# DRAFT Initial Study/Mitigated Negative Declaration

# WWTP Elec/Mech Rehab and Sludge Holding Tank Replacement Project

## Carmel Area Wastewater District Wastewater Treatment Plant



March 2020



Carmel Area Wastewater District 3945 Rio Road P.O. Box 221428 Carmel, CA. 93922

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#### **Section 1:** Introduction

#### 1.1 Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accord with the provisions of the California Environmental Quality Act (CEQA) and assess the potential environmental impacts of the proposed Project. The proposed Project includes rehabilitation of existing Influent Pump Station, Headworks, Chlorination Building, and Effluent Pump Station by installation of various new electrical and mechanical equipment. Furthermore, the project includes demolition of three existing sludge tanks and installation of one new sludge tank.

1. Project title: WWTP Elec/Mech Rehab and Sludge Holding

Tank Replacement Project

**2.** Lead agency name and address: Carmel Area Wastewater District (CAWD)

3945 Rio Road Carmel, CA 93922

**3. Contact person and phone number:** Barbara Buikema

General Manager 831-624-1248

**4. Project location:** Monterey County

**5. Project sponsor name and address:** Carmel Area Wastewater District (CAWD)

3945 Rio Road Carmel, CA 93922

**6. General plan designation:** Coastal Zone

7. **Zoning:** Public Quasi Public (PQP)

8. Other Agency Approvals Required: Coastal Commission

## Section 2: General Description and Location

#### 2.1 General Description

Carmel Area Wastewater District (CAWD) proposes to conduct rehabilitation of several areas of the wastewater treatment plant to maintain the facilities in good operating condition.

The project involves replacement of select electrical and mechanical equipment with in-kind or substantially similar equipment. The new equipment will be installed to serve the existing Influent Pump Station, Headworks, Chlorination Building, and Effluent Pump Station. Not all equipment in these areas is being replaced, and no changes are being made to the existing building structures.

Furthermore, the project includes demolition of three existing sludge tanks and a small storage building, and the installation of one new sludge tank in the location of one demolished tank. The new tank storage capacity will be about 75,000 gallons. The three sludge tanks being demolished are about 70,000 gallons, 188,000 gallons, and 70,000 gallons respectively.

#### 2.2 Project Location

The general location of the Project is shown in Figure 1. The Plant is located South of the Carmel River, as shown in Figure 2. The closest residences to the plant are across the river on the northeast side, approximately 100 yards from the closest process structure on the plant site. Directly north of the plant site, across the river, are the Junipero Serra School and the Larsen Youth Baseball field, approximately 200 yards away. The Carmel Elementary School is over 0.3 miles northwest of the Plant site. The other sides of the plant site are bounded by undeveloped land. The west boundary of the plant site is slightly more than 800 yards from the Pacific Ocean and Highway 1 is approximately 600 yards to the east and south of the plant site. The Plant facilities are screened from view by heavy tree cover and vegetation that surrounds the Plant site.

The Plant site is within the flood plain of the Carmel River and the facilities on the Plant site are protected from flooding by using structures that are made of concrete with first floor elevations above the flood levels. The 100-yr flood level according to FEMA is between 16 ft to 20 ft elevation (0 to 4 ft. above ground level). Accordingly, the mechanical and electrical equipment for the Project will be designed to be elevated above the flood elevation, or protected from the flood waters if they are below the flood elevation.

The existing facilities located on the Plant site are typical industrial facilities that are found on a site of a publicly owned wastewater treatment plant. The Plant site is categorized as Public/Quasi-Public in the Monterey County Land Use Plan.

## 2.3 Description of Project Components

The components of the Project are described below. The site layout showing the location of the components of the Project is shown on Figure 3. Four existing structures will be demolished including three sludge holding tanks. One new sludge holding tank will be constructed within the footprint of one of the existing tanks that will be demolished. The remainder of the work is within existing structures or within the footprint of existing process areas.

The Project components will generally consist of civil, mechanical, structural, electrical, instrumentation and control modifications. General work that will be completed related to the components listed below consists of earthwork, removal of existing buried piping, installation of buried piping, installation of buried electrical conduits, demolition of incidental quantities of existing asphalt pavement, and placement of new asphalt pavement in areas of demolition.

#### 2.3.1 Influent-Standby Generator Building Electrical/Mechanical Rehabilitation

The Project includes rehabilitation work inside the existing Influent Pump Station and Standby Generator Structure. The rehabilitation work will include replacing the existing electrical motor control center (MCC), installing two smaller pumps in the existing pump room, and demolition of one redundant existing 450 kW Standby Generator.

## 2.3.2 Headworks -Operations Building Electrical/Mechanical Rehabilitation

The Project includes rehabilitation work for the existing Headworks process. The rehabilitation work will include replacing the existing electrical motor control center (MCC) with a new MCC in the Operations Building, replacing the existing mechanical screening equipment in the existing structure, replacing the existing grit removal collector drive in the existing tank structure, and replacing the existing influent flowmeter in the existing structure.

## 2.3.3 Chlorination Building Electrical/Mechanical Rehabilitation

The Project includes rehabilitation work inside the existing Chlorination Building. The rehabilitation work will include replacing the existing electrical motor control center (MCC), replacing the existing programmable logic controller (PLC), replacing the existing plant water hydropneumatic tank, and replacing the existing chlorine analyzers.

#### 2.3.4 Effluent Pump Station Electrical/Mechanical Rehabilitation

The Project includes rehabilitation work inside the existing Effluent Pump Station structure. The rehabilitation work will include replacing the existing electrical motor control center (MCC), replacing the existing programmable logic controller (PLC), and replacing the existing effluent flowmeter.

#### 2.3.5 Laboratory Power Standby Power Feeder

The CAWD/Reclamation Laboratory Facilities are not connected to the standby power system at the treatment plant. Therefore, if power goes out the lab has to hook up a small portable generator and the loss of power may effect sample testing. A new power sub feed from the Chlorination Building will be installed to provide automatic standby power at the lab.

#### 2.3.6 Demolition of Three Existing Sludge Tanks and One Storage Building

The Project includes demolition of existing sludge handling structures, sludge recirculation pump, and exposed and below grade piping. Four existing structures will be demolished (three sludge holding tanks, and one storage building). Demolition of piping for these structures includes piping in the basement of the Digester No. 1 Control Building.

#### 2.3.7 Construction of One New Sludge Holding Tank

One new 75,000 gallon sludge holding tank will be constructed in the location of the existing 188,000 sludge holding tank and will include a new recirculation pump to replace the one that is demolished. The construction of the new sludge holding tank involves driving sixteen (16) precast concrete piles. Data and reports from recent pile driving tests at the site from construction in 2015 show that each pile will take about 20 minutes to drive into place. Therefore, elevated noise is anticipated for a combined time of less than 6 hours spread out over several days. The electrical feeds to the New Sludge Holding tank will be routed from the existing MCC in the Digester No. 2 Control Building.

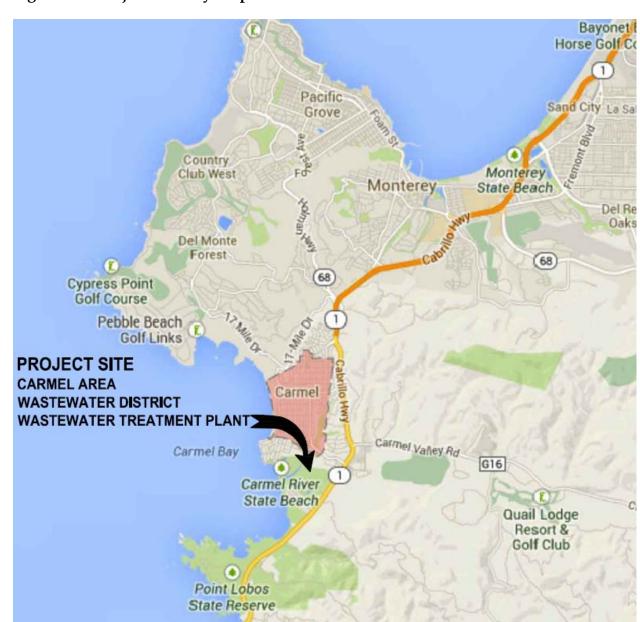


Figure 1: Project Vicinity Map

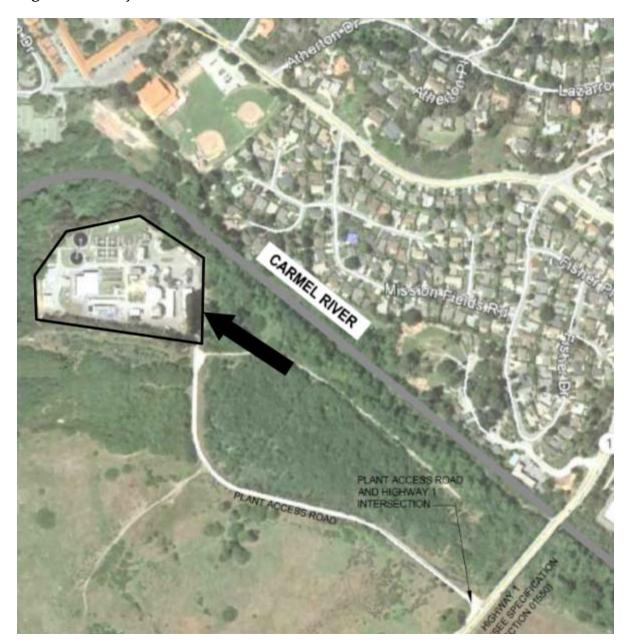


Figure 2: Project Location

Address: 26900 State Route 1, Carmel, CA 93923

Figure 3: Site Layout



## EXISTING BUILDINGS TO RECEIVE NEW WORK

- 1 INFLUENT-STANDBY GENRATOR BUILDING
- 2 HEADWORKS
- 3 OPERATIONS BUILDING
- 4 CHLORINATION BUILDING
- 5 EFFLUENT BUILDING
- 6 LABORATRY BUILDING
- 7 DIGESTER NO. 1 CONTROL BUILDING
- 8 DIGESTER NO. 2 CONTROL BUILDING

## EXISTING STRUCTURES TO BE DEMOLISHED

- 188,000 GALLON SLUDGE TANK
- ii 70,000 GALLON SLUDGE TANK
- iii 70,000 GALLON SLUDGE TANK
- iv STORAGE BUILDING

#### NEW STRUCTURE

A NEW 75,000 GALLON SLUDGE HOLDING TANK

CARMEL AREA WASTEWATER DISTRICT
WASTEWATER TREATMENT FACILITY
BUILDING NUMBER PLAN

# **Section 3:** Determination

# 3.1 Environmental Factors Potentially Affected:

	nvironmental factors checked below would be potentially significantly affected by this ct as indicated by the checklist on the following pages.
Bi G La Po	esthetics
3.2	Determination: (To be completed by the Lead Agency)
On th	ne basis of this initial evaluation:  I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

	osed project could have a significant effect on the
•	tentially significant effects (a) have been analyzed
1 ,	or NEGATIVE DECLARATION pursuant to applicable
, ,	avoided or mitigated pursuant to that earlier EIR or
NEGATIVE DECLARATION	N, including revisions or mitigation measures that are
imposed upon the proposed	Project, nothing further is required.
Signature	Date
Title	For

## **Section 4:** Evaluation of Environmental Impacts

The Carmel Area Wastewater District, as the CEQA Lead Agency, has prepared this initial study to identify potentially significant effects of the project and revisions to the project that would avoid or mitigate the effects to a point where clearly no significant effects would occur. This document includes a checklist for each resource topic, supporting explanations, and a discussion of mitigation measures that have been incorporated into the proposed project.

The resource topics considered in this Initial Study include:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality

- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

#### 4.1 Aesthetics

Would the project:  a) Have a substantial adverse effect on a	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
scenic vista?				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				$\boxtimes$

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				

The site is industrial in nature and does not involve scenic resources or a scenic vista. The proposed Project facility improvements will be located within the existing Plant site and will cause a relatively minor change in the visual characteristics of the existing facility. All new facilities would be installed in areas that are already graded and/or paved. As a result, the proposed improvements will not create substantial impacts to the visual quality of the site or surroundings. The character of the site will be temporarily disrupted during the construction period.

The Plant has existing lighting features, including nighttime safety lighting, as part of normal operations. Lighting fixtures added as part of the Project will not add a new source of substantial light or glare to the site, and will be equipped with off switches to turn the lights out at night when they are not needed.

In addition to the above, the Plant site is surrounded by trees and vegetation that effectively screen the existing facilities on the Plant site, such that the existing facilities are not visible beyond the fence line of the site. The new facilities also will not be visible beyond the fence line of the site.

#### **Mitigation Measures**

No mitigation measures are necessary for aesthetic resources.

# 4.2 Agricultural 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				$\boxtimes$
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?				$\boxtimes$
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use?				

The facilities will be installed on the site of the existing Plant. The Plant site is not used for any agricultural resources.

#### **Mitigation Measures**

No mitigation measures are necessary for agricultural resources.

## 4.3 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct     implementation of the applicable air     quality plan?				$\boxtimes$
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				$\boxtimes$
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?				
d) Expose sensitive receptors to substantial pollutant concentrations?				
e) Create objectionable odors affecting a substantial number of people?				

The operation of the new components of the Project will not cause any change to the air emissions or odors from the Plant site compared to the existing air quality condition. Many

project components consist of replacing existing project equipment with new similar equipment that are not sources of air emissions or odors, and therefore will not impact air quality. The Project does not expand the capacity of the Plant to treat wastewater and does not change the processes used to treat wastewater.

#### **Construction Impacts**

Dust may be generated during the construction of the sludge holding tank, and the installation of the adjacent paving. Overall, minimal earthmoving for a short duration is anticipated during construction of the above components. The area of the earthmoving is as follows:

 Demolition of existing sludge tanks and storage structure and construction of one new tank: 0.18 acres

The 0.18 total acres of minor earthmoving work for the above described improvements is significantly less than the Monterey Bay Unified Air Pollution Control District (APCD) threshold of 2.2 acres per day, and therefore will not have a potentially significant impact for particulate matter.

The contractor will be required to employ general dust suppression methods. By employing dust suppression, and due to the fact that the Plant is surrounded by vegetation, it's anticipated that dust, if generated, will not be noticeable beyond the Plant site.

The Project will use typical construction equipment such as dump trucks, pile drivers, and front end loaders that will temporarily emit precursors of ozone. Per Section 5.3 of the CEQA Air Quality Guidelines published by the APCD, these emissions are accommodated in the emission inventories of State and federally approved air plans and would not have a significant impact on the attainment and maintenance of ozone Ambient Air Quality Standards (AAQS).

#### **Operations Impacts**

No additional Plant vehicles or Plant vehicle miles will be needed as a result of the Project.

#### **Mitigation Measures**

Employ dust suppression during construction activities that create dust.

# 4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have substantial adverse effects, 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?				$\boxtimes$
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) 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?				

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				$\boxtimes$
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?				$\boxtimes$

The Project will be within the footprint of the existing Plant and all work will occur on previously developed, and disturbed land within the Plant site. Biological resource values are extremely limited and there is no suitable habitat for sensitive species on the Plant site. There are no known sensitive species as identified by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service in areas where the Project work will occur. The Project does not include any work in wetlands as defined by Section 404 of the Clean Water Act. The Project will not result in disturbance to local natural systems or biological resources.

Pile driving activities for the construction of the Sludge Holding Tank will generate short term construction noise. The project includes driving 18 piles. The duration of pile driving noise to drive one pile would last about 20 minutes followed by about 20 to 60 minutes with no noise. Therefore, the cumulative time that pile driving noise will occur would be about 6 hours spread out over the course of approximately two or three days.

CAWD has conducted pile driving during previous projects at the WWTP and conducted sound tests during the latest pile driving activities in 2015. Sound measurements taken show the maximum and equivalent decibels (dB) at various distances from the pile driving activities. The results are shown in Figure 4. The equivalent amplitude of sound measured at distances of about 300 feet from the pile driving was measured at about 80 dB.

#### **Mitigation Measures**

Mitigation will be carried out for potential noise effects on nesting raptors and/or other protected avian/bat species. Mitigation for noise effects will include:

Pile driving activities that may indirectly affect nesting raptors and/or other protected avian/bat species will be timed to avoid the primary breeding and nesting seasons (generally February 1<sup>st</sup> through September 31<sup>st</sup>).

In addition, prior to pile driving, a qualified biologist shall conduct pre-construction surveys for avian/bat species within 300 feet of the proposed pile driving activities. Pre-construction surveys will be conducted prior to the initiation of the pile driving activities, with a final preconstruction survey occurring no more than 72 hours prior to the start of pile driving. Based on the results of these surveys, one or more of the following will occur:

- If avian/bat surveys determine that protected species are not nesting or roosting within the survey area, then no additional mitigation is required.
- If avian/bat surveys identify nests or roosts that would be impacted by the pile driving activities, the qualified biologist would notify the CAWD representative and an appropriate no-disturbance buffer would be imposed within which no pile driving activities would take place until the young of the year are no longer reliant upon the nest/roost or parental care for survival, as determined by a qualified biologist.

Figure 4: Pile Driving Sound Measurements from 2015 Project



# SUMMARY OF AVERAGE AND MAXIMUM SOUND LEVELS CAWD WWTP REHABILITATION - PHASE 1 CARMEL, CA

Pile	Time Started	Time Ended	Run Time	Approx. Distance from Rig (ft.)	LAeq (dB)	LAFmax (dB)
5	9/30/2015 9:07	9/30/2015 9:42	36:01.0	590	64.7	79.3
11	9/29/2015 15:22	9/29/2015 16:07	44:44.1	615	64.2	85
13	9/29/2015 14:28	9/29/2015 15:19	50:49.4	600	64.6	81.2
22	9/30/2015 7:54	9/30/2015 8:29	34:41.3	635	63.1	78.9
28	9/30/2015 8:33	9/30/2015 9:07	34:00.0	610	64.7	79.3
30	9/29/2015 8:40	9/29/2015 9:39	59:12.9	305	75.6	96.9
34	9/30/2015 10:30	9/30/2015 11:38	08:01.7	265	78.9	98.4
42	9/30/2015 13:11	9/30/2015 14:09	57:44.1	295	77.8	95
54	9/29/2015 9:40	9/29/2015 10:29	49:03.5	270	81.3	101.3
64	9/29/2015 10:35	9/29/2015 11:13	37:40.6	310	81.2	99.5
68	9/29/2015 11:28	9/29/2015 11:34	06:31.0	600	61.9	72.5
71	9/30/2015 14:11	9/30/2015 14:41	29:35.3	295	77.3	94.3
75	9/29/2015 12:59	9/29/2015 13:28	29:38.1	100	93	107.3
79	9/30/2015 15:25	9/30/2015 15:57	32:00.5	305	77	94.9
84	9/30/2015 14:43	9/30/2015 15:20	36:16.9	320	74.8	94
128	9/30/2015 16:29	9/30/2015 17:02	32:37.4	320	76.1	96.5
137	9/30/2015 15:59	9/30/2015 16:29	30:30.0	310	78.2	98.8

#### 4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				$\boxtimes$
d) Disturb any human remains, including those interred outside of formal cemeteries?				

The ground disturbed for the Project will be in areas that have previously been disturbed during past construction and Plant operation and maintenance activities. Cultural resources were not found during this previous work, so the potential for encountering important cultural, archaeological and paleontological resources is considered to be very low.

#### **Mitigation Measures**

No mitigation measures are necessary for cultural resources.

# 4.6 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?				$\boxtimes$
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?				$\boxtimes$

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				$\boxtimes$
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				$\boxtimes$

A geotechnical report was completed by Geotechnical Consultants Inc. (GTC) for the Project site to provide foundation design criteria for the new facilities to be constructed on the site. Based on the findings of the investigation, GTC concluded that the construction of the proposed facilities on the project site is geotechnically feasible.

The proposed facilities will be designed in accordance with the 2010 American Society of civil Engineers/Structural Engineering Institute (ASCE/SEI) "Minimum Design Loads for Buildings and Other Structures", referred to hereafter as ASCE 7-10. ASCE 7-10 was adopted by the California Building Code effective as of January 1, 2014. ASCE 7-10 prescribes minimum design loads for civil structures. When used in tandem with appropriate design practices, quality control procedures, and construction practices, the risk of structural failure is minimized to a level acceptable to the California Building Code.

The primary geologic hazards at the Plant site are strong ground shaking related to moderate to large earthquakes occurring on one of the regional active faults in the vicinity, liquefaction, seismic settlement, and flooding inundation. Hazards related to fault rupture, lateral spread, inundation by tsunami, land sliding, and expansive soils are considered low to very low. Construction of the Project will not result in substantial risks to life or property.

Due to the liquefaction potential and the seismic settlement potential, the new Sludge Holding Tank will be pile supported. Other minor structures, such as concrete slabs, will have a foundation that is designed to minimize settlement to the extent possible.

#### **Mitigation Measures**

No mitigation measures are necessary for geology and soils resources other than employing the design standards referenced above.

#### 4.7 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 gasses?				$\boxtimes$

The Project will likely cause a slight reduction in greenhouse gas (GHG) emissions for two primary reasons:

- The Project includes installing smaller influent pumps which will use less electricity than the existing pumps.
- The Project includes installing variable frequency drives in the new MCC in the Chlorination Building for the plant water pumps so to reduce energy consumption.

No additional Plant vehicles or Plant vehicle miles will be needed for operations as a result of the Project.

#### **Mitigation Measures**

No mitigation measures are necessary for GHG.

## 4.8 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				$\boxtimes$
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?				$\boxtimes$
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				$\boxtimes$
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 for people residing or working in the project area?				

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				$\boxtimes$
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

The Project is located on the site of an operating wastewater treatment plant, and public access to the site is restricted. Hazardous chemicals are used in various processes for wastewater treatment, however the Project does not involve any changes to the existing chemical systems.

#### **Mitigation Measures**

No mitigation measures are necessary for hazards or hazardous materials

# 4.9 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?				

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				$\boxtimes$
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite?				$\boxtimes$
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?				$\boxtimes$
e) 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?				$\boxtimes$
f) Otherwise substantially degrade water quality?				
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				
<ul> <li>i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?</li> </ul>				$\boxtimes$
j) Inundation by seiche, tsunami, or mudflow?				$\boxtimes$

The Project will not change the treatment processes used by the Plant, nor will it increase the wastewater treatment capacity of the Plant. Consequently the Project will not change the water quantity or quality of the Plant effluent.

The drainage pattern of water on Plant site will not be functionally changed by the construction of the project. The plant site has a self-contained stormwater system that captures any runoff within the plant site and pumps it into the wastewater treatment system.

The Plant is within a flood plain as defined by the Flood Insurance Rate Map No. 06053C0320G of Monterey County. The existing Plant consists of numerous concrete structures that may impede flow in the flood plain. The Project involves a net reduction in buildings onsite that could impede flow in the flood plain.

#### **Mitigation Measures**

No mitigation measures are necessary for hydrology and water quality.

## 4.10 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				$\boxtimes$
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				$\boxtimes$
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				

The Project will be constructed within the Plant site and the work has no impact on land use or planning. The facilities to be constructed are similar to other existing facilities on the Plant site, and are consistent with the land use of the Plant site.

The Plant site is within the jurisdiction of the California Coastal Commission and there is an existing permit that authorizes rehabilitation projects that intend to maintain the existing facility. The existing permit requires the coastal commission be notified 30 days prior to commencement of construction.

#### **Mitigation Measures**

No mitigation measures are necessary for land use and planning.

## 4.11 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				

There are no known mineral resources in the project area.

## **Mitigation Measures**

No mitigation measures are necessary for mineral resources.

#### **4.12** Noise

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				$\boxtimes$
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?				$\boxtimes$

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above level, existing without the project				
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 expose people residing or working in the project area to excessive noise levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				

During the construction of the project, concrete piles will be driven using a pile hammer over a period of a few days. The short term increase in noise levels above what is typically generated on the Plant site will be noticeable off site. Pile driving noise was measured during similar pile driving activities during WWTP construction in 2015. The pile driving noise was measured at various distances from the pile driver and are shown in Figure 4. The nearest residence on the North side of the Carmel River is over 400 feet from the pile driving activities; at this distance the equivalent dB is estimated to be less than 75 dB based on the previous tests. The Occupational Safety and Health Administration (OSHA) has set the 8-hour noise exposure limit at 90 dB. The total time of pile driving is expected to be around 6 hours (about 20 minutes per pile) based on past pile driving. The 6 hours of driving is expected to be spread out over about 3 days assuming about 6 piles are driven per day.

Except for the pile driving, the Project will not expose the public to noticeable noise levels for the following reasons:

- The Plant site is isolated from the public
- The Plant site is surrounded by heavy vegetation that screens the site

Operation of the Project components will have minimal, if any, impact on the noise level on the Plant site. In general, the new mechanical equipment is replacing existing mechanical equipment and will not have noticeably different noise characteristics.

#### **Mitigation Measures**

- The Carmel Area Wastewater District will distribute an information flyer to residents
  and businesses that have the potential to notice the noise generated by the pile driving
  activities. While the noise cannot be mitigated, the flyer will at least inform the public
  about the higher noise levels during pile driving, and note that the noise will be short
  term.
- The specifications for the construction of the Project will limit the normal construction hours to between 7 a.m. and 5 p.m. on Monday through Friday. Special construction needs may require some work to be completed outside these hours, but this will be atypical.
- Typical noise levels for construction equipment (not including pile driving equipment) will be limited to a maximum of 90 decibels within 50 feet of the equipment.

## 4.13 Population and Housing

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				$\boxtimes$

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				$\boxtimes$
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				$\boxtimes$

The Project will have no impact on population since will not increase the treatment capacity of the Plant. There is no housing on the Plant site, and the Project does not involve housing.

#### **Mitigation Measures**

No mitigation measures are necessary for population and housing.

#### 4.14 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?				$\boxtimes$
ii. Police protection?				$\boxtimes$
iii. Schools?				$\boxtimes$
iv. Parks?				$\boxtimes$
v. Other public facilities?				

The Project will have no impact on public services. The Project includes components that will need to be operated and maintained by the existing Plant staff. However, the components are replacing the function of existing components, and therefore will not cause a noticeable increase in workload and will not cause additional staff to be hired. The Project will have no impact on other public services.

#### **Mitigation Measures**

No mitigation measures are necessary for public services.

## 4.15 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				$\boxtimes$

The Plant site is not used for public, or private recreation, hence the Project has no impact on recreation.

## **Mitigation Measures**

No mitigation measures are necessary for recreation.

# 4.16 Transportation/Traffic

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of				$\boxtimes$

Would the project:  transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to intersections, streets, highways and	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
freeways, pedestrian and bicycle paths, and mass transit?				
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				$\boxtimes$
e) Result in inadequate emergency access?				
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				$\boxtimes$

There will be a temporary increase in traffic to the Plant site during construction of the facilities due to construction vehicle traffic. The construction vehicle traffic will enter the Plant site via the Plant access road from Highway 1. The construction vehicle traffic will likely be an average of less than 20 vehicles per day, consisting primarily of light duty trucks and personal vehicles with occasional heavy duty trucks for supply and material deliveries. Since Highway 1 is heavily travelled, the extra construction vehicle traffic on Highway 1 will be negligible. The Plant access road is used only to access the Plant site and is not used by the public.

After completion, the Project will not create a change in vehicle traffic entering and exiting the plant from the current conditions.

#### **Mitigation Measures**

No mitigation measures are necessary for transportation or traffic.

## 4.17 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				$\boxtimes$
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?				
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?				$\boxtimes$
g) Comply with federal, state, and local statutes and regulations related to solid waste?				

The project will not increase the capacity of the wastewater treatment Plant or change the capability of the Plant to treat wastewater. Therefore, the quantity and quality of the Plant effluent will not be changed by the Project.

The Plant will likely use less electricity as a result of the project. There will be no anticipated change to the quantity of potable water and natural gas used by the Plant as a result of the Project. The Project will not have any impact on other utilities or services.

#### **Mitigation Measures**

No mitigation measures are necessary for utilities and service systems.

**Section 5:** Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
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?				

The Project consists of a variety of modifications to the existing Carmel Area Wastewater District wastewater treatment plant (Plant) so that it will retain its capability to reliably function to meet the conditions of its National Pollutant Discharge Elimination System (NPDES) permit

to discharge wastewater. The modifications will have no impact on fish, wildlife, or human beings. The incremental modifications contained in the Project will not change the cumulative existing impact of the overall Plant on the environment.

The Project will have minor impacts on the environment during the construction phase, and mitigation measures will be included to minimize these impacts.

Once construction is completed, the Project could not have a significant impact on the environment. A Mitigated Negative Declaration will be prepared for the Project to account for the minor potential environmental impacts during construction.