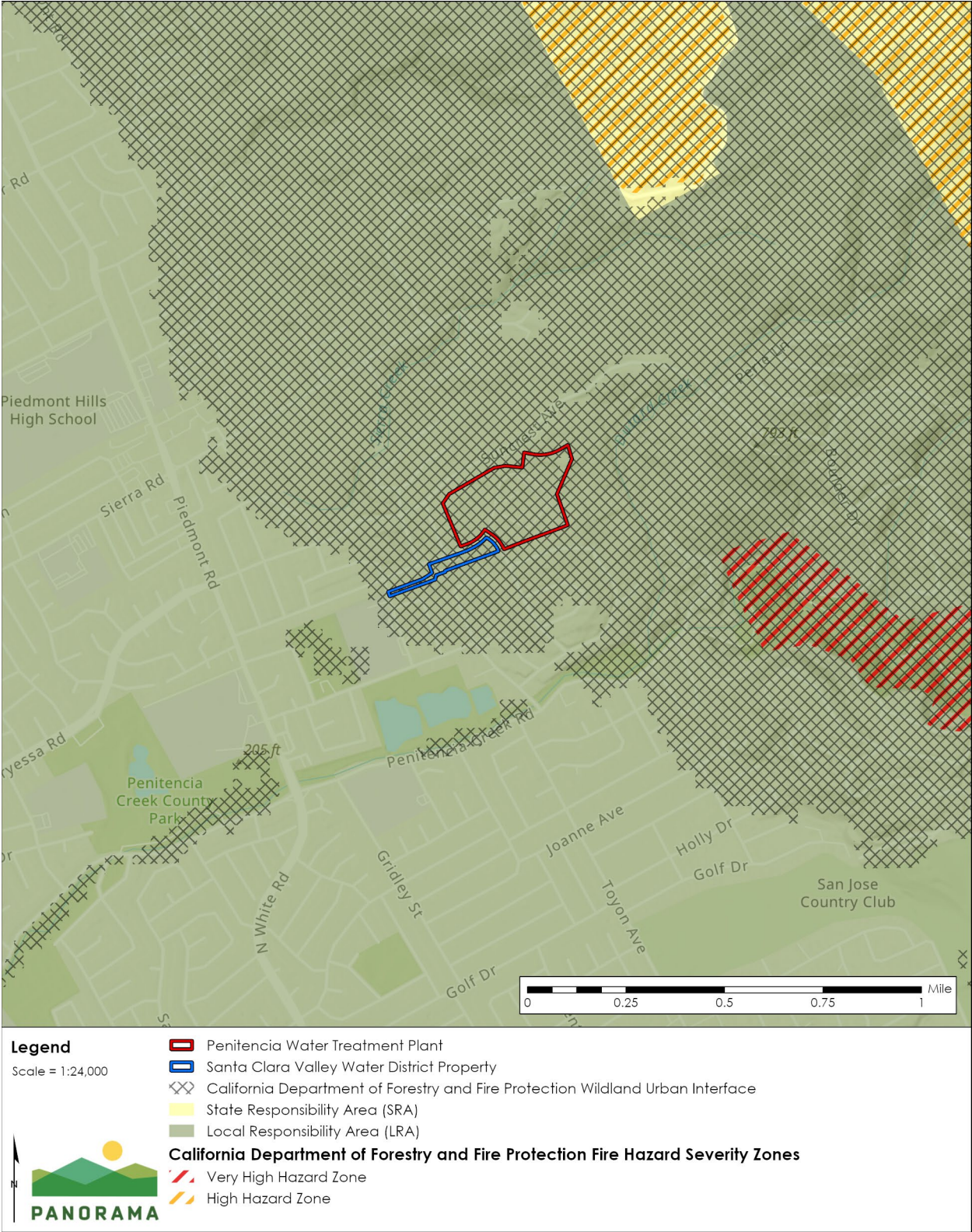
### *Lead Based Paint and Asbestos*

The project would have a less than significant effect on the impact described with mitigation implemented. According to the Phase 1 HSLA, lead based paint is present on structures at the PWTP and given that the PWTP was built before lead paint and asbestos were regulated (pre-1978), there is a potential presence of lead and asbestos in the building materials that would be demolished at the project site. Project demolition activities could result in a significant hazard to the public or environment if any asbestos or lead based paint in the demolition materials are not properly handled.

Mitigation Measure HAZ-2 defines procedures for any demolition waste that could contain lead or asbestos in compliance with State and federal standards for proper handling, transport, and disposal of lead and asbestos containing material. With the implementation of the Mitigation Measure HAZ-2, the impact from lead and asbestos waste would be **less than significant with mitigation**.

# 4 ENVIRONMENTAL EVALUATION

Figure 4.2-7 Wildfire Risk



## 4 ENVIRONMENTAL EVALUATION

### Operation

The project would have a less than significant effect on the impact described. During operation of the project, hazardous materials on site would include diesel for the backup generator and sodium hypochlorite for chlorination in the chemical building. Both the diesel and the sodium hypochlorite would include secondary containment to avoid any accidental release. The PWTP has a Hazardous Business Plan (HMBP) as required by State law that includes an inventory of hazardous materials at a facility, emergency response plans and procedures to be followed in the event of a reportable release or threatened release of a hazardous material, safety procedures in the event of a release or threatened release of a hazardous material, including onboarding for new employees and annual refresher courses for existing employees, and a site map that depicts stormwater and sewer drains, access and exit points, emergency shutoffs, evacuation staging areas, hazardous material handling and storage areas, and emergency response equipment. The HMBP would be updated to reflect the project prior to operation.

Additionally, the operation of the project would be required to follow all applicable federal, State, and local regulations pertaining to hazardous materials that would minimize the risk of hazardous material release during routine operations or in the event of an accident. Applicable regulations include but are not limited to requirements imposed by the USEPA, DTSC, and RWQCB. CCR title 8 addresses workplace regulations involving the use, storage, and disposal of hazardous materials. CCR titles 22 and 26 set forth environmental health standards for hazardous materials management. California Health and Safety Code chapter 6.95 sets forth enabling legislation for the application of CCR titles 8, 22, and 26. Safety precautions for the prevention of fire hazards associated with the use and storage of hazardous materials are addressed in the Uniform Fire Code. Compliance with applicable federal, State, and local regulations, including but not limited to CCR titles 8, 22, and 26, the Uniform Fire Code, and California Health and Safety Code chapter 6.95, would ensure that the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or reasonably foreseeable upset and accident conditions. Thus, the impact would be **less than significant**.

- c) Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

### Construction

The project would have a less than significant effect on the impact described with mitigation implemented. The project site is located within 0.2 mile of Noble Elementary School. Project construction activities would involve handling and transport of hazardous materials from demolition of facilities and excavation of soils that could contain hazardous materials. This could have a significant impact if the hazardous materials and soil were emitted or improperly handled within one-quarter mile from the school. As discussed in the project description, the project would implement BMPs described in Table 2.7-1 to avoid and minimize hazardous materials from being released to the public or environment. BMPs HM-7 through HM-10 would be implemented during construction and would ensure proper vehicle and equipment fueling,

## 4 ENVIRONMENTAL EVALUATION

cleaning and maintenance, ensure proper hazardous materials management be implemented and utilize spill prevention measures. While the BMPs would avoid emissions during normal handling of hazardous materials during construction the BMPs do not address impacts from demolition of facilities containing asbestos or lead based paint, which could cause emissions of lead or asbestos within 0.25 mile of a school, which would be a significant impact.

Mitigation Measure HAZ-2 defines procedures for proper testing, handling, containment, and disposal of lead and asbestos containing materials in compliance with State and federal requirements. Through proper handling of lead and asbestos containing materials, the impact associated from handling hazardous materials or emissions of hazardous materials within 0.25 mile of a school would be **less than significant with mitigation**.

### Operations

The project would have a less than significant effect on the impact described. The project would require the use of hazardous materials such as diesel and sodium hypochlorite and would also involve the transport of hazardous materials along roads adjacent to Noble Elementary School. The volumes of hazardous materials that would be used during operation of the project would be minimal and would not appreciably differ from quantities used for the existing belt-press hydraulic systems and belt conveyor systems that are being replaced by the project. Routine transport, use, storage, and disposal of the polymer, oils, and grease would comply with federal and State regulations as discussed in a) and b) above. In addition, the HMBP for the PWTP would be updated to reflect the hazardous material storage and use for the project. Since the hazardous materials would be stored, handled, and used normally in accordance with strict requirements, they would not result in an increased risk of upset at or around the project site. The project has been designed to comply with State and federal standards for hazardous materials management, including secondary containment, leak detection, and alarm systems where needed to address any leaks of hazardous materials. Also, following any accidental event, proper procedures for the response and cleanup of the site would be conducted in accordance with regulatory guidelines, BMPs, and the HMBP for the project. Therefore, the potential to create a significant hazard to the public from exposure to hazardous materials would be considered **less than significant**.

- d) Would the project 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?**

No, the project would not have the impact described. The project site is listed on the Geotracker website as a leaking underground storage tank (LUST) cleanup site (case no. T0608501227). However, the case was completed and has been closed since 1990. The project site would therefore not create a hazard to the public or the environment. Therefore, there would be **no impact**.



## 4 ENVIRONMENTAL EVALUATION

- e) **Would the project result in a safety hazard or excessive noise for people residing or working in the project area if located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport?**

No, the project would not have the impact described. The project site is not located within an airport land use plan or within 2 miles of an airport. The nearest public airport is San Jose Airport located approximately 5 miles from the project site. Because the project is not within 2 miles of a public airport or within an airport land use plan, the project would not result in a safety hazard or excessive noise for people residing or working in the project area and **no impact** would occur.

- f) **Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

The project would have a less than significant effect on the impact described. Construction and operation of the project would not affect an adopted emergency response plan or emergency evacuation plan. All construction activities would occur within the project site and would not require lane or road closures that could interfere with emergency response or evacuations. The project site is not publicly accessible and does not have habitable structures that would need to be evacuated in the event of an emergency. Construction-related employee vehicle trips and truck trips for the project would not impair the ability of emergency responders to reach their destinations or impact evacuation routes. Construction-related traffic would temporarily increase traffic in the area, particularly along Whitman Way. Employee vehicle trips would remain the same and would not increase after construction of the project is complete. Access to the project site and surrounding properties would be maintained at all times for fire and emergency response vehicles. The project would not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and, therefore, the impact would be **less than significant**.

- g) **Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

### Construction

The project would have a less than significant effect on the impact described. The project site is within the Wildland Urban Interface Zone (CALFIRE 2019). During construction of the project, mechanized equipment as well as fuels and other potentially flammable substances would be used. Construction would involve use of hot equipment, which has the potential to create sparks and ignite a wildfire.. As described in the project description, the project would implement BMPs described in Table 2.7-1 to avoid and minimize impacts on the environment. BMP HM-12 requires the incorporation of fire prevention measures including having appropriate fire suppression equipment available on site, such as fire extinguishers, and limiting smoking to designated areas that are away from combustible chemicals or vegetation. Implementation of BMP HM-12 would reduce potential for the project to cause a wildland fire, and the resulting impact would be **less than significant**.



## 4 ENVIRONMENTAL EVALUATION

### Operation

The project would have a less than significant effect on the impact described. The project site is within the City of San Jose's Wildland Urban Interface Zone but would not include habitable structures. The operation of the project would not involve the use of equipment on undisturbed land that could ignite a wildfire. All equipment would be operated and contained in paved areas. Since the project would not involve operation in any areas containing flammable vegetation and any flammable materials would be properly contained per the HMBP, operation of the project would not result in an increased risk of wildfire that could expose people or structures to loss or death. The impact would be **less than significant**.

### Mitigation Measures

**Mitigation Measure HAZ-1 – Sampling and Waste Management:** The project would adhere to the following testing, sampling, and handling procedures during construction:

- A soil and groundwater quality investigation shall be conducted to evaluate subsurface conditions in any proposed excavation or construction area to evaluate potential impacts from the project, including evaluation of soil management options for materials produced during exaction and construction and potential health and safety impacts to the project workers. Samples shall be analyzed for petroleum hydrocarbons (including gasoline, diesel, and oil), VOCs, polychlorinated biphenyls, semi-volatile organic compounds, PCBs, organochlorine pesticides, and metals. If groundwater is encountered prior to the final depth, then a groundwater sample shall be taken. Groundwater samples collected from the borings should be analyzed for petroleum hydrocarbons, VOCs, dissolved metals, and pH.
- The results of the soil and groundwater investigation shall be reported to Valley Water. Excavated soil will be segregated, staged, labeled/marked, and properly managed as appropriate per the result of the soil and groundwater investigation in a manner that complies with applicable regulations and to facilitate proper disposal.
- Valley Water will give contractor written notice to dispose of all or a portion of the waste material at a Class I disposal site if the Engineer determines that such disposal is required based on review of contractors waste characterization and the analytical results of samples collected.
- Transport materials and/or wastes in accordance with all local, State, and federal laws, rules, and regulations.
- Contractor shall not assume any soil is approved for offsite reuse. Off-site reuse is only permitted with explicit approval from Valley Water after a careful review of the contractor's proposed reuse and soil testing results.

### Mitigation Measure HAZ-2 - Asbestos and Lead-based Paint:

Demolition of the project structures and facilities shall comply with the OSHA Standard 1926.6 related to lead abatement and all other applicable State and federal requirements for the safe

## 4 ENVIRONMENTAL EVALUATION

handling and disposal of lead-based paint, ACM, and universal wastes. The project contractor shall implement the measures described below.

### *Lead-based Paint*

As lead was identified in the paints on existing PWTP facilities, all coated surfaces shall be considered to contain some lead and require demolition dust control procedures and presumed respiratory protection usage for compliance with Cal/OSHA's Construction Lead Standard under 8 CCR section 1532.1. The aforementioned regulation contains requirements for lead air monitoring, work practices, respiratory protection, etc., that are triggered by the detected presence of any levels of lead.

None of the applicable regulations require removal of lead paint prior to demolition if the paints are securely adhered to the substrates (i.e., non-flaking or non-peeling). Disposal of the demolition debris in this case can be handled as non-hazardous and non-RCRA waste after the loose and flaking paint have been removed as long as demolition practices do not compromise worker safety and waste stream characterization testing has been performed by the contractor on the entire waste stream for verification.

Conventional demolition techniques shall be employed for all painted surfaces, with the Contractor complying with applicable OSHA and Cal/OSHA statutes regarding the following:

- Worker awareness training
- Exposure monitoring, as needed
- Medical examinations, which may include blood lead level testing
- Establishing a written respiratory protection program

### *Asbestos*

Any suspected asbestos material at the project site not sampled or not visually identified as negative by the testing and sampling procedures shall be assumed to contain asbestos and require destructive testing prior to demolition. Inspections in California are required to be conducted by a Certified Asbestos Consultant (CAC) or by a Certified Site Surveillance Technician (CSST) working under a CAC. In the absence of testing, the materials should be assumed to contain asbestos and disposed of in accordance with OSHA standard 1926.6.

## 4 ENVIRONMENTAL EVALUATION

### 4.2.10 Hydrology and Water Quality

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>10. HYDROLOGY AND WATER QUALITY. Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Settings

#### Surface Water

The proposed project site is located within the Lower Coyote Creek-Frontal San Francisco Bay Estuaries (180500030204) of the USGS delineated Hydrologic Unit Code (HUC) (EPA, n.d.) and within the Coyote subwatershed of the Santa Clara Basin watershed. The project site is within the San Francisco Bay Regional Water Quality Control Board region (SCVURPPP 2019).

## 4 ENVIRONMENTAL EVALUATION

The water quality control plan applicable to surface waters in the project site is the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan). The closest surface waters to the project site are Sierra Creek and Dutard Creek, approximately 0.25 mile to west and east, respectively (Figure 4.2-8). Dutard Creek is a tributary to Coyote Creek, which is a Section 303d-listed impaired water for diazinon, trash, and toxicity (SWRCB, n.d.-b)

### Groundwater

The project site lies within the Santa Clara subbasin of the Santa Clara Valley Basin, which extends from southern San Jose north into Alameda, Contra Costa, and San Mateo counties. Valley Water is the exclusive groundwater sustainability agency (GSA) responsible for sustainable groundwater management within the Santa Clara subbasin. The Santa Clara subbasin is a high priority basin based on criteria that include overlying population, projected growth, number of wells, irrigation acreage, groundwater reliance, and groundwater impacts; however, the subbasin it is not identified as being critically over-drafted. The groundwater sustainability plan, *2021 Groundwater Management Plan for the Santa Clara and Llagas Subbasin* (GWMP) was adopted by Valley Water in 2021 (Valley Water 2021).

### Flood Hazard, Seiche, and Tsunami Zones

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) indicate the project site is within Zone D, which is an area with possible but undetermined flood hazards. The project site is not within a designated 100-year floodplain, seiche, or tsunami zone.

### Discussion

- a) **Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

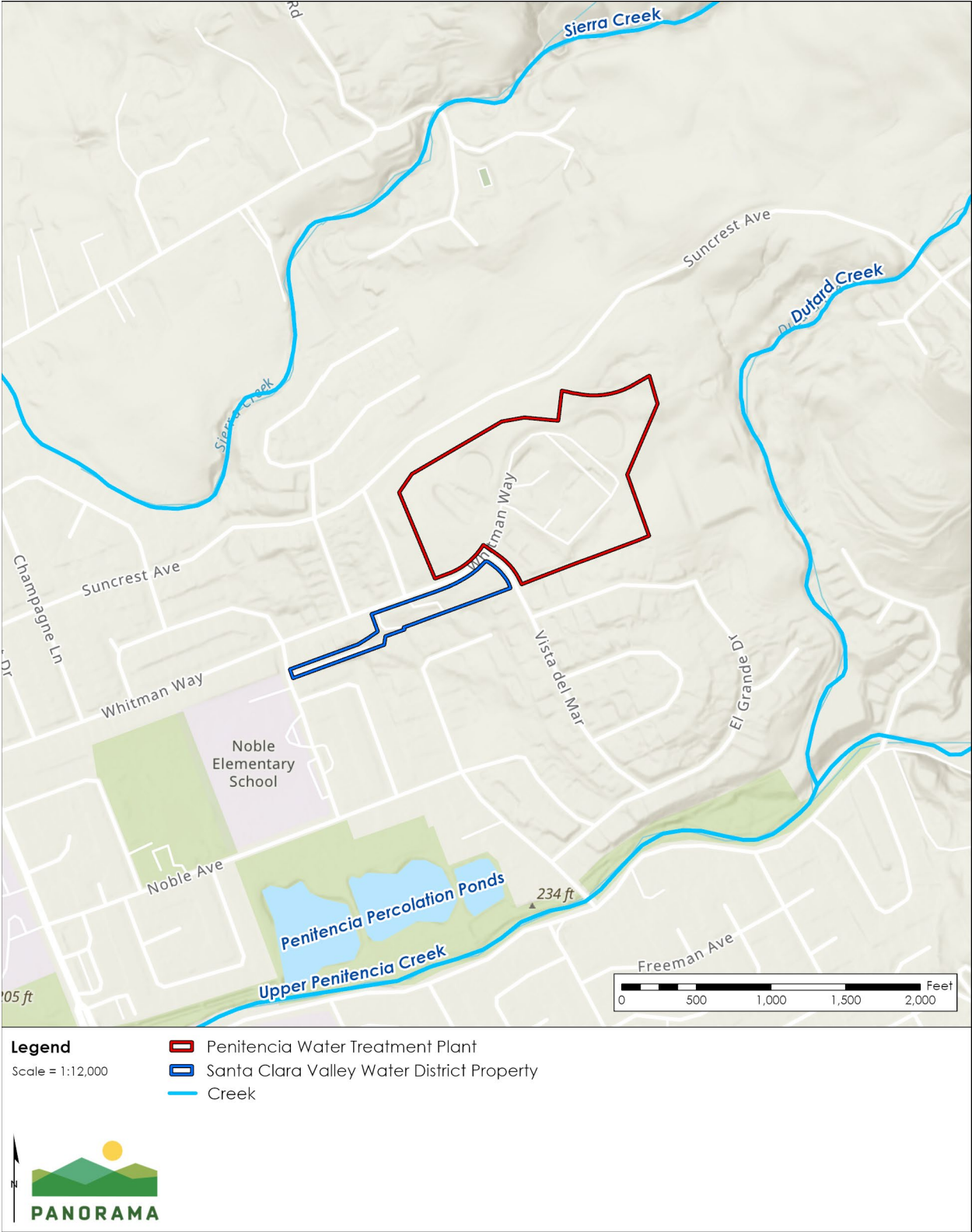
### Construction

#### *Stormwater Runoff*

The project would have a less than significant effect on the impact described. Construction of the project would require site clearing, excavation, and grading of soils that could increase erosion and sedimentation. Construction would also require fill placement and stockpiling of soils as well as the use of heavy equipment and materials, which could result in spills of fuels or lubricants, and sedimentation that could degrade water quality of surface waters from stormwater discharges. Stormwater runoff from construction activities could degrade surface water quality if the stormwater runoff contained elevated levels of pollutants or sediment.

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Figure 4.2-8 Surface Waters



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The National Pollutant Discharge Elimination System (NPDES) storm water program, implemented by the State Water Resources Control Board (SWRCB), regulates storm water discharges from construction sites that disturb one or more acres of land. The project site is greater than 1.0 acre in size and, therefore, is subject to the NPDES requirements for construction. Construction of the project would be required to comply with the Construction General Permit, which requires preparation of a project-specific SWPPP. In addition, as described in the project description, the project would implement BMPs described in Table 2.7-1 including BMPs HM-7 to HM-10, BMP WQ-4, BMP WQ-5, BMPs WQ-9 to WQ-13, and BMP WQ-16. BMPs HM-7, HM-8, HM-9, and HM-10 include measures to restrict vehicles and equipment from being cleaned, maintained, or refueled in areas that could impact water quality as well as the proper measures to prevent any spills from occurring during construction. BMP WQ-4 would ensure that staging and stockpiled materials are properly contained and maintained to avoid any polluted stormwater runoff. BMP WQ-5, BMP WQ-9, BMP WQ-11, and BMP WQ-16 ensure that the overall construction site is properly maintained and in clean condition and that construction site entrances/exits and all other disturbed ground would be stabilized to prevent sedimentation or erosion impacting stormwater runoff. BMP WQ-13 restricts any substances or materials that could degrade groundwater quality from entering any well or exploratory well during construction. Due to compliance with the Construction General Permit requirements and implementation of BMPs during construction, the stormwater runoff from construction of the proposed would not violate any water quality standards or waste discharge requirements and, therefore, the impact would be **less than significant**.

### *Groundwater Dewatering*

The project would have a less than significant effect on the impact described with implementation of mitigation. Construction of the proposed project could involve temporary groundwater dewatering during excavation for the proposed project facilities. Dewatered groundwater has the potential to be contaminated, which could cause a potentially significant impact from violation of water quality standards if not properly treated and discharged. Mitigation Measure HAZ-1 requires sampling of any dewatered groundwater and specifies proper procedures for handling of any contaminated liquids to ensure compliance with water quality standards. Because Mitigation Measure HAZ-1 defines procedures for sampling and proper handling of any contaminated groundwater, the impact from dewatering on water quality would be **less than significant with mitigation**.

### **Operation**

The project would have a less than significant effect on the impact described. Valley Water operates under the Municipal Regional Stormwater NPDES Permit (MRP), issued by the Regional Water Quality Control Board (RWQCB). In particular, the project would comply with provision C.3 of the MRP, which requires that new and redeveloped projects include measures to both treat and prevent increases in stormwater runoff. The project would expand the paved driveway around the sludge handling facilities and, to the north, of the new centrifuge building, expanding project facilities by approximately 30,000 square feet to accommodate trucks hauling dewatered solids from the facility. And although, the project's increase of impervious surface



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could result in increased stormwater runoff, any impact to water quality or reduction to the amount of groundwater infiltration would be managed in compliance with the requirement in provision C.3 of the MRP. Thus, the impact on water quality standards water quality standards, waste discharge requirements, or surface or groundwater quality would be **less than significant**.

- b) Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

### Construction

The project would have a less than significant effect on the impact described. Water would be used during construction for dust control and compaction during grading and other ground disturbing activities. Water would be obtained from the on-site treatment system, and the total water use for dust control would be minimal. The water at the PWTP comes from surface water sources including the State Water Project.

Groundwater dewatering could be required during the excavation stage to create a dry work area in any areas where groundwater is encountered during excavation. Temporary groundwater wells would be installed around the areas of deep excavations, and pumps would be used to extract the groundwater continuously during the earthwork and concrete work during construction, as needed. Impact on groundwater supplies during construction dewatering would be confined to the vicinity of the excavation. Groundwater levels would return to pre-project conditions after construction is completed and the impact on groundwater supplies from temporary dewatering activities would be **less than significant**.

### Operation

The project would have a less than significant effect on the impact described. The project would increase the impervious surface area at the project site by about 30,000 square feet by widening the existing roadway around sludge handling ponds to accommodate truck access that would routinely access the roadway to haul off dewater solids from the centrifuge building. The amount of additional impervious surface to the site would not have a substantial impact on the potential groundwater recharge at the site. Because the project would not lower the groundwater table or cause a reduction in groundwater recharge due to impervious surfaces, the impact would be **less than significant**.

- c) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**
- i. result in substantial erosion or siltation on or off site?**

### Construction

The project would have a less than significant effect on the impact described. The project would not alter the existing drainage pattern of the area or alter the course of a stream or river because the project site would be located largely within the existing impervious surface area and the increase of impervious surface area. The project would be required to prepare and implement a

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SWPPP to be in compliance with the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance (Order No. 2022-0057-DWQ, adopted September 8, 2022), which would assist in the management of erosion or sedimentation that could occur during the project's grading and excavation activities. In addition, and as discussed in the project description, the project would implement BMPs described in Table 2.7-1. BMPs WQ-5, WQ-9, WQ-11 and WQ-16 would specifically be implemented to reduce erosion or siltation. BMPs WQ-5, WQ-9, WQ-11, and WQ-16 would ensure that the overall construction site is properly maintained and in clean condition and that construction site entrances/exits and all other disturbed ground would be stabilized to prevent sedimentation or erosion impacting stormwater runoff. With the implementation of the SWPPP, as well as BMPs WQ-5, WQ-9, WQ-11, and WQ-16, the impact from erosion and siltation impacts related to construction would be **less than significant**.

### Operation

The project would have a less than significant effect on the impact described. Implementation of the project would not alter the existing drainage pattern due to the increase in impervious surfaces from the expansion of the pavement around the sludge basin area to accommodate space for truck hauling of dewatered solids. All disturbed staging areas would be stabilized as required by the SWPPP, and all other disturbed areas outside of the paved area would be landscaped to further stabilize and prevent any erosion or sedimentation. Surface runoff from new impervious surfaces would be managed in compliance with C.3 of the MRP and runoff would be directed to landscaped areas to increase infiltration and minimize erosion. Areas that currently drain to the plant facilities would continue to be directed to on-site drains for water treatment and recycling. The project would not result in a change in drainage patterns that would cause substantial erosion or siltation on or off site. The impact would be **less than significant**.

**ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?**

The project would have a less than significant effect on the impact described. The project would increase the amount of impervious surface by approximately 30,000 square feet from the expansion of the pavement around the sludge basin area to accommodate space for truck hauling off dewatered solids. However, the project would not substantially increase the rate or amount of surface runoff from this increased impervious areas because the surface runoff from the paved areas of the project site would be directed either to existing stormwater drains on site, off the paved areas onto the vegetated areas with measures in place to avoid erosion, or to existing drains around the solids holding area that would be pumped back up to the headworks to be retreated. Additionally, the project would comply with provision C.3 of the MRP, which requires that new and redeveloped projects include measures to both treat and prevent increases in stormwater runoff. By complying with the requirement in provision C.3 of the MRP, the proposed project impacts on water quality standards would be **less than significant**.

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- iii. **create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

### Construction

The project would have a less than significant effect on the impact described. Construction of the project would disturb more than 1 acre of land and would be required to comply with the Construction Stormwater General Permit, including preparation of a project-specific SWPPP. Compliance with the Construction Stormwater General Permit requirements and implementation of a project-specific SWPPP would avoid generation of polluted runoff from the project site and the impact would be **less than significant**.

### Operation

The project would have a less than significant effect on the impact described. The project would increase the amount of impervious surface by approximately 30,000 square feet from the expansion of the pavement around the sludge basin area to accommodate space for truck hauling off dewatered solids. As discussed previously, the project would comply with provision C.3 of the MRP, which requires that new and redeveloped projects include measures to both treat and prevent increases in stormwater runoff. With compliance with the requirement in C.3 of the MRP, impacts on contributing to excessive stormwater runoff or provide substantial sources of polluted runoff would be **less than significant**.

- iv. **impede or redirect flood flows?**

No, the project would not have the impact described. The project site is not located in a 100-year floodplain. Because the proposed structures would not impede or redirect any flood flows, **no impact** would occur.

- d) **In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?**

No, the project would not have the impact described. The project site is not within a flood hazard, tsunami, or seiche zone. Therefore, the proposed project would not risk the release of pollutants due to potential inundation. There would be **no impact**.

- e) **Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

The project would have a less than significant effect on the impact described. The Basin Plan is the water quality control plan for the San Francisco Bay region, including the project site. The project would not result in any direct discharge to any creek or surface water body. Dutard Creek is located downstream of the project site and drains to Coyote Creek, which is listed as impaired for diazinon, trash, and toxicity according to the Basin Plan. The project involves upgrades to water quality treatment infrastructure and would not contribute any sources of diazinon, trash, or toxicity to Dutard Creek or Coyote Creek. The project would not conflict with a water quality control plan and the impact would be **less than significant**.

The project would use the on-site PWTP water source during construction for dust suppression purposes. Although the project would increase impervious surfaces at the project site, the

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increased impervious area would be negligible and would not inhibit groundwater recharge. The project would also potentially be required to conduct dewatering during deep excavation during construction. The dewatering during excavation would be temporary and is not expected to be substantial. The groundwater levels would be restored after construction from natural groundwater recharge and, therefore, the dewatering during construction would not have an impact on the sustainability of the groundwater basin. Therefore, the project would not conflict with or obstruct implementation of a sustainable groundwater management plan and the impact would be **less than significant**.

### **Mitigation Measures**

**Mitigation Measure HAZ-1 (refer to Hazards and Hazardous Materials)**

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### 4.2.11 Land Use and Planning

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>11. LAND USE AND PLANNING. Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The project site is located within the City of Jose and has a land use designation of Public/Quasi Public (PQP) and zoning designation of Low to Medium Residential Based District (R-1-8). The project site is developed within the existing PWTP. Land uses immediately surrounding the site include suburban residential and undeveloped property. Single-family residential uses are located to the south and west, undeveloped private property is located to the north, and undeveloped public property owned by San Jose Water Company to the east of the project site.

### Discussion

#### a) Would the project physically divide an established community?

*Physical division of an established community* typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and an outlying area. The project would upgrade the existing residuals management facilities within the existing PWTP property. The project does not involve construction of a physical feature or removal or access that would physically divide an established community. Therefore, **no impact** would occur.

#### b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No, the project would not have the impact described. The project would replace existing infrastructure at the PWTP site with infrastructure that serves the same essential purpose and function and located in the same area. There is a proposed project along Suncrest Avenue adjacent to the PWTP that proposes changes to the land use and zoning for the adjacent property. The proposed project is discussed further in Section 4.2.21 as a cumulative project. The project would not conflict with any existing land use plan or policy as it would be replacing existing infrastructure within the PWTP site. Any impacts attributable to future development of adjacent properties would need to be evaluated in the environmental analysis for the adjacent

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projects.<sup>5</sup>The project would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. Therefore, **no impact** would occur.

### **Mitigation Measures**

No mitigation required.

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<sup>5</sup> The City of San Jose is processing an application for a proposed project that would include a rezone (File No. PDC23-007) and General Plan Amendment (File No. GP18-010). The proposed rezone and General Plan Amendment application includes a subdivision with 56 single-family homes on approximately 39.5 acres located adjacent to the PWTP. This



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### 4.2.12 Mineral Resources

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>12. MINERAL RESOURCES. Would the project:</b>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

*Minerals* are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances including, but not limited to, coal, peat and oil-bearing rock but excluding geothermal resources, natural gas, and petroleum. Rock, sand, gravel, and earth are also considered minerals by the Department of Conservation when extracted by surface mining operations. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated the Communications Hill Area (Sector EE), located approximately 7.9 miles southwest of the project site, bounded generally by the Southern Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue as containing mineral deposits which are of regional significance as a source of construction aggregate materials. No other areas in San Jose are designated as containing mineral deposits that are either of statewide significance or the significance of which requires further evaluation (City of San Jose 2011). The project site does not contain mineral deposits subject to SMARA.

### Discussion

- a) **Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

No, the project would not have the impact described. Since the project site is currently developed as a water treatment facility and does not contain any mineral resources, the project activities would not result in the loss of availability of a known mineral resource that would be of value to the region or state. Therefore, **no impact** would occur.

- a) **Would the project 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?**

No, the project would not have the impact described. The project site is not identified as a locally important mineral resource recovery site in the general plan, specific plan, or other land use plan. Therefore, **no impact** from loss of availability of a locally important mineral resource would occur.

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### **Mitigation Measures**

No mitigation is required.

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### 4.2.13 Noise

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>13. NOISE. Would the project result in:</b>				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Settings

#### Noise Fundamentals

Noise is defined as unwanted and objectionable sound. Sound levels usually are measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing (Caltrans 2013). Commonly used noise terminology and metrics include (Federal Transit Administration 2018):

- **A-weighted decibel (dBA).** A-weighting is a method used to account for changes in level sensitivity as a function of frequency. A-weighting de-emphasizes the high (6.3 kilohertz [kHz] and above) and low (below 1 kHz) frequencies and emphasizes the frequencies between 1 kHz and 6.3 kHz, to simulate the relative response of the human ear.
- **Community Noise Equivalent Level (CNEL).** CNEL is a 24-hour time-averaged sound exposure level adjusted for average-day sound source operations. The adjustment includes a 5-dB penalty for noise occurring between 7 p.m. and 10 p.m., and a 10-dB penalty for noise occurring between 10 p.m. and 7 a.m., to adjust for the increased impact of nighttime noise on human activities.
- **L50.** This is the median noise level, or level that is exceeded 50 percent of the time.
- **Day-Night Average Sound Level (Ldn).** Ldn describes a receiver's cumulative noise exposure from all events over 24 hours. Events between 10 p.m. and 7 a.m. are increased by 10 dB to account for people's greater nighttime sensitivity to noise.

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- **Equivalent Sound Level (Leq).** The Leq describes a receiver's cumulative noise exposure from all events over a specified period. The Leq is a “dosage” type measure and is the basis for the descriptors used in current standards, such as the 24-hour CNEL, used by the State of California.
- **Maximum Sound Level (Lmax).** The Lmax is the highest sound level measured over a given period.

### Sensitive Noise Receptors

Noise-sensitive land uses generally include those areas of habitation where the intrusion of noise can adversely affect occupancy, use, or enjoyment of the environment (City of San Jose 2011). Noise sensitive receptors include residential, hotels, motels, hospitals, and residential care. Sensitive receptors that could be exposed to increased noise generated by the project include those receptors within 1,000 feet of the project site as shown on Figure 4.2-4. Sensitive receptors generally include:

- Residences located on El Grande Drive are south and directly adjacent to the PWTP southern fence line.
- The residences along Bay Laurel Lane located as close as approximately 180 west of the PWTP western fence line.
- The residences along Suncrest Avenue located as close as approximately 200 feet north of the PWTP's northern fence line.
- A residence on Vista del Mar adjacent the staging area.

### Groundborne Vibration

Vibrating objects in contact with the ground radiate energy through the ground. Vibratory motion is commonly described by identifying the peak particle velocity (PPV). PPV is generally accepted as the most appropriate descriptor for evaluating the potential for building damage (Caltrans 2020).

### Noise Standards

#### *Federal and State Guidance*

CEQA does not specify a numerical threshold for “substantial increases” in noise, and no federal regulations that limit overall environmental noise levels have been established; however, federal guidance documents address environmental noise and regulations for specific sources. EPA published *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* in 1974, which provides information for State and local governments to use in developing their own ambient noise standards. EPA determined that an Ldn of 55 dBA protects the public from indoor and outdoor activity interference (EPA 1974).

EPA, the Federal Highway Administration (FHWA), and the U.S. Department of Transportation have developed guidelines for noise. Under the authority of the Noise Control Act of 1972, EPA established noise emission criteria and testing methods, published under Title 40 Part 204 of the CFR, that apply to some construction and transportation equipment (e.g., portable air

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compressors; medium and heavy-duty trucks). These regulations would apply to trucks that would transport equipment to the project site.

### *Local Guidance*

Valley Water is exempt from compliance with the local noise ordinances under California Government Code (CGC) § 53091(d) or (e), which state that county or city building and zoning ordinances do not apply to the construction of facilities for water storage or transmission. This analysis uses applicable policies and regulations from the San Jose General Plan and San Jose Municipal Code for guidance.

### *City of San Jose General Plan*

The Envision San Jose 2040 General Plan's Environmental Leadership chapter sets forth policies with the goal of minimizing the impact of noise on people in the City (City of San Jose, 2011). Relevant goals and policies from the Noise and Vibration section of the Environmental Leadership chapter are listed below.

**Policy EC-1.6:** Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent uses through noise standards in the City's Municipal Code.

**Policy EC-1.7:** Require construction operations within San Jose to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:

- Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.

For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.

**Policy EC-2.3:** Require new development to minimize continuous vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, including ruins and ancient monuments or building that are documented to be structurally weakened, a continuous vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A continuous vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of

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normal conventional construction. Equipment or activities typical of generating continuous vibration include but are not limited to: excavation equipment; static compaction equipment; vibratory pile drivers; pile-extraction equipment; and vibratory compaction equipment. Avoid use of impact pile drivers within 125 feet of any buildings, and within 300 feet of historical buildings, or buildings in poor condition. On a project-specific basis, this distance of 300 feet may be reduced where warranted by a technical study by a qualified professional that verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction. Transient vibration impacts may exceed a vibration limit of 0.08 in/sec PPV only when and where warranted by a technical study by a qualified professional that verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction.

### *City of San Jose Municipal Code (Title 20 – Zoning)*

The City of San Jose has noise standards in the City of San Jose Municipal Code Zoning Ordinance (Title 20), which contains noise performance standards that limit noise levels at adjacent properties and applicable hours of construction.

- Chapter 20.30.700(B)(2) states that the sound pressure level generated by any use or combination of uses on a property shall not exceed 55 decibels at the property line of any residential or non-residential use.
- Chapter 20.100.450 (Hours of construction within 500 feet of a residential unit):
  - c. Unless otherwise expressly allowed in a development permit or other planning approval, no applicant or agent of an applicant shall suffer or allow any construction activity on a site located within 500 feet of a residential unit before 7:00 a.m. or after 7:00 p.m., Monday through Friday, or at any time on weekends.
  - d. Without limiting the scope of Section 20.100.310, no applicant or agent of an applicant shall suffer or allow any construction activity on a site subject to a development permit or other planning approval located within 500 feet of a residential unit at any time when that activity is not allowed under the development permit or planning approval.
  - e. This section is applicable whenever a development permit or other planning approval is required for construction activity.

### **Methodology**

To quantify existing ambient noise levels in the project site, four long-term (72-hour) and several short-term (10-minute) noise measurements were collected in and around the project site. A Metrosonics db-308 Sound Level Meters calibrated before and after the measurements were used for the long-term noise measurements. A Larson Davis SoundTrack LxT Sound Level Meter calibrated before and after the measurements was used for the short-term measurements.

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Figure 4.2-9 shows the noise measurement locations. The existing noise level data collected during short-term and long-term measurements is summarized in Appendix F.

To assess the potential construction noise impacts from the proposed project noise technical analyses were conducted which combined intermittent noise levels from the on-site construction equipment to be used during project construction based on equipment noise data in the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) (Appendix F). Estimates of noise from the construction of the project was based on the maximum amount of construction equipment used on a given day.

Five construction activity scenarios were modeled for construction to represent the noisiest elements (worst case scenario) of the project noise generation in terms of equipment and distance to nearby sensitive receptors. Distances between the construction equipment and the nearest residential façade (sensitive receptor) were modeled for all five scenarios and reflect individual pieces of equipment as well as the combined noise for each scenario. Detailed construction noise calculations are included in Appendix F.

### Discussion

- a) **Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

### Construction

The project would have a less than significant effect on the impact described with implementation of mitigation. Construction would result in a temporary increase in ambient noise levels in the vicinity of the project. Construction activities would require the use of various noise generating equipment such as excavating machinery (e.g., excavators, loaders, etc.) and other construction equipment (e.g., scrapers, dozers, compactors, trucks, pile drivers etc.). The noise levels generated by construction equipment would vary depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment, and the prevailing wind direction.

The maximum noise levels for various types of construction equipment that could be used during project construction are provided in Table 4.2-11. Maximum noise levels generated by construction equipment used for the project would range from 77 to 101 dB, Lmax at a distance of 50 feet. Construction of the project would occur between 7 a.m. and 7 p.m., Monday through Friday, consistent with Chapter 20.100.450 of the San Jose Municipal Code. However, extended work hours, such as weekend work and early morning starts for concrete pours would be required and would occur outside of the City's allowable construction hours as discussed under nighttime construction below.



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Figure 4.2-9 Noise Monitoring Locations and Noise Barrier



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**Table 4.2-11 Typical Noise Levels from Construction Equipment**

Construction equipment	Noise level (dB, L <sub>max</sub> at 50 feet)
Backhoe	78
Excavator	81
Dozer	82
Front End Loader	79
Forklift	77
Compactor	83
Water Truck	80
Crane	81
Welder/Torch	74
Pneumatic Tools	85
Impact Pile Driver	101
Vibratory Pile Driver	95
Auger Drill Rig	84
Generator	82
Dump Truck	77
Haul Truck (Earth Hauler)	88
Concrete Mixer Truck	79
Paver	77
Roller	80

*Source: (Federal Highway Administration 2006)*

### **Daytime Construction**

The project would have a less than significant effect on the impact described following the implementation of mitigation. The project's construction noise would generate noise levels between 73.6 and 90.1 dB, Leq at the nearest receptor as shown in Table 4.2-12. Construction noise would last over the construction period (5 years) but may not be continuous over the entire construction duration. The distance to the nearest receptor is based on the construction phase and construction activities would be expected to move further away from the nearest receptor and therefore produce less noise at different phases of construction. The estimated noise levels are based on worst-case scenarios because each scenario assumes that all equipment that is proposed to be used for that activity is present and operating simultaneously at the closest point to the nearest residential façade.

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**Table 4.2-12 Noise levels from project construction at nearby sensitive receptors**

Scenario	Activity	Residential Receptor Location	Principal Noise Sources	Reference Noise Level (dB, Lmax at 50 feet)	Distance to Receptor (feet) <sup>1</sup>	Usage Factor (%)	Leq (h) Level (dB) <sup>2</sup>	Leq (h) Level with Mitigation (dB)
A1-a	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Impact Pile Driver	101.3	370	20	76.9	N/A <sup>3</sup>
A1-a	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Excavator	80.7	350	40	59.8	N/A <sup>3</sup>
A1-a	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Haul Truck (4x)	88.0	350	40	67.1	N/A <sup>3</sup>
A1-a	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Compactor	83.2	350	20	59.3	N/A <sup>3</sup>
A1-a	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Front End Loader	79.1	350	40	58.2	N/A <sup>3</sup>
A1-a	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Dump Truck (2x)	76.5	350	40	55.6	N/A <sup>3</sup>
<b>A1-a</b>	<b>Demolition of northernmost Sludge Holding Pond</b>	<b>Nearest Residence on Suncrest Avenue</b>	<b>Combined Total</b>	<b>-</b>	<b>350</b>	<b>-</b>	<b>78.6</b>	<b>N/A<sup>3</sup></b>
A1-b	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Auger Drill Rig	84.4	370	20	60.0	N/A <sup>3</sup>
A1-b	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Excavator	80.7	350	40	59.8	N/A <sup>3</sup>
A1-b	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Haul Truck (4x)	88.0	350	40	67.1	N/A <sup>3</sup>

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Scenario	Activity	Residential Receptor Location	Principal Noise Sources	Reference Noise Level (dB, Lmax at 50 feet)	Distance to Receptor (feet) <sup>1</sup>	Usage Factor (%)	Leq (h) Level (dB) <sup>2</sup>	Leq (h) Level with Mitigation (dB)
A1-b	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Compactor	83.2	350	20	59.3	N/A <sup>3</sup>
A1-b	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Front End Loader	79.1	350	40	58.2	N/A <sup>3</sup>
A1-b	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Dump Truck (2x)	76.5	350	40	55.6	N/A <sup>3</sup>
<b>A1-b</b>	<b>Demolition of northernmost Sludge Holding Pond</b>	<b>Nearest Residence on Suncrest Avenue</b>	<b>Combined Total</b>	<b>-</b>	<b>350</b>	<b>-</b>	<b>73.9</b>	<b>N/A<sup>3</sup></b>
A1-c	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Vibratory Pile Driver	95.0	370	20	70.6	N/A <sup>3</sup>
A1-c	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Excavator	80.7	350	40	59.8	N/A <sup>3</sup>
A1-c	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Haul Truck (4x)	88.0	350	40	67.1	N/A <sup>3</sup>
A1-c	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Compactor	83.2	350	20	59.3	N/A <sup>3</sup>
A1-c	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Front End Loader	79.1	350	40	58.2	N/A <sup>3</sup>
A1-c	Demolition of northernmost Sludge Holding Pond	Nearest Residence on Suncrest Avenue	Dump Truck (2x)	76.5	350	40	55.6	N/A <sup>3</sup>



## 4 ENVIRONMENTAL EVALUATION

Scenario	Activity	Residential Receptor Location	Principal Noise Sources	Reference Noise Level (dB, Lmax at 50 feet)	Distance to Receptor (feet) <sup>1</sup>	Usage Factor (%)	Leq (h) Level (dB) <sup>2</sup>	Leq (h) Level with Mitigation (dB)
<b>A1-c</b>	<b>Demolition of northernmost Sludge Holding Pond</b>	<b>Nearest Residence on Suncrest Avenue</b>	<b>Combined Total</b>	<b>-</b>	<b>350</b>	<b>-</b>	<b>75.5</b>	<b>N/A<sup>3</sup></b>
A2-a	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Impact Pile Driver	101.3	100	20	88.3	76.3 <sup>4</sup>
A2-a	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Excavator	80.7	90	40	71.6	59.6 <sup>4</sup>
A2-a	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Haul Truck (4x)	88.0	90	40	78.9	66.9 <sup>4</sup>
A2-a	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Compactor	83.2	90	20	71.1	59.1 <sup>4</sup>
A2-a	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Front End Loader	79.1	90	40	70.0	58.0 <sup>4</sup>
A2-a	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Dump Truck (2x)	76.5	90	40	67.4	55.4 <sup>4</sup>
<b>A2-a</b>	<b>Demolition of southernmost Wastewater Recovery Pond</b>	<b>Nearest Residence on El Grande Drive</b>	<b>Combined Total</b>	<b>-</b>	<b>90</b>	<b>-</b>	<b>90.1</b>	<b>78.1<sup>4</sup></b>
A2-b	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Auger Drill Rig	84.4	100	20	71.3	59.3 <sup>4</sup>
A2-b	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Excavator	80.7	90	40	71.6	59.6 <sup>4</sup>
A2-b	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Haul Truck (4x)	88.0	90	40	78.9	66.9 <sup>4</sup>

## 4 ENVIRONMENTAL EVALUATION

Scenario	Activity	Residential Receptor Location	Principal Noise Sources	Reference Noise Level (dB, Lmax at 50 feet)	Distance to Receptor (feet) <sup>1</sup>	Usage Factor (%)	Leq (h) Level (dB) <sup>2</sup>	Leq (h) Level with Mitigation (dB)
A2-b	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Compactor	83.2	90	20	71.1	59.1 <sup>4</sup>
A2-b	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Front End Loader	79.1	90	40	70.0	58.0 <sup>4</sup>
A2-b	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Dump Truck (2x)	76.5	90	40	67.4	55.4 <sup>4</sup>
<b>A2-b</b>	<b>Demolition of southernmost Wastewater Recovery Pond</b>	<b>Nearest Residence on El Grande Drive</b>	<b>Combined Total</b>	<b>-</b>	<b>90</b>	<b>-</b>	<b>85.7</b>	<b>73.7<sup>4</sup></b>
A2-c	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Vibratory Pile Driver	95.0	100	20	82.0	70.0 <sup>4</sup>
A2-c	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Excavator	80.7	90	40	71.6	59.6 <sup>4</sup>
A2-c	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Haul Truck (4x)	88.0	90	40	78.9	66.9 <sup>4</sup>
A2-c	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Compactor	83.2	90	20	71.1	59.1 <sup>4</sup>
A2-c	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Front End Loader	79.1	90	40	70.0	58.0 <sup>4</sup>
A2-c	Demolition of southernmost Wastewater Recovery Pond	Nearest Residence on El Grande Drive	Dump Truck (2x)	76.5	90	40	67.4	55.4 <sup>4</sup>
<b>A2-c</b>	<b>Demolition of southernmost Wastewater Recovery Pond</b>	<b>Nearest Residence on El Grande Drive</b>	<b>Combined Total</b>	<b>-</b>	<b>90</b>	<b>-</b>	<b>87.1</b>	<b>75.1<sup>4</sup></b>

## 4 ENVIRONMENTAL EVALUATION

Scenario	Activity	Residential Receptor Location	Principal Noise Sources	Reference Noise Level (dB, Lmax at 50 feet)	Distance to Receptor (feet) <sup>1</sup>	Usage Factor (%)	Leq (h) Level (dB) <sup>2</sup>	Leq (h) Level with Mitigation (dB)
A3	Paving of southern project site – Directly south of Washwater Recovery Ponds	Nearest Residence on El Grande Drive	Paver	77.2	80	50	70.1	58.1 <sup>4</sup>
A3	Paving of southern project site – Directly south of Washwater Recovery Ponds	Nearest Residence on El Grande Drive	Compactor	83.2	80	20	72.2	60.2 <sup>4</sup>
A3	Paving of southern project site – Directly south of Washwater Recovery Ponds	Nearest Residence on El Grande Drive	Roller	80.0	80	20	68.9	56.9 <sup>4</sup>
A3	Paving of southern project site – Directly south of Washwater Recovery Ponds	Nearest Residence on El Grande Drive	Haul Truck (3x)	88.0	80	40	79.9	67.9 <sup>4</sup>
A3	Paving of southern project site – Directly south of Washwater Recovery Ponds	Nearest Residence on El Grande Drive	Concrete Mixer Truck	78.8	80	40	70.7	58.7 <sup>4</sup>
<b>A3</b>	<b>Paving of southern project site – Directly south of Washwater Recovery Ponds</b>	<b>Nearest Residence on El Grande Drive</b>	<b>Combined Total</b>	<b>-</b>	<b>80</b>	<b>-</b>	<b>85.3</b>	<b>73.3<sup>4</sup></b>
A4	Concrete pours for foundation of southernmost Washwater Recovery Pond	Nearest Residence on El Grande Drive	Pickup Truck (2x)	75.0	90	40	65.9	53.9 <sup>4</sup>
A4	Concrete pours for foundation of southernmost Washwater Recovery Pond	Nearest Residence on El Grande Drive	Concrete Mixer Truck (2x)	78.8	100	40	68.8	56.8 <sup>4</sup>



## 4 ENVIRONMENTAL EVALUATION

Scenario	Activity	Residential Receptor Location	Principal Noise Sources	Reference Noise Level (dB, Lmax at 50 feet)	Distance to Receptor (feet) <sup>1</sup>	Usage Factor (%)	Leq (h) Level (dB) <sup>2</sup>	Leq (h) Level with Mitigation (dB)
<b>A4</b>	<b>Concrete pours for foundation of southernmost Washwater Recovery Pond</b>	<b>Nearest Residence on El Grande Drive</b>	<b>Combined Total</b>	<b>-</b>	<b>90</b>	<b>-</b>	<b>73.6</b>	<b>61.6<sup>4</sup></b>
A5	Use of Staging Area	Nearest Residence on Vista Del Mar	Pickup Truck (3x)	75.0	90	40	65.9	N/A <sup>5</sup>
A5	Use of Staging Area	Nearest Residence on Vista Del Mar	Backhoe	77.6	90	40	68.5	N/A <sup>5</sup>
A5	Use of Staging Area	Nearest Residence on Vista Del Mar	Forklift	77.0	90	40	67.9	N/A <sup>5</sup>
<b>A5</b>	<b>Use of Staging Area</b>	<b>Nearest Residence on Vista Del Mar</b>	<b>Combined Total</b>	<b>-</b>	<b>90</b>	<b>-</b>	<b>74.0</b>	<b>N/A<sup>5</sup></b>

### NOTES:

1 Some pieces of equipment are listed closer to the nearest residential façade because they are mobile and would be located along the access roads on-site which are located closer to residences on both the north and south side of the project site while in use.

2 The hourly Leq level is adjusted for distance from nearest sensitive receptor and percentage of usage.

3 Noise from the demolition of the northernmost Sludge Holding Pond would be reduced by the existing topography and distance between the nearest residences on Suncrest Avenue. Due to the distance between this activity and the nearest residences, no temporary sound barrier is proposed for construction occurring on the north side of the project site.

4 Implementation of Mitigation Measure NOI-1 would result in an approximate 12 dB reduction of noise from construction reaching the nearest residences on El Grande Drive. This reduction would come from installation of a temporary 12-foot-tall construction noise barrier that would be located directly east, south, and west of the Washwater Recovery Ponds and located as close as feasible to construction activities.

5 No temporary sound barriers are proposed adjacent to the staging area.

Source: (RCH Group 2024)

## 4 ENVIRONMENTAL EVALUATION

Activities generating the most amount of noise (i.e., demolition, grading, excavation and pile driving) would occur within 500 feet of several residential homes for 5 years, a period that would exceed the 12-month duration threshold set forth in City of San Jose General Plan Policy EC-1.7. Generation of construction noise in proximity to receptors for more than 12 months would be a potentially significant impact. The City General Plan's Policy EC-1.7 states that for such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints would be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.

The project would implement Mitigation Measures NOI-1 and NOI-2, which would implement the required noise logistics plan to reduce construction noise at nearby sensitive receptors. Mitigation Measure NOI-1 would require the installation of a 12-foot-tall temporary construction noise barrier adjacent to the construction occurring at the wastewater recovery ponds. This temporary construction noise barrier would effectively reduce construction noise levels at residences on El Grande Drive by approximately 12 dB (see mitigated construction noise levels for Scenarios A2-A4 in Appendix F). Mitigation Measure NOI-2 requires written notification to all residential units within 500 feet of the construction to before construction activities). As such, with the implementation of Mitigation Measures NOI-1 and NOI-2, construction noise would comply with local standards and would be **less than significant with mitigation**.

### *Night-time Construction*

The project would have a less than significant effect on the impact described following the implementation of mitigation. Consistent with Chapter 20.100.450 of the San Jose Municipal Code, construction within 500 feet of a residential unit is limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday unless expressly allowed in a development permit or other planning approval. While construction is planned to occur within the approved construction hours consistent with San Jose Municipal Code, construction could occur during early morning hours or outside normal working hours for specified construction activities such as concrete delivery and pours. The extended workdays for concrete delivery and pours would be approximately 16 hours long. The total number of extended workdays would occur for a total of 3 weeks, nonconsecutively over the course of the 5-year construction period. Noise levels during concrete pours would be equivalent to those indicated in Scenario A4 in Table 4.2-12 and would be up 73.6 dB Leq without mitigation at the nearest receptor. Early morning concrete work occurring during nighttime hours could potentially cause annoyances at the residences along El Grande Drive during nighttime hours and would exceed the approved work hours, which would be a significant impact. Mitigation Measures NOI-1 would implement a sound barrier as shown in Figure 4.2-9, which would effectively reduce noise levels during concrete pours by 12 dB at adjacent receptor to 61.6 dB Leq. Valley Water would also implement Mitigation Measure NOI-2, which requires notification of nearby receptors prior to extended

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workdays for concrete pours. As such, due to the very infrequency and short duration of extended concrete pours over the project duration, the impact from extended work hours for concrete pours would be **less than significant with mitigation**.

### *Staging Area Noise*

The project would have a less than significant effect on the impact described. Construction staging and stockpiling would occur within the staging areas shown in Figure 2.3-1 or within one or more disturbed or developed areas within 10 miles of the PWTP. As shown in Table 4.2-12, the use of the staging area adjacent the PWTP would generate a maximum noise level of 74 dB, Leq at the nearest receptor. The estimated noise levels shown in Table 4.2-12 are very conservative because it is assumed that all equipment that is proposed to be used in the staging area is present and operating simultaneously, which will never be the case. The noise level generated from the use of a staging area would be much lower than the noise levels presented in Table 4.2-12. Therefore, the same can be assumed for use of other staging areas on Valley Water property or use of off-site staging areas. It is assumed that use of any staging sites within 10 miles of the PWTP would comply with the local jurisdiction's construction noise ordinance (i.e., hours of construction or construction noise limits). As such, off-site staging area noise impacts would be **less than significant**.

### **Operation**

The project would have a less than significant effect on the impact described. The project facilities would be very similar to the existing RMS facilities that are currently on-site and would not generate a substantial permanent increase in ambient noise levels in the vicinity of the project site. The project would include new pumps, which would be a source of new stationary noise-generating equipment. The closest new pump would be approximately 200 feet north of the nearest residential property line on El Grande Drive.

To analyze potential operational noise impacts, operational noise levels from the existing equipment was recorded as a reference noise level on June 26, 2023. The noise levels recorded from the operating sludge drying beds and equipment was a constant 68 dB, Leq at a distance of 20 feet away. Using the reference noise level, attenuation modeling was conducted to predict the resulting noise levels from the proposed pump operational noise at the nearest residential property line.

**Table 4.2-13 Noise levels from proposed sludge transfer pump station**

Noise Source	Reference Noise Level (dB, Leq at 20 feet)	Distance to Receptor (feet)	Leq (h) Level (dB) <sup>1</sup>	Threshold (dB, Lmax) <sup>2</sup>	Exceeds Noise Threshold?
Noise from proposed sludge transfer pump station	68	200	48	55	<b>No</b>

Notes:

1. Assumes a 6 dB reduction from standard distance attenuation

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2. San Jose Municipal Code, Part 7, Chapter 20.30.700 prohibits noise levels from the Project site to exceed 55 dB, Lmax at the nearest residential property line.

*Source: (RCH Group 2024)*

As shown in Table 4.2-13 noise from the proposed operational pumps would be 48 dB, Leq at the nearest property line of a residential use (located approximately 200 feet away). This noise level would not exceed the 55 dB, Lmax limit outlined in San Jose Municipal Code, Part 7, Chapter 20.30.700. As such, operational noise from proposed pumps would be **less than significant**.

### **b) Would the project generate excessive groundborne vibration or groundborne noise levels?**

The project would have a less than significant effect on the impact described following the implementation of mitigation. Construction activities could result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and operations involved. In most cases, vibration induced by typical construction equipment does not result in adverse effects on people or structures (Caltrans 2013). Construction equipment noise is address in Impact a) and construction equipment would not be a source of groundborne noise. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely results in structural damage. City of San Jose Policy EC-2.3 sets a threshold of 0.08 in/sec. PPV for sensitive historic structures, including ruins and ancient monuments or buildings that are documented to be structurally weakened, and a continuous vibration limit of 0.20 in/sec PPV for buildings of normal conventional construction. Policy EC-2.3 also restricts use of impact pile drivers within 125 feet of any buildings, and within 300 feet of historical buildings, or buildings in poor condition.

Construction of the project would involve use of heavy equipment that would temporarily generate groundborne vibration levels in proximity to residential structures, including potential use of impact pile drivers. Depending on the location of construction, several pieces of heavy equipment that would be used for demolition and construction could be as near as 90 feet from the nearest residential structure. Other pieces of mobile equipment could be as near as 80 feet from the nearest residential structure. Most of the construction would occur at distances much greater than 80 and 90 feet throughout the duration of project construction. Construction would require the use of either an impact pile driver, a vibratory pile driver, or an auger drill to install beams to support the deep excavations at the washwater basins. Other heavy equipment would include a roller that would be used for paving. The estimated PPV for heavy construction equipment that could be used at 80 and 90 feet is summarized in Table 4.2-14.

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**Table 4.2-14 Vibration (PPV) Levels During Construction**

Construction Equipment/Type of Construction	PPV at 25 feet (in/sec)	Distance to Nearest Receptor (feet)	PPV at nearest receptors to the project (in/sec)	Exceeds 0.2 in/sec PPV Threshold?
Pile Driver (Impact) (Upper Range)	1.518	90	<b>0.22</b>	<b>Yes</b>
Pile Driver (Vibratory) (Typical Range)	0.644	90	0.09	No
Caisson Drilling (Auger Drilling)	0.089	90	0.01	No
Roller/Paving	0.21	80	0.04	No

Notes: Bold indicates an exceedance of a threshold

Source:

As shown in Table 4.2-14, the predicted vibration levels from construction activities would exceed the City of San Jose's 0.2 PPV threshold during use of an impact hammer at a distance of 90 feet from the nearest residential structure and the resulting vibration impact on nearby structures is potentially significant. Implementation of Mitigation Measures NOI-3 requires a minimum setback of 125 feet from the nearest residence and would ensure that construction vibration from the use of an impact pile driver would be below the 0.2 PPV significance threshold and would not exceed the vibration thresholds set by the City of San Jose. As presented in Table 4.2-12, all other pile driver options would not exceed the vibration threshold at the nearest residential structure. As such, vibration impacts from construction would be **less than significant with mitigation**.

- c) **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

No, the project would not have the impact described. No public airports or private airstrips are within 2 miles of the project site. The nearest airport is the Reid-Hillview Airport located approximately 4 miles south of the project. As such, **no impact** would occur.

### Mitigation Measures

#### Mitigation Measure NOI-1: Noise Barriers

Prior to demolition occurring at the Washwater Recovery Ponds, Valley Water will install a temporary 12-foot-tall construction noise barrier as close as feasible to the southernmost Washwater Recovery Pond demolition and construction activities to shield the residential receptors to the south on El Grande Drive. The noise barrier shall be equipped with exterior-rated quilted sound blankets that are a minimum of 2 inches thick. There may be some periods

## 4 ENVIRONMENTAL EVALUATION

of construction when the noise barrier may be temporarily moved or dismantled to accommodate the movement of heavy equipment and work crews within the immediate project construction area. Valley Water will schedule any dismantling or moving of the noise barrier to coincide with periods when construction activities will occur within the adopted construction hours of the City of San Jose (7:00 a.m. to 7:00 p.m.) and fall within the local noise requirements. The location of the temporary noise barrier is shown on Figure 4.2-9 or functional equivalent.

### **Mitigation Measure NOI-2: Notification**

Prior to the start of construction activities (major phases), Valley Water will provide written notification to all residents within 500 feet of the construction site. The notice shall include information on the estimated start date and duration of construction activities, hours of construction, and contact information (i.e., telephone number and email address) for the VW Construction Manager or assigned staff (e.g., Construction Noise Coordinator). Additional written notification to all residential units within 500 feet of the construction site shall be provided prior to nighttime construction activities (before 7:00 a.m. or after 7:00 p.m.) informing them of the estimated start date, duration, and hours of construction for nighttime construction activities. Written notification shall be provided at least one week prior to any nighttime construction activity.

The VW Construction Manager or assigned staff (Construction Noise Coordinator) will be responsible for responding to any local complaints about construction noise or vibration. Contact information (i.e., telephone number and email address) for the Construction Noise Coordinator shall be conspicuously posted along public roads adjacent to the construction site in addition to any written notifications to area residents.

### **Mitigation Measure NOI-3: Impact Pile Driver Setback**

Impact pile driver use shall be limited to locations 125 feet or greater from any off-site structure. Prior to use of any impact pile driver at the site, the contractor shall submit a pile driving plan to Valley Water that includes information on the type of pile drivers to be used and the location of the pile driver to demonstrate that the pile driver will be greater than 125 feet from any off-site residence. This measure does not apply to Vibratory Pile Drivers, Caisson Drilling, or Roller/Paving equipment.

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### 4.2.14 Population and Housing

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>14. POPULATION AND HOUSING. Would the project:</b>				
a) Induce substantial unplanned 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Environmental Setting

The project site is an existing developed water treatment facility within the City of San Jose. The project site is surrounded by single-family residential uses to the south and west, undeveloped private property to the north, and undeveloped public property to the east.

#### Discussion

- a) **Would the project induce substantial unplanned 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)?**

No, the project would not have the impact described. The project would include upgrades to the existing PWTP facilities that would improve the efficiency of the residual management process that would allow the plant to operate at its design capacity but would not increase the permitted capacity of the plant. The project would not induce substantial unplanned population growth in the area because the project would not include any new housing; new commercial or industrial facilities or extend infrastructure or public facilities. The project would not generate additional permanent employment opportunities because the project would replace existing infrastructure and would automate processes that are currently manual. The project would generate a small number of short-term construction jobs, which are expected to come from the local or regional labor force. The project would not directly or indirectly induce population growth because it would not create any housing or increase infrastructure capacity. Therefore, **no impact** would occur.

- b) **Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

No, the project would not have the impact described. Implementation of the project would not displace any residents or housing units because no housing exists on the project site. **No impact** would occur.

#### Mitigation Measures

No mitigation required.



## 4 ENVIRONMENTAL EVALUATION

### 4.2.15 Public Services

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>15. PUBLIC SERVICES.</b>				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The project site is located within the City of San Jose and is under the jurisdiction of the San Jose Fire Department and San Jose Police Department. The nearest fire station is City of San Jose Fire Department's Fire Station 19, located at 3292 Sierra Road, San José, CA 95132 (approximately 0.7 mile west of the Project site), approximately 4-minutes driving time to the project site. The San Jose Police Station is located at 201 W Mission Street, San Jose, CA 95110 (approximately 5 miles southwest of the Project site), approximately 15-minute driving time to the project site.

The project is within Berryessa Union School District and East Side Unified High School District. The closest school to the project site is Noble Elementary School, located approximately 0.2 mile to the southwest of the project site. The closest parks to the project site are Noble Park, located approximately 0.4 mile to the southwest of the project site, and Alum Rock Park, located approximately 0.4 mile to the southeast of the project site.

## 4 ENVIRONMENTAL EVALUATION

### Discussion

- a) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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?**

No, the project would not have the impact described. The project would not increase demand for fire protection services that would necessitate the need for new or physically altered facilities because the project would not increase the number of employees on the project site or increase the local population. The project would replace existing residual management facilities with new facilities that provide the same function. **No impact** would occur.

ii. **Police protection?**

No, the project would not have the impact described. The project would not increase demand for police services that would necessitate the need for new or physically altered facilities, because the project would not increase the number of employees on the project site or increase the local population. The project would replace existing residual management facilities with new facilities that provide the same function. **No impact** would occur.

iii. **Schools?**

No, the project would not have the impact described. The project would not result in population growth that would increase demand for schools because the project would not increase the local population. The project would replace existing residual management facilities with new facilities that provide the same function. **No impact** would occur.

iv. **Parks?**

No, the project would not have the impact described. The project would not result in population growth that would increase demand for parks, because the project would not increase the local population. The project would replace existing residual management facilities with new facilities that provide the same function. **No impact** would occur.

v. **Other public facilities?**

No, the project would not have the impact described. The project would not result in population growth or other land use modifications that would increase demand for other facilities. The project would replace existing residual management facilities with new facilities that provide the same function. Therefore, **no impact** would occur.

### Mitigation Measures

No mitigation required.

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### 4.2.16 Recreation

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>16. RECREATION.</b>				
a) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The project site is located within the City of San Jose, which manages approximately 3,520 acres of parks (regional/city-wide and neighborhood/community), community gardens and open space lands (City of San Jose 2011). The closest parks to the project are Noble Park, which is approximately 0.4 mile to the southwest of the project site, and Alum Rock Park, which is also approximately 0.4 mile to the southeast of the project site.

### Discussion

**a) Would the project 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?**

No, the project would not have the impact described. The project would consist of improvements to an existing water treatment facility. The project would allow the PWTP to operate at its permitted capacity but would not expand the treatment capacity of the plant and would not induce population growth. The project would not propose any residential use that would increase the use of existing neighborhood and regional parks or other recreational facilities in the project vicinity. Therefore, **no impact** would occur.

**b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

No, the project would not have the impact described. The project consists of improvements to an existing water treatment facility. The project would not include recreational facilities, nor would the project induce population growth and demand for recreational facilities requiring the construction or expansion of recreational facilities. Therefore, **no impact** would occur.

### Mitigation Measures

No mitigation required.

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### 4.2.17 Transportation

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>17. TRANSPORTATION. Would the project:</b>				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

The project site is located on Whitman Way, at Vista Del Mar in the City of San Jose. Whitman Way and Vista Del Mar are residential two-lane roads that provide local access to nearby residences. Regional access to the project site is available from Interstate 680 via Berryessa Road and Piedmont Road. Berryessa Road and Piedmont Road are four-lane roadways. Berryessa Road has a Class 2 (Basic) bike lane, and Piedmont Road has a Class 2 (Buffered) bike lane<sup>6</sup> (City of San Jose 2021). The Valley Transportation Authority runs bus line 71 along Piedmont Road and bus line 61 along Berryessa Road (Valley Transportation Authority, n.d.).

### Discussion

- a) **Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

### Construction

The project would have a less than significant effect on the impact described. Construction of the project would generate a temporary increase in vehicle trips by construction workers and by trucks transporting material to and from the project site. Over the course of the 5-year construction period, the number of truck trips would vary, but for purposes of this analysis, it is assumed there would be approximately 3 truck trips per day on average. Trucks and vehicles would use Whitman Way, Piedmont Road, and Berryessa Road to access the project site. The

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<sup>6</sup> Class II (basic) bike lanes provide dedicated on-street space for bicyclists in the roadway, delineated with painted pavement stripes and symbols on the roadway surface. Class II (buffered) bike lanes have a striped buffer area between bicycle and general-purpose travel lanes (City of San Jose 2020).

## 4 ENVIRONMENTAL EVALUATION

project would not require full or partial closure of any streets or their associated bicycle routes and public transportation facilities. Equipment and vehicle staging would occur within the project site and on an established offsite staging area, and no material staging would occur within public roads. There would be no temporary closure or disruption of roads, lanes, bicycle lanes, or public transportation routes as a result of project construction. Project construction would not conflict with policies, plans, ordinances, or programs addressing the performance of the circulation system, and impacts would be **less than significant**.

### Operation

No, the project would not have the impact described. The project facilities would replace existing RMS facilities, and operation of the project would not change the number of employees on the project site. Implementation of the project would reduce the volume of dewatered solids for off-site disposal, which would require fewer off-haul truck trips during operation. Because operation of the project would not generate any operational traffic or affect any roadways, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle or pedestrian facilities. **No impact** would occur.

#### **b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

The project would have a less than significant effect on the impact described. During project construction, vehicle miles traveled would temporarily increase because of construction worker vehicles trips, truck trips, and equipment transport. The project would require an average of 30 workers onsite per day during construction. Construction would temporarily generate 60 vehicle trips per day as workers would travel to the site in the morning and leave the site in the afternoon. Operation of the project would require the same number of employees as the existing RMS facilities, and operation would not generate any additional vehicle trips. According to the Governor's Office of Planning and Research, small projects that generate or attract fewer than 110 trips per day may be assumed to cause a less than significant impact in regards to vehicle miles traveled per CEQA Guidelines section 15064.3(b) (Governor's Office of Planning and Research 2018). Because the construction would temporarily generate 60 vehicle trips per day and operation would generate no increase in vehicle trips, the project would generate fewer than 110 trips per day. Therefore, the project would not generate an increase in vehicle miles traveled that would conflict or be inconsistent with CEQA Guidelines section 15064.3(b). The impact would be **less than significant**.

#### **c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

No, the project would not have the impact described. The project would be accessed from existing public roads and would not alter the physical configuration of the existing roadway network serving the area and would not introduce unsafe design features. Construction of the project would temporarily increase traffic to the site by up to approximately 3 truck trips per day on average but would not include any design features that would introduce incompatible uses that might introduce a safety hazard to circulation. No new roadways or access roads

## 4 ENVIRONMENTAL EVALUATION

would be constructed for the project. Therefore, the project would not result in an increase of hazards due to design features or incompatible uses. **No impact** would occur.

### d) Result in inadequate emergency access?

No, the project would not have the impact described. Construction of the project would occur within the project site at the existing PWTP. No lane closures or detours would be required and emergency access to the project site, and the surrounding vicinity would be maintained. The temporary increase in traffic due to project construction would not cause a significant increase in traffic volume on roadways in the area. The project would not require the partial or full closure of any public roads. Project operation would not increase the amount of traffic to the site that could affect any emergency access to the area and would not generate impacts on the transportation network that could impact emergency access. For those reasons, the project would have **no impact**.

### Mitigation Measures

No mitigation required.

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### 4.2.18 Tribal Cultural Resources

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>18. TRIBAL CULTURAL RESOURCES</b>				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Settings

Effective July 2015, Assembly Bill (AB52) requires (1) a lead agency to provide notice to any California Native American tribes that have requested notice of projects proposed by the lead agency, and (2) if a tribe requests consultation within 30 days upon receipt of the notice, the lead agency to consult with the tribe. As of this time, Valley Water has not received written requests from any California Native American Tribes to receive such notifications.

CEQA section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing, on a national, State, or local register of historical resources.

Far Western Anthropological Research Group, Inc., submitted a Sacred Lands File search request to the Native American Heritage Commission (NAHC) on July 7, 2023. Far Western Anthropological Research Group, Inc., received a response from the NAHC on July 26, 2024, stating that a search of the Sacred Lands File provided negative results.



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Valley Water sent notification to two tribes on August 25, 2023 in compliance with AB 52. The notification letters are provided in Appendix G. No responses were received from any tribes.

### Discussion

- a) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**
- i. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**
  - ii. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

No, the project would not have the impact described.

Based on the response from the NAHC and absence of any comments from Native Americans noting the presence of tribal cultural resources within the project site, no tribal cultural resources are known to occur within the site. In addition, the project would be located primarily within the existing disturbance footprint of the existing facilities that would be replaced by the project. Due to the absence of tribal cultural resources within the project site, the project would have **no impact** on tribal cultural resources.

### Mitigation Measures

No mitigation required.

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### 4.2.19 Utilities and Service Systems

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>19. UTILITIES AND SERVICE SYSTEMS. Would the project:</b>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Settings

The project site is located in the City of San Jose. Existing utility service to the site includes electrical service by Pacific Gas & Electric. The PWTP is an existing water treatment facility and water is supplied to the project on site. Wastewater service is provided by the San Jose-Santa Clara Regional Wastewater Facility. The landfills and transfer station that serve the City of San Jose include California Waste Solutions, Guadalupe Rubbish Disposal Company, Kirby Canyon Landfill, Newby Island Sanitary Landfill, and Zanker Road Landfill. The nearest landfill to the project site is Newby Island Sanitary Landfill, located 6.4 miles from the site.

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30), enacted through Assembly Bill 939 and modified by subsequent legislation, required all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000, and to divert at least 75 percent of generated waste (based on per capita disposal rates) by 2020. A jurisdiction's diversion rate is the percentage of the total waste that a jurisdiction diverts from disposal through reduction and recycling programs. The law

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requires all California counties, in coordination with their respective cities, to develop and implement integrated waste management plans. As part of these plans, counties must ensure that a minimum of 15 years of disposal capacity is available to serve the county and its cities.

### Discussion

- a) **Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

#### Water

The project would have a less than significant effect on the impact described. The project would upgrade the existing RMS facilities at PWTP. Upgrades of the RMS facilities would allow the PWTP to operate at its permitted design capacity and would not expand the treatment capacity of the PWTP as the project would not change any treatment process infrastructure. The project would result in increased recycling and efficiency in water treatment operations. The impact on water utilities would be beneficial and **less than significant**.

#### Wastewater

No, the project would not have the impact described. The project would not generate any wastewater. Solids removed during the dewatering process would be thickened and removed from the site by truck and would not create any wastewater. Process water recycled in the RMS process would be returned to the PWTP for treatment to increase water recycling and efficiency. The project would have **no impact** on wastewater facilities.

#### Stormwater Drainage

The project would have a less than significant effect on the impact described. The existing storm water drainage infrastructure is located off site, and the project would not modify the stormwater drainage. The project would comply with the Stormwater Construction General Permit and MRP.3 requirements and would not result in increased stormwater drainage. The project would have a **less than significant** impact on stormwater drainage facilities.

#### Electrical Power

The project would have a less than significant effect on the impact described. Operation of the project would require approximately 300,000 kWh annually relative to existing conditions of electric power. Power would be supplied from the existing PG&E electrical distribution lines serving the PWTP. The increased energy demand for the project would not require any new or expanded electrical service. The project would have a **less than significant impact** on electrical power facilities.

#### Natural Gas

No, the project would not have the impact described. Construction of the project would require the use of generators to power some construction equipment. During operation of the project, a new separate standby generator, using up to 500 horsepower motors, would provide backup power for critical equipment in the event of power interruptions, for the sludge holding and dewatering facilities. An existing on-site standby generator would provide backup power for

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the sedimentation basin and washwater handling and treatment facilities. The standby generators would be tested monthly for 2 hours. No other natural gas would be used or required during operation of the project, and therefore no expansion of new natural gas services would be required. The project would have **no impact** on natural gas facilities.

### Telecommunication Facilities

No, the project would not have the impact described. The project would not modify any telecommunication facilities or require new telecommunication facilities. The project would have **no impact** on telecommunication facilities.

**b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

No, the project would not have the impact described. During construction, the project would use a small amount of water from the on-site treatment system for dust control during grading and to support compaction during excavation. Operation of the project would increase efficiency of the RMS facilities by reducing the amount of water in the thickened solids and resulting in increased recycling of water at the facility. Operation of the project would not require more water than the existing RMS facilities. The project would not affect existing water supply entitlements, nor would it require new or expanded entitlements. Accordingly, **no impact** would occur.

**c) Would the project 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?**

No, the project would not have the impact described. The project would consist of upgrading existing RMS facilities and would not generate any wastewater. Because the project would not produce any wastewater, it would not affect wastewater capacity and there would be **no impact**.

**d) and Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

The project would have a less than significant effect on the impact described. Construction of the project would generate approximately 16,000 cubic yards of soil during excavation and approximately 1,050 cubic yards of solid waste during demolition of facilities. Waste generated by the project would be processed at the Newby Island Sanitary Landfill located approximately 6.4 miles from the project site. The Newby Island Sanitary Landfill has a permitting capacity of 4,000 tons per day and accepts contaminated soil, green materials, tires, sludge, mixed municipal waste, industrial waste, construction/demolition waste. The landfill is permitted to operate until 2041 (CalRecycle, n.d.). The project would not significantly impact the 4,000 ton daily permitted capacity at the Newby Island Sanitary Landfill. Construction waste may generate hazardous waste including used oil or grease and lead and asbestos from structure demolition.

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The project would improve the RMS thickening and dewatering processes and reduce the volume of dewatered solids for off-site disposal compared to the existing operation.

The project would not generate solid waste in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals; therefore, impacts would be **less than significant**.

**e) Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

The project would have a less than significant effect on the impact described. Construction of the project would generate demolition waste including concrete, asphalt, piping, metals, and wood waste, as summarized in Table 2.5-1 in the project description. At least 65 percent of the demolition waste would be recycled as required by California Green Building Standards Code (Building Standards Commission 2022). All hazardous waste would be required to be disposed of at the nearest Class I landfill that is authorized to accept hazardous waste (see details on the management and transportation of hazardous waste in Section 3.2.9 Hazards and Hazardous Materials). The project would comply with federal, State and local management and reduction statutes and regulations related to solid waste; therefore, the impact would be **less than significant**.

### **Mitigation Measures**

No mitigation required.

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### 4.2.20 Wildfire

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>20. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</b>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Settings

The project site is not located within a state responsibility area or lands classified as a very high fire hazard severity zone (CAL FIRE, n.d.). Areas classified as high fire hazard severity zone are located approximately 0.65 mile northwest of the project site, and areas of very high fire hazard severity zone in a Local Responsibility Area are located approximately 0.41 mile west of the site (California Department of Forestry and Fire Protection (CAL FIRE)), n.d.). The project site is located within the City of San Jose's Wildland-Urban Interface, which is a transitional area between development and undeveloped wildland that are vulnerable to fires given their proximity to vegetative fuels and an indicator to residents who reside within the WUI to take actions to prepare for a potential wildfire (City of San Jose, n.d.-c).

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### Discussion

- a) **Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?**
- b) **Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**
- c) **Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**
- d) **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

No, the project would not have the impact described. The project site is not within or near a state responsibility area or within a very high fire hazard severity zone. As such, the project will have **no impact** to issues a-d. Refer to Section 4.2.8 for potential impacts from wildfire during construction and operation of the project.

### Mitigation Measures

No mitigation required.



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### 4.2.21 Mandatory Findings of Significance

Environmental Impacts	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>21. MANDATORY FINDINGS OF SIGNIFICANCE:</b>				
a) Does the project 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, substantially 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

- a) **Does the project 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, substantially 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?**

The project would have a less than significant effect on the impact described with implementation of mitigation. Please refer to the impact discussions presented in Sections 4.2.1 through 4.2.20, in particular the impact analysis for Biological Resources (Section 4.2.4), Cultural Resources (Section 4.2.5), and Tribal Cultural Resources (Section 4.2.18). Valley Water's implementation of applicable biological BMPs, HVP conditions, and mitigation measures as proposed in this Mitigated Negative Declaration would avoid or minimize these impacts such that the project would not 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, substantially 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. Therefore, with mitigation measures BIO-1, BIO-2, BIO-3 and CUL-1, BMPs, and VHP conditions, the impact would be **less than significant with mitigation**.

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- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

The project would have a less than significant effect on the impact described with implementation of mitigation. Section 15064(h)(1) of CEQA Guidelines states that a lead agency shall consider whether the cumulative impact is significant, and the incremental effects of the project are cumulatively considerable. A lead agency may determine that a project's incremental contribution would be less-than-cumulatively considerable when one or more of the following occur: 1) the contribution would be rendered less-than-cumulatively considerable through implementation of mitigation measures; 2) the project would comply with the requirements of a previously approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the project's cumulative effects; and/or 3) the project's incremental effects would be so small that the environmental conditions would be essentially the same regardless of whether the project is implemented.

The project could contribute to cumulative impacts of other projects within the City of San Jose. Cumulative projects located in proximity to the proposed project include the following:

- Valley Water security upgrades at the PWTP including CCTV and access control systems, replacement of the fence around the PWTP with tight weave climb/tamper resistant material and barbed wire, and improved lighting within the facility. The security upgrades at the PWTP are scheduled to occur in 2027. The security upgrades would be subject to separate future CEQA review and separate approval by Valley Water.
- Valley Water addition of an additional sulfuric acid injection point at the PWTP for water treatment. The project would add a new vault, aboveground raw water pipeline, and pump for the injection point. Construction is estimated to start in June 2026 and would last one year.
- Hengli 6, LLC, Suncrest Avenue Planned Development Project: The Suncrest Avenue Planned Development Project includes development of 15 residential lots directly adjacent the PWTP site boundary/fenceline and south of Suncrest Avenue and an additional 33 residential lots north of Suncrest Avenue with a new street and extension of infrastructure to serve the residential development. The timeframe for development of the Suncrest Avenue Planned Development Project is unknown. The applicant has filed plans, but the CEQA review process for the project has not started.
- 905 North Capitol Avenue Project, approximately 1.6 miles southwest of the project site. The 905 North Capitol Avenue project includes the construction of a seven-story 350-unit apartment building and a three-story, 32-unit townhome building (City of San Jose, n.d.-a). The 905 North Capitol Avenue Project is currently under pre-construction review.

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The analysis in this Initial Study indicates the project would have no impact on agricultural and forestry resources, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, or wildfire and would thus not contribute to any cumulative impacts on those resources. The potential for cumulative impacts on the remaining resource topics is addressed below.

### Aesthetics

The Suncrest Avenue Planned Development includes lots on the south side of Suncrest Avenue, residential development in the area would block views of the project from Suncrest Avenue due to the height of residential structures and closer proximity to the public road viewpoint. Because the residential development would block views of the project, the project would not contribute to cumulative impacts on aesthetics when considered in combination with cumulative projects and the cumulative impact would be **less than significant**.

### Air Quality and Greenhouse Gases

Air quality and greenhouse gases are cumulative impacts by their nature. The thresholds established by BAAQMD for air quality and greenhouse gases consider cumulative impacts. Because the project would not exceed any threshold established by BAAQMD for air quality or greenhouse gases, the project would not contribute considerably to any regional or global cumulative impact on air quality or greenhouse gases and the impact would be **less than significant**.

### Biological Resources

The project would involve minor extension of the developed PWTP infrastructure into an area containing serpentine bunchgrass grasslands. The security project at the PWTP is a linear project that would replace an existing fence and would not impact biological resources. The sulfuric acid injection project would be located in developed areas and would not impact biological resources. The 905 Capitol Avenue building is in a developed area and would not result in impacts on biological resources. The types of vegetation communities that occur within the project impact area likely also occur within the Suncrest Avenue Planned Development Project. The project is a covered activity under the VHP and the Suncrest Avenue Planned Development Project would also require coverage under the VHP. Because the VHP provides regional mitigation for impacts on biological resources, including special status species and serpentine bunchgrass grassland, the cumulative impact on special status species and serpentine bunchgrass grassland would be **less than significant**.

### Cultural Resources

No cultural resources have been recorded in the project site or in the cumulative project development area for the PWTP security upgrades, sulfuric acid injection, or the Suncrest Avenue Planned Development. Because no cultural resources are known to occur in the area, **no cumulative impact** on cultural resources would occur.

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### Energy

Operation of the project would result in increased efficiency and reduced truck travel through increased dewatering of solids. Because the project would increase efficiency, **no cumulative impact** on energy resources would occur.

### Geology and Soils

A cumulative impact on geology and soils could occur if the project in combination with one or more cumulative projects exacerbated a geologic hazard. The security project at the PWTP involves replacement of a fence and would not contribute to cumulative impacts on geology or soils. The sulfuric acid injection project would only involve a small vault and would not impact geologic resources. The project at 905 Capitol Avenue does not have the potential to contribute to cumulative geology and soils impacts in combination with the project due to the distance between the project and the 905 Capitol Avenue. The project and Suncrest Avenue Development could cause a significant cumulative impact on geology and soils if the projects were to exacerbate the existing landslide in the area or cause substantial erosion and the potential exists for a significant cumulative impact as a result of the Suncrest Avenue Development.

As discussed in the geology and soils section, the project would implement geotechnical engineering measures to ensure the design addresses the existing landslide conditions in the area. The project and Suncrest Avenue Development will not be constructed concurrently and would not contribute to cumulative construction related impacts on erosion. The project would also implement C.3 hydrologic design requirements to avoid erosion during operation. Because the project incorporates proper design measures to address landslide hazards and C.3. permit requirements, the project's contribution to a cumulative impact on geology and soils would be less than cumulatively considerable and therefore **less than significant**.

### Hazards and Hazardous Materials

Impacts on hazards and hazardous materials would only be cumulative within a 1-mile area because hazardous materials typically do not transfer in soil or groundwater over 1 mile. The project and cumulative projects would not create any new substantial sources of hazards or hazardous materials. Construction of each project would be subject to State of California and federal laws governing use of hazardous materials. Because the projects would be expected to comply with State and federal laws, the cumulative impact on hazards and hazardous materials would be **less than significant**.

### Hydrology and Water Quality

Construction of the project would potentially overlap with construction of the security upgrades at the PWTP. Both the project and security upgrades at the PWTP would implement Valley Water BMPs including BMPs WQ-4, WQ-5 WQ-9, WQ-11, and WQ-16. BMP WQ-4 would ensure that staging and stockpiled materials are properly contained and maintained to avoid any soil erosion from stockpiles. BMPs WQ-5, BMP WQ-9, BMP WQ-11, and BMP WQ-16 would ensure that the overall construction site is properly maintained and in clean condition and that construction entrances/exits and all other disturbed ground would be stabilized to

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prevent sedimentation or erosion. With implementation of Valley Water BMPs, the cumulative impact during construction would be **less than significant**.

Future operation of the project would include a small increase in the impervious surface at the project site. As discussed in the project description and Hydrology and Water Quality sections, the project would comply with C.3 permit requirements. Because the project would comply with C.3 permit requirements, the project would have a less than considerable contribution on any future water quality impact and the cumulative impact would be **less than significant**.

### Noise

The project would generate noise from heavy equipment operation during construction. Construction of the project may overlap with the security upgrades at the PWTP and the sulfuric acid injection project construction. The project will be coordinated with the PWTP security upgrades and sulfuric acid injection to ensure that the construction happens in a safe manner and the upgrades would not occur in the same areas as the project construction at the same time. Because noise and vibration attenuate with distance and the project would implement Mitigation Measure NOI-1 and NOI-2, the project and security upgrades would result in a **less than significant** cumulative impact on noise with implementation of the project mitigation measures.

### Transportation

The temporary increase in truck traffic generated during construction of the project could potentially overlap with the construction of the PWTP security upgrades and sulfuric acid injection project. Replacement of the security fence and installation of increased security systems at the PWTP and construction of the sulfuric acid injection project would generate a very low volume of traffic. Neither the project, the PWTP security upgrades, nor the sulfuric acid injection project would be located within any road or would require any road closure. The impact from the project construction in combination with the PWTP security upgrades and sulfuric acid injection project on transportation would be **less than significant**.

### Utilities and Service Systems

The project would generate a small volume of solid waste during construction. The project operation would result in a net decrease in waste generation due to the increased dewatering of solids. Because of the small volume of waste generated during construction and the net decrease in waste generation during operation, **no cumulative impact** on utilities or service systems would occur.

#### **c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

The project would have a less than significant effect on the impact described with implementation of mitigation. The above analysis shows that the project would not result in significant impacts with the incorporation of mitigation measures. While the analysis finds that the project would result in some adverse impacts to air quality, noise, geology and soils, hazards and hazardous materials, and hydrology and water quality, mitigation measures along

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with BMPs have been identified to reduce the impact to a less than significant level. Therefore, the proposed project would not indirectly or directly result in significant adverse effects on human beings, either indirectly or directly. As such, the project would have a less than significant effect on human beings following implementation of aforementioned mitigation measures.

### **Mitigation Measures**

Mitigation Measures AQ-1, AQ-2, BIO-1, BIO-2, BIO-3, CUL-1, HAZ-1, HAZ-2, NOI-1, and NOI-2.

## 5 List of Preparers

### 5.1 List of Preparers

**Table 5.1-1 Valley Water Contributors**

Contributor	Role
Mike Coleman	Project Manager, Environmental Planner
Katrina Jessop, PE	Senior Engineer, Program Manager
Donnalyn Steffani, PE	Assistant Engineer II

**Table 5.1-2 Third Party Consultant Preparers**

Contributor	Role
Susanne Heim	Project Manager: QA/QC, Project Description, Mandatory Findings of Significance
Charlotte Hummer	Deputy Project Manager: Aesthetics, Air Quality, Cultural Resources, Energy, Geology and Soils, GHG, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Tribal Cultural Resources
Cassidy Cunningham	Agricultural and Forestry Resources, Biological Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, Wildfire, Mandatory Findings of Significance
HT Harvey	Biological Resources
Far Western	Cultural Resources
RCH	Air Quality, Greenhouse Gases, Noise



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