Addendum to the Environmental Impact Report for the San José - Santa Clara Water Pollution Control Plant Master Plan (SCH# 2011052074)

DIGESTED SLUDGE DEWATERING FACILITY

File No. PP18-018

Prepared by

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

September 2019

TABLE OF CONTENTS

Addendum to the Environmental Impact Report for the San José-Santa Clara Water Pollution Control Plant Master Plan

Page

Chapter 1, Introduction 1-1
1.1 Background 1-1
1.2 Purpose of This Addendum 1-4

Chapter 2, Project Description 2-1
2.1 Project Location 2-1
2.2 Summary of Approved Biosolids Process Improvements Project 2-1
2.3 Proposed Uses East of Zanker Road 2-4
2.4 Changes Since Plant Master Plan EIR 2-4
2.5 Project Purpose and Objectives 2-7
2.6 Project Components 2-7
2.7 Operations 2-19
2.8 Construction Schedule and Process 2-21
2.9 Required Actions and Approvals 2-27
2.10 References 2-28

Chapter 3, Environmental Checklist 3-1
Introduction to the Analysis 3-1
3.1 Aesthetics 3-2
3.2 Agriculture and Forestry Resources 3-15
3.3 Air Quality 3-17
3.4 Biological Resources 3-35
3.5 Cultural Resources 3-63
3.6 Energy 3-69
3.7 Geology and Soils 3-73
3.8 Greenhouse Gas Emissions 3-81
3.9 Hazards and Hazardous Materials 3-88
3.10 Hydrology and Water Quality 3-96
3.11 Land Use and Planning 3-107
3.12 Mineral Resources 3-109
3.13 Noise 3-111
3.14 Population and Housing 3-118
3.15 Public Services 3-120
3.16 Recreation 3-122
3.17 Transportation 3-124
3.18 Tribal Cultural Resources 3-133
3.19 Utilities and Service Systems 3-137
3.20 Wildfire 3-145
3.21 Mandatory Findings of Significance 3-147

Chapter 4, Authors and Consultants 4-1
4.1 Lead Agency 4-1
4.2 Consultants 4-1

Appendices

A. WPCP Schematic Flow Diagram A-1
B. Biosolids Transition Strategy Report B-1
C. Architectural Guidelines C-1
D Air Quality and Greenhouse Gas Modeling D-1
E. Odor and Hydrogen Sulfide Impact Assessment E-1
F. Biological Resources Technical Memorandum F-1
G. Special-Status Species with Potential to Occur in the Study Area G-1
H. Preliminary Geotechnical Feasibility Study H-1
I. Sludge Dewatering Facility CEQA Consistency Transportation Analysis I-1
J. Letter to Tribal Representative J-1

List of Figures

Figure 1-1 San José-Santa Clara Regional Wastewater Facility Location 1-2
Figure 1-2 Regional Wastewater Facility Existing Land Uses 1-3
Figure 1-3 Schematic Flow Diagram for Existing Solids Treatment Processes 1-5
Figure 2-1 Project Location 2-2
Figure 2-2 Biosolids Process Improvements from San José/Santa Clara Water Pollution Control Plant Master Plan EIR 2-3
Figure 2-3 Biosolids Management from Plant Master Plan and Project 2-6
Figure 2-4 Project Components 2-8
Figure 2-5 Proposed Dewatering Facility Process Flow Diagrams 2-12
Figure 2-6 Proposed Four-Story Dewatering Facility Rendering 2-13
Figure 2-7 Proposed Four-Story Dewatering Facility Site Plan with 120-Foot and 280-Foot Front Setback 2-14
Figure 2-8 Proposed Two-Story Dewatering Facility Rendering 2-15
Figure 2-9 Proposed Two-Story Dewatering Facility Site Plan with 120-Foot and 280-Foot Front Setback 2-16
Figure 3.1-1 Site Simulation of Proposed Two-Story Dewatering Facility from Zanker Road Looking Northeast 3-9
Figure 3.1-2 Site Simulation of Proposed Two-Story Dewatering Facility from Zanker Road Looking Southeast 3-10
Figure 3.1-3 Site Simulation of Proposed Four-Story Dewatering Facility from Zanker Road Looking Northeast 3-13
Figure 3.1-4 Site Simulation of Proposed Four-Story Dewatering Facility from Zanker Road Looking Southeast 3-14
Figure 3.3-1 Odor Isopleths Showing Greater than 88 Exceedances of the Odor Goal for the Project Scenarios 3-31
Figure 3.3-2 Odor Isopleths Showing Greater than 88 Exceedances of the Odor Goal for the Transition Scenario 3-32
Figure 3.4-1 Biological Study Area 3-36
Figure 3.5-1 San José-Santa Clara Regional Wastewater Facility Potential Streamline Moderne Industrial Historic District 3-64
Figure 3.10-1 FEMA Flood Zones 3-98

Page

List of Tables

Table 2-1 Dewatering Facility Components and Systems 2-17
Table 2-2 Dewatered Cake Production and Off Haul 2-19
Table 2-3 Project Water Supplies 2-21
Table 2-4 Approximate Design and Construction Schedule 2-22
Table 2-5 Disturbance Area of Project Components 2-24
Table 2-6 Soil and Demolition Debris Volumes and Truck Trip Estimates 2-25
Table 2-7 Construction Equipment 2-27
Table 3.3-1 Project Construction Schedule 3-20
Table 3.3-2 Construction Equipment Used by Phase 3-21
Table 3.3-3 Average Daily Construction-Related Pollutant Emissions 3-22
Table 3.3-4 Average Daily Operational Emissions 3-24
Table 3.3-5 Summary of Odor Impacts 3-29
Table 3.8-1 Total Estimated GHG Emissions from Construction 3-83
Table 3.8-2 GHG Emissions from Project Operations 3-85
Table 3.13-1 Typical Noise Levels from Operating Demolition/Construction Equipment 3-113
Table 3.17-1 Construction Trips 3-127
Table 3.17-2 Construction Period Trip Generation Estimates 3-128
Table 3.17-3 Trip Generation Estimates During Operations 3-130
Table 3.19-1 Summary of Landfills for Construction Disposal 3-142
Table 3.19-2 Summary of Landfills for Biosolids Disposal 3-143

This page intentionally left blank

CHAPTER 1
Introduction

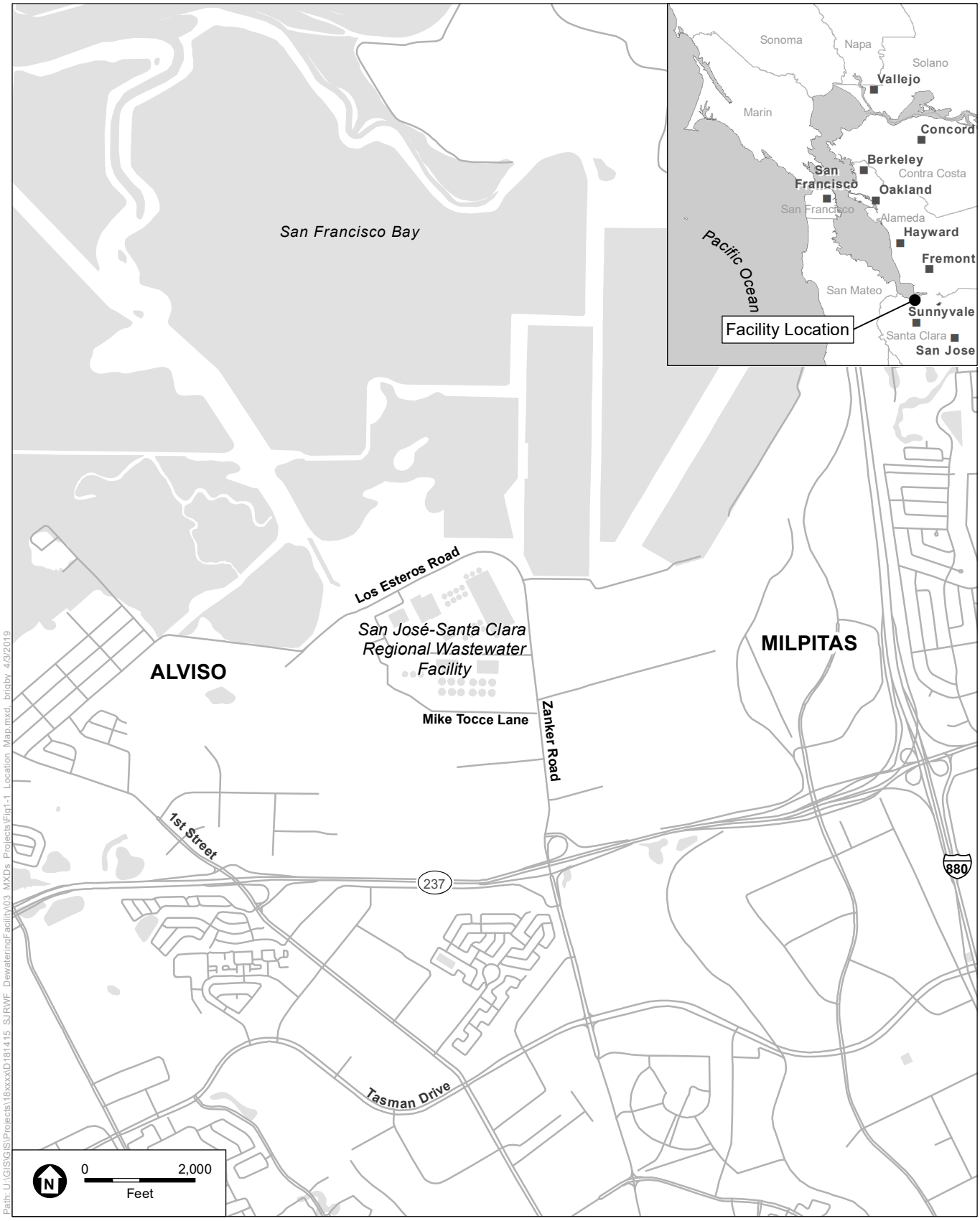
1.1 Background

1.1.1 Overview of the San José-Santa Clara Regional Wastewater Facility

The San José-Santa Clara Regional Wastewater Facility (Facility) treats domestic, industrial, and commercial wastewater from the cities of San José, Santa Clara, Campbell, Los Gatos, Monte Sereno, Cupertino, Milpitas, and Saratoga; and unincorporated Santa Clara County. The Facility is located at 700 Los Esteros Road in north San José, California, between State Route (SR) 237 and San Francisco Bay and flanked by the community of Alviso to the west and the City of Milpitas to the east, as shown in **Figure 1-1**. In total, the existing service area covers roughly 300 square miles and contains a service population of approximately 2 million people (1.4 million residents and 600,000 workers). Originally constructed in 1956, the Facility treats an average of 110 million gallons per day (mgd) of wastewater, with an existing capacity of 167 mgd of average dry weather influent flow. The Facility provides a tertiary level of treatment, in accordance with state and local regulations. It produces recycled water for irrigation, industrial use and toilet flushes, and also discharges treated wastewater to the South San Francisco Bay. The City of San José (City) manages the Facility and the surrounding Facility lands, which together total approximately 2,680 acres.

About half of this area consists of current and former lagoons and drying beds used for biosolids[1] management, and lands that have provided a buffer between Facility operations and neighboring land uses. The main operational area of the Facility occupies about seven percent of Facility and surrounding lands (196 acres), and includes most of the facilities used in wastewater treatment operations, with the exception of the lagoons and beds used for solar drying of biosolids (**Figure 1-2**). **Appendix A** includes a schematic flow diagram for the treatment of liquids and solids at the Facility.

[1] Biosolids" refers to treated sewage sludge: the solid residuals from the wastewater treatment process.

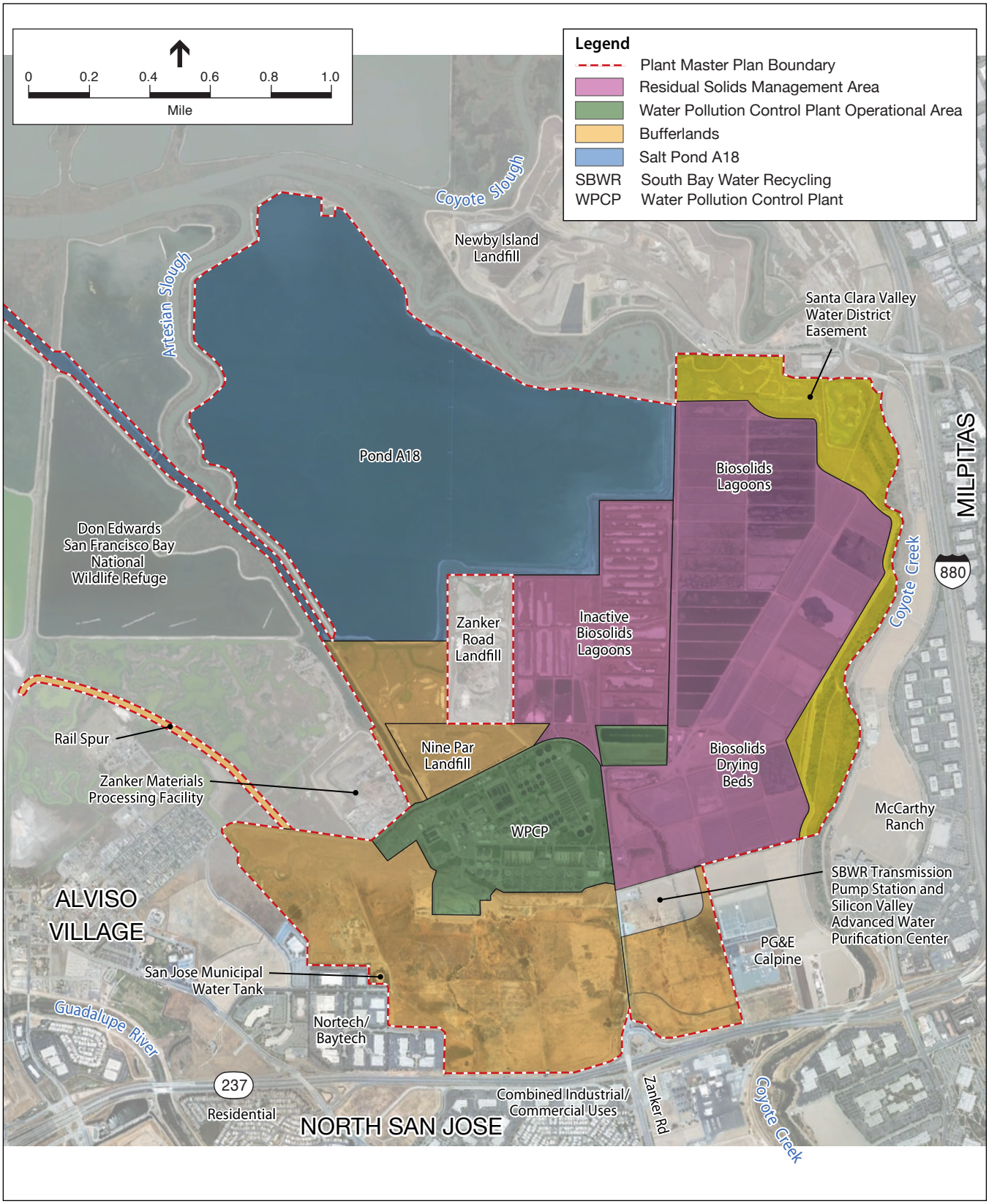


SOURCE: ESA, 2019

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 1-1
San José-Santa Clara Regional Wastewater Facility Location

ESA



SOURCE: ESA I J&S

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 1-2
Regional Wastewater Facility Existing Land Uses

1.1.2 Plant Master Plan

In December of 2013, City adopted the San José/ Santa Clara Water Pollution Control Plant Master Plan (City of San José, 2013). The City prepared the Plant Master Plan for the Facility and the surrounding lands to identify Facility improvement projects needed to address aging infrastructure, reduce odors, accommodate projected population growth in the Facility's service area, comply with changing regulations that affect the Facility, and to develop a comprehensive land use plan for the entire site. The master planning effort identified both near-term and long-term (to year 2040) Capital Improvement Program (CIP) facility improvements and land uses. The plan covers the components, processes, and land uses within the approximately 2,680-acre boundary of the Facility, including Pond A18.

The City was the lead agency for the San José-Santa Clara Water Pollution Control Plant Master Plan Environmental Impact Report (EIR) (Plant Master Plan EIR; State Clearinghouse No. 2011052074; City of San José File Number PP11-403).[2] The City adopted the EIR for the Plant Master Plan on November 19, 2013. The EIR evaluated potential environmental impacts that could occur as a result of implementing the Plant Master Plan, including the biosolids facilities. The EIR also provided applicable mitigation to reduce the intensity of potential environmental impacts.

1.1.3 Existing Biosolids Processing Facilities

The existing biosolids processing facilities at the Facility are shown in Figure 1-2 (digesters in operational area, and lagoons and drying beds). Solids from the facility are currently processed through two steps, digestion and residual solids management, before they are trucked to the landfill, as shown in **Figure 1-3**.[3]

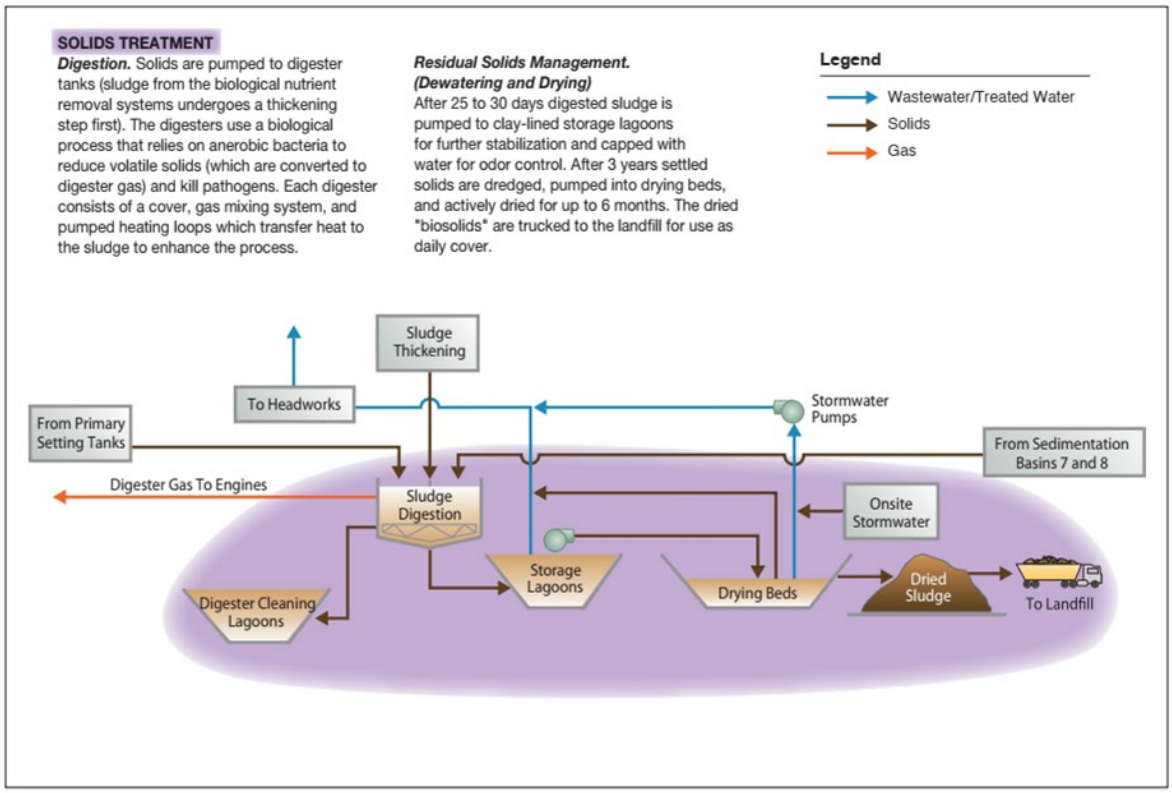
1.2 Purpose of This Addendum

Since completion of the Plant Master Plan and the EIR, the City has further refined the project components for the proposed improvements to the biosolids operation, including the dewatering process, as further described in Chapter 2. The City also has a more defined construction footprint that accounts for staging areas, pipeline corridors, and project component locations. Because the City has proposed these changes following EIR adoption, an addendum to the EIR is necessary to meet the requirements of the California Environmental Quality Act (CEQA).

---

2 The legal name of the facility remains "San José/Santa Clara Water Pollution Control Plant" but beginning in early 2013, the facility's common name was changed to San José-Santa Clara Regional Wastewater Facility.

3 Solids are pumped to digester tanks (sludge from the biological nutrient removal [BNR] systems undergoes a thickening step first). The digesters use a biological process that relies on anaerobic bacteria to reduce volatile solids (which are converted to digester gas) and kill pathogens. Each digester consists of a cover, gas mixing system and pumped heating loops, which transfer heat to the sludge to enhance the process. For a description of the entire wastewater treatment plant process, including liquids and solids processing, refer to the Plant Master Plan EIR [http://www.sanjoseca.gov/index.aspx?NID=4968].



SOURCE: Carollo et al., 2009; ESA/J&S.
Mountain View, CA. Accessed: January 22, 2019.

San José-Santa Clara Regional Wastewater Facility
Digested Sludge Dewatering Facility Project

Figure 1-3
Schematic Flow Diagram for Existing Solids Treatment Processes

The CEQA Guidelines (Sections 15162 and 15164) allow that a lead agency may prepare an addendum to a previously adopted or certified EIR if minor technical changes or additions to the environmental evaluation are necessary, but none of the following occurs:

1. Substantial changes are proposed in the project which will require major revisions to the Environmental Impact Report due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous Environmental Impact Report due to involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous Environmental Impact Report was adopted, shows any of the following:

    a. The project will have one or more significant effects not discussed in the Environmental Impact Report;

    b. Significant effects previously examined will be substantially more severe than shown;

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous Environmental Impact Report would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This Addendum documents that included modifications to the Digested Sludge Dewatering Facility (Project) do not trigger any of the conditions described above. Specifically, given the Project description and knowledge of the Project area (based on the Project, site-specific environmental review, and environmental review prepared for the City's Plant Master Plan EIR), the City has concluded that the Project would not result in any new significant impacts not previously disclosed in the circulated EIR; nor would it result in a substantial increase in the magnitude of any significant environmental impact previously identified. For these reasons, an addendum to the approved EIR is sufficient to meet the requirements of CEQA. In accordance with CEQA Guidelines Section 15164, an addendum need not be circulated for public review but can be included in or attached to the final adopted EIR. The City must consider the addendum with the adopted EIR prior to making a decision on the Project.

The approved mitigation measures provided in the adopted Plant Master Plan EIR Mitigation Monitoring and Reporting Program (MMRP) have been incorporated by reference, with modifications (additions, deletions, renumbering/renaming, or other minor revisions) made as necessary to apply to the Project. The adjusted mitigation measures do not change the original impact conclusions from the Plant Master Plan EIR, nor are they considerably different from that analyzed in the Plant Master Plan EIR.

CHAPTER 2
Project Description

2.1 Project Location

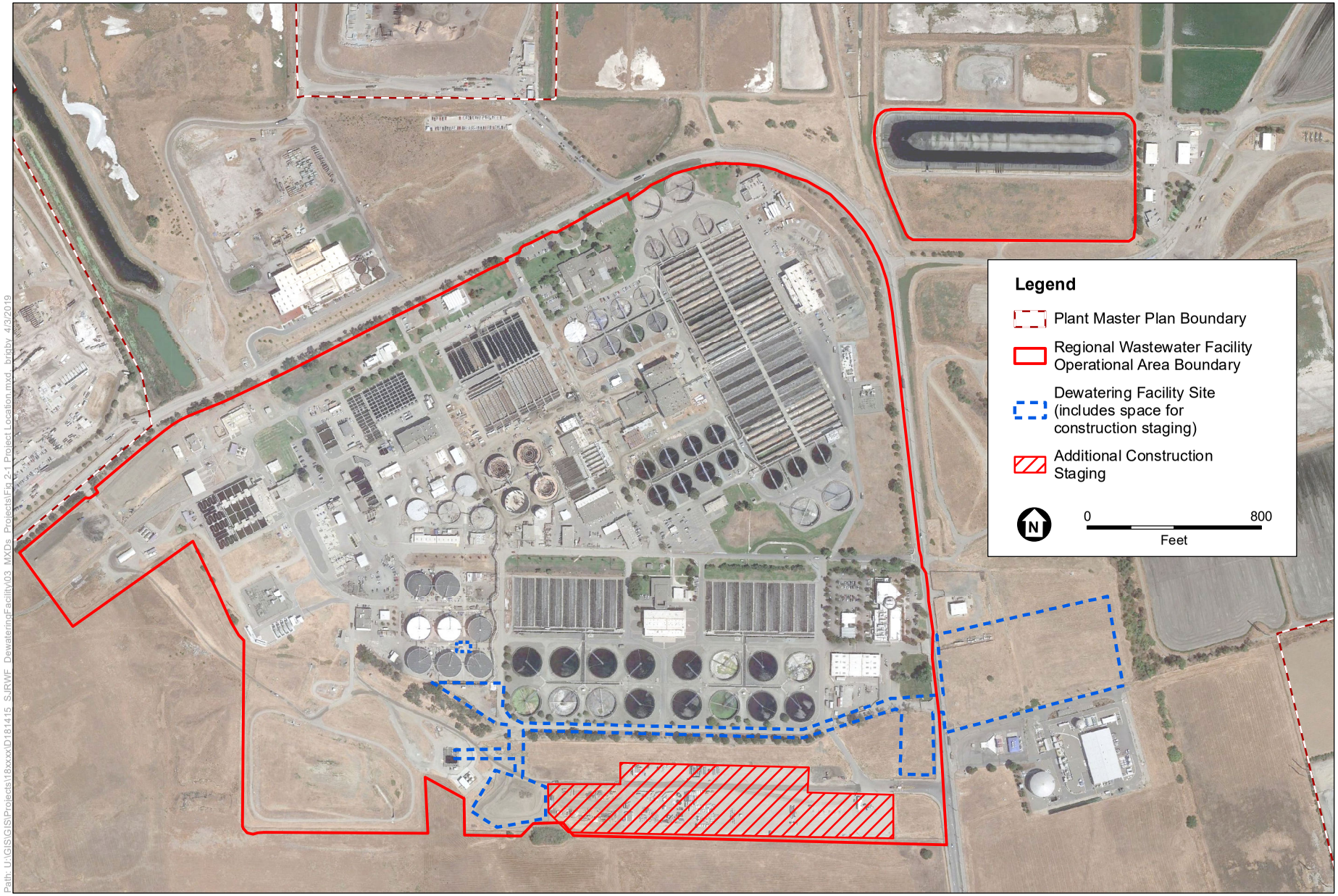
The Project would be located in the northern area of Santa Clara County, within the City of San José. The Project area is comprised of up to approximately ten acres of land located within the 2,680 acre-wastewater facility. The Project components are divided between two different areas on the Facility property: one site for the proposed dewatering facility on the east side of Zanker Road, across from the main Facility operational area; and sites for digested sludge (DS) conveyance and storage facilities, located west of Zanker Road, as shown in **Figure 2-1**.

2.2 Summary of Approved Biosolids Process Improvements Project

The various components proposed for the biosolids process improvements are described in Section 3.5.6 of the Plant Master Plan EIR and summarized below. The location of the proposed components of the biosolids process improvements from the Plant Master Plan EIR is shown in **Figure 2-2**.

Some of these improvements were evaluated at a project level, with others were evaluated at a program level in the Plant Master Plan EIR. The dewatering facilities proposed as part of the biosolids process improvements were evaluated at both project (i.e., B2-P1) and program (i.e., B2-P2) level.

- B2-P1: Dewatering Phase 1 – construct a pilot dewatering facility.
- B3-P1: Covered Lagoons Phase 1 – construct a series of covered, lined lagoons for the temporary storage of DS.
- B4-P1: Thermal Drying Phase 1 – implement a pilot program to field-test heat drying units to determine the process and technology best suited for a full-scale thermal drying facility.
- B5-P1: Greenhouse Drying Phase 1 – implement greenhouse drying as part of the conversion from the existing open air solar drying beds operation.
- B6: Back-up Sludge Pipeline – install a new 14-inch diameter back-up sludge pipeline, which would parallel the existing sludge pipeline, extending along the eastern edge of the proposed covered lagoons.



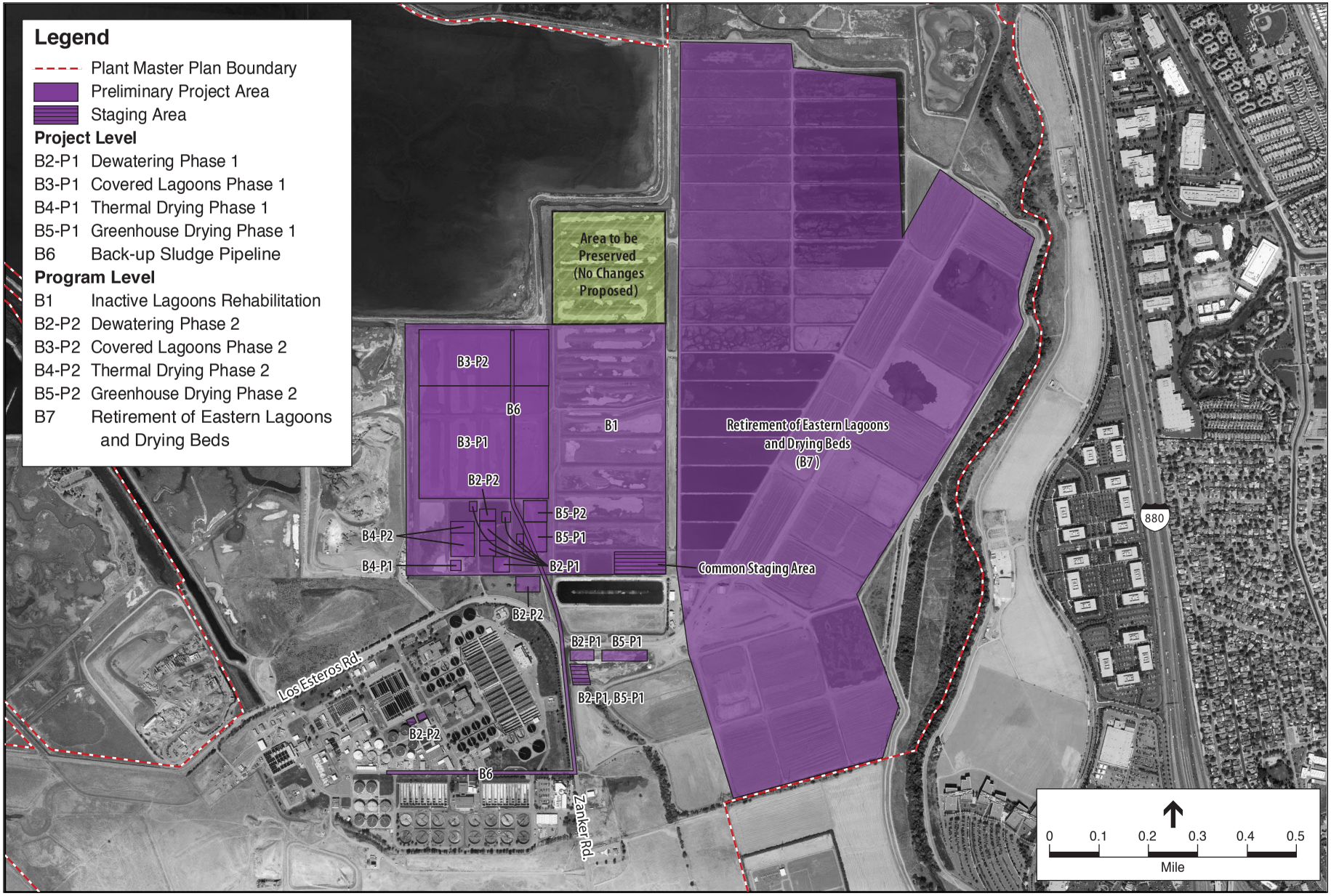
Path: U:\GIS\GIS\Projects\18xxxx\D181415_SJRWF_DewateringFacility\03_MXDs_Projects\Fig 2-1 Project Location.mxd, brigby, 4/3/2019

SOURCE: Google Earth, 2018

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 2-1
Project Location

ESA



SOURCE: Carollo
IMAGE: Google Inc. 2011. Google Earth Pro, Version 5.2. Mountain View, CA. Accessed: March 7, 2010.

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 2-2
Biosolids Process Improvements from San Jose/ Santa Clara Water Pollution Control Plant Master Plan EIR

- B1: Inactive Lagoons Rehabilitation – field testing and an assessment of the contents of the inactive lagoons; remediation, which may include leaving biosolids in place or re-using elsewhere within the site; and filling some of the lagoons to level the grade.
- B2-P2: Dewatering Phase 2 – install the remaining mechanical dewatering units needed to dewater the entire projected (year 2040) solids stream as well as additional polymer storage and dosage facilities and solids conveyance systems.
- B3-P2: Covered Lagoons Phase 2 – covered lagoons that would be constructed as warranted to accommodate about six months of digested solids, based on projected (year 2040) loadings.
- B4-P2: Thermal Drying Phase 2 – construct a large-scale mechanical thermal drying facility, following pilot-testing of different thermal drying technologies (B4-P1).
- B5-P2: Greenhouse Drying Phase 2 – construct additional greenhouses needed to dry approximately 10 percent of dewatered solids based on projected increases in solids loading.
- B7: Retirement of Eastern Lagoons and Drying Beds – decommission the lagoons and drying beds within the eastern portion of the project site, making the area available for future improvements.

2.3 Proposed Uses East of Zanker Road

The Plant Master Plan EIR included an evaluation of the proposed land uses east of Zanker Road, which was allocated for the future plant expansion areas for treatment processes, including B2-P1: Dewatering Phase 1 and B5-P1: Greenhouse Drying Phase 1, shown on Figure 2-2, as well as landscaping.

2.4 Changes Since Plant Master Plan EIR

As part of the City of San Jose's strategy to move away from the current land-intensive solids process, which has historically been linked to odors, the dewatering facility has remained an important component of the transition strategy that the City developed after the Plant Master Plan was adopted in 2013. This strategy was further refined through a series of City Council and Treatment Plant Advisory Committee (TPAC) meetings held in 2014 and 2015, and through detailed evaluation of the current biosolids management system and recommended system upgrades. Below are some of the key milestones that have shaped the City's plans for the dewatering facility since 2014.

The Plant Master Plan envisioned a program that produced a mix of Class A (30 percent) and Class B (70 percent) biosolids products, as shown in the top portion of **Figure 2-3**.[4] In an April 2014 Study Session, the TPAC directed staff to evaluate the production of Class A instead of Class B biosolids with new biosolids processes. Also around this time, the Facility's Capital Improvement

[4] The disposal of biosolids is regulated by the federal biosolids rule (40 Code of Federal Regulations Part 503), which identifies allowed uses for Class A biosolids, which contain virtually no detectible levels of pathogens, and Class B biosolids, which are treated but still contain detectable levels of pathogens. The Facility currently produces Class A biosolids. Class A biosolids can be sent off-site for use as a soil amendment or cement kiln fuel and Class B biosolids can be sent off-site to a composting facility, used for land application, or used for alternative daily cover.

Program team conducted a detailed project validation review process of all projects recommended in the Plant Master Plan. This validation effort led to a change from the approach described in the Plant Master Plan (which involved the use of covered, lined sludge storage lagoons for digested sludge and separate dewatering and cake storage facilities), to a smaller operation consisting of DS storage tanks and a consolidated dewatering and cake storage facility, which is more in line with best practices in the wastewater industry.

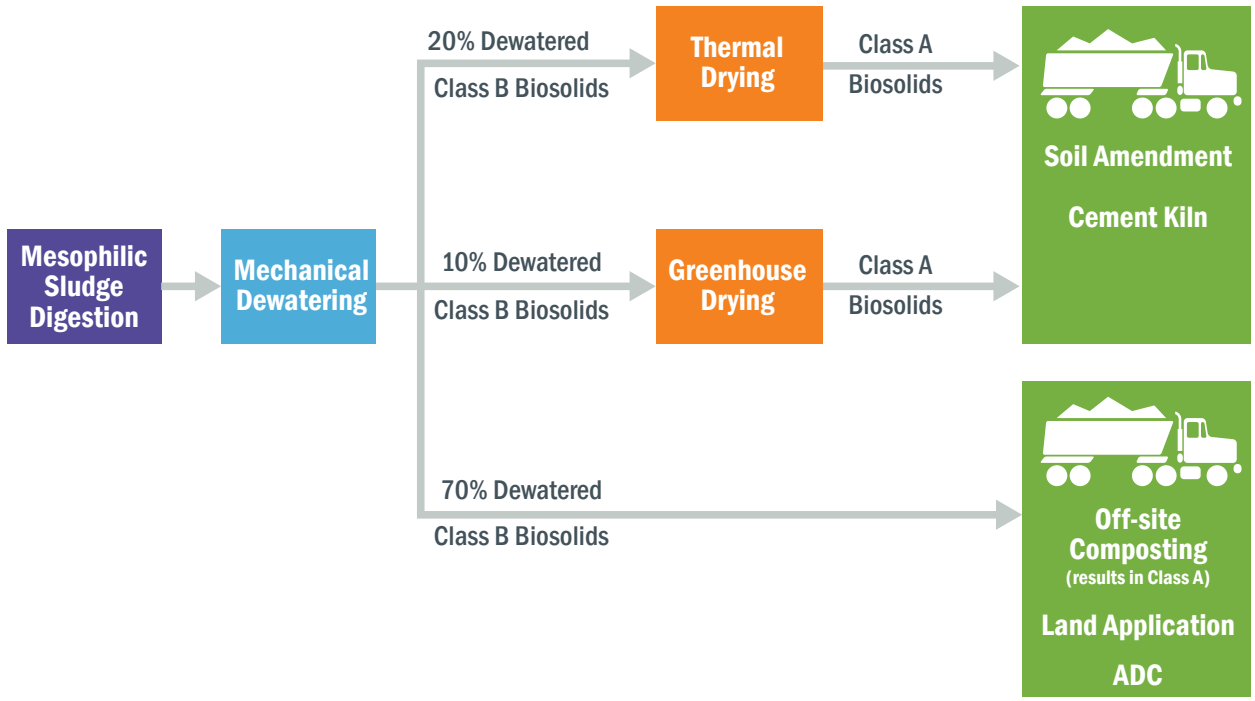
Following the April 2014 Study Session, a Biosolids Transition Strategy Report (**Appendix B**) was prepared to address certain specific issues regarding implementation of the transition from the Plant Master Plan's recommended system to the current biosolids management system, considering changes that have occurred since the technical aspects of the Plant Master Plan were developed. The Biosolids Transition Strategy Report included both near-term and long-term recommendations for the biosolids transition strategy, taking into consideration the goals identified in Plant Master Plan. The biosolids transition strategy involved background investigations including information gathering and technical reviews, as well as site visits. It also included market investigations to assess issues such as the demand for Class A and dried biosolids. An evaluation of alternatives for the biosolids processing facilities for comparison against the Plant Master Plan was completed as well.

On December 2, 2014, the City Council approved two of the recommendations in the report, which included proceeding with temperature-phased anaerobic digestion (TPAD)[5] (Temperature Phased Anaerobic Digestion from the Biosolids Transition Strategy Report), as shown in the bottom portion of Figure 2-3, followed by mechanical dewatering for production of 100 percent Class B biosolids.

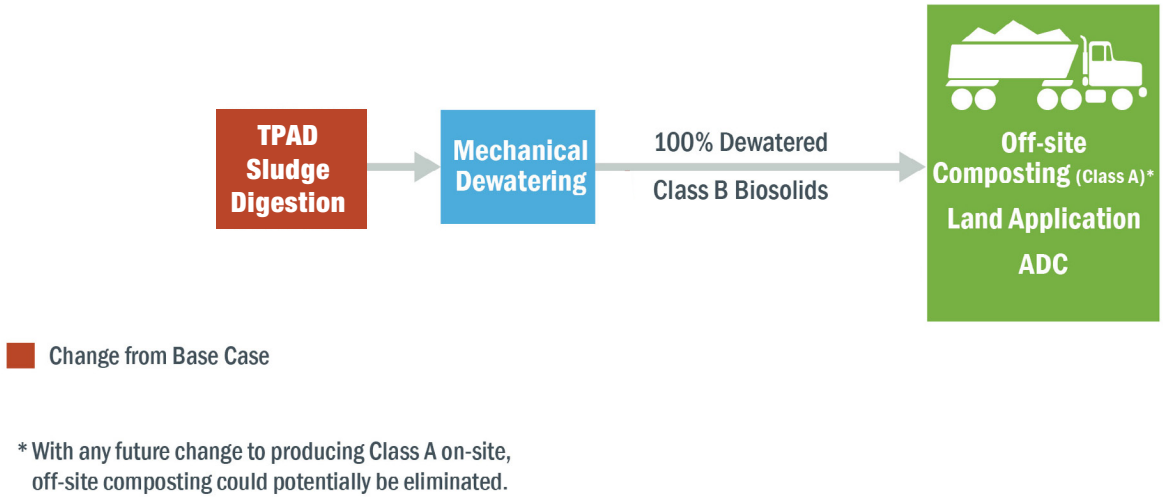
On June 2, 2015, the Council approved the final Biosolids Transition Strategy Report along with recommendations to: (1) locate the dewatering facility to the area east of Zanker Road, while also reserving a portion of the site for future biosolids processes, to avoid space constraints and significantly reduce impacts to sensitive environmental resources; (2) proceed with designing a new dewatering facility sized to process 100 percent of sludge volume generated by the digestion process; and (3) subsequently decommission the existing lagoons and drying beds.

As compared to the biosolids process improvements envisioned in the Plant Master Plan (described above in sections 2.2), this Project described and evaluated in this document includes only those components related to the mechanical dewatering facility (i.e., B2-P1 and B2-P2). The remaining components proposed under the Plant Master Plan for the biosolids process improvements (i.e., B3-P1, B4-P1, B5-P1, B6, B1, B3-P2, B4-P2, B5-P2, and B7) are being deferred to a later date and would be evaluated under a separate CEQA process at the time they are implemented. The location of the mechanical dewatering facility is independent of the location of other future operations (i.e., thermal drying and greenhouse drying facilities).

[5] TPAD will be completed through the Digester and Thickener Facilities Upgrade project, which entails converting the anaerobic sludge digestion process from single-stage mesophilic digestion to temperature-phased anaerobic digestion (TPAD), consisting of a thermophilic stage followed by a mesophilic stage. That project, is currently under construction and is scheduled to be substantially complete by February 2021.



Biosolids Management System from the Plant Master Plan



* With any future change to producing Class A on-site, off-site composting could potentially be eliminated.

Temperature Phased Anaerobic Digestion (Project)

SOURCE: Brown & Caldwell, 2019

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 2-3

Biosolids Management from Plant Master Plan and Project

2.5 Project Purpose and Objectives

The need for the Project is predicated on the essential service provided by the Facility: to protect public health and water quality through reliable, high quality, cost-effective wastewater treatment. Upgrades to the biosolids facilities are needed to support this overall service due to the age and state of the infrastructure and changes in operational reliability and regulatory requirements. In addition, the current solids lagoon storage and drying process occupies approximately 500 acres of land.

The Project is needed in order to achieve the following goals:

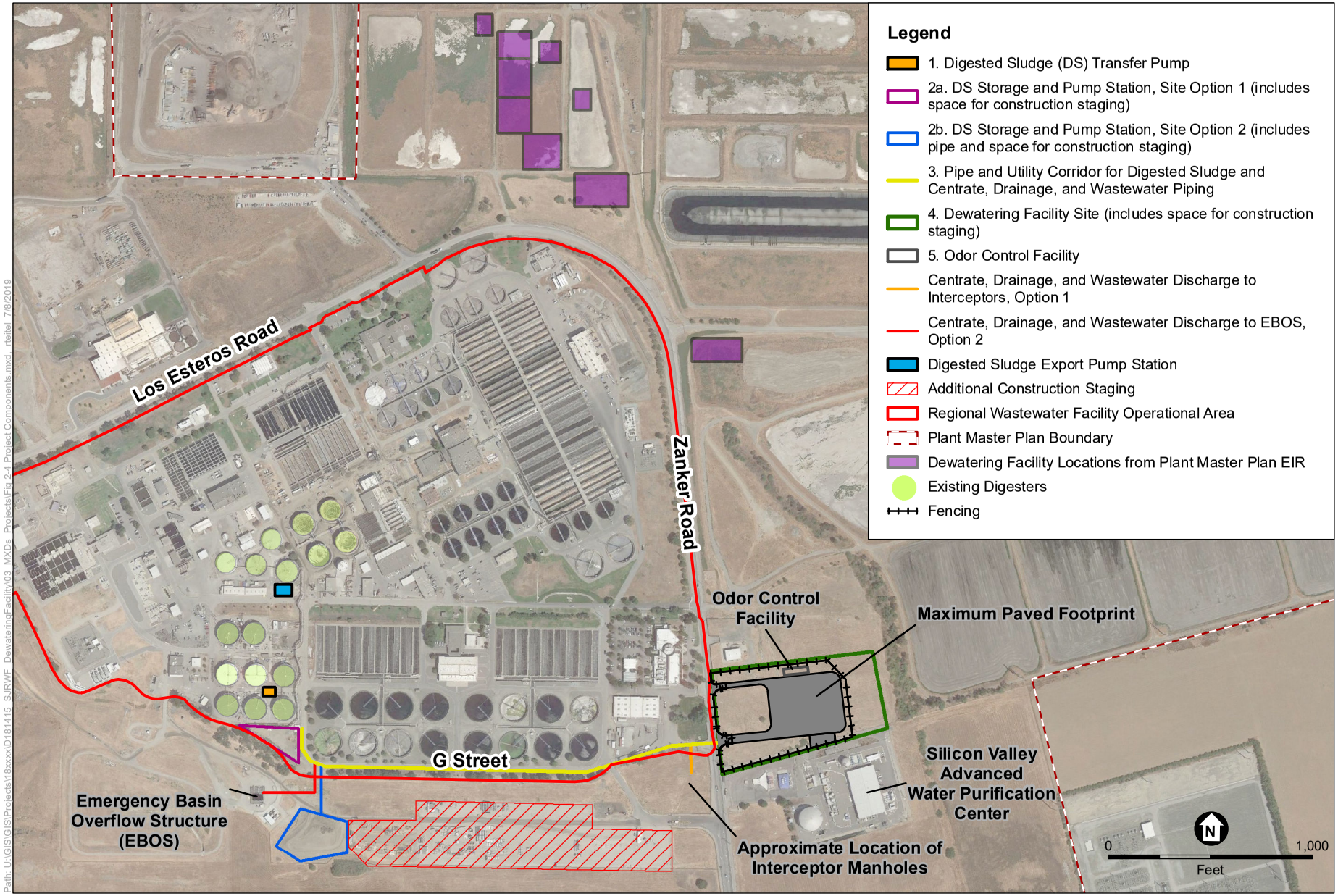
- Reduce odors in the surrounding community through decommissioning of the existing sludge stabilization lagoons and drying beds used to process digested sludge;
- Allow the City to develop multiple and diversified biosolids end-use options;
- Reduce the footprint of the biosolids management facilities to enable other uses of land currently occupied by sludge stabilization lagoons and drying beds and;
- Create flexibility to respond to future regulations, and market conditions pertaining to the beneficial use of biosolids.

The City developed 15 objectives to advance the overall operational, economic, environmental, and social goals of the Plant Master Plan. The following four objectives are relevant to the Project:

- ***Wastewater Treatment***. Protect the environment, public health, and safety through reliable wastewater treatment that can accommodate population growth and meet foreseeable future regulations.
- ***Efficient Operations***. Maximize the long-range efficient use of the Facility's existing facilities and reduce the footprint of the existing biosolids treatment area.
- ***Cost Effectiveness***. Maintain cost-effective Facility operations and competitive sewer rates through enhanced operations, flexibility, and rigorous evaluation of new technologies.
- ***Good Neighbor***. Reduce visual, noise, and odor impacts from Facility operations to neighboring land uses to the extent practicable.

2.6 Project Components

This section describes the proposed facilities, processes, and other features associated with the Project. The Project area boundary encompasses all of these proposed components. **Figure 2-4** illustrates the location of the proposed components. The City is contemplating several options, as described below, for implementing the Project. This document evaluates all of the options; the selection of the specific options to be implemented would occur during the design-build process.



Path: U:\GIS\GIS\Projects\18xxxx\D181415_SJRWF_DewateringFacility\03_MXDs_Projects\Fig 2-4 Project Components.mxd, rtetel 7/8/2019

SOURCE: Google Earth, 2018; ESA, 2019

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 2-4
Project Components

ESA

The main function of the Project is to dehydrate the DS to a dewatered cake[6] that would be hauled off-site for appropriate disposal.

2.6.1 Digested Sludge Conveyance and Storage

Digested Sludge Transfer Pump Station

A DS transfer pump (component No. 1 on Figure 2-4) system would convey DS from the digesters to the DS storage tanks. This transfer pump station would be located within the digester complex, on the existing concrete pad. This pump station must operate in parallel with the existing pumps that transfer sludge to the existing Digested Sludge Export Pump Station (DSEPS). This is required in order to maintain capability to export sludge to the lagoons throughout construction and commissioning of the Project and until the existing sludge lagoons and drying beds are decommissioned. Once the Project is online, the DSEPS would be decommissioned.

Digested Sludge Storage and Pump Station

Up to two new DS concrete or steel storage tanks (component No. 2 on Figure 2-4) would be constructed to serve as a buffer, and attenuating peak influent loads and flows[7] between the digesters and the dewatering facility. The storage tanks would be approximately 70 feet in diameter and approximately 30 feet above ground; a couple feet of the tanks would be buried under ground to stabilize the structure. The storage tanks would each hold approximately 1.55 million gallons of DS and would be connected to the new DS transfer system and existing digester gas piping system that serves the digester complex.

Potential locations for the DS storage tanks are shown in Figure 2-4. Site Option 1 is an approximately 0.4-acre triangular site located south of the existing digesters. This location provides the shortest distance for conveyance piping both for bringing DS to the storage tanks and for pumping DS to the dewatering facility. Site Option 2 is approximately 1.5 acres and is located southeast of the Emergency Basin Overflow Structure (EBOS).[8] This location would require more conveyance pipeline trenching, which would follow existing service roads, to bring DS south from the digesters and back north to G Street (an internal paved roadway).

A new DS pump station would be located directly adjacent to the DS storage tank at either Site Option 1 or Site Option 2, and would have a maximum capacity of up to 1,600 gallons per minute.

---

6 The solid waste generated by dewatering is known as cake, which is the dewatered sludge. This cake would be a Class B biosolids. The type of biosolids is driven by the digestion process. The Digester and Thickener Facilities Upgrade project, which entails converting the anaerobic sludge digestion process from single-stage mesophilic digestion to TPAD, would include future flexibility to achieve Class A biosolids through the addition of batch tanks to the digestion process in the future (not included as part of this Project).

7 The Project has been sized to process the full range of DS loading rates, both with and without imported materials (i.e., fats, oils and grease [FOG] brought to the Facility in trucks, and scum and grease collected from in-plant treatment processes). As planned, imported materials would be added to the solids treatment process upstream of the anaerobic digestion process.

8 In the event of an emergency, excess wastewater is diverted from the Emergency Basin Overflow Structure (EBOS), upstream of the existing Headworks facilities, to the 6.4 acre, 8-million-gallon Emergency Basin, where it is held temporarily until incoming wastewater flows are reduced. The Emergency Basin is located south of the operational area fence line.

Digested Sludge Conveyance Pipelines

Digested sludge conveyance pipelines (component No. 3 on Figure 2-4) would transfer sludge from the DS pump station to two receiving wet wells[9] at the new dewatering facility. Two parallel pipelines (one duty and one standby), approximately 10-inches in diameter, would cross Zanker Road and then be located within G Street (an internal roadway) from either site option to the dewatering facility building.

2.6.2 Dewatering Facility Building

This component of the Project is referred to as component No. 4 (refer to Figure 2-4), or the dewatering facility.

The dewatering equipment (further described in Table 2-1 below) would be housed within an approximately 53,000 square-foot building.[10] The dewatering building would be located east of Zanker Road as shown in Figure 2-4 (component No. 4). The City is currently considering two options for this building: a four-story or a two-story configuration, depending on the alternative selected for the dewatering process. Both options are further described below. Either building configuration would include two separate driveways connected to Zanker Road. These would allow trucks to circulate through the dewatering facility in a loop by entering and exiting through separate driveways. A locking gate on each driveway would be set back approximately 70 feet, far enough from Zanker Road to allow a semi-truck to park in the driveway while waiting for the gate to open so they do not block traffic on Zanker Road.

Either building option would be designed in accordance with the City's *San José-Santa Clara Regional Wastewater Facility Architectural Program Guidelines* (City of San José, 2015) and the *San José-Santa Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines (*City of San José, 2015a) (**Appendix C**) to be consistent with other structure at the Facility, and would include space for dewatering process systems, a laboratory room, a control room, and other mechanical and utility spaces for necessary systems, as further described below.

Consistent with the Riparian Corridor Protection and Bird-Safe Design, the building would avoid mirrors and large areas of reflective glass and would not include transparent glass skyways, walkways, or entryways, free-standing glass walls, and transparent building corners. The building would also avoid up-lighting and spotlights.

Process and Building Options

One of two options would be selected for dewatered cake conveyance: (1) gravity chutes where centrifuges are installed directly over the storage bins; or (2) pumps and piping. If the gravity chute option is selected, a four-story dewatering facility, as described below, would be required.

---

9 The wet wells serve as holding sumps to collect and equalize digested sludge prior to the dewatering process.

10 This is for the largest building footprint option; the differences in sizes between the two-story and four-story buildings do not vary that much (i.e., 52,700 square feet for two-story and 51,779 square feet for four-story).

The two-story dewatering facility, as described below, would include pumps and piping to convey dewatered cake into storage bins. **Figure 2-5** shows the process flow diagrams for both the four-story (gravity chute) option and two-story (pumps and piping) option. Conveyors would likely be needed with either option.

Four-Story Dewatering Facility (Option 1)

Figure 2-6 depicts a rendering of the four-story dewatering facility option. The four-story dewatering facility would be approximately 90 feet tall and 52,000 square feet. This building would provide the height necessary to convey dewatered cake to the storage bins by gravity. The dewatering facility would include a room for heating, ventilation, and air conditioning equipment; a server room for computer equipment; a fully redundant electrical substation with outdoor voltage transformers and indoor switchgear; electrical rooms; a conference room; locker rooms; a separate bathroom for truck drivers; and a maintenance shop. **Figure 2-7** shows the proposed site plan for the four-story building.

Two-Story Dewatering Facility (Option 2)

Figure 2-8 depicts a rendering of the two-story building option. The two-story dewatering facility would be approximately 45 feet tall and 52,000 square feet. This building would involve the same processes and components as the four-story building (refer to **Figure 2-9** for the proposed site plan) but would require additional pumps or conveyors after the centrifuge process to lift dewatered cake up into the storage bins before it is loaded onto trucks (Figure 2-5).

Building Setback Options

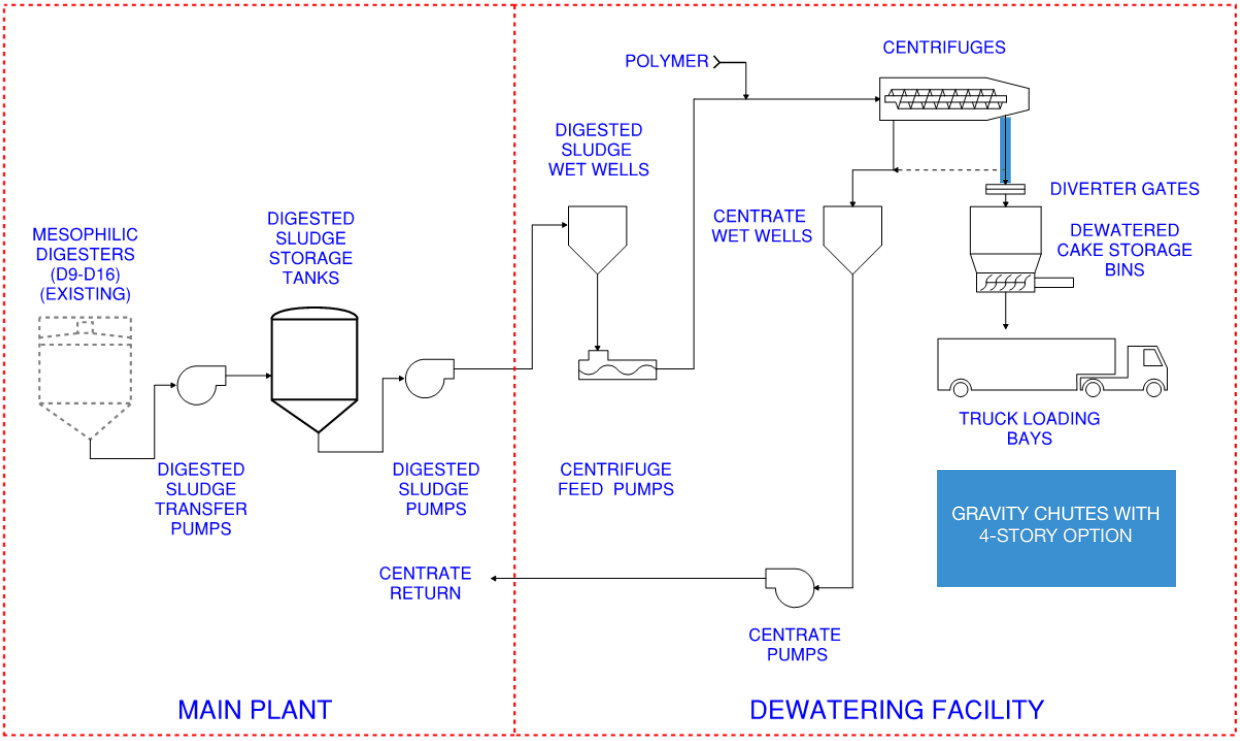
Two front setback options are under consideration for the Project: a 280-foot front setback and a 120-foot front setback. Both the options have been analyzed in this document.

Setback Option 1 (280 Feet from Zanker Road)

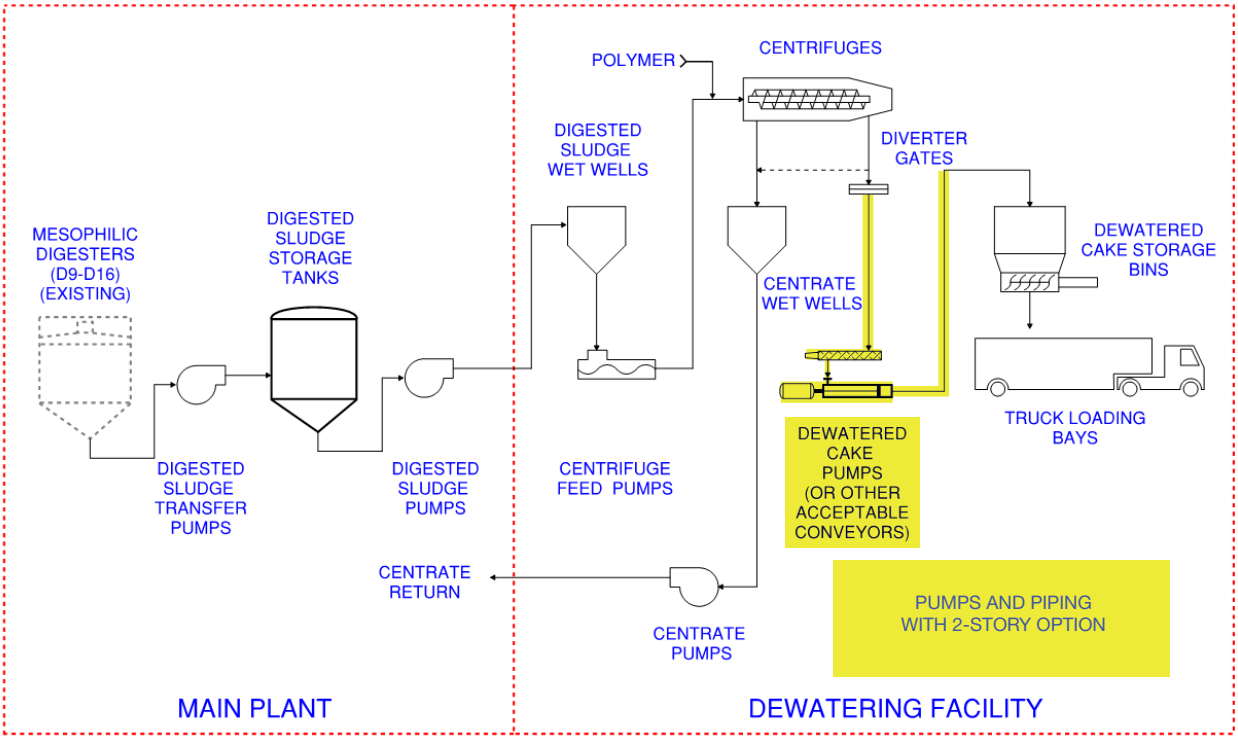
A 280-foot setback from Zanker Road would allow more room for on-site traffic circulation. With this configuration, the dewatering facility would be located approximately 105 feet from the riparian corridor for the four-story building and approximately 164 feet for the two-story building, along the eastern boundary of the Project site.

Setback Option 2 (120 Feet from Zanker Road)

This option would place the dewatering facility 120 feet away from Zanker Road and includes space for future expansion of the dewatering facility (e.g., additional truck loading bay). The implementation of the future dewatering facility expansion would require subsequent CEQA review. Under this option the dewatering facility would be located approximately 190 feet from the riparian corridor along the eastern boundary of the Project site for the four-story building and approximately 124 feet for the two-story building.



Four-Story Dewatering Facility Process Flow Diagram



Two-Story Dewatering Facility Process Flow Diagram

SOURCE: Brown & Caldwell, 2019

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 2-5

Proposed Dewatering Facility Process Flow Diagrams

Rendering: Four-Story Dewatering Facility Set Back by 120 Feet

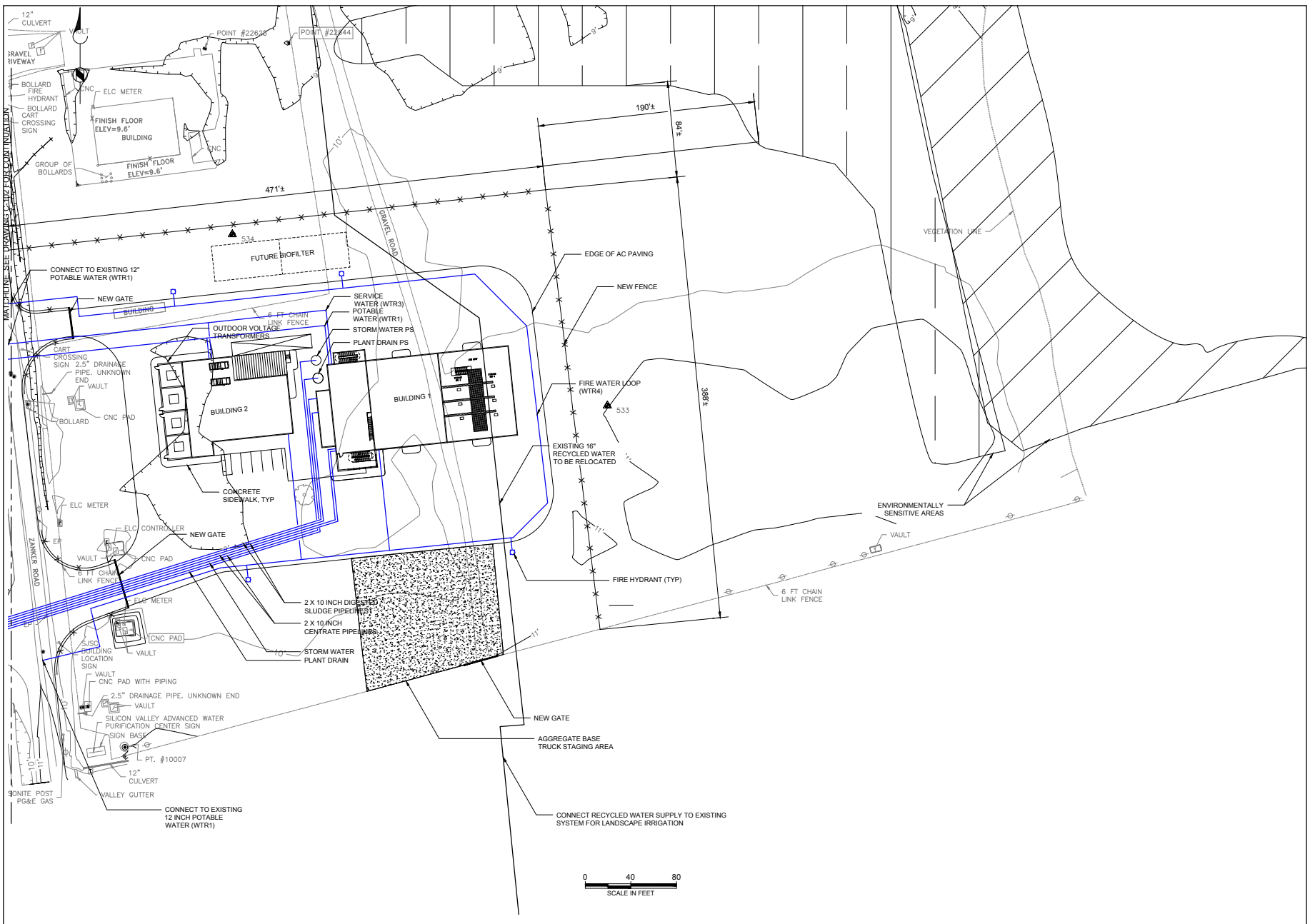
Rendering: Four-Story Dewatering Facility Set Back by 280 Feet

SOURCE: Brown & Caldwell, 2019

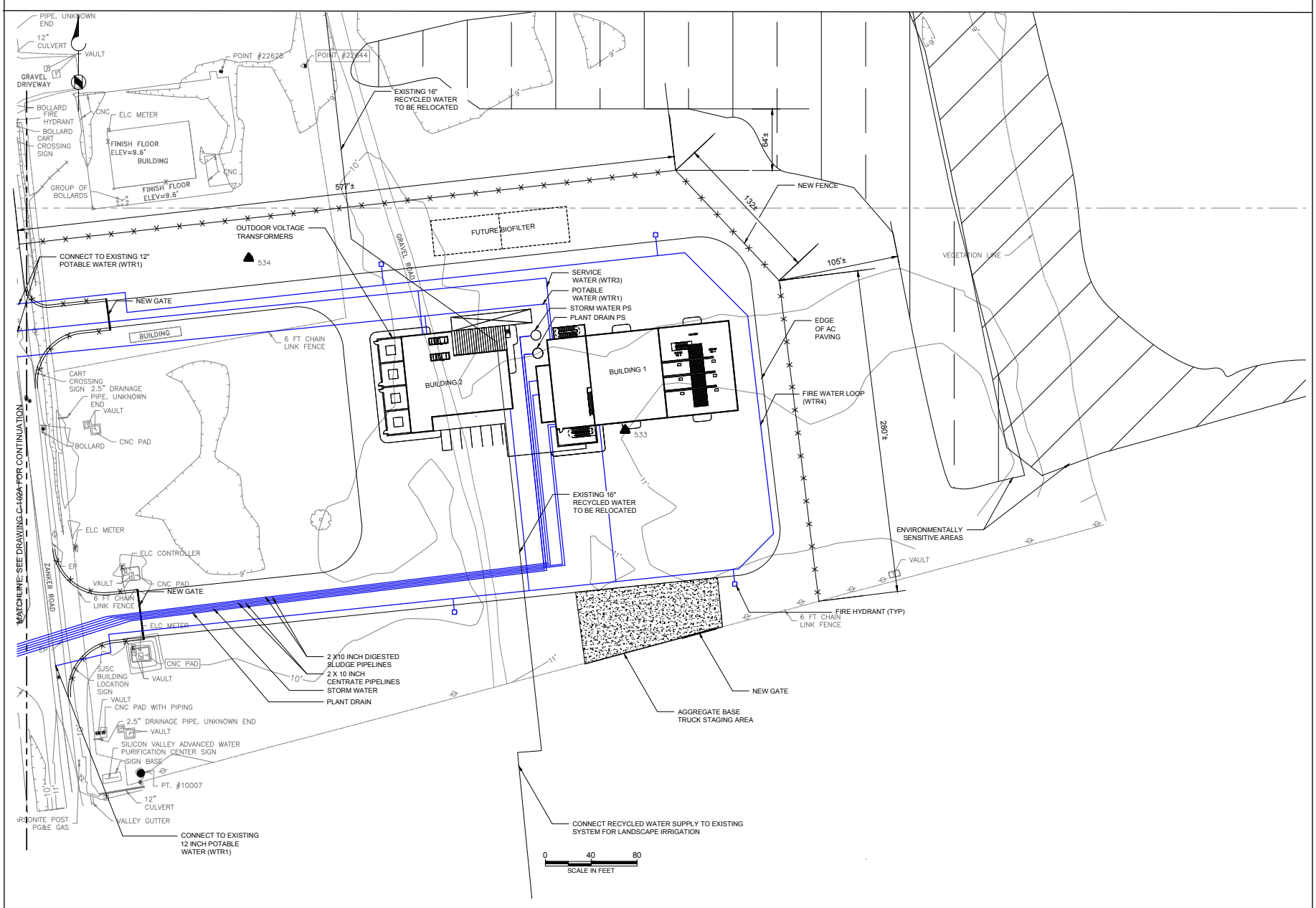
San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 2-6

Proposed Four-Story Dewatering Facility Rendering



Four-Story Dewatering Facility Proposed Site Plan with 120-Foot Setback



Four-Story Dewatering Facility Proposed Site Plan with 280-Foot Setback

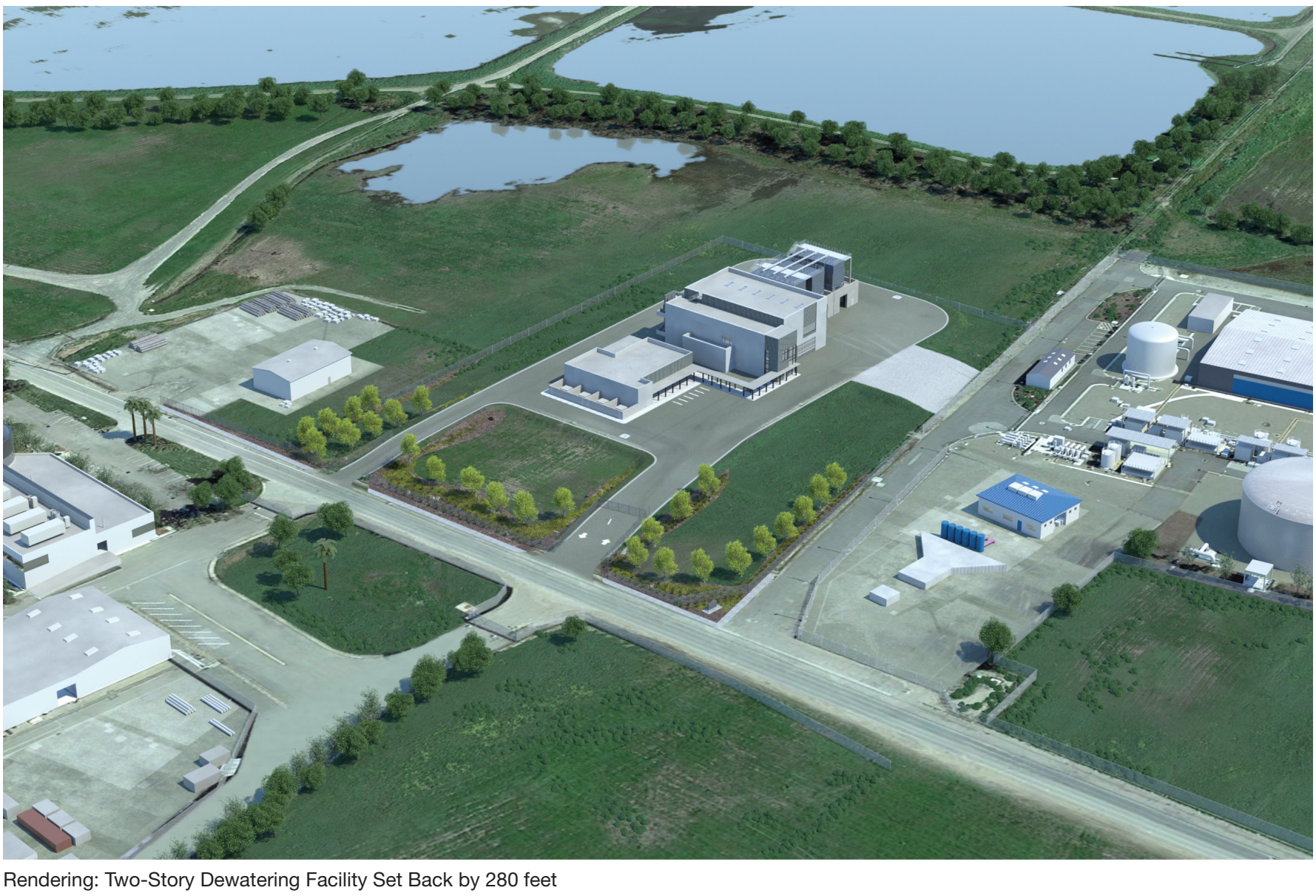
SOURCE: Brown & Caldwell, 2019

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 2-7

Proposed Four-Story Dewatering Facility Site Plan with 120-Foot and 280-Foot Front Setback

Rendering: Two-Story Dewatering Facility Set Back by 120 Feet



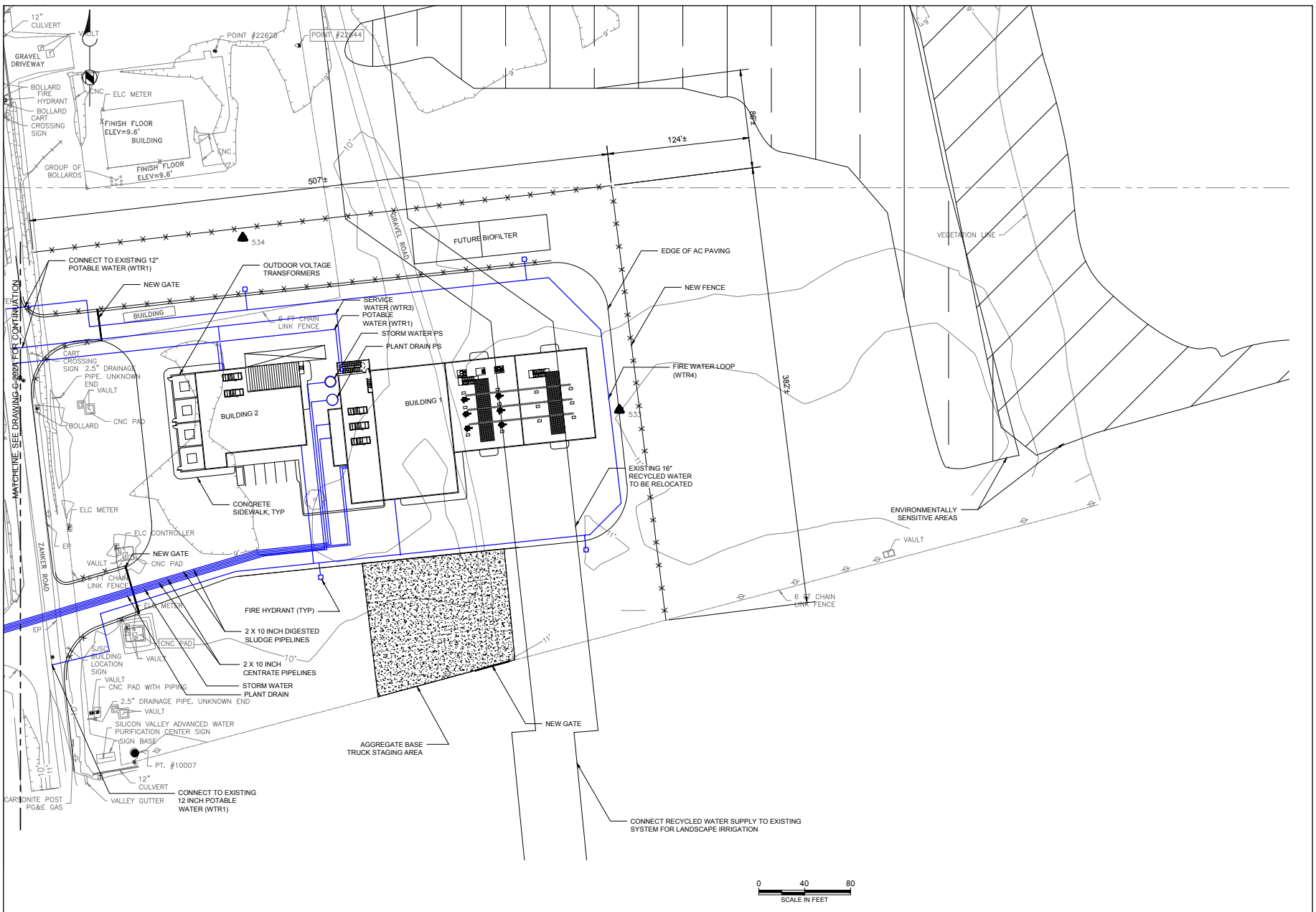
Rendering: Two-Story Dewatering Facility Set Back by 280 feet

SOURCE: Brown & Caldwell, 2019

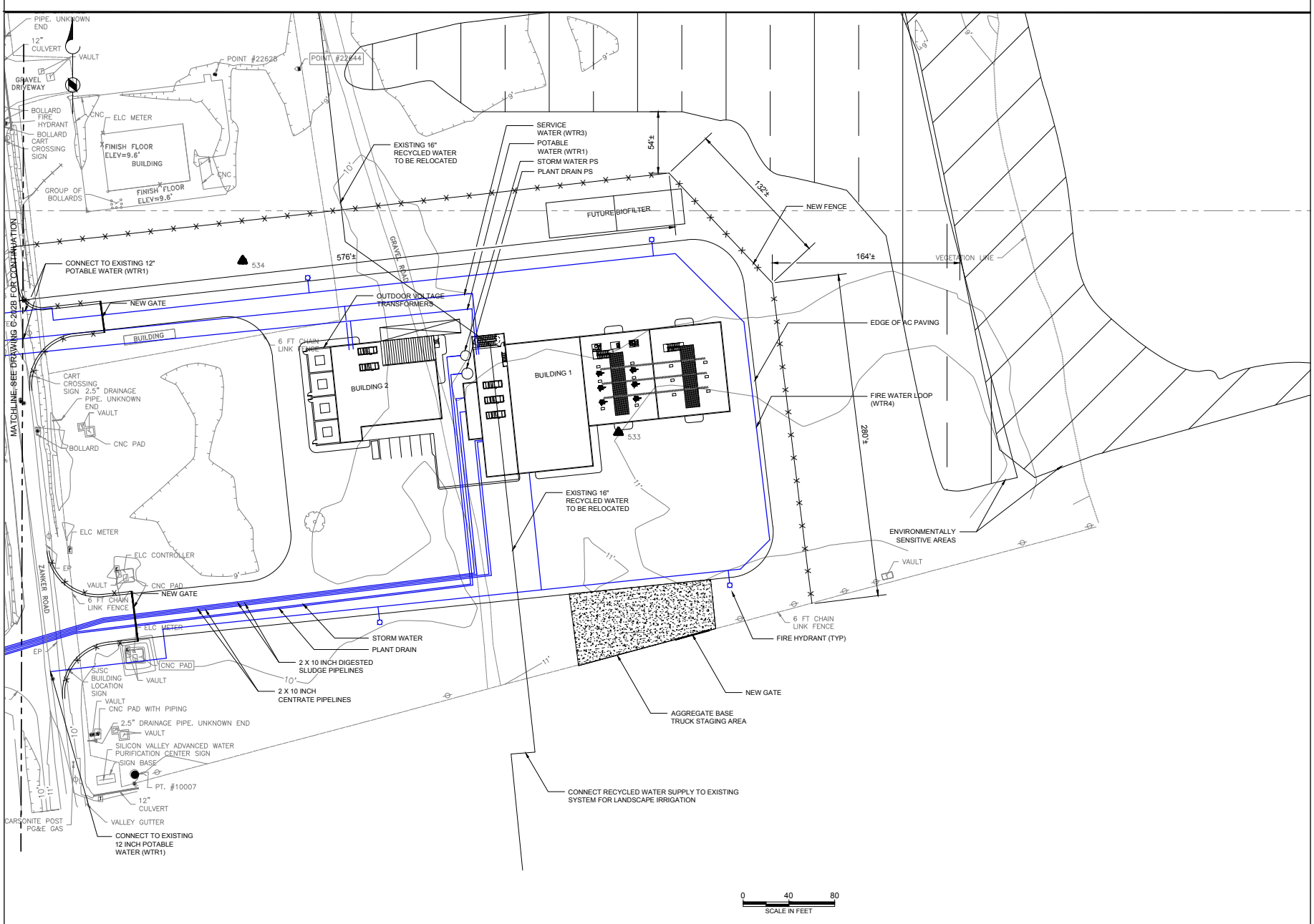
San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 2-8

Proposed Two-Story Dewatering Facility Rendering



Two-Story Dewatering Facility Proposed Site Plan with 120-Foot Setback



Two-Story Dewatering Facility Proposed Site Plan with 280-Foot Setback

SOURCE: Brown & Caldwell, 2019

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 2-9

Proposed Two-Story Dewatering Facility Site Plan with 120-Foot and 280-Foot Front Setback

Components for the Dewatering Facility

The dewatering facility building would house the system components described in **Table 2-1** that would be used for the dewatering process.

TABLE 2-1
DEWATERING FACILITY COMPONENTS AND SYSTEMS

Component/System		Description
Wet Wells		Two wet wells would be located at the dewatering facility to receive DS from the DS conveyance pipelines.
Polymer System		A polymer storage, make-up, dilution, and metering system would be required to condition DS as it is fed to the centrifuges. Potable water with appropriate backflow prevention would be used to dilute the polymer solution.
Centrifuge System	*Feed Pumps*	Centrifuge feed pumps would convey DS from the wet wells to the centrifuges. One dedicated pump would be used for each centrifuge.
	Centrifuges	Continuous-feed centrifuges would be used to dewater DS by separating water from solids. The centrifuge systems would include the following features: • A cake discharge chute on each centrifuge, including either a diverter gate or a screw conveyor mounted on the cake discharge chute to direct water and excessively wet sludge to the centrate system during startup and shutdown. • A centrate[a] discharge chute on each centrifuge with a vent line routed to the foul-air ventilation system. • Bowl and discharge chute vent lines routed to the foul-air ventilation system.
Dewatered Cake System	*Conveyance*	Conveyance systems would transport dewatered cake from the centrifuges to the dewatered cake storage bins.
	Storage	Dewatered cake storage bins or silos would provide temporary cake storage between dewatering and truck hauling operations. The bin or silo systems would be specifically designed for storing dewatered sludge cake and for loading dewatered cake into truck trailers. The bins would include foul-air ducts from the tops of the bins to the foul-air ventilation fans.
	Truck Loading Facilities	Truck loading bays would be used to transfer dewatered cake from the storage bins into truck beds. The truck loading facilities would be fully enclosed bays with roll-up doors and sufficient length to contain an entire semi-truck and trailer. These bays would be ventilated at a high rate, as much as 12 air changes per hour, using the foul-air fans. The dewatered cake would be off-hauled to be used as a composting feed stock, or soil amendment.
Centrate Pump Station and Pipelines		A centrate pump station (sized to handle peak flows) within the dewatering facility would convey centrate from two centrate wet wells into the centrate pipelines. Two centrate conveyance pipelines are required to transfer centrate from the dewatering facility wet wells to either the EBOS or the existing three interceptors adjacent to Zanker Road, as shown on Figure 2-4. If the pipelines are routed to the EBOS, they would be located underground along G street, parallel to the DS conveyance pipelines and would include discharge into the EBOS. If the pipelines are routed to the existing interceptors, they would enter a new buried vault near the existing interceptor manholes and split into three lines feeding each manhole (Figure 2-4). A valve inside the vault would control the flow into each interceptor. The pipeline corridor would also include the pipelines for stormwater and wastewater conveyance.
Odor Control		Foul-air ventilation would be required within the cake processing area and would vent air through a stack at the top of the building to the odor control facility.
Struvite[b] Management		Struvite management measures would be employed to control struvite formation in piping, tanks, equipment, and DS and centrate systems. These measures include long-radius elbows on pipelines, cleanouts, pigging stations, chemical addition points (e.g., acid and anti-scalant), and use of smooth-walled pipelines such as high-density polyethylene.

NOTES:
[a] Dewatering would generate a solid waste and a liquid waste stream. The liquid waste is known as centrate. The centrate would contain high concentrations of ammonia. The City could implement a side-stream treatment process, as a separate future project, that would use biological, physical and/or chemical processes to remove nutrients (nitrogen and/or phosphorus) from centrate. The end product of this process would be discharged to the main treatment plant secondary treatment process.
[b] Struvite is a phosphate mineral common in sewage systems that crystallizes into white or brownish-white pyramidal crystals. These can build up in components used to convey sewage, leading to reduced conveyance capacity and damaged infrastructure.

SOURCE: Brown and Caldwell, 2018

Odor Control Process

Foul-air ventilation would be required within the process areas of the dewatering building for odor ventilation. The system would include fans and ducts to extract foul-air from process areas such as wet wells, DS and centrate pump areas, the centrifuge room, cake storage bins, and the truck loading bays. The foul-air would be vented through a stack at the top of the building to the atmosphere or, if installed, to the odor control facility (described below). Ventilation would also include measures to manage the release of odorous gases from DS wet wells.

An odor control facility (component No. 5 on Figure 2-4) would be installed when and if required by the Bay Area Air Quality Management District (BAAQMD). This facility would treat the foul air using available technology designed to remove odor, such as biofiltration.[11] The odor control facility would be located adjacent to the dewatering facility building and would be approximately eight feet tall and 4,800 square feet in area.

Landscaping

The architectural and landscaping design for the dewatering facility building would be consistent with the *Council Policy: Riparian Corridor Protection and Bird-Safe Design* (City of San José, 2016), the *San José-Santa Clara Regional Wastewater Facility Architectural Program Guidelines* (City of San José, 2015), and the *San José-Santa Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines* (City of San José, 2015a). Landscaping would be located on the sides and in front of the building and consist of native, drought-tolerant species. As shown in Figures 2-6 and 2-8, fencing would be installed around the perimeter of the dewatering facility site. Lighting would also be installed at the exterior of the new building. Consistent with the Architectural Design Guidelines, lighting would have sensors that automatically turns off the outdoor lighting when daylight is available. Luminaire shields would be installed such that no light is directed off the site or into the sky.

Tree Removal

The project is proposing to remove one ordinance-sized elderberry tree, 166-inch diameter at breast height, located in the middle of the proposed dewatering facility building site, east of Zanker Road.

2.6.3 Transition from Current Processing to Mechanical Processing

Throughout construction and commissioning of the Project, the existing DSEPS would continue pumping digested sludge to the storage lagoons. After testing is complete and the dewatering facility is fully commissioned, the DSEPS would be partially decommissioned. The DSEPS building, wet well, and other structural elements would be left intact since the DSEPS building

[11] A biofilter is a contained porous filter media on which microorganisms live. The microorganisms oxidize odor and air emission compounds, producing carbon dioxide, water, biomass, and benign byproducts, when odorous air is passed through the filter media. In a biotrickling filter, water is sprayed within the container onto the biofilter to support the microorganisms that remove the odorous compounds.

houses electrical equipment used to power other systems at the Facility. Once the Project is operating, the DSEPS would cease pumping and DS in the storage lagoons would remain for a final three years[12] before it is transferred to the drying beds.

There would be a 4-year transition period in which the mechanical dewatering facility would be in operation and some of the DS would continue to be processed though the existing biosolids treatment facilities, including use of lagoons and drying beds. The amount of DS in the lagoons and drying beds would gradually get reduced during this transition period as the biosolides from the drying beds are hauled off to the landfill.

Implementation of the Project would provide one necessary step towards the future retirement of the lagoons and drying beds. Once the City transitions biosolids processing to the proposed mechanical dewatering, they would decommission the lagoons and drying beds and the area would be made available for future improvements. (This decommissioning is not part of the current Project or CEQA analysis but was evaluated programmatically in the Plant Master Plan EIR.)

2.7 Operations

The City has projected wastewater flows and loads through 2040 as part of the Plant Master Plan. The Project would be designed to handle projected 2040 flow conditions envisioned in the PMP.

2.7.1 Personnel and Hours

The Project would operate continuously 24 hours per day, 7 days per week, like the rest of the Facility. The dewatering facility would require up to nine new additional staff for operations and maintenance.

2.7.2 Truck Trips and Routes

Once design capacity is reached, it is anticipated that approximately 68 truck trips per day would be required for removal of dewatered cake, assuming a maximum capacity of 25 tons of dewatered cake per truck trip. **Table 2-2** shows estimated dewatered cake production and truck trips for the annual average and peak day by 2040.

Trucks would enter the facility via Zanker Road, north of SR 237 and complete a loop through the dewatering facility, then exit onto Zanker Road and travel south to SR 237. In addition to truck traffic associated with hauling dewatered cake, approximately one truck trip per week is required for the delivery of the polymer chemical used in the dewatering process.

[12] The City would choose among three options to handle the remaining three years of biosolids stabilized in the lagoons: (1) continue to use the drying beds for three years as the new dewatering equipment is put into service; (2) dewater the biosolids using contract dewatering (i.e., having a contractor to dewater the biosolids); or (3) remove the biosolids from the lagoons and drying beds and transport it to the proposed mechanical dewatering plant north of the operational area if there is sufficient or stand-by capacity. Interim management actions of the retired lagoons and drying beds would depend in part on the timing of proposed land uses, but would include drainage and vegetation control. A possible interim use of one or more lagoons includes temporary storage of materials associated with levee construction for the South San Francisco Bay Shoreline Study.

TABLE 2-2
DEWATERED CAKE PRODUCTION AND OFF HAUL

Condition	Dewatered Cake Production (cubic yards per day)	Truck Trips for Hauling Dewatered Cake (trips per day)[a]
2040 Annual Average	700	34
2040 Peak Day[b]	2,100	68

NOTES:
[a] The number of truck trips is based on a maximum capacity of 25 tons of dewatered cake per truck trip. Currently, the Facility's biosolids are processed on site and used as alternative daily cover at the Newby Island Landfill just north of the Facility.
[b] Peak day conditions are based on trucking daily sludge production plus an additional amount to draw down stored dewatered sludge. As planned, capacity would be provided at the dewatering facility to store up to two days of dewatered cake production.

SOURCE: Brown and Caldwell, 2019.

2.7.3 Energy and Utilities

Power Supply

A new power supply would be required for the Project, including a 4.16 kilovolt power supply for the dewatering facility, and a 480-volt power supply system for the DS storage and pump station. All facilities would be powered from the Facility's existing distribution network, which is powered by dual PG&E grid feeds and power generated at the cogeneration facility, or the power may also come from a new PG&E service off of Zanker Road. No new power poles would be required.

Stormwater System

Stormwater captured at the dewatering facility would be collected and pumped via a dedicated pump station consisting of two (one duty and one standby) 1,200 gallon-per-minute pumps. A dedicated pipeline would carry stormwater either to the Emergency Basin Overflow Structure (EBOS) or to the existing interceptors, which would then flow into the existing Facility Headworks for treatment, as shown on Figure 2-4. This pipeline would be located in the same corridor as the pipelines for the centrate and wastewater conveyed from the dewatering facility building.

Plant Drain System

The dewatering facility would include a drain system to collect sanitary flow from restrooms, showers, and kitchens as well as drainage from process areas such as floor drains and truck washdown stations. A dedicated pump station consisting of two (one duty and one standby) pumps would convey sanitary flows via a dedicated pipeline either to the EBOS or to the existing interceptors, as shown on Figure 2-4. This pipeline would be located in the same corridor as the pipelines for the centrate and stormwater conveyed from the dewatering facility building.

Water Supply

Table 2-3 lists the various water supplies needed to support the Project.

TABLE 2-3
PROJECT WATER SUPPLIES

Water Type	Description
Potable Water Supply	A potable water supply would be required for the potable water uses in the dewatering facility. Potable water would be supplied from a new service connection to an existing 12-inch diameter potable water main located within Zanker Road. San José Municipal Water System (SJMWS) would be responsible for establishing the new service connection for the dewatering facility. This supply would also be used to make up and dilute the polymer solution before DS is conveyed.
Treated Effluent Service Water	A service water supply would be required for various process purposes, including centrifuge flushing, washdowns, flushing pump seals, priming drain traps, and other similar purposes. This supply would be provided from the existing Facility distribution network.
Recycled Water Supply	A recycled water supply would be required for landscape irrigation. The SJMWS and South Bay Water Recycling (SBWR) would be responsible for establishing the new service connection for the dewatering facility. The Project would include relocating an existing 16-inch-diameter recycled water pipeline that passes through the dewatering facility site. This work would be completed in coordination with SJMWS and SBWR.
Fire Water Supply	A fire water supply would be required to feed fire hydrants installed around the site and fire suppression sprinklers in the building for fire protection. Fire water would be supplied from the existing 12-inch-diameter potable water main in Zanker Road or from the existing water distribution system at RWF.

SOURCE: Brown and Caldwell, 2018.

2.8 Construction Schedule and Process

2.8.1 Construction Schedule

The Project is being developed using a process called the "progressive design-build" process. This process entails hiring a single entity responsible for the design and construction. The design-builder, once under contract with the City, would initiate design work. Once the detailed design and pricing are agreed upon by the City, the design-builder finalizes the design and initiate construction. It is also possible that certain early works construction (such as below ground piping) could be authorized by the City prior to finalizing the design work.

Design and construction would require approximately four years, from about July 2019 through June 2023. **Table 2-4** shows the estimated construction schedule and duration by activity. Both building options (four-story or two-story) would require approximately the same construction schedule. Proposed typical construction hours for the Project would be Monday through Friday, 7:00 am to 4:00 pm. However, the selected contractor may be required to work on Saturday and Sunday, or during extended hours. No nighttime work would be required for construction.

TABLE 2-4
APPROXIMATE DESIGN AND CONSTRUCTION SCHEDULE

Activity	Expected Duration (days)	Estimated Schedule
Design		
Design Notice to Proceed		July 2019
Construction Notice to Proceed		July 2020
Construction		
Preliminary Site Characterization Mobilization and Site Preparation	88	July 2020 - October 2020
Grading, Excavation, Piping	217	September 2020 - June 2021
Facilities Construction	565	November 2020 - December 2022
Paving, Finish, Testing and Startup	195	September 2022 - June 2023
Total	**1,065**	**July 2019 - June 2023**

SOURCE: Brown & Caldwell, 2019.

2.8.2 Construction Process

Preliminary Site Characterization

Preceding construction at the site, work to provide a detailed characterization of site features and facility conditions would occur. Some preliminary site characterization activities would assess existing facilities and operations, while other activities would require ground disturbance (such as excavation, geotechnical investigations and soil testing). Ground-disturbing activities would occur within areas to be disturbed during construction. Preliminary site characterization activities would include:

- Condition assessments
- Surveying
- Geotechnical investigations
- Soil testing
- Subsurface facility locating
- Final equipment selection
- Traffic planning
- Hydraulic evaluation
- Excavation

Mobilization and Site Preparation

During site preparation, trucks would deliver construction equipment and miscellaneous materials to the Project area and field offices would be set up. Removal of grasses and one tree in the center of the dewatering facility site is required. No tree removals would be required at the DS storage and pump station site options.

Grading and Excavation

Excavation and grading for Project would include excavating areas for the dewatering facility, conveyance pipelines, DS storage tanks, and DS pump station. Some excavated soil would be stored at one or more of the construction staging areas prior to disposal or reuse. Figure 2-4

shows the approximate location of staging areas, which can change based on the space available at the time of construction. **Table 2-5** summarizes the ground disturbance required during construction of individual Project components for both the four-story and two-story building options. Disturbance area would be larger than footprints of individual structures. A total of approximately 80,000 square feet within the Facility operational area and approximately 340,700 square feet outside of the Facility operational area would be disturbed in association with excavation and grading during construction. The maximum depth of excavation would be approximately 12 feet below ground (100 feet for the building piles, if required, which would be driven and not require excavation).

Soil excavated would be temporarily stored onsite and reused or subsequently hauled by truck to a Class II or Class III landfill, depending on the chemical composition of the soil. Class II (hazardous) soils would be hauled to either Altamont or Keller Canyon landfills. Class III (non-hazardous) soils would be hauled to Altamont Landfill. The soil volume and truck load estimates associated with Project excavation and demolition activities is shown in **Table 2-6**.

Facilities Construction

During this phase, all of the components for the Project would be constructed (the pipeline construction is further described below). This would include construction of the power facilities, DS sludge storage tanks and pump facilities, and the dewatering facility.

Aboveground Facilities

Early construction activities would include excavation for foundations of structures and pile driving if necessary. The building pad for the dewatering facility would be raised by approximately five feet for flood protection. The dewatering facility, odor control facility, DS storage tanks and pump station would be constructed primarily of conventional concrete and steel construction methods. Approximately 50 percent of excavated material would be used as backfill around these structures.

Pipeline Construction

Project pipelines would be installed within G Street to convey DS from the DS storage tank and pump station to the dewatering facility. Centrate conveyance pipelines, a stormwater pipeline, and a sanitary sewer pipeline from the dewatering facility would also be installed from the dewatering facility to either the EBOS via G Street or to the existing interceptors across Zanker Road.

Construction of the pipelines would involve moving pipelines and equipment to the correct location along the pipeline routes, removing existing pavement, excavating trenches for the pipelines, welding and placing the pipelines, backfilling the trenches, and restoring the asphalt surface.

All pipelines would be constructed using open trench (i.e., cut and cover) techniques. The approximate maximum depth of excavation for pipelines would be five feet below ground surface (bgs). The width of pipeline trenches would vary based upon pipeline diameter. Approximately 20 feet on either side of the pipeline trenches would be required for equipment use and pipeline storage during construction.

TABLE 2-5
DISTURBANCE AREA OF PROJECT COMPONENTS

Component	Approximate Disturbance Area Within Facility Operational Area (square feet)		Approximate Disturbance Area Outside Facility Operational Area (square feet)		Maximum Depth of Excavation (feet)	
	Four Story Option	Two Story Option	Four Story Option	Two Story Option	Four Story Option	Two Story Option
Digested Sludge Dewatering Facility						
All items at the dewatering facility building site	-	-	260,000	285,000	12 (foundation) 100 (piles)	12 (foundation) 100 (piles)
Odor treatment facility	-	-	3,700	3,700	3.5	3.5
Digested Sludge Storage Tanks and Digested Sludge Pump Station						
Site Option 1	35,000	35,000	-	-	10[a]	10[a]
Site Option 2	-	-	35,000	35,000	10[a]	10[a]
Pipelines and Duct Banks						
Centrate pipelines to existing interceptors	-	-	10,000	10,000	5	5
Centrate pipelines from G Street to Emergency Basin Overflow Structure	-	-	5,000	5,000	5	5
Stormwater, plant drain, and digested sludge pipelines along G Street	45,000	45,000	-	-	5	5
Duct Banks to dewatering facility	-	-	2,000	2,000	5	5
Totals[b]	**80,000 (1.8 acres)**		**340,700 (7.8 acres)**		**Max: 12 feet; 100 for piles**	

NOTES:
[a] Estimates of excavation depths for digested sludge storage tanks assume excavation for construction of foundations and partial burial of tanks.
[b] Totals show the maximum disturbance area possible, which would result from the two-story building option.

SOURCE: Brown and Caldwell, 2019.

TABLE 2-6
SOIL AND DEMOLITION DEBRIS VOLUMES AND TRUCK TRIP ESTIMATES

Construction Activity	Material	Volume (cubic yards)		Total Round Trip Truck Trips[a]	
		Four Story Option	Two Story Option	Four Story Option	Two Story Option
Excavation Stockpiled On-site					
Dewatering facility	Soil	4,300	5,800	-	-
Digested sludge storage tanks and pump station	Soil	1,200	1,200	-	-
Buried pipeline trenches	Soil	4,100	4,100	-	-
Odor treatment facility	Soil	600	600	-	-
Totals		**10,200**	**11,700**	-	-
Exported Materials for Off-site Disposal					
Pavement demolition[b]	Asphaltic concrete	200	200	20	20
Spoils from foundation excavations at dewatering facility[c]	Soil	2,200	2,900	220	300
Spoils from digested sludge storage tanks and pump station	Soil	600	600	100	100
Spoils from buried pipeline trenches	Soil	2,000	2,000	200	200
Spoils from excavations for odor treatment facility	Soil	300	300	30	30
Totals		**5,300**	**6,000**	**570**	**650**
Imported Materials					
Roadway pavement	Asphaltic concrete	500	600	100	100
Roadway pavement	Crushed rock	1,500	1,800	200	200
Raise site by 5 feet for flood protection	Soil	39,000	45,000	2,600	2,600
Buried pipeline bedding	Crushed rock	1,900	1,900	200	200
Structures	Portland cement concrete	8,000	9,000	900	900
Miscellaneous construction materials and equipment	Various	-	-	900	1,000
Totals		**50,900**	**58,300**	**4,900**	**5,000**
Precast concrete piles		900 piles	1,000 piles	90	100
Totals				**4,990**	**5,100**

NOTES:
[a] Number of truck trips assumes an average of 10 cubic yards of material per trip.
[b] Pavement demolition quantities are based on demolition of four inches of pavement within the existing Facility for installation of buried pipelines.
[c] Estimates for excavation spoils assumes 50 percent of the excavated material is used as backfill.

SOURCE: Brown and Caldwell, 2019.

Similar to excavation of the dewatering facility, excavated material from pipeline installation would be temporarily stored onsite prior to disposal or reuse. Either excavated material (if suitable) or imported material would be used to backfill around the pipelines. Approximately 2,000 cubic yards of material requiring disposal would be produced during pipeline construction.

Paving, Finishing, Testing, and Start Up

After construction and backfilling is complete, paving would be replaced in areas where it had been removed for pipeline installations. The paving would require 240 trucks to import associated material. During finishing work, testing, and start up, workers would test and start facilities, but no large equipment or materials would be needed.

2.8.3 Construction Staging and Access

The Project would use the dewatering facility site and an area designated south of the Facility operational area for construction staging, equipment storage, and worker parking (Figure 2-4). This can change based on the space available at the time of construction. Construction traffic within the developed Facility area would be managed in accordance with traffic routing plans. Traffic associated with import and export of construction materials would primarily use Zanker Road between SR 237 and the Facility.

Construction vehicles would access the construction equipment and staging area through an entrance gate off of Zanker Road. During construction of pipelines across Zanker Road, the two lane road would be reduced to one lane for approximately one week. Traffic would be maintained through the work area by limiting construction to one lane at a time.

2.8.4 Construction Workforce and Equipment

The size of the construction workforce would equate to approximately 20 to 30 vehicle trips per day (i.e., 10-15 workers), with a maximum of 100 vehicle trips per day (i.e., 50 workers). Construction would require an average of five truck trips per day and a maximum of 20 truck trips per day for removal of demolition debris and excavation spoils and delivery of construction materials and equipment.

Table 2-7 identifies construction equipment to be used for the Project.

2.8.5 Construction Best Management Practices

During construction, the contractor would be required to comply with state and City of San José standard runoff, erosion, and dust control best management practices. Groundwater from excavations would be pumped to settling tanks to remove grit from the water and would then be discharged into the Headworks facilities directly or into the Facility storm water collection system, which drains to the Headworks facilities, for treatment.

TABLE 2-7
CONSTRUCTION EQUIPMENT

Item	Maximum Quantity	Duration (equipment-months)
Abrasive blaster	2	6
Aerial boon or scissor lift	4	60
Air compressor	4	60
Asphalt paver	1	1
Backhoe	3	24
Bulldozer	2	6
Butt fusion pipe welder	2	6
Concrete bucket	2	24
Concrete pump	1	24
Concrete saw	2	6
Crane	3	48
Excavator	3	24
Front-end Loader	1	6
Truck with flatbed trailer	2	12
Grader	1	4
Grout pump	1	6
Pavement roller	2	4
Pickup truck	10	360
Pile driver, if required	1	6
Road sweeper	1	24
Vibratory roller	2	36
Water tank	1	36
Welder	5	360

SOURCE: Brown and Caldwell, 2019.

2.9 Required Actions and Approvals

2.9.1 State

The Project may require the following state permits and approvals:

- San Francisco Bay Regional Water Quality Control Board National Pollutant Discharge Elimination System - Construction General Permit for Stormwater and Stormwater Pollution Prevention Plan (if stormwater would not discharge back to the Facility during construction).
- State Water Resources Control Board – Permit and approval for use of recycled water for landscape irrigation.

2.9.2 Regional and Local

The Project may also require the following regional and local permits and approvals:

- Bay Area Air Quality Management District:
  - Authority to construct.
  - Permit to operate following commissioning.
  - Off-road construction equipment certification.
- Santa Clara Valley Habitat Agency - compliance with Santa Clara Valley Habitat Plan requirements.

2.10 References

Brown & Caldwell, 2014. Biosolids Transition Strategy Report. December 23, 2014.

Brown & Caldwell, 2018. Digested Sludge Dewatering Facility Project Definition Report. October 8, 2018.

Brown & Caldwell, 2019. Technical Memorandum, Construction and Operations Quantities for Digested Sludge Dewatering Facility. January 28, 2019.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San José, 2015. San José-Santa Clara Regional Wastewater Facility Architectural Program Guidelines. October 2015.

City of San José, 2015a. San José-Santa Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines. October 20, 2015.

CHAPTER 3
Environmental Checklist

Introduction to the Analysis

This section includes analyses for all Project component options:

- Digested Sludge (DS) Storage and Pump Station-Site Option 1 and Site Option 2
- Two-story and four-story height options for the dewatering facility
- 120-foot and 280-foot front setback options for the dewatering facility

The "Project sites" include the Project components at two different areas on the Facility property; one site for the proposed dewatering facility on the east side of Zanker Road, across from the main Facility operational area, and sites for digested sludge conveyance and storage facilities located to the south of the operational area.

Where these analyses differ, these components are discussed separately.

3.1 Aesthetics

3.1.1 Setting

The designated scenic vistas and scenic resources in the vicinity of the Project have not substantially changed since preparation of the certified Plant Master Plan EIR.

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public viewer's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, a visual or aesthetic impact may occur. *Visual character* is the unique set of landscape features that combines to make a view, including native landforms, water, and vegetation patterns as well as built features such as buildings, roads, and other structures. *Visual quality* is the intrinsic appeal of a landscape or scene due to the combination of natural and built features in the landscape. Natural and built features combine to form unique perspectives with varying degrees of visual quality, which is rated as high, moderate, or low.[13] Visual sensitivity reflects the level of interest or concern that viewers and responsible land management agencies have for a particular visual resource with visual quality taken into account. Visual sensitivity is a measure of how noticeable proposed changes might be in a particular setting and is determined based on the distance from a viewer, the contrast of the proposed changes, and the duration that a particular view would be available to viewers. For example, areas such as scenic vistas, parks, trails, and scenic roadways typically have high visual quality and visual sensitivity because these locales are publically protected, appear natural, and have view durations that are typically long, and close-up views that are more commonly available.

The City of San José is considered an urbanized area, as defined in CEQA Guidelines Section 15387, and as mapped by the U.S. Census. The Envision San José 2040 General Plan (2011) contains goals regarding visual resources; primarily concerning access to scenic resources (Goal CD-9) and maintaining attractive gateways within the City (Goal CD-10), particularly along loosely-defined "Grand Boulevards" and "Rural Scenic Corridors".

All new private development is subject to a design review process that includes a review of architecture and site planning. Design review is based upon a series of guidelines prepared by the City's Planning Division and adopted by the City Council to assist those persons involved in the design, construction, review and approval of development in San José. Specific design guidelines applicable to the Project include those for industrial and commercial design, which are described in Section 4.15.2.3 of the Plant Master Plan EIR.

[13]
- **Low.** The location is lacking in natural or cultural visual resource amenities typical of the region. A site with low visual quality will have aesthetic elements that are perceptibly uncharacteristic of the surrounding area.
- **Moderate.** The location is typical or characteristic of the region's natural or cultural visual amenities. A site with moderate visual quality maintains the visual character of the surrounding area, with aesthetic elements that do not stand out as either contributing to or detracting from the visual character of an area.
- **High.** The location has visual resources that are unique or exemplary of the region's natural or cultural scenic amenities. A site with high visual quality is likely to stand out as particularly appealing and makes a notable positive contribution to the visual character of an area.

Scenic Highways

There are no state scenic highways in the vicinity of the Project from which views of the Project could be seen. The Facility is visible from State Route (SR) 237, located approximately 0.6 miles south of the Project site. The operational area facilities located on the west side of Zanker Road are industrial in character, with most buildings being one to two stories high. The periphery of the main operational area consists of fencing plus landscaping including eucalyptus trees, shrubs, and manicured lawns.

Scenic Vistas and Scenic Resources

No designated scenic vistas occur in the Project vicinity. The General Plan defines scenic vistas or resources in the City of San José as broad views of the Santa Clara Valley, the hills and mountains surrounding the valley, the urban skyline, and the baylands. The City of San José has many scenic resources which include the hills and mountains which frame the valley floor. The Project site is relatively flat and allows for views of the eastern foothills, Mount Hamilton, and the Diablo Mountains to the east, and the San Francisco Baylands to the north. These views are seen by motorists and bicyclists from Los Esteros Road and Zanker Road but such views are temporary and fleeting.

No scenic resources are located on the site or in the immediate vicinity of the Project area. A portion of SR 237 west of Interstate 880, and North 1st Street from Vista Montaña to Tony P. Santos Street are designated as Gateways in the Envision San José 2040 General Plan (City of San José, 2011). The Project site is too distant to be seen from either the SR 237 Gateway or the North 1st Street Gateway, which are designated scenic resources. Similarly, views of the Project would not be visible from any nearby recreational trails (i.e., Coyote Creek Trail, Alviso Slough Trail, and Mallard Slough Trail) due to surrounding levee grading, vegetation, and the distance between the trails and the Project site.

Surrounding Visual Character

Roadways in the vicinity of the Project site include Zanker Road and Los Esteros Road, providing primary access to the Facility operational area and the primary means by which the public can observe the Project sites.

Prominent urban features in the vicinity of the Project sites are shown on Figure 1-2 in Chapter 2, Project Description, and include the Silicon Valley Advanced Water Purification Center (SVAWPC) directly adjacent to and south of the site for the dewatering facility building. To the south is also the SR 237 corridor along which are numerous commercial office developments. The Nortech development is adjacent to and west of the bufferlands. The PG&E Calpine power plant is located to the southeast between the Plant Master Plan boundary and SR 237.

The Project site for the dewatering facility building (Component 4 on Figure 2-4) is visible from Zanker Road. The views consist of electrical transmission lines, fencing, ruderal grasslands, one tree located near the center of the site, and trees bordering the eastern portion of the site. The SVAWP, located directly adjacent to and south of the Project site for the dewatering facility, is

also visible from Zanker Road. The visual quality of the site for the dewatering facility building is considered moderate; positive because of the open space and rural character within San José, but negative because of the surrounding industrial facilities and utility infrastructure. Because of the industrial character of surrounding facilities and utility infrastructure, viewer sensitivity from Zanker Road is considered moderate.

The DS Storage and Pump Station, Site Option 1 (Component 2a on Figure 2-4) consists of pavement surrounded by operational area facilities. There are trees and sparse shrub vegetation located adjacent to the southwest border of this site. Viewing opportunities of the DS Storage and Pump Station, Site Option 1 from Zanker Road are limited, distant, and largely screened by the operational area facilities and landscaping. The DS Storage and Pump Station, Site Option 2 (Component 2b on Figure 2-4) consists of a disturbed open space area, adjacent to the Iron Salts Feed Station and the Facility construction staging/enabling area. Viewing opportunities of the DS Storage and Pump Station, Site Option 2 from Zanker Road are limited, distant and largely screened by the construction staging area trailers and equipment. The visual quality of these sites is considered low because of the surrounding industrial facilities and utility infrastructure. Because of the industrial character of the Facility operational area, viewer sensitivity from Zanker Road is considered moderate.

Overall the view in the immediate vicinity of the Project sites is comprised of a combination of industrial and institutional buildings, including the SVAWPC tank (which is approximately 37 feet tall), and the buildings associated with the Facility, which extend up to 40 feet tall. The nearest sensitive receptors to the Project site include residences in the Alviso Village area, which is approximately one mile (5,600 feet) west of the Project area, and George Mayne Elementary School, located 1.25 miles (6,500 feet) southwest of the Project area. The Project site is not visible from any of these locations.

3.1.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified significant and unavoidable impacts on scenic resources, the visual character, or quality of the site and its surroundings specific to: proposed land uses south, west, and east of the operational area, including the economic development portion of the Plant Master Plan evaluated in the EIR; the recreational parks located in the proposed land uses south and west of operational area; the flexible space for the proposed land uses east of operational area, and the roadway connecting Zanker road to Dixon Landing Road.

- The Plant Master Plan EIR identified potentially significant, but mitigable to less-than-significant, impacts on scenic resources, the visual character, or quality of the site and its surroundings resulting from the implementation of B2-P1 (Dewatering Phase 1). The Plant Master Plan EIR also identified less-than-significant impacts from the implementation of B2-P1 (Dewatering Phase 1) related to the creation of new sources of light and glare.

- The Plant Master Plan EIR identified less-than-significant impacts on scenic resources, the visual character, or quality of the site and its surroundings specific to: the proposed land uses north of operational area; the roadway system connecting Nortech Parkway to Zanker Road, trails; and owl habitat and Artesian Slough riparian corridor located in the proposed land uses south and west of operational area; and the freshwater wetlands and eastern stormwater channel, nature museum, light industrial, and trails for the proposed land uses east of

operational area. The Plant Master Plan EIR also identified less-than-significant impacts related to the creation of a new sources of light and glare.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
I. AESTHETICS — Except as provided in Public Resources Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐	☒
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 point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☒	☐

Discussion

a) **Construction and Operation**

There are no scenic vistas in the Project vicinity. With the absence of designated scenic vistas in the area, construction and operation of the Project would therefore not result in a substantial adverse effect on a scenic vista. This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.1.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

b) **Construction and Operation**

As noted above, scenic resources in the vicinity of the Project site include SR 237 Gateway, the North 1st Street Gateway, and the hills and mountains which frame the valley floor. Because views of the Project site are too distant from both the SR 237 Gateway and the North 1st Street Gateway, the Project would not be visible from these vantage points. The one existing tree on the Dewatering facility site, as well as the other landscaping around the periphery of the Facility could be considered a scenic resource to motorists and bicyclists passing the site on Zanker road.

Construction of the pipelines and the DS transfer pump, and DS Sludge and Pump Station would not require the removal of any landscaping or trees. Only one tree is proposed to be removed by this Project, which is located at the center of the dewatering facility site. Tree removal to accommodate the dewatering facility would diminish the scenic resources at the site.

The Plant Master Plan EIR identified potentially significant impacts on scenic resources, the visual character, or quality of the site and its surroundings resulting from the implementation of B2-P1 (Dewatering Phase 1). The Plant Master Plan EIR included implementation of Mitigation Measure AES-1a (Landscape Program), which would require landscaping improvements along the northern edge of Los Esteros Road to minimize views of the taller structures.

As described in Section 2.3.2 of Chapter 2, Project Description, landscaping would be located on the sides and in front of the building and consist of native, drought-tolerant species, in accordance with the *San José-Santa Clara Regional Wastewater Facility Architectural Program Guidelines* (City of San José, 2015a), and the *San José-Santa Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines* (City of San José, 2015b). This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.1.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Less Impact than Approved Project. (Less than Significant)**

c) As discussed above, the Envision San José 2040 General Plan (2011) contains general goals regarding visual resources; primarily concern access to scenic resources (Goal CD-9) and maintaining attractive gateways within the City (Goal CD-10), particularly along loosely-defined "Grand Boulevards" and "Rural Scenic Corridors". Discussion of potential effects on scenic corridors, such as those designated in the City's General Plan are discussed in checklist item b) above, and were determined to be less than significant. As discussed, views of the Project would not be visible from these vantage points. Access to the scenic resources associated with the scenic corridors would be maintained. Further, the 'attractiveness' of these corridors, as interpreted as 'gateways' would not be altered.

As discussed above, The City of San José's Municipal Code includes several regulations associated with protection of the city's visual character and control of light and glare. Light and glare associated with the Project is further discussed under checklist item d) below. The zoning ordinance also includes development standards for each zoning district, which currently include standards for maximum building height. The Project's consistency with the zoning ordinance is discussed in Section 3.11, Land Use.

As discussed above, specific City design guidelines applicable to the Project include those for industrial and commercial design. Common guidelines contained in both the Commercial Design Guidelines and Industrial Guidelines that pertain to the Project include; Surrounding Area Character, Site Character, Building Form and Scale, Complexity/Unity, General Landscaping, Perimeter Landscaping, and Lighting. The Project's consistency with these guidelines is summarized below.

- Surrounding Area Character, Building Form and Scale, Complexity/Unity: As described in the Project Description, the dewatering facility building would be designed in accordance with the City's *San José-Santa Clara Regional Wastewater Facility Architectural Program Guidelines* (City of San José, 2015) and the *San José-Santa*

Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines (City of San José, 2015a) to be consistent with other structure at the Facility.

- Site Character: As described in the Project Description, the dewatering facility building would be set back form the existing riparian corridor, preserving this feature.
- General Landscaping and Perimeter Landscaping: As described in the Project Description, landscaping would be located on the sides and in front of the building.
- Lighting: As described in the Project Description, lighting would be installed at the exterior of the new building. Consistent with the Architectural Design Guidelines, lighting would have sensors that automatically turns off the outdoor lighting when daylight is available. Luminaire shields would be installed such that no light is directed off the site or into the sky.

Therefore, the Project would not conflict with applicable zoning and other regulations governing scenic quality.

Given the limited scenic corridors and gateways in proximity to the Project and because the Project site is within an area with limited views in close proximity to non-urbanized areas located to the north, this analysis also considerers the potential for the Project to substantially degrade the existing visual character or quality of public views of the site and its surrounding.

Construction

Plant Master Plan EIR analyzed the construction-related aesthetics impacts of a number of capital improvement projects and found that direct views of the Plant Master Plan area (which includes the Project site) would be available from Los Esteros and Zanker Road, including views of construction work areas and staging areas. Construction is a regular occurrence in this very flat, industrialized area and is visible only when the viewer is relatively close, when there are no obstructions, and when the construction equipment is particularly large. Construction would require approximately three years, from July 2020 through June 2023. Construction activities associated with the Project would be similar to those described in Section 4.15.3.4 of the Plant Master Plan EIR. Construction of the Project would be short term and would be visually consistent with the working industrial character of the Facility and adjacent landfills and would not affect the existing visual character or quality of public views of the site and its surroundings.[14] This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.1.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

[14] Around the Facility operational area, other large industrial-type facilities in the immediate vicinity include the Nine Par Landfill and currently operating Newby Island Sanitary Landfill, the Zanker Road Landfill, and the Zanker Materials Processing Facility.

Operation

Once completed, the pipelines would not include any above ground structures, and therefore would not would affect the existing visual character or quality of public views of the site and its surroundings. The DS transfer pump, and DS Storage and Pump Station would be located at the interior of the Facility operational area. However, this would not affect the overall views of the area because these components are not highly visible to surrounding viewing opportunities, and therefore would not would affect the existing visual character or quality of public views of the site and its surroundings.

The site for the dewatering facility building is currently undeveloped and lacks screening, but the new dewatering facility building would be screened with landscaping which will soften the views from Los Esteros and Zanker Road.

The site for the dewatering facility building is relatively flat and allows for views of the eastern foothills, Mount Hamilton, and the Diablo Mountains to the east. These views can be seen by motorists and bicyclists from Los Esteros Road and Zanker Road but such views would be temporary and fleeting. The City is currently considering two options for this building: a four-story or a two-story configuration, depending on the alternative selected for the dewatering process.

Similar to existing facilities within the existing operational area and surrounding urban features in the vicinity of the Project site, the proposed two-story building would be approximately 45 feet tall and would generally be of similar height to existing Facility buildings across Zanker Road and the exterior of this building would be designed in accordance with the City's *San José-Santa Clara Regional Wastewater Facility Architectural Program Guidelines,* and the *San José-Santa Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines* to match the existing Facility structures. As described in Section 2.6.2 of the Project Description and shown on Figure 2-5, this two-story building would require additional pumps or conveyors after the centrifuge process to lift dewatered cake up into the storage bins before it is loaded onto trucks. **Figure 3.1-1** and **Figure 3.1-2** include renderings of the proposed two-story building as viewed from street level at two locations along Zanker Road for both the 120-foot and 280-foot front setback.[15] As shown in these figures, views of the eastern foothills, Mount Hamilton, and the Diablo Mountains to the east would still be visible with the dewatering facility in place. Because the proposed two-story building would be similar in height to the existing Facility structures across Zanker Road and surrounding urban features, including the SVAWPC tank (which is approximately 37 feet tall), and would use exterior finishes that would appear similar to existing Facility structures, it would not would not would affect the existing visual character or quality of public views of the site and its surroundings.

[15] These visual simulations do not show the existing electrical transmission lines and poles located along Zanker Road, which would remain in place.

Viewpoint Location from Zanker Road Looking Northeast

Two-Story Building with Setback of 120-feet from Zanker Road

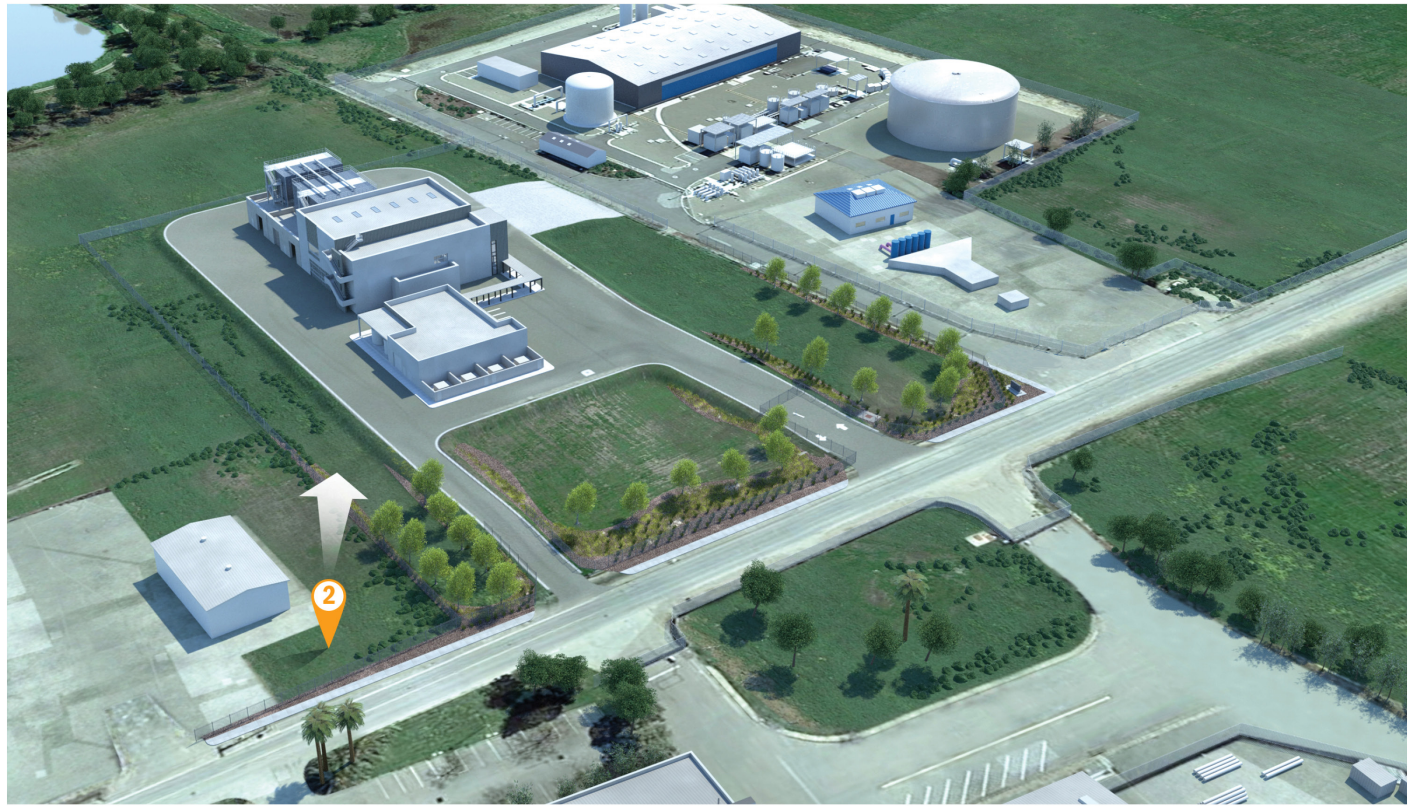
Two-Story Building with Setback of 280-feet from Zanker Road

SOURCE: Brown and Caldwell; HKIT Architects

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 3.1-1

Site Simulation of Proposed Two-Story Dewatering Facility from Zanker Road Looking Northeast



Viewpoint Location from Zanker Road Looking Southeast

Two-Story Building with Setback of 120-feet from Zanker Road

Two-Story Building with Setback of 280-feet from Zanker Road

SOURCE: Brown and Caldwell; HKIT Architects

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 3.1-2

Site Simulation of Proposed Two-Story Dewatering Facility from Zanker Road Looking Southeast

Four-Story Building

The four-story dewatering facility option would be approximately 90 feet tall, which would be taller than the heights of the existing Facility buildings, which are mostly located at the Facility across Zanker Road. The Plant Master Plan included cake silos associated with the cake storage tanks for the Phase 1 dewatering facility, which would extend approximately 62 feet tall. The Plant Master Plan also included proposed land uses south and west of operational area that would include buildings ranging in height from four to eight stories high.

As described in Section 2.6.2 of the Project Description, and shown on Figure 2-5, this four-story building would provide the height necessary to convey dewatered cake to the storage bins by gravity. The exterior of the dewatering facility building would be designed in accordance with the City's *San José-Santa Clara Regional Wastewater Facility Architectural Program Guidelines,* and the *San José-Santa Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines* to match the existing Facility structures. **Figure 3.1-3** and **Figure 3.1-4** include renderings of the proposed four-story building as viewed from street level at two locations along Zanker Road for both the 120-foot and 280-foot front setback.[16] As shown in these figures, views of the eastern foothills, Mount Hamilton, and the Diablo Mountains to the east would still be visible with the dewatering facility in place. The landscaping, as further described above under item b) would further screen views of the taller building. The landscaping was also included in the Plant Master Plan EIR as Mitigation Measure AES-1a Landscape Program.

With the inclusion of landscaping and use of exterior finishes that would appear similar to existing Facility components, this impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.1.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Significant and Unavoidable)**

d) The Plant Master Plan EIR identified less-than-significant impacts related to the creation of a new sources of light and glare during construction and operation of the proposed master plan facilities.

Construction

Construction of the Project would primarily occur during daytime hours from 7:00 am to 4:00 pm. Construction activities would not involve any nighttime work or nighttime lighting. This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.1.2) and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

[16] Ibid.

Operation

As noted in Section 3.1.1, the Project site is not visible from the nearest sensitive receptors and so would not result in impacts related to glare. As discussed in Section 3.4 item e), the Project has been designed to incorporate bird-safe design features. Nighttime lighting is currently used throughout the Facility operational area, including at the SVAWPC adjacent to the Project site. The Project would add to existing lighting, sufficient to provide lighting needed for operations, access and security of the components, including the dewatering facility building. Consistent with the Architectural Design Guidelines, and City's Outdoor Lighting Policy for private development, lighting would have sensors that automatically turns off the outdoor lighting when daylight is available. Luminaire shields would be installed such that no light is directed off the site or into the sky. The City of San José Public Streetlights Council Policy 4-2 requires that new streetlight lighting be dimmable and programmable, which would control the amount and color of light shining on streets and sidewalks. However, because lighting would be used to operate critical Facility components, this policy is not relevant to the Project. Further, there are no residences or other active nighttime uses in the immediate vicinity of the Project site. City of San José Outdoor Lighting on Private Developments Policy 4-3 prohibits directing of light sources toward the sky and requires that light sources producing more than 4,050 lumens be fully shielded to prevent light aimed skyward. As described above, Luminaire shields would be installed such that no light is directed off the site or into the sky. This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.1.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

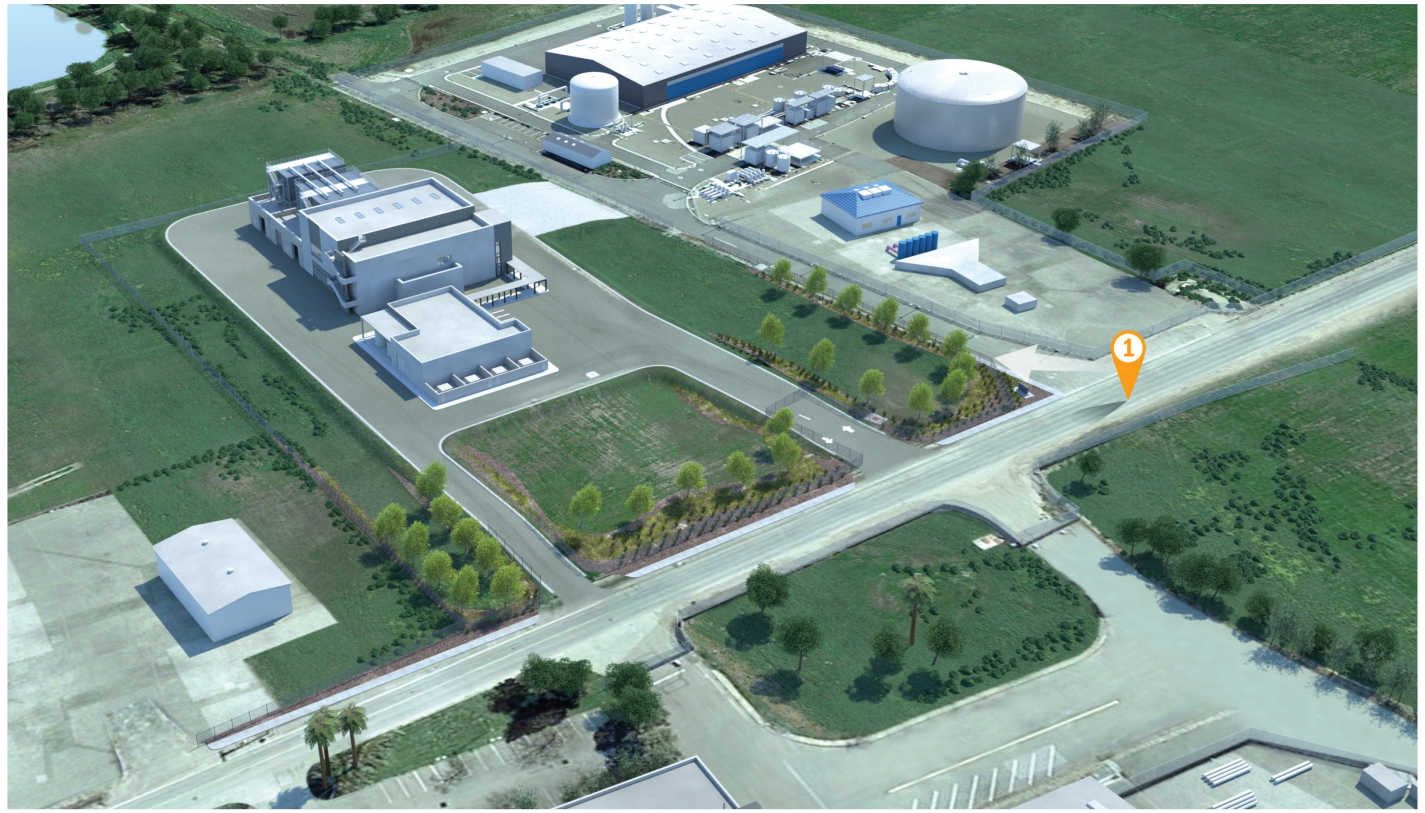
References

City of San José, 2011. Envision San José 2040 General Plan. Adopted November 1, 2011, Amended February 27, 2018.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San José, 2015a. San José-Santa Clara Regional Wastewater Facility Architectural Program Guidelines. October 2015.

City of San José, 2015b. San José-Santa Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines. October 20, 2015.



Viewpoint Location from Zanker Road Looking Northeast

Four-Story Building with Setback of 120-feet from Zanker Road

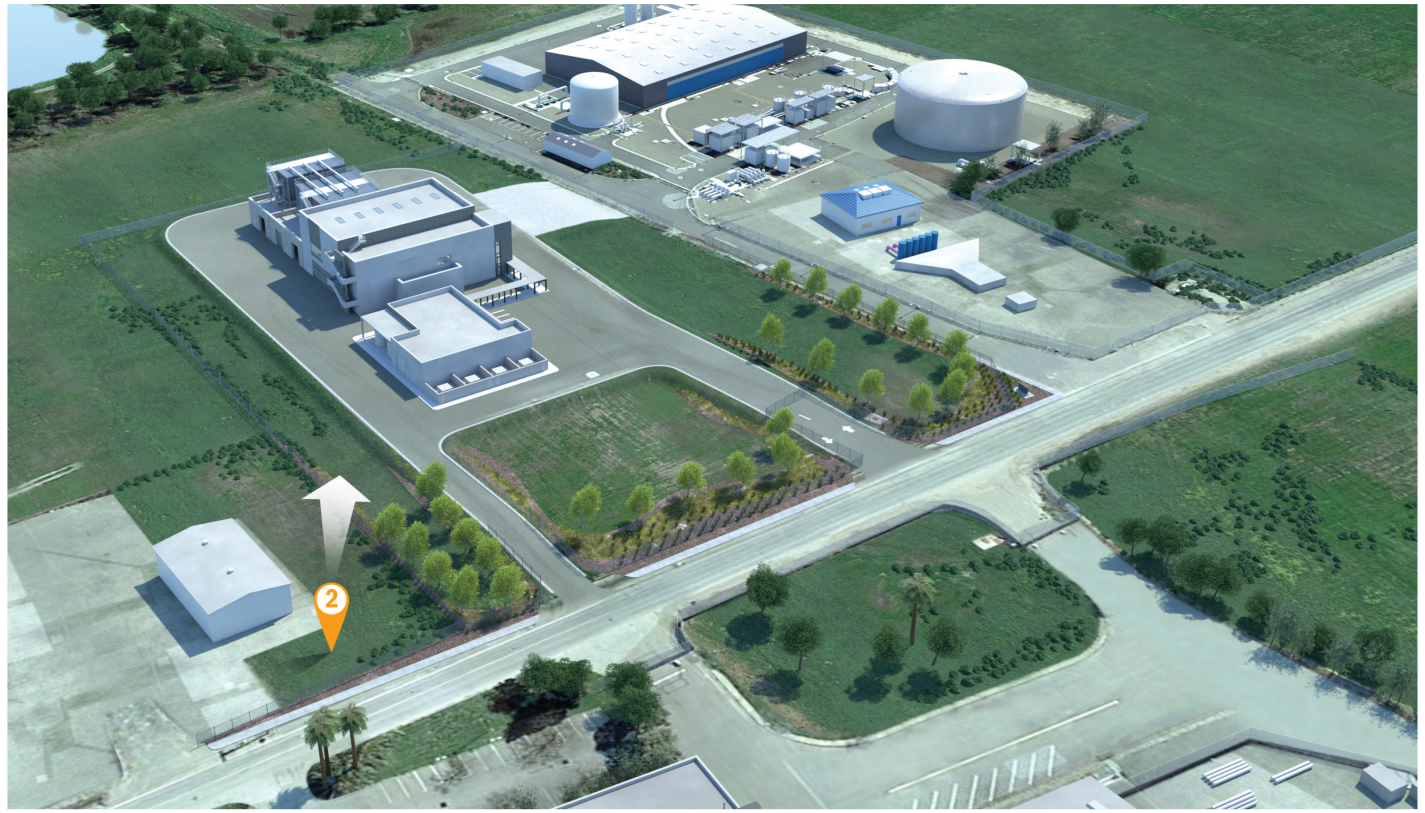
Four-Story Building with Setback of 280-feet from Zanker Road

SOURCE: Brown and Caldwell; HKIT Architects

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 3.1-3

Site Simulation of Proposed Four-Story Dewatering Facility from Zanker Road Looking Northeast



Viewpoint Location from Zanker Road Looking Southeast

Four-Story Building with Setback of 120-feet from Zanker Road

Four-Story Building with Setback of 280-feet from Zanker Road

SOURCE: Brown and Caldwell; HKIT Architects

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 3.1-4

Site Simulation of Proposed Four-Story Dewatering Facility from Zanker Road Looking Southeast

3.2 Agriculture and Forestry Resources

3.2.1 Setting

The state and local land use and zoning designations with respect to agricultural and forest resources have not changed for the Project site and surroundings, and agricultural or forest use of the Project site has not commenced since adoption of the certified Plant Master Plan EIR. There are no lands on or adjacent to the Project under a Williamson Act contract, or designated as farmland or forest land. Thus there has not been a substantial change in the circumstances of or impacts on involving agricultural and forest resources at the Project site or surrounding areas.

3.2.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified no impacts resulting from the Project conflicting with existing zoning or causing rezoning of forest land, timberland, or timberland zoned Timberland Production. The Plant Master Plan EIR identified no impact related to the loss of forest land or conversion of forest land to non-forest use.

- The Plant Master Plan EIR identified less-than-significant impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Plant Master Plan EIR also identified less-than-significant impacts related to a zoning conflict for agricultural uses or with an existing Williamson Act contract.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
II. AGRICULTURE AND FORESTRY RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department 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?	☐	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	☐
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))?	☐	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
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?	☐	☐	☐	☒	☐

Discussion

a-e) **Construction and Operation**

The Project site is located within the Plant Master Plan boundary and several components extend into the Facility's bufferlands. The Project site is not located on or adjacent to any agricultural lands (including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance), lands subject to a Williamson Act contract, forest lands, or timberlands. The Project would not result in the construction of any facilities or other displacement, interference, or loss of agricultural or forest lands. Additionally, the Project would not alter other areas which could, directly or indirectly, result in the conversion of farmland or forest land to other uses. This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.2.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

References

California Department of Conservation, Farmland Mapping and Monitoring Program, available at https://www.conservation.ca.gov/dlrp/fmmp. Accessed April 4, 2019.

City of San Jose, Planning, Building and Code Enforcement, available at http://www.sanjoseca.gov/index.aspx?NID=2037. Accessed April 4, 2019.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

County of Santa Clara, Department of Planning and Development, available at https://www.sccgov.org/sites/dpd/programs/wa/pages/wa.aspx. Accessed April 4, 2019.

3.3 Air Quality

3.3.1 Setting

The air quality setting relevant to the Project sites, including applicable regulations and air quality conditions, has not appreciably changed since the certification of the Plant Master Plan EIR. The Bay Area Air Quality Management District (BAAQMD) maintains regional authority for air quality management in the Project area and the entire San Francisco Bay Area Air Basin (Bay Area).

The Federal Clean Air Act and the California Clean Air Act both require the establishment of standards for ambient concentrations of air pollutants, called Ambient Air Quality Standards (AAQS). The Bay Area experiences occasional violations of ozone and particulate matter (PM_{10} and $PM_{2.5}$) standards. Therefore, the Project area currently is designated as a non-attainment area for violation of the state 1-hour and 8-hour ozone standards, the federal ozone 8-hour standard, the state respirable particulate matter (PM_{10}) 24-hour and annual average standards, the state fine particulate matter ($PM_{2.5}$) annual average standard, and the federal $PM_{2.5}$ 24-hour standard. The Project area is designated as attainment for all other state and federal standards (BAAQMD, 2017).

At the time of certification of the Plant Master Plan EIR, the BAAQMD's 2010 Clean Air Plan (CAP) was the applicable air quality plan in place to protect public health and climate in the Bay Area. In 2017, the 2017 Bay Area Clean Air Plan (2017 CAP) was adopted to address nonattainment issues for the Bay Area (BAAQMD, 2017a). The 2017 CAP provides a regional strategy to protect public health and protect the climate by continuing progress toward attaining all state and federal air quality standards; eliminating health risk disparities from exposure to air pollution among Bay Area communities; transitioning the region to a post-carbon economy needed to achieve greenhouse gas (GHG) reduction targets for 2030 and 2050; and providing a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets. The 2017 CAP includes a wide range of 85 control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

At the time of preparation of the Plant Master Plan EIR, the BAAQMD 2010 CEQA Air Quality Guidelines were in effect. The BAAQMD updated its CEQA Guidelines most recently in May 2017 to include revisions to address the California Supreme Court's 2015 opinion in *California Building Industry Association vs. BAAQMD, 62 Cal.4th 369*. However, as the May 2017 CEQA Guidelines do not update outdated references, links, analytical methodologies or other technical information; current significance thresholds for evaluation of project construction and operational impacts remain the same as those used in the Plant Master Plan EIR. BAAQMD is currently working to update any outdated information in the Guidelines (BAAQMD, 2019).

Sensitive receptors, as identified and discussed in the certified Plant Master Plan EIR, have not changed and remain applicable to the Project. There are no sensitive receptors (e.g., residences, schools) adjacent to or in the immediate vicinity of the Project area, and no hospitals, daycare centers, or long-term care facilities within one mile of the Project area. The closest sensitive uses are residences located approximately 3,450 feet (0.7 mile) to the south, 4,100 feet (0.8 mile) west of the Project site, and 5,800 feet (1.1 miles) to the east of the Project site. The closest school is the George Mayne Elementary School located approximately 5,000 feet (one mile) to the southwest.

3.3.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified significant and unavoidable impacts related to implementation of the Master Plan for the potential to conflict with the applicable air quality plan and for the potential to violate air quality standards during construction as project-related construction emissions, even with mitigation measures incorporated, were found to exceed the identified significance thresholds.

- The Plant Master Plan EIR identified less-than-significant impacts related to implementation of the Master Plan for the potential to violate air quality standards during operation, exposure of sensitive receptors to substantial pollutant concentrations, and objectionable odors.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
III. 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:**					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐	☒
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?	☐	☐	☐	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒	☐

Discussion

a) **Construction and Operation**

The BAAQMD CEQA Guidelines recommend that a project's consistency with the current air quality plan be evaluated using the following three criteria:

a. The project supports the goals of the applicable air quality plan,

b. The project includes applicable control measures from the air quality plan, and

c. The project does not disrupt or hinder implementation of any control measures from the air quality plan.

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 (BAAQMD, 2017b).

The primary goals of the 2017 CAP, the applicable air quality plan for the Bay Area, are to attain air quality standards, reduce population exposure and protect public health in the Bay Area, and reduce GHG emissions and protect the climate. The BAAQMD-recommended guidance for determining if a project supports the goals in the current CAP is to compare estimated project emissions with BAAQMD thresholds of significance. If project emissions would not exceed the thresholds of significance after the application of all feasible mitigation measures, the project would be consistent with the goals of the 2017 CAP. As indicated in the following discussion with regard to air quality item b), the Project would result in less-than-significant impacts related to construction emissions with the implementation of the BAAQMD recommended fugitive dust control measures, which are included in the City's conditions of approval for the Project. Therefore, the Project would be considered to support the primary goals of the 2017 CAP.

The 2017 CAP contains 85 control measures aimed at reducing air pollution in the Bay Area. Projects that incorporate all feasible control measures are considered consistent with the CAP. Two of the stationary source control measures are applicable to operation of water pollution control plants: WR1 (Limit GHGs from POTWs [Publicly-Owned Treatment Works]) and WR2 (Support Water Conservation). Control Measure WR1 pertains better management of GHG emissions at POTWs. It also explores rulemaking to reduce GHGs emitted directly within POTWs and promotes the use of biogas recovery systems at POTWs. Control Measure WR2 promoted water conservation by requiring best management practices that reduce water consumption and increase on-site water recycling in new and existing Facility buildings. While both of these measures do not contain specific emissions control strategies, neither of the measures would apply to the Project as the Project would not affect existing biogas recovery at the Facility. For these reasons, the Project would not be inconsistent with nor hinder implementation of the 2017 CAP control measures. In summary, the Project would be consistent with all three criteria listed above to evaluate consistency with the 2017 CAP and, therefore, would not conflict with or obstruct implementation of the 2017 CAP.

This impact would be the less than what was identified in the Plant Master Plan EIR (as described above in Section 3.3.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Less Impact than Approved Project. (Less than Significant)**

b) According to the BAAQMD, no single project will, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The BAAQMD *CEQA Air Quality Guidelines* recommends using its quantitative thresholds of significance to determine if an individual project's emissions would considerably contribute to cumulative air quality impacts in the region. If a project's emissions exceed the identified

significance thresholds, its contribution to cumulative air quality would be considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD, 2017b). Alternatively, if a project does not exceed the identified significance thresholds, then the project would not be considered cumulatively considerable and would result in less-than-significant air quality impacts.

As discussed above in Section 3.3.2, the Plant Master Plan EIR disclosed significant and unavoidable impacts related to the potential to conflict with an applicable air quality plan and potential to violate air quality standards during construction of projects in 2016. Therefore, the contribution of the approved Plant Master Plan to cumulative air quality was also concluded as being significant. The Project's individual contribution to the cumulative air quality of the area has to be evaluated below by comparing its construction and operational emissions to the applicable BAAQMD thresholds.

Construction

Construction activities associated with the Project would involve use of equipment that would emit exhaust containing ozone precursors (reactive organic gases [ROG], and nitrogen oxides [$NO_{x]}$) and particulate matter (PM_{10}, and $PM_{2.5}$). On-site and off-site vehicle activity associated with material transport and construction worker commutes would also generate emissions. Emissions generated by these activities would vary depending on the number and types of equipment used, duration of use, operation schedules, and the number of construction workers and delivery trips. Criteria pollutant emissions of ROG and NO_x from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during Project construction.

Air pollutant emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ that would be generated by off-road construction equipment (e.g., excavators, graders, loaders) and construction vehicle trips were estimated using the California Emissions Estimator Model (CalEEMod 2016, version 3.2) along with the Project-specific data for construction schedule (as shown in **Table 3.3-1** below), equipment requirements and activity level for each construction phase and number of construction related vehicle trips. This construction equipment use by phase is shown in **Table 3.3-2** below.

TABLE 3.3-1
PROJECT CONSTRUCTION SCHEDULE

Construction Phase	Start	End	Number of Workdays[a]
Mobilization and Site Preparation	July 2020	October 2020	88
Grading, Excavation and Piping	September 2020	June 2021	217
Facilities Construction	November 2020	December 2022	565
Paving, Finish, Testing and Startup	October 2022	June 2023	195
Total Workdays (accounting for overlapping phases)	July 2020	June 2023	783

NOTES:
[a] Assuming construction would take place Monday to Friday only.
SOURCE: Brown & Caldwell, 2019 (Response to RFI)

TABLE 3.3-2
CONSTRUCTION EQUIPMENT USED BY PHASE

Equipment	Number	Horsepower (hp)
Mobilization and Site Preparation		
Air compressor	1	25
Backhoe	1	200
Concrete saw	1	0.5
Excavator	2	200
Front-end loader	1	100
Truck with flatbed trailer	1	400
Pickup truck	4	200
Road sweeper	1	200
Water tanker	1	200
Grading, Excavation and Piping		
Air compressor	2	25
Backhoe	2	200
Bulldozer	2	175
Butt fusion pipe welder	2	0.5
Concrete saw	1	0.5
Crane	2	200
Excavator	2	200
Front-end loader	1	100
Truck with flatbed trailer	2	400
Grader	1	150
Pickup truck	5	200
Road sweeper	1	200
Vibratory roller	2	200
Water tanker	1	200
Facilities Construction		
Abrasive blaster	2	0.5
Aerial boom or scissor lift	4	25
Air compressor	4	25
Backhoe	1	200
Concrete bucket	2	0.5
Concrete pump	1	100
Concrete saw	1	0.5
Crane	3	200
Excavator	1	200
Front-end loader	1	100
Truck with flatbed trailer	1	400
Grout pump	1	50
Pickup truck	10	200
Road sweeper	1	200
Water tanker	1	200
Welder	5	1

TABLE 3.3-2 (CONTINUED)
CONSTRUCTION EQUIPMENT USED BY PHASE

Equipment	Number	Horsepower (hp)
Paving, Finish, Testing and Startup		
Aerial boom or scissor lift	1	25
Air compressor	1	25
Asphalt paver	1	100
Backhoe	1	200
Crane	1	200
Excavator	1	200
Pavement roller	1	125
Pickup truck	5	200
Road sweeper	1	200
Vibratory roller	1	200
Water tanker	1	200

SOURCE: Brown & Caldwell, 2019 (Response to RFI)

Average daily construction emissions were estimated assuming that construction would begin in July 2020 and would take approximately 783 workdays to complete over a period of approximately 36 months, after taking into account overlapping phases of construction. Average daily construction emissions were estimated by dividing the total construction emissions as estimated by CalEEMod by the number of workdays. All assumptions and calculations used to estimate the Project-related construction emissions are provided in **Appendix D**. Estimated average daily emissions are shown in **Table 3.3-3** (below) and compared to the BAAQMD thresholds.

TABLE 3.3-3
AVERAGE DAILY CONSTRUCTION-RELATED POLLUTANT EMISSIONS (POUNDS/DAY)

Emissions	ROG	NOx	Exhaust PM10*	Exhaust PM2.5*
Total Project Emissions	2.9	25.8	0.9	0.8
BAAQMD Construction Threshold	54	54	82	54
Significant Impact?	No	No	No	No

NOTES:
[a] BAAQMD's construction-related significance thresholds for PM_{10} and $PM_{2.5}$ apply to exhaust emissions only and not to fugitive dust.

SOURCE: Appendix D

As indicated in Table 3.3-3, the average daily construction exhaust emissions would not exceed the BAAQMD's significance thresholds. The Plant Master Plan EIR determined that the average worst case daily emissions associated with the project-level improvements, including Improvement B2-P1 (Dewatering Phase 1) emissions estimates for ROG, PM_{10}, and $PM_{2.5}$ would not exceed the applicable BAAQMD significance thresholds; however, exhaust emissions of NO_X would exceed the BAAQMD significance threshold, a significant impact.

In addition to exhaust emissions, emissions of fugitive dust would also be generated by construction activities associated with grading and earth disturbance, travel on paved and unpaved roads, etc. Such emissions could result in a potential significant impact. With regard to fugitive dust emissions, the BAAQMD Guidelines focus on implementation of recommended dust control measures rather than a quantitative comparison of estimated emissions to a significance threshold. For all projects, the BAAQMD recommends the implementation of its *Basic Control Mitigation Measures* (BAAQMD, 2017b). These measures would be implemented by the Project as part of the City's project conditions of approval, and are listed below. These measures were also included in the Plant Master Plan EIR as Mitigation Measure AQ-1.

BAAQMD Basic Control Mitigation Measures

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Post a publicly visible sign with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours.

This impact would be less than what was identified in the Plant Master Plan EIR (as described above in Section 3.3.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Less Impact than Approved Project. (Less than Significant)**

Operation

Once operational, the Project would operate continuously 24 hours per day and seven days a week. The Project would require up to nine new additional staff for operations and

maintenance, resulting in 18 worker commute trips per day. In addition, once design capacity for the facility is reached in 2040, it is anticipated that approximately 68 truck trips per day would be required for removal of dewatered cake on a peak day. On an average day, approximately 34 truck trips would be needed to haul away the dewatered cake. The building housing the dewatering facility will include conditioned spaces but the emissions from natural gas heating would be very minimal. Operational emissions from employee commute and haul truck trips were also estimated using CalEEMod and are presented in **Table 3.3-4**. As shown, Project operational emissions would be minimal and well below the BAAQMD significance thresholds for operation.

TABLE 3.3-4
AVERAGE DAILY OPERATIONAL EMISSIONS (POUNDS/DAY)

Emissions	ROG	NOx	Total PM_{10}	Total $PM_{2.5}$
Mobile Sources	0.2	8.2	0.6	0.2
BAAQMD Construction Threshold	54	54	82	54
Significant Impact?	No	No	No	No

SOURCE: Appendix D

The Plant Master Plan EIR determined that operational emissions associated with both project-level and program-level improvements, including B2-P1 (Dewatering Phase 1) and B2-P2 (Dewatering Phase 2), for ROG, PM_{10}, $PM_{2.5}$, and NOx would not exceed the applicable BAAQMD significance thresholds, a less-than-significant impact. Given that operational emissions associated with the Project would be less than the respective BAAQMD significance thresholds, the Project's contribution to the cumulative air quality impact in the area would be less than significant.

This impact would be the same as identified in the certified Plant Master Plan EIR (as described above in Section 3.3.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

c) Construction and Operation

Toxic Air Contaminants

Construction activities associated with the Project would result in the generation of exhaust emissions that contain air pollutants, including particulate matter (PM_{10} and $PM_{2.5}$), the majority of which would be diesel particulate matter (DPM); a known toxic air contaminant (TAC). Exposure of sensitive receptors to TAC emissions could result in an elevated health risk. Under the California Environmental Protection Agency guidelines, DPM is used as a surrogate measure of carcinogen exposure for the mix of chemicals that make up diesel exhaust as a whole.

The nearest offsite sensitive receptors are located at 3,450 feet from the Project site to the south. The BAAQMD has identified a distance of 1,000 feet from the source to the

closest sensitive receptor locations within which community health risk impacts are likely (BAAQMD, 2017b). Due to the large distance separating construction sources from the nearby receptors, exposure would be greatly reduced. Furthermore, as shown in Table 3.3-3, PM_{10} and $PM_{2.5}$ emissions associated with construction of the Project would be less than one pound per day. At these emission levels and with the large buffer distance separating the sources and receptors, temporary and intermittent construction activities extending over a duration of 36 months would not lead to a new significant increase in health risk from exposure to TACs.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.3.2), and the Project would not result in new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Hydrogen Sulfide

Hydrogen sulfide (H_2S), is a byproduct of biological reduction of sulfates and decomposition of organic material in wastewater and forms a dominant component of odor at wastewater treatment plants. It is generated virtually at every point in the wastewater treatment system including during dewatering/drying. It is also regulated as a health and safety risk to exposed individuals. Different regulatory standards apply to the general public in areas outside the RWF boundary (BAAQMD Regulation 9, Rule 2) and to workers exposed inside the fence line (OSHA regulations). Therefore, H2S emissions were modeled in both locations and for both the transition and long term scenarios for comparison to the appropriate standards (Brown & Caldwell, 2018; **Appendix E**).

H_2S exposure to offsite receptors is regulated by BAAQMD Regulation 9, Rule 2 – Inorganic Gaseous Pollutants, Hydrogen Sulfide, which limits ground-level concentrations of H_2S beyond the facility fence line to below 0.06 parts per million (ppm) (90 micrograms per cubic meter [$\mu g/m^3$]) averaged over three consecutive minutes or 0.03 ppm (45 $\mu g/m^3$) averaged over any 60 consecutive minutes in any 24-hour period.

Based on H_2S dispersion modeling for the Project conducted by Brown & Caldwell (Brown and Caldwell, 2018), the Project would result in offsite exceedances of H_2S levels during the transition period, when the lagoons/drying beds would be active along with the Project. However, the offsite H2S contour for the transition period would be exactly the same as the baseline scenario implying that no additional receptors would be impacted during the transition period. The maximum offsite H_2S concentration modeled was 274 $\mu g/m^3$. The one-hour offsite regulatory standard is 45 $\mu g/m^3$. Maximum H_2S concentration is not available for the baseline condition (drying beds and lagoons only). Dispersion modeling concluded that generation of H_2S is dominated by the lagoons/drying beds as the neither the location or configuration of the dewatering facility building nor the inclusion or exclusion of the proposed biofilter for odor treatment had any impact on this concentration. However, in the long term, once the lagoons/drying beds are decommissioned and only the Project is operational, no off-site regulatory exceedances of H_2S levels were predicted. The maximum H_2S concentration during the operation of the dewatering facility (after all lagoons have

been decommissioned) modeled for comparison to the one-hour offsite regulatory standard of 45 µg/m³ was 34.20 µg/m³. This modeled H_2S level did not change with the location or configuration of the dewatering facility building, nor with the inclusion or exclusion of a biofilter for odor treatment.

In conclusion, there would be no offsite exceedances of the H_2S standard for the long term scenario. The additional H_2S generated by the Project during the 4-year transition period would be insignificant and would not increase offsite exceedances over the baseline scenario. The impact of the Project on offsite H_2S concentrations during the transition and long term scenarios would be less than significant.

For onsite receptors, the following enforceable worker exposure limits apply according to Occupational Health & Safety Administration (OSHA) worker standards:

- *General Industry*: 29 CFR 1910.1000 TABLE Z-2, Toxic and hazardous substances - Exposures must not exceed 20 ppm (30,000 µg/m³) (ceiling) with the following exception:
  - If no other measurable exposure occurs during the eight-hour work shift, exposures may exceed 20 ppm, but not more than 50 ppm (75,000 µg/m³) (peak), for a single time period up to 10 minutes.
- *Construction*: 29 CFR 1926.55 Appendix A, Gases, vapors, fumes, dusts, and mists sets exposure limit of 10 ppm (15,000 µg/m^3) time-weighted average (TWA)

Based on dispersion modeling conducted by Brown & Caldwell, no on-site regulatory exceedances of H_2S levels were predicted for the long term scenario after the lagoons/drying beds are decommissioned. The maximum H_2S concentration modeled for comparison to the eight-hour onsite regulatory standards is 17.28 µg/m³, several orders of magnitude below any of the onsite regulatory standards. Neither the location or configuration of the dewatering facility building changed these results, nor did it matter if the dewatering facility had a biofilter installed or not.

Even during the transition period, while the lagoons/drying beds would be active at the same time as the Project, no onsite regulatory exceedances of H_2S levels were predicted. For all design options analyzed, the maximum H_2S concentration modeled for comparison to the eight-hour onsite regulatory standard of 30,000 µg/m³ is 274 µg/m³. Neither the location or configuration of the dewatering facility building changes these results, nor does it matter if the dewatering facility had a biofilter installed or not.

Therefore, the impact of the Project on onsite H_2S concentrations during the transition and long term scenarios would also be less than significant.

Impact of H2S emissions was not specifically discussed in Plant Master Plan EIR, but it generally concluded a less-than-significant impact with respect to exposure of receptors to substantial pollutant concentrations.

Criteria Air Pollutants

The Project would generate criteria pollutant emissions ROG, NOx and particulate matter, as discussed under checklist question b); however, the impacts of these emissions on sensitive receptors are harder to quantify. Given that ozone formation occurs through a complex photo-chemical reaction between its precursors NO_X and ROG in the atmosphere with the presence of sunlight, the impacts of ozone are typically considered on a basin-wide or regional basis instead of a localized basis. The health-based ambient air quality standards for ozone therefore are as concentrations of ozone and not as tonnages of their precursor pollutants (i.e., NO_X and ROG). It is not necessarily the tonnage of precursor pollutants emitted that causes human health effects, but the concentration of resulting ozone or particulate matter. Because of the complexity of ozone formation and the non-linear relationship of ozone concentration with its precursor gases, and given the state of environmental science modeling in use at this time, it is infeasible to convert specific project level emissions of NO_X or ROG emitted in a particular area to concentration of ozone in that area. Meteorology, the presence of sunlight, seasonal impacts, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone (SCAQMD, 2014; SJVAPCD, 2014). Since the Project would not exceed the numeric indicator for ROG and NO_X emissions during either construction or operation, it is not likely that Project ROG and NO_X emissions could result in an increase in ground-level ozone concentrations in proximity to the Project sites or elsewhere in the air basin and impacts can be considered less than significant.

As expressed in the *amicus curiae* brief submitted for the *Sierra Club v. County of Fresno* case (also known as the *Friant Ranch Case* [SCAQMD, 2014; SJVAPCD, 2014]), the CEQA significance thresholds for criteria pollutants from an air district were set at emission levels tied to the region's attainment status, and are emission levels at which stationary pollution sources permitted by an air district must offset their emissions. The CEQA project must use feasible mitigations in order for the region to attain the health based ambient air quality standards. Therefore, given that the Project would not exceed the mass emissions thresholds established by the BAAQMD, it is not likely that emissions from Project-related activities would cause or contribute to the exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

The primary health concern with exposure to NO_X emissions is the secondary formation of ozone. As the *amicus curiae* briefs submitted for the *Sierra Club v. County of Fresno* case suggested, and as was stated above, because of the complexity of ozone formation, and given the state of environmental science modeling in use at this time, it is infeasible to determine whether, or to what extent, a single project's precursor (i.e., NO_X and ROG) emissions would potentially result in the formation of secondary ground-level ozone and the geographic and temporal distribution of such secondary formed emissions. Furthermore, available models today are designed to determine regional, population-wide health impacts, and cannot accurately quantify ozone-related health impacts caused by NO_X or ROG emissions from local level (project level). Notwithstanding these scientific constraints, the disconnect between project level NO_X emissions and ozone-related health impact cannot be bridged at this time.

This impact would be the same as identified in the certified Plant Master Plan EIR (as described above in Section 3.3.2), and the Project not result in new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

d) **Construction and Operation**

For projects that include the operation of an odor source (such as the Project), the BAAQMD CEQA Guidelines recommend screening distances that can be used in the evaluation of potential impacts to existing sensitive receptors. The BAAQMD recommends that the screening distances be used as indicators to how much additional analysis would be required rather than the sole indicator of impact significance. The BAAQMD recommended odor screening distance for wastewater treatment plants is two miles (BAAQMD, 2017b). The closest residences to the Project site are located approximately 3,450 feet (0.7 mile) to the south in the Westwinds mobile home park. Residences to the west and east of the Project are farther away at approximately 4,100 (0.8 miles) and 5,800 feet (1.1 miles), respectively. George Mayne Elementary School located approximately 5,000 feet (one mile) to the southwest. Winter winds in the Project area tend to be southwesterly and southeasterly and summer winds tend to be westerly. which could carry odorous emissions from the Project to the north and east as a result of the Project. As there are no residences to the north, residential areas to the east are most likely to be affected.

The Project would generate odorous emissions from the dewatering process areas, which includes the wet wells, DS and centrate pump areas, the centrifuge room, cake storage bins, and the truck loading bays. The dewatering facility would be entirely enclosed. The truck loading bays would be long enough to contain an entire semi-truck and trailer. Roll up doors on both ends of the truck loading bays, when closed, would contain odors within the process areas. As discussed above under item c), H_2S is a dominant component of odor at wastewater treatment plants. The Project would vent the foul air from the process areas within the dewatering facility through a stack to the top of the building. In the future, the project may include an odor treatment using an odor control system. This odor control system would be housed in a building located adjacent to the dewatering building. The foul air vented from the process areas within the dewatering facility would be routed to this odor control facility where it would be treated using engineered granules designed to remove odors and a biological treatment process (i.e., biofiltration). Refer to the Project Description section for a description of the odor control facility.

An air dispersion modeling analysis was conducted by Brown & Caldwell in 2018 (included as Appendix E) to inform odor management planning for the Project and to provide improved understanding of the relative odor impacts for each of the design options, as described in Chapter 2, Project Description. The analysis evaluated the design options for the Project and compared results against the BAAQMD regulatory limits for offsite exposures of H_2S, the Occupational Safety and Health Administration (OSHA) limits for onsite exposures of H_2S, and City-selected limits for offsite odor exposures. The modeling analysis included an evaluation of odor impacts both with and without odor treatment to identify any:

- Potential worker health and safety issues;
- Compliance issues with BAAQMD permits and regulatory requirements; and
- Compliance issues with applicable OSHA standards.

Because odor has a cumulative impact, odor modeling for the Project included other sources at the Facility, taking into account the planned odor treatment associated with those sources. As odor is generally measured by perception of the receptor rather than as a chemical concentration; dilutions to threshold (D/T)[17] was used for the odor modeling. An odor threshold of five D/T (1-hour duration, 99 percent frequency with 3-minute peaking factor) was selected for the Project which is consistent with the Plant Master Plan, Plant Master Plan EIR, the CH_2M Odor and Corrosion Control Study (CH2M, 2015), and BAAQMD regulatory standards. Different regulatory standards apply to the general public (BAAQMD Regulation 9, Rule 2) and to workers exposed inside the fence line (OSHA regulations). Therefore, the impact assessment modeled odor and H_2S both outside (off-site receptors) and inside of the fence line (employees) depicted on Figure 1-2 in Chapter 1, Introduction.

AERMOD, the U.S. Environmental Protection Agency's (USEPA) preferred and recommended air dispersion model, was used to evaluate how odors and H_2S migrate and disperse downwind from the sources to offsite receptors and onsite workers based on source location, release height, terrain, building downwash and weather. Odor conditions with the lagoons and drying beds in operation during the transition period and no dewatering facility was used as the baseline for this assessment. Section 2.6.3 of the Project Description describes the transition period. For each of the design options for the dewatering facility building, odor and H_2S dispersion were modeled both for the transition period as well as for the long-term, when only the Project would be active. The results are summarized in **Table 3.3-5** below.

TABLE 3.3-5
SUMMARY OF ODOR IMPACTS

Scenario	Odor offsite	H_2S onsite	H_2S offsite
Lagoons/drying beds only (baseline)	**Yes**	No	**Yes**
Lagoons/drying beds with Project (Transition period)	**Yes**	No	**Yes**
Project (long term scenario, without odor control)	**Yes**	No	No
Project (long term scenario, with odor control)	No	No	No

SOURCE: Brown and Caldwell, 2018.

[17] To measure an odor, the odorous sample is diluted with odor free air to reach a threshold, which is the concentration of the odor in air when 50 percent of a population can detect the odor in the odorous sample. The numerical value of the odor concentration is equal to the dilution factor that is necessary for the odorous sample to reach the odor threshold and is expressed as Odor Units (OU) or Dilution-to-Threshold ratio (D/T). The odor concentration at the odor threshold is one OU or one D/T by definition. Therefore, the measure of the odor concentration of a sample is the number of dilutions with odor free air required to reach 1 D/T.

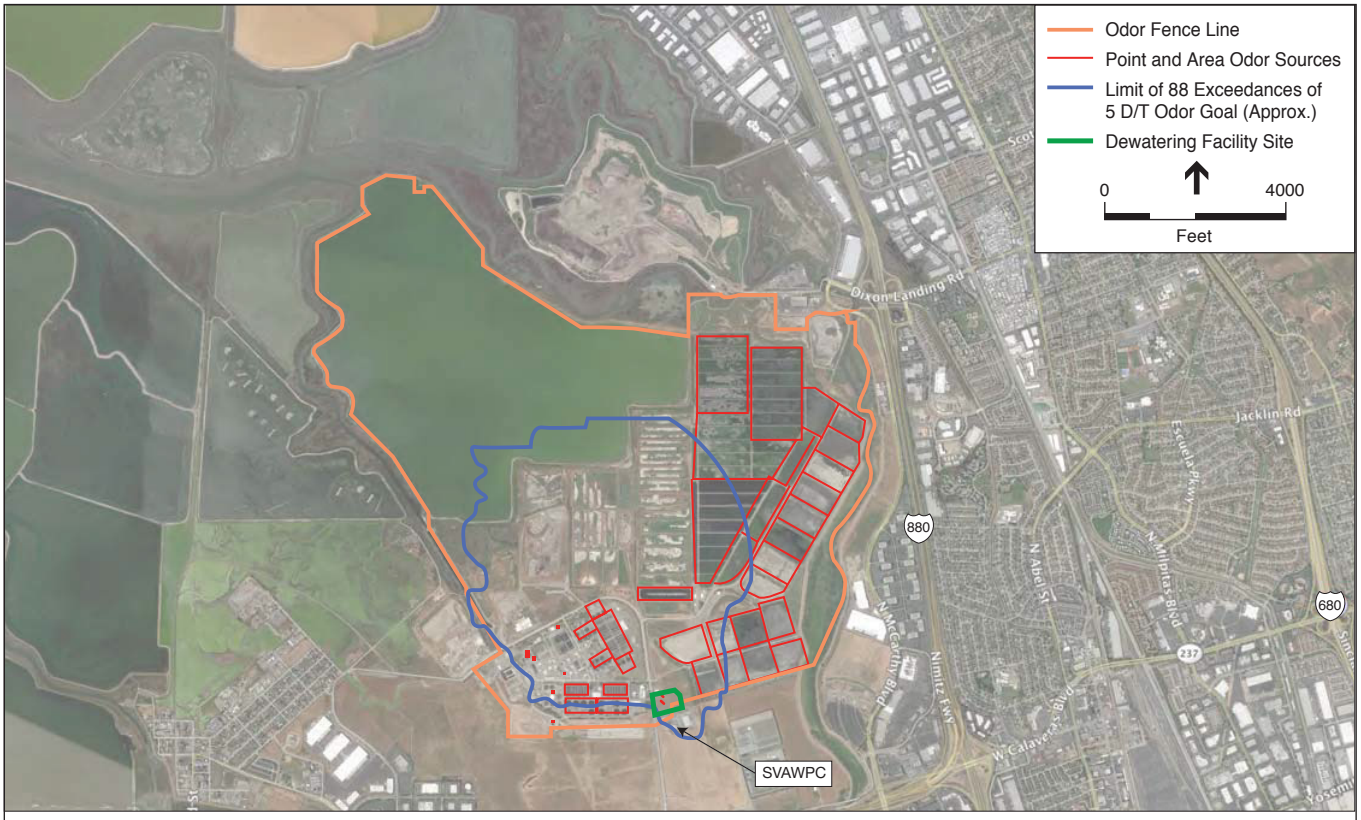
As shown in Table 3.3-5, the dispersion analysis concluded that neither the odor goal nor the H_2S offsite goal is met for the baseline scenario – which is the current open-sir processing of biosolids with the lagoons/drying beds in operation. For the transition period, which will be the addition of the Project in operation with the existing lagoons/drying beds, the Project has no impact on the extent of offsite exceedances, regardless of the configuration or location of the dewatering facility, as odor from the lagoons/drying beds dominate. In the long-term, once the lagoons/drying beds are decommissioned and only the Project is in operation, without odor control the H_2S goals would be met but some offsite odor is expected. In the long-term, once the lagoons/drying beds are decommissioned and only the Project with odor control is in operation, both odor and H_2S goals are met.

Figures 3.3-1 and 3.3-2 show the odor contours for the Project and transition scenarios, respectively.[18] These contours represent odor "isopleths" connecting locations where the odor goal is exceeded. The odor goal refers to complying with the adopted odor goal criteria (5 D/T, 1-hour duration, 99 percent frequency with 3-minute peaking factor) at the Phase 1 odor fence line. This odor goal has been used by the City in implementing odor control projects. The isopleths shown in Figures 3.3-1 and 3.3-2 represent the extent of offsite locations where the odor goal criterion is exceeded for more than 88 hours in the year. Exceedance for 88 hours in a year corresponds to compliance with the 99 percent frequency criterion of the 5 D/T threshold and 3-minute peaking factor.

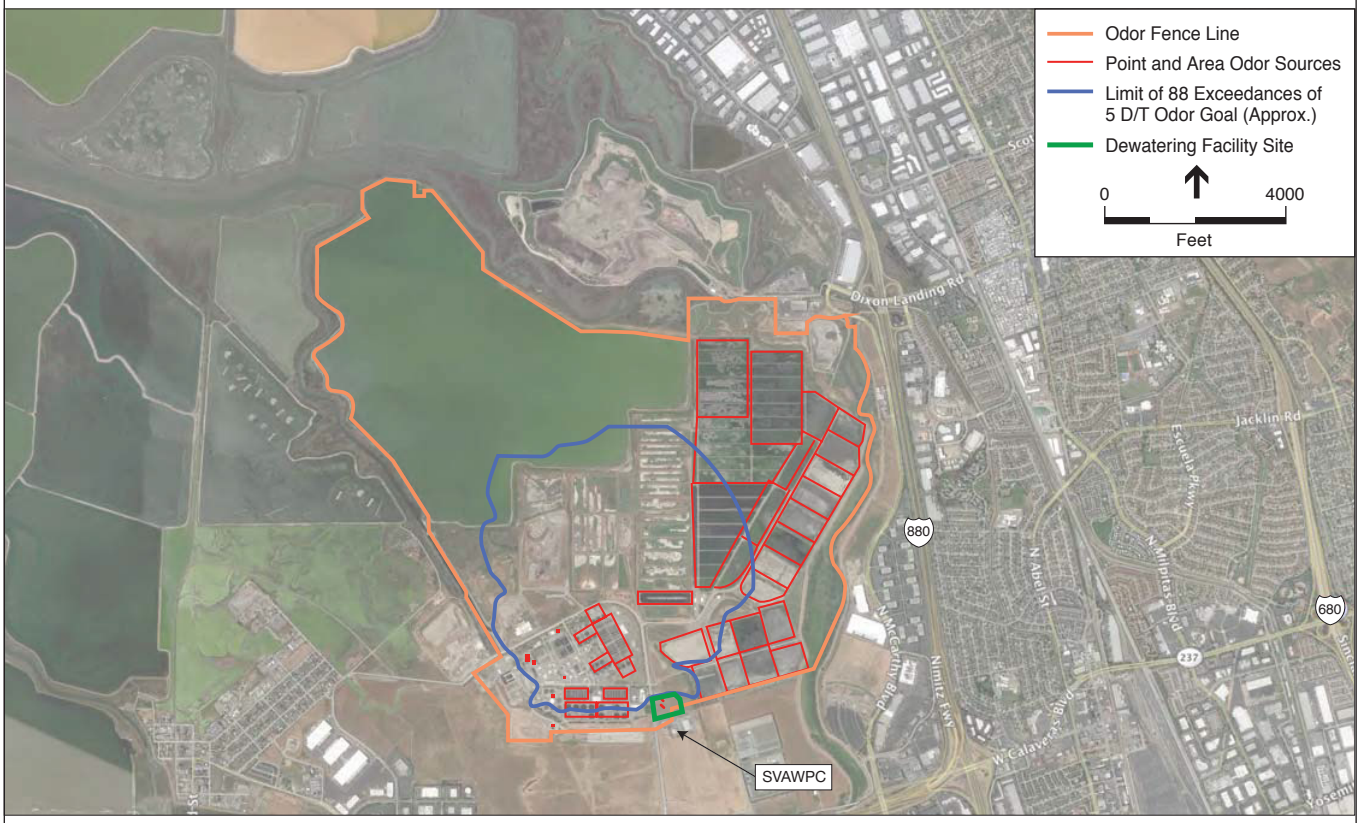
As shown on Figure 3.3-1, the odor contour for the Project scenario with odor control would be well within the Facility boundary and not affect any sensitive receptors surrounding the Facility. Without odor control, the odor contour would extend beyond the odor fence line in an industrial area to the south of the dewatering facility, shown in the upper image on Figure 3.3-1. The current and planned land use in this area is non-residential, and comprises of industrial uses such as treatment plant, office, and research and development. Thus, there would be no increase in the number of sensitive receptors exposed to odor from the Facility, because there are no current or proposed sensitive receptors in the area exposed.

During the four-year transition period when both the lagoons/drying beds and the Project would be in operation, the odor contour would extend beyond the baseline contour (when only the lagoons/drying beds would be operational) in one residential area to the east of the Facility boundary. Therefore, during the transition period, the number of receptors exposed to odor from the Facility would marginally increase. The change in number of residential receptors affected between the baseline and transition scenarios was estimated using census block data for the affected parcels. The population within the baseline contour affected by the greater than 88 hours of exceedance of the 5 D/T odor threshold is estimated to be approximately 4,585. With the addition of the Project in the transition scenario, the population affected would increase by approximately 239. Though there are no guidelines to define what would be considered a "substantial" increase in the number of people

[18] The odor isopleth for the baseline scenario is very similar to that shown for the "Limit of 88 Exceedances of 5 D/T Odor Goal (Approx.)" in the lower graphic on Figure 3.3-2.



Odor Profile with the Dewatering Facility (Stack) and no Lagoons and Drying Beds



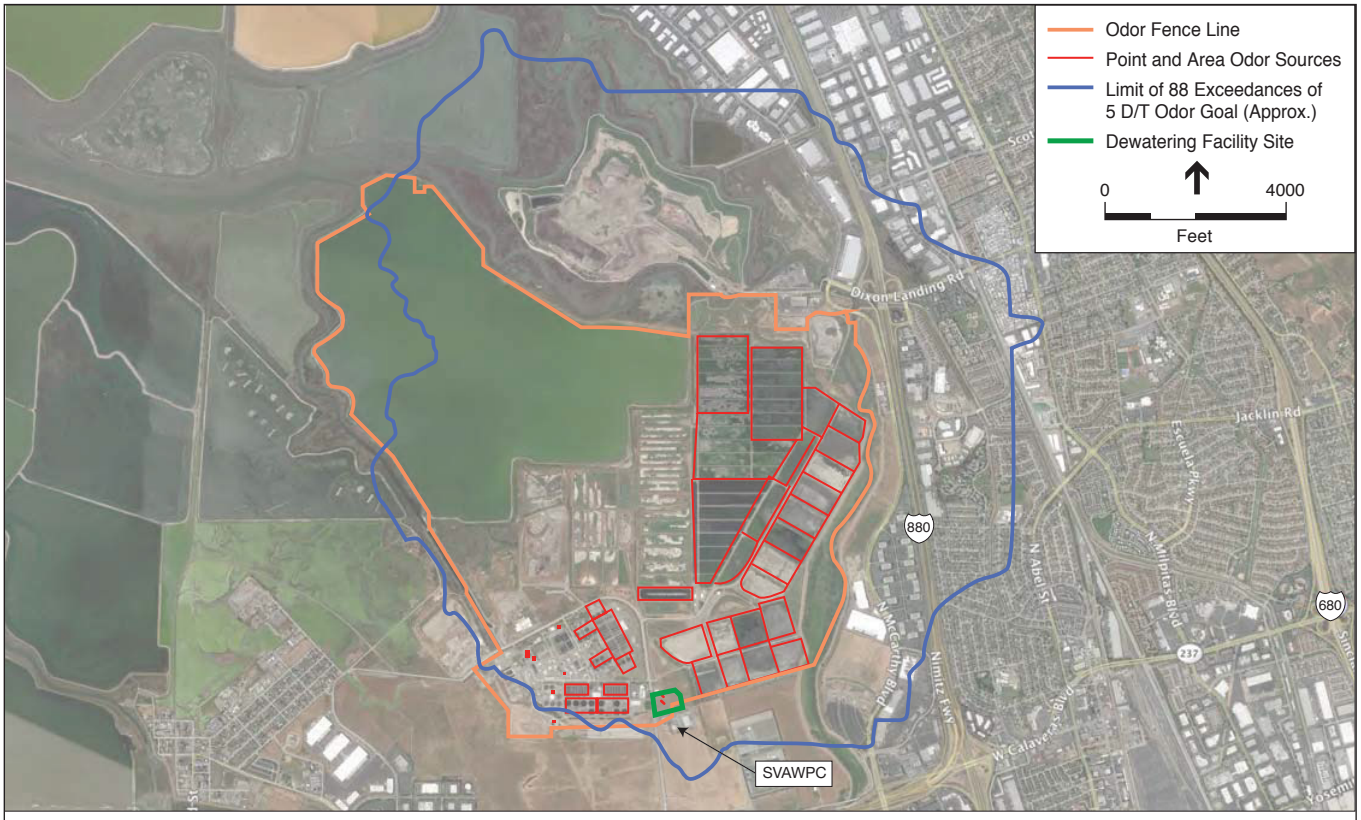
Odor Profile with the Dewatering Facility (Biofilter) and no Lagoons and Drying Beds

SOURCE: Brown & Caldwell, Appendix C

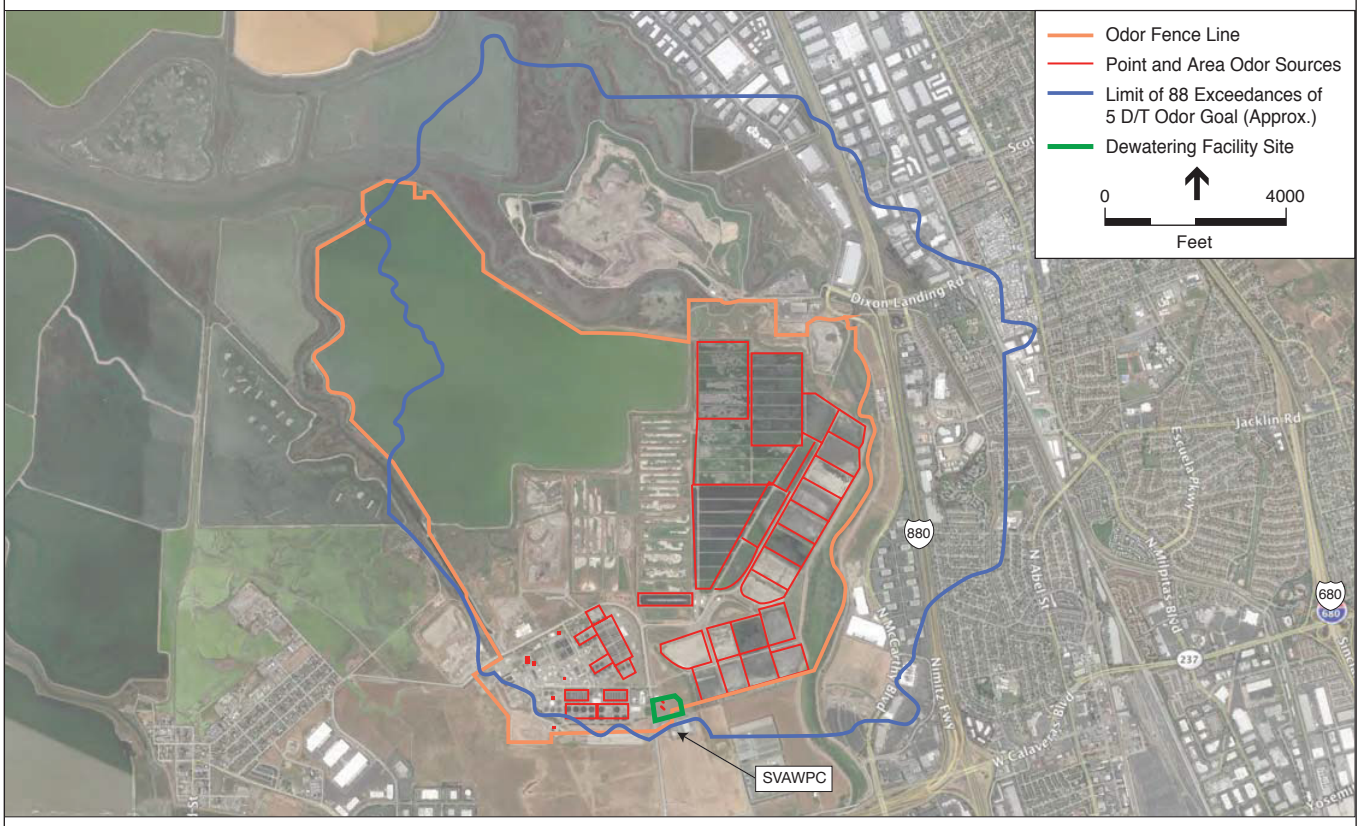
San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 3.3-1

Odor Isopleths Showing Greater than 88 Exceedances of the Odor Goal for the Project Scenarios



Odor Profile with Lagoons and Drying Beds with Dewatering Facility (Stack, No Biofilter)



Odor Profile with Lagoons and Drying Beds with Dewatering Facility (Biofilter)

SOURCE: Brown & Caldwell, Appendix C

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility Project

Figure 3.3-2

Odor Isopleths Showing Greater than 88 Exceedances of the Odor Goal for the Transition Scenario

affected, a temporary increase of five percent over baseline exposure conditions would not be considered significant. The impact would reduce substantially with no offsite receptors affected once the dewatering beds are decommissioned and only the Project's dewatering facility is operational. In addition, it can be noted that during the 4-year transition period, as the biosolids are hauled off the site, the odor is expected to reduce.

One of the objectives of the Plant Master Plan is to reduce odor impacts from Facility operations. Consistent with this goal, completing the transition to the dewatering facility instead of using lagoons and drying beds would reduce odor impacts once the dewatering facility becomes fully operational. Cumulative odors from the RWF facilities both inside and outside the Facility boundaries are expected to improve compared to existing conditions with the implementation of the Project. Therefore, it is reasonable to assume that the project would not substantially increase the potential for exposure of nearby residents and land uses to objectionable odors.

This impact would be the same as identified in the certified Plant Master Plan EIR (as described above in Section 3.3.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

BAAQMD, 2017. Air Quality Standards and Attainment Status. Available at http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status, last updated January 5, 2017. Accessed April 3, 2019.

BAAQMD, 2017a. Final 2017 Clean Air Plan, adopted April 19, 2017. Available: http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en, accessed April, 2019.

BAAQMD, 2017b. BAAQMD CEQA Air Quality Guidelines, updated May 2017.

BAAQMD, 2019. CEQA Guidelines Update Underway – Update to the current CEQA Guidelines and Thresholds of Significance, Accessed April 29, 2019.

Brown and Caldwell, 2018. San Jose – Santa Clara Regional Wastewater Facility - Odor and Hydrogen Sulfide Impact Assessment for the Digested Sludge Dewatering Facility, Technical Memorandum, September 12, 2018.

Brown and Caldwell, 2019. Response to RFI#1 for AQ and GHG Modeling, April 2, 2019

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

CH2M, 2015. CIR Program Study 3: Odor and Corrosion Control Study, Chapter 2 – RWF Odor Goal and Odor Fence Line Phases, August 19, 2015.

SCAQMD, 2014. Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.

SJVAPCD, 2014a.Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.

3.4 Biological Resources

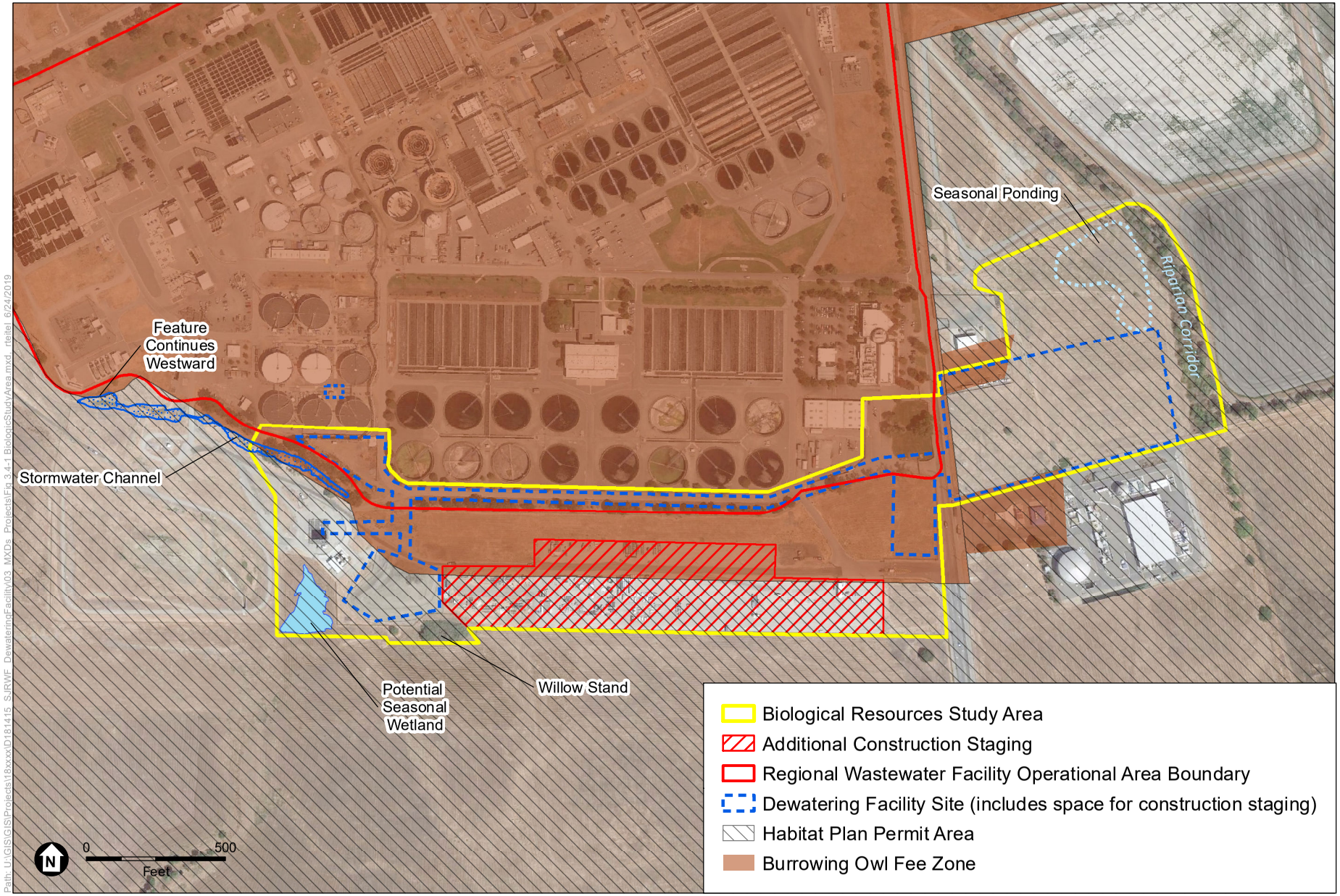
3.4.1 Setting

Biological resources located within the Project sites are a subset of the same resources described in the certified Plant Master Plan EIR. The following analysis includes different terms to describe the geographical areas subject to Project impacts. "Project sites" include the project components at two different areas on Facility property; one site for the proposed dewatering facility on the east side of Zanker Road, across from the main Facility operational area, and sites for digested sludge conveyance and storage facilities located to the south of the operational area. The "study area" is the area investigated in the reconnaissance-level biological survey (ESA, 2019), which includes the Project sites as well as the sensitive biological resources in the immediate vicinity of them, such as wetlands and the riparian corridor. The study area is a larger area than that in which the Project activities would take place and is displayed in **Figure 3.4-1**. These are the areas in which direct, indirect, or cumulative effects to terrestrial biological resources could occur as a result of the Project.

The biological resources setting relevant to the study area, including applicable regulations and conditions of sensitive habitats and natural communities such as wetlands and riparian areas, and special status plant and wildlife species, has not appreciably changed since the adoption of the Plant Master Plan EIR. Biological communities present within the Project site include developed/landscaped, disturbed/ruderal, non-native annual grassland, seasonal wetland, and riparian woodland. Setting discussions from the certified Plant Master Plan EIR for biological resources in the Project site are otherwise applicable to the Project.

Special-status species lists for this analysis were re-generated and derived from the California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS) for the Mountain View, Milpitas, Calaveras Reservoir, Niles, San José West, and Newark 7.5-minute U.S. Geological Survey quadrangles (CDFW, 2019; CNPS, 2019); and United States Fish and Wildlife Service (USFWS) for special-status species that could potentially be affected by the Project (USFWS, 2019). Compiled lists of species analyzed for the Project can be found in Attachment A of **Appendix F** (Biological Resources Technical Memorandum); the complete list of special-status species with the potential to occur in the study area is displayed in **Appendix G** (Special-Status Species with Potential to Occur [PTO] Table). In addition, the following references were reviewed in preparation of this section:

- San José – Santa Clara Regional Wastewater Facility, Digested Sludge Dewatering Facility Project Biological Resources Technical Memorandum (Appendix F [ESA, 2019a]);
- San José – Santa Clara Regional Wastewater Facility, Digested Sludge Dewatering Facility Biological Reconnaissance Survey Results (Appendix F [ESA, 2019b]);
- Santa Clara Valley Habitat Plan (SCVHA, 2015);
- City of San José, Council Policy on Riparian Corridor Protection and Bird-Safe Design (City of San José, 2016);
- San José-Santa Clara Regional Water Pollution Control Plant Master Plan Environmental Impact Report and relevant survey results (City of San José, 2013a);



SOURCE: GoogleEarth, 2018; ESA, 2019

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility

Figure 3.4-1
Biological Study Area

ESA

- Biological Resource Assessment Digested Sludge Dewatering Project San José-Santa Clara Regional Wastewater Facility City of San José, California (Appendix F [Environmental Collaborative, 2018]); and
- Best available scientific literature and survey records.

Santa Clara Valley Habitat Plan (SCVHP)

The Santa Clara Valley Habitat Plan (SCVHP) provides a framework for promoting the protection and recovery of natural resources, including endangered species, while streamlining the permitting process for planned development, infrastructure, and maintenance activities. The SCVHP was developed through a partnership between Santa Clara County; the Cities of San José, Morgan Hill, and Gilroy; Santa Clara Valley Water District; Santa Clara Valley Transportation Authority; U.S. Fish and Wildlife Service; and California Department of Fish and Wildlife. The SCVHP will protect, enhance, and restore natural resources in specific areas of Santa Clara County and contribute to the recovery of endangered species. Rather than separately permitting and mitigating individual projects, the SCVHP evaluates natural-resource impacts and mitigation requirements comprehensively in a way that is more efficient and effective for at-risk species and their essential habitats. Conditions relevant to the Project include: Condition 11 of the HCP minimizes impacts on natural communities identified as representing important ecosystems in the Plan area; Condition 12 of the HCP Wetland and Pond Avoidance and Minimization minimizes direct and indirect impacts to wetlands and ponds; and Condition 15 of the HCP minimizes direct impacts of covered activities on western burrowing owls through the implementation of surveys, avoidance, and minimization guidelines. These conditions are discussed in detail in under criterion f) below.

3.4.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified no impact resulting from the Project's potential to interfere with the movement of any applicable native or migratory fish or wildlife species, or conflict with local policies or ordinances.
- The Plant Master Plan EIR identified potential impacts to special-status plant and wildlife species, riparian communities, wetlands, and protected trees, which were reduced to less-than-significant levels through application of mitigation measures.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
IV. BIOLOGICAL RESOURCES — Would the project:					
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?	☐	☐	☐	☒	☐
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 U.S. Fish and Wildlife Service?	☐	☐	☐	☒	☐

Issues (and Supporting Information Sources):	New Potentially Significant Impact	New Less Than Significant with Mitigation Incorporation	New Less Than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
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?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐

Discussion

A Biological Resources Technical Memorandum (Appendix F) was prepared to determine whether the proposed construction and operational activities could affect terrestrial species listed as threatened, endangered, or candidate species and their habitat, and potential effects to wetlands (ESA, 2019a).

a) As the terrestrial species occupy many different habitats within the study area, potential direct and indirect effects from the Project are discussed by the effect on each respective taxonomic group (e.g., birds, rare plants).

Construction

Rare Plants

Individuals of Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), a California Rare Plant Rank (CRPR) 1B.1 plant, have been documented in the annual grasslands approximately a quarter mile west of the proposed Site Option 2 for the DS Storage and Pump Station (ICF, 2012). However, this species was not observed during surveys conducted for the Facility's Iron Salt Feed Station Project (ESA, 2015a) and Headworks Improvements and New Headworks Project Alternatives Constraints Analysis reconnaissance survey (ESA, 2016) and wetland delineation (ESA, 2018). The general land area/potential habitat area surveyed during those projects is the same for that of the DS Storage and Pump Station Site Option 2 area. Therefore it is presumed that the said plant is absent from this portion of the project site.

A systematic survey for Congdon's tarplant was conducted on July 20 and 26 in 2017 in the proposed dewatering facility building site, which confirmed the absence of the species in the study area. A follow-up reconnaissance survey was conducted on July 26, 2017 along the southern edge of the existing Facility (Environmental Collaborative, 2018). This species' blooming period is May through October; therefore, presence/absence

surveys have not been conducted in preparation of this analysis. Pappose tarplant (*Centromadia parryi* ssp. *parryi*), a more common subspecies found in annual grasslands of the region, has been confirmed present in the study area by previous field surveys (Environmental Collaborative, 2018).

Based on these surveys, if Congdon's tarplant or pappose tarplant are present, indirect impacts to the species could potentially occur from construction activities or trampling by individuals supporting the proposed dewatering facility building site. Absence of the species cannot be confirmed without the completion of a protocol-level floristic survey performed by a botanist during the blooming period. The Plant Master Plan EIR determined that impacts to Congdon's tarplant could occur in the southwest portion of the Plant Master Plan site as a result of burrowing owl mitigation implemented in this area and human use of a proposed trail. Similarly, additional direct impacts could occur in the eastern grassland of the Plant Master Plan site that was proposed to undergo construction associated with future economic development (i.e., the dewatering site). Similar site characteristics, such as soil type, are found in the vicinity of the proposed dewatering facility building site. Potential direct and indirect impacts to Congdon's tarplant and pappose tarplant from the Project would be reduced to less than significant with the implementation of the Plant Master Plan EIR **Mitigation Measure BIO-1: Reduce Impacts to Tarplant**, listed below, which would require conducting surveys for Congdon's tarplant and pappose tarplant prior to construction and implementing restrictions on mowing activities prior to construction in suitable tarplant habitat, if present. The criteria that determines the level of impact on special status plants is based on the potential loss of an individual plant occurrence, rather than the loss of potentially suitable habitat. The following mitigation measure has been modified to apply to the Project. The level of impact on special status plants as a result of the Project does not change the original impact conclusion analyzed in the Plant Master Plan EIR, nor is the adjusted mitigation measure considerably different from that provided to reduce impacts to tarplant in the Plant Master Plan EIR.

Mitigation Measure BIO-1: Reduce Impacts to Tarplant.

For purposes of reducing direct impacts to Congdon's tarplant and pappose tarplant, the project proponent shall:

- Conduct surveys for Congdon's tarplant and pappose tarplant May through October. This shall be conducted by a qualified biologist.
- Avoid damaging or removing individuals of Congdon's tarplant and pappose tarplant while conducting the above activities whenever possible.
- When mowing is necessary, conduct mowing in areas occupied by Congdon's and pappose tarplant (known natural and reseeded locations) before May (to avoid the blooming season [May to mid-November]) or after seeds have been set (mid-November). Do not mow in areas with Congdon's and pappose tarplant from May to mid-November, even if those areas have burrowing owls or are part of the burrowing owl habitat management area. Mow no lower than 6 inches in areas with

Congdon's tarplant in order to minimize removal of tarplant foliage prior to flowering.

Conditions in areas occupied by burrowing owl, and Congdon's tarplant and pappose tarplant will change over time, and conflicts between measures to reduce impacts to the tarplant and burrowing owl habitat management strategies (e.g., mowing) may arise. To adapt to changing conditions, this measure may require refinement by a qualified biologist in coordination with CDFW to ensure adequate protection of these species. If individuals of Congdon's tarplant and pappose tarplant cannot be avoided through the provisions listed above, the permanent loss of Congdon's and pappose tarplants shall be mitigated at a minimum mitigation-to-impact ratio of 1:1. To address permanent loss of Congdon's tarplant and pappose tarplant individuals, the following measures shall be implemented:

- During October and November, the project proponent shall track Congdon's tarplant and pappose tarplant within the area to determine when plants have set seeds. Once seeds have set, seeds from individuals of Congdon's tarplant and pappose tarplant from within the area will be collected during October or November prior to initiation of activities that will impact individuals, and immediately sown at reseeding location(s) to allow the plant to flower and produce seed before the end of the next blooming period, thereby avoiding a temporal loss (i.e., the species missing a flowering cycle).
- Seed of Congdon's tarplant and pappose tarplant will be applied either alone or as a component of the revegetation mix within the impact area for any temporary impacts and within a proposed replacement area for permanent impacts. The replacement area will be determined in consultation with CDFW.
- Areas seeded with Congdon's tarplant and pappose tarplant will be monitored during the first 5 years following reseeding. Monitoring will be conducted during the peak blooming period (May–November). The planted population will be compared to a known reference population each time monitoring is conducted to accurately verify the degree of success of the planted population.
- During the first year of monitoring, revegetation will be considered successful if the species in 70% of the reseeded area are occurring at densities comparable to the reference population. If unsuccessful, seed will be collected and sown in the unsuccessful areas prior to the rainy season that year. If reseeding is necessary at any point during the monitoring period, the monitoring period will reset (extended by five years) for the affected area.
- During each subsequent year of monitoring, revegetation will be considered successful if the species is found to be occurring in 80% of the reseeded area at densities comparable to the reference population. If revegetation is unsuccessful for two consecutive years, seed will be collected and sown in the unsuccessful areas prior to the rainy season that year.
- During the final two years of monitoring, if seeding of previously unoccupied habitat is successful (plants occur in 80% of the reseeded area at densities comparable to the reference population), then the mitigation will be deemed successful and no additional monitoring will be required. If unsuccessful, the area will be deemed unsuitable habitat. In this case, revegetation of additional

areas, determined in consultation with CDFW will occur, and an additional two years of monitoring will be conducted.

For purposes of reducing indirect impacts on Congdon's tarplant and pappose tarplant, the project proponent shall:

- Modify weed control activities, in areas of occupied Congdon's tarplant and pappose tarplant habitat. Broadcast herbicides will not be used in or around areas supporting Congdon's tarplant and pappose tarplant. In areas supporting Congdon's tarplant and pappose tarplant, herbicides will only be applied through spot treatment. Herbicide applications will be conducted by persons familiar with Congdon's tarplant and pappose tarplant and able to identify the species to avoid it.
- Install informational and warning signs in areas adjacent to habitat occupied by Congdon's tarplant and pappose tarplant instructing people utilizing the site to stay clear of known occurrences.

Raptors and Nesting Migratory Birds

The Migratory Bird Treaty Act and California Fish and Game Code protect raptors, most native migratory birds, and resident breeding birds that may migrate through and/or nest in the study area. Please refer to the Biological Resources Technical Memorandum (Appendix F) for further details pertaining to the regulatory guidelines protecting raptors and nesting migratory birds. Several waterbirds were observed foraging and resting within and adjacent to the study area, including red-winged blackbird (*Agelaius phoeniceus*), American avocet (*Recurvirostra americana*), bank swallow (*Riparia riparia*), black-necked stilt (*Himantopus mexicanus*), short-billed dowitcher (*Limnodromus griseus*), least sandpiper (*Calidris minutilla*), American coot (*Fulica americana*), red-tailed hawk (*Buteo lineatus*), California gull (*Larus californicus*), killdeer (*Charadrius vociferus*), European starling (*Sturnus vulgaris*), common raven (*Corvus corax*), mallard (*Anas platyrhynchos*), Canada goose (*Branta canadensis*), song sparrow (*Melospiza melodia*), and black phoebe (*Sayornis nigricans*).

Project construction during the breeding season could render the study area temporarily unsuitable for foraging and nesting birds due to the noise, vibrations, and increased activity levels associated with vegetation grubbing, earth moving, and heavy equipment operation. Construction impacts during the breeding season would have potential to adversely affect common and special-status nesting birds due to the potential to result in "take", or loss, of a nest; disturbances during the nesting season can cause reduced incubation, reduced foraging by adults, reduced feeding of chicks, nest predation, nest abandonment, and other forms of nest failure. The Plant Master Plan EIR identified impacts to nesting resident and migratory birds that could utilize vegetation in or near the Plant Master Plan project site associated with improvements B2-P1 (Dewatering Phase 1) and B2-P2 (Dewatering Phase 2). The Plant Master Plan EIR identified pre-construction survey requirements and CDFW protocols to protect nesting activity, if any were to occur at the time construction begins. Implementation of the Plant Master Plan EIR **Mitigation Measure BIO-2d: Raptor and Migratory Bird Nest Measures**, listed below, would

reduce adverse effects to common and special status nesting birds to less than significant by requiring worker environmental training, restricting certain construction activities during the breeding bird season, requiring preconstruction surveys, and implementing avoidance measures if active nests are located. This mitigation measure includes an update to Mitigation Measure BIO-2d from the Plant Master Plan EIR to reflect the most recent occurrence information for Ridgway's rail[19]; the adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR.

Western burrowing owl (*Athene cunicularia*) is known to forage and breed in the non-native grassland south and west of the Project sites. Burrowing owls were observed near the Project sites during surveys in 2015 (ESA, 2015b). The Plant Master Plan EIR identified Facility property east of Zanker Road as suitable foraging habitat for burrowing owls; however, the presence of rodent burrows and suitable grassland habitat (i.e., grass height of 4–inches or less on a periodic basis) as documented during the biological reconnaissance survey renders this portion of the study area, in addition to non-native annual grasslands in other portions of the study area, as suitable western burrowing owl nesting habitat. Temporary noise, visual, and vibration impacts to potential nesting western burrowing owls adjacent to the Project sites could occur as a result of Project-related construction activities. Temporary loss of western burrowing owl nesting habitat during construction could also occur under the Project, such as grasslands immediately west of Zanker Road.

Potential temporary effects to western burrowing owl individuals associated with the Project would be reduced to less than significant through the implementation of the Plant Master Plan EIR **Mitigation Measure BIO-2e: Western Burrowing Owl Measures**, listed below, which requires habitat surveys, implementing avoidance measures if active nests are located, and construction monitoring. Mitigation Measure BIO-2e: Western Burrowing Owl Measures includes updates to the Plant Master Plan EIR Mitigation Measure BIO-2e to reflect the Project specific requirements; the adjusted mitigation measure does not change the original impact conclusion, nor does it considerably different from that analyzed in the Plant Master Plan EIR.

Permanent impacts to western burrowing owl nesting habitat would occur through the loss of non-native grasslands associated with construction of the dewatering facility (approximately 52,000 square feet). Other permanent Project components are located in areas outside of suitable burrowing owl nesting habitat. The Plant Master Plan EIR accounted for Project-related impacts to burrowing owl habitat loss in the analysis of improvements B2-P1 (Dewatering Phase 1) and B2-P2 (Dewatering Phase 2). These impacts were mitigated through the preservation of 0.9-acre of nesting habitat and

[19] Although no suitable habitat is provided for Ridgway's rail in the Project site, the nearest black rail occurrence was recorded approximately 1.5 miles west of the project in brackish marsh habitat of Alviso Slough, in August 2015 (CDFW, 2018).

178.2 acres of foraging habitat surrounding the existing artificial burrow complexes in the bufferlands west of Artesian Slough (refer to Table 4.7-7 of the Plant Master Plan EIR).

The addition of lighting associated with the construction and operation of new facilities may also result in adverse effects on breeding birds. The loss of any active nest or disruption of nesting efforts would be considered a potentially significant impact. However, lights at the Project sites (during construction and operation) shall be directed downward and shielded pursuant to Condition 7 of the Santa Clara Valley Habitat Conservation Plan (SCVHA, 2015) and the *San José-Santa Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines* (City of San José, 2015a) to ensure that no fugitive light spills out into natural lands and interferes with typical avian behavior.

Mitigation Measure BIO-2d: Raptor and Migratory Bird Nest Measures.

If possible, construction shall be scheduled between September 1st and January 31st (inclusive) to avoid the nesting season. If Project construction is scheduled during breeding bird season (February 1st–August 31st, inclusive), City's Environmental Services Department (ESD) or its contractor shall retain a qualified wildlife biologist to conduct a survey for nesting raptors and migratory bird nests within 7 days of the start of construction or after any construction breaks of 14 days or more, within 7 days prior to the resumption of construction. Surveys shall be performed for the Project areas and for suitable habitat within 300 feet. If an active nest is discovered, a no-disturbance buffer zone around the nest tree (or, for ground-nesting species, or nests identified on Facility buildings, the nest itself) shall be established. The no-disturbance zone shall be marked with flagging or fencing that is easily identified and avoided by the construction crew, and shall not affect the nesting birds. In general, the minimum buffer zone widths shall be as follows: 100 feet (radius) for non-raptor species and 300 feet (radius) for raptor species; however, the buffer zone widths may be adjusted if an obstruction, such as a building, is within line-of-sight between the nest and construction. Buffer zone widths and other avoidance measures may be modified based on consultation with CDFW and the USFWS. Buffer zones shall remain in place as long as the nest is active or young remain in the area and are dependent on the nest.

Construction activities that are scheduled to begin outside the breeding season (September 1st through January 31st, inclusive) can proceed without surveys. If possible, all necessary tree and vegetation removal shall be conducted before the start of breeding bird season to minimize the opportunity for birds to nest at the Project site and conflict with Project construction activities.

ESD shall notify the PBCE Senior Environmental Planner when the mitigation actions will occur for approval prior to the start of construction.

Mitigation Measure BIO-2e: Western Burrowing Owl.

To avoid or minimize direct impacts of Project activities on western burrowing owls, the City shall ensure the following procedures are implemented consistent with the Santa Clara Valley Habitat Conservation Plan (HCP). This survey methodology is consistent with accepted survey protocols for this species under HCP.

a. ***Habitat Survey***

i. Western burrowing owl habitat surveys shall be required in all Project areas in all HCP modeled occupied habitat. Surveys are not required in sites that are mapped as potential burrowing owl nesting or only overwintering habitat. Modeled habitat types may change throughout the permit term based on the best available scientific data. Habitat surveys are required in both breeding and non-breeding seasons.

ii. Qualified biologist(s) shall conduct a pedestrian survey of all Project areas and accessible areas within 250-feet of Project areas. Pedestrian survey transects shall be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines shall be no more than 50 feet and can be reduced to account for differences in terrain, vegetation density, and ground surface visibility. Poor weather may affect the biologist's ability to detect burrowing owls; therefore, the biologist shall avoid conducting surveys when wind speed is greater than 20 kilometers per hour and there is precipitation or dense fog. The biologist shall map areas with burrows or burrow complexes that could support burrowing owls and all burrows that may be occupied (as indicated by tracks, feathers, egg shell fragments, pellets, prey remains, or excrement).

iii. To avoid impacts to owls from surveyors, owls and/or occupied burrows shall be avoided by a minimum of 150 feet wherever practical to avoid flushing occupied burrows. Disturbance to occupied burrows shall be avoided during all seasons.

iv. If suitable habitat is identified during the habitat survey, and if the Project does not fully avoid impacts to the suitable habitat, preconstruction surveys shall be required. Suitable habitat is fully avoided if the project footprint does not impinge on a 250-foot buffer around the suitable burrow.

b. ***Preconstruction Surveys***

i. A qualified biologist shall conduct preconstruction surveys in all suitable habitat identified in the habitat surveys within 250 feet of construction activity, between 14 and 4 days prior to initiating ground disturbance related to Project construction activities. The 250-foot buffer zone shall be surveyed to identify burrows and owls outside of the Project areas which may be impacted by factors such as noise and vibration (heavy equipment) during project construction. As burrowing owls may recolonize a site after only a few days, time lapses between Project activities shall require subsequent take avoidance surveys including but not limited to a final survey conducted no more than 2 days prior to ground disturbance to ensure absence. A minimum of two surveys shall be conducted (if owls are detected on the first survey, a second survey is not needed).

ii. The preconstruction survey shall be a minimum of 3 hours, beginning 1 hour before sunrise and continuing until 2 hours after sunrise (3 hours total) or beginning 2 hours before sunset and continuing until 1 hour after sunset. Additional time may be required for large project sites.

c. ***Avoidance Measures***

The City shall employ avoidance measures described below to avoid direct take of individual burrowing owls during Project construction.

Breeding Season Avoidance Measures - February 1 to August 31

i. If preconstruction surveys identify evidence of Western burrowing owls within 250 feet of the Project area during the breeding season, the Project proponent shall avoid all nest sites that could be disturbed by Project construction activities during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance shall include establishment of a 250-foot no-disturbance buffer zone around active nest sites by a qualified biologist.

ii. If active nests cannot be avoided, construction may occur within 250 feet of active nest sites if 1) the nest is not disturbed, and 2) the Project proponent develops and implements an Avoidance, Minimization, and Monitoring Plan, subject to approval by CDFW the Habitat Agency overseeing the HCP. The plan shall incorporate the following criteria:

1. A qualified biologist shall monitor the owls for at least 3 days prior to Project construction to determine baseline nesting and foraging behavior (i.e., behavior without construction). The same qualified biologist shall monitor the owls during construction and find no change in owl nesting and foraging behavior in response to construction activities.

2. If there is any change in owl nesting and foraging behavior as a result of Project construction activities, these activities shall cease within the 250-foot buffer. Construction shall not resume within the 250-foot buffer until the adult owls and juveniles from the occupied burrows have moved out of the project site.

3. If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the no-disturbance buffer zone may be removed. The biologist shall excavate the burrow to prevent reoccupation after receiving approval from CDFW.

Non-Breeding Season Avoidance Measures – September 1st to January 31st, (inclusive)

i. If preconstruction surveys identify evidence of Western burrowing owls within 250 feet of the Project area during the non-breeding season (September 1st to January 31st, inclusive), the Project proponent shall establish a 250-foot no-disturbance buffer around occupied overwintering burrows as determined by a qualified biologist.

ii. If occupied burrows cannot be avoided, construction may occur within 250 feet of overwintering burrows sites if:

1. A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).

2. The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
3. If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities shall cease within the 250-foot buffer.
4. If the owls are gone for at least one week, the Project proponent may request approval from the HCP Habitat Agency for qualified biologist to excavate usable burrows to prevent owls from re-occupying the site. After all usable burrows are excavated, the no-disturbance buffer zone shall be removed and construction may continue. Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.

d. ***Construction Monitoring***

During construction, the no-disturbance buffer zones shall be established and maintained where applicable and based on the Project Avoidance, Minimization, and Monitoring Plan. A qualified biologist shall monitor the site consistent with the requirements described in the Avoidance Measures, described above, to ensure that buffers are enforced and owls are not disturbed. The qualified biological monitor shall include in the Project's environmental training for all Project personnel on the avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.

e. ***Passive Relocation***

If avoidance measures described cannot be implemented with the Project, Passive Relocation shall be implemented according to the protocol described in the HCP and in coordination with, and approval by CDFW.

Western Pond Turtle

Western pond turtles (*Emys marmorata*) have the potential to utilize both the aquatic and terrestrial portions of the study area. Marginally suitable habitat for western pond turtle occurs in the riparian habitat located east of the proposed dewatering facility site and stormwater channel located south of the DS Storage and Pump Station Option 1, as shown in Figure 3.4-1. Since no construction activities are proposed in these areas, no western pond turtle habitat would directly be affected by the Project. However, the species could utilize the Project sites for dispersal or migratory movement to these aquatic features in the surrounding areas. As such, construction activities could adversely affect western pond turtles that may disperse out of the stormwater channel or riparian woodland community and into the Project sites through direct mortality, increased visual or noise disturbance, or upland habitat disturbance. The Plant Master Plan EIR identified impacts to western pond turtle associated with improvements B7 (Retirement of Eastern Lagoons and Drying Beds) and SF1-P2 (Landscaping and Road Repairs Phase 2), and areas associated with the Artesian Slough, freshwater wetland, eastern stormwater channel, and light industrial land uses east and northeast of the existing operational area. Implementation of the Plant Master Plan EIR **Mitigation Measure BIO-2b: Western**

Pond Turtle Measures, listed below, would reduce adverse effects on this species to less than significant by conducting preconstruction surveys, relocating western pond turtles off the construction site, implementing construction monitoring by a qualified biologist, and installing exclusion fence. Mitigation Measure BIO-2b: Western Pond Turtle Protection Measures include updates to the Plant Master Plan EIR Mitigation Measure BIO-2b to reflect the Project specific requirements; the adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure BIO-2b: Western Pond Turtle Measures.

a. Prior to the start of construction activities, the project proponent shall retain a qualified biologist to conduct preconstruction surveys for pond turtles in all suitable habitats (aquatic and upland) in the vicinity of the work site. Surveys shall take place no more than 72 hours prior to the onset of site preparation and construction activities with the potential to disturb turtles or their habitat.

b. If preconstruction surveys identify active western pond turtle nests within the Project site, the biologist shall establish no-disturbance buffer zones around each nest using temporary orange construction fencing. The demarcation shall be permeable to allow young turtles to move away from the nest following hatching. The radius of the buffer zone and the duration of exclusion shall be determined in consultation with the CDFW. The buffer zones and fencing shall remain in place until the young have left the nest, as determined by the qualified biologist.

c. A qualified biologist shall monitor construction activities in the vicinity of suitable habitat within which western pond turtle is found (either during the survey or observed during construction), and remove and relocate western pond turtles in proposed construction areas to suitable habitat outside the project limits, consistent with CDFW protocols and handling permits. Relocation sites shall be subject to CDFW approval.

d. If any turtles are found in the Project site, construction activities shall halt within 50 feet and the qualified biologist shall be notified. If the biologist determines the turtle is a western pond turtle, the turtle shall be relocated into nearby suitable habitat consistent with CDFW protocols and handling permits.

This impact would not be the same as identified in the Plant Master Plan EIR (as described above in Section 3.4.2), and the Project would not result in any new or more significant impacts during construction compared to identified in the certified Plant Master Plan EIR.
Same Impacts as Approved Project. (Less than Significant with Mitigation)

Operation

Potential permanent loss of rare plants or burrowing owl habitat as a result of Project implementation would be reduced to less than significant with the application of Mitigation Measure BIO-1: Reduce Impacts to Tarplant and Mitigation Measure BIO-2e: Western Burrowing Owl. Operations of the Project's proposed facilities, including the dewatering facility building, are not expected to result in impacts on rare plants or special

status wildlife species greater in intensity than those potentially occurring during the construction phase of the Project activities, as discussed above.

This impacts would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.4.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impacts as Approved Project. (Less than Significant)**

b) Figure 3.4-1 shows the location of the riparian woodland area with reference to the project footprint. The riparian woodland community is located approximately 60 feet east of the proposed dewatering facility building site construction limit, identified as "Dewatering Facility Site" in Figure 3.4-1. The construction staging area for the Project is within this construction limit. As clear from this figure, the riparian woodland community is within the study area, but outside of the Project site and construction limits. Currently, two design alternatives have been proposed for the dewatering facility. Upon completion, the dewatering facility would either be located approximately 105 feet or further from the riparian corridor (Setback Option 1) or 124 feet or further from the riparian corridor (Setback Option 2). The height of the building would be between 45 and 90 feet.

The riparian woodland community in the study area is considered a small, lower order remnant tributary that is hydrologically isolated from its former lower reaches by a levee at its northern terminus (ICF, 2013). This community in the study area is covered by a canopy of red willow trees (*Salix laevigata*) and boxelder (*Acer negundo*), and predominantly supports mulefat (*Baccharis salicifolia*), California blackberry (*Rubus ursinus*), cutleaf geranium (*Geranium dissectum*), poison hemlock (*Conium maculatum*), coyote brush (*Baccharis pilularis*), and the non-native invasive giant reed (*Arundo donax*). Despite the fact the habitat is hydrologically disconnected from any true fluvial flows, the vegetation is diverse and well developed, and therefore the riparian community provides high-value habitat for many wildlife species. The multilayered riparian community provides escape cover, foraging, and nesting opportunities for common and special-status wildlife. Western pond turtle could be found in this habitat, in addition to wildlife species found in seasonal wetlands as described below under item c). The riparian community is expected to be inundated from direct rainfall and runoff of adjacent land further south (upstream) as evidenced by the culvert at the southern end of this feature and similar hydrology and vegetation upstream of this location. This feature possesses positive hydric soils[20] characteristics and hydrologic indicators[21] (ICF, 2013).

Construction

Mobilization, grading, excavation, and the dewatering facility building construction would last approximately three years. Groundwater from excavations would be would be discharged into the Facility Headworks directly or into the Facility stormwater collection system, which drains to the Headworks facilities, for treatment. As such, potential

[20] Hydric soil – soil which is permanently or seasonally saturated by water, resulting in anaerobic conditions.
[21] Factors that influence the wetness of the site.

construction related runoff as a result of the Project would not constitute a threat to the health and function of the riparian corridor.

Visual or noise disturbance originating from the Project potentially indirectly impacting wildlife within the riparian community during construction would be temporary, and would affect a small footprint of the riparian corridor relative to adjacent and similar quality habitat. These impacts are considered less than significant.

However, during the construction period, indirect impacts on the riparian wetland community could result from soil compaction from adjacent grading and construction activities; changes in soil and hydrologic conditions from increased erosion and sedimentation from construction activities; and introduction and spread of non-native species due to ground disturbance and transport from construction personnel and equipment. The Plant Master Plan EIR identified impacts to riparian habitat for the development areas east of Zanker Road and associated with improvements B2-P1 (Dewatering Phase 1) and B2-P2 (Dewatering Phase 2).

The Project would implement standard best management practices (BMPs) in compliance with local regulations, including a Construction General Permit for Stormwater and Stormwater Pollution Prevention Plan (SWPPP) (refer to Section 3.10, Hydrology and Water Quality), and the requirements of the City of San José Riparian Corridor Policy, which includes guidance for how Riparian Projects[22] should be designed to protect and preserve the City's Riparian Corridors and guidance for the bird-friendly design of buildings and structures in the baylands and riparian habitats of lower Coyote Creek, north of State Route 237. In addition, the Project would comply with state regulations, such as those governed by the Regional Water Quality Control Board (RWQCB), to protect the vegetation and wildlife within the riparian corridor of the study area.

Further, with the implementation of Plant Master Plan EIR **Mitigation Measure BIO-3a: Riparian Woodland Habitat Avoidance Measures**, and **Mitigation Measure BIO-3c: Control of Non-Native Invasive Plant Species**, both listed below, and, **Mitigation Measure BIO-4a: Wetlands Avoidance Measures**, as described under item (c) below, impacts on the riparian corridor would be reduced to less than significant. These measures require installation of orange construction barrier fencing around the boundaries of riparian habitat to be avoided prior to initiation of construction activities; installation of silt fence to minimize potential sedimentation or contamination of stormwater runoff generated from the Project site into the riparian community; revegetation of areas disturbed during construction with approved native plant species; and removal of invasive plant seeds and plant parts from all clothing, shoes, vehicles, and equipment prior to working near any environmentally sensitive area, including riparian woodland habitat. Additionally, **Mitigation Measure BIO-4b: Wetlands Restoration for Project-Level Improvements**

22 "Riparian Project" means any development or activity that is located within 300 feet of a Riparian Corridor's top of bank or vegetative edge, whichever is greater, and that requires approval of a Development Permit as defined in Chapter 20.200 of Title 20 of the San José Municipal Code (the Zoning Code), except that projects that only require approval of a Single-Family House Permit under the provisions of the Zoning Code are not subject to this Policy.

would further reduce impacts to the riparian community by requiring the Project to obtain regulatory agency permits and approvals to ensure the Project results in no net loss of riparian functions and values, if it is determined during the design phase that indirect impacts on riparian woodland community cannot be avoided.

These mitigation measures include updates to address the potential for stormwater runoff generated from the Project site that could indirectly affect the riparian woodland community and to ensure there is no net loss of the riparian community's function or value in proximity of the Project site. The adjusted mitigation measures do not change the original impact conclusion, nor are they considerably different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure BIO-3a: Riparian Woodland Habitat Avoidance Measures.

Design of program-level WPCP improvements and planned land uses will avoid areas of riparian woodland habitat to the extent feasible. Riparian habitat impact avoidance shall be consistent with the City's General Plan Riparian Habitat Policy and HCP setbacks.

To reduce impacts on riparian woodland habitat during development east of Zanker Road construction and maintenance activities, the project proponent and/or its contractor shall implement the following measures:

- Minimize cutting and trimming of adjacent shrubs and trees during construction and maintenance activities to the maximum extent possible. Shrubs that need to be trimmed should be cut at least 1 foot above ground level to leave the root systems intact and allow for regeneration.
- Contract a certified arborist to perform or oversee necessary trimming of riparian trees.

Install orange construction barrier fencing around the boundaries of riparian habitat to be avoided prior to initiation of construction activities. The protected area shall be designated an environmentally sensitive area and would be clearly identified on the construction specifications. Fencing shall be maintained throughout the construction period.

Mitigation Measure BIO-3c: Control of Non-Native Invasive Plant Species.

To minimize introduction and spread of non-native invasive plant species, the project proponent or its contractor shall implement the following:

a. A qualified biologist or botanist shall conduct field training for construction workers to inform them about invasive species and methods to minimize spread of invasive species for the duration of all associated project and program activities mentioned above.

b. Revegetate areas disturbed during construction with approved native plant species.

c. Remove invasive plant seeds and plant parts from all clothing, shoes, vehicles, and equipment prior to entering or working in or near any environmentally sensitive area, including riparian woodland habitat.

d. Stage construction and maintenance equipment in weed-free areas.

e. Gather and bag invasive plant seeds or plant parts found in the containment area and take them to an appropriate disposal facility.

f. Implement the following measures to prevent the spread of noxious weeds and invasive plants when present.

g. Educate crews in the use of weed-free materials when available, ensure vehicles leaving paved roads do not spread weeds in sensitive habitats (including salt marsh or upland refugia habitat for salt marsh harvest mouse, salt marsh wandering shrew, California clapper rail, California black rail, dusky footed woodrat, and all aquatic and wetland habitat); and

h. Avoid entering patches of invasive plants to the maximum extent possible.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.4.2), and the Project would not result in any new or more significant impacts to riparian wetland communities during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

Operation

Operation of the dewatering facility is not expected to result in impacts on the riparian woodland community because the dewatering facility set-back would be in accordance with the Riparian Corridor Policy; a stormwater drainage system would be implemented to ensure no stormwater runoff would enter the riparian community; and the Project would result in no net loss of riparian function or value, as discussed above.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.4.2), and the Project would not result in any new or more significant impacts to riparian wetland communities during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

c) Potentially jurisdictional features located adjacent to the Project sites are displayed in Figure 3.4-1 and include seasonal wetlands and ponded areas, and riparian woodland community, further described below. The Biological Resources Technical Memorandum provided in Appendix F describes these features in detail as they relate to the Project. ESA biologists conducted preliminary draft wetland delineations for areas included in the Project on May 30, 2014 (ESA, 2014a); March 6, 2015 (ESA, 2015b); October 7 and 14, 2014 (ESA, 2014); and August E10, 2017 (ESA, 2018), to identify jurisdictional limits of regulated wetlands and other waters of the U.S. and of the State. All conclusions presented in those assessments are considered preliminary and subject to change pending

official review and preliminary jurisdictional determination in writing by the U.S. Army Corps of Engineers (USACE).

An existing drainage channel consisting of a series of functionally isolated segments that retain water during the wet season is located southwest of the proposed DS Storage and Pump Station Site Option 1. Flows from the isolated segment at the northernmost end of the channel are culverted under Los Esteros Road to a bypass channel and storm water basin, which then flow to San Francisco Bay via a pump station and weir structure[23] at the northern end of the bypass channel. The drainage channel is in the bottom of a channel that has been altered and realigned. A channel at the location is indicated on topographic maps prepared before extensive development in the area. Downstream of the study area, surface connection to its tidal reach and San Francisco Bay is blocked by earthen barriers. A portion of the drainage feature is within 1,500 feet of the high tide line of a downstream water; due to the proximity to the high tide line of San Francisco Bay, the drainage feature meets the definition of adjacent and neighboring, and is a potential waters of the U.S.

The seasonal wetland overlapping the location of the proposed DS Storage and Pump Station, Site Option 2 location consists of a very shallow depression containing hydrophytic plant species that are distinct from surrounding non-native grassland that typifies the area. Evidence of surface ponding includes cracked soil, algal mats, and water-stained leaves.

The seasonal ponding community northeast of the proposed dewatering facility is characterized as displaying only the hydrology indicator present by virtue of the appearance of inundation in aerial imagery and field reconnaissance; wetland vegetation and hydric soils are not present.

The riparian woodland community is situated approximately 60 feet east of the proposed dewatering facility site construction footprint. This remnant riverine drainage is hydrologically isolated from its former lower reaches by a levee at its northern terminus, approximately 0.25-mile north of the dewatering facility site. The southern portion of this feature is connected to stormwater runoff from adjacent land to the south as evidenced by a culvert and the presence of similar upstream hydrology and vegetation. Impacts to the riparian woodland community located east of the dewatering building site are described above under item (b).

Construction

This discussion describes potential construction-related impacts on the stormwater channel, seasonal wetland, and ponded areas. Impacts to the riparian woodland community located east of the dewatering building site are described above under item (b).

Temporary impacts to the drainage channel located south of the proposed Pump Station Site Option 1 and the drainage piping from the dewatering facility to EBOS could occur as a result of the introduction and spread of non-native species due to ground disturbance and

[23] A weir is a structure which is constructed across a stream channel to change the stream's water flow characteristics.

transport from construction personnel and equipment, in addition to the degradation or modification of habitat through increased erosion and sedimentation, and changes to hydrologic regimes. Although the feature no longer conveys flows downstream to tidal waters and is now maintained by the City to capture Facility stormwater runoff, it provides a physical connection between two historic remnant channels that once drained to San Francisco Bay. In addition, all parts of this drainage channel between the tops of bank are waters of the State, and are also subject to RWQCB regulation under the Porter–Cologne Water Quality Act. Additionally, CDFW would likely extend California Fish and Game Code Section 1600 jurisdiction of this feature based on top of bank features and vegetation within the drainage, including facultative plants,[24] primarily non-native opportunistic, marginally hydrophytic low barley (*Hordeum marinum*), Italian ryegrass (*Festuca perennis*), curly dock (*Rumex crispus*), and perennial pepperweed (*Lepidium latifolium*), even though all trees above top of bank are eucalyptus.

The seasonal wetland west of the proposed Pump Station Site Option 2 site is characterized by a depression that was formed as a result of Facility-related construction activities. Aerial imagery shows that this feature has been subject to extensive excavation and used for construction-related purposes. At no time has the site been abandoned or subject to recapture under the Clean Water Act (CWA). Therefore, the shallow depression would not be considered jurisdictional waters of the U.S. under current or possible revisions to the Section 404 of the CWA. However, the feature could still be considered waters of the State regulated by the RWQCB under the Porter-Cologne Water Quality Control Act. Project construction could result in temporary indirect impacts to this feature as a result of soil removal or fill due to construction proposed adjacent to this feature, including excavation and grading, and construction for the dewatering facility building pad and aboveground facilities.

The ponded feature in the grasslands northeast of the dewatering facility building site (as shown on Figure 3.4-1) only displayed the hydrology indicator by virtue of the appearance of inundation in aerial imagery and field reconnaissance; wetland vegetation and hydric soils are not present (ESA, 2014; ESA, 2019). Therefore, the site does not meet the three criteria required for geographical jurisdiction under Section 404 of the federal CWA. Furthermore, the wetland is isolated (i.e. does not have a significant nexus with navigable waters of the U.S, such as a demonstrable and regularly occurring surface water connection directly with or via intervening channel to San Francisco Bay), so also does not meet the federal regulatory definition of a wetland (ESA, 2014). This feature may still be subject to the regulatory authority of the RWQCB as waters of the State under the Porter-Cologne Water Quality Control Act. Project construction could result in temporary indirect impacts to this feature as a result of soil removal or fill due construction proposed adjacent to this feature, including excavation and grading, and construction for the dewatering facility building pad and aboveground facilities.

[24] The National List of Plant Species that Occur in Wetlands (Reed 1988) describes the wetland indicator status, and their rating, of facultative plants to equally likely to occur in wetlands and non-wetlands (34-66%).

The Plant Master Plan identified impacts to wetlands associated with improvements B2-P1 (Dewatering Phase 1) and B2-P2 (Dewatering Phase 2) and implemented Plant Master Plan EIR **Mitigation Measure BIO-4a: Wetlands Avoidance Measures**, listed below, to reduce potential sedimentation or contamination of stormwater runoff generated from the Project site into potential jurisdictional wetlands. Similarly, the Plant Master Plan EIR **Mitigation Measure BIO-4b: Wetlands Restoration for Project-Level Improvements**, listed below, was implemented to further reduce impacts to jurisdictional features by requiring the Project to obtain regulatory agency permits and approvals to ensure the Project results in no net loss of wetland habitat functions and values. Updated versions of these measures would be implemented to mitigate for Project-related indirect impacts to wetland features. Furthermore, the Project would be compliant with Condition 12 of the HCP by implementing such measures as installing fence between the Project area and the wetlands and ponded area; installing erosion control measures to reduce siltation and runoff of contaminants into wetlands, ponded area, and the riparian corridor community; and the obtaining of regulatory agency permits and approvals.

These mitigation measures include updates to Mitigation Measure BIO-4a and Mitigation Measure BIO-4b, provided under the approved Plant Master Plan EIR to address the potential for stormwater runoff generated from the Project site effecting potential jurisdictional wetlands and ensure that there is no net loss of wetland habitat. The adjusted mitigation measures do not change the original impact conclusion, nor are they considerably different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure BIO-4a: Wetlands Avoidance Measures.

Access roads, work areas, and infrastructure shall be sited to avoid and minimize direct and indirect impacts to jurisdictional features. Prior to the beginning of any construction-related activities, the following measures shall be applied to protect potential jurisdictional features:

a. A protective barrier (such as silt fencing) shall be erected around water features adjacent to the Project at the “top of bank" or at the feature boundary to isolate them from Project activities and reduce the potential for incidental fill, erosion, or other disturbance;

b. Signage shall be installed on the fencing to identify sensitive habitat areas and restrict construction activities;

c. No equipment mobilization, grading, clearing, or storage of equipment or machinery, or similar activity shall occur at the Project site until a representative of the City has inspected and approved the protection fencing; and

d. The City shall ensure that the temporary fencing is continuously maintained until the Project is completed.

e. Drainage from all proposed facilities where chemical spills could occur during Project operation shall be directed away from sensitive resources and/or include other measures to minimize potential for release of potential pollutants to the environment.

Mitigation Measure BIO-4b: Wetlands Restoration for Project-Level Improvements.

If it is determined during the design phase that impacts on wetland habitat cannot be avoided, the City's ET shall obtain permits and approvals from the SCVHA, USACE, Regional Water Quality Control Board (RWQCB), and/or CDFW, as applicable. In order to ensure that the Project results in no net loss of wetland habitat functions and values, the City shall compensate for the loss of wetland resources through on-site restoration/ creation, off-site protection and enhancement of riparian and wetland habitat, and/or purchase of mitigation credits consistent with the terms and conditions of USACE Regional General Permit 18 for implementation of covered activities in the HCP. On-site or off-site habitat restoration/creation and/or purchase of mitigation credits consistent with the terms and conditions of USACE Regional General Permit 18 shall be determined in consultation with the resource agencies, as applicable. The City shall prepare a mitigation plan, which shall include monitoring applicable requirements and success criteria.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.4.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

Operation

Operation of the Project is not expected to adversely affect the drainage channel south of the proposed Pump Station Site Option 1, the seasonal wetland west of the proposed Pump Station Site Option 2 site, or the ponded feature in the grasslands northeast of the dewatering facility building site. This determination is based on the distance of Project operations and maintenance that are to occur relative to the location of these features, in addition to the degree of disturbance associated with the existing operation and maintenance activities relative to these features. Operations of the DS Storage and Pump Station at either site option as well as drainage piping to EBOS are not expected to result in impacts on nearby seasonal wetland communities because the locations of these facilities would not result in loss of wetland habitat functions or value, as discussed above. Additionally, a stormwater drainage system would be constructed within the dewatering facility to properly capture stormwater runoff preventing it from entering the riparian community in accordance with state regulations. Operational impacts to the riparian community located east of the dewatering building site are described above under item (b).

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.4.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

d) **Construction and Operation**

The Plant Master Plan EIR determined that project- and program-level improvements are not expected to interfere substantially with the movement of wildlife species or impede

the use of wildlife nursery sites. The open space within the study area creates potential wildlife habitat, and birds and mammals using this habitat may be exposed to an increased risk of noise, vibrations, and increased activity levels associated with vegetation grubbing, earth moving, and heavy equipment operation. However, Project impacts are not likely to interfere substantially with wildlife movement corridors because the Project construction and operational footprint are not located within a known wildlife movement corridor. Although the study area encompasses a riparian community potentially used as a wildlife movement corridor, Project construction and operation would occur adjacent to this feature. Visual or noise disturbance originating from the Project potentially indirectly impacting wildlife movement corridors during construction would be temporary; and during both construction and operations, would affect a small footprint of the riparian corridor relative to adjacent and similar quality habitat. Furthermore, implementation of the Plant Master Plan EIR Mitigation Measure BIO-2b: Western Pond Turtle Measures, listed above, would reduce potential adverse effects on western pond turtle to less than significant by conducting preconstruction surveys, relocating western pond turtles off the construction site, implementing construction monitoring by a qualified biologist, and installing of exclusion fence.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.4.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

e) **Construction and Operation**

City of San José Tree Ordinance

The City of San José's Municipal Code (Section 13.32) regulates the removal of trees. An "ordinance tree" is defined as any native or non-native tree with a circumference of 38 inches (diameter of about 12 inches) measured at 4½ feet above natural grade. Removal of ordinance-size trees located on City-owned property requires the posting of a courtesy notice to the public and review by the City Arborist's Office (City of San José, 2013a). The Project would result in the removal of one multi-trunk native blue elderberry (*Sambucus nigra* subsp. *caerulea*) located in the middle of the proposed dewatering facility building site, which would be subject to this ordinance since its size, 166-inch diameter at breast height (DBH), which meets the ordinance threshold.

The City requires replacement of all removed ordinance-size trees in accordance with established tree replacement ratios, as outlined below.

Under these conditions, the City's typical mitigation is to plant four 24-inch box trees for each tree removed. Replacement trees can be planted in a suitable location on Facility property or on other City property, to be identified by the City Arborist. Implementation of the following project condition of approval would reduce Project impacts as a result of tree removal to less than significant. The Project, therefore, would not conflict with any

local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

> **Compensate for Removal of Protected Trees.** As part of the project condition of approval, the trees to be removed shall be replaced on-site or off-site at the accepted ratios or through payment of an in-lieu fee to Our City Forest to compensate for the loss of the trees. Protected trees that are lost shall be replaced at a minimum of four 24-inch box trees per tree removed. Tree replacement amounts shall be subject to the City's Arborist and/or PBCE, who would determine the final mitigation for impacts to protected trees. Replacement trees shall be planted in a suitable location on Facility property or on other City property, to be identified by the City Arborist and approved by the PBCE.

The Plant Master Plan EIR identified impacts to protected trees associated with land uses south and east of the operational area. The remaining trees that are adjacent to the other Project sites could be impacted by mechanical damage to tree trunks and canopies from inadvertent contact by construction equipment, vehicles or construction materials; root damage resulting from grading or excavation activities; or root damage resulting from soil compaction caused by heavy equipment or vehicle traffic. All other trees adjacent to the Project sites would be safeguarded from construction activities by conditions identified in the City's Municipal Code 13.32.130 – Safeguarding Trees During Construction and through implementation of the Plant Master Plan EIR **Mitigation Measure BIO-5b: Minimize Construction Effects on Protected Trees to be Retained**, listed below. Conditions include no construction equipment within the dripline of any trees and the use of barricades around tree trunks to prevent injury to trees and retaining a certified arborist to oversee protection of native trees to be retained on the project site.

> **Mitigation Measure BIO-5b: Minimize Construction Effects on Protected Trees to be Retained.**
>
> The project proponent shall implement the following tree-protection measures prior to and during project construction.
>
> - Retain a certified arborist to oversee protection of native trees to be retained on the project site.
> - Require that any tree or root pruning occurring for construction is first approved by the certified arborist.
> - Require that the certified arborist evaluate injuries to retained trees as soon as possible for appropriate treatment. With implementation of these conditions and measures, the Project would not result in any new or more significant impacts than those identified in the certified Plant Master Plan EIR.

San José Riparian Corridor Policy

The eastern limit of the proposed dewatering facility site would be located as close as 105 feet under both proposed setback options. As such the Project can be defined as a "Riparian Project" under the San José Riparian Corridor Policy, which is applicable to projects within 300 feet of riparian corridors.

The recommended setback for the type of land use proposed by the Project is 100 feet from the edge of the riparian corridor. The proposed setbacks for the various options of the Project are 105 feet or 124 feet; both meeting the requirements of the Riparian Corridor Policy. As such, the Project would not significantly alter the quality or function of vegetation or wildlife habitat within the corridor. The riparian corridor in the study area is considered a small, lower order remnant tributary, with influences that do not extend to greater than approximately 50 feet beyond the outer vegetation canopy. Further, the Coyote Creek riparian corridor, located less than one-half mile to the east of the study area's riparian corridor, is of higher quality habitat that could support potential riparian species in the unlikely circumstance they are displaced during the operation of the Project.

The tallest design option of the dewatering building would result in a 90 feet tall building but it would not significantly conflict with the Bird-Safe Design elements included in the San José Riparian Corridor Policy because the Project has been designed to incorporate all bird-safe design features identified in the Riparian Corridor Policy, as discussed further in Chapter 2, Project Description. Building options would be constructed with materials compliant with the City's Bird-Safe Design elements. Further, the proposed heights of the facilities would be similar to those in the immediate region, such as the Los Esteros Energy Center, located southeast of the dewatering facility or office buildings in the vicinity. As such, the Project would not substantially conflict with policies set forth in the San José Riparian Corridor Policy Bird-Safe Design elements.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.4.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

f) Construction and Operation

The Project is subject to the Santa Clara Valley Habitat Conservation Plan (HCP; effective October 14, 2013) (SCVHA, 2015). The Project is considered a Covered Activity on land designated by the HCP as Urban-Suburban.

The only species covered by the HCP that has suitable nesting and foraging habitat or the potential to occur within the study area is the western burrowing owl. The facilities proposed by the Project within the current operational area of the Facility, in addition to the dewatering facility building location, would encroach into the Habitat Plan burrowing owl fee zone area (Figure 3.4-1). The Project would be consistent with Condition 15 of the HCP, through the implementation of the Plant Master Plan EIR **Mitigation Measure BIO-2e: Western Burrowing Owl Measures**, as described above. Mitigation Measure BIO-2e incorporates surveys, and avoidance and minimization measure guidelines to avoid or minimize direct impacts on western burrowing owls and would ensure burrowing owl habitat supports a stable or increasing burrowing owl population.

As discussed above, Condition 11 of the HCP minimizes impacts on natural communities identified as representing important ecosystems in the Plan area (SCVHA, 2012). Riparian plant communities, such as the one in the study area, are considered sensitive because of habitat loss and their value to a diverse community of plant and wildlife species (SCVHA, 2012).

Condition 11 of the Habitat Plan applies to all covered activities that may impact streams, which includes all development within the urban service area where a stream or the stream setback overlaps any portion of the parcel on which a covered activity is being implemented.

Stream communities are grouped into two simplified categories for the purposes of Condition 11: Category 1 and Category 2. Category 1 streams have sufficient flow to support covered species and riparian habitat (i.e., in-channel ponds downstream of reservoirs, perennial streams, and some intermittent streams) and typically require a 100-foot setback. Category 2 streams may not have sufficient flow to support covered species and riparian habitat (i.e., ephemeral streams and some intermittent streams that provide minimal support of water-quality functions and minimal primary breeding habitat); are not specifically mapped as part of the Habitat Plan; include both identified streams (named creeks and USGS blueline creeks) that are not classified as Category 1 streams (as shown in Figure 6-2 of the HCP); and other unmapped streams that meet the "Criteria to Verify or Identify a Watercourse as a Stream".[25] Category 2 streams require a 35-foot setback from proposed development. Unless a covered activity meets the "Exemption" criteria or is granted a stream setback exception implementation of covered activities is prohibited within the stream setback.

Based on the aforementioned criteria, the riparian corridor in the study area meets the HCP definition of a Category 2 stream (as defined on page 6-48 of the HCP), which requires a 35-foot setback from proposed development.

The HCP requires a stream setback for covered activities to minimize degradation of stream and riparian communities as well as to maintain basic biological and physical functions of stream and riparian systems. This setback also recognizes the limited potential for new development within the urban service area to provide stream protections.

The study area's riparian woodland community is located approximately 60 feet east of the proposed dewatering facility building site construction limits (which includes limits of construction staging area as well), as shown in Figure 3.4-1. It is part of the study area, but not of the Project site. Currently, two design alternatives have been proposed for the height of the dewatering facility, two stories (45 feet tall) and four stories (90 feet tall), and two alternatives proposed for the setback from Zanker Road; 280-feet (Setback Option 1) and 120-feet (Setback Option 2). Upon completion, the dewatering facility would either be located approximately 105 feet or further from the riparian corridor

[25] Refer to page 6-48 of the HCP for definition of "Criteria to Verify or Identify a Watercourse as a Stream"

(Setback Option 1) or 124 feet or further from the riparian corridor (Setback Option 2). As such, the Project would comply with Condition 11 of the HCP.

Through the implementation of the Plant Master Plan EIR Mitigation Measure BIO-4a: Wetlands Avoidance Measures and Mitigation Measure BIO-4b: Wetlands Restoration for Project-Level Improvements, as described above, the Project would be compliant with Condition 12, Wetland and Pond Avoidance and Minimization of the HCP. With implementation of this measure, fencing would be erected between the project area and the wetlands and ponded area; erosion control measures would be used on site to reduce siltation and runoff of contaminants into wetlands, ponded area, and the riparian corridor community, and regulatory agency permits and approvals would be obtained to ensure the Project results in no net loss of wetland or riparian habitat functions.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.4.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the Plant Master Plan EIR. **Same as Approved Project. (Less than Significant with Mitigation)**

References

California Native Plant Society (CNPS), Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.45). Available at: http://www.rareplants.cnps.org Accessed March 8, 2019.

California Department of Fish and Wildlife (CDFW), 2018. California Natural Diversity Database Occurrences for 7.5-minute USGS topographic quadrangles: Calaveras Reservoir, Milpitas, Mountain View, Newark, and San Jose West. Commercial Version, dated February 5, 2018.

CDFW, 2019. California Natural Diversity Database 7.5-minute U.S. Geological Survey quadrangles for Mountain View, Milpitas, Calaveras Reservoir, Niles, San José West, and Newark. March 8, 2019.

City of San José, 2013a. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013. available at http://www.sanjoseca.gov/index.aspx?NID=4968

City of San José, 2013b. Tree Policy Manual & Recommended Best Practices. September 26, 2013.

City of San José, 2015. Email correspondence from Russell Hansen, City of San José Arborist, to Aziza Amiri, City of San José Public Works Engineer. Tree Removal on Zanker Road. November 25, 2015.

City of San José, 2015a. San José-Santa Clara Regional Wastewater Facility Study Number 7-Architectural Design Guidelines. October 20, 2015.

City of San José, 2016. Council Policy: Riparian Corridor Protection and Bird-Safe Design. August 26, 2016. available at https://www.sanjoseca.gov/DocumentCenter/View/60393

Environmental Collaborative, 2018. Biological Resource Assessment for the Digested Sludge Dewatering Project. August 30, 2018.

Environmental Science Associates (ESA), 2014. San José – Santa Clara Regional Wastewater Facility, Wetland Delineation Summary for Alternative Biosolids Sites A and C, Santa Clara County, California. October 20, 2014.

ESA, 2014a. City of San José Water Treatment Facility Improvement Projects – Preliminary Delineation of Potential Jurisdictional Waters and/or Wetlands in the vicinity of the proposed Emergency Diesel Generators and Iron Salt facilities. June 13, 2014

ESA, 2015a. San José – Santa Clara Regional Wastewater Facility, Iron Salt Feed Station Initial Study. File Number PP14-098. May 2015.

ESA, 2015b. Area G Wetlands and Burrowing Owl Survey Results. Technical Memorandum from ESA Ecologist, Chris Rogers, to City of San Jose, Julie Benabente. March 12, 2015.

ESA, 2016. San José – Santa Clara Regional Wastewater Facility, Headworks Improvements and New Headworks Alternatives Constraints Analysis. Prepared for CDM Smith, Inc. October 2016.

ESA, 2018. San José – Santa Clara Regional Wastewater Facility, Wetland Delineation Report for Headworks Improvements and New Headwords Project, Santa Clara County, California. February, 2018.

ESA, 2019a. Sludge Dewatering Facility Project Biological Resources Technical Memorandum for the City of San José San José-Santa Clara Regional Wastewater Facility. June, 2019.

ESA, 2019b. San Jose – Santa Clara Regional Wastewater Facility, Digested Sludge Dewatering Facility Biological Reconnaissance Survey. March 29, 2019.

ICF, 2012. Existing Conditions Report San Jose/Santa Clara Water Pollution Control Plant-Master Plan. January 2012.

ICF, 2013. Potential Wetlands within the Inactive Biosolids Lagoons Delineation on October 25 and 26, November 2, 2012, and January 28 and 29, 2013.

Reed, P. B., Jr., 1988. National List of Plant Species that Occur in Wetlands. Washington, DC: U.S. Fish and Wildlife Service.

Santa Clara Valley Habitat Agency (SCVHA), 2012. Santa Clara Valley Habitat Plan. Prepared for City of Gilroy, City of Morgan Hill, City of San José, County of Santa Clara, Santa Clara Valley Transportation Authority, and Santa Clara Valley Water District. Prepared by ICF International. August 2012. available at https://scv-habitatagency.org/178/Santa-Clara-Valley-Habitat-Plan.

SCVHA, 2015. Multi-Phase Project Burrowing Owl Fee Policy.

USFWS, 2019. List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility. Consultation Code: 08ESMF00-2019-SLI-1306. March 8, 2019.

3.5 Cultural Resources

3.5.1 Setting

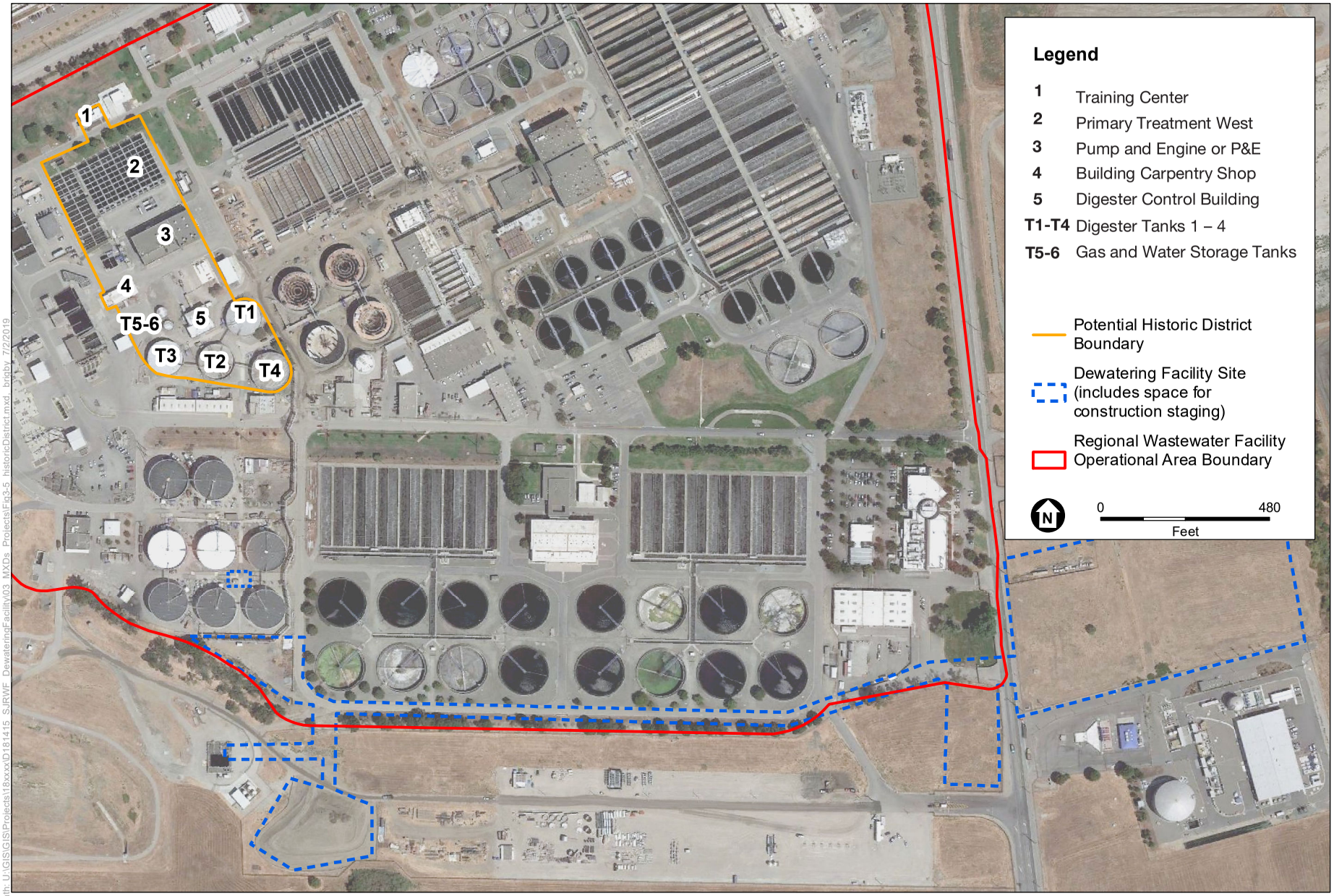
The cultural resources setting relevant to the Project site has changed since certification of the Plant Master Plan EIR. Since that time, the City has inventoried and evaluated the older, northern portion of the Facility. In addition, several archaeological studies, including two subsurface investigations and archaeological monitoring, have been completed to further determine the archaeological sensitivity of the Facility. Regulations related to cultural resources have also changed. This includes the adoption of Assembly Bill 52 (AB 52), regarding tribal cultural resources (refer to Section 3.18 of this document for a discussion of tribal cultural resources).

The *San José-Santa Clara Regional Wastewater Facility Streamline Moderne Industrial Historic District* (District) has been recommended eligible for listing in the National Register of Historic Places (National Register) under Criteria A and C at the local level, and eligible for listing in the California Register of Historical Resources (California Register) under Criteria 1 and 3. The District encompasses approximately seven acres on the north-central portion of the Facility and includes 11 contributing buildings and structures that were built between 1956 and circa 1963, as shown on **Figure 3.5-1**. The District retains sufficient historic integrity to convey its significance. The District is approximately 1,300 feet from the closest Project component (DS Sludge and Storage Pump Station, Site Option 1).

Since certification of the Plant Master Plan EIR, two archaeological subsurface surveys have been completed at the Facility in support of Plant Master Plan EIR Mitigation Measure 3b. The subsurface surveys consisted of excavating numerous shovel test pits and auger samples, including 12 shovel test pits within the Project site. The purpose of the subsurface survey was to determine whether buried or otherwise obscured archaeological resources exist in the Facility. The surveys did not identify any cultural materials in or in the vicinity of the Project site (ESA 2015, ESA 2015a). Archeo-Tec also completed an archaeological analysis of the Project site, including a surface survey, and no cultural materials were identified (Archeo-Tec, 2018).

3.5.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified potentially significant, but mitigable to less-than-significant, impacts to a historical resource from program level improvements, and no impacts from project level improvements or other proposed land uses. The Plant Master Plan EIR identified potentially significant, but mitigable to less-than-significant impacts to unknown archaeological resources and disturbance to human remains.



Path: U:\GIS\GIS\Projects\18xxxx\D181415_SJRWF_DewateringFacility\03_MXDs_Projects\Fig3-5_historicDistrict.mxd brjoby 7/2/2019

SOURCE: ESA, 2016

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Facility

Figure 3-5-1
San José-Santa Clara Regional Wastewater Facility
Potential Streamline Moderne Industrial Historic District

ESA

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
V. CULTURAL RESOURCES — Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒	☐

Discussion

a) **Construction and Operation**

CEQA Guidelines Section 15064.5 requires the lead agency to consider the effects of a project on historical resources. A historical resource is defined as any building, structure, site, or object listed in or determined to be eligible for listing in the 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 CEQA Guidelines Section 15064.5, are addressed under impact b, below.

The *San José-Santa Clara Regional Wastewater Facility Streamline Moderne Industrial Historic District* is adjacent to one of the Project sites, located approximately1,300 feet away. However, there would be no direct or indirect impacts to the 11 buildings and structures that contribute to the District, because none of the buildings and structures would be demolished or otherwise altered by the Project. No impacts would occur to architectural historical resources as a result of the Project and no mitigation is required.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.5.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

b) **Construction and Operation**

This section discusses archaeological resources, both as historical resources according to CEQA Guidelines Section 15064.5, as well as unique archaeological resources, as defined in Public Resources Code Section 21083.2(g). A significant impact would occur if the Project would cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

ESA cultural resources staff completed a records search for the Project at the Northwest Information Center (NWIC) of the California Historical Resources Information System

on August 1, 2011 (File No. 11-0118) and updated the search on May 11, 2016 (File No. 15-1655). There are no previously recorded prehistoric or historic-era archaeological resources in the Project site. Background research indicates that prehistoric archaeological resources have been recorded within one mile of the Project; including archaeological site CA-SCL-528. This site consists of midden soil with bay and marine shell, fire-cracked rock, carbon and baked clay, faunal fragments, lithic debitage, and groundstone fragments. Human remains have also been uncovered at this location. Subsurface excavations were completed in 1983, 2008, 2010, and 2015 to define site boundaries.

Archaeological consultant Archeo-Tec completed a cultural resources analysis and surface survey of the Project site on April 3 and July 26, 2017. No cultural resources were identified during the survey effort (Archeo-Tec, 2018). Archaeologists from ESA conducted a subsurface survey in the additional construction staging area, adjacent to some of the Project components (i.e., DS Storage and Pump Station, Site Option 2) on July 21, 2015. The subsurface survey consisted of excavating 12 shovel test pits (to a depth of 0.5 meters below ground surface) to determine whether there are subsurface or obscured archaeological resources. No archaeological resources were identified during the surface and subsurface surveys. In their cultural resources analysis, Archeo-Tec recommended monitoring during Project implementation; however, the results of the subsurface survey completed by ESA indicate that there is a low potential to impact archaeological resources during Project implementation (Archeo-Tec, 2018).

While unlikely, the unanticipated discovery of archaeological resources cannot be entirely discounted. Disturbance to archaeological resources could be a significant impact. To facilitate compliance with CEQA, Project personnel shall be alerted to the possibility of encountering archaeological resources during construction, and informed of the proper procedures to follow in the event that such materials are found. In the event of an inadvertent discovery of subsurface archaeological resources during ground-disturbing activities, implementation of the mitigation measure CUL-1a, as included below, would reduce this impact to a less-than-significant level. This mitigation measure includes an update to Mitigation Measure CUL-3a from the Plant Master Plan EIR to include a "preservation in place" clause, per a court case ruling (Madera Oversight Coalition Inc., et al., vs. County of Madera, September 2011). The adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure CUL-1a: Inadvertent Discovery of Archaeological Resources.

If prehistoric or historic-era archaeological resources are encountered by construction personnel during Project implementation, all construction activities within 100 feet shall halt and the contractor shall notify Environmental Services Depart (ESD) personnel and the Planning Building and Code Enforcement (PBCE) Senior Environmental Planner. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, hand stones, or milling slabs); and battered stone tools, such as hammer stones and pitted stones.

Historic-era materials might include: stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.

The City's ESD or its contractor shall retain a Secretary of the Interior-qualified archaeologist to inspect the findings within 24 hours of discovery. If it is determined that the Project could damage a historical resource, as defined by CEQA (CEQA Guidelines §15064.5), construction shall cease in an area determined by the archaeologist until a mitigation plan has been prepared, approved by the PBCE Senior Environmental Planner, and implemented to the satisfaction of the archaeologist (and Native American representative if the resource is prehistoric, who would be identified by the Native American Heritage Commission [NAHC]). If the Native American representative identifies the find as a potential tribal cultural resource, ESD or its contractor shall proceed to **Mitigation Measure CUL-1b**. For archaeological resources, the archaeologist, in consultation with the PBCE Senior Environmental Planner and the City's Historic Preservation Officer, shall determine when construction can resume.

The preferred mitigation shall be preservation in place. If preservation in place is not physically or financially feasible, mitigation shall be data recovery through excavation. If preservation in place is selected as mitigation, the mitigation shall be accomplished through one of the four following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before building appropriate facilities on the resource site; or (4) deeding the resource site into a permanent conservation easement. If preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to the satisfaction of the PBCE Senior Environmental Planner to recover the scientifically consequential information from the resource prior to any excavation at the resource site. Treatment for most of the resources that could be encountered shall consist of (but shall not necessarily be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

Mitigation Measure CUL-1b: Inadvertent Discovery of Tribal Cultural Resources.

The Native American representative shall make recommendations to the City for the appropriate measures to treat the tribal cultural resource. These measures will be implemented in accordance with Section 15064.5 of the CEQA Guidelines.

Section 3.18 has a detailed discussion of tribal cultural resources.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.5.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

c) **Construction and Operation**

Based on the background research as well as surface and subsurface surveys, the potential to discover human remains during ground disturbance is low in the Project site. However, the discovery of human remains cannot be entirely discounted. Disturbance of human remains could be a significant impact. To facilitate legal compliance, Project personnel shall be alerted to the possibility of encountering human remains during construction, and informed of the proper procedures to follow in the event they are found. Implementation of the mitigation measure from the Plant Master Plan EIR, as included below, would reduce this impact.

> **Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains.**
>
> If human remains are encountered by construction personnel during Project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the PBCE Senior Environmental Planner. ESD shall contact the Santa Clara County Coroner to determine whether or not the remains are Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall contact the NAHC within 24 hours. The NAHC would then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to the City for the appropriate means of treating the human remains and any associated funerary objects which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.5.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

References

Archeo-Tec, 2018. Phase I Cultural Resources Evaluation for the Digested Sludge Dewatering Facility Project, San José-Santa Clara Regional Wastewater Facility, Prepared for Scheidegger & Associates, July 2018.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

ESA, 2015. San José-Santa Clara Regional Wastewater Facility Zanker Road Development Project Cultural Resources Survey Report, Prepared for the City of San José, June 2015.

ESA, 2015a. Cultural Resources Survey Report, San José-Santa Clara Regional Wastewater Facility Construction Enabling Project, Prepared for the City of San José, July 2015.

3.6 Energy

3.6.1 Setting

The energy setting as relevant to the Project, including applicable regulations, has not appreciably changed since the certification of the Plant Master Plan EIR. Energy conservation is embodied in many federal, state and local statutes and policies. At the federal level, energy standards apply to numerous products (e.g., the EnergyStar™ program) and transportation (e.g., fuel efficiency standards). At the state level, Title 24 of the California Administrative Code sets energy standards for buildings, rebates/tax credits are provided for installation of renewable energy systems, and the Flex Your Power program promotes conservation in multiple areas. Title 24 standards were most recently updated in 2017. At the local level, the City of San José as part of its Envision San José 2040 General Plan, has goals (Goal MS-14) and policies in place to reduce per capita energy consumption and increase efficiency by at least 50 percent compared to 2008 levels by 2022 and maintain or reduce net aggregate energy consumption levels equivalent to the 2022 (Green Vision) level through 2040 (City of San José, 2011).

3.6.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified less-than-significant impacts related to implementation of the Master Plan for the potential to result in the wasteful and/or unnecessary consumption of energy.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
VI. ENERGY — Would the project:					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒	☐

Discussion

a, b) **Construction**

Construction energy use would include both direct and indirect uses of energy. Direct energy use would include the consumption of fuel (typically gasoline and diesel fuel) for operation of construction equipment and vehicles. Energy in the form of electricity may also be consumed by some pieces of construction equipment, such as welding machines, pumps, power tools, lighting, etc.; however, the amount of consumed electricity would be relatively minimal. Indirect energy use includes the energy required to make the materials and components used in construction. This includes energy used for extraction of raw materials, manufacturing, and transportation associated with manufacturing. Direct energy represents about one-quarter of total construction-related consumption while

indirect energy use typically represents about three-quarters of total construction-related energy consumption (Hannon, 1978).

It is not possible to estimate the precise amount of construction-related energy demand at this stage as it depends on operating conditions of the equipment that cannot be predetermined. Therefore, the CEQA checklist focusses on the efficient use of energy as opposed to a quantification of the actual amount of energy consumed. Fuel use for the Project construction would be consistent with typical construction and manufacturing practices, and energy standards such as the Energy Policy Acts of 1975 and 2005, and Title 24, which promote strategic planning and building standards that reduce consumption of fossil fuels, increase use of renewable resources, and enhance energy efficiency. Project construction would not require excessive or wasteful use of energy and would therefore not conflict with the applicable energy policies. Further, the energy consumption during construction would not result in long-term depletion of non-renewable energy resources and would not permanently increase reliance on energy resources that are not renewable. Construction activities would not reduce or interrupt existing electrical or natural gas services due to insufficient supply, and would not include inherently wasteful or unnecessary use of energy. Because Project construction would not interrupt existing local Pacific Gas and Electric (PG&E) service and because project-specific construction-related energy demand would not be expected to have a material effect on energy resources, or result in wasteful or unnecessary use of energy, construction activities would result in a less-than-significant impact associated with energy consumption. Nonetheless, implementation of the City's standard permit conditions which include the Bay Area Air Quality Management District's basic and additional mitigation measures, as described in Section 3.3, Air Quality, would reduce the amount of fuel energy consumed during the construction phase of the project by limiting unnecessary idling and through proper operation and maintenance of equipment.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.6.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

In the Plant Master Plan EIR identified that operational electrical power use at the Facility for project-level improvements, including B2-P1 (Dewatering Phase 1), would be expected to increase by 10,375 megawatts per hour (MWh) annually above the current baseline. Electrical power use from program-level improvements, including B2-P2 (Dewatering Phase 2) would be expected to increase by an additional 32,413 MWh annually above the project-level increases. The Facility project-level usage would represent an approximately ten-fold increase over baseline, and the Facility program-level usage would represent an approximately 40 percent increase over Facility project-level usage.

Once the Project is operational, energy use primarily would be in the form of electricity to power the pumps, centrifuges, conveyors and other equipment at the dewatering facility, as

well as the DS pumps. The Facility has an existing 4.16-kilovolt (kV) medium-voltage power distribution system that is powered externally from dual 115 kV PG&E service connections at two substations on the west and east sides of the Facility. The distribution system is also powered by existing standby diesel generators installed within the Facility, located to the west of the substation, and from power generated at the cogeneration facility.

The Project includes a new 4.16 kV power supply system to power the dewatering facility building, as well as a new 480-volt (V) power supply system for the DS storage and pumping (pers. com., 2019). To estimate the power demand for the Project, it was assumed that the power demand would be similar to the dewatering facility under construction for Orange County Sanitation District (OCSD) (pers. com., 2019). The OCSD facility has a connected load of about 3,000 horsepower (hp), equivalent to 2.2 megawatts (MW). Actual power draw will be less than the connected load since not all equipment would operate simultaneously. In addition, power use would increase over time as flows and loads increase. Initially, power draw could be about 50 percent of the connected loads. Over time, the power draw may increase to a maximum 75 percent of the connected loads once design capacity is reached. Based on this, the Project would require approximately 14,454 MWh of energy per year once design capacity is reached in 2040. Energy use from employee trips associated with the nine new staff at the facility and truck trips associated with the removal of dewatered sludge cake would be minimal.

The increased usage of electrical power would tend to conflict with goals and polices of the City's General Plan described above, related to reducing energy consumption (Goal MS-14). Although the Project would increase energy usage, converting the current biosolids processes to an enclosed mechanized drying method is necessary to meet one of the main goals and objectives of Plant Master Plan, related to odor reduction. The goals and objectives are described in Section 2.5 of the Project Description. Given the Project objectives, the energy usage would not be considered an unnecessary or wasteful use pursuant to the General Plan's goals and policies. As the Project would not result in a wasteful, inefficient, and unnecessary use of energy and would not conflict with applicable plans and policies that promote energy conservation, the Project's energy use during operation would constitute a less-than-significant impact.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.3.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR would result. **Same Impact as Approved Project. (Less than Significant)**

References

City of San José, 2011. Envision San José 2040 General Plan. Adopted November 1, 2011, Amended February 27, 2018.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

Hannon et al., 1978, Energy and Labor in the Construction Sector. Article in Science Magazine. November 24, 1978.

Personal communication, Michael Walkowiak, Brown & Caldwell, Managing Engineer, email correspondence on April 15, 2019.

3.7 Geology and Soils

3.7.1 Setting

A preliminary geotechnical investigation was prepared for the Project by Fugro on May 16, 2017, and is contained in **Appendix H**.

The nature, scale, and timing of the Project have not changed in a manner that would further exacerbate existing geologic and seismic hazards at the Project site. While the footprint of the Project site has changed as shown in Figure 2-4 in Chapter 2, Project Description, the revised footprint would not intersect any additional known faults, or unstable or expansive soils. Setting discussions from the certified Plant Master Plan EIR for this resource area are therefore applicable to the entire Project area.

Alquist-Priolo Earthquake Fault Zoning

Accounting for the wide range of possible earthquake sources and for multi-fault ruptures, it is estimated that the Bay Area as a whole has a 72 percent chance of experiencing an earthquake of magnitude 6.7 or higher before 2045. According to a recent forecast published by the U.S. Geological Survey, the individual faults posing the greatest threat to the Bay Area are the Hayward-Rodger's Creek fault and the San Andreas fault. Other faults capable of producing significant earthquakes in the Bay Area include the Calaveras, Concord–Green Valley, Marsh Creek–Greenville, and the San Gregorio faults. The nearest mapped fault with known activity in the last 11,000 years is the Hayward fault zone, located approximately 3.9 miles east of the Facility (California Geological Survey, 2004). No new faults zoned under the Alquist-Priolo Earthquake Fault Zoning Act, or any other Holocene-active faults pass through the Project site.

Seismic Ground Shaking and Related Ground Failure

The California Geologic Survey is required to identify and map areas prone to earthquake hazards, known as zones of required investigation. The Project is within a liquefaction zone of required investigation (California Geological Survey, 2004). Strong seismic shaking could occur as a result of seismic activity along any of the faults noted above and trigger liquefaction in the Project area. As required for zones of required investigation, a Geotechnical Investigation was prepared for the Project. The Geotechnical Investigation determined that the subsurface conditions at the Project site are similar to other locations around the Facility: a layer of surficial fill overlies buried slough deposits (soft organic clays containing varying amounts of sand and gravel) and alluvial sands, below which are inter-layered clays, sands, and gravels (Fugro, 2017).

Paleontological Resources

The Project site overlies young Holocene-age geologic units. Beneath a cap of artificial fill lies deposits of mud and silt associated with the present-day bay estuary (bay mud) and the distal edges of alluvial fans (U.S. Geological Survey, 1999). These types of geologic deposits are too young (i.e., less than 5,000 years old) to have fossilized the remains of organisms, or to have preserved vertebrate fossils. While the bay mud may contain a variety of marine invertebrate

remains and organic matter (mollusks, clams, foraminifera, microorganisms, etc.), such remains are not fossilized, are likely to exist in other Bay Mud deposits all around the Bay Area, and would not be considered significant or unique. For these reasons, in accordance with Society of Vertebrate Paleontology standards, the paleontological potential of the site is low.

3.7.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified potentially significant but mitigable impacts related to the Project's potential to directly or indirectly destroy a unique geological feature or paleontological resource.

- The Plant Master Plan EIR identified less-than-significant impacts related to the Project causing a risk of loss, injury, or death due to placement on an unstable geologic unit or expansive soil, and less-than-significant impacts for the risk of loss, injury, or death related to seismic-related ground failure, including liquefaction.

- The Plant Master Plan EIR identified no impact related to risk of loss, injury, or death related to the rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. The Plant Master Plan EIR identified no impact related to soils incapable of adequately supporting the use of septic tanks, no impact related to risk of loss, injury, or death related to landslides, and no impact related to substantial soil erosion or loss of topsoil.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
VII. GEOLOGY AND SOILS — Would the project:					
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.	☐	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒	☐
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 off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐

Issues (and Supporting Information Sources):	New Potentially Significant Impact	New Less Than Significant with Mitigation Incorporation	New Less Than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒	☐

Discussion

a.i) **Construction and Operation**

The Plant Master Plan boundary area lies within a region of California that contains many active and potentially active faults and is considered an area of high seismic activity. No faults zoned under the Alquist-Priolo Earthquake Fault Zoning Act, or any other Holocene-active faults pass through the Project site. The only mapped fault within the Plant Master Plan boundary is the concealed Quaternary age Silver Creek Fault, located approximately 0.5 miles east of the Project site. The Fault is buried beneath hundreds of feet of mud and sediment and the probability of rupture on the fault is remote. While it is possible that surface rupture could occur outside of these zones, the risk of occurrence is not substantial. Therefore, construction and operation of the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

a.ii, iii) **Construction and Operation**

As noted above, the Plant Master Plan boundary area is located within a seismically active region. As a result, the Plant Master Plan components, as well as the Project (including the proposed dewatering facility building, DS storage tanks, pipelines, and various other Project features), could be subject to strong seismic ground shaking, seismic failure, or liquefaction during an earthquake. Based on the characteristics of underlying materials described in Section 3.7.1, the preliminary geotechnical investigation conducted for the Project identified the extent of settlement that could occur at the site during a large earthquake and provided feasible engineering recommendations to remedy potentially adverse soil and seismic conditions, in addition to providing the necessary soil and foundation information required by the structural engineer designing the building (Fugro, 2017). The Geotechnical Investigation recommendations include the use of flexible piping connections, the design of the building foundation and retaining wall to accommodate lateral earthquake loading, and the compaction of fill to accepted engineering standards. The Project would be designed in accordance with the Geotechnical Investigation recommendations and would be required to incorporate

standard engineering and construction techniques related to seismicity, in accordance with the requirements of the California Building Code. Adherence to these recommendations and requirements would minimize potential impacts of strong seismic ground shaking, seismic-related ground failure, and liquefaction on site during construction and operation of the Project.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

a.iv) **Construction and Operation**

All of the Project sites have limited topographic relief, with elevations spanning a differential of less than 10 feet (Santa Clara County, 2018). Therefore, potential for landslides on the sites, including seismically induced landslides, during construction and operation is considered remote.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

b) **Construction**

Project construction would involve construction staging, as well as ground disturbance during on site grading, excavation and trenching. In the event of a rain storm, erosion on site could occur, with sediment from the various Project component sites (as shown on Figure 2-4 in Chapter 2, Project Description) becoming entrained in stormwater runoff from these locations. However, potential for erosion and loss of sediment from the site during construction would be minimized via adherence to applicable permitting requirements and implementation of best management practices (BMPs), as discussed in greater detail for checklist item c) in Section 3.10, Hydrology and Water Quality.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

Operation

Project operations such as dewatered cake off haul and facility maintenance are not expected to result in erosion or loss of topsoil. The finished Project components would either be buried underground (e.g., pipelines) or would include paved surfaces, which would not be subject to substantial erosion or topsoil loss, as there would be no excavation or grading associated with Project operations.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

c) **Construction**

The potential for seismic-related ground failure, including liquefaction, and landslides for the Project are discussed above under a.iii) and a.iv). Soils at the site are not considered collapsible due to the depositional environment of the sediments (collapsible soils are usually deposited in arid climates). Ground subsidence in response to groundwater withdrawal has occurred in the Santa Clara Valley historically; however, the Santa Clara Valley Water District now actively manages groundwater levels in the area such that subsidence is limited (Santa Clara Valley Water District, 2016). Therefore, the Project would not contribute to subsidence. Lateral spreading could occur during construction excavation if a liquefiable layer is present in the subsurface; however, graded areas would be required to comply with California Occupational Safety and Health, which would limit the potential for lateral spreading by sloping and shoring excavated areas. Compliance with these state standards, in addition to measures in the Geotechnical Investigation, would reduce the potential hazard from unstable soils, including lateral spreading, subsidence, or liquefaction.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

Project operations such as dewatered cake off haul and facility maintenance are not expected to cause lateral spreading, subsidence, or liquefaction. The finished Project components would either be buried underground (e.g., pipelines) or would include paved surfaces, which would not be expected to cause lateral spreading, subsidence, or liquefaction, as there would be no excavation associated with Project operations.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

d) **Construction and Operation**

Expansive soils can damage overlying structures over time through periods of wetting and drying. Although native soils underlying the Project area have high shrink-swell potential, this potential is limited due to the placement of fill on the sites, where the fill is anticipated to have limited shrink-swell potential (Brown & Caldwell, 2018). Additionally, adherence to standard engineering and construction techniques in

accordance with the requirements of the California Building Code, as well as the recommendations in the Geotechnical Investigation, would further minimize potential effects of expansive soils on the Project site, as the California Building Code includes structural design requirements that mitigate the hazard posed by expansive soils. The Geotechnical Investigation recommendations regarding compaction of fill material, supporting structures on deepened footings, excavation and replacement of expansive materials with nonexpansive material, construction drilled piers and grade beams, and chemical soil treatment would also reduce the potential damage resulting from expansive soils. With compliance with applicable construction requirements in the California Building Code that require application of design criteria from the geotechnical engineer or engineering geologist, and implementation of measures identified in the Geotechnical Investigation, this impact would be less than significant during construction and operation.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

e) **Construction and Operation**

The Project would not utilize septic systems or other alternative disposal systems for the disposal of wastewater. This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

f) **Construction**

While the paleontological sensitivity of the units underlying the Project site is low, there is a remote possibility that fossils may nevertheless be discovered during excavations associated with the Project. Because the significance of such fossils would be unknown until examined by a qualified paleontologist, such an event represents a potentially significant impact on paleontological resources.

If any fossils are discovered during ground disturbing activities, implementation of the mitigation measure from the Plant Master Plan EIR, as included below, would reduce this impact.

Mitigation Measure CUL-2: Inadvertent Discovery of Paleontological Resources.

If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find and the contractor shall notify ESD personnel and the PBCE Senior Environmental Planner. ESD or its contractor shall retain a qualified paleontologist to inspect the findings within 24 hours of discovery to assess the nature and importance of the find and, if necessary, develop appropriate

treatment measures in conformance with Society of Vertebrate Paleontology standards, and in consultation with the PBCE Senior Environmental Planner.

With implementation of the above measure, impacts on paleontological resources would be less than significant.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

Operation

Project operations such as dewatered cake off haul and facility maintenance are not expected to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, as there would be no excavation associated with Project operations.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.7.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

References

Brown & Caldwell, 2018. Digested Sludge Dewatering Facility Project Definition Report. October 8, 2018.

California Geological Survey, Seismic Hazard Zones, Milpitas Quadrangle, Official Map. Released October 19, 2004.

California Geological Survey, Special Studies Zone, Milpitas, Revised Official Map. Effective January 1, 1982.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

Field, E.H., and 2014 Working Group on California Earthquake Probabilities, 2015, UCERF3: A new earthquake forecast for California's complex fault system: U.S. Geological Survey 2015–3009, 6 p., http://dx.doi.org/10.3133/fs20153009.

Fugro, 2017. Preliminary Geotechnical Feasibility Study, Proposed Digested Sludge Dewatering Facility, San Jose-Santa Clara Regional Wastewater Facility, San Jose, California. May 16, 2017.

Santa Clara County, Discover GIS SCC Map, available at https://www.sccgov.org/sites/gis/SCCMap/Pages/home.aspx. Accessed April 11, 2019.

Santa Clara Valley Water District, 2016. 2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins (GWMP), November 22, 2016.

Society of Vertebrate Paleontology (SVP). Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources: Standard Guidelines, Society of Vertebrate Paleontology News Bulletin, Vol. 163, p. 22-27. 1995.

U.S. Geological Survey, 1999. Preliminary Geologic Description of the San Jose 30 X 60 Minute Quadrangle. California. 1999.

3.8 Greenhouse Gas Emissions

3.8.1 Setting

The environmental and regulatory settings relevant to greenhouse gases (GHGs) have not appreciably changed since the certification of the Plant Master Plan EIR. With regard to impacts from GHGs, both the BAAQMD and California Air Pollution Control Officers Association (CAPCOA) consider GHG impacts to be exclusively cumulative impacts; therefore, assessment of significance relative to the certified Plant Master Plan EIR is based on a determination of whether the GHG emissions from the Project represent a cumulatively considerable contribution to the global atmosphere.

In 2011, the City adopted the *Envision San José 2040 General Plan* (2040 General Plan). As part of the General Plan update, the City adopted a *Greenhouse Gas Reduction Strategy for the City of San José* (GHG Reduction Strategy) in accordance with the BAAQMD CEQA Guidelines and CEQA Guidelines Section 15183.5 (City of San Jose, 2011). The GHG Reduction Strategy identifies policies and measures to reduce GHG generation within the City. Relevant policies include:

> *MS-5.6:* Enhance the construction and demolition debris recycling program to increase diversion from the building sector.
>
> *MS-6.3:* Encourage the use of locally extracted, manufactured or recycled and reused materials including construction materials and compost.
>
> *MS-6.12:* Promote use of recycled materials, including reuse of existing building shells/ elements, as part of new construction or renovations.

The City's GHG Reduction Strategy was approved as part of the City's 2040 General Plan and analyzed in the 2040 General Plan Integrated Final Program Environmental Impact Report (2040 General Plan PEIR) (certified in November 2011) and updated in the Supplemental PEIR (certified in December 2015). The City of San José prepared a Supplemental PEIR to supplement the information included in the 2040 General Plan PEIR regarding GHG emissions and global climate change. The Supplemental PEIR reevaluated the significance of projected GHG emissions associated with existing and planned land uses in San José and the consistency of the General Plan and GHG Reduction Strategy with the California Climate Change Scoping Plan and other plans (City of San Jose, 2015). Compliance with the City's 2040 General Plan and GHG Reduction Strategy would ensure that the Plant Master Plan that was evaluated in the Plant Master Plan EIR is consistent with the State's AB32 goals.

3.8.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified less than significant impacts for both project- and program-level improvements consistent with the General Plan GHG Reduction Strategy up to the year 2020. However, subsequent to year 2020, the project- and program-level improvements analyzed in the Plant Master Plan EIR were found to make a cumulatively considerable contribution to City-wide emissions, which were determined by the 2040 General Plan PEIR to be significant and unavoidable by 2035, even with implementation of the measures contained in the GHG Reduction Strategy. The conclusions in the 2040 General

Plan PEIR have not changed based upon the supplemental information on GHG emissions presented in the Supplemental PEIR.

- The Plant Master Plan EIR identified significant and unavoidable impacts for projects implemented beyond 2020 and identified mitigation measures to reduce the severity of this impact from projects proposed at the Facility.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
VIII. GREENHOUSE GAS EMISSIONS — Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒	☐

Discussion

a) GHG emissions worldwide cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate sufficient GHG emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects in San José, the entire state of California, across the nation, and around the world contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts.

Project-related GHG emissions would occur from direct as well as indirect sources. Direct sources include the combustion of diesel fuel to provide power for the operation of various construction equipment, fuel combusted in vehicles needed for construction worker to commute to the Project site, trucks for the delivery of construction material, and hauling of material. Indirect GHG emissions are generated primarily during the operational phase from the use of electricity to power the dewatering facility and the DS pumps.

Construction

Construction GHG emissions associated with the Project were estimated using the California Emissions Estimator Model (CalEEMod 2016, version 3.2) along with Project-specific information such as construction schedule, the types, number and size (horsepower rating) of construction equipment used during each construction phase, daily usage in terms of hours per day, the number days each piece of equipment would be used, the number of construction worker commute trips, and the number of truck trips for material delivery and hauling. Appendix D contains the data and assumptions used to estimate the construction-phase GHG emissions that would be associated with the Project. Default CalEEMod assumptions were used when Project-specific data was not available. Short-term construction would also result in GHG emissions associated with use of water for dust suppression. It is estimated that approximately 1,000 gallons of water would be used daily on an average for soil compaction and dust suppression. Water use could be as high as 10,000 gallons per day when soil is being imported to raise the site

(pers. com., 2019). Construction contractors would either use recycled water from the adjacent SVAWPC or from nearby fire hydrants with a flow meter rented from San Jose Water. Indirect short-term electricity usage-related GHG emissions associated with water use for construction activities were estimated using use factors established by the California Energy Commission (CEC) and emission rate from PG&E and the U.S. Environmental Protection Agency (USEPA) (CEC, 2005; PG&E, 2018; USEPA, 2018).

The Plant Master Plan EIR identified approximately 1,157.1 metric tons CO_2e[26] would be generated during construction of B2-P1 (Dewatering Phase 1). **Table 3.8-1** shows the GHG emissions estimated to be generated by construction activities that would be associated with the Project. As shown in the table, Project construction would generate a total of approximately 2,044 metric tons CO_2e over the 36-month construction period (which includes the mobilization and site preparation; grading, excavation and piping; facilities construction; and paving, finishing, testing and startup) from construction equipment and vehicle trips. Indirect emissions from water use would account for another 0.4 metric tons of CO_2e over the construction period, resulting in a total of 2,044.4 metric tons of CO_2e. When amortized over a project life of 30 years[27], annual amortized construction emissions would be 68.1 metric tons CO_2e. These emissions are considered along with the operational emissions discussed below. Refer to Appendix D for details on the calculations and assumptions used to estimate construction GHG emissions.

TABLE 3.8-1
TOTAL ESTIMATED GHG EMISSIONS FROM CONSTRUCTION

Source	GHG Emissions (metric tons) CO_2e
Direct emissions from construction equipment and vehicle trips	
2020	406.6
2021	890.6
2022	625.8
2023	120.5
Total GHG Emissions from construction equipment and vehicle trips	2,044
Indirect emissions from water use for dust suppression	0.4
Total GHG Emissions	**2,044.4**

SOURCE: Appendix D.

26 Because these GHGs have different warming potentials (i.e., the amount of heat trapped in the atmosphere by a certain mass of the gas), and carbon dioxide (CO_2) is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2-equivalent (CO_2e) emissions.

27 BAAQMD does not have adopted thresholds of significance for construction-related GHG emissions. Therefore, the South Coast Air Quality Management District's (SCAQMD) recommendations have been used to evaluate Project construction emissions. Because impacts from construction activities occur over a relatively short-term period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. Therefore, SCAQMD recommends that construction emissions be amortized over the project lifetime, and be considered as part of the operational emissions inventory so that GHG reduction measures would address construction GHG emissions as part of the operational GHG reduction strategies (SCAQMD, 2008).

The BAAQMD does not have adopted significance thresholds for construction-related GHG emissions. However, it recommends that GHG emissions that would occur during construction be quantified and disclosed, and a determination made on the significance of the impacts in relation to meeting AB 32 GHG reduction goals. The City has established a GHG Reduction Strategy to meet the recommended considerations outlined in CEQA Guidelines Section 15064.4 and the recent standards for "qualified plans" as set forth by BAAQMD. The GHG impact analysis focuses on the Project's conformance with the City's GHG Reduction Strategy as discussed below.

Operation

The Plant Master Plan EIR identified that the total estimated annual operation and maintenance emissions that would be associated with the project-level Facility improvements, including the B2-P1 (Dewatering Phase 1), would be approximately 2,991 metric tons CO_2e. Once the Project is operational, GHG emissions would be generated indirectly from the use of electricity. The Facility has an existing 4.16-kilovolt (kV) medium-voltage power distribution system that is powered externally from dual 115 kV PG&E service connections at two substations on the west and east sides of the Facility. The distribution system is also powered by existing standby diesel generators installed within the Facility, located to the west of the substation, and from power generated at the cogeneration facility.

The Project includes a new 4.16 kV power supply system to power the dewatering facility building, as well as a new 480-volt (V) power supply system for the DS storage and pumping.

To estimate the power demand for the Project, it was assumed that the power demand would be similar to the dewatering facility under construction for Orange County Sanitation District (OCSD). The OCSD facility has a connected load of about 3,000 horsepower (hp) (2,200 kilowatts [kW] or 2.2 megawatts [MW]). Actual power draw for the Project would be less than the connected load since not all equipment will operate simultaneously and at full capacity. In addition, power use would increase over time as flows and loads increase at the dewatering facility. Initially, power draw could be about 50 percent of the connected loads. Over time, the power draw may increase to a maximum 75 percent of the connected loads once design capacity is reached. Based on this, the Project would require approximately 14,454 megawatts per hour (MWh) of energy per year once design capacity is reached in 2040, assuming 75 percent of the connected loads. Indirect GHG emissions that would be generated by the Project's use of electricity from PG&E's electrical grid were estimated using an emission factor of 294 pounds of CO_2 per MWh based on data for 2016 (PG&E, 2018). Nitrous oxide (N_2O) and methane (CH_4) emission factors for electricity were obtained from the USEPA (USEPA, 2018). GHG emissions in the form of CO_2e were calculated by multiplying the N_2O and CH_4 emissions by their respective global warming potential, and then adding the CO_2, N_2O, and CH_4 emissions.

Project operations would also generate direct GHG emissions from employee trips to the dewatering facility and truck trips to remove the dewatered sludge. It is estimated that

nine new employees would be needed for the dewatering facility to operate 24 hours a day, seven days a week. On an average, 34 truck trips would be needed daily for the dewatered sludge cake to be removed, generating 68 daily trips. Emissions from these trips were derived from the CalEEMod run and added to the GHG inventory of the project as shown in **Table 3.8-2** below.

TABLE 3.8-2
GHG EMISSIONS FROM PROJECT OPERATIONS

Operational Sources	Annual CO_2e Emissions (metric tons)
On-road Vehicle Trips	464.5
Indirect Electrical Grid Emissions	1,940.8
30-year amortized construction emissions	68.1
Total	**2,473**

SOURCE: Appendix D.

The Plant Master Plan EIR identified that the operational emissions combined with the annual amortized construction emissions would be approximately 3,226.3 metric tons CO_2e. As shown in the above table, Project operational emissions would below the operational emissions included in the Plant Master Plan EIR, but would exceed the BAAQMD's significance threshold of 1,100 metric tons CO_2e per year. Because the Project's operational GHG emissions combined with the 30-year amortized construction emissions, described above under construction, would exceed the BAAQMD significance threshold for operation, the Project would lead to a significant impact on the environment. The Plant Master Plan EIR also identified significant impacts for projects implemented beyond 2020 and identified Mitigation Measure GHG-1a to reduce the severity of this impact from projects proposed at the Facility.

Measures applicable to the Project from Mitigation Measure GHG-1a of the Plant Master Plan EIR are listed below. This mitigation measure includes an update to remove those portions specific to the economic development projects. The adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure GHG-1a: GHG Reduction Strategy Measures.

The following measures identified in the GHG Reduction Strategy shall be implemented:

- An evaluation of post 2020 operational energy efficiency and associated design measures shall be completed for energy-intensive Facility improvements, such as the mechanical drying improvements.
- The proposed number of parking spaces would not exceed requirements in the Municipal Code.

While the recommended mitigation measures would minimize potential impacts, the emissions associated with the Project would still contribute to an expected long-term

significant and unavoidable impact identified in the City's 2040 General Plan PEIR. Therefore, it is reasonable to assume that emissions from long-term (i.e., post 2020) operation of the Project would have a significant effect on the environment, resulting in a significant unavoidable impact.

Therefore, this impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.8.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Significant Unavoidable)**

b) The Envision San José 2040 General Plan includes a GHG Reduction Strategy that identifies specific policies incorporated within the General Plan which will reduce GHG emissions, and provides an analysis of the effectiveness of those policies, with the intent that future projects that conform to the Envision General Plan may make use of consistency with the GHG Reduction Strategy in lieu of performing individual project analyses, as per the BAAQMD CEQA Guidelines and CEQA Guidelines Section 15183.5. The GHG reduction actions from the General Plan outlined in GHG Reduction Strategy fall into two categories: specific actions that the City is taking to reduce GHGs, and measures that will be implemented on a project-by-project basis through implementation of the City's General Plan land use Diagram and land use policies to help reduce GHGs resulting from those projects.

The Project would involve process improvements to existing facilities and as part of the Plant Master Plan, serve to help implement one of the City-sponsored initiatives in the GHG Reduction Strategy (also described in the City's Green Vision) that includes beneficially reusing 100 percent of the City's wastewater (GV Goal#6), a goal planned to be accomplished by rebuilding of the City's Water Pollution Control Plant. The Project would not involve changes in land uses as envisioned within the General Plan and would be consistent with the Land Use/Transportation Diagram. Buildings on the Project site would be subject to the City's Green Building Ordinance as necessary to achieve operational emissions reductions consistent with the GHG Strategy. The 2040 General Plan includes a number of actions to increase the use of recycled materials used during construction, and reduce construction and demolition debris. To ensure that the Project would not conflict with the applicable GHG reduction policies of the 2040 General Plan, the Project would comply with applicable General Plan Policies for reduction of GHG emissions, including MS-5.6 and MS-6.3.

However, Project consistency with the City's GHG Reduction Strategy can be used as a proxy for consistency with the State's AB 32 GHG emissions goals only up to the year 2020. The Project would increase energy consumption both due to the more energy intensive dewatering and drying processes and pumping of larger flows and loads through the Facility, driven by projected increases in the service area population.

Given that the Project would be operational beyond 2020, and given the increase in GHG emissions above the BAAQMD operational threshold of 1,100 metric tons CO_2e per year (as described under item a) above), according to the GHG Reduction Strategy, the Project

would result in a cumulatively considerable contribution to City-wide emissions that were determined by the 2040 General Plan PEIR to be significant and unavoidable by 2035 even with implementation of the measures contained in the GHG Reduction Strategy (City of San Jose, 2011).

Therefore, based on a review of anticipated Project emissions in comparison to the City's GHG Reduction Strategy and the BAAQMD CEQA Guidelines, the Project would not be consistent with the State's AB 32 GHG emissions reduction goals beyond 2020. This impact would be the same as identified in the Plant Master Plan EIR, and the Project would not result in any new or more significant impacts compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Significant Unavoidable)**

References

California Energy Commission (CEC), 2005. California's Water – Energy Relationship Prepared in Support of the 2005 Integrated Energy Policy Report Proceeding, Final Staff Report, (CEC-700-2005-011-SF). Table C-6, page 118. November 2005.

City of San José, 2011. Envision San José 2040 General Plan. Adopted November 1, 2011, Amended February 27, 2018.

City of San José. 2015. Envision San José 2040 General Plan. Integrated Final Program Environmental Impact Report for the Envision San José 2040 General Plan. November 2011; City of San José. Supplemental Environmental Impact Report for the Envision San José 2040 General Plan. December 2015.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San Jose, 2015. Greenhouse Gas Reduction Strategy for the City of San Jose, June 2011, updated December 2015. Available at http://www.sanjoseca.gov/DocumentCenter/View/9388, Accessed March 28, 2019.

Pacific Gas and Electric Company (PG&E), 2018. Currents – Independent Registry Confirms Record Low Carbon Emissions for PG&E, posted on March 26, 2018. Available at: https://www.pgecurrents.com/2018/03/26/independent-registry-confirms-record-low-carbon-emissions-for-pge/, accessed April 12, 2019.

Personal communication, Michael Walkowiak, Brown & Caldwell, Managing Engineer, email correspondence on April 10 2019.

USEPA, 2018. Emissions and Generation Resource Integrated Database (eGRID) Summary Tables - Subregion Output Emission Rates for 2016. updated February 15, 2018. Available at:: https://www.epa.gov/sites/production/files/2018-02/documents/egrid2016_summary tables.pdf. Accessed April 5, 2019.

3.9 Hazards and Hazardous Materials

3.9.1 Setting

The environmental setting relevant to Hazards and Hazardous Materials for the Project site has not changed in comparison to that described in the certified Plant Master Plan EIR. While the footprint of the Project site has changed as shown in Figure 2-4 in Chapter 2, Project Description, the revised footprint would not intersect any additional known hazardous materials sites. Setting discussions from the certified EIR for this resource area are therefore applicable to the entire Project area.

Hazardous Material Sites

The Facility is located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and documented releases of hazardous materials have been identified within and adjacent to the Facility. A database search of the California State Water Resources Control Board (SWRCB) GeoTracker database and the California Department of Toxic Substances Control (DTSC) EnviroStor database was performed to identify any new hazardous materials sites or uses at the Project site, in the Facility, and within a search radius of up to one mile from the Facility. No additional hazardous materials sites or other known hazardous materials spills were identified (SWRCB, 2019; DTSC, 2019).

Emergency Response Plan

The Santa Clara County Operational Area Emergency Operations Plan establishes emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of response in the event of an emergency. This plan does not designate specific emergency response or evacuation routes within or surrounding the Facility. The Facility has developed a Contingency Plan for Operation Under Emergency Conditions (Contingency Plan) as required by the Facility's NPDES permit. This Contingency Plan outlines actions required at the Facility in response to extreme flooding, earthquakes, fire, and accidental release of hazardous materials. In the case of an ammonia, chlorine, or sodium bisulfate release, should nonessential Facility personnel need to be evacuated, the Contingency Plan indicates personnel should proceed south along Zanker Road and should not proceed on Los Esteros Road.

3.9.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified potentially significant but mitigable to less-than-significant impacts for accidental release of hazardous materials in the soil and groundwater into the environment, location on a hazardous materials site, and accident conditions related to rupture of subsurface utilities. Mitigation applied to these potential impacts included a pre-construction hazardous materials assessment, implementation of a health and safety plan, implementation of a soil and groundwater management plan, and coordination with regulatory agencies and utility providers.

- The Plant Master Plan EIR identified less-than-significant impacts for potential hazards associated with the accidental release of hazardous building and construction materials, transport or use of hazardous materials, and potential exposure to fires.
- The Plant Master Plan EIR identified no impact for potential public or private airport related safety hazards, for emission or handling of hazardous substances within a quarter mile of a school, or potential interference with emergency plans.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
IX. HAZARDS AND HAZARDOUS MATERIALS — Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒	☐

Discussion

a, b, d) **Construction**

Project construction activities for all Project components shown on Figure 2-4 in Chapter 2, Project Description, would involve the use of fuels, lubricants and solvents. Storage and use of these construction items at the Project site could result in the accidental release of small quantities of hazardous materials, which could result in exposures of construction workers to these materials and/or degrade soil, groundwater and surface water near the Project site. This impact would be potentially significant. Project construction would require implementation of storm water best management practices (BMPs) and would pump all groundwater from excavated areas either to the

Emergency Basin Overflow Structure (EBOS) or to the existing interceptors to be routed to the Facility Headworks for treatment, as shown on Figure 2-4 in Chapter 2, Project Description. This would minimize the risk of a hazardous materials release during construction activities, as further discussed under Section 3.10, Hydrology and Water Quality. With routing of groundwater into the Headworks facilities and implementation of BMPs, potential adverse effects related to reasonably foreseeable upset and accident conditions involving the release of hazardous construction chemicals into the environment would not be more significant than those identified in the Plant Master Plan EIR.

The potential exists during Project construction activities, including grading and excavation, that subsurface and overhead utilities (e.g., a high-pressure natural gas line or electrical line) might be inadvertently damaged. Such damage to utilities could fatally injure construction workers, damage equipment, and initiate fire. Because of the greater risk involved in excavating around high-pressure gas lines and the potential for catastrophic results, this impact would be considered a significant hazard to the public. Utility clearance is part of the standard construction process for projects at the Facility by requiring advance coordination with utility providers for protection of subsurface utilities and protection for utilities during construction, including implementation of Mitigation Measure UT-6, further described in Section 3.19, Utilities and Service Systems. With implementation of this utility clearance process and mitigation measure, the Project would not result in any new or more significant impacts to utilities during construction compared to those identified in the Plant Master Plan EIR.

Project construction would include grading, excavation, and the construction a new facility. No facilities would be demolished; for this reason, the likelihood of release of hazardous building materials such as lead-based paint or asbestos is very low and would not result in any new or substantially greater significant impacts than those previously identified in the Plant Master Plan EIR.

As noted in Section 3.10.2, the Facility is located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No additional hazardous materials sites or other known hazardous materials spills were identified (SWRCB, 2019; DTSC, 2019). The potential exists for workers to encounter hazardous materials in the soil and groundwater during Project construction because the Facility is included on a list of hazardous material sites. Any hazardous materials encountered in excavated soil or groundwater during Project construction could result in a release to the environment, which could potentially expose construction workers, the public, and other Facility personnel to hazardous materials and chemical vapors. For these reasons, the impact related to exposure to hazardous materials in soil and groundwater during construction of the Project at either DS storage and pump station site and a reasonably foreseeable release of hazardous materials would be potentially significant. However, implementation of mitigation measures identified in the Plant Master Plan EIR, and listed below, for the potential upset and release of hazardous materials and the location on a hazardous materials site would minimize potential impacts.

Mitigation Measure HAZ-1a: Pre-Construction Hazardous Materials Assessment.

Prior to construction, ESD or its contractor shall ensure that a limited soil and/or groundwater investigation is performed at proposed construction work areas to characterize soil and groundwater quality. If the results reveal soil and/or groundwater contamination exist in excess of applicable regulatory screening levels (Environmental Screening Levels or California human health screening levels) for the proposed site use, the City shall contact the appropriate regulatory agency (the Santa Clara County Department of Environmental Health [SCCDEH], the Regional Water Quality Control Board [RWQCB], or Department of Toxic Substances Control [DTSC]) as appropriate. ESD or its contractor shall complete subsequent site investigations and/or remedial activities required by the regulatory agency to ensure that residual impact, if any, shall not pose a continuing significant threat to groundwater resources, human health, or the environment.

The results of the pre-construction hazardous materials assessment shall be incorporated into the Site Health and Safety Plan prepared in accordance with **Mitigation Measure HAZ-1b**, below, and the Soil and Groundwater Management Plan prepared in accordance with **Mitigation Measure HAZ-1c**, below, to determine whether: specific soil and groundwater management and disposal procedures for contaminated materials are required; excavated soils are suitable for reuse; and construction worker health and safety procedures for working with contaminated materials are required.

Mitigation Measure HAZ-1b: Health and Safety Plan.

ESD or its contractor shall retain a qualified environmental professional to prepare a site-specific Health and Safety Plan (HASP) in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal/OSHA regulations (8 CCR Title 8, Section 5192). Because anticipated contaminants vary depending upon the location of proposed improvements in the Project area and may vary over time, the HASP shall address site-specific worker health and safety issues during construction. The HASP shall include the following information.

- Results of sampling conducted in accordance with Mitigation Measure HAZ-1a.
- All required measures to protect construction workers and the general public by including engineering controls, monitoring, and security measures to prevent unauthorized entry to the construction areas and to reduce hazards outside of the construction areas. If prescribed contaminant exposure levels are exceeded, personal protective equipment shall be required for workers in accordance with state and federal regulations.
- Required worker health and safety provisions for all workers potentially exposed to contaminated materials, in accordance with state and federal worker safety regulations, and designated qualified individual personnel responsible for implementation of the HASP.
- The contractor shall have a site health and safety supervisor fully trained pursuant to hazardous materials regulations be present during excavation, trenching, or cut and fill operations to monitor for evidence of potential soil contamination, including soil staining, noxious odors, debris or buried storage

containers. The site health and safety supervisor must be capable of evaluating whether hazardous materials encountered constitute an incidental release of a hazardous substance or an emergency spill. The site health and safety supervisor shall implement procedures to be followed in the event of an unanticipated hazardous materials release that may impact health and safety. These procedures shall be in accordance with hazardous waste operations and regulations and specifically include, but are not limited to: 1) immediately stopping work in the vicinity of the unknown hazardous materials release; 2) notifying SCCDEH, RWQCB, or DTSC; and 3) retaining a qualified environmental firm to perform sampling, remediation, and/or disposal.

- Documentation that HASP measures have been implemented during construction.
- Provision that submittal of the HASP to ESD, or any review of the contractor's HASP ESD, shall not be construed as approval of the adequacy of the contractor as a health and safety professional, the contractor's HASP, or any safety measure taken in or near the construction site. The contractor shall be solely and fully responsible for compliance with all laws, rules, and regulations applicable to health and safety during the performance of the construction work.

Mitigation Measure HAZ-1c: Soil and Groundwater Management Plan.

If hazardous materials or contaminated soil and groundwater above regulatory screening levels are identified under the pre-construction hazardous materials assessment, done in accordance with Mitigation Measure HAZ-1a, ESD shall require the construction contractor to prepare and implement a Soil and Groundwater Management Plan that specifies the method for handling and disposal of contaminated soil and groundwater prior to construction.

The Soil and Groundwater Management Plan will establish the sampling and laboratory analysis program which may include the following: analysis of subsurface soil samples within the Project site for total petroleum hydrocarbons (as gasoline, diesel, and waste oil), Title 22 metals, and volatile organic compounds (VOCs) or any other chemicals of concern to evaluate the potential presence of contamination; groundwater samples if subsurface excavations are anticipated to require dewatering; and additional analyses for VOCs and semi-volatile organic compounds (SVOCs) for groundwater samples collected at construction locations within 1,000 feet of adjacent landfills.

The Soil and Groundwater Management Plan shall include all necessary procedures to ensure that excavated materials and fluids generated during construction are stored, managed, and disposed of in a manner that is protective of human health and in accordance with applicable laws and regulations. The Plan shall include the following information.

- Step-by-step procedures for evaluation, handling, stockpiling, storage, testing, and disposal of excavated material, including criteria for reuse and offsite disposal. All excavated materials shall be inspected prior to initial stockpiling, and spoils that are visibly stained and/or have a noticeable odor shall be stockpiled separately to minimize the amount of material that may require special handling. In addition, excavated materials shall be inspected for buried building materials, debris, and evidence of underground storage tanks; if identified, these materials shall be

stockpiled separately and characterized in accordance with landfill disposal requirements. If some of the spoils do not meet the reuse criteria and/or debris is identified, these materials shall be disposed of at a permitted landfill facility.

- Procedures to be implemented if unknown subsurface conditions or contamination are encountered, such as previously unreported tanks, wells, or contaminated soils.
- Procedures for containment, handling and disposal of groundwater generated from construction dewatering, the method to be used to analyze groundwater for hazardous materials likely to be encountered and the appropriate treatment and/or disposal methods.

The Pre-Construction Hazardous Materials Assessment (HAZ-1a), Health and Safety Plan (HAZ-1b), and Soil Management Plan (HAZ-1c) shall be submitted to the PBCE Senior Environmental Planner for approval.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.9.2) and would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

Operation

Following construction, Project operation activities would include daily off-haul of dewatered cake, which would be a Class B biosolid. Transportation of all biosolids to their disposal site would comply with applicable local regulations. The disposal of biosolids is regulated by the federal biosolids rule (40 Code of Federal Regulations Part 503), which identifies allowed uses for different types of biosolids. Class A biosolids, contain virtually no detectible levels of pathogens, and Class B biosolids, which are treated but still contain detectable levels of pathogens. The Facility currently produces Class A biosolids. Class A biosolids can be sent off-site for use as a soil amendment or cement kiln and Class B biosolids can be sent off-site to be disposed of at a composting facility, used for land application, or used for alterative daily cover.

In addition to dewatered cake off-hauling, the emulsion polymer chemical used in the dewatering process would be delivered once per week. All chemicals would be stored in accordance with applicable federal, state, and local regulations (e.g., chemical storage with secondary containment). The City maintains a Hazardous Materials Business Plan for Facility operations, which contains information including but not limited to a hazardous materials inventory and emergency response plans, and which would be updated to reflect changes in the amount of chemicals stored, used, and handled by the dewatering facility. Compliance with these standards would result in less-than-significant impacts related to release of hazardous materials into the environment during Project operations.

This impact would be the same as identified in the Plant Master Plan EIR (as described in Section 3.9.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

c) **Construction and Operation**

There are no schools within 0.25-miles of the Project site. The Project would not be any closer to a school than what was evaluated in the Plant Master Plan EIR. This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.9.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

e) **Construction and Operation**

The nearest airports to the Project site are the Norman Y. Mineta San José International Airport, located approximately four miles south of the Project site, and the Moffett Federal Airfield, located approximately five miles west of the Project site. The Project would not be any closer to an airport than what was evaluated in the Plant Master Plan EIR. This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.9.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

f) **Construction and Operation**

As described above in Section 3.9.1, the Project would follow the emergency Contingency Plan during operation if there is an accidental release of hazardous materials. Project construction would require a one-lane closure of Zanker Road, which could interfere with the use of Zanker Road during evacuation of the Facility, a potentially significant impact. With implementation of **Mitigation Measure TR-1** (further described in Section 3.16 Transportation), notifying Facility personnel of the temporary closure of Zanker Road and instructing personnel to evacuate using Mike Tocce Lane, construction of the Project would not affect evacuation routes and impacts would be less than significant. **New Less than Significant Impact with Mitigation.**

g) **Construction and Operation**

Based upon fire hazard mapping by the CAL FIRE Forest Resource Assessment Program and the Santa Clara County Wildland Urban Fire Interface Map, the Project site is not located within an area identified as a high fire hazard area. Therefore, the Project would have no impact associated with wildfire. The use of construction equipment and the possible temporary on site storage of fuels and/or other flammable construction chemicals could pose an increased fire risk resulting in injury to workers or the public during construction. However, contractors would be required to comply with hazardous materials storage and fire protection regulations, which would minimize potential for fire creation, and ensure that the risk of fires during construction would be less than significant.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in 3.9.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

CAL FIRE, 2019. California Fire Hazard Severity Zone Map Update Project, http://egis.fire.ca.gov/FHSZ/, accessed April 5, 2019.

California Department of Forestry and Fire Protection, Fire and Resource Assessment Program, Fire Hazard Severity Zones in State Responsibility Areas, Santa Clara County, California. November 7, 2007.; California Department of Forestry and Fire Protection, Fire and Resource Assessment Program, Very Fire Hazard Severity Zones in Local Responsibility Areas, Santa Clara County, California. May 2008.

California Department of Toxic Substances Control (DTSC), 2019. EnviroStor Database search, www.envirostor.dtsc.ca.gov/public, accessed March 5, 2019.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

Santa Clara County, 2008, Santa Clara County Operational Area Emergency Operations Plan, March 18, 2008, available online at http://www.sccgov.org/sites/oes/Documents/EOP_Complete.pdf

Santa Clara County Planning Office, Santa Clara County Wildland Urban Interface Fire Area, Adopted February 24, 2009.

San José-Santa Clara Regional Wastewater Facility Environmental Services Division, Contingency Plan for Operation Under Emergency Conditions, December 2015.

State Water Resources Control Board (SWRCB), 2019. GeoTracker Database search, geotracker.waterboards.ca.gov, accessed March 5, 2019.

3.10 Hydrology and Water Quality

3.10.1 Setting

Setting information relevant to hydrology and water quality within the Project area remains the same as discussed in the certified Plant Master Plan EIR. While the footprint of the Project site has changed as shown in Figure 2-4 in Chapter 2, Project Description, the revised footprint would not intersect any additional known hydrologic features. The setting discussions from the certified EIR for this resource area are therefore applicable to the entire Project area.

Stormwater

Under existing conditions, stormwater runoff within and around the Facility is collected and routed into the Facility Headworks for subsequent treatment. The Project includes new stormwater collection facilities that would drain the newly paved areas and route the water to either to the Emergency Basin Overflow Structure (EBOS) or to the existing interceptors to be routed to the Facility Headworks for treatment, as shown on Figure 2-4 in Chapter 2, Project Description.

Groundwater

Site-specific groundwater studies for other Projects at the Facility have encountered groundwater between approximately three to 13 feet below ground surface at the Facility and the surrounding area, including the Project site (Brown & Caldwell, 2018). Installation of the Project components is likely to require dewatering operations because excavations for the pipelines and the dewatering facility building would occur deeper than the local groundwater table.

On May 24, 2016, the Santa Clara Valley Water District adopted Resolution No. 16-51 establishing the Santa Clara Valley Water District as the groundwater sustainability agency for the Santa Clara groundwater subbasin. The *2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins* (GWMP) was adopted on November 22, 2016, and was submitted to the California Department of Water Resources as an alternative to a groundwater sustainability plan on December 21, 2016 (Santa Clara Valley Water District, 2016). The GWMP identifies groundwater recharge areas, water budgets, and sustainability goals, and describes programs and activities to maintain a reliable groundwater supply and protect groundwater quality.

The San Francisco Bay Regional Water Quality Control Board is required by law to address region-wide water quality concerns through the Water Quality Control Plan (Basin Plan). The Basin Plan has been updated to reflect the Basin Plan amendments adopted up through May 7, 2017. The plan establishes beneficial water uses, water quality objectives, and strategies for achieving these objectives. Included in the plan are priorities for the disposal of extracted groundwater during construction, including reclaiming effluents if technically and economically feasible, or discharging effluents to a municipal treatment plant.

Flood Hazards

The Project site is not within a tsunami inundation area and would not be affected by a seiche (California Emergency Management Agency, 2009). FEMA has mapped the entire site within the 100-year coastal floodplain (FEMA Zone AE), as shown in **Figure 3.10-1**. The Project would include placing structures and development in the mapped FEMA 100-year floodplain, although the potential for those structures to impede or redirect flood flows is low. The Project would store potential pollutants. The City has undertaken flood protection planning for the Facility, and in 2016 identified recommendations and guidelines for flood protection for future CIP Projects at the Facility (San José-Santa Clara Regional Wastewater Facility, 2016). The purpose of the Flood Protection Guidelines is to provide the Facility with a set of guidelines to follow in order to adequately protect existing and future planned facilities from potential flooding that could reach the Facility (including sea level rise). Guidelines for both existing and new structures were developed, addressing different categories and subcategories of facilities, such as below grade, at grade, and above grade structures. The recommendations in the Flood Protection Guidelines consider the City's 2040 General Plan language (specifying that the Facility be protected from the 500-year recurrence interval event) as the governing requirement and design basis, as it is the strictest and most closely reflects the national standard for critical facilities used by FEMA (City of San Jose, 2018).

The need for flood protection for the Facility is also heavily dependent on the implementation of the U.S. Army Corps of Engineers Shoreline Levee Project (USACE, 2015). The Flood Protection Guidelines identify two preferred options for overall Facility flood protection, one option to be implemented if the Shoreline Levee Project is not constructed, and one option if the Shoreline Levee Project is constructed.[28]

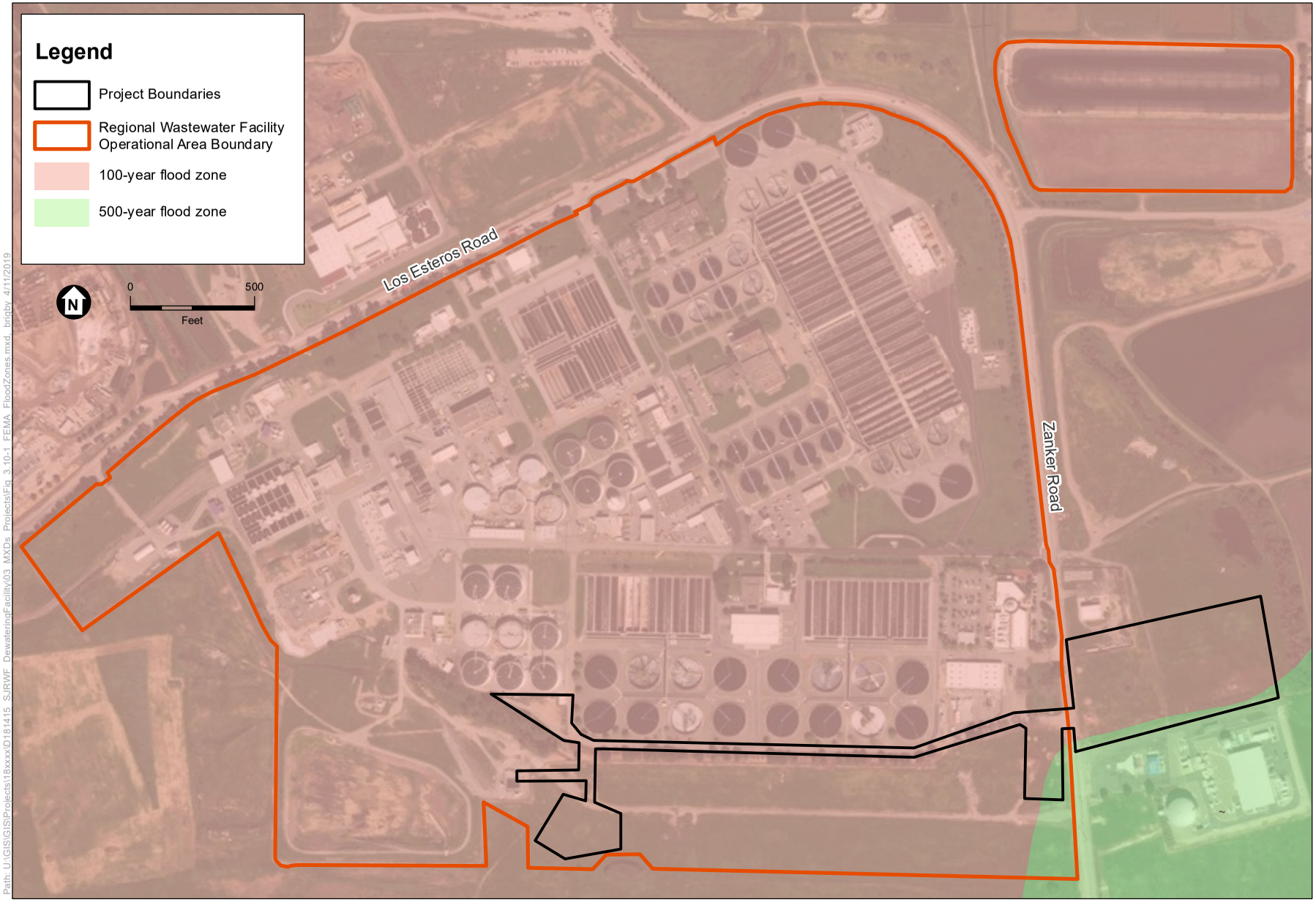
3.10.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified potentially significant but mitigable to less-than-significant impacts for potential for increased scour and erosion from restoration of Pond A18, alteration of pond or downstream water quality due to proposed operations of Pond A18, increased risk of flooding due to runoff associated with increases in impervious area, potential to cause saltwater intrusion of regional groundwater sources, and depletion of groundwater supplies or interference with groundwater recharge.

- The Plant Master Plan EIR identified no impact related to placing housing within a 100-year flood hazard area and exposure of people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow.

- The Plant Master Plan EIR identified less-than-significant impacts for degradation of receiving waters due to generation and emission of construction-related water quality pollutants, reduced water quality downstream of the project site due to storm water discharges during project operations, alteration of downstream/receiving water quality, and increased risks associated with coastal flooding.

[28] Without the Shoreline Levee Project, a system of interconnected engineered berms at elevation 14.6 feet NAVD88 (representing the 500-year flood elevation plus an upper range estimate of sea level rise, without freeboard) around the main Facility operation area is recommended. With the Shoreline Levee Project, a similar system of interconnected engineered berms around the Facility, to an elevation of 13.1 feet NAVD88 (representing the 500-year flood elevation without sea level rise or freeboard), is recommended.



Path: U:\GIS\GIS\Projects\18xxxx\D181415_SJRWF_DewateringFacility\03_MXDs_Projects\Fig_3.10-1_FEMA_FloodZones.mxd, brigby, 4/11/2019

SOURCE: FEMA; ESRI, 2013; ESA, 2019

San José-Santa Clara Regional Wastewater Facility Digested Sludge Dewatering Project

Figure 3.10-1

FEMA Flood Zones

ESA

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
X. HYDROLOGY AND WATER QUALITY — Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒	☐
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 imperious surfaces, in a manner which would:	☐	☐	☐	☒	☐
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒	☐
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	☐	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation?	☐	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒	☐

Discussion

a) **Construction**

Project construction activities involving the use of heavy equipment would not differ from those described in the Plant Master Plan EIR in Section 4.9.3.4. Drainage from the Project site, which is treated at the Facility, eventually discharges into the San Francisco Bay. Therefore, discharges from construction activities could result in the degradation of water quality within the San Francisco Bay, as well as other tributaries that receive stormwater from the Project site – namely, Coyote Creek and Artesian Slough. Degradation of water quality along these waterways could in turn affect beneficial use[29], and could result in exceedance of water quality objectives[30]. The Project would result in the disturbance of approximately ten acres of surface area during construction. As such, construction would

[29] Beneficial uses in this context refers to the resources, services, and qualities of aquatic systems that are the ultimate goals of protecting and achieving high water quality. Examples include municipal and domestic water supply, estuarine habitat, and water contact recreation.

[30] Water quality objectives reflect Clean Water Act requirements and state requirements and are included in the San Francisco Bay Basin Plan.

require the City and/or contractor to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit) through development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify site-specific best management practices (BMPs) designed to control stormwater at the Project site and limit the amount of runoff leaving the construction site. Implementation of the BMPs would minimize the discharge of potential water quality pollutants associated with construction activities.

Groundwater is anticipated to occur within excavations at the Project site. Excavations associated with the Project would require dewatering operations[31] because the excavations would be deeper than the local groundwater table. As discussed in Chapter 2, Project Description, groundwater encountered during excavations would be pumped to settling tanks and then to Facility Headworks for treatment. Implementation of BMPs and treatment of pumped groundwater would reduce impacts related to the degradation of receiving waters due to emission of construction-related water quality pollutants such that impacts would be the same as identified in the Plant Master Plan EIR.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

Project operation would improve existing wastewater treatment processes at the Facility, which would be in continued compliance with the existing the wastewater discharge NPDES permit for the Facility (Order No. R2-2014-0034 and NPDES Permit No. CA0037842). Therefore, the Project would not violate any water quality standards or waste discharge requirements. Water quality pollutants from paved areas would be minimized through the Facility's treatment process (as required by the Facility's NPDES permit).

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2) and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

b) **Construction**

As described in Section 3.10.1, construction activities for installing Project components are likely to require dewatering. Construction activities would not result in an increase of impervious surfaces during construction; thus, the impact to groundwater during

[31] Groundwater dewatering involves the removal of water from the excavation at a rate equal to or greater than the rate of groundwater entering the excavation, which is typically accomplished by the use of surface pumps, submersible pumps, and in some cases, by the use of extraction wells placed at a given distance around the excavation location. Pumps extract the water from the excavation and pipes discharge the water to open ground, tanks or directly to receiving water sources. The purpose of dewatering is to lower the water table to below the depth of excavation to provide access to desired depth.

construction of the Project facilities would be temporary and confined to the vicinity of the excavation. Pumping causes groundwater levels to decline in the area around the excavation, which could interfere with the operation of nearby wells if present. However, the affected groundwater would be from the shallow aquifer, which is not used as a source of groundwater supplies. Further, the influence of pumping (i.e., cone of depression) would not extend far from the excavation and would never be greater than the depth of the excavation.

Because groundwater from the shallow aquifer is not used for any purposes in the vicinity of the Project site, and because the duration of groundwater dewatering would be limited to the construction period, groundwater dewatering would not decrease groundwater supplies such that the Project may impede sustainable groundwater management of the Santa Clara groundwater subbasin. For these reasons, Project construction would not alter the groundwater system such that sustainable groundwater management would be impeded.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

The Project does not include installation of any groundwater supply wells and thus would not lower the local groundwater table through operation of onsite groundwater wells. The area where new impervious surface would be created by the Project is in the "confined' area and not considered a recharge area for the Santa Clara groundwater subbasin (Santa Clara Valley Water District, 2016). For these reasons, Project operations would not alter the groundwater system such that sustainable groundwater management would be impeded, and operation impacts to sustainable groundwater management of the Santa Clara groundwater subbasin would be less than significant.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Less Impact than Approved Project. (Less than Significant)**

c.i) Construction

The Project construction activities would not involve the addition of impervious surfaces. During the construction of the Project, grading and excavation activities could result in exposure of soil to runoff, potentially causing erosion and entrainment of sediment in the runoff. If graded areas and/or soil stockpiles are not managed properly and protected against stormwater flows, high sediment loads in stormwater runoff could clog drainage pipes, cause water pumps to malfunction, or otherwise decrease the carrying capacity of drainage channels, potentially resulting in increases in localized ponding or flooding. However, as discussed above in item a), the City or its contractor would be required to comply with the General Construction Permit. By implementing BMPs required as part

of the SWPPP prepared in compliance with this permit, the effects of Project construction activity on drainage patterns, flooding, and stormwater drainage facilities would be the same as those identified in the Plant Master Plan EIR.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

As described in item a), during operations stormwater from newly paved areas would drain to the EBOS or the existing interceptors for treatment via new stormwater collection infrastructure. All other disturbed areas would be restored to existing conditions. During operations the Project would therefore result in less-than-significant impacts related to erosion and siltation.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

c.ii, iii) **Construction and Operation**

The Project would result in the installation of new impervious surfaces associated with the proposed dewatering facility building and parking area, as well as the DS Storage and Pump Station. Impervious surfaces prevent the infiltration of stormwater into the subsurface. As a result, during a storm event, impervious surfaces can result in a net increase in the volume of water discharged from a site, and can also result in an increase in the peak discharge rate of water from the site. As noted for items a), c.i), and f), all stormwater drainage from the Project area would be routed to the EBOS or the existing interceptors, then to the Facility's existing Headworks for treatment via new stormwater collection facilities designed to capture the additional volume of runoff created by new impervious area. Potential increases in stormwater volume due to Project implementation would be relatively limited due to the limited area of new impervious surfaces that would be installed and could be managed within the Facility's available capacity. Therefore, the Project would not generate runoff in a manner that would result exceed the capacity of existing or planned stormwater drainage systems. While new storm drain lines and pumps are proposed as part of the Project, implementation of Mitigation Measure HYD-1 (Comprehensive Drainage Plan) from the Plant Master Plan EIR, listed below, would ensure that any changes or increases in runoff from the Project sites are adequately characterized and that drainage systems are planned in a manner that avoids significant impacts related to flooding. This mitigation measure has been modified to apply to the Project. The adjusted mitigation measure does not change the original impact conclusion, nor is it considerable different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure HYD-1: Comprehensive Drainage Plan.

The City shall prepare and implement a comprehensive drainage plan for the future plant expansion area, the south and east of the Facility operational area. The plan shall be consistent with the provisions and requirements of the Municipal Regional Permit (NPDES Permit Order R2-2009-0074), as well as with the subsequent policies and guidance set forth by the relevant permittee(s) (e.g., the City of San José). This plan shall incorporate the following elements:

- The storm drain system and treatment capacity shall be designed in a manner to accommodate peak conditions from a design storm. The City requires that the storm drain system have the capacity for a 10-year event; however, the comprehensive drainage plan shall also plan for a 100-year event. The plan need not avoid all ponding and flooding during a 100-year event, but shall consider where water would pool and flow and include measures to avoid draining excess runoff to offsite pumps, to avoid flooding structures, and to avoid the release of untreated sewage during a 100-year runoff event.
- Actions necessary to prevent exceeding Headworks capacity and/or releasing of runoff offsite, as specified in the NPDES requirements, shall be identified and implemented. Such actions may include installation of additional pumping capacity or redirection of runoff to other surface waters (so long as such discharges are in compliance with NPDES requirements).
- Proposed roads (including the Dixon Landing roadway east of the operational area) and recreational trails shall be designed to allow passage of surface water drainages, avoid fill within wetland habitats, and shall incorporate measures to reduce the impact of impervious surfaces on the rate and volume of stormwater runoff. The size and design of culverts, channels, cross drains, boardwalks, and/or bridges (as applicable) shall be determined based on drainage calculations that consider both a 10-year and 100-year storm event.

The drainage plan shall also identify measures to ensure that current rates of groundwater infiltration are not decreased significantly by the increase in impervious area with implementation of proposed PMP land uses to the south and east of the operational area. Where soils are suitable, such measures might include bioswales, infiltration galleries, or other measures that promote stormwater retention and infiltration rather than offsite conveyance.

By preparing and implementing a comprehensive drainage plan through implementation of Mitigation Measure HYD-1, potential impacts would be reduced to less-than-significant.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

c.iv, d) **Construction**

FEMA has mapped the entire site within the 100-year coastal floodplain (FEMA Zone AE), as shown in Figure 3.10-1. Construction activities would be temporary and would not be anticipated to impede or redirect flood flows. Construction activities that involve ground disturbance or bring chemicals to the area, as discussed above in item a), could release pollutants due to Project inundation, however this risk would be reduced by BMPs implemented pursuant to the General Construction Permit. In addition, as discussed in Section 3.9, Hazards and Hazardous Materials, checklist item b), contaminated soil and groundwater would be controlled with implementation of Mitigation Measures HAZ-1a–c.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2) and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

As described above in Section 3.10.1, the Project would include placing structures within the mapped FEMA 100-year floodplain. The potential for those structures to impede or redirect flood flows is low. The increased risks associated with coastal flooding would be reduced through implementation of recommendations from the Flood Protection Guidelines. Recommended flood protection measures that would reduce future flood risk for the Project components include: completing the finished floors of new facilities above the design flood elevation; installing flood walls or barriers; surrounding the Facility or process areas within the Facility with engineered levees or berms built to the elevation required for protection; raising tunnel entrances above flood level; and designing new facilities to accommodate future levels of protection for the planned lifetime of the Facility. Chemicals stored at the dewatering facility building would be protected from accidental release during flooding by the flood protection measures that would be incorporated into Project design. The final Project design would also include specific flood protection measures in accordance with the status of the Shoreline Levee Project. Design of the Project in accordance with the Flood Protection Guidelines would ensure impacts related to pollutant release during inundation would be less than significant.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

e) **Construction**

As discussed in item a), implementation of best management practices and treatment of pumped groundwater would reduce impacts related to the degradation of receiving waters due to generation and emission of construction-related water quality pollutants. As discussed in item b), construction may require dewatering which causes groundwater levels to decline in the area around the excavation, which could interfere with the

operation of nearby wells if present. However, the affected groundwater would be from the shallow aquifer, which is not used as a source of groundwater supplies. Further, the influence of pumping (i.e., cone of depression) would not extend far from the excavation and would never be greater than the depth of the excavation. Because groundwater from the shallow aquifer is not used for any purposes in the vicinity of the Project site, and because the duration of groundwater dewatering would be limited to the construction period, groundwater dewatering would not decrease groundwater supplies such that the project may impede sustainable groundwater management of the Santa Clara groundwater subbasin. For these reasons, Project construction would not alter the groundwater system such that sustainable groundwater management would be impeded, and construction impacts to sustainable groundwater management of the Santa Clara groundwater subbasin would be less than significant.

As discussed above, dewatering practices during construction would only affect the shallow aquifer. As discussed in Chapter 2, Project Description, groundwater encountered during excavations would be pumped to settling tanks and then to Facility Headworks for treatment. Implementation of BMPs and treatment of pumped groundwater would reduce potential impacts related to the degradation of groundwater due to construction practices.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

Operation

The Project does not include installation of any groundwater supply wells and thus would not lower the local groundwater table through operation of onsite groundwater wells. Project operation would not conflict with the policies established in the Basin Plan. The area where new impervious surface would be created by the Project is in the “confined’ area and not considered a recharge area for the Santa Clara groundwater subbasin. For these reasons, Project operation would not alter the groundwater system such that sustainable groundwater management would be impeded, and operation impacts to sustainable groundwater management of the Santa Clara groundwater subbasin would be less than significant. Once construction is complete, drainage patterns within most Project areas would be restored to existing conditions. Under existing conditions, stormwater runoff within and around the Facility is collected and routed into the Facility headworks for subsequent treatment. Water quality pollutants from paved areas would be minimized through the Facility’s treatment process (as required by the Facility’s NPDES permit).

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.10.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

Brown & Caldwell, 2018. Digested Sludge Dewatering Facility Project Definition Report. October 8, 2018.

California Emergency Management Agency, 2009. Tsunami Inundation Map for Emergency Planning, San Francisco Bay Area, December 9, 2009.

City of San José, 2011. Envision San José 2040 General Plan. Adopted November 1, 2011, Amended February 27, 2018.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

Santa Clara Valley Water District, 2016. 2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins (GWMP), November 22, 2016.

San Francisco Bay Regional Water Quality Control Board, Basin Plan, available online at https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/bp_ch3.html. Accessed April 16, 2019.

San José-Santa Clara Regional Wastewater Facility, 2016. CIP Program RWF Flood Protection Study Final Flood Protection Guidelines for Future RWF Projects – Task 4.2, April 5, 2016.

U.S. Army Corps of Engineers, 2015. Final Interim Feasibility Study with Environmental Impact Statement and Environmental Impact Report, September 2015.

3.11 Land Use and Planning

3.11.1 Setting

Existing land uses surrounding the Project area have not changed since adoption of the Plant Master Plan EIR and the Project would continue to support wastewater treatment activities. The Project site is designated in the Envision San José 2040 General Plan as Public/Quasi-Public, a category that is typically used to designate public land uses such as water treatment facilities and the bufferlands. The Project site is zoned as Heavy Industrial, which is intended for industrial uses with nuisance or hazardous characteristics which for reasons of health, safety, environmental effects, or general welfare are best segregated from other uses. Extractive and primary processing industries, as well as wastewater treatment, are typical of this zoning district.

3.11.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified a less-than-significant impact associated with the Project's potential to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.
- The Plant Master Plan EIR identified no impact associated with physically dividing an established community.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XI. LAND USE AND PLANNING — Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐

Discussion

a) **Construction and Operation**

As shown in Figure 2-4 in Chapter 2, Project Description the Project components are divided between two different areas on Facility property. All of the Project components would occur within the Plant Master Plan planning area; none of the proposed components or uses would physically intrude into or divide an existing established community.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.11.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

b) **Construction and Operation**

The Project was included as part of the biosolids process improvements, as described in section 3.5.6 of the Plant Master Plan EIR. The Plant Master Plan EIR also allocated the proposed land uses east of Zanker Road for the future plant expansion areas for treatment processes, including dewatering.

Because the Project would continue to support wastewater treatment activities, implementation of these improvements would be consistent with the Public/Quasi-Public use designation in the General Plan and the Heavy Industrial zoning district. The Project would be consistent with land use policies in the General Plan, which recognize the continuing use of this area for wastewater treatment uses while establishing policies intended to limit impacts on nearby Baylands and maintain an open character.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.11.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

City of San José, 2011. Envision San José 2040 General Plan. Adopted November 1, 2011, Amended February 27, 2018.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San José, 2019, Zoning Maps, available online at http://www.sanjoseca.gov/index.aspx?nid=2037, accessed April 8, 2019.

3.12 Mineral Resources

3.12.1 Setting

The state and local land use and zoning designations with respect to mineral resources have not changed for the Project site or surrounding areas in comparison to that described in the Plant Master Plan EIR. The Project area is not within an aggregate resource area, and is mapped by the California Division of Mines and Geology being within Mineral Resource Zone 1.47 Mineral Resource Zone 1 identifies areas where adequate information exists to determine that significant aggregate resources are not present. Mineral resources are not present at the Project site.

3.12.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified no impact related to the Project's potential to result in the loss of availability of a known mineral resource of value to the region and residents of the state. The Plant Master Plan EIR identified no impact related to the Project's potential to result in the loss of availability of a locally-important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XII. MINERAL RESOURCES — Would the project:					
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?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐

Discussion

a, b) **Construction and Operation**

As noted above, no known mineral resources of importance to the state or region are located on the Project site. Additionally, no locally important mineral resource recovery sites are delineated for the Project area, including in a general plan or other land use plan. Therefore, the Project would not result in the loss of availability of mineral resources, or otherwise interfere with the extraction of existing mineral resources. This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.12.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same as Impact as Approved Project. (No Impact)**

References

California Division of Mines and Geology, 1996. Update of Mineral Land Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Region. DMG Open-File Report, 1996.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

United States Geological Survey, Mineral Resources Data System, Mineral Resources On-Line Spatial Data. Available at https://mrdata.usgs.gov/general/map-us.html. Accessed April 8, 2019.

3.13 Noise

3.13.1 Setting

The environmental and regulatory settings relevant to noise and vibration has not appreciably changed since the certification of the Plant Master Plan EIR. Sensitive receptors, as identified in the certified Plant Master Plan EIR, have not changed and remain applicable to the Project. There are no sensitive receptors (e.g., residences, schools) adjacent to or in the immediate vicinity of the Project area, and no hospitals, daycare centers, or long-term care facilities within one mile of the Project area. The closest sensitive uses are residences located approximately 3,450 feet (0.7 mile) to the south, 4,100 feet (0.8 mile) west of the Project site, and 5,800 feet (1.1 miles) to the east of the Project site. The closest school is the George Mayne Elementary School located over 5,000 feet (one mile) to the southwest.

There have been no changes to sections of the City of San Jose General Plan Noise Element or the Municipal Code that would regulate noise generated from Project construction and operation.

The City of San José does not include, as part of its Noise Element of the General Plan or Municipal Code, quantitative criteria for the determination of demolition and construction noise impacts to neighboring noise-sensitive uses. Rather, the City considers noise impacts from project construction requiring heavy machinery for more than 12 months (continuous) to be significant at residential uses within 500 feet and commercial uses within 200 feet of the construction (City of San José 2011).

The City's Municipal Code establishes performance standards for noise exposure associated with stationary/non-transportation sources at the property line of noise-sensitive uses. Specifically, noise exposure is limited to 55 decibels (dB), 60 dB, and 70 dB at the property line of residential, commercial, and industrial receivers, respectively. Although the Code is not explicit with respect to the acoustical descriptor assigned to these noise levels, it is a reasonable interpretation that these levels may be applied to an hourly average noise level (Hourly L_{eq}).

3.13.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified potentially significant but mitigable to less-than-significant impacts to land uses south of the Facility operation area associated with temporary increase in noise exposure from Project-related demolition and construction. The Plant Master Plan EIR identified potential impacts for land uses south and east of the Facility operation area associated with increases in noise exposure to the surrounding area from operations associated with Project improvements.

- The Plant Master Plan EIR identified less-than-significant impacts from implementation of the Facility improvements associated with: temporary increase in noise and vibration exposure in the project vicinity from project-related demolition and construction; long-term traffic noise exposure in the project vicinity from project-related traffic; and increases in noise exposure to the surrounding existing environment from operations associated with project improvements. The Plant Master Plan EIR identified less-than-significant impacts

associated with exposure of future proposed uses south and east of the Facility operational area to unacceptable traffic noise levels from existing traffic.

- The Plant Master Plan EIR identified no impacts associated with being located within an airport land use plan area or an area within two miles of a public airport or public use airport or private airstrip, or exposure of people residing or working in the area to excessive noise levels.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XIII. NOISE — Would the project result in:					
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?	☐	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐

Discussion

a) **Construction**

Project construction activities (which includes the mobilization and site preparation; grading, excavation and piping; facilities construction; and paving, finishing, testing and startup) would take place over a period of 36 months from July 2020 to June 2023. Though construction activities would generally take place within the existing developed and operational area of the Facility, it would temporarily and intermittently increase noise levels in the vicinity of the Project site. However, as the construction activities would be distributed temporally and spatially over the Project area, noise generated at any point would not be consistent over the entire 36-month construction duration.

There are no existing or proposed residential uses within 500 feet of the Project site. The nearest residential uses are approximately 4,100 feet to the west, 3,450 feet to the south and 5,800 feet to the east of the Project site (including the construction staging areas).

Noise from construction equipment varies greatly depending on many factors such as the operation being performed, and the type, model, age, and condition of the equipment. Typically, noise associated with heavy equipment diesel engine operations often dominates the noise environment in the vicinity of construction sites where the dominant source of noise is the engine, often a diesel engine, which usually does not have sufficient muffling. Stationary sources such as generators, pumps, and compressors may also

substantially contribute. In other cases, such as impact pile-driving or pavement-breaking, noise generated by the process dominates. However, impact pile driving would not be used for Project construction. Drilled piles would be used as part of construction of the four-story dewatering facility building. Drilling of piles would involve an auger drill rig along with a truck to pump the pile in place. At 84-85 dBA[32], noise from drilling of piles using an auger drill rig and a drill rig truck, would be less than the noise generated by impact driven piles (i.e., 101 dBA). Project construction from operation of other typical construction equipment ranges from approximately 75 to 90 dB[33] (Lmax[34] at 50 feet) with noise from heavy demolition and earth moving operations having the highest noise production (FTA, 2018).

Table 3.3-1 in the Air Quality section shows the list of equipment proposed to be used for Project construction. **Table 3.13-1** below shows typical construction noise levels associated with the operation of this type of construction equipment.

TABLE 3.13-1
TYPICAL NOISE LEVELS FROM OPERATING DEMOLITION/CONSTRUCTION EQUIPMENT

Construction Equipment	Noise Exposure Level, dB L_{max} @ 50 Feet
Air Compressor	80
Auger Drill Rig	85
Backhoe	80
Concrete Mixer (Truck)	85
Concrete Pump (Truck)	82
Concrete Saw	90
Crane	83-88
Drill Rig Truck	84
Dump Truck	84
Excavator	85
Bulldozer	85
Grader	85
Impact Pile Driver	101
Front-end Loader	80
Asphalt Paver	85
Pump	77
Vibratory Roller	85
Concrete Saw	76
Welder	73
Truck with flatbed trailer	84

SOURCES: Federal Transit Administration (FTA), 2018; FHWA, 2006.

32 A-weighted sound levels
33 Unit used to measure the sound pressure level (SPL).
34 L_{max} is the highest instantaneous sound level measured during a specified period.

As shown in Table 3.13-1, maximum noise level generated by Project construction equipment would be 90 dBA. Assuming a usage factor of 1, which means a time period of one-hour with full power operation and ignoring any additional attenuation from intervening topography or structures, this noise level would attenuate to 53.2 dBA, 51.7 dBA and 48.7 dBA at the closest existing residences to the south, west and east of the site, respectively, based on a conservative assumption of a noise level reduction of six dB for every doubling of distance. However, the City's noise ordinance specifies receiving noise limits as applicable only to adjacent land uses (City of San Jose, 2019). Due to the location of the Project site within the treatment plant boundary, there are no land uses adjacent to the Project site. The nearest offsite land uses, while not adjacent to the Project site, are located 3,200 feet to the south. Construction noise levels would attenuate to 53.7 dBA at these uses, well below the 70 dBA standard for adjacent industrial and non-commercial uses. noise level would be less than the 55 dB limit at the closest existing residential uses, as specified by the City's municipal code (City of San Jose, 2019). Therefore, estimated construction noise exposure associated with Project construction activities would not be expected to exceed the established significance threshold or typical ambient noise exposure at neighboring uses. Existing noise-sensitive uses in the Project vicinity would not be significantly affected by Project construction-related noise.

This impact would be the same as that identified in the Plant Master Plan EIR (as described above in section 3.13.2), and the Project construction would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

The Plant Master Plan EIR identified that at the closest existing residential receiver(s) to Improvement B2-P1 (Dewatering Phase 1), approximately 5,100 feet southeast of the facilities, noise exposure from operations is not expected to exceed 23 dB. This noise level is well below the limit of 55 dB DNL established by the City for adjacent residential uses. Nighttime Leq noise levels at the closest residences west and south of the proposed B2-P1 (Dewatering Phase 1), were measured to be as low as 43 dB and 45 dB, respectively. The Plant Master Plan EIR identified that the resulting noise exposure from Improvement B2-P2 (Dewatering Phase 2) at the closest residential receivers approximately 6,000 feet to the west would be 22 dB. This noise level would be well below the limit of 55 dB DNL established by the City, and would be less than the nighttime noise levels (i.e., as low as 43 dB) measured at the residential area east of the site.

Once the Project is operational, the new dewatering facility would operate 24 hours per day, 7 days per week. Minimal operational noise would be generated primarily from the operation of pumps, centrifuges, and conveyors, which would be housed within the dewatering facility building and as a result no significant noise exposure is expected. There would also be additional material handling noise, especially associated with the four-story dewatering facility building option, when the dewatered cake is conveyed to

the storage bins by gravity. In the two-story dewatering facility building option, additional noise would be generated from pumps that would be used to pump the dewatered cake. However, all of these operations would take place within the building structure and over 3,450 feet from the nearest sensitive receptors. Maximum noise generated by the DS pumps would be approximately 77 dBA as shown in Table 3.13-1. Assuming operation of multiple pumps, combined noise level from the dewatering facility building under both building height options, as well as the DS pumps, is not expected to exceed 85 dBA. Resulting noise exposure at the closest residential receivers to the south, west and east would be 48.2 dB, 46.7 dB and 43.7 dB, respectively. This noise level would be well below the limit of 55 dB DNL established by the City, same as the findings in the Plant Master Plan EIR. Resulting noise levels at industrial uses to the south would be 49 dBA, well below the 70 dB receiving noise standard for industrial uses.

Additionally, a new 4.16kV electrical substation with outdoor voltage transformers and indoor switchgear for the dewatering facility building and a new 480-volt power supply system for the DS storage and pump station would be constructed to provide power to these components. Electrical substations generate low frequency tonal noise primarily produced by transformers, which receptors in the vicinity experience as an irritating "hum". During the day the noise hum from the transformers is typically masked, and not audible over daytime traffic and other noise. However, at night, when the background noise drops, the hum becomes more perceptible, annoying residents and in some cases impacting on their health. Substation power transformers typically generate noise levels ranging from 60 to 80 dBA (Csanyi, 2012).

Transformer noise will 'transmit' and attenuate at different rates depending on the transformer size, voltage rating, and design. Few complaints from nearby residents are typically received concerning substations with transformers of less than 10 Mega Volt Amperes (MVA) capacity, except in urban areas with little or no buffers. Complaints are more common at substations with transformer sizes of 20 – 150 MVA, especially within the first 170–200 meters (500–600 feet). As maximum noise levels of 80 dBA from the electrical transformers would attenuate to 43.2 dB at the closest existing residential receiver approximately 3,450 feet south of the Project site, noise exposure from the new electrical substation also be well below the limit of 55 dB DNL established by the City.

The Project would require nine additional staff for operation, which would generate 18 employee vehicle trips per day. In addition, on an average approximately 68 daily one-way truck trips would be generated to haul away the dewatered sludge cake from the dewatering facility building, when design capacity of the facility is reached in 2040. The majority of these trips would be from SR 237, and a negligible amount of the trips would come from surface streets south of SR 237 (i.e., Zanker Road). The expected traffic volume increase along SR 237 as a result of the Project would be negligible relative to existing or future traffic volumes, and would not produce a noticeable traffic noise exposure increase at noise-sensitive receivers in the vicinity.

Because of the distance between the Project and the nearest receptors, the Project would not generate, during operation, a substantial temporary or permanent increase in ambient noise levels at receptors 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.

This impact would be the same as that identified in the Plant Master Plan EIR (as described above in Section 3.13.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

b) **Construction and Operation**

The City's General Plan Policy EC-2.3 considers vibration exposure from project demolition/construction activities to neighboring acoustically sensitive uses to be significant if it would exceed 0.20 in/sec PPV.[35] This criterion is considered at locations where project demolition/construction requires the operation of substantial impact equipment/operations (e.g., hoe ram, pile driving). No such activities are proposed as part of the Project. Typical, non-impact construction equipment operations would not be expected to produce vibration levels in excess of 0.21 in/sec PPV at a distance of 25 feet (FTA, 2018). In addition, groundborne noise and vibration attenuate rapidly with distance. Given the large distance of over 3,400 feet separating construction activities from the nearest sensitive receptors, vibration from the operation of any impact and earthmoving equipment (which generate highest vibration) would also attenuate to a less than significant level.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.13.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

c) **Construction and Operation**

Norman Y. Mineta San José International Airport and Moffett Field are located approximately four miles south and five miles west of the Project site, respectively. There are no private airstrips within two miles of the Project site. Since the Project is not in the vicinity of a public airport or private airstrip and because it does not include uses that would be affected by local aircraft operations, the Project would not be significantly affected by aircraft noise.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.13.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

[35] Ground vibration is measured in terms of Peak Particle Velocity (PPV) with units in inches/second.

References

City of San José, 2011. Envision San José 2040 General Plan - Policy EC-1.7 of Chapter 3, Environmental Leadership, adopted November 1, 2011. Amended February 27, 2018.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San José, San José Municipal Code Section 20.50.300, Available at https://library.municode.com/ca/san_jose/codes/code_of_ordinances?nodeId=TIT20ZO_CH20.50INZODI_PT5PEST_20.50.300PEST. accessed April 11, 2019.

Edvard Csanyi, 2012. Electrical Engineering Portal – Typical Noise Levels in Power Substations, July 5, 2012.

Federal Highway Administration (FHWA), 2006. Construction Noise Handbook, August 2006.

Federal Transit Administration (FTA), 2018. Transit Noise and Vibration Impact Assessment Manual, September 2018.

3.14 Population and Housing

3.14.1 Setting

The environmental setting relevant to Population and Housing for the Project has not changed in comparison to that described in the Plant Master Plan EIR. There is no existing housing located on or adjacent to the Project site.

3.14.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified that the Plant Master Plan would not directly induce growth because it is limited to improvements of the Facility's wastewater treatment facilities, changes to land use designations of certain Facility lands, and associated infrastructure improvements. The Plant Master Plan EIR concluded that the Plant Master Plan could indirectly induce growth in the future by removing insufficient wastewater treatment capacity and the lack of developable industrial land as potential obstacles to growth.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XIV. POPULATION AND HOUSING — Would the project:					
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)?	☐	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	☐

Discussion

a) **Construction and Operation**

The Project would not involve or result in major new housing, business, or industrial developments that could drive population growth. The Project would not directly induce growth because the facilities are limited to improvements of the Facility's wastewater treatment facilities and associated infrastructure improvements (as opposed to construction of housing or commercial development). The Project would involve construction and use of industrial facilities at an existing industrial site. The Project would be designed to handle projected 2040 flow conditions, consistent with the planning period for the Plant Master Plan. The Project would not involve or result in major new housing, business, or industrial developments that could drive substantial population growth.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.14.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

b) **Construction and Operation**

The Project would involve construction and use of industrial facilities at an existing industrial site. The Project would not result in the demolition of existing housing, or otherwise cause a reduction in housing units on site or elsewhere. This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.14.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

3.15 Public Services

3.15.1 Setting

The nature of the Project with respect to Public Services has not changed in comparison to that described in the Plant Master Plan EIR. Fire protection services for the City are still provided by the San José Fire Department (SJFD). The closest fire station to the Facility is still Station 25 located at 5125 Wilson Way in Alviso, approximately one mile west of the Facility. Police services for the City of San José are still provided by the San José Police Department (SJPD).

3.15.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified potentially significant, but mitigable to less than significant, impacts related to effects on fire and police protection response times resulting from proposed land use changes. The Plant Master Plan EIR identified potentially significant, but mitigable to less than significant, impacts related to increased use of park facilities resulting from proposed land use changes.

- The Plant Master Plan EIR identified less-than-significant impacts to fire and police protection and park facilities related to construction and operation of Facility improvements.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XV. PUBLIC SERVICES — Would the project:					
a) 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 following public services:	☐	☐	☐	☒	☐
i) Fire protection?	☐	☐	☐	☒	☐
ii) Police protection?	☐	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒	☐
iv) Parks?	☐	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☐	☒	☐

Discussion

a.i-iv) **Construction and Operation**

The Project would involve the construction and operation of a new dewatering facility and supporting components to mechanize the biosolids drying process. The Project would install new industrial facilities on undeveloped land, in proximity to other similar facilities. These proposed facilities would not require additional fire or police protection

or response, need for schools, demand for parks, or need for other public facilities, such that new or physically altered public facilities would be needed. These proposed facilities would not require additional fire or police protection such that response times would be substantially altered. The Project would not result in a need for schools or other public facilities, that would increase demand for existing parks.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.15.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San José Fire Department website: Available at: http://www.sanjoseca.gov/index.aspx?NID=197 Accessed March 19, 2019.

3.16 Recreation

3.16.1 Setting

The nature of the Project with respect to existing recreational facilities or parks has not changed since certification of the Plant Master Plan EIR. The nearest park to the Project site is Alviso Park, located approximately one mile (5,600 feet) to the west. The nearest recreational trail to the Project site is Highway 237 Bikeway. This paved bike path is 0.5 miles south of the Project site and connects Coyote Creek Trail to Zanker Road where it terminates. Other recreational trails are over 0.8 miles from the Project site and include Coyote Creek Trail, Alviso Slough Trail, and Mallard Slough Trail.

3.16.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified potentially significant, but mitigable to less than significant, impacts for the future increase in use of neighborhood and regional parks or other recreational facilities specific to the economic development portion of the Plant Master Plan evaluated in the EIR.

- The Plant Master Plan EIR identified less-than-significant impacts related to the increase in use of neighborhood and regional parks or other recreational facilities.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XVI. RECREATION:					
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?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐

Discussion

a, b) **Construction and Operation**

The Project would involve the construction and operation of a new dewatering facility and supporting components to mechanize the biosolids drying process. The Project would install new industrial facilities on undeveloped land, in proximity to other similar facilities. The Project would not result in new housing development or other activities that would increase use, alter usage patterns, or increase demand for existing recreational facilities, thereby causing increased physical deterioration of recreation related facilities or demand for new facilities.

This impacts would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.16.2), and the Project would not result in any new or more significant

impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San Jose, 2019. Facilities. Available at http://www.sanjoseca.gov/Facilities?clear=False, last updated March 8, 2019.

3.17 Transportation

3.17.1 Setting

Setting information relevant to transportation for the Project remains the same as discussed in the certified Plant Master Plan EIR. Construction vehicles would access the construction equipment and staging area through the existing entrance/gate off Zanker Road, connecting to State Route (SR) 237. The setting discussions from the Plant Master Plan EIR for this resource area are therefore applicable to the entire Project area.

Access to the Project site from the regional roadway network is limited to Zanker Road. As reported in the Plant Master Plan EIR, Zanker Road serves an average daily traffic (ADT) volume of approximately 3,600 vehicles north of the SR 237 ramps. The most likely intersections that could be affected by an increase in traffic trips would be the Zanker Road/SR 237 Westbound Ramps and Zanker Road/SR 237 Eastbound Ramps intersections. Both of these intersections are part of the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP).[36] According to the VTA's 2017 Annual Monitoring and Conformance Report, these two intersections operate at level of service (LOS) F and D, respectively during the AM peak hours and LOS E during the PM peak hours.[37] The acceptable service levels for these intersections is LOS E or better (Santa Clara Valley Transportation Authority, 2017).

SR 237 has relatively high traffic volumes during both peak traffic periods and has limited capacity to accommodate additional growth in traffic. Northbound I-880 is the peak commute direction during the morning, and southbound is the peak commute direction during the evening. I-880 has slightly more capacity to accommodate additional growth in traffic, though it does have constraints in the peak directions of travel. Data published by Caltrans indicate that the annual average daily traffic (AADT) on I-880 is about 180,000 vehicles south of SR 237 and 225,000 vehicles north of SR 237 (Caltrans, 2017). CMP guidelines require that freeway segments to which a proposed development is projected to add trips equal to or greater than one percent of the freeway segment's capacity must be evaluated.

3.17.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified significant and unavoidable impacts to established measures of effectiveness for travel mode share and travel speeds in transit corridors specific to the economic development portion of the Plant Master Plan evaluated in the EIR.

[36] As the Congestion Management Agency (CMA) for Santa Clara County and through its Congestion Management Program (CMP), the Santa Clara Valley Transportation Authority (VTA) has a statutory role to work with its Member Agencies (the 15 cities and towns in Santa Clara County, as well as the County of Santa Clara) on issues related to land use and transportation. As part of this role, VTA is working with its Member Agencies on the transition from Level of Service (LOS) to Vehicle Miles Traveled (VMT), in accordance with Senate Bill 743.

[37] The operation of a local roadway network is commonly measured and described using a grading system called Level of Service (LOS). The LOS grading system qualitatively characterizes traffic conditions associated with varying levels of vehicle traffic, ranging from LOS A (indicating free-flow traffic conditions with little or no delay experienced by motorists) to LOS F (indicating congested conditions where traffic flows exceed design capacity and result in long delays). This LOS grading system applies to both roadway segments and intersections.

- The Plant Master Plan EIR identified potentially significant, but mitigable to less-than-significant, impacts for effects to levels of service at the study intersections and freeways, reductions in roadway capacity, and emergency access.
- The Plant Master Plan EIR identified less than significant impacts for conflicts with applicable transportation plans, effects to levels of service at study intersections and freeways designated as Congestion Management Program (CMP) facilities, increases in traffic-related hazards, and conflicts with adopted policies, plans, and programs supporting alternative transportation.
- The Plant Master Plan EIR identified no impact related to air traffic patterns as the project would not introduce new air traffic or interfere with existing air traffic.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XVII. TRANSPORTATION — Would the project:					
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☐	☒	☐

Discussion

The evaluation of the transportation impacts associated with the Project is based on a Transportation Analysis prepared by Fehr & Peers (**Appendix I**) (Fehr & Peers, 2019).

a) **Operation**

Intersections

The addition of up to 30 construction-related vehicle trips per day over the construction period would result in minor to negligible changes to existing traffic patterns along Project area access roads. These additional trips are not anticipated to reduce level of service noticeably, and the intersections would continue to operate at acceptable service levels (LOS E or better)[38]. Therefore, construction of the Project would have a less than significant impact on local intersection operations.

Under the Plant Master Plan EIR, it was determined that the near-term plant improvements are anticipated to add 17 new vehicle trips during the AM peak period and 21 new vehicle

[38] The acceptable service levels for these intersections is LOS E or better (Santa Clara Valley Transportation Authority, 2017).

trips during the PM peak period to the nearby roadways. It was determined that the addition of those trips would not substantially increase the critical delay or volume-to-capacity ratio at the two study intersections, and the intersections would continue to operate at acceptable service levels (LOS B). Although construction of the Project would add more trips than those evaluated under the Plant Master Plan EIR, the intersections would continue to operate at acceptable service levels (LOS E or better)[39]. Furthermore, traffic generated by Project construction is excluded from CMP conformance requirements.[40]

Freeways

The SR 237 and I-880 segments immediately adjacent to the Project site could be affected if there was an increase in traffic trips. Under the Plant Master Plan EIR, it was determined that the near-term plant improvements are anticipated to add approximately one to 12 vehicles per hour per lane to the freeway segments, which results in adding less than one percent of capacity to any study freeway segments. As described above, the Project would add approximately 30 commute trips during each of the AM and PM peak hours, and no more than 20 truck trips per day. The Project would have no significant impact on study freeway segments because it would add less than one percent of capacity to any study freeway segments.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.17.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Construction

As noted in the Project Description, during Project construction, an average of five trucks per day and a maximum of 20 trucks per day would be needed for the removal of demolition debris and excavation spoils and delivery of construction materials and equipment. The size of the construction workforce would equate to approximately 20 to 30 vehicle trips per day (i.e., 10-15 workers), with a maximum of 100 vehicle trips per day (i.e., 50 workers).

Construction traffic and typical daily on-going operations traffic estimates for the Project were estimated based on:

- Daily truck volumes hauling materials into or out of the construction site
- Number of construction workers at the site
- Number of trucks entering and exiting the site for typical operations (after construction is completed)

39 Ibid.

40 Legislation that created the Santa Clara VTA CMP excludes certain types of traffic from a determination of conformance with CMP traffic LOS standards. Construction traffic is one of these exclusions; for this reason, traffic generated by construction from the Project would not conflict with the CMP and does not require LOS analysis.

- Number of employees on-site for typical operations

Data for the Project was compared to trip generation estimates from the Plant Master Plan EIR Appendix D, as shown in **Table 3.17-1**. The Plant Master Plan EIR included trip generation estimates for B2-P1 (Dewatering Phase 1) and B2-P2 (Dewatering Phase 2). As shown in the table, the number of Project construction trucks is less than the number evaluated in the Plant Master Plan EIR and the number of construction workers on a typical day would be similar. (A total of 58 workers for all simultaneous construction activities was evaluated in the Plant Master Plan EIR.)

TABLE 3.17-1
CONSTRUCTION TRIPS (DAILY TOTALS)

Source	Construction Trips		
	Trucks	Workers	Maximum One-Way Trips per Day
Plant Master Plan EIR	36	10	92
Project	20	20-30[a]	100

NOTES:
[a] Average day conditions; peak construction period may require up to 100 workers during short periods.
SOURCE: Fehr & Peers, 2019.

The Project construction period traffic estimates are presented in **Table 3.17-2**. The numbers of construction trucks were multiplied by two (one inbound trip and one outbound trip) to calculate the number of daily truck trips. These truck trips will occur throughout the day. The AM and PM peak hours typically occur within the two-hour periods from 7:00 am to 9:00 am and 4:00 pm to 6:00 pm, respectively. The AM and PM peak hour truck volumes are estimated to be 17 percent of the daily volumes with half of the truck trips inbound and half outbound. To be consistent with the Plant Master Plan EIR analysis, it was assumed that all construction workers would arrive to the site in single-occupancy passenger vehicles (i.e., no carpools) during the typical morning peak period and depart from the site during the typical evening commute peak period. The truck trips are converted to Passenger Car Equivalents (PCEs) by multiplying them by a factor of 2.0 (pursuant to the Plant Master Plan EIR analysis) to reflect their relative effect on traffic operations compared to light vehicles.

The increase in number of anticipated workers is largely off-set by the decrease in the number of trucks. As a result, the Project would generate similar amounts of construction traffic (within 10 PCEs[41] during each peak hour) as evaluated in the Plant Master Plan EIR.

[41] The addition of 10 passenger cars equivalents over a one-hour period would not be noticeable at the adjacent intersections and would be more dispersed farther from the site.

TABLE 3.17-2
CONSTRUCTION PERIOD TRIP GENERATION ESTIMATES

Vehicle Trip Type	Morning Peak Hour			Evening Peak Hour		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Plant Master Plan EIR						
Construction Trucks	6	6	12	6	6	12
Construction Workers	10	0	10	0	10	10
Totals	***16***	***6***	***22***	***6***	***16***	***22***
Total (PCEs)	***22***	***12***	***34***	***12***	***22***	***34***
Project						
Construction Trucks	3	3	6	3	3	6
Construction Workers	30	0	30	0	30	60
Totals	***33***	***3***	***36***	***3***	***33***	***36***
Total (PCEs)	***36***	***6***	***42***	***6***	***36***	***42***

SOURCE: Fehr & Peers, 2019.

During construction of pipelines across Zanker Road, the two lane road will would be reduced to one lane for approximately one week. However, traffic flow would be maintained through implementation of the Plant Master Plan EIR **Mitigation Measure TR-4 (Implement Project Traffic Control Plan)**, described below.

Mitigation Measure TR-4: Implement Project Traffic Control Plan.

ESD or its contractor(s) shall prepare and implement a Traffic Control Plan to reduce traffic impacts on the roadways at and near the work site, as well as to reduce potential traffic safety hazards and ensure adequate access for emergency responders. ESD or its contractor(s) shall coordinate development and implementation of this plan with City departments (e.g., Emergency Services, Fire, Police, Transportation), as appropriate. To the extent applicable, the Traffic Control Plan shall conform to the Caltrans' *California Manual on Uniform Traffic Control Devices*, Part 6 (Temporary Traffic Control)[42] and San José Public Works Department's Temporary Traffic Control Manual.[43] The Traffic Control Plan shall include, but not be limited to, the following elements:

- Circulation and detour plans to minimize impacts on local road circulation during road and lane closures. Flaggers and/or signage shall be used to guide vehicles through and/or around the construction zone.
- Identifying truck routes designated by City of San José and Santa Clara County. Haul routes that minimize truck traffic on local roadways shall be utilized to the extent possible.

[42] California Department of Transportation (Caltrans), *California Manual on Uniform Traffic Control Devices for Streets and Highways – Part 6: Temporary Traffic Control*, amended November 7, 2014.
[43] City of San José, Public Works Department, *Temporary Traffic Control Manual*, September 27, 2005, available online at http://www.sanjoseca.gov/index.aspx?NID=3464, accessed October 2015.

- Controlling and monitoring construction vehicle movement through the enforcement of standard construction specifications by onsite inspectors.
- Scheduling truck trips outside the peak morning and evening commute hours to the extent possible.
- Limiting the duration of road and lane closures to the extent possible.
- Notifying Facility personnel of the temporary closure of Zanker Road and instructing personnel to evacuate using Mike Tocce Lane during Zanker Road closure.
- Maintaining pedestrian and bicycle access and circulation during project construction where safe to do so. If construction activities encroach on bicycle routes or multi-use paths, advance warning signs (e.g., "Bicyclists Allowed Use of Full Lane" and/or "Share the Road") shall be posted that indicate the presence of such users.
- Identifying detours for bicycles and pedestrians, where applicable, in all areas affected by project construction.
- Storing all equipment and materials in designated contractor staging areas on or adjacent to the worksite, such that traffic obstruction is minimized.
- Implementing roadside safety protocols. Advance "Road Work Ahead" warning and speed control signs (including those informing drivers of State legislated double fines for speed infractions in a construction zone) shall be posted to reduce speeds and provide safe traffic flow through the work zone.
- Coordinating construction administrators of police and fire stations (including all fire protection agencies). Operators shall be notified in advance of the timing, location, and duration of construction activities and the locations of detours and lane closures, where applicable.
- Repairing and restoring affected roadway rights-of way to their original condition after construction is completed.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.17.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

Operation

Truck traffic generated by Project operations was estimated in a similar fashion as construction traffic. The facility employees will work on three different shifts with five on the day shift and two each on the swing and night shifts. The employee trips were estimated assuming that each employee would travel to the Project site in a single-occupant vehicle. The five day-shift employees would arrive during the AM peak hour and depart during the PM peak hour. The two swing shift employees would arrive during the PM peak hour and the two-night shift employees would leave during the AM peak hour. The Project operational-related trip estimates are presented in **Table 3.17-3**.

TABLE 3.17-3
TRIP GENERATION ESTIMATES DURING OPERATIONS

Vehicle Trip Type	Morning Peak Hour			Evening Peak Hour		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Plant Master Plan EIR (All Near-term Capital Improvement Projects)[a]						
Trucks	2	2	4	0	1	1
Employees	9	4	13	6	14	20
Totals	***11***	***6***	***17***	***6***	***15***	***21***
Total (PCEs)	***13***	***8***	***21***	***6***	***16***	***22***
Project						
Trucks	6	6	12	6	6	12
Employees	5	2	7	2	5	7
Totals	***11***	***8***	***19***	***8***	***11***	***19***
Total (PCEs)	***17***	***14***	***31***	***14***	***17***	***31***

NOTES:

[a] The Plant Master Plan EIR analysis did not present information regarding truck volumes or employees specifically for sludge dewatering operations.

SOURCE: Fehr & Peers, 2019.

As shown in the table, the Project would generate similar amounts of operational traffic as those evaluated in the Plant Master Plan EIR (within 10 PCEs). Therefore, Project operations would not result in in any new or more significant impacts compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

b) **Construction and Operation**

The Plant Master Plan EIR included an analysis on the potential changes (or burden) on city transportation systems in 2040 (the horizon year of the General Plan as well as the Plant Master Plan). The analysis was based on a projected transportation condition in the future year when the General Plan capacities for jobs and housing are fully developed. The analysis included an evaluation of the Plant Master Plan's impacts to vehicle miles traveled (VMT) per service population, vehicle hours traveled (VHT) per service population, travel mode share, and vehicle speeds in the transit corridors. The assessment of the Plant Master Plan's contribution to citywide VMT (i.e., the difference in citywide VMT between the General Plan 2040 No Project and General Plan 2040 Plus Project conditions) indicates that the Plant Master Plan would not result in any increase in citywide VMT; therefore, the Plant Master Plan would have a less than significant impact on citywide VMT under General Plan 2040 plus Project conditions.

Section 15064.3 of the CEQA Guidelines suggests that the analysis of VMT impacts applies mainly to land use and transportation projects. Furthermore, consistent with the City's VMT analysis guidance as stated in Council Policy 5-1 (City of San Jose, 2018):

> "…subsequent discretionary approval(s) required for a project approved prior to the Effective Date may continue to be analyzed under the prior environmental clearance and existing City Council Policy 5-3 after the Effective Date, provided that there is no Substantial Change to the project, as defined in California Public Resources Code Section 21166 and CEQA Guidelines Sections 15162-15164."

Since the Plant Master Plan EIR was approved prior to the Effective Date of Council Policy 5-1 (March 2018), and the Project evaluated in this Addendum does not represent a substantial change to the project evaluated in the Plant Master Plan EIR, the City has determined that an analysis of VMT pursuant to requirements of Section 15064.3 of the CEQA Guidelines is not required for the Project. As such, the analysis is focused on the vehicle delay/LOS performance measure, which is the same performance measure used to evaluate transportation impacts in the Plant Master Plan EIR and is consistent with the City's guidance prior to implementation of Policy 5-1.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.17.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Less Impact than Approved Project. (No Impact)**

c) **Construction and Operation**

The Plant Master Plan EIR determined that the operational area improvements would not alter roadway geometries or provide new roadway design features that would result in traffic safety hazards for vehicles, bicyclists, and pedestrians along nearby roadways. The Project would not install any new public access roadways, nor would it alter roadway geometries or provide new roadway design features that would result in traffic safety hazards for vehicles, bicyclists, and pedestrians along nearby roadways. Additionally, the Project would not introduce an incompatible use to area roadways, as the area is already developed with public utility facilities.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.17.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

d) **Construction and Operation**

The Plant Master Plan EIR determined that lane closures during construction activities would result in inadequate emergency access. Existing access to the Project site is gained via Zanker Road, from North 1st Street, and along Los Esteros Road. During construction of pipelines across Zanker Road, the two lane road will would be reduced to one lane for approximately one week. However, traffic flow would be maintained and implementation of the Plant Master Plan EIR **Mitigation Measure TR-4 (Implement Project Traffic Control Plan)**, would reduce potential impacts to emergency access during construction of the Project to less than significant.

Because access would be maintained to the site for both emergency and general (public) vehicles and the Project would not create any obstructions that would impede access in the event of an emergency, the Project would not result in inadequate emergency access. Based on these findings, the Project would not result in any new or more significant impacts to emergency access during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

References

California Department of Transportation (Caltrans). 2017 Traffic Volumes on California State Highways, available online at http://dot.ca.gov/trafficops/census/; accessed March 20, 2019.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San José, 2018. Council Policy – Transportation Analysis Policy, Policy Number 5-1. Effective March 29, 2018.

Fehr & Peers, 2019. Sludge Dewatering Facility CEQA Consistency Transportation Analysis. April 24, 2019.

Santa Clara Valley Transportation Authority, 2017. 2017 CMP Monitoring and Conformance Report, available online at: http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/CMP_2017_Monitoring_Report.pdf. accessed April 25, 2019.

3.18 Tribal Cultural Resources

3.18.1 Setting

Tribal cultural resources are: 1) 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 in the California Register of Historical Resources (California Register), or local register of historical resources, as defined in Public Resources Code Section 5020.1(k); or, 2) a resource determined by the CEQA lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c). For a cultural landscape to be considered a tribal cultural resource, it must be geographically defined in terms of the size and scope of the landscape (Public Resources Code Section 21074[b]). Also, an historical resource, as defined in Public Resources Code Section 21084.1, unique archaeological resource, as defined in Public Resources Code Section 21083.2(g), or non-unique archaeological resource, as defined in Public Resources Code Section 21083.2(h), may also be a tribal cultural resource.

The City sent certified letters to six local Native American tribes and individuals on April 17, 2019, describing the Project and requesting information on any known tribal cultural resources within the Project site. Katherine Erolinda Perez from the Nototomne Cultural Preservation (Northern Valley Yokuts/Ohlone/Bay Miwuk) responded on April 26, 2019 requesting consultation and a site visit. On May 9, 2019, tribal representatives met with City staff and consultants from ESA to discuss the Project. The meeting was held at the Facility and included an overview of the Project as well as an on-site tour of the Project site. At the meeting, tribal representatives described standard mitigation measures for tribal cultural resources to include avoidance of resources and sensitivity training. The City noted that there are adopted standard practices for all construction projects at the Facility based on mitigation measures included in the Plant Master Plan EIR, which includes procedures for the unanticipated discovery of cultural resources. During the site visit, tribal representatives noted that the blue elderberry tree (*Sambucus nigra subsp. caerulea)* to be removed may be considered a tribal cultural resource and asked about the presence of Valley Elderberry Longhorn Beetle (VELB). ESA consultants noted that there are no VELB in this area (species with potential to occur in the project area are listed in Appendix G). Tribal representatives requested to take the branches when the tree is removed.

On June 3, 2019 ESA sent copies of the cultural resources studies previously completed within the Facility to Ms. Perez. ESA noted that none of these studies, which included dozens of shovel test pits and monitoring as well as a review of previously completed trenching in the Facility lands, identified any indigenous cultural materials such as midden soil, shell, or lithic fragments and that monitoring had been recommended for projects within a 500-foot radius of known archaeological sites. Monitoring was not recommended for the remainder of the Facility, including the Project site, due to the negative results of the extensive testing and the disturbed nature of the general vicinity with up to 20 feet of artificially placed fill.

On May 24, 2019, the tribal representatives sent an email with comments and questions, and the City offered to discuss those comments at an in-person meeting. The meeting was planned for

June 27, 2019. Tribal representatives were unable to attend that meeting due to changes in their schedule and canceled the meeting. The City requested a new meeting date; however, no additional responses or requests have been provided by tribal representatives. City provided a letter (**Appendix J**) with detailed responses to the email sent by the tribal representative.

In addition to tribal consultation, a records search for the Project was completed at the Northwest Information Center (NWIC) of the California Historical Resources Information System on August 1, 2011 (File No. 11-0118) and updated on May 11, 2016 (File No. 15-1655). The records search indicates that there are no previously recorded prehistoric or historic-era archaeological resources at the Project site. In addition, no archaeological resources were identified at the Project site during the surface and subsurface surveys (see Section 3.5 Cultural Resources).

3.18.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR evaluated impacts to cultural resources significant to Native American tribes, however, it did not specifically discuss impacts to tribal cultural resources as defined in Public Resources Code Section 21074(a)(1) because Assembly Bill (AB) 52 had not yet been adopted. AB 52, codified in the Public Resources Code (Sections 21074, 21080.3, 21082.3, 21083 *et seq*), requires lead agencies to analyze the impacts of a project on "tribal cultural resources" separately from archaeological resources. AB 52 also requires lead agencies to engage in additional consultation with California Native American tribes, and required the Office of Planning and Research to update Appendix G of the CEQA Guidelines to specifically address tribal cultural resources.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XVIII. TRIBAL CULTURAL RESOURCES — Would the project:					
a) 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐	☐

Discussion

a.i) **Construction and Operation**

No known tribal cultural resources listed or determined eligible for listing in the California Register, or included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), pursuant to Public Resources Code Section 21074(a)(1), would be impacted by the Project.

However, if any previously unrecorded archaeological resource were identified during ground-disturbing construction activities and were found to qualify as a tribal cultural resource pursuant to Public Resources Code Section 21074(a)(1) (determined eligible for listing in the California Register or in a local register of historical resources), any impacts to the resource resulting from the Project could be potentially significant. Any such potential significant impacts would be reduced to a less-than-significant level by implementing **Mitigation Measures CUL-1a: Inadvertent Discovery of Archaeological Resources** and **CUL-1b: Inadvertent Discovery of Tribal Cultural Resources** from the Plant Master Plan EIR (refer to Section 3.5, Cultural Resources).

With implementation of these mitigation measures, this impact would be reduced to less than significant, and the Project would result in a new less-than-significant impact with mitigation during construction and operation compared to those identified in the certified Plant Master Plan EIR. **New Less than Significant Impact with Mitigation.**

a.ii) **Construction and Operation**

The City determined that any resource that could potentially be impacted by the Project would not be a significant tribal cultural resource pursuant to criteria set forth in Public Resources Code Section 5024.1(c). Therefore, the Project is not anticipated to impact any such resources.

However, if any previously unrecorded archaeological resource were identified during Project ground-disturbing construction activities and were found to qualify as a tribal cultural resource pursuant to the definitions above, any impacts to the resource resulting from the Project could be potentially significant. Any such potential significant impacts would be reduced to a less-than-significant level by implementing **Mitigation Measures CUL-1a**: **Inadvertent Discovery of Archaeological Resources**, and **CUL-1b: Inadvertent Discovery of Tribal Cultural Resources** (refer to Section 3.5, Cultural Resources).

With implementation of these mitigation measures, this impact would be reduced to less than significant, and the Project would result in a new less-than-significant impact with mitigation during construction and operation compared to those identified in the certified Plant Master Plan EIR. **New Less than Significant Impact with Mitigation.**

References

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

ESA, 2015. San José-Santa Clara Regional Wastewater Facility Zanker Road Development Project Cultural Resources Survey Report, Prepared for the City of San José, June 2015.

ESA, 2015a. Cultural Resources Survey Report, San José-Santa Clara Regional Wastewater Facility Construction Enabling Project, Prepared for the City of San José, July 2015.

3.19 Utilities and Service Systems

3.19.1 Setting

The environmental setting relevant to Utilities and Service Systems for the Project has not changed in comparison to that described in the certified Plant Master Plan EIR. While the Project includes utility connections to existing facilities as described in Chapter 2, Project Description, there would be no expansion of utility service beyond the Facility; although there may be a new PG&E service line off of Zanker Road associated with the Project. Setting discussions from the certified EIR for this resource area are therefore applicable to the entire Project area.

3.19.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified significant and unavoidable impacts related to the construction of new or expansion of existing water treatment facilities and water supply availability to serve the project from existing entitlements and resources specific to the economic development portion of the Plant Master Plan evaluated in the EIR.
- The Plant Master Plan EIR identified potentially significant, but mitigable to less-than-significant impacts for disruption of regional or local utilities.
- The Plant Master Plan EIR identified less-than-significant impacts for the construction of new or expansion of existing water treatment facilities, water supply availability to serve the project from existing entitlements and resources, sufficient permitted capacity to accommodate the solid waste disposal needs during construction and operation, and compliance with statutes and regulations related to solid waste.
- The Plant Master Plan EIR (Section 4.13 Utilities and Service Systems) identified no impact related to: exceedance of wastewater treatment requirements of the applicable Regional Water Quality Control Board; the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, which could cause significant environmental effects; or adequate capacity to serve the projected demand in addition to the wastewater treatment provider's existing commitments.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XIX. UTILITIES AND SERVICE SYSTEMS — Would the project:					
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?	☐	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒	☐

Issues (and Supporting Information Sources):	New Potentially Significant Impact	New Less Than Significant with Mitigation Incorporation	New Less Than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
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?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒	☐

Discussion

a) **Construction**

This criterion applies to projects that, due to their nature, increase the need for water or wastewater treatment or storm water management or electric power, natural gas, or telecommunications facilities. The Project evaluated in this document is the construction of new components within an existing wastewater treatment facility, as well as supporting components such as stormwater drainage. Refer to Sections 3.1 through 3.20 for a description of impacts and mitigation measures associated with construction of the Project.

Utility Service

Construction of the Project components could result in utility service disruption if construction activities in public rights-of-way require closure of utility lines during construction. Potentially affected utilities may include water, recycled water, sewer, gas, electricity, telecommunications, cable, and other infrastructure. Although there would be no interruption in Facility operations during construction of Project, other utilities could be affected during construction. Utility clearance is part of the standard construction process for projects at the Facility. During design, projects incorporate the Facility GIS utility maps into plan drawings and if there are close clearances that need to be confirmed, a third party utility company is employed during the design stage. Utility drawings are also provided to contractors and before breaking ground, contractors must conduct potholing to confirm utility clearance, in addition to calling USANorth prior to any digging. The coordination with the utility service providers was included in the Plant Master Plan EIR as Mitigation Measure UT-6 (Coordination With Utility Service Providers and Develop Utility Avoidance Plan), as described below.

Mitigation Measure UT-6: Coordination With Utility Service Providers and Develop Utility Avoidance Plan.

Prior to construction, the project proponent shall coordinate with appropriate utility service providers and related agencies to determine the location of utilities and the City will incorporate into construction specifications the requirement that the

contractor develop a plan to reduce service interruptions. The plan shall be approved by the City and submitted to appropriate utility providers. Utilities to be addressed in the plan shall include, but may not be limited to: water, recycled water, sewer, gas, electricity, telephone, cable. Coordination efforts shall include the following:

- The project proponent shall coordinate with SJMWS as the water purveyor to minimize or eliminate potential water interruptions. Such coordination efforts may include requiring the construction contractor to hot-tap28 existing water lines for new water line connections when possible to maintain service of existing water lines. Another option is to isolate construction areas and back feed water through alternate lines to provide continuous service.

With implementation of this utility clearance process, this impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.19.2), and the Project would not result in any new or more significant impacts to utilities during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

The Plant Master Pan EIR concluded that expansion of the Facility is expected to result in the need for 23 additional staff by 2040, and this small increase in employees would result in an approximately seven percent increase in potable water usage. This increase would not require additional water supply entitlements for expansion of the Facility under the Plant Master Plan. Once operational, the Project would require up to nine new additional staff for operations and maintenance. Because the Project would add less staff than those included in the Plant Master Plan EIR, the increase in potable water usage would be less than seven percent. Potable water for the Project would be supplied from a new service connection to an existing potable water main located within Zanker Road. Because an existing potable water line would be used for this supply, no new water supply facilities would be needed to provide potable water for the Project.

The dewatering facility would include a plant drain system to collect sanitary flow from restrooms, showers, and kitchens as well as drainage from process areas such as floor drains and truck washdown stations. The sanitary flows would be conveyed via a dedicated pipeline either to the EBOS or to the existing interceptors, which would then flow into the existing Facility Headworks for treatment, as shown on Figure 2-4 in Chapter 2, Project Description. The existing EBOS and interceptors are sufficiently sized to accommodate these flows, thus no new water treatment facilities would be needed to support the Project.

Water supplies needed to support the Project are included in Table 2-3 in Chapter 2, Project Description. The Treated Effluent Service Water and Fire Water Supply would be provided from the existing water distribution system at the Facility; therefore, no new water supply would be needed to support these processes. A recycled water supply would be required for landscape irrigation, which would require an approval/permit from the State Water Resources Control Board. The Project would include relocating an existing

16-inch-diameter recycled water pipeline that passes through the dewatering facility site. Because an existing recycled water line would be used for this supply, no new facilities would be needed to provide recycled water for the Project

Stormwater captured at the dewatering facility would be sent to either the EBOS or to the existing interceptors for treatment, as shown on Figure 2-4 in Chapter 2, Project Description. The existing EBOS and interceptors are sufficiently sized to accommodate these flows, thus no new stormwater treatment facilities would be needed to support the Project.

A new power supply would be required for the Project; however, the new components would be powered from the Facility's existing distribution network, which is powered by dual PG&E grid feeds and power generated at the cogeneration facility. Because the power supply would come from the Facility's existing network, no new power supply facilities (i.e., power lines, a substation, transformer) would be needed to support the Project.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.19.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

b) **Construction**

The Project would require limited water during construction in support of dust suppression and on site earth moving activities. The Plant Master Plan EIR, Table 4.13-4, identified that approximately 28.91 million gallons of water would be needed for construction of B2-P1 (Dewatering Phase 1), and that water requirements for B2-P2 (Dewatering Phase 2) would likely be similar. The Project would require approximately 1,000 gallons per day for dust control and soil compaction, and up to 10,000 gallons per day when soil is being imported. The Project would require less water for construction activities than those identified in the Plant Master Plan EIR. The contractors would likely use publicly available recycled water (available on-site) for most construction uses; consequently, construction of the Project would not significantly affect water supplies.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.19.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

As discussed in checklist item a) above, a potable water supply would be required for the potable water uses in the dewatering facility. Potable water would be supplied from an existing potable water main located within Zanker Road. Once operational, the Project would require up to nine new additional staff for operations and maintenance. The Project would add less staff than those included in the Plant Master Plan EIR, therefore the increase in potable water usage would be less than seven percent and there would be

sufficient water supplies available to serve the Project. There is no reasonably foreseeable future development associated with the Project.[44]

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.19.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

c) **Construction and Operation**

The Facility is the wastewater treatment provider and the Project would install new wastewater infrastructure at the Facility. The Project would not result in additional residences or businesses. Impacts related to increase wastewater or stormwater flows to the Facility are addressed above in item b) above. The Facility has capacity to treat up to 261 million gallons per day of wastewater during wet weather. The amount of wastewater generated by the Project would not substantially increase the amount of wastewater requiring treatment at the Facility. For these reasons, the Project would have no impact on wastewater treatment capacity.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.19.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

d) **Construction**

Construction activities associated with the Project, such as earthwork (i.e., grading, excavation), would produce solid waste. The Plant Master Plan EIR, Table 4.13-5, identified that approximately 8,434 and 1,099 cubic yards of soil would need to be disposed of off-site associated with the B2-P1 (Dewatering Phase 1) and B2-P2 (Dewatering Phase 2), respectively. As shown in Table 2-6 in Chapter 2, Project Description, the Project would produce approximately 5,300 and 6,000 cubic yards of soil that would need to be hauled offsite for the two-story and four-story dewatering facility building options, respectively.

The solid waste material would be managed in compliance with City's mandatory Construction and Demolition Diversion Deposit Program and any applicable recommendations of the Zero Waste Strategic Plan's Construction and Demolition Program in effect at the time of construction, which would substantially reduce impacts to Santa Clara County landfills. The majority of construction waste is expected to be soil from grading and excavation. As long as soils slated for off-site disposal are not contaminated with hazardous materials or have otherwise been screened appropriately for the proposed use, soils could be used onsite for backfill or as landfill cover at the landfills listed in

[44] Setback Option 2, as described further in Chapter 2, Project Description, would place the dewatering facility 120 feet away from Zanker Road and includes space for future expansion of the dewatering facility (e.g., additional truck loading bay). The implementation of the future dewatering facility expansion would require subsequent CEQA review.

Table 3.19-1 and are not considered waste. Soils not used onsite would be hauled by truck to a Class II or Class III landfill, depending on the chemical composition of the soil. Altamont and Keller Canyon landfills are Class II sites and accept designated wastes and nonhazardous wastes. Altamont Landfill is a Class III site and accepts nonhazardous soils. The landfills designated by the City for this Project have sufficient capacity to accommodate the identified solids waste disposal needs during construction, as shown in Table 3.19-1.

TABLE 3.19-1
SUMMARY OF LANDFILLS FOR CONSTRUCTION DISPOSAL

Landfill	Location	Estimated Closure Month/Year	Remaining Capacity (cubic yards)	Max Waste Accepted/Day[a]
Altamont Solid Waste Landfill (Class II, III)	10840 Altamont Pass Road, Livermore, CA	01/2025	65,400,000	11,150 cubic yards
Keller Canyon Landfill	901 Bailey Road, Pittsburg, CA	12/2030	52,930,000	3,270 tons

NOTE:
[a] Alternative daily cover does not count towards the maximum waste accepted per day.

SOURCE: CalRecycle, 2017. Solid Waste Information System (SWIS)–Facility/Site Listing for Altamont Solid Waste Landfill; SWT Engineering, 2016, *Joint Technical Document Keller Canyon Landfill (SWIS No. 07-AA-0032*), Volume 1. May.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.19.2), and the Project would not result in any new or more significant impacts during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

Once operational, the Project would require up to nine new additional staff for operations and maintenance. These additional staff would not be expected to greatly increase the amount of municipal solid waste generated at the Facility currently, and therefore, the landfills designated by the City for this Project have sufficient capacity to accommodate the identified solids waste disposal needs during operation.

Currently, the Facility's biosolids are processed on site and used as alternative daily cover at the Newby Island Landfill just north of the Facility. The Facility currently generates approximately 47 dry tons of biosolids per year. This volume is expected to increase to 80 dry tons per year by 2040, as discussed in the Plant Master Plan EIR. The Facility currently produces biosolids that are 80 percent solids and 20 percent water and are suitable for use as alternative daily cover for most landfills. The Plant Master Plan envisioned a program that produced a mix of Class A (30 percent) and Class B (70 percent) biosolids products. The Plant Master Plan EIR determined that the Newby Island, Guadalupe, and Kirby Canyon Landfills have sufficient capacity for Facility biosolids in the near term (until approximately 2044). The Plant Master Plan identified a range of options to dispose of or reuse biosolids and included a Biosolids Management Program under which the Facility would establish at least three disposal options that

could each accommodate up to 50 percent of the disposal volume. After undergoing the fine screening and dewatering phase, the dewatered solids would either be hauled offsite for a combination of disposal to landfill, soil augmentation, and composting, or dried further on site. In the event that one of the three disposal options, as described above, is no longer available, the Facility could still dispose the entire volume of biosolids at the two remaining disposal sites. The Plant Master Plan EIR concluded that with the Biosolids Management Program in place, the impact related to a landfill with sufficient capacity to accommodate the biosolids solid waste needs would be less than significant.

The Project would produce 100 percent Class B biosolids that would be hauled off-site to landfills for disposal. Based on the remaining capacity of the landfills designated to receive biosolids in the near term, as shown in **Table 3.19-2**, these landfills have sufficient capacity to accommodate the identified biosolids disposal needs.[45]

TABLE 3.19-2
SUMMARY OF LANDFILLS FOR BIOSOLIDS DISPOSAL

Landfill	Location	Estimated Closure Month/Year	Remaining Capacity (cubic yards)	Max Waste Accepted/Day (tons)[a]
Newby Island Sanitary Landfill	1601 Dixon Landing Road Milpitas, CA 95035	01/2041	21,200,000	4,000
Guadalupe Sanitary Landfill	15999 Guadalupe Mines Road San Jose, CA 95120	01/2048	11,055,000	1,300
Kirby Canyon	910 Coyote Creek Golf Drive San Jose, CA 95037	12/2022	16,191,600	2,600

NOTE:
[a] Alternative daily cover does not count towards the maximum waste accepted per day.

SOURCE: CalRecycle, 2018. Solid Waste Information System (SWIS).

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.19.2), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

e) **Construction and Operation**

All disposal facilities identified by the City for disposal and recycling of construction and demolition debris are permitted for the types of waste generated by Project construction. The California Integrated Waste Management Act of 1989 (AB 939) and Senate Bill (SB) 1016 requires municipalities to divert at least 50 percent of all solid waste generated by the year 2000 and establishes the goal of diverting at least 75 percent of generated waste (based on per capita disposal rates) by 2020. In addition, San José's Zero Waste Resolution

[45] The landfills in Table 3.19-2 were contacted to confirm that all of these landfills accept Class B biosolids. There is no set limit/cap on the amount of Class B biosolids that these landfills can receive. Alternative daily cover at landfills is a beneficial use that displaces use of topsoil in the management of active landfill disposal cells. Class B biosolids usually meet the threshold quality level for alternative daily cover.

established an objective of zero waste by 2022, which entails diverting all wastes from landfills. As of 2015, San José disposed of 643,775 tons of waste (or 3.5 pounds per person per day), well below the California Integrated Waste Management Act target rate for San José of 5.2 pounds per person per day. Specifications for construction of the Project would contain requirements for the handling, storage, cleanup, and disposal of hazardous materials; including petroleum-based products, cement, or other construction pollutants. Refer to Section 3.9, Hazards and Hazardous Materials, for additional information on hazardous materials associated with construction of the Project and how hazardous materials would be handled if encountered during construction.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in Section 3.19.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

CalRecycle, Jurisdiction Diversion/Disposal Rate Detail for San José, Reporting year 2017. Available online at https://www2.calrecycle.ca.gov/LGCentral/%20DiversionProgram/JurisdictionDiversionDetail/444/Year/2017 Accessed March 19, 2019.

CalRecycle, 2017. Solid Waste Information System (SWIS)–Facility/Site Listing for Altamont Solid Waste Landfill; SWT Engineering, 2016, Joint Technical Document Keller Canyon Landfill (SWIS No. 07-AA-0032), Volume 1. May.

CalRecycle, 2018. Solid Waste Information System (SWIS).

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

Santa Clara County, Five-Year CIWMP/RAIWMP Review Report, August 25, 2011.

3.20 Wildfire

3.20.1 Setting

The environmental setting relevant to wildfires has not changed in comparison to that described in the certified Plant Master Plan EIR. Based upon fire hazard mapping by the CAL FIRE Forest Resource Assessment Program and the Santa Clara County Wildland Urban Fire Interface Map, the Project site is not located within an area identified as a high fire hazard area (CAL FIRE, 2019).

3.20.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR (Sections 4.11 and 4.12) evaluated impacts related to potential exposure to fires. The Plant Master Plan EIR identified less-than-significant impacts for potential hazards associated exposure to fires.

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XX. WILDFIRE — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) 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) 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?	☐	☐	☒	☐	☐

Discussion

a-d) Based upon fire hazard mapping by the CAL FIRE Forest Resource Assessment Program and the Santa Clara County Wildland Urban Fire Interface Map, the Project site is not located within an area identified as a high fire hazard area. Therefore, the Project would have no impact associated with wildfire. The use of construction equipment and the possible temporary on site storage of fuels and/or other flammable construction chemicals could pose an increased fire risk resulting in injury to workers or the public during construction. However, contractors would be required to comply with hazardous materials storage and fire protection regulations, which would minimize potential for fire creation, and ensure that the risk of fires during construction would be less than significant. Through compliance with legal requirements related to hazardous materials

storage and fire protection, potential risks of fire associated with construction and operation of the Project would not result in any new or more significant impacts compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

CAL FIRE, 2019. California Fire Hazard Severity Zone Map Update Project, http://egis.fire.ca.gov/FHSZ/, accessed April 5, 2019.

California Department of Forestry and Fire Protection, Fire and Resource Assessment Program, Fire Hazard Severity Zones in State Responsibility Areas, Santa Clara County, California. November 7, 2007.; California Department of Forestry and Fire Protection, Fire and Resource Assessment Program, Very Fire Hazard Severity Zones in Local Responsibility Areas, Santa Clara County, California. May 2008.

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

Santa Clara County Planning Office, Santa Clara County Wildland Urban Interface Fire Area, Adopted February 24, 2009.

3.21 Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*	*Checklist Source(s)*
XXI. MANDATORY FINDINGS OF SIGNIFICANCE —						
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?	☐	☐	☐	☒	☐	
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)?	☐	☐	☐	☒	☐	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒	☐	

Discussion

a) The Project has the potential to degrade the quality of the environment. As discussed in the sections above, the Project would have the same impacts to aesthetics, air quality, biological resources, cultural resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation, and utilities and service systems as the Project analyzed in the certified Plant Master Plan EIR.

The Project has the potential to degrade the quality of the environment. Tree removal to accommodate the dewatering facility would slightly diminish the scenic resources at the site. However, this impact would be reduced to less than significant levels with landscaping that would be located in front of the building. The landscaping was also included in the Plant Master Plan EIR as Mitigation Measure AES-1a Landscape Program. With implementation of the landscaping, this impact would be less than significant, and the Project would not result in any new or more significant impacts compared to those identified in the certified Plant Master Plan EIR.

The Project has the potential to impact biological resources. As discussed above in Section 3.4, Biological Resources, the Project could result in impacts to the following:

- Congdon's tarplant. Potential impacts to Congdon's tarplant from the Project would be reduced to less than significant with the implementation of the Plant Master Plan EIR Mitigation Measure BIO-1: Reduce Impacts to Tarplant.

- The Project would result in the removal of one tree and potential impacts to nesting or breeding birds, including special-status bird species. Implementation of the Plant Master Plan EIR Mitigation Measure BIO-2d: Raptor and Migratory Bird Nest Measures would reduce adverse effects to common and special status nesting birds to less than significant. The remaining trees on site could be impacted by mechanical damage to tree trunks and canopies from inadvertent contact by construction equipment, vehicles or construction materials; root damage resulting from grading or excavation activities; or, root damage resulting from soil compaction caused by heavy equipment or vehicle traffic. All other trees onsite or adjacent to the Project site would be safeguarded from construction activities by conditions identified in the City of San José's Municipal Code 13.32.130 – Safeguarding Trees During Construction and through implementation of the Plant Master Plan EIR Mitigation Measure BIO-5b: Minimize Construction Effects on Protected Trees to be Retained.

- Temporary noise, visual, and vibration impacts to potential nesting western burrowing owls adjacent to the Project sites could occur as a result of Project-related construction activities. Potential effects to western burrowing owls associated with the Project during the non-breeding season would be reduced to less than significant through the implementation of the Plant Master Plan EIR Mitigation Measure BIO-2e Western Burrowing Owl Measures.

- Construction activities could adversely affect western pond turtles through direct mortality, increased visual or noise disturbance, or upland habitat disturbance. Implementation of the Plant Master Plan EIR Mitigation Measure BIO-2b: Western Pond Turtle Measures would reduce adverse effects on this species associated with the Project to less than significant.

- Indirect impacts on the riparian woodland habitat could result from soil compaction from adjacent grading and construction activities; changes in soil and hydrologic conditions from increased irrigation and run-off from the construction area, and erosion and sedimentation from construction activities; and introduction and spread of non-native species due to ground disturbance and transport from construction personnel and equipment. Implementation of Plant Master Plan EIR Mitigation Measure BIO-3a: Riparian Woodland Habitat Avoidance Measures and Mitigation Measure BIO-3c: Control of Non-Native Invasive Plant Species impacts on the riparian corridor would be reduced to less than significant.

- Potential sedimentation or contamination of stormwater runoff generated from the Project site could encroach into potential jurisdictional wetlands. Implementation of Plant Master Plan EIR Mitigation Measure BIO-4a: Wetlands Avoidance Measures and Mitigation Measure BIO-4b: Wetlands Restoration for Project-Level Improvements, would reduce impacts to jurisdictional features.

With implementation of the above mitigation measures, Project impacts to special-status species would be the same as identified in the Plant Master Plan EIR, and the Project would not result in any new or more significant impacts compared to those identified in the certified Plant Master Plan EIR.

As discussed above in Section 3.5, Cultural Resources, and Section 3.18 Tribal Cultural Resources, there are no historical resources or archaeological resources in the Project area. Potential impacts to inadvertently discovered archaeological resources (including those found to qualify as a tribal cultural resource pursuant to PRC Section 21074(a)(1)) or human remains would be reduced to a less-than-significant level with implementation of Mitigation Measure CUL-3a Inadvertent Discovery of Archaeological Resources and Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains from the Plant Master Plan EIR. No other cultural resources would be affected and the Project would not eliminate important examples of the major periods of California history or prehistory. With implementation of the above mitigation measures, Project impacts to cultural resources would be the same as identified in the Plant Master Plan EIR, and the Project would not result in any new or more significant impacts compared to those identified in the certified Plant Master Plan EIR.

b) Cumulative environmental effects are multiple individual effects that, when considered together are considerable or compound or increase other environmental impacts. The individual effects may result from a single project or a number of separate projects and may occur at the same place and point in time or at different locations and over extended periods of time. Cumulative projects identified that are ongoing at present or anticipated in the reasonably foreseeable future that would be relevant to the Project include the proposed projects associated with implementation of the Plant Master Plan, as well as other anticipated upgrades at the Facility, including: Fire Life Safety Upgrades, Advanced Facility Control and Meter Replacement Phase 2, Switchgear M4 Replacement and G3 and G3A Removal, HVAC Improvements, Headworks Improvements, Headworks Critical Improvements, Blower Improvements, and Nitrification Clarifiers Rehab.

The certified Plant Master Plan EIR did not evaluate impacts to Tribal Cultural Resources, as Assembly Bill (AB) 52 had not yet been adopted, as discussed in Section 3.4, Tribal Cultural Resources. As a result, cumulatively considerable impacts for Tribal Cultural Resources were also not previously considered. The geographic scope for cumulative effects on tribal cultural resources includes the immediate vicinity of locations where the project could cause disturbance to known tribal cultural resources. As the Project would not have an impact on known tribal cultural resources there would be no significant cumulative impact on known tribal cultural resources to which the Project could contribute. Similar to the proposed project, cumulative projects in the project vicinity could have a significant impact on previously undiscovered archaeological resources, including human remains interred outside of formal cemeteries, during ground-disturbing activities that could be considered tribal cultural resources. However, implementation of Mitigation Measures Mitigation Measure CUL-3a Inadvertent Discovery of Archaeological Resources, Mitigation Measure CUL-1b Inadvertent Discovery of Tribal Cultural Resources, and Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains would require that work halt in the vicinity of a find until it is evaluated by a Secretary of the Interior-qualified archaeologist, and in the case of human remains the County Coroner. In addition, cumulative projects undergoing CEQA review would have similar types of inadvertent discovery measures. Therefore, with implementation of

Mitigation Measures CUL-3a, CUL-1b and CUL-2, the Project's contribution to cumulative impacts on tribal cultural resources would not be considerable.

As noted in Section 3.17, Transportation, and the Project Description, construction traffic generation and onsite activity would be limited. However, construction of the Project could overlap with construction of other projects at the Facility. Because the extent of construction of potentially overlapping projects is not fully known at this time, it is possible that service levels along affected roadways could be temporarily degraded. Therefore, implementation of Mitigation Measure C-TR (see below) as described in the approved Plant Master Plan EIR would reduce the Project's contribution to any potential traffic impacts to the surrounding network; and ensure that the Project would not result in any new or more significant traffic impacts compared to those identified in the certified Plant Master Plan EIR.

Mitigation Measure C-TR-1: Implement Coordinated Transportation Management Plan.

Prior to construction, the City's contractor(s) shall develop a Coordinated Transportation Management Plan and work with other projects' contractors and appropriate City departments (e.g., Emergency Services, Fire, Police, Transportation) to prepare and implement a transportation management plan for roadways adjacent to and directly affected by the Project as well as planned Facility improvements and land uses, and to address the transportation impact of the overlapping construction projects within the vicinity of the Project. The transportation management plan shall include, but not be limited to, the following requirements:

- Coordination of individual traffic control plans for the Project with nearby projects.
- Coordination between the Project contractor and other project contractors in developing circulation and detour plans that include safety features (e.g., signage and flaggers). The circulation and detour plans shall address:
  - Full and partial roadways closures
  - Circulation and detour plans to include the use of signage and flagging to guide vehicles through and/or around the construction zone, as well as any temporary traffic control devices
  - Bicycle/Pedestrian detour plans, where applicable
  - Parking along public roadways
  - Haul routes for construction trucks and staging areas for instances when multiple trucks arrive at the work sites
- Protocols for updating the transportation management plan to account for delays or changes in the schedules of individual projects.

A comprehensive and continual outreach program to notify affected citizens (i.e. residents of Alviso, commuters, etc.) of all construction activity and roadway closures for the duration of the projects.

c) Impacts to air quality, water quality, and hazardous materials by the Project could directly affect human beings, and all CEQA impacts discussed above could indirectly affect human beings. However, implementation of the mitigation measures, General Plan policies, and conditions of approval; and compliance with applicable federal, state, and local regulations as discussed in the approved Plant Master Plan EIR and in this addendum would reduce these impacts to a less than significant level. This addendum has identified no other direct or indirect adverse effects on human beings.

References

City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

This page intentionally left blank

CHAPTER 4
Authors and Consultants

4.1 Lead Agency

City of San José
Department of Planning, Building, and Code Enforcement

David Keyon, Principal Planner
Casandra Van Der Zweep, Planner IV
Sanhita Ghosal, Planner III

City of San José
Department of Environmental Services

Jennifer Voccola, Interim Sustainability and Compliance Manager
Cathy Correia, Interim Environmental Compliance Officer
Andrew Martin, Interim Supervising Environmental Services Specialist
Ruchita Acharya, Environmental Project Team Lead

4.2 Consultants

Environmental Science Associates (ESA)

Jill Hamilton, Project Director
Meryka Dirks, Project Manager
Ben Rigby, Deputy Project Manager
John Bourgeois, Biology Lead
Elizabeth Hill, Biological Resources Analyst
Heidi Koenig, Cultural Lead
Jyothi Iyer, Air Quality, Greenhouse Gas, and Noise Lead
Karen Lancelle, Geology, Hydrology and Hazards Lead
Shadde Rosenblum, Transportation Lead

Fehr & Peers

Jane Bierstedt, Transportation Analysis

This page intentionally left blank