web site: www.calleguas.com

2100 OLSEN ROAD • THOUSAND OAKS, CALIFORNIA 91360-6800 805/526-9323 • FAX: 805/522-5730 • FAX: 805/526-3675

December 27, 2016

NOTICE OF INTENT TO ADOPT A DRAFT NEGATIVE DECLARATION AND INITIAL STUDY (ND/IS)

Las Posas Basin Aquifer Storage and Recovery Wellfield Emergency Generators (Spec 494)

Based on an Initial Study prepared for the above referenced project, the Calleguas Municipal Water District (Calleguas) has determined that development of the project should not result in any significant environmental impacts. As such, preparation of a Negative Declaration is appropriate for complying with the provisions of the California Environmental Quality Act (CEQA).

PROJECT LOCATION AND DESCRIPTION

The proposed project is a component of the Las Posas Basin Aquifer Storage and Recovery Project (ASR Project) which is utilized by Calleguas to inject and store imported water in the lower aquifer system of the Las Posas Basin for later use. The ASR Project helps ensure regional water supply reliability during planned maintenance projects and emergencies when prolonged interruptions in imported water supplies may occur. The ASR Project currently has very limited permanent on-site emergency generator facilities and cannot fully operate without utility power. As such, the Wellfield Emergency Generators Project (Project) is proposed to ensure that potable water is available to customers during emergency situations. The Project includes the following components:

- Five diesel-fueled emergency standby engine-driven generators
- Emergency generator building to house the engines/generators
- Diesel fuel storage area, adjacent to the generator building
- Electrical utility service yard
- Access road
- Fire water pipeline
- Electrical gear

The Project site is located along Grimes Canyon Road in central Ventura County, California, immediately west of the City of Moorpark on properties owned by Calleguas, including APNs 503-0-060-24, 502-0-090-01, and 502-0-090-02. Surrounding land uses include agriculture (primarily citrus and avocado orchards) with residential developments located to the east.

ENVIRONMENTAL ISSUE AREAS ANALYZED

CEQA requires Calleguas to assess any environmental impacts from project implementation. The Initial Study focused on the following issue areas: aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials/risk of upset, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/circulation, utilities and service systems, and cumulative impacts.

PUBLIC REVIEW PERIOD

The public review period for the Draft ND/IS begins on December 30, 2016 and closes January 31, 2017. Please submit written comments to Calleguas MWD, 2100 Olsen Road, Thousand Oaks, California 91360, Attn: Eric Bergh. For further information, call (805) 579-7128.

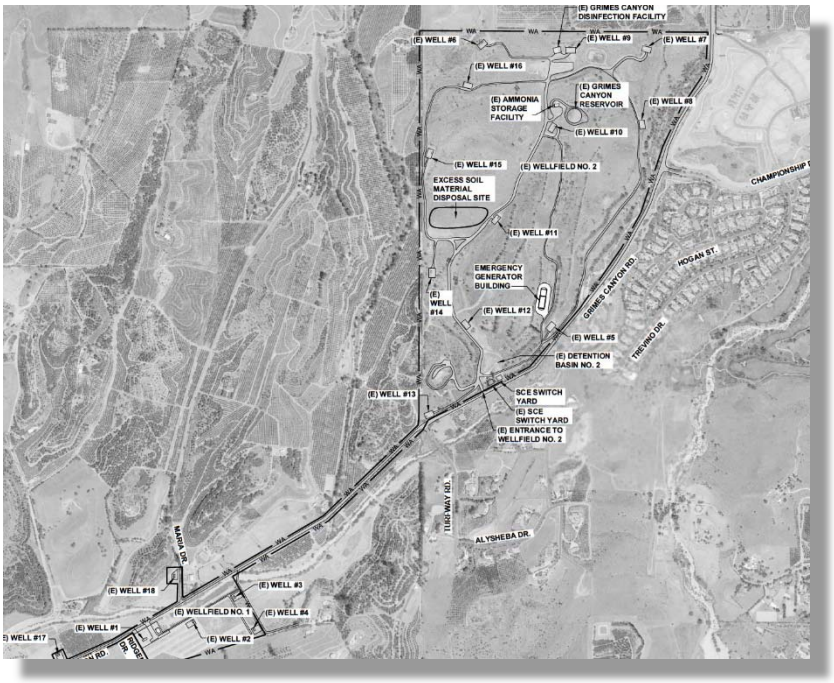
PUBLIC MEETINGS

Unless otherwise noticed, the Calleguas Board of Directors will consider approval of the Final ND/IS during its regularly scheduled board meeting on February 15, 2017, at 5:00 p.m. at Calleguas' administration office located at the address noted above.

Copies of the draft negative declaration and initial study are available for review at http://www.calleguas.com/images/docs-documents-reports/494draft-nd-is-dec16.pdf, the Calleguas administration office, and the Moorpark Library, 699 Moorpark Ave, Moorpark, CA.

DRAFT
NEGATIVE DECLARATION

LAS POSAS BASIN AQUIFER STORAGE AND RECOVERY WELLFIELD EMERGENCY GENERATORS



Lead Agency:

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360
Contact: Mr. Eric Bergh
(805) 579-7128

Prepared by:

Padre Associates, Inc.
1861 Knoll Drive
Ventura, CA 93003
(805) 644-2220

December 2016

Project No. 1602-1441

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LAS POSAS BASIN AQUIFER STORAGE & RECOVERY PROJECT
WELLFIELD EMERGENCY GENERATORS

PROJECT DESCRIPTION

Emergency Engines/Generators and Building

The Project would include five diesel-fueled emergency standby engine-driven generators to be located at Wellfield No. 2, which would provide electrical power to all of the existing wellfield facilities in the event of a loss of utility power. Each engine would produce approximately 3,000 brake-horsepower (BHP), and would comply with air pollutant emissions limits of the U.S. Environmental Protection Agency New Source Performance Standards for stationary emergency engines. The engines/generators and related equipment would be housed in a new emergency generator building that would be approximately 140 feet long by 70 feet wide with a maximum height of 35.5 feet. The building would be constructed of concrete masonry blocks and would be similar in appearance to other masonry buildings at the wellfields, but would be constructed with smooth face concrete masonry block, instead of rough-cut blocks.

Diesel Fuel Storage

The facility would include four 20,000 gallon double-walled diesel fuel storage tanks located on concrete pads adjacent to the emergency generator building. Each fuel storage tank would be approximately 10 feet wide, 8 feet tall and 40 feet long. A concrete containment wall would be provided around the perimeter of the storage tank area to provide an additional level of protection by containing any fuel spillage or leakage.

Electrical Utility Service Yard

The proposed Project would include a new electrical utility service yard that contains the electrical service meters and related equipment for Southern California Edison, the electrical utility provider. The new service yard would be located on a graded pad near the existing switchyard at Wellfield No. 2, near the property line along Grimes Canyon Road.

Access Road and Other Components

A new 20 foot wide access road would be provided by improving an existing gravel road from the existing switchyard to the emergency generator building site. The access road would be approximately 1,040 feet long and surfaced with asphalt. A new 12 inch diameter buried fire water pipeline would be provided from a connection near the existing switchyard to the emergency generator building site. The pipeline would be approximately 1,090 feet long and serve two proposed fire hydrants near the emergency generator building.

New buried electrical conduits, conductors, pull boxes, and above-ground fused sectionalizers would be provided at Wellfield No. 2 to transmit electrical power from the proposed electrical utility service yard to the emergency generator building and from the generators to the wellfield facilities within Wellfield No. 2. Additionally, new electrical conductors would be installed in both new and existing conduits from the generators at Wellfield No. 2 to wells at Wellfield No. 1. New buried electrical conduits, conductors, and above-ground fused sectionalizers would be provided at Wellfield No. 1 to transmit electrical power from the generators at Wellfield No. 2 to wells at Wellfield No. 1. Many of the new electrical conductors to serve the wells would be installed in existing buried conduits using existing pull boxes.

Construction

Construction would be primarily limited to normal working hours 8 to 10 hours per day, between the hours of 7 a.m. and 4:30 p.m., Monday through Friday. Occasional work may be required during other times and on weekends as determined to be necessary by CMWD. It is anticipated that construction of proposed facilities would require approximately 24 to 30 months. Construction-related ground disturbance within both wellfields would occur mostly in previously disturbed areas. Construction equipment and materials staging would occur within designated staging and storage areas within Wellfield No. 1 and No. 2. In Wellfield No. 2, the staging and storage areas are comprised of an approximately 0.3-acre site located on both sides of Well No. 12, as well as the emergency generator pad area. In Wellfield No. 1, the staging and storage area is comprised of an approximately 3,000 square foot site located adjacent to Well No. 1. Any excess earth material generated by grading would be deposited in the existing Excess Soil Material Disposal Site west of Well No. 11.

Operation

The emergency standby engine-driven generators would be operated periodically for testing and/or maintenance. Typical engine operation for maintenance would be up to three hours of continuous operation per engine. Only one engine would be operated at a time for testing and maintenance.

The Project would operate during emergencies when electrical power is not available to run the well pumps and other wellfield facilities needed to provide potable water. A natural disaster, such as an earthquake has the potential to interrupt CMWD's imported water connection and electrical power to the ASR Project. In that situation, the CMWD service area would be entirely reliant on water stored in Lake Bard, ASR Project water and CMWD purveyor groundwater supplies. If circumstances require, the proposed Project may operate for extended periods.

Operation of the Wellfield Emergency Generator facility during a power outage would meet the definition of emergency in Section 21060.3 of the Public Resources Code in that it would mitigate loss of essential public services (potable water). Operation of the Facility would be exempt from CEQA under Section 21080 of the Public Resources Code in that it is a specific action necessary to mitigate an emergency (loss of potable water supply). Therefore, impacts associated with emergency operation of Project facilities is not addressed in this Negative Declaration.

PROJECT INCORPORATED IMPACT REDUCTION AND AVOIDANCE MEASURES

Cultural Resources

The following standard impact avoidance measures have been incorporated into the Project to ensure archaeological impacts would not be significant:

1. In the event that archaeological resources are encountered during Project construction, work shall be stopped immediately or redirected away from the find until a qualified archaeologist is retained to evaluate its significance. If resources are found to be significant, they shall be subject to a sub-surface documentation and mitigation program.
2. In the event of discovery of any human remains during Project construction, there shall be no further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent human remains until: a) the County coroner has been informed and has determined that no investigation of the cause of death is required; b) If the remains are of Native American origin, 1) the descendants from the deceased Native Americans have made a recommendation for means of treating or disposing with appropriate dignity the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98 or 2) the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the Commission.

Air Quality

Construction. Air pollutant emissions reduction measures recommended by the Ventura County APCD shall be fully implemented, including:

- Removal of vegetation and ground disturbance shall be limited to the minimum area necessary to complete Project construction activities. Vegetative cover shall be maintained on all other portions of the Project area.
- Regular ground wetting of exposed soils and sediments, and unpaved access roads shall be conducted during construction to control fugitive dust emissions.
- Grading activities shall cease during periods of high winds (greater than 20 miles per hour, averaged over one hour).
- Silt containing material excavated, stockpiled or transported during construction shall be wetted regularly.
- On-site construction vehicle speed shall be limited to 15 miles per hour in unpaved areas.
- Trucks transporting backfill material to the Project site shall be covered or maintain a minimum two-foot freeboard.
- Roadways in the vicinity of construction access points shall be swept as necessary to prevent the accumulation of silt.
- Minimize truck idling time.

- Maintain engines in good condition and proper tune.

Operation. The generator engines shall comply with federal air pollutant standards for stationary diesel engines (40 CFR 60 Subpart IIII) as documented by a certificate of conformity issued by U.S. Environmental Protection Agency to the engine manufacturer as required by 40 CFR 1039. The generator engines shall also comply with the state air toxics control measure for stationary diesel engines (17 CCR 93115). Testing and maintenance operation of the engines shall be limited to 15 hours per year per engine. Typical engine operation for maintenance operations would be up to three hours of continuous operation per engine. Only one engine would be operated at a time for testing and maintenance.

PROJECT LOCATION

The proposed Project site (ASR Project Wellfields no. 1 and no. 2) is located along Grimes Canyon Road in central Ventura County, California, immediately west of the City of Moorpark. Both wellfields are zoned AE-40 ac; Agricultural-Exclusive 40-acre minimum parcel size.

PROJECT PROPONENT AND LEAD AGENCY

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360

Contact: Eric Bergh (805) 579-7128

PROPOSED FINDINGS

The Calleguas Municipal Water District (CMWD) has prepared this Negative Declaration (ND) pursuant to Sections 15070-15075 of the State Guidelines for the Implementation of the California Environmental Quality Act. This Negative Declaration documents CMWD's finding that there are no significantly adverse impacts associated with the proposed Project, and the Project does not require the preparation of an Environmental Impact Report. The attached Initial Study identifies and discusses potential impacts for identified subject areas.

PUBLIC COMMENTS

In compliance with Section 15073 of the State Guidelines for the Implementation of the California Environmental Quality Act, CMWD will accept written comments on the adequacy of the information contained in the Draft ND. The comment period will be identified in the Notice of Intent to Adopt the ND to be distributed to responsible agencies and interested parties. This Project would not result in any significant effects on the environment. After the close of the public comment period, CMWD will make appropriate changes to the document pursuant to the comments received and will release a Final ND.

Due to the non-complex nature of this Project, a separate environmental hearing will not be held. However, public testimony will be accepted at the ND approval hearing before the CMWD's Board of Directors. For information regarding scheduling of this hearing, please contact Mr. Eric Bergh at (805) 579-7128.

1.0 INTRODUCTION

1.1 PURPOSE AND LEGAL AUTHORITY

This Initial Study has been prepared for the Wellfield Emergency Generators (Project), which is a proposed component of the existing Las Posas Basin Aquifer Storage and Recovery Project (ASR Project). The Project would provide emergency electrical power to existing facilities in case of loss of electrical utility power to the ASR Project wellfields.

Section 2.0 of this document provides a description of the Project. The Calleguas Municipal Water District (CMWD) is also the "lead agency" for the Project. As defined by Section 15367 of the CEQA Guidelines, the lead agency is "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant impact on the environment." Based on the findings of the Impact Analysis (Section 3.0 of this Initial Study), it has been determined that the Project would not have a significant impact on the environment. As such, a Negative Declaration has been prepared for the Project in accordance with CEQA.

1.2 PROJECT PROPONENT AND LEAD AGENCY

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360

Contact: Eric Bergh (805) 579-7128

1.3 PROJECT LOCATION

The Project site (ASR Project Wellfields No. 1 and No. 2) is located along Grimes Canyon Road in central Ventura County, California, immediately west of the City of Moorpark (see Figure 1). Wellfield No. 1 covers approximately 18.7 acres (APN 503-0-060-24) and includes six injection/extraction wells. Wellfield No. 2 covers approximately 219.2 acres (APN 502-0-090-01, -02) and includes 12 injection/extraction wells. Surrounding land uses include agriculture (primarily citrus and avocado orchards) with residential developments located to the east of Wellfield No. 2.

1.4 PROJECT BACKGROUND

This Project is proposed by the CMWD, a wholesale water purveyor. CMWD supplies water to 19 retail water purveyors within its 366-square mile service area, which includes the cities of Moorpark, Simi Valley, Thousand Oaks, Camarillo, Oxnard, Port Hueneme and surrounding unincorporated portions of Ventura County. Since the completion of the State Water Project (SWP) in 1972, CMWD has relied upon the SWP for a majority of its drinking water supply.

In an effort to improve the reliability of its water supply through the development of conjunctive use programs, CMWD undertook the ASR Project. A Program Environmental Impact Report (EIR) was prepared for the ASR Project in 1995, and the project was subsequently approved by CMWD.

The ASR Project allows CMWD to inject imported water into the lower aquifer system of the Las Posas Basin. The ASR Project helps ensure regional water supply reliability during planned maintenance projects and emergencies when prolonged interruptions in imported water supplies may occur. The estimated initial extraction capacity of the 18 injection/extraction wells is approximately 24 million gallons per day (mgd). Extraction capacity is expected to decrease over a period of weeks and months as the wells produce water. CMWD is working to determine the sustainable production capacity from the wellfields and the available storage in the aquifer using a numerical groundwater flow model based on actual basin conditions.

The proposed Wellfield Emergency Generators are a critical component of the ASR Project, but were not addressed in the Program EIR. Much of the ASR Project has already been constructed, including 18 injection/extraction wells and appurtenant facilities located west of Moorpark, more than six miles of pipeline up to 72 inches in diameter, and a portion of Grandsen Pump Station (GPS). GPS is located in the City of Moorpark and provides the pumping capacity necessary to deliver water produced from the wellfields throughout the CMWD service area. Phase 1 of GPS has been completed, while Phase 2 is currently under construction.

1.5 PROJECT PURPOSE AND NEED

As noted above, in the event of an interruption of CMWD's imported water supply from Metropolitan Water District of Southern California (MWD), the ASR Project provides an important supply for CMWD to meet regional water demands. As such, it is vital that its facilities operate under emergency conditions, including a utility power outage. It is likely that a major earthquake that interrupts imported water supplies would also include a prolonged utility power outage. The ASR Project currently has very limited permanent on-site emergency generator facilities (only sufficient to operate critical facilities at the chlorine building) and therefore cannot operate without utility power. In order to ensure that potable water is available to customers during emergency situations, the proposed Project is essential.

1.6 PREPARERS OF THE INITIAL STUDY

This document was prepared for the CMWD by Matt Ingamells and Pat McClure of Padre Associates, Inc.

2.0 PROJECT DESCRIPTION

2.1 PROJECT ELEMENTS

The Project is comprised of the following primary components:

- Five diesel-fueled emergency standby engine-driven generators.
- Emergency generator building to house the engines/generators.
- Diesel fuel storage area, adjacent to the generator building.
- Electrical utility service yard.
- Access road.
- Fire water pipeline.
- Electrical gear.

Each of these facilities would be located within Wellfield No. 2; however, electrical conductors (electrical cables) would be installed in existing conduits from Wellfield No. 2 to Wellfield No. 1. Additionally, electrical gear would be installed within Wellfield No. 1. A grading plan for the emergency generator building site is provided as Figure 2, and the proposed generator building layout is provided as Figure 3. Figure 4 provides exterior elevation views of the proposed emergency generator building.

2.1.1 Emergency Engines/Generators

The Project would include five diesel-fueled emergency standby engine-driven generators which would provide electrical power to existing and planned wellfield facilities in the event of a loss of utility power. Each engine would produce approximately 3,000 brake-horsepower (BHP), and would comply with air pollutant emissions limits of the U.S. Environmental Protection Agency New Source Performance Standards for stationary emergency engines (see Section 2.4). Engines under consideration are Cummins model DKQAE V-16 rated at 2,922 BHP (standby) and Caterpillar model 3516C TA V-16 rated at 2937 BHP (standby). Each engine would be provided with a super-critical type exhaust silencer mounted on the engine in the emergency generator building with a 20 inch diameter exhaust pipe exiting the west side of the building.

2.1.2 Emergency Generator Building

The engines/generators and related equipment would be housed in a new emergency generator building that would be approximately 140 feet long by 70 feet wide with a maximum height of 35.5 feet (see Figure 4). The building would be constructed of concrete masonry blocks and would be similar in appearance to other masonry buildings at the wellfields (see Figure 6.d), but would be constructed with smooth face concrete masonry block, instead of rough-cut. The building design includes engineered measures to reduce noise when the generators are operating. The building would be constructed on a graded pad approximately 360 feet long by 150 feet wide.

The building site would be provided with concrete v-ditch to intercept storm water run-off around the perimeter of the pad and the top of engineered cut slopes, and direct it to the south. A 42-inch-diameter buried storm drain would be provided to collect storm run-off from the emergency generator building site and higher elevation areas to the north and discharge to an energy dissipater (i.e., rock rip-rap in concrete grout) located south of the building (see Figure 2).

Exterior lighting would be provided along the building perimeter, which would be turned on manually using timed switches that would turn off the lighting after a specific time period, and used only during infrequent site visits by CMWD staff.

2.1.3 Diesel Fuel Storage

The Project would include four 20,000 gallon double-walled diesel fuel storage tanks located on concrete pads adjacent to the emergency generator building (see Figure 3). This volume of fuel storage is needed to keep the generators operational during an extended power outage.

Each fuel storage tank would be approximately 10 feet wide, 8 feet tall and 40 feet long. A concrete containment wall would be constructed around the perimeter of the approximately 65-foot square storage tank area to provide an additional level of protection by containing any fuel spillage or leakage.

Exterior lighting would be provided along the perimeter of the fuel containment area which would be turned on manually using timed switches that would turn off the lighting after a specific time period, and used only during infrequent site visits by CMWD staff.

2.1.4 Electrical Utility Service Yard (SCE Switchyard in Figure 1)

The Project would include a new electrical utility service yard that contains the electrical service meters and related equipment for Southern California Edison (SCE), the electrical utility provider. The new service yard would be sited on a graded pad near an existing electrical utility service yard (switchyard) at Wellfield No. 2, near the property line along Grimes Canyon Road (see Figures 1 and 5.b).

2.1.5 Access Road

A new 20 foot wide access road would be provided by improving an existing gravel road from near the existing switchyard to the proposed emergency generator building site. The access road would be approximately 1,040 feet long and surfaced with asphalt.

2.1.6 Fire Water Pipeline

A new 12 inch diameter buried fire water pipeline would be provided from a connection near the existing switchyard to the proposed emergency generator building site. The pipeline would be approximately 1,090 feet long and serve two proposed fire hydrants near the emergency generator building.

2.1.7 Electrical Gear

New buried electrical conduits, conductors, pull boxes, and above-ground fused sectionalizers would be provided at Wellfield No. 2 to transmit electrical power from the proposed electrical utility service yard to the emergency generator building and from the generators to the wellfield facilities within Wellfield No. 2. Additionally, new electrical conductors would be installed in both new and existing conduits from the generators at Wellfield No. 2 to wells at Wellfield No. 1. New buried electrical conduits, conductors, and above-ground fused sectionalizers would be provided at Wellfield No. 1 to transmit electrical power from the generators at Wellfield No. 2 to Wellfield No. 1. Many of the new electrical conductors would be installed in existing buried conduits using existing pull boxes.

2.2 CONSTRUCTION

Construction would be primarily limited to normal working hours within an 8-hour period, between the hours of 7 a.m. and 4:30 p.m., Monday through Friday. Occasional work may be required during other times and on weekends as determined necessary by CMWD. It is anticipated that construction of proposed facilities would require approximately 24 to 30 months. Construction work would include the following general activities:

- Rough grading of the access road, emergency generator building pad and electrical utility service yard.
- Construction of the foundations for the emergency generator building and fuel storage area and access road paving.
- Installation of drainage improvements and the fire water pipeline.
- Erection of the emergency generator building.
- Installation of the emergency generators and diesel fuel storage tanks.
- Installation of electrical gear, conduits and conductors, including the electrical utility service yard.

Construction-related ground disturbance within both wellfields would mostly occur in previously disturbed areas associated with existing facilities. Construction equipment and materials staging would occur within designated staging and storage areas within Wellfield No. 1 and No. 2. In Wellfield No. 2, the staging and storage areas are comprised of an approximately 0.3-acre site located on both sides of Well No. 12, as well as the emergency generator building pad area (see Figures 1 and 5.a). In Wellfield No. 1, the staging and storage area is comprised of an approximately 3,000 square foot site located adjacent to Well No. 1. Any excess earth material generated by grading would be deposited in the existing Excess Soil Material Disposal Site west of Well No. 11 (see Figures 1 and 5.c).

2.3 OPERATION

The emergency standby engine-driven generators would be operated periodically for testing and/or maintenance. Typical engine operation for maintenance would be up to three hours of continuous operation per engine. Only one engine would be operated at a time for testing and maintenance. Total operating hours per engine for testing and maintenance would be up to 15 hours per year, which is less than 50 hours per year needed to qualify for an exemption from Ventura County Air Pollution Control District Rule 74.9 (addressing stationary internal combustion engines).

The Project would operate during emergencies when electrical power is not available to run the well pumps and other wellfield facilities needed to provide potable water. A natural disaster, such as an earthquake has the potential to interrupt CMWD's imported water connection and electrical power to the ASR Project. In that situation, the CMWD service area would be entirely reliant on water stored in Lake Bard, ASR Project water and CMWD purveyor groundwater supplies. If circumstances require, the proposed Project may operate for extended periods.

Operation of the Project during a power outage would meet the definition of emergency in Section 21060.3 of the Public Resources Code in that it would mitigate loss of essential public services (potable water). Operation of the Project would be exempt from CEQA under Section 21080 of the Public Resources Code in that it is a specific action necessary to mitigate an emergency (loss of potable water supply). Therefore, impacts associated with emergency operation of Project facilities is not addressed in this Initial Study.

2.4 PROJECT INCORPORATED IMPACT REDUCTION AND AVOIDANCE MEASURES

2.4.1 Cultural Resources

The following standard impact avoidance measures have been incorporated into the Project to ensure archaeological impacts would not be significant:

1. In the event that archaeological resources are encountered during Project construction, work shall be stopped immediately or redirected away from the find until a qualified archaeologist is retained to evaluate its significance. If resources are found to be significant, they shall be subject to a sub-surface documentation and mitigation program.
2. In the event of discovery of any human remains during Project construction, there shall be no further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent human remains until: a) the County coroner has been informed and has determined that no investigation of the cause of death is required; b) If the remains are of Native American origin, 1) the descendants from the deceased Native Americans have made a recommendation for means of treating or disposing with appropriate dignity the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98 or 2) the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the Commission.

2.4.2 Air Quality

Construction. The following air pollutant emissions reduction measures recommended by the Ventura County Air Pollution Control District (APCD) shall be fully incorporated into the Project:

- Removal of vegetation and ground disturbance shall be limited to the minimum area necessary to complete Project construction activities. Vegetative cover shall be maintained on all other portions of the Project area.
- Regular ground wetting of exposed soils and sediment, and unpaved access roads shall be conducted during construction to control fugitive dust emissions.
- Grading activities shall cease during periods of high winds (greater than 20 miles per hour, averaged over one hour).
- Silt containing material excavated, stockpiled or transported during construction shall be wetted regularly.
- On-site construction vehicle speed shall be limited to 15 miles per hour in unpaved areas.
- Trucks transporting backfill material to the Project site shall be covered or maintain a minimum two-foot freeboard.
- Roadways in the vicinity of construction access points shall be swept as necessary to prevent the accumulation of silt.
- Minimize truck idling time.
- Maintain engines in good condition and proper tune.

Operation. The generator engines shall comply with federal air pollutant standards for stationary diesel engines (40 CFR 60 Subpart IIII) as documented by a certificate of conformity issued by U.S. Environmental Protection Agency to the engine manufacturer as required by 40 CFR 1039. The generator engines shall also comply with the state air toxics control measure for stationary diesel engines (17 CCR 93115). Testing and maintenance operation of the engines shall be limited to 15 hours per year per engine. Typical engine operations for maintenance would be up to three hours of continuous operation per engine. Only one engine would be operated at a time for testing and maintenance.

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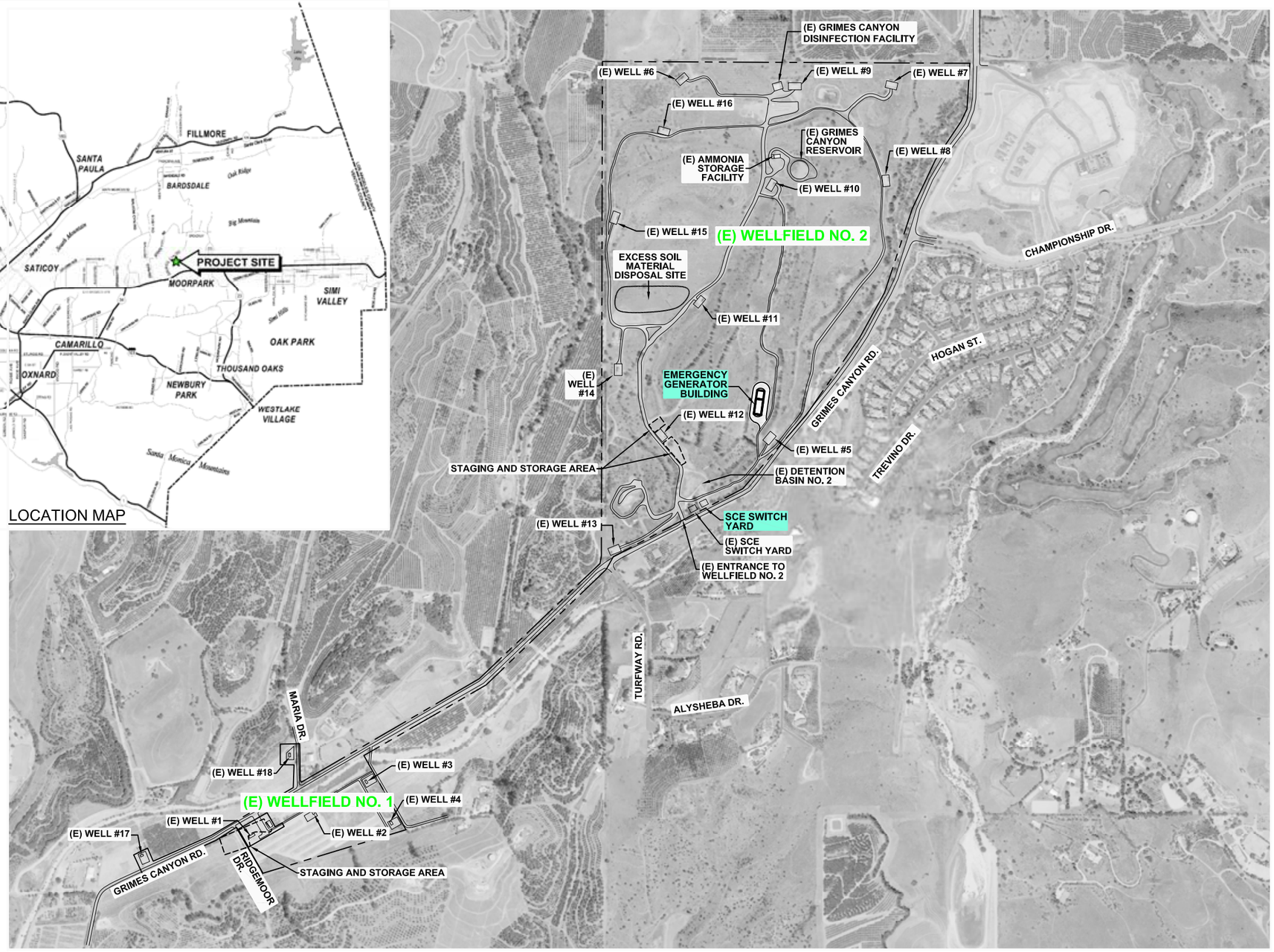
November 2016
Project No. 1602-1441

LOCATION MAP



N

0 1000 2000
1"=2000'
GRAPHIC SCALE

LEGEND

(E) EXISTING FACILITY

PROPOSED FACILITY

Source: Kennedy Jenks Consultants

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Calleguas Municipal Water District - Emergency Generator Facility

PROJECT OVERVIEW
FIGURE 1

Back of Figure 1

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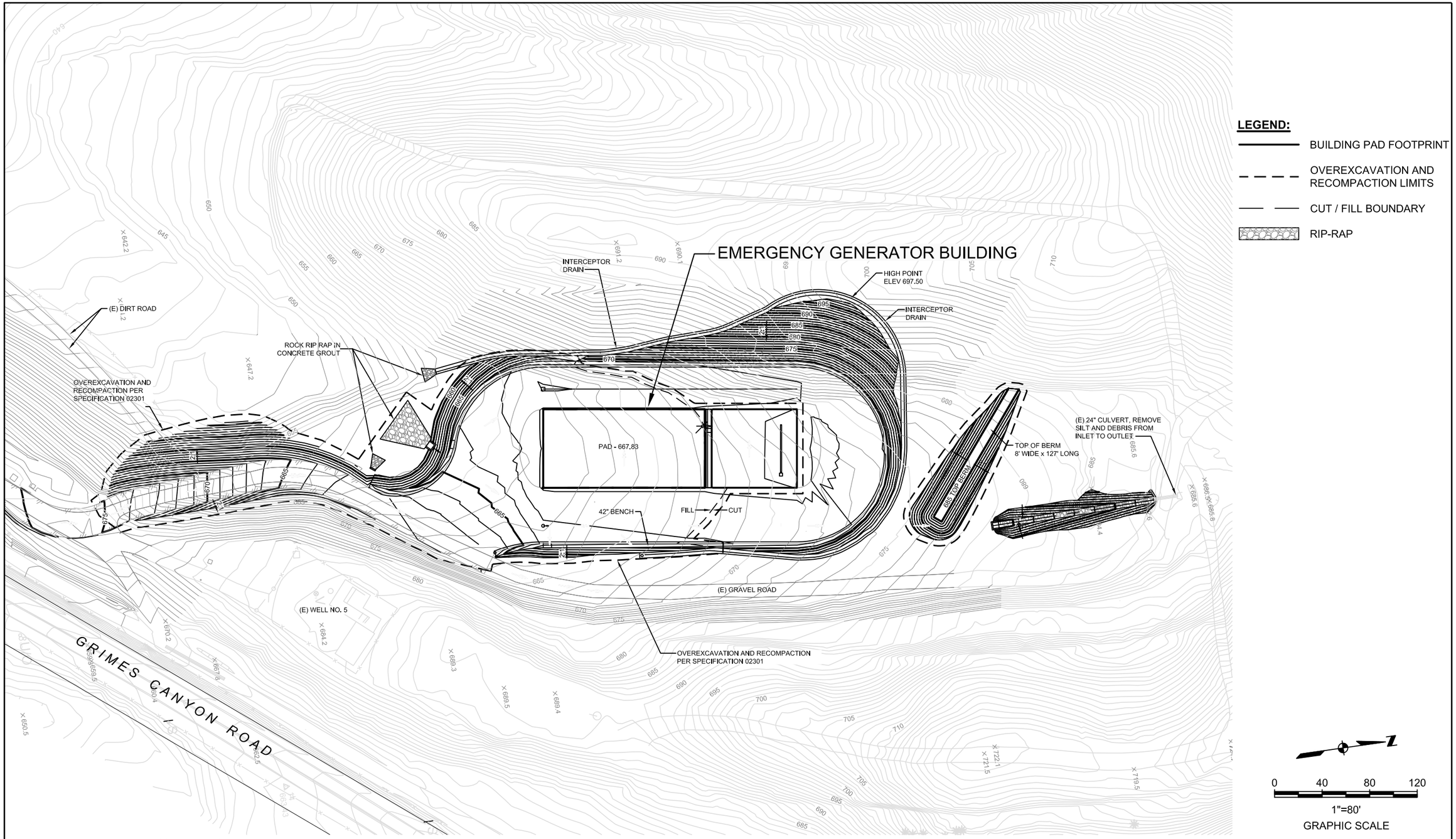


Source: Kennedy Jenks Consultants

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Calleguas Municipal Water District - Emergency Generator Facility

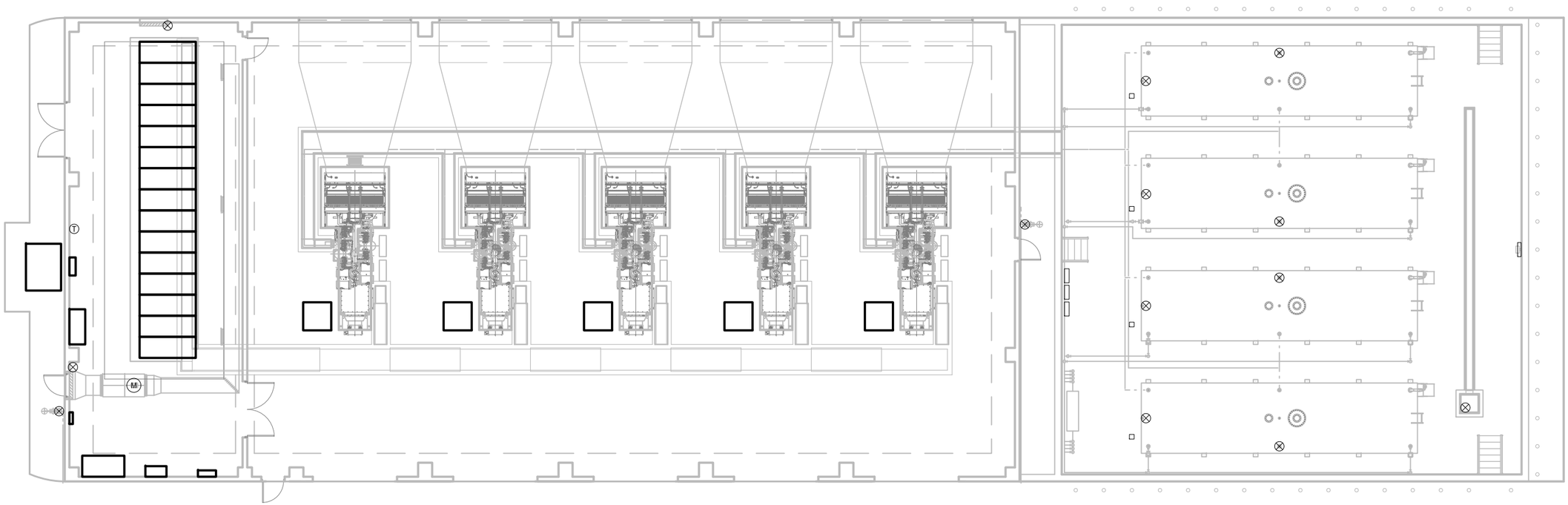
EMERGENCY GENERATOR SITE GRADING PLAN
FIGURE 2

Backside Figure 2

ELECTRICAL ROOM

ENGINE/GENERATOR SETS (5)

DIESEL FUEL STORAGE TANKS (4)



0 8 16 24

1"=16'

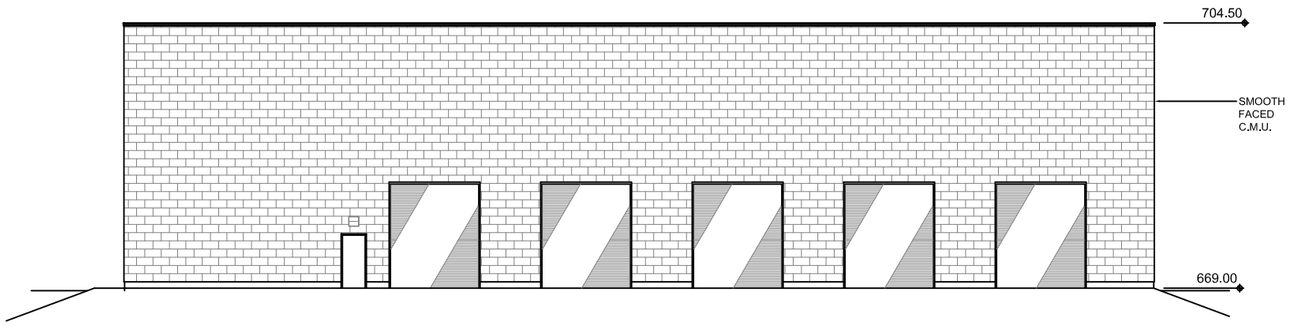
GRAPHIC SCALE

Source: Kennedy Jenks Consultants

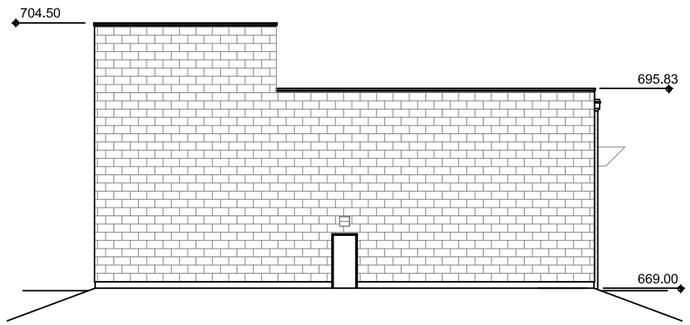
EMERGENCY GENERATOR BUILDING LAYOUT
FIGURE 3

Backside Figure 3

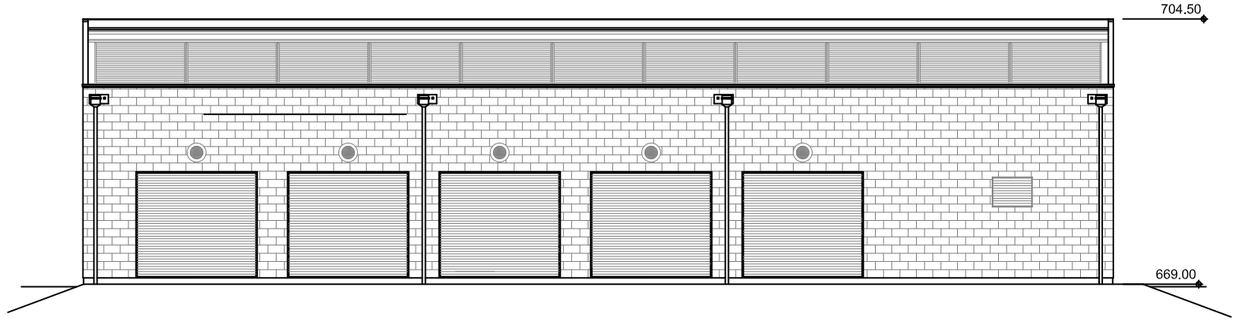
November 2016
Project No. 1602-1441



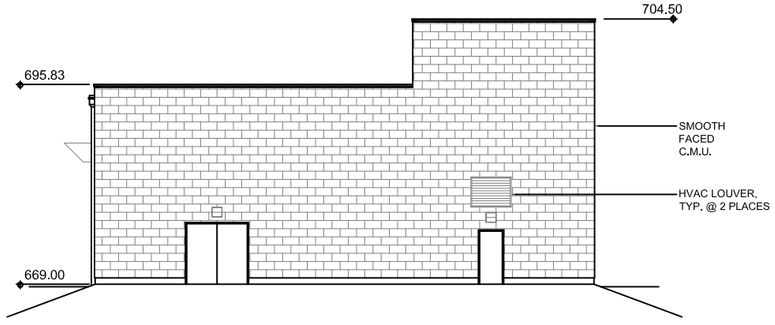
EAST ELEVATION



NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION

0 10 20 30

1"=20'

GRAPHIC SCALE

Source: Kennedy Jenks Consultants

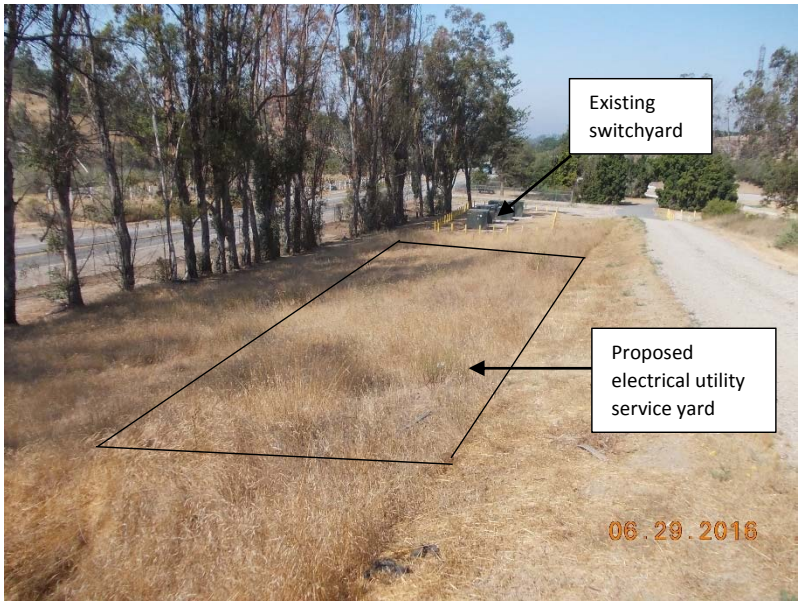
padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Calleguas Municipal Water District - Emergency Generator Facility

EMERGENCY GENERATOR BUILDING EXTERIOR ELEVATIONS
FIGURE 4

Back of Figure 4

a. Emergency generator building site, facing north



b. Proposed electrical utility service yard site, facing southwest

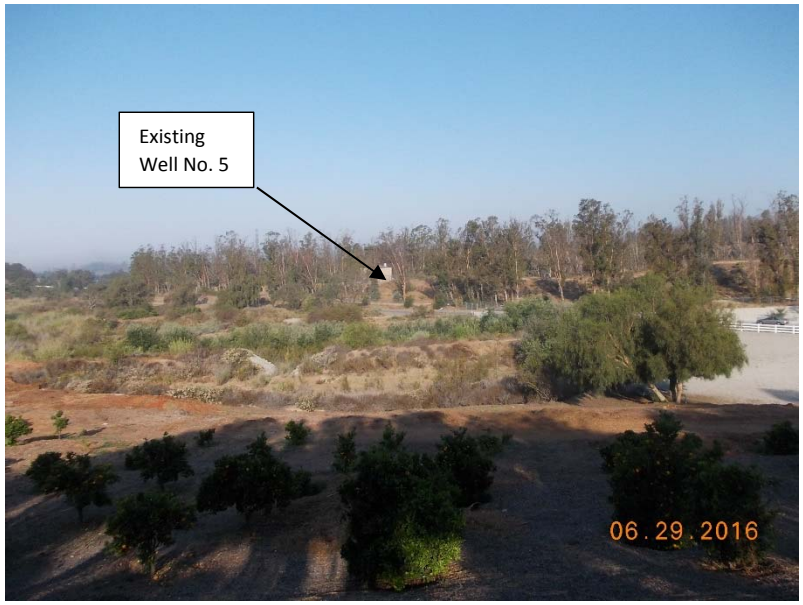
c. Excess soil materials disposal site, facing north

d. Proposed Wellfield No. 2 construction staging area, facing north

SITE PHOTOGRAPHS
FIGURE 5

Back of Figure 5

a. View from Grimes Canyon Road, with Wellfield no. 2 entrance



b. View towards emergency generator site from near residences

c. View of Wellfield no. 2 from Grimes Canyon Road

d. Wellfield disinfection building, example of masonry to be used

PUBLIC VIEWS OF WELLFIELD NO. 2
FIGURE 6

Back of Figure 6

3.0 ENVIRONMENTAL IMPACT ANALYSIS

This section provides an analysis of the potential environmental impacts associated with the Project. The analysis is organized by environmental issue area (e.g., aesthetics, agricultural resources, air quality). Each issue area begins with a checklist, which identifies criteria that have been used to assess the significance or insignificance of each potential impact. The checklists used in this Initial Study were taken from the 2016 update to the State CEQA Guidelines prepared by the Association of Environmental Professionals. The checklists also indicate the conclusions made regarding the potential significance of each impact. Explanations of each conclusion are provided after the checklists. If appropriate, setting descriptions and recommended mitigation measures are also provided. Finally, residual impacts (i.e., with the implementation of recommended mitigation measures) are assessed.

Impact classifications used in the checklists are the following:

- **Potentially Significant Impact.** An impact that could be significant, and requires further study in an Environmental Impact Report (EIR).
- **Less than Significant Impact with Mitigation.** An impact that is potentially significant, but can feasibly be mitigated to a less than significant level with measures identified in the Initial Study.
- **Less than Significant Impact.** An impact that would not be significantly adverse.
- **No Impact.** Applied when the Project would not result in any impact to a specific issue area.

3.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Setting

The site of the proposed above-ground facilities (southern portion of Wellfield No. 2) supports a mixture of grasslands, remnant landscaping trees (windrows) and patches of native vegetation (see Figures 1 and 5). Overall, the affected area has a rural visual character, with orchards located to the north and west. A residential area (Country Club Estates) and the Moorpark Country Club golf course are located to the east along Championship Drive. This gated (private) residential area is elevated above Grimes Canyon Road and has partial views of the emergency generator building site. Public views of the emergency generator building site from Grimes Canyon Road are mostly obscured by intervening berms and vegetation (see Figure 6). Grimes Canyon Road is considered an eligible Ventura County scenic highway (Ventura County RMA Planning Division, 2011). No designated scenic resource areas occur in the Project area.

3.1.2 Impact Analysis

a. Proposed facilities are not visible from any scenic vistas.

b. The Project may involve the removal of a small number of non-native windrow trees at the proposed electrical utility service yard. However, this action would not damage any scenic resources or substantially reduce the visual screening of existing facilities from Grimes Canyon Road. In any case, the proposed facility sites are not visible from a State scenic highway.

c. The emergency generator building would be up to 35.5-feet high, and composed of masonry block similar to other structures at Wellfield No. 2 (see Figure 6.d), but would be smooth-faced. This relatively large building and exposed fuel tanks could impart an industrial visual character to the immediate area. However, as shown in Figure 2, the building pad would be constructed at elevation 667.83 feet, with intervening topography (north-south berm supporting Well No. 5, see well building in center of Figure 6.b) at elevations ranging from 684 to 722 feet. Therefore, the building would not be visible from adjacent portions of Grimes Canyon Road (see Figure 6). More distant views from residences to the east and other portions of Grimes Canyon Road would be mostly screened by a eucalyptus windrow along the property boundary, and a tree windrow immediately east of the emergency generator building site. Therefore, potential degradation of visual quality or visual character associated with the emergency generator building is considered a less than significant impact.

d. Proposed new exterior lighting would be limited to security lighting at the emergency generator building and fuel tank containment area. This lighting would be controlled by manually activated timers, and only used when CMWD staff are on-site, and would not result in significant glare for motorists on Grimes Canyon Road. In addition, an existing berm east of the generator building site would block direct lighting from reaching Grimes Canyon Road and diffuse any lighting seen from residences. Night lighting would not degrade nighttime views as it would not be located near the residential areas located to the east, and would not significantly increase existing nighttime lighting in the area.

3.1.3 Mitigation Measures and Residual Impacts

As the Project would not result in significant impacts related to aesthetics, no mitigation measures are necessary.

3.2 AGRICULTURAL AND FORESTRY RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	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?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of forest land or timberland?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.2.1 Setting

Historically, the Project property (both wellfield sites) was used for agricultural activities. Prior to its present use, the Project property supported a plant nursery. Based on the most recent (2012) Ventura County Important Farmland Map provided by the California Department of Conservation, the Project property supports a few small areas of farmland of "Local Importance". The proposed emergency generator building site and electrical utility service yard would not be located in any such designated areas. Potentially affected soils (Project-related earthwork) are not candidates for listing for either Prime Farmland or Farmland of Statewide Importance by the California Department of Conservation. The Project property is zoned AE-40 ac (Agricultural-Exclusive 40-acre minimum parcel size).

The nearest forest land (as defined in Public Resources Code Section 12220) or timberland is located within the Los Padres National Forest, approximately 9.5 miles north of the Project property.

3.2.2 Impact Analysis

a. The Project would add facilities and/or new components to existing wellfields which have already been taken out of agricultural production. These impacts were addressed in the Program EIR prepared for the ASR Project. No additional conversion of farmland to non-agricultural use and no loss of farmland soils would occur. The agricultural zoning would not change.

b. The Project facilities/components would be entirely located within the Project property which is not under any Williamson Act contracts.

c. The Project is consistent with existing zoning of the affected parcels (AE-40 ac), and would not cause any forest land or timberlands to be rezoned.

d. The Project would not result in the loss or conversion of forest land to non-forest uses.

e. Projects that involve public infrastructure (e.g., roads, power, water, sewer) in a previously undeveloped area may lead to inducement of population growth and associated conversion of agricultural lands. However, the Project would merely supply emergency power to existing potable water facilities, and would not result in any expansion of these facilities or extension of service area. The Project would comply with the Agricultural Commissioner's Office 300-foot agricultural/urban buffer from existing farmlands.

3.2.3 Mitigation Measures and Residual Impacts

The Project would not result in significant impacts to agricultural or forestry resources. Therefore, no mitigation is required.

3.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Setting

Ambient Air Quality. Ventura County is located in the South Central Coast Air Basin. The topography and climate of Southern California combine to make the basin an area of high air pollution potential. Ozone and particulate matter less than 10 microns (PM_{10}) are of particular interest in Ventura County because State air quality standards for these pollutants are periodically exceeded. The air quality of Ventura County is monitored by a network of five stations, operated by the California Air Resources Board (CARB) and the Ventura County Air Pollution Control District (APCD). The Simi Valley ambient air monitoring station is located approximately 12.1 miles east of the emergency generator building site, and is the most representative of the area affected by the Project.

Table 1 lists the monitored maximum concentrations and number of violations of air quality standards at the Simi Valley station for the years 2013 through 2015. As shown in Table 1, the State 8-hour ozone concentrations monitored at the Simi Valley station exceeded the State standard an average of 13.7 days per year from 2013 through 2015. The Federal 8-hour ozone standard was also exceeded during 2013 through 2015.

Table 1. Air Quality Summary – Simi Valley Station

Parameter	Standard	Year		
		2013	2014	2015
Ozone (O_3) – parts per million				
Maximum 1-hour concentration monitored (ppm)		0.104	0.097	0.096
Number of days exceeding State standard	0.09 ppm	3	1	1
Maximum 8-hour concentration monitored (ppm)		0.089	0.085	0.078
Number of days exceeding Federal 8-hour standard	0.075 ppm	4	7	2
Number of days exceeding State 8-hour standard	0.070 ppm	11	16	14
$PM_{2.5}$ – micrograms per cubic meter				
Maximum value		28.6	30.8	33.0
Number of sampling days above Federal standard	35	0	0	0
PM_{10} – micrograms per cubic meter				
Maximum value		44.1	49.6	63.5
Number of sampling days above State standard	50	0	0	-
Number of sampling days above Federal standard	150	0	0	0

Significance Thresholds. The APCD has developed Air Quality Assessment Guidelines (2003) for the preparation of air quality impact analyses. The Guidelines indicate that a project may have a significant impact on the environment if it would:

- Result in daily emissions exceeding 25 pounds of reactive organic compounds (ROC) or oxides of nitrogen (NO_x).
- Cause a violation or make a substantial contribution to a violation of an ambient air quality standard.

- Directly or indirectly cause the existing population to exceed the population forecasts in the most recently adopted Ventura County Air Quality Management Plan (AQMP).
- Be inconsistent with the AQMP and emit greater than two pounds per day ROC or NO_x.

3.3.2 Impact Analysis

a. Projects that cause local populations to exceed population forecasts in the AQMP are considered inconsistent with the AQMP, as exceeding population forecasts can result in the generation of emissions beyond those which have been projected in the AQMP. The Project would only make an existing public water supply available during periods when electricity is unavailable and would not provide a new source of water that could induce population growth. Overall, the Project would have no effect on implementation of the AQMP and progress towards attainment of air quality standards.

b. State 1-hour ambient standards for CO are sometimes exceeded at roadway intersections during times of peak traffic congestion. These localized areas are sometimes called CO "hotspots". Due to the relatively low ambient CO levels and the lack of major intersections in the region, CO hotspots rarely occur. The Project would generate only small amounts of traffic, and only during the construction period. Considering the above, the Project would not be expected to create or contribute substantially to the violation of CO standards.

Fugitive dust would be generated by the operation of heavy equipment and off-road use of motor vehicles during Project construction. Dust generation from these activities would be considered a significant impact if APCD Rule 51 is violated. Rule 51 states "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public or which endangers the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property." Fugitive dust minimization measures have been incorporated into the Project (see Section 2.4) and would ensure fugitive dust impacts are less than significant.

c. **Short-Term Construction Emissions**. The Project would generate air pollutant emissions as a result of construction activities, primarily exhaust emissions from heavy-duty trucks, worker vehicles and heavy equipment. Heavy equipment emissions were estimated for a peak day using the OFFROAD model developed by the CARB, focusing on rough grading activities. Emissions of on-road vehicles were estimated using the CARB's EMFAC2014 model, assuming two heavy-duty truck trips (four one-way trips) and 10 worker trips (20 one-way trips) would occur on a typical work day. Estimated Project peak day emissions are listed in Table 2.

Table 2. Construction Air Pollutant Emissions

Source	Pollutant, Pounds per Peak Day			
	ROC	NO_x	CO	PM_{10}
Equipment exhaust	5.6	46.0	20.2	1.8
On-road vehicles	0.1	0.8	1.5	0.1
Fugitive dust	0.0	0.0	0.0	341.3
Total	5.7	46.8	21.7	343.2

Peak day construction emissions would be 46.8 pounds NO_X and 5.7 pounds ROC. As such, NO_X emissions during peak construction periods would exceed the 25 pounds per day threshold established by the APCD. However, due to the temporary, short-term nature of construction emissions, the APCD does not apply the quantitative emissions thresholds for ROC and NO_X to construction activities. The APCD does require that emission reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation. Applicable measures have been incorporated into the Project as discussed in Section 2.4.

Long-Term Engine Testing Emissions. Engine operation associated with testing and maintenance would be limited to 15 hours per year per engine. A typical peak day scenario was developed for comparison to the significance thresholds, consisting of six engine hours total (two engines run separately for three hours each), which would produce up to 254.1 pounds NO_x and 5.8 pounds ROC (Caterpillar 3516C TA). These emissions would exceed the APCD significance thresholds; however, these thresholds do not apply to stationary sources of air pollution that would be regulated under permits issued by the APCD. The proposed generator engines would be certified to comply with Federal and State emissions standards (see Section 2.4), comply with APCD Rule 74.9 and operate in compliance with a permit-to-operate issued by the APCD. Therefore, long-term engine testing emissions would be less than significant.

d. See the discussion under part b. above regarding ozone and fugitive dust. A health risk assessment was conducted for the Project (see Kennedy/Jenks Consultants, 2016) to address emissions of diesel particulate matter (designated toxic air contaminant and carcinogen) associated with engine testing and maintenance. The AERMOD View model and HARP2 Risk Assessment Standalone Tool were used to calculate ambient concentrations of diesel particulate matter and health risk values at the nearest property boundary. The non-cancer chronic hazard index was calculated based on an hourly emission rate of one engine operating at full load. The cancer risk assessment value was calculated based on annual emissions, 15 hours per year of engine operation. The non-cancer chronic hazard index calculated for the Project is 0.0017, which is substantially below the 1.0 standard adopted by the Ventura County APCD.

The cancer health risk value calculated for the Project is 9.05 in a million, which is below the 10.0 standard adopted by the Ventura County APCD. Therefore, Project-related health risk associated with emissions of diesel particulate matter are considered less than significant.

e. Residences of Country Club Estates (Trevino Drive) are located within 900 feet of the proposed emergency generator building, and would potentially be exposed to odors associated with diesel engine exhaust. However, these engines would only be operated for testing and maintenance purposes, up to 15 hours per year per engine. In addition, the engine exhaust would be directed to the west, away from residential areas. The affected residences are currently exposed to diesel odors associated with heavy-duty truck traffic on Grimes Canyon Road (~24 trucks/hour, see Section 3.12.1) and agricultural equipment. Overall, Project-related odors are expected to be short in duration, minimal in intensity and consistent with the current odor environment. Therefore, odor impacts are considered less than significant.

3.3.3 Mitigation Measures and Residual Impacts

With the implementation of Project-incorporated impact avoidance measures, the Project would not result in significant impacts to air quality. Therefore, no mitigation is required.

3.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 Wildlife 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 and regulations or by the California Department of Fish and Wildlife or U.S. 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?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

3.4.1 Setting

All proposed facilities would be located in previously disturbed areas associated with past orchard and nursery land uses.

Vegetation. The proposed emergency generator building site is bounded by eucalyptus windrows on the adjacent north-south oriented berms. The site supports non-native annual grassland dominated by rip-gut grass (*Bromus diandrus*) and red brome (*Bromus madritensis* ssp. *rubens*), with patches of coyote brush (*Baccharis pilularis*) and California sagebrush (*Artemisia californica*). The proposed Wellfield No. 2 construction staging and storage area (see Figures 1 and 5.d) is periodically cleared of vegetation as part of fire prevention, and mulch has been applied to the southern portion of the area. The Wellfield No. 1 construction staging and storage area is composed of a gravel surfaced area surrounding Well No. 1 and does not support vegetation.

The proposed excess soil disposal site is an existing soil stockpile area used to store excess soil from a previous wellfield improvement project. This area was stabilized with erosion control measures including straw wattles and hydroseeding following its use as a soil disposal site for the previous project. Vegetation at the excess soil disposal site is composed of mostly non-native species (rip-gut grass, red brome, slender wild oats [*Avena barbata*], Russian thistle [*Salsola tragus*]), but also includes a few native shrubs (California sagebrush, prickly pear [*Opuntia littoralis*] and golden-bush [*Hazardia*]).

The proposed electrical utility service yard site is vegetated by non-native annual grasses, and is mowed or otherwise cleared annually to reduce fire hazard.

Wildlife. Wildlife surveys have been conducted in the past by Padre Associates biologists on five separate occasions within Wellfield No. 2 (August 19, 1997, December 4, 1997, July 14, 1998, November 11, 1999, and November 8, 2000) for other phases of the ASR Project (e.g., 1995 ASR Program EIR, 2001 ASR Water Reservoir Project MND). In addition, a qualified ornithologist conducted California gnatcatcher surveys on March 12, 19, and 29, and April 7, 1999 in Wellfield No. 2, with negative results.

Biological surveys were conducted on May 31 and June 29, 2016 of the affected facility sites by a qualified biologist to preliminarily identify special-status species and their habitat. Wildlife species observed included Eurasian collared dove (*Streptopelia decaocto*), spotted towhee (*Pipilo maculatus*), northern mockingbird (*Mimus polyglottos*), Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), black phoebe (*Sayornis nigricans*), California towhee (*Melozone crissalis*), ash-throated flycatcher (*Myiarchus cinerascens*), California quail (*Callipepla californica*), Bewick's wren (*Thryomanes bewickii*), western scrub jay (*Aphelocoma californica*), greater roadrunner (*Geococcyx californianus*), lesser goldfinch (*Spinus psaltria*), house finch (*Carpodacus mexicanus*), red-tailed hawk (*Buteo jamaicensis*), great horned owl (*Bubo virginanus*), black-headed grosbeak (*Pheucticus melanocephalus*), California ground squirrel (*Spermophilus beecheyi*), Audubon's cottontail (*Sylvilagus audubonii*), raccoon (*Procyon lotor*) and coyote (*Canis latrans*).

Special-Status Species. A search of the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDB) was conducted on May 12, 2016 for reported occurrences of special-status species within five miles of the emergency generator building site.

Listed species:

- Least Bell's vireo (*Vireo bellii pusillus*) - State and Federal Endangered: reported from Arroyo Las Posas, approximately 2.1 miles to the south-southwest.
- California gnatcatcher (*Polioptila californica californica*) - Federal Threatened, California species of special concern: reported from near Moorpark, approximately 2.4 miles to the east-southeast.
- Riverside fairy shrimp (*Streptocephalus woottoni*) – Federal Endangered: reported from near the State Route 23/Tierra Rejada Road interchange, 4.2 miles to the southeast.
- Conejo dudleya (*Dudleya parva*) – Federal Threatened: reported from near Santa Rosa Valley, 4.9 miles to the southeast.
- Lyon's pentachaeta (*Pentachaeta lyonii*) – State and Federal Endangered: reported from near Moorpark, approximately 3.9 miles to the east-southeast.
- California orcutt grass (*Orcuttia californica*) – State and Federal Endangered: reported from near the State Route 23/Tierra Rejada intersection, 4.1 miles to the southeast.

Non-listed special-status species:

- Arroyo chub (*Gila orcuttii*): reported from Arroyo Simi, approximately 3.2 miles to the southeast.
- Western pond turtle (*Emys marmorata*): reported from Arroyo Simi, approximately 3.2 miles to the southeast.
- Coast horned lizard (*Phrynosoma blainvillii*): reported from the Las Posas Hills, 3.7 miles to the south.

- Western spadefoot toad (*Spea hammondii*): west of Happy Camp Canyon, approximately 3.0 miles to the northeast.
- Cooper's hawk (*Accipiter cooperi*): reported from Wellfield No. 2 in 1999.
- San Diego desert woodrat (*Neotoma lepida intermedia*): reported from the Union Pacific Railroad right-of-way near Moorpark, approximately 1.3 miles to the south.

No special-status species were observed during the biological field survey.

3.4.2 Impact Analysis

a. All proposed facilities would be located in previously disturbed areas associated with wellfield development and past orchard and nursery land uses. The only special-status species (including rare, threatened or endangered species) observed during past field surveys of Wellfield No. 2 was Cooper's hawk. No special-status species were observed during the field surveys conducted for the Project. Suitable habitat for Cooper's hawk or other special-status species is not present at the proposed facility sites. Therefore, significant impacts to special-status species are not anticipated.

b. Riparian scrub associated with the Grimes Canyon drainage is located at least 350 feet from the nearest proposed facility site (emergency generator building pad). No sensitive natural communities occur within or adjacent proposed facility sites. Therefore, no adverse impacts to sensitive habitats are anticipated.

c. Due to the lack of hydric soils and limited hydrophytic vegetation, Federally-protected wetlands do not occur in the Grimes Canyon drainage. In any case, impacts to this drainage would not occur. Therefore, no adverse impacts to wetlands are anticipated.

d. The South Coast Missing Linkages Project identified a potential regional wildlife linkage between the Santa Monica Mountains and the Sierra Madre Range. This linkage extends from the Thousand Oaks area north to Hopper Mountain in the Los Padres National Forest, and is located approximately 4 miles east of Wellfield No. 2. The Project would not result in the loss of vegetation, or barriers to fish and wildlife movement within this or any other potential movement corridor. Therefore, no adverse impacts to fish and wildlife movement are anticipated.

e. The Project would not result in the removal of any native trees or conflict with any local policies or ordinances concerning biological resources. Therefore, no adverse impacts related to compliance with policies protecting biological resources are anticipated.

f. The Project area is not subject to a habitat conservation plan or other conservation plan. Therefore, no adverse impacts related to compliance with habitat conservation plans are anticipated.

3.4.3 Mitigation Measures and Residual Impacts

The Project would not result in significant impacts to biological resources. Therefore, no mitigation is required.

3.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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 of the CEQA Guidelines?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?	☐	☐	☒	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

The following information summarizes the findings of a Phase I Archaeological Survey Report prepared for the Project by Padre Associates (2016).

3.5.1 Setting

Archaeological Context. Ventura County is part of a larger regional cultural area that includes most of Santa Barbara and San Luis Obispo counties. Wallace (1955), Warren (1968), and King (1990) have developed chronological sequences that apply to the prehistory of Ventura County. This assessment uses the chronological sequence developed by King (1990) to discuss the Early, Middle, and Late Periods of cultural development in Ventura County.

Early Period (c. 8,000 – c. 3350 B.P.). Reliable evidence of Holocene (post-10,000 years ago) settlement in Ventura County begins circa 8,000 Before Present (B.P.). The earliest sites were located on terraces and mesas; however, settlement gradually shifted to the coast (Wlodarski, 1988). Site assemblages dating to this period often contained large amounts of milling stones and manos, crude choppers, and core tools (W&S, 1997). Prehistoric peoples used these tools to harvest terrestrial and sea mammals, shellfish, and fish. Mortars and pestles appear toward the end of the period, suggesting a shift towards a greater reliance on acorns (Ventura County RMA Planning Division, 2011).

Middle Period (c. 3350 – c. 800 B.P.). Archaeological material dating to the Middle Period represents a significant evolution in hunter-gatherer technology. The presence of chipped stone tools increases and diversifies, projectile points became more common, and fishhooks and plank canoes (tomol) appear (Wlodarski, 1988; W&S, 1997). Burials dating to this period provide evidence of wealth and social stratification indicating a transition to ranked society (Ventura County RMA Planning Division, 2011). Excavation data from the Santa Monica Mountains demonstrate expansion to the inland region allowing trade and ceremonial exchange patterns to develop (Ventura County RMA Planning Division, 2011).

Late Period (c. 800 – c. 150 B.P.). The cultural complexity initiated during the Middle Period intensified in the Late Period. This period is also referred to as the Chumash Era as Chumash social and religious development peaked during this time. Villages became the main population centers with satellite camps geared toward the seasonal harvest of plants, seeds, game, and material resources (Wlodarski, 1988). The Chumash became expert craftsman of baskets, stone vessels, shell beads, tomol, and fishing technology. It is also likely that communication and trade with non-Chumash tribes and villages accelerated during this period (Ventura County RMA Planning Division, 2011).

Ethnographic Context. The wellfields are located within the ethnographic territory of the Chumash, who inhabited the Coast Ranges between San Simeon and Malibu (Kroeber, 1925). The Chumash have been divided into several geographic groups, each associated with a distinct language dialect. The Chumash living in Ventura County formed the *Ventureño* dialect group of the Chumash language family. This group was named for their association with the Spanish Mission San Buenaventura, founded in 1782.

The Chumash political organization comprised a named village and the surrounding resource areas governed by a chief, known as the *Wot* (Sampson, 2013). Some higher status chiefs controlled large chiefdoms containing several villages. It is likely the wellfield area was included in the chiefdom *Lulapin,* whose limits extended from Malibu to just beyond modern Santa Barbara. Local villages included *Quimisac*, located approximately three miles east of the wellfields in Happy Camp Canyon, and *Ta'apu* and *Shimiyi* located in Simi Valley. According to ethnographic studies, inhabitants from different villages bonded through trade, joint ceremonies, and intermarriage (Sampson, 2013). *Quimisac* controlled most of the "fused shale", a material used to manufacture stone tools, trade in the region.

Spanish colonization and the establishment of Mission San Buenaventura resulted in the erosion of Chumash culture in Ventura County. Chartkoff and Chartkoff (1984) note that Spanish settlement barred many Native Americans from traditionally important resources including clamshell beads, abalone shells, Catalina steatite (soapstone), shellfish, and asphaltum. The introduction of European customs and diseases transformed the hunter-gatherers into agricultural laborers and decimated the native population.

Historical Context. Juan Cabrillo, while exploring the California coast, became the first European to travel near the wellfields when he anchored near Point Mugu in October 1542. Over two hundred years later, Gaspar de Portolá led the first Spanish land expedition in January 1770, traveling through Simi Valley and camped near a Chumash village (Bolton, 1926; Browning, 1992; Priestley, 1937).

In 1776, Juan Bautista de Anza traveled through Ventura County as leader of the San Francisco colonists, stopping near the outlet of the Santa Clara River. This route, known today as the Juan Bautista De Anza National Historic Trail, runs from near Nogales, Arizona to San Francisco, California, and crosses through Ventura County (CATE, 2000).

The wellfield area is located within the Rancho Simi, a 113,009-acre parcel granted to Santiago Pico and Luis Peña by Governor Diego de Borica in 1795 (Atkins, 2012). Pico constructed a large adobe dwelling on the property in the early nineteenth century, which served as the rancho headquarters and a stopover place between the Missions San Fernando Rey and San Buenaventura (Simi Valley Historical Society, 2016).

In 1821, Mexico declared independence from Spain; a year later, California became a Mexican Territory. After the secularization of the missions in 1834, lands were gradually transferred to private ownership via a system of land grants (Hoover, 1990). José de la Guerra purchased Rancho Simi from the Pico family in 1842 and raised cattle and sheep on the property (Atkins, 2012).

Following the Bear Flag Revolt in 1846, John C. Frémont and the California Battalion marched into Mission San Buenaventura, finding all the inhabitants fled except the Chumash neophytes. The Treaty of Hidalgo formally transferred California to the United States in 1848 and statehood was achieved in 1850. At the time, the area that would become Ventura County was originally the southern portion of Santa Barbara County (Murphy, 1979).

Locally, the Philadelphia and California Petroleum Company purchased most of Rancho Simi after de la Guerra's death in 1858. The rest of de la Guerra's family moved to an adobe in Tapo Rancho (Atkins, 2012). During the 1860s, Americans settled in the area and raised livestock and crops (Simi Valley Historical Society, 2016).

The Philadelphia and California Petroleum Company failed to find oil on Rancho Simi. After the Company president Thomas A. Scott died in 1881, most of the property was sold and divided into ranches and farms (Atkins, 2012). In 1887, the Simi Land and Water Company was established, and advertised the real estate in publications throughout the United States (Simi Valley Historical Society, 2016). A group of Chicago doctors formed the California Mutual Benefit Colony of Chicago, hoping to establish a health resort or sanatorium along the Arroyo Simi. The health resort never materialized and many of the doctors returned to Chicago (Atkins, 2012).

Robert W. Poindexter, the secretary of the Simi Land and Water Company, received the plot of land that would become Moorpark when the company dissolved in 1887. In the 1890s, the Southern Pacific Railroad announced plans to relocate its Coast Line route from Los Angeles to San Francisco through the Santa Susana Mountains. Poindexter and his wife surveyed and plotted the town site in 1900. That same year, a train depot was built and an application for a post office was submitted and approved. Poindexter named the town after the Moorpark apricot, which used to grow in the area. The town slowly grew after the completion of the Santa Susana railroad tunnel in 1904 (Moorpark Historical Society, 2016).

Agriculture was the main source of revenue as early settlers preferred dry land farming to grow apricots, black-eyed beans, hay, and lima beans. As more water wells were drilled and irrigation systems improved, walnuts and citrus crops became the preferred crops because of the higher yields. After World War II, chicken, turkey, and egg ranches were established (Moorpark Historical Society, 2016). In 1961, Julius Goldman founded Egg City, a massive chicken farm, approximately 1.5 miles north of the wellfields (Maiella, 1993). The complex was closed in 1996 and the ruins destroyed by a wildfire in 2006 (Rasmussen, 2006). Moorpark remained a small community until the late 1970s and early 1980s when large housing developments were constructed on the northern and southern edges of town. The City of Moorpark was incorporated on July 1, 1983 (Moorpark Historical Society, 2016).

Native American Consultation. As part of the consultation process with Native American organizations and individuals, Padre Associates e-mailed a letter to the Native American Heritage Commission (NAHC) on May 11, 2016 to request information about sacred or traditional cultural properties that may be located within the wellfields. A search of the Sacred Lands file housed at the NAHC did not indicate the presence of Native American cultural resources within the proposed facility sites. On May 17, 2016, the NAHC provided a list of local groups and individuals to contact for further information regarding local knowledge of sacred lands.

On May 20, 2016, Padre Associates sent letters to each of the Native American groups and individuals on the NAHC list; they were asked to provide pertinent information or to express any concerns they may have about the Project. Padre made follow-up phone calls on June 2, 2016. No comments were received concerning the Project from any Native American groups or individuals.

Field Surveys. On May 26, 2016, Padre Archaeologist Andrew Nicchitta surveyed each of the proposed facility sites for archaeological resources. Parallel transects spaced at 15-meter (50 foot) intervals were used to ensure complete survey coverage of the sites. During the survey, Mr. Nicchitta encountered thousands of fragments of a burned earthen material in the eastern half of the excess soil material disposal site. This friable material consisted of sandy clay mixed with unsorted gravels (less than 0.5-centimeter diameter) and ranged in color from brown to tan and black to red where scorched. Though this material resembles brick or ceramic, it was determined that they are burned/fired root casts resulting from the burning of tree stumps in the former orchard. This material was transported to the site with excess earth material during construction activities conducted at Wellfield No. 2. In summary, no archeological or historic resources were found during the field survey.

3.5.2 Impact Analysis

a. The National Register of Historic Places listing does not include any properties within or adjacent to the proposed facilities. No California Historical Landmarks or California Points of Historical Interest are located within or adjacent to the proposed facility sites. The California State Historic Resources Inventory lists no properties within or adjacent to the proposed facility sites. No Ventura County landmarks are located within or adjacent to the proposed facility sites (Ventura County Cultural Heritage Board, 1995). Therefore, no impacts to historic resources are anticipated.

b. One archaeological resource was identified within a 0.25-mile radius of the proposed facility sites. P-56-100072 is an isolated primary chert flake found on a creek terrace (Maki, 1997). The context of the flake suggests that it was deposited from creek flooding or washed down from the surrounding hillside. This resource would not be impacted by Project implementation. In the unlikely event, unreported archeological resources are discovered during Project construction, the Project has incorporated avoidance measures (see Section 2.4) to ensure that significant archeological impacts do not occur.

c. A record search was conducted of the on-line collections data base of the University of California Museum of Paleontology. Numerous foraminifera specimens (marine shell-forming invertebrates) of Oligocene and Miocene age have been found in Grimes Canyon several miles north of the wellfields. No paleontological resources or unique geological features have been reported from the immediate Project area; therefore, no impacts to such resources are anticipated.

d. No prehistoric village site or burial sites are known in the Project area. In the unlikely event that site grading disturbs unidentified burial sites, the Project has incorporated avoidance measures (see Section 2.4) to ensure that significant archeological impacts do not result.

3.5.3 Mitigation Measures and Residual Impacts

Implementation of impact avoidance measures incorporated into the Project would prevent significant impacts to unreported cultural resources. No further study of this issue is required.

3.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	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?	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 risks to life or property?	☐	☐	☒	☐
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?	☐	☐	☐	☒

3.6.1 Setting

Wellfield No. 1 is underlain by alluvium associated with the Grimes Canyon drainage. Wellfield No. 2 is underlain by the Saugus Formation (weakly consolidated gravel and volcanic rocks of Pleistocene age) with alluvium in the valley bottoms (Dibblee, 1992). Exploratory geotechnical drilling identified six feet of artificial fill over three feet of colluvium at the emergency generator building site, with alluvium (clayey sand) below the colluvium. Groundwater was not encountered in the 30.5-foot-deep drill hole (Oakridge Geosciences, Inc., 2015).

Soils found within Wellfield No. 1 are sandy alluvial land and Rincon silty clay loam (9-15 percent slopes). Soils found within Wellfield No. 2 are Corralitos loamy sand (2-9 percent slopes), Garretson loam (0-2 percent slopes), Soper loam (15-30 percent slopes) and Soper gravelly loam (30-50 percent slopes) (Edwards et al., 1970).

The entire Southern California region, including the Moorpark area, is located within a seismically active area. The Simi-Santa Rosa Fault is located approximately 3.4 miles south of the emergency generator building site. The Oak Ridge Fault is located approximately 4.0 miles north of Wellfield No. 2, and is considered active (Ventura County General Plan Hazards Appendix, updated 2013). The wellfields are not located within a designed Alquist-Priolo Special Studies Zone.

Liquefaction occurs when strong, cyclic motions during an earthquake cause water-saturated soils to lose their cohesion and take on a liquid state. Liquefied soils are unstable and can subject overlying structures to substantial damage. The occurrence of liquefaction is highly dependent on local soil properties, depth to groundwater, and the strength and duration of a given ground-shaking event. All of Wellfield No. 1 and parts of Wellfield No. 2 lie within a liquefaction hazard area (California Department of Conservation, 2000).

Ground shaking is the cause of most damage during earthquakes. The predominant (10 percent probability of exceedance in 50 years) earthquake in the Project area is magnitude 6.9. In the Project area, the peak ground acceleration with a probability of 10 percent exceedance in 50 years is 0.71 g in alluvium conditions (California Department of Conservation, 2000).

Subsidence is generally related to over-pumping of groundwater or petroleum reserves from deep underground reservoirs. No recognized subsidence has been identified within the Project area (Ventura County General Plan Hazards Appendix, updated 2013).

Expansive soils are primarily clay-rich soils subject to changes in volume with changes in moisture content. Shrinking and swelling of soils can damage overlying structures, roadways, and utilities. Soils at the wellfields are generally not clay-rich; however, the Rincon soil series has been mapped at Wellfield No. 1 and is considered to have a high shrink-swell potential (Edwards et al., 1970). Soils encountered during geotechnical boring at the emergency generator building site are considered moderately expansive (Oakridge Geoscience, 2015).

Areas of high landslide or mudflow potential are typically hillside areas with slopes of greater than 10 percent. The wellfields are not located within or adjacent to an Earthquake-Induced Landslide Hazard Zone (California Department of Conservation, 2000).

3.6.2 Impact Analysis

a. Due to the presence of faults in the immediate Project area, the potential exists for fault rupture to affect the proposed emergency generator building and other facilities during the design life of the Project. However, the Geotechnical Report prepared for the Project indicates the potential for ground-rupture and liquefaction is low. In any case, engineering of the Project would consider the seismic environment and would be designed and installed to be resistant to seismic-related damage, including ground-shaking and liquefaction. The proposed facility sites are relatively level and not subject to landslides. The Project would not increase the number of persons exposed to existing seismic hazards. Therefore, seismic-related impacts are considered less than significant.

b. The proposed facility sites are relatively level and not subject to excessive erosion. Project construction would involve removal of vegetation and could result in soil erosion. However, Project construction activities would be subject to the State's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Water Quality Order 2012-0006-DWQ), which would require implementation of best management practices to minimize soil erosion. Overall, the potential for soil erosion is considered less than significant.

c. According to the Ventura County General Plan Hazards Appendix, the proposed facility sites are not located in a subsidence zone. As such, the Project is not expected to be subject to impacts associated with land subsidence. See response a. for discussion of issues related to liquefaction and landslides.

d. The proposed emergency generator building site is known to support moderately expansive soils. However, based on the recommendations of the Geotechnical Report, approximately six feet of existing fill material would be removed from the emergency generator building site and replaced with engineered (compacted) fill. Implementation of these measures would avoid impacts associated with expansive soils.

e. Septic waste disposal systems are not proposed as part of the Project; therefore, no impacts would result.

3.6.3 Mitigation Measures and Residual Impacts

No significant geologic hazards were identified; therefore, mitigation measures are not required.

3.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or directly, 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?	☐	☐	☐	☒

3.7.1 Setting

Greenhouse gases (GHGs) are defined as any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). These greenhouse gases lead to the trapping and buildup of heat in the atmosphere near the earth's surface, commonly known as the Greenhouse Effect. There is increasing evidence that the Greenhouse Effect is leading to global climate change.

California Global Warming Solutions Act (Assembly Bill [AB] 32). AB 32 focuses on reducing GHG emissions in California. GHG as defined under AB 32 include: water vapor, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires the CARB to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. In addition, two State-level Executive Orders have been enacted by the Governor (Executive Order S-3-05, signed June 1, 2005, and Executive Order S-01-07, signed January 18, 2007) that mandate reductions in GHG emissions.

In December 2008, CARB approved a Scoping Plan for Climate Change, pursuant to AB 32. The Scoping Plan proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve the environment, reduce dependence on oil, diversify energy sources, save energy, and enhance public health while creating new jobs and enhancing the growth in California's economy. Key elements of the Scoping Plan for reducing California's greenhouse gas emissions to 1990 levels by 2020 include:

- Expansion and strengthening of existing energy efficiency programs and building and appliance standards.
- Expansion of the Renewables Portfolio Standard to 33 percent.
- Development of a California cap-and-trade program that links with other Western Climate Initiative Partner programs to create a regional market system.
- Implementation of existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
- Targeted fees to fund the State's long-term commitment to AB 32 administration.

The Climate Change Scoping Plan was updated in May 2014, and confirms that California is on target for meeting the 2020 GHG emissions reduction goal.

GHG and CEQA. From 2007 to 2009, CARB has promulgated several discrete early action measures to reduce GHG emissions prior to the full and final adoption of a plan to reduce aggregate California GHG emissions to 1990 levels by 2020. Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that greenhouse gas emissions and the effects of GHG emissions are appropriate for CEQA analysis. It directs the California Office of Planning and Research (OPR) to develop guidelines *"for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division."* (Pub. Res. Code § 21083.05(a)).

In December 2009, the California Natural Resources Agency adopted amendments to the CEQA Guidelines (Title 14, Cal. Code of Regulations, §15000 et seq.) to comply with the mandate set forth in Public Resources Code §21083.05. These revisions became effective March 18, 2010. According to GHG amendments to the CEQA Guidelines, each public agency that is a CEQA lead agency needs to develop its own approach to performing a climate change analysis for projects that generate GHG emissions. A consistent approach should be applied for the analysis of all such projects, and the analysis must be based on best available information.

Climate Change Action Plans. Many California counties have developed a climate change action plan focusing on reducing GHGs from local sources, to facilitate meeting the State reduction targets of AB 32. To date, Ventura County has not developed any plans related to GHG emissions reduction in the County.

Significance Thresholds. To date, GHG thresholds of significance have not been adopted by the CMWD or Ventura County. On November 8, 2011, the Ventura County APCD completed a staff report assessing several options and strategies in developing GHG thresholds for land development projects. Although no GHG thresholds were developed, the November 8, 2011 staff report stated that consistency with any GHG thresholds developed by the South Coast Air Quality Management District (SCAQMD) is preferred. On December 5, 2008, the SCAQMD governing board adopted an interim GHG significance threshold of 10,000 metric tons per year CO_2 equivalent (including amortized construction emissions) for industrial projects. Due to the lack of any other applicable threshold, this value will be used in this analysis to determine the significance of the contribution of the Project to global climate change.

3.7.2 Impact Analysis

a. Construction. Project construction would result in greenhouse gas emissions, primarily in the form of CO_2 exhaust emissions from the use of off-road construction equipment and on-road vehicles. Emissions of GHG from construction-related sources were estimated using CARB's EMFAC2014 Model and emission factors provided in the California Climate Action Registry General Reporting Protocol. Estimated emissions of GHG associated with Project construction are 127.4 metric tons of CO_2 equivalent ($MTCO_2E$) and the calculations are summarized in Table 3.

Table 3. Construction-Related Greenhouse Gas Emissions

Source	CO_2 Emissions (metric tons)	CH_4 Emissions (metric tons)	N_2O Emissions (metric tons)
Total GHG Emissions	125.7	0.008	0.005
Global Warming Potential Factor	*1*	*25*	*298*
Total CO_2 Equivalent Emissions	125.7	0.20	1.49
Total Metric Tons of CO_2 Equivalent	**127.4**		

Operation. Long-term GHG emissions would be generated by operation of the emergency generator engines for testing and maintenance purposes. GHG emissions associated with engine operation were estimated using vendor-provided fuel consumption and GHG emissions factors from the California 2000-2014 Greenhouse Gas Inventory. Based on 15 hours/year of operation per engine at 100 percent load, maximum GHG emissions would be 108.4 $MTCO_2E$ if the Cummings engines were selected, and 106.1 $MTCO_2E$ for the Caterpillar engines.

Total GHG Emissions. Total Project GHG emissions include both construction and operational emissions. Typically, construction GHG emissions are amortized over the life of the Project and added to operational emissions for comparison to thresholds (see Table 4). Total Project emissions would be less than the 10,000 $MTCO_2E$ per year threshold adopted for the Project; therefore, GHG emissions are considered a less than significant impact on global climate change.

Table 4. Total GHG Emissions

Source	Total GHG Emissions ($MTCO_2E$)
Engine operation (testing and maintenance)[1]	108.4
Construction (amortized over 30 years)	4.2
Total	**112.6**

[1] based on Cummings engines, which have slightly higher fuel usage and GHG emissions at 100% load

b. The Project would not involve any sources of greenhouse gases that are regulated under the State cap and trade program, or other plans or policies regulating these emissions.

3.7.3 Mitigation Measures and Residual Impacts

No significant impacts to global climate change related to greenhouse gas emissions were identified; therefore, mitigation measures are not required.

3.8 HAZARDS AND HAZARDOUS MATERIALS/RISK OF UPSET

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	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?	☐	☐	☒	☐
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 for people residing or working in the project area?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Would the project:		Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☒	☐

3.8.1 Setting

A "hazardous material" means any material that, because of its quantity, concentration, physical or chemical characteristics poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. Appendix G of the CEQA Guidelines indicates that a project would have a significant impact if it would create a public health hazard, expose people to a potential health hazard, or pose a threat to the environment.

Hazardous materials sites within two miles of the proposed facility sites are limited to two closed leaking underground storage tank cases; petroleum leakage approximately 0.7 miles to the south and diesel fuel leakage located approximately 1.1 miles to the south of Wellfield No. 1. These cases were evaluated and closed by the Ventura County Environmental Health Division, with contamination limited to adjacent soils.

3.8.2 Impact Analysis

a. Excluding diesel fuel, the Project would not use, transport or dispose of hazardous materials. Up to 80,000 gallons of diesel fuel would be stored at the emergency generator building site, and transported to the site using tanker trucks. Diesel fuel transportation would occur very infrequently and be limited to a maximum of three tanker trucks per day and utilize existing truck routes (SR 118, Grimes Canyon Road). All diesel fuel would be consumed on-site and disposal would not be required. Therefore, significant hazards to the public or environment related to hazardous materials would not occur.

The wellfield area is served by Station 40 of the Ventura County Fire Department, located approximately 5.0 road miles from Wellfield No. 2. Emergency response from this station is expected to be less than 10 minutes. Station 42 is located approximately 5.5 road miles from Wellfield No. 2 and could provide support to Station 40 staff. The Project includes four large steel double-walled diesel fuel storage tanks that may be considered a potential fire hazard. However, the tanks would be provided with spill prevention and leak detection equipment, contained within concrete walls and fire hydrants would be provided at the site. In addition, bollards would be installed around the perimeter of the fuel storage area to prevent inadvertent collisions by trucks and potential damage to fuel storage tanks. Therefore, no substantial increase in fire hazard would occur.

b. The diesel fuel tanks would be provided with features to avoid and detect leakage, including a leak monitor sensor at each tank, over-fill protection valve, a fuel sensor at the fuel tank area sump, manually-operated sump discharge valve to prevent discharge of contaminated storm water, fill connection spill containment at each tank, and a concrete wall enclosing the fuel tank area. These measures would prevent discharge of diesel fuel to the environment should a leak or other upset condition occur. Therefore, significant hazards to the public or environment associated with potential upset conditions would not occur.

c. As the nearest school is Walnut Canyon Elementary is located approximately 1.8 miles southeast of the emergency generator building site, the Project would not involve the use of hazardous materials, hazardous waste or result in hazardous emissions within one-quarter mile of a school.

d. No hazardous materials sites compiled pursuant to Government Code Section 65962.5 are located in the Project area. The Project would not affect any of these sites or result in a related hazard to the public or the environment.

e. The proposed facility sites are located at least 9.6 miles northeast of the Camarillo Airport. The Project area is not identified in an Airport Land Use Plan, nor is it located within two miles of a public use airport. No safety hazards resulting from airport proximity are expected.

f. The proposed facility sites are not located near a private airstrip, and so would not result in a safety hazard.

g. The Project's components are limited to providing back-up electrical power to existing wellfields, no change in population or public access would occur. Therefore, no impacts to emergency response would occur.

h. The proposed facility sites support areas of flammable vegetation and wildland fires may occur. Areas mapped within a Very High Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection occur approximately 1.3 miles northwest of Wellfield No. 2. CMWD implements a fuel reduction (weed abatement) program at Wellfield No. 2 in compliance with Ventura County Fire Department requirements. The Project would be constructed from non-flammable materials (masonry, concrete, steel), and would not involve any habitable structures or substantially increase the risk of loss, injury or death from wildland fires.

3.8.3 Mitigation Measures and Residual Impacts

No significant impacts related to hazards or hazardous materials were identified; therefore, mitigation measures are not necessary.

3.9 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
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)?	☐	☐	☐	☒
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 off-site?	☐	☐	☒	☐
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 off-site?	☐	☐	☒	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems?	☐	☐	☐	☒
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?	☐	☐	☐	☒
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

3.9.1 Setting

The Grimes Canyon drainage is an intermittent tributary of Arroyo Las Posas of the larger Calleguas Creek watershed. The Calleguas Creek watershed is approximately 50 percent agriculture and urban, and about 50 percent natural areas. About 90 percent of the natural areas of the watershed are coastal scrub. There are also natural grasslands, and small remnants of oak woodland, oak savanna, chaparral, and riparian vegetation. Increased runoff, erosion, and sedimentation are significant problems in the watershed as a whole, and have resulted in major impacts to stream morphology and the infilling of Mugu Lagoon. Erosion and sedimentation have been dramatically increased by human development (agriculture and urban) and are a major focus of current watershed management efforts.

The Grimes Canyon watershed is mainly agriculture (orchards and field crops), with some coastal scrub areas in the upper watershed. The portion of the watershed downstream of the facility sites primarily supports agriculture down to the Arroyo Las Posas confluence. As with the Calleguas Creek watershed as a whole, the Grimes Canyon watershed has experienced dramatic increases in runoff, erosion, and sediment transport due mainly to the conversion of large expanses of coastal scrub and oak woodland/savannas to agricultural areas.

Beneficial uses established in the Water Quality Control Plan (California RWQCB, 1994) for surface water in the Arroyo Las Posas (Calleguas Creek Reach 6, Long Canyon to Hitch Blvd.) are potential municipal water supply, potential industrial service water supply, potential process water supply, potential agricultural water supply, groundwater recharge, freshwater replenishment, warm freshwater habitat, potential cold freshwater habitat, and wildlife habitat.

The water quality of Arroyo Las Posas is considered impaired, under Section 303(d) of the Clean Water Act, due to levels of ammonia, chlordane, chloride, chlorpyrifos, dichloro-diphenyl-trichloroethane (DDT), diazinon, dieldrin, fecal coliform bacteria, nitrate, nitrite, sedimentation/siltation, sulfates, total dissolved solids, and aquatic toxicity. A water body is impaired when data indicate that adopted water quality objectives are routinely exceeded or that beneficial uses are not protected.

3.9.2 Impact Analysis

a. The Project would not result in any discharge of water or waste to surface waters or groundwater aquifers.

b. The Project would use small amounts of potable water for soil compaction and dust control and would be supplied by existing connections at Wellfield No. 2. This water would be provided by CMWD, from mostly non-groundwater sources. The amount of water used would be relatively small (up to a few thousand gallons a day) and temporary and, as such, would not adversely affect groundwater supplies.

c. The Project would not alter existing drainage patterns and would not affect the Grimes Canyon drainage or tributary drainages. Localized erosion associated with storm run-off during construction is addressed in Section 3.6.2. Significant Project-related increases in erosion or siltation would not occur.

d. The Project would not alter existing drainage patterns, or cause flooding. The Project-related increase in impervious surfaces would be approximately 1.8 acres, including the emergency generator building site paving, building roof and access road improvements. Storm drain improvements at the emergency generator building site would include interceptor drains (concrete v-ditch) on the top of the slopes surrounding the site, storm drain boxes in paved areas and a 42-inch-diameter storm drain that would collect storm water north of the site and on-site storm water and empty it onto rock rip-rap aprons into an existing swale south of the emergency generator building site (see Figure 2). Storm water from the swale would sheet-flow towards existing Detention Basin No. 2 near the Wellfield No. 2 entrance (see Figure 1). As any increased storm run-off associated with increased impervious surfaces at the emergency generator building site would be detained on-site, no substantial change in off-site storm run-off would occur.

e. The Project incorporates storm drain systems needed to serve the proposed facility sites. The Project would not contribute storm flow to any off-site existing or planned storm water drainage systems.

f. There are no other aspects of the Project that could result in the substantial degradation of water quality.

g. The Project would not involve the construction of any housing.

h. Based on review of the applicable Flood Insurance Rate Maps (panel 06111C0816E, revised January 20, 2010), a small portion of Wellfield No. 1 lies within a 1% annual chance flood hazard area (no base flood elevations determined). Wellfield No. 2 and proposed facility sites are not located within a flood hazard area. The Project does not include any structures within the 1% annual chance floodplain of the Grimes Canyon drainage that could impede or redirect flood flows.

i. See part h. above regarding flooding. The wellfields or proposed facility sites are not located within a dam inundation hazard zone.

j. Tsunamis are large-scale sea waves produces by tectonic activities along the ocean floor. Seiches are freestanding or oscillatory waves associated with large enclosed or semi-enclosed bodies of water. As the proposed facility sites are not located near the ocean or any large enclosed or semi-enclosed bodies of water, the Project is not subject to any impacts of this nature. Debris and mudflows are typically a hazard experienced in the floodplains of streams that drain very steep watersheds. The proposed facility sites are located in relatively level areas, and would not be exposed to debris or mud flow hazards.

3.9.3 Mitigation Measures and Residual Impacts

No significant impacts related to hydrology or water quality would result from the Project. Therefore, no mitigation is required.

3.10 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.10.1 Setting

The affected parcels are zoned Agricultural-Exclusive, 40-acre minimum parcel size (AE-40 ac). The purpose of the AE zone is to preserve and protect commercial agricultural lands as a limited and irreplaceable resource. The current land use (potable water facilities) is consistent with the AE zoning.

3.10.2 Impact Analysis

a. All proposed facilities and components would be located within the existing wellfields and would not divide an established community.

b. The Project would be subject to the policies of the Ventura County General Plan. The Project would not conflict with any General Plan policies.

c. See Section 3.4.2.f.

3.10.3 Mitigation Measures and Residual Impacts

No significant impacts related to land use would result from the Project. Therefore, no mitigation is required.

3.11 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Result in the loss or 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?	☐	☐	☐	☒

3.11.1 Setting

Aggregate is the only locally important mineral resource, and is defined as construction grade sand and gravel. The proposed facility sites are located in areas mapped as MRZ-4 (areas where available data is inadequate for assignment to any other MRZ category) (California Division of Mines and Geology, 1993). The Wayne J. Sand and Gravel Quarry is located approximately 2.2 miles northeast of Wellfield No. 2.

The Ventura County General Plan Resources Appendix has determined that there is a sufficient supply of aggregate to meet local demand for the next 50 years. Therefore, no project would have a significant impact on the supply of aggregate resources. However, any land use proposed to be located in or adjacent to a known aggregate resource area, or adjacent to a principal access road to an existing aggregate mining or processing operation may have an impact on mineral resources. Determinations of significance must be made on a case-by-case basis considering the type of land use proposed and its location relative to aggregate resource areas and production facilities.

3.11.2 Impact Analysis

a. The proposed facility sites are not located in a mineral resource area, and would not hamper the extraction of such resources in the region. Therefore, no impacts to such resources would occur as result of Project implementation.

b. The Project would not adversely affect the Wayne J. Sand and Gravel Quarry, Grimes Rock or other mineral resource production sites, or the availability of these mineral resources.

3.11.3 Mitigation Measures and Residual Impacts

No impacts to mineral resources would result from the Project. Therefore, mitigation is not required.

3.12 NOISE

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	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?	☐	☐	☒	☐
b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
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 levels existing without the project?	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

3.12.1 Setting

Noise levels are measured on a logarithmic scale due to physical characteristics associated with noise transmission and reception. A doubling of noise energy normally results in a 3.0-decibel (dB) increase in noise levels. The threshold of human hearing is between 0 and 10 dBA. Because of the structure of the human auditory system, a 10-dB increase in noise is perceived as a doubling of noise. A 1- to 2-dB change in ambient noise levels is generally not perceptible to sensitive receptors.

Noise levels diminish (or attenuate) as distance from the source increases based upon an inverse square rule, but the rate of attenuation varies with the type of sound source. Sound attenuates from point sources, such as an industrial facility, at a rate of 6 dB per doubling of distance. Roads typically have an attenuation rate of 4.5 dB per doubling of distance. However, heavily traveled roads with few gaps in traffic are typically characterized as a line source with an attenuation rate of 3-dB per doubling of distance.

The duration of noise and the time period at which it occurs are important factors in determining the impact of noise on sensitive receptors. Noise is more disturbing at night than during the day and noise indices have been developed to account for the varying duration of noise events over time as well as community response to them. The Community Noise Level Equivalent (CNEL) and the Day-Night Average Level (DNL or Ldn) are such indices. These indices use time-weighted average values based on the equivalent sound level (Leq).

The CNEL penalizes noise levels during the night (10 p.m. to 7 a.m.) by 10 dB to account for the increased sensitivity of people to noise during the hours when most people are expected to be resting or sleeping. Evening noise levels (7 p.m. to 10 p.m.) are penalized 5 dB by the CNEL. Appropriately weighted hourly Leqs are then combined over a 24-hour period to result in a CNEL. The Ldn also penalizes nighttime noise levels, but does not penalize evening levels.

People are subject to a multitude of sounds in the urban environment. Excessive noise may not only be undesirable, but may also cause physical and/or psychological damage. The amount of annoyance or damage to sensitive receptors is dependent primarily upon three factors: 1) the amount and nature of the noise; 2) the amount of ambient noise present before the intruding noise; and 3) the activity of the person working or living in the noise source area.

The difficulty in relating noise exposure to public health and welfare is one of the major obstacles in determining appropriate maximum noise levels. Although there has been some dispute in the scientific community regarding the detrimental effects of noise, a number of general conclusions have been reached, including the following:

- Noise of sufficient intensity can cause irreversible hearing damage.
- Noise can produce physiological changes in humans and animals.
- Noise can interfere with speech and other communication.
- Noise can be a major source of annoyance by disturbing sleep, rest, and relaxation.

The dominant source of noise in the Project area is rail traffic (Union Pacific Railroad, Metrolink) and vehicle traffic on major roadways, primarily Grimes Canyon Road, SR 118 (Los Angeles Avenue) and SR 23. Noise sensitive receptors within 2,000 feet of the proposed emergency generator building site include residences within Country Club Estates and adjacent residential areas, with the nearest residence located 900 feet away.

Baseline noise measurement was conducted on June 29, 2016 at the emergency generator building site, and adjacent to a residence near the Grimes Canyon Road/Championship Drive intersection (see Table 5). Due to lack of access (affected communities are gated), the noise measurement site was located on an equestrian trail at approximately the same distance from Grimes Canyon Road (primary noise source) as affected residences. Heavy-duty truck traffic is high on Grimes Canyon Road, primarily associated with trucks traveling between SR 118 and sand/gravel quarries on northern Grimes Canyon Road. A short-term traffic count conducted on June 29, 2016 near the Wellfield No. 2 entrance road yielded 15 heavy-duty trucks between 8:18 and 8:55 a.m. (24 trucks/hour).

Table 5. Baseline Noise Measurement Data

Measurement Site	Measurement Period	Distance to Grimes Canyon Road (feet)	Measured Noise Level (dBA Leq)
Emergency generator building site	9:07 to 9:22 a.m.	325*	41.5
Representative residence near Wellfield No. 2	7:28 to 7:53 a.m.	125	57.1

*An earthen berm is located between the site and Grimes Canyon Road

Significance Thresholds. For the purposes of this impact analysis, the Ventura County noise thresholds for short-term construction operations are used as identified in Construction Noise Threshold Criteria and Control Plan prepared by Advanced Engineering Acoustics (amended 2010). According to this document, residential areas are only considered a noise sensitive land use during the evening and nighttime (7 p.m. to 7 a.m.). Construction noise standards for residences are: evening – 50 dBA Leq OR ambient noise level + 3 dBA; nighttime – 45 dBA Leq OR ambient noise level + 3 dBA.

For the purposes of this analysis, standards for noise generators listed in Section 2.16.2-1 of the Ventura County General Plan Goals, Policies and Programs document are used to determine significance. These standards are:

- 55 dBA Leq OR ambient noise + 3 dBA, whichever is greater from 6 a.m. to 7 p.m.
- 50 dBA Leq OR ambient noise + 3 dBA, whichever is greater from 7 p.m. to 10 p.m.
- 45 dBA Leq OR ambient noise + 3 dBA, whichever is greater from 10 p.m. to 6 a.m.

3.12.2 Impact Analysis

a. Construction noise would be generated by heavy equipment and heavy-duty trucks associated with facility installation. Noise levels at adjacent sensitive receptors associated with rough grading at the emergency generator building site were estimated using the Roadway Construction Noise Model developed by the Federal Highway Administration. The estimated peak daytime noise level at the nearest residence (Trevino Drive) is 57.1 dBA Leq. Therefore, evening and nighttime construction work would exceed the County's construction noise standards. As construction work is not planned for the evening or nighttime, construction noise impacts would be less than significant.

A noise impact analysis was conducted for the Project by Steve Rogers Acoustics (2015) to identify noise impacts associated with operation of the emergency generator engines. Estimated noise values for all five engines operating at rated BHP are listed in Table 6 for the residences closest to the emergency generator building site. These data indicate that daytime operation of all five engines at rated BHP would not exceed the daytime noise standard (ambient + 3 dBA). As all engine testing and maintenance would occur during daytime hours between 7 a.m. to 7 p.m. and engines would be tested individually, significant operation-related noise impacts would not occur. Note that operation of the emergency generators during emergencies is not addressed in this analysis as discussed in Section 2.3.

Table 6. Emergency Generator Engine Noise Impact Analysis Results

Location	Daytime Ambient Noise Levels[1] (dBA Leq)	Daytime Noise Standard (ambient + 3 dBA Leq)	Estimated Noise Level (dBA Leq)	Estimated Noise Level with Enhanced Noise Controls[2] (dBA Leq)
Saddle Ranch residence	57.1	60.1	64	53
10861 Pimlico Drive	57.1	60.1	68	57
6651 Affirmed Place	57.1	60.1	64	51
6791 Trevino Drive	57.1	60.1	65	53
6875 Hogan Street	57.1	60.1	67	56

[1] Based on noise measurement data in Table 5

[2] All engines operating with proposed super critical exhaust mufflers

b. Project construction (primarily earthwork) would generate ground-borne noise and vibration; however, this noise and vibration would not be readily detectable at residences as they are at least 900 feet from areas of proposed major earthwork. Operation of the emergency generators would produce ground-borne noise and vibration. However, they would be provided with spring vibration isolators between the generator/engines and the steel frame, which would result in vibration isolation of greater than 95 percent. Therefore, operation-related ground-borne noise and vibration is not anticipated to significantly affect nearby land uses.

c. See the discussion of long-term operation noise in part a. above.

d. See the discussion of construction noise in part a. above.

e. The Project is not located in an area addressed in an Airport Land Use Plan, nor is it within two miles of any public or private airstrips. Therefore, no impacts are expected.

f. See the discussion of airstrip-related noise in part e. above.

3.12.3 Mitigation Measures and Residual Impacts

No significant noise impacts would result from the Project. Therefore, mitigation is not required.

3.13 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	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)?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.13.1 Impact Analysis

a. The Project would not involve any new facilities, operational changes or extension of infrastructure that would increase the amount of water stored or pumped by ASR Project facilities. The Project would only increase the availability of water stored by the ASR Project during emergencies and could not support any new development. Since an increase in potable water availability would not occur, the Project would not result in population growth beyond currently forecast levels. Overall, the Project does not have the potential to induce population growth.

b. As all components would be sited within existing ASR Project facilities, no housing would be displaced by the proposed facilities and construction of replacement housing would not be necessary.

c. As people would not be displaced as a result of Project implementation, it would not be necessary to provide replacement housing.

3.13.2 Mitigation Measures and Residual Impacts

No significant impacts to population or housing would result from the Project, therefore, no mitigation is required.

3.14 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	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?				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

3.14.1 Impact Analysis

a. The Project location (western Moorpark area) is served by Station 40 of the Ventura County Fire Department located at 4185 Cedar Springs Street in Moorpark, approximately 5.0 road miles from the emergency generator building site. Emergency response from this station is expected to be less than 10 minutes. Station 42 is located approximately 5.5 road miles from the emergency generator building site and could provide support to Station 40 staff. Therefore, no new fire protection facilities would be required.

The Ventura County Sheriff's Department provides law enforcement services to the City of Moorpark and adjacent unincorporated areas (including the wellfields). The nearest station is located at 610 Spring Road in Moorpark. Currently, the wellfields are gated and not accessible to the public. No new law enforcement facilities would be required.

The Project would not provide housing or increase the local population. Therefore, no impacts to schools, parks and other public facilities or increased demand for such facilities would occur.

3.14.2 Mitigation Measures and Residual Impacts

No impacts to public services would result from the Project. Therefore, no mitigation is necessary.

3.15 RECREATION

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	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 that might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.15.1 Setting

Recreational facilities in the Project area include the Moorpark County Club (private), Rustic Canyon Golf Course, Happy Camp Canyon Regional Park, Arroyo Vista Community Park, Glenwood Park, Poindexter Park, and Tierra Rejada Park.

3.15.2 Impact Analysis

a. The Project would not result in population growth, and would not increase the use of existing neighborhood or regional parks, or any other recreational facilities. As such, the Project would not result in the accelerated physical deterioration of any recreational facilities. No impact would result.

b. The Project would not involve the construction or expansion of any recreational facilities. Thus, the Project would not have any impacts on the physical environment associated with the construction or use of recreational facilities.

3.15.3 Mitigation Measures and Residual Impacts

No impacts associated with recreational facilities would result from the Project; therefore, no mitigation is necessary.

3.16 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	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 transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and 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)?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.16.1 Setting

The quality of traffic service provided by a roadway system can be described through the Level of Service (LOS) concept. LOS is a standardized means of describing traffic conditions by comparing traffic volumes in a roadway system with the system's capacity. A LOS rating of A-C indicates that the roadway is operating efficiently. Minor delays are possible on an arterial with a LOS of D. Level E represents traffic volumes at or near the capacity of the highway, resulting in possible delays and unstable flow. A LOS of F represents traffic volumes that may result in substantial delays.

The Project components would be located adjacent to Grimes Canyon Road, which can be accessed from SR 118 from the south or Broadway Road/SR 23 from the north. 2015 traffic volume data provided by the Ventura County Public Works Agency indicates Grimes Canyon Road operates at LOS B (Class II two-lane roadway, 2,800 vehicles/hour) and Broadway Road operates at LOS B (Class II two-lane roadway, 2,600 vehicles/hour).

Year 2014 traffic volumes provided by the California Department of Transportation (Caltrans) indicate 18,600 average daily trips occur on SR 118 (west of the Grimes Canyon Road intersection). Based on the Ventura County LOS thresholds for conventional state highways, SR 118 operates at LOS E.

Significance Thresholds. The following significance thresholds were taken from the Ventura County Initial Study Assessment Guidelines and have been utilized by CMWD for this Project.

- Cause the existing LOS on a roadway segment to fall to an unacceptable level (LOS F in this case).
- An increase of one peak hour trip at an intersection operating at LOS F.

Note that LOS E is considered acceptable (Ventura County Resource Management Agency, 2011) for the affected segment of SR 118.

3.16.2 Impact Analysis

a. Motor vehicle trips would be generated by Project construction activities and by operation and maintenance activities. Installation of proposed facilities would involve up to 10 heavy-duty truck round trips on a peak day, and up to 20 worker transportation round trips per day. Since construction activity would generally occur between 7 a.m. and 4:30 p.m., worker transportation trips would mostly occur prior to peak commute hour. In addition, heavy-duty truck trips would be distributed relatively evenly throughout the day. Therefore, few of these trips would occur during peak commute hour.

Project construction traffic would utilize roadways operating at acceptable LOS. Based on the relatively small number of Project-related trips as compared to existing volumes, Project traffic would not cause affected roadways to operate at unacceptable LOS.

Facility operation and maintenance activities would generate up to three heavy-duty truck round trips per day (fuel deliveries and/or other supplies). Existing wellfield maintenance staff would be used to maintain the proposed facilities; therefore, no new maintenance-related trips would occur. Facility operation and maintenance traffic would utilize roadways operating at acceptable LOS. Based on the relatively small number of Project-related trips as compared to existing volumes, operation and maintenance traffic would not cause affected roadways to operate at unacceptable LOS.

b. The Project area is not subject to a congestion management plan. Impacts relating to LOS are addressed in part a. above.

c. Since no public airports or private airstrips are located near the proposed facility sites, no impacts to such facilities would result from the Project.

d. The Project would not involve any changes to roadways or incompatible uses of existing roadways; therefore, Project-related increases in traffic hazards are not anticipated.

e. The Project would not require emergency services or create conditions that would impede emergency access for adjacent land uses.

f. As discussed in response a. above, the Project would result in small increases in traffic volumes. However, Project traffic would not be of significant levels that would conflict with or impede existing alternative transportation (e.g., mass transit, bicycles). In addition, the Project would not result in obstruction of areas (e.g., bus turnouts, bicycle racks, bicycle lanes) that support alternative transportation plans, policies or programs.

3.16.3 Mitigation Measures and Residual Impacts

No significant impacts associated with transportation/traffic would result from the Project; therefore, no mitigation is necessary.

3.17 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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 project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

3.17.1 Impact Analysis

a. The Project would not generate wastewater or require additional treatment of existing wastewater.

b. No new water or wastewater treatment facilities would be required to serve the proposed facilities.

c. The Project would not require the construction or modification of public storm water drainage facilities. No impacts would result.

d. Excluding small amounts used during construction, the Project would not increase demand for potable water or require any new entitlements or water supply facilities.

e. See response b.

f. To the extent possible, excess earth material generated by Project-related earthwork would be stored/used at the wellfields and not disposed at a landfill. However, small quantities unsuitable for storage or reuse may be disposed of at a landfill.

g. CMWD complies with all federal, state and local statutes relating to solid waste, and would continue to do so during the operation of the Project. As such, no impacts of this type are expected to result.

3.17.2 Mitigation Measures and Residual Impacts

No significant impacts related to utilities and service systems would result from the Project; therefore, no mitigation is necessary.

4.0 CUMULATIVE IMPACTS

Cumulative impacts are defined as two or more individual effects which, when considered together are considerable, or which compound or increase other environmental impacts. Under Section 15064 of the State CEQA Guidelines, the lead agency (Calleguas Municipal Water District) must identify cumulative impacts, determine their significance and determine if the effects of a project are cumulatively considerable.

4.1 DESCRIPTION OF CUMULATIVE PROJECTS

4.1.1 Ventura County

The Ventura County Resource Management Agency pending project list and recently approved project list (dated November 1, 2016) were reviewed to identify other projects that would result in a physical change to the environment in the Project area. These projects are:

- PL16-0134 (CEMEX Mine): extend the life of CUP 4633 by 49 years, approve a new mining area and modify mine restoration requirements (under review).
- PL16-0097 (Grimes Rock): expansion of the mining area and modifications to the reclamation plan (under review).
- PL13-0116 (Wayne L. Sand & Gravel): expansion of the mining area and permit time extension (approved, under appeal).
- PL15-0145 (7202 Balcom Canyon Road): time extension and increase in the number and size of equestrian events (under review).
- PL14-0047 (7840 Balcom Canyon Road): four lot parcel subdivision (under review).

4.1.2 City of Moorpark

The following projects are under review, recently approved or under construction as listed in the City's Quarterly Status Report for July 2016 (current as of November 17, 2016):

- Toll Brothers, Inc., Championship Drive: 50 single-family residences (under construction).
- Pacific Communities: 283 single-family residences (under review).
- Hitch Ranch Partners: 755 single-family residences (under review).
- Toll Brothers, Inc., Spring Road: 132 single-family residences (under construction).
- City Ventures: 110 single-family residences (recently approved).
- John Chiu: 60 condominium units (under review).
- Hovnanian Homes, Meridian Hills: 248 single-family residences (under construction).
- Mansi/Aldergate Investment: 390 senior units (under review).
- Essex Moorpark: 200 apartment units (under review).

- Birdsall Group: 21 single-family residences (recently approved).
- Grand Moorpark: 66 apartment units (under review).
- Housing Authority: 24 affordable dwelling units (recently approved).
- Spring Road: 95 townhouse units (under review).
- Kim Clement Center: 21,644 square foot church (recently approved).
- Moorpark Hospitality: 108-unit hotel (recently approved).
- Triliad Development: motion picture studio complex (recently approved).
- City Hall Expansion: 32,000 square foot city hall (under review).

4.2 DISCUSSION OF CUMULATIVE IMPACTS

4.2.1 Aesthetics

Degradation of visual quality associated with proposed facilities would not incrementally contribute to aesthetics impacts of the cumulative projects, because they could not be viewed from the same area. In any case, proposed facilities would be visually consistent with existing wellfield facilities and not readily visible from any public viewing areas. Cumulative aesthetic impacts are considered less than significant.

4.2.2 Air Quality

Construction-related air emissions associated with the Project would incrementally contribute to air emissions of the cumulative projects. However, emissions reduction measures have been incorporated into the Project which would prevent significant cumulative impacts. Air pollutant emissions associated with operation of the engine/generators would incrementally contribute to mobile and stationary source emissions associated with the cumulative projects. However, the engine/generators would be operated in compliance with an APCD permit to operate and the incremental contribution would not be considerable.

4.2.3 Biological Resources

Habitat loss associated with the Project would incrementally contribute to loss of wildlife habitat of the cumulative projects. However, the Project's contribution would not be substantial because the affected areas have been previously disturbed and do not support special-status species.

4.2.4 Cultural Resources

The cumulative projects identified in Section 4.1 may adversely impact cultural resources, and the Project has the potential to incrementally contribute to cumulative impacts to archeological resources. However, impact avoidance measures have been incorporated into the Project to prevent significant Project-specific and cumulative impacts.

4.2.5 Greenhouse Gas Emissions

By their nature and potential global effects, greenhouse gas emissions are a cumulative issue. The Project would generate greenhouse gas emissions during construction and operation, which would incrementally contribute to cumulative impacts. However, Project emissions would be much less than any suggested threshold, and are considered less than significant on a cumulative basis.

4.2.6 Water Resources

Potential construction-related discharges to surface waters (storm water run-off) associated with the Project would incrementally contribute to water resource impacts of the cumulative projects. However, direct discharge of storm water to the Grimes Canyon drainage would be avoided and best management practices would be implemented as required by the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, which would prevent significant cumulative impacts to surface waters.

4.2.7 Noise

Construction-related noise associated with the cumulative projects would not be additive, because they would not affect the same noise receptors. Note that construction of the Toll Brothers residential project on Championship Drive (located 2,000 feet northeast of the proposed emergency generator building site) is expected to be completed prior to Project construction. Cumulative construction noise impacts would be the same as Project-specific noise impacts and less than significant because Project-related noise (construction) would not occur after 7 p.m.

Numerous noise control features have been incorporated into the Project design, such that noise associated with operation of the proposed engine/generators would be less than significant, and the incremental contribution to cumulative noise impacts not considerable.

4.2.8 Transportation

Construction-related and operational traffic on SR 118 associated with the Project may incrementally contribute to traffic generated by other projects; however, the Project's contribution to traffic congestion would not be cumulatively considerable.

5.0 MANDATORY FINDINGS OF SIGNIFICANCE

MANDATORY FINDINGS OF SIGNIFICANCE --	Potentially Significant Impact	Less than Significant Impact with Mitigation	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 that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a. The Project may adversely affect unreported buried archeological resources. However, measures have been incorporated into the Project to prevent significant impacts to cultural resources.

b. The incremental cumulative impacts of the Project would not be cumulatively considerable.

c. The Project may result in adverse impacts related to aesthetics, air quality, water quality and noise. However, impacts would be less than significant as measures have been incorporated into the Project to avoid and/or minimize impacts.

6.0 DETERMINATION OF ENVIRONMENTAL DOCUMENT

On the basis of this evaluation:

[X] I find the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION should be prepared.

[ ] I find that although the Project could have a significant impact on the environment, there will not be a significant effect with the implementation of mitigation measures described in this Initial Study. A MITIGATED NEGATIVE DECLARATION should be prepared.

[ ] I find the Project, individually and/or cumulatively, MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.

December 9, 2016

Signature of Person Responsible for Administering the Project Date

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