# DRAFT ENVIRONMENTAL IMPACT REPORT POWER PLANT 1 AND POWER PLANT 2 TRANSMISSION LINE CONVERSION PROJECT

**APPENDICES** 

PREPARED BY



Environmental Affairs 111 North Hope Street, Room 1044 Los Angeles, California 90012

WITH ASSISTANCE FROM

DUDEK

38 North Marengo Avenue Pasadena, California 91101

MAY 2019

# APPENDIX A1 INITIAL STUDY

## **INITIAL STUDY**

# POWER PLANT 1 AND POWER PLANT 2 TRANSMISSION LINE CONVERSION PROJECT

## LOS ANGELES DEPARTMENT OF WATER AND POWER

Environmental Affairs 111 North Hope Street, Room 1044 Los Angeles, California 90012

WITH ASSISTANCE FROM

## **DUDEK**

38 North Marengo Avenue Pasadena, California 91101

JANUARY 2018

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## INITIAL STUDY PP1 AND PP2 TRANSMISSION LINE CONVERSION PROJECT

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## ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
amsl	above mean sea level
AQMP	Air Quality Management Plan
BMP	best management practices
CAAQS	California Ambient Air Quality Standards
CEQA	California Environmental Quality Act
CH <sub>4</sub>	methane
CMP	congestion management program
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
County	Los Angeles County
EIR	Environmental Impact Report
FAA	Federal Aviation Administration
GHG	greenhouse gas
-	Interstate
IS	Initial Study
kV	kilovolt
LACM	Natural History Museum of Los Angeles
LADWP	Los Angeles Department of Water and Power
MRCA	Mountains Recreation Conservation Authority
MRZ	Mineral Resource Zone
Муа	million years ago
NAAQS	National Ambient Air Quality Standards
NERC	North American Electric Reliability Corporation
N <sub>2</sub> O	nitrous oxide
NPDES	National Pollutant Discharge Elimination System
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	oxides of nitrogen
O <sub>3</sub>	ozone
PCB	polychlorinated biphenyl
PM <sub>10</sub>	particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter)
PM <sub>2.5</sub>	particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter)
PP1	Power Plant 1
PP2	Power Plant 2
PPV	peak particle velocity
RWQCB	Regional Water Quality Control Board

Acronym/Abbreviation	Definition
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SOx	oxides of sulfur
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
VOC	volatile organic compound

## 1 INTRODUCTION

### 1.1 Project Overview

The Power Plant 1 (PP1) and Power Plant 2 (PP2) Transmission Line Conversion Project (proposed project) is a transmission line replacement project proposed by the Los Angeles Department of Water and Power (LADWP). The project would be located within a linear alignment in northwestern Los Angeles County that generally extends from Haskell Canyon to the community of Sylmar, located south of the City of Santa Clarita. The project would involve replacing a 12-mile segment of an existing 115 kilovolt (kV) double circuit transmission line with a new 230 kV double circuit transmission line (hereafter referred to as the "115 kV line" and the "230 kV line," respectively). This process would involve demolishing the existing 115 kV line and constructing an approximately 12-mile segment of 230 kV lines and associated transmission structures generally adjacent to the existing 115 kV line. The 115 kV line and its associated transmission towers would be removed after the 115 kV line is terminated at Haskell Canyon Switching Station from the north. The existing line that would be replaced is located within an alignment that extends from Haskell Canyon Switching Station in the north to Olive Switching Station in the south. The proposed new line would also originate at Haskell Canyon Switching Station but would instead terminate at Sylmar Switching Station. The project alignment is approximately 12 miles long and consists of LADWP-owned land and private properties within an LADWP right-of-way. The purpose of this project is to increase the transmission capacity between Haskell Canyon Switching Station and Sylmar Switching Station so that additional renewable energy supplies can be transmitted to the Los Angeles basin.

## 1.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed project constitutes a project as defined by CEQA (California Public Resources Code, Section 21065). LADWP, as a public municipal utility, would fund, implement and operate the proposed project and is therefore the lead agency for the purposes of CEQA compliance.

LADWP has prepared an Initial Study (IS) in accordance with the CEQA guidelines to determine if the proposed project could have the potential to cause significant adverse environmental impacts. Based on the conclusions of the Initial Study evaluation (contained in Section 3 of this document), LADWP has determined that the proposed project may have a significant impact and, therefore, will prepare an Environmental Impact Report (EIR) pursuant to CEQA. Since some impacts evaluated in the Initial Study would not be potentially significant, LADWP proposes to eliminate them from detailed evaluation in the EIR.

## 1.3 Project Location

#### **Proposed Alignment**

The proposed 230 kV line would be located within the same corridor as the existing 115 kV line. As such, the linear area in which the proposed and existing lines are located will be referred to herein as the "project alignment." The project alignment extends from Haskell Canyon Switching Station in the north to Sylmar Switching Station in the south. The southern extent of the alignment is located within the Granada Hills-Knollwood Community Plan area within the City of Los Angeles, immediately west of Interstate 5 (I-5), near the interchange of I-5 and I-210 and approximately 825 feet south-southeast of the intersection of San Fernando Road and Sepulveda Boulevard. The alignment then extends east for approximately 0.6-mile, crossing I-5 and entering the Sylmar Community Plan area within the City of Los Angeles, paralleling San Fernando Road. The alignment then angles north, crosses I-210, and extends through an industrial area in Sylmar before exiting the City of Los Angeles and extending through an undeveloped mountainous area in the San Gabriel Mountains, north of Sylmar and within an unincorporated area of Los Angeles County (County). The portion of the alignment that crosses the San Gabriel Mountains extends between State Route 14 (SR 14) to the west and the Angeles National Forest boundary to the east. This area is comprised of rugged, hilly terrain. Next, the alignment descends into the Santa Clara River basin in the City of Santa Clarita. It extends through the City of Santa Clarita for approximately 7 miles, crossing the SR 14, the Santa Clara River, and single-family residential neighborhoods and commercial areas within the City of Santa Clarita. The alignment extends for approximately 2 miles through an area with single-family residential neighborhoods and undeveloped hillside areas in Haskell Canyon. The alignment then terminates at the Haskell Canyon Switching Station, which is located just south of the Angeles National Forest (Figure 1).

#### **Existing Conditions**

The project would be located within an established transmission corridor and within two existing electrical switching stations (Haskell Canyon Switching Station and Sylmar Switching Station). The transmission corridor has been used for electricity transmission since the early 1900s. The corridor is an LADWP right-of-way, consisting of LADWP-owned land and private property that is 250 feet in width and contains three existing transmission lines: a 500 kV DC line, the 115 kV line that is proposed for replacement as part of this project, and 230 kV lines supported by 4-circuit towers. All three existing transmission lines are supported by lattice transmission towers. Representative images of the existing right-of-way are shown in Figure 2.

The existing 115 kV line is supported by approximately 85 lattice transmission towers, each of which have a footprint that is approximately 20 feet in width by 20 feet in length. Each tower has 4 concrete foundations that are approximately 2 feet in diameter each. The existing towers range in height from 56 feet to 130 feet.

#### **Surrounding Land Uses**

The land uses surrounding the transmission corridor and the two switching stations range from industrial areas to open space. Surrounding land use designations are shown in Figure 3.

### 1.4 Environmental Setting

The project area falls within the northwestern portion of Los Angeles County and generally straddles the San Gabriel Mountains, the Santa Clara River Valley, and the Sierra Pelona Mountains. The southern terminus of the alignment is located within the San Fernando Valley and parallels Grapevine Canyon. The alignment then crosses the Elsmere, Whitney, and Placerita Canyons, extending through the San Gabriel Mountains and then descending into the Santa Clara River Valley, where it crosses neighborhoods, undeveloped hilly areas, and commercial areas within the City of Santa Clarita. The alignment then crosses the Santa Clara River and then ascends through hillside neighborhoods before ascending north through an undeveloped, hilly area within Haskell Canyon. The alignment terminates just outside of the Angeles National Forest boundary. Elevations along the alignment range from approximately 1,300 feet above mean sea level (amsl) along the Santa Clara River to approximately 2,320 feet amsl in the hillside regions of the project area.

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## 2 PROJECT DESCRIPTION

### 2.1 Background

The 115 kv San Francisquito PP1 and PP2 transmission lines were built between 1917 and 1925 for the purpose of carrying power generated by water flow through the newly constructed Los Angeles Aqueduct. These lines are part of the first electrical power generation and transmission system constructed to provide electricity to the City of Los Angeles. The purpose of the proposed project is to increase the transmission capacity between Haskell Canyon Switching Station and Sylmar Switching Station to accommodate increasing renewable energy supplies from the desert areas to the north. Under current conditions, the existing transmission lines extending south from Haskell Canyon Switching Station do not have sufficient capacity to transfer these renewable energy supplies to the highly populated Los Angeles basin.

#### 2.2 Construction

Construction of the proposed project would involve the following general sequence of events: (1) surveying activities to complete the project design; (2) identifying access roads to be used and improving/repairing access roads as necessary; (3) clearing the right-of-way; (4) removing existing structures and conductors associated with the 115 kV line; (5) installing new transmission structures; (6) installing ground wires and conductors for the new 230 kV line; (7) installing counterpoise/grounding for the new 230 kV line; (8) switching station tie-in; and (9) site rehabilitation. Each of these activities is described in greater detail below. Note that while these activities are described separately, multiple activities may occur simultaneously. For example, access road grading, removal of existing 115 kV line facilities, installation of new transmission structures, and conductor stringing could all occur simultaneously at different segments of the alignment.

Construction is expected to take approximately 2 years, beginning in 2020 and ending in 2022. While the number of workers along the alignment would vary based on the construction phase, the work force would generally consist of 7 construction crews working simultaneously on multiple segments of the alignment. Each crew would have approximately 12 workers, equating to a maximum total of 84 workers per day throughout construction. Construction working hours would vary from 8 hours to 15 hours or more, if necessary. Construction would generally occur on weekdays during the daytime, with a number of exceptions: weekend construction would occur during removal of the existing 115 kV facilities, installation of new transmission structures, and conductor stringing. If necessary, weekend construction may also occur during other construction phases. Nighttime construction would be required for major roadway, freeway, and railroad crossings.

Best management practices (BMPs) would be used to minimize the risk of potential impacts during construction and would be communicated to employees prior to the start of work. Safety requirements and procedures to be followed during construction are provided in the LADWP Power Distribution safety rulebook.

#### **Surveying Activities**

The proposed activities would take place on LADWP-owned lands and on privately owned lands. Prior to surveying on private lands, LADWP would negotiate rights-of-entry with landowners. Once survey permits are obtained, construction survey work would commence. Whenever possible, the location of the right-of-way and proposed facilities would be planned to avoid identified sensitive resources. Additional geotechnical investigations may also be required based on site conditions.

#### **Access Road Improvements and New Spur Roads**

The proposed construction activities would require heavy vehicles and construction workers to travel to and from work areas for transmission structure installation, transmission structure removal, and staging along the alignment. Because the proposed alignment is within an existing transmission line corridor with transmission lines that are operated and maintained by LADWP, it is anticipated that existing access roads would be used for transporting workers and equipment to the work areas. However, some of the existing access roads may require improvements or repairs in order to ensure adequate access and safe conditions along the road. Additionally, wherever possible, existing spur roads would be rerouted, or new spur roads would be constructed, to establish access to new transmission structures at locations where there is no existing access. (Some existing 115 kV line transmission structures are not accessible by vehicle. New reliability standards require that transmission structures are to be accessible by vehicle, or by foot where vehicle access is not possible, for workers and equipment to perform repairs and maintenance.) Equipment required for access road improvements and construction or rerouting of spur roads would generally include motor graders, backhoes, dump trucks, and pickups.

#### **Right-of-Way Clearing**

The clearing of some natural vegetation may be required prior to and during construction. However, selective clearing would be performed only when necessary for surveying, electrical safety clearances, line reliability, and maintenance. Trimming or removal of mature vegetation, under or near the conductors, would be done to provide adequate electrical clearance as required by the National Electrical Safety Code, the North American Electrical Reliability Corporation, and California Public Utilities Commission General Order 95 standards.

Trees that are at risk for falling onto the lines or for otherwise affecting the lines during wind-induced line swing would be removed. Normal clearing procedures consist of topping or removing large trees. Smaller

trees are generally left undisturbed. Where there is a direct conflict between trees and clearance standards, the removal of trees would be jointly reviewed and agreed upon between LADWP and the owners or managers of the property.

#### Staging Area Establishment

Several staging areas would be established along the proposed alignment for equipment storage, materials storage, and mobile offices. The locations of the staging areas are currently unknown; however, they would be confined to LADWP's right-of-way and would be situated on flat terrain. Each area would be approximately one acre in size. Staging areas would be used throughout the duration of construction and would be returned to their previous site conditions during the site rehabilitation phase.

#### Removal of Existing 115 kV Line

The existing 115 kV line and associated infrastructure would be removed. The removal process would take approximately 12 months, would require approximately 30 workers, and would involve several pieces of construction equipment including tensioners, line trucks, wire trailers, tractors, pullers, and sag cats (i.e., the same equipment that would be required for stringing the new conductor), as well as man lifts, cranes, and medium- or heavy-duty helicopters. The removal process would entail the following activities: installing equipment pads, removing conductors and ground wires, removing transmission structures, and removing transmission structure footings.

**Installing Equipment Pads.** Equipment pads would be required for conductor and ground wire removal. As such, pads of approximately 150-feet by 150-feet would be installed at approximately 1-mile intervals along the alignment. Because the alignment is 12 miles long, it is anticipated that approximately 12 equipment pads would be installed for the purposes of wire removal, equating to a total temporary disturbance area of 6 acres. Most of these pads would later be used for stringing the new conductor for the 230 kV line.

Removing Conductors and Ground Wires. The old conductors and ground wires would be removed with the same types of equipment that would be required for stringing new conductors for the 230 kV line (i.e., tensioners, line trucks, wire trailers, tractors, pullers, and sag cats). The wire would first be placed in travelers on each tower and would then be pulled out using empty reels. This process would be staged from the equipment pads described above.

**Removing Transmission Structures.** Existing towers would be removed by crane and workers in man lifts. Heavy-duty helicopters would be used where feasible. Where helicopter use is not feasible, a crane and man lift would be used. Removal would require two temporary construction pads to allow for the operation of a crane and a man lift. Each pad would be approximately 60 feet by 30 feet in size, for a total temporary disturbance area of 3,600 square feet at each tower removal site. (Because there would be 85 tower removal

sites, the total temporary disturbance area associated with the crane and man lift pads required for tower removal would be approximately 7 acres along the alignment.) The pads would be graded flat and compacted for equipment support and would be located on opposite sides of the tower, where feasible. First, workers in a man lift would unbolt tower sections. Either a crane or a helicopter would then remove and tower segments. When a crane is used for removal, the removed tower segments would be placed on the ground and later transported to one of the staging areas or to a construction salvage location. In instances where a helicopter is used for removal, the tower segments would be transported to a predetermined location for steel salvage.

**Removing Tower Footings.** The existing footings would be removed to approximately 2 feet below grade using jackhammers.

#### **Transmission Structure Installation**

Construction of the proposed project would involve installation of approximately 75 transmission structures within the proposed alignment. The majority of the new structures would be double-circuit steel monopole structures. Steel lattice structures will be used where deemed necessary for safety and reliability reasons. The new structures would range in height from 80 feet to 180 feet. Each installation would require approximately 30 workers, would take 25 days to complete, and would involve several pieces of construction equipment including a crane, a man lift, a power auger or drill, materials trucks, ready-mix concrete trucks, a dump truck, pile drivers, and a water truck. A heavy helicopter may be used for erection of poles and transportation of materials. Each installation would involve several steps: preparing the work area, establishing foundations, assembling the tower, and installing the tower, as described below.

**Preparing the Work Area.** Structure installation activities would begin with establishing construction pads. For each structure installation site, two construction pads would be installed to allow for the operation of the crane and the man lift. Each pad would be approximately 60 feet by 30 feet in size, for a total disturbance area of 3,600 square feet at each installation site. At each new structure site, one pad would be permanently established (for maintenance purposes) and one would be temporary (for construction only).

Establishing Foundations. Once the work area has been prepared with the construction pads, tower foundations would be established. Monopole structures would require one foundation ranging from 4 feet to 10 feet in diameter and 15 feet to 40 feet in depth. Lattice structures would require four concrete foundations, each of which would be approximately 4 feet in diameter and 35 feet in depth. The total footprint for each lattice structure would be approximately 1,024 square feet (32 feet in width by 32 feet in length). Holes for the foundations would be bored using truck- or track-mounted excavators equipped with various diameter augers to match diameter and depth requirements of the foundation sizes. Each foundation would extend 0.5 feet to 4 feet above the ground line. (In locations with extremely sandy soils, the soil may be stabilized using water or a gelling agent prior to excavating the holes, and steel casings may

be used for the excavation. In locations with high groundwater levels, dewatering may be required to ensure a dry construction area during foundation drilling. Any construction dewatering would occur pursuant to the Regional Water Quality Control Board's Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters.) Excavated materials would be spread around the installation site. Following excavation of the foundation holes, each footing would be constructed by placing formwork, reinforcing steel, and a bolt ring or stub into the foundation hole (bolt rings are used for monopole structures and stubs are used for lattice towers). Next, the bolt ring or stub would be positioned and encased in concrete. Reinforcing steel cages would be assembled at the staging areas and delivered to each installation site by flatbed truck. A typical foundation installation would require approximately 24 to 40 cubic yards of concrete.

Assembling and Installing Poles. Each monopole transmission structure would consist of 3 to 4 tubular segments and arms that would be transported to installation sites by a flatbed truck or a heavy helicopter. At the site, the pole segments and arms would be assembled and bolted to the foundation by a crane or helicopter. The equipment used for assembly and installation (either a crane or a helicopter) would depend on the terrain and the site's proximity to other energized transmission lines.

Assembling and Installing Towers. Lattice transmission tower would be assembled at each site, then installed and bolted to the foundations. Bundles of steel members and associated parts would be transported to each installation site by truck. Steel members would be assembled into subsections of convenient size and weight on the ground. Assembly would be facilitated with a crane and/or helicopter. The assembled subsections would be erected into place by a crane or helicopter and the fastened together in the air to form a complete tower.

#### **Conductor Stringing**

Once the new transmission structures are in place, conductors would be strung between the structures. Conductor stringing activities would last for approximately 12 months, would require 70 workers, and would involve several pieces of construction equipment including tensioners, line trucks, wire trailers, tractors, pullers, sag cats, and a helicopter.

Conductor stringing activities would begin with the establishment of stringing pads situated at intervals along the alignment. Each stringing pad would be approximately 150 feet by 150 feet in size, for a total footprint of 22,500 square feet (0.5 acre) per pad. Many of these stringing pads would also be used for removal of the conductor from the 115 kV line. The crane and man lift pads that were constructed at the transmission structure installation sites would also be used for staging of conductor stringing activities. The equipment listed above would be staged at the stringing pads and at the structure installation work area pads.

The process of conductor stringing involves multiple steps. First, the materials required for conductor stringing would be delivered to each work area. Materials would include insulators, the conductor, shield wire, hardware, and stringing sheaves. Transmission structures would then be rigged with insulator strings and stringing sheaves at each ground wire and conductor position. (Sheaves are rollers that are temporarily attached to the lower end of the insulators to allow the conductor to the pulled, or strung, along the line.) Pilot lines would then be strung between transmission structures by a medium- or heavy-duty helicopter and threaded through the stringing sheaves at each tower location. The pilot line enables stringing of a "pulling line," which is stronger and larger in diameter relative to the pilot line. The pilot line can also be used to pull in the ground wire. The pulling line would then be attached to the conductors and used to pull them onto the transmission structures. This process would be repeated until the ground wire or conductor is pulled through all sheaves. Bundled conductors would be pulled together with the assistance of a running board, which attaches the bundled conductor to the pulling line. Ground wire and conductors would be strung using powered pulling equipment at one end and powered braking or tensioning equipment at the other end of a conductor segment. After installing the conductor ground wire, sagging, clipping, and dead-ending activities would be performed. This process would involve adjusting the position of the conductors and shield wires, removing stringing sheaves, and permanently attaching the conductor to the insulators with specialized hardware.

For public protection during the wire installation process, temporary guard structures may be built at major freeway crossings, railroad crossings, major transmission line crossings, and major highway and distribution crossings, as necessary. Guard structures would consist of H-frame poles placed on either side of the obstacle. These structures would prevent ground wire, conductor, or equipment from falling on a freeway, another transmission line, or other obstacle. Equipment for installing guard structures would include augers, line trucks, pole trailers, and cranes. The amount of ground disturbance for each guard structure would be approximately 200 feet by 300 feet. The guard structures would be left in place until conductors and ground wires are strung, tensioned, and clipped. Guard structures may not be necessary for small roads. In those cases, other safety measures such as barriers, construction workers with flags, or other traffic control measures would be used.

#### **Counterpoise Installation and Grounding Practices**

Part of standard construction practice prior to wire installation would involve measuring the resistance of tower footings and installing counterpoise (grounds) as needed. To determine whether a tower requires counterpoise, ground resistance measurements would be taken at tower sites after the foundations and tower structures are installed. These measurements would be evaluated to determine the number and location of any tower structures requiring counterpoise. If the resistance to remote earth for each transmission structure is greater than 30 ohms, counterpoise (grounds) would be installed to lower the resistance to 30 ohms or less. Counterpoise would consist of bare copper-clad or galvanized steel cable buried a minimum of 12 inches deep, extending horizontally from one or more tower legs for approximately

8584 DUDEK 200 feet. Typical counterpoise installation would include two installations per tower structure on opposite tower legs. Four counterpoise installations may be required in some circumstances.

In addition to counterpoise installation, standard grounding practices during construction would include both temporary and permanent grounding of equipment and structures, such as fences or pipelines, as necessary to reduce any potential magnetically inducted voltages to harmless levels. Such practices could include electrical isolation of equipment or structures and the installation of grounding wires.

#### **Switching Station Tie-Ins and Upgrades**

The proposed transmission line would extend between the Sylmar Switching Station and the Haskell Canyon Switching Station. At each switching station, the new line would be connected into and out of the switching station through dedicated station structures within the switching station, commonly referred to as "buses." Upgrades at the Sylmar Switching Station would be required for the new line. Upgrades would involve installation of new high voltage electrical equipment supported by reinforced concrete foundations. (These foundations may either be shallow spread foundations or deep pile foundations, depending on the soil parameters.) Construction of the new foundations would require excavation and soil compaction. Work would also be required at the Olive Switching Station to remove the existing conductor for the 115 kV line. The equipment that would be required for the switching station upgrades would include backhoe loaders, bulldozers, drilling machines, pile drivers, compaction roller vehicles, trucks, and cranes.

#### Site Rehabilitation

Site rehabilitation activities would be undertaken to return the construction areas to their original condition to the extent feasible. In open space and naturalized areas, site rehabilitation may include replanting and/or hydroseeding with appropriate native seed.

## 2.3 Operations and Maintenance

Regular inspection and maintenance of overhead facilities is crucial for maintaining uniform, adequate, safe, and reliable service. As with the existing 115 kV line, the 230 kV transmission line would be inspected several times annually by both ground and air patrols. Maintenance would be performed as needed. When access would be required for non-emergency maintenance and repairs, LADWP would adhere to the same precautions and procedures that were taken during the construction.

#### **Emergency Maintenance Activities**

Emergency maintenance may be required for the existing 115 kV line. Such maintenance activities may also be required for the new line, once it has been installed. As with existing conditions, emergency maintenance would involve prompt movement of maintenance crews to repair or replace any damaged equipment or

infrastructure. Crews would be instructed to protect plants, wildlife, and other resources of significance. Restoration procedures following completion of repair work would be similar to those prescribed for normal construction activities. Effects to nearby sensitive receptors, such as residents, would be minimized by limiting noise, dust, and vehicle traffic.

#### **Vegetation Management**

Vegetation management is required along transmission line right-of-ways by the North American Electric Reliability Corporation (NERC), California Public Utilities Commission General Order 95, the Los Angeles County Fire Code, California Public Resources Code (Sections 4292-4296), and the California Code of Regulations (Title 14, Article 4, Sections 1250-1256). As such, vegetation management is currently conducted along the project alignment and would continue to be carried out during operation of the new 230 kV line. An upgrade from 115 kV to 230 kV would not require additional clearances other than those that are currently being maintained along the alignment. In compliance with NERC's Standard FAC-003-1, LADWP has a Vegetation Management Plan for the transmission corridor. After project implementation, vegetation management would continue to occur pursuant to this plan. Vegetation management consists of routine tree trimming to maintain the required minimum 10-foot clearance from conductors to vegetation that is required by California Public Resources Code Section 4293, clearance of flammable vegetation within a 10-foot radius around the base of transmission structures in accordance with California Public Resources Code Section 4292, and clearance immediately adjacent to access roads to permit adequate access to the facilities.

#### **Access Road Maintenance**

Ongoing access road maintenance would be conducted in accordance with existing road authorizations issued to LADWP. Access road maintenance would consist of those activities necessary to allow continued access to the right-of-way and/or each tower structure. These activities may include grading and maintenance of drainage systems, bridges, culverts, fences, gates, and signs. Motor graders, backhoes, dump trucks, and pickups are used to maintain access roads. Access road maintenance would occur in a manner generally consistent with existing access road maintenance activities that are conducted for the 115 kV line.

#### **Safety Practices**

The new transmission line would be protected with power circuit breakers and related line replay protection equipment. If conductor failure occurs, power would be automatically removed from the line. Lightning protection would be provided by overhead ground wires along the line. Electrical equipment and fencing at the switching station would be grounded. All fences, metal gates, pipelines, and other metal components that cross or are within the transmission line right-of-way would be grounded to prevent electrical shock. If applicable, grounding outside of the project alignment may also occur.

## 2.4 Discretionary Approvals Required for the Project

The following discretionary permits and approvals may be required for the proposed project:

#### **Federal Permits**

- U.S. Army Corps of Engineers, Clean Water Act Section 404 Permit (individual or Nationwide) (proposed project may include discharge of dredged or fill materials into Waters of the United States and/or wetlands)
- Federal Highway Administration Permit to cross a Federal Aid Highway (proposed construction and operation may occur across or within federal highway rights-of-way)

#### **State Permits**

- California Department of Fish and Wildlife Streambed Alteration Agreement (proposed construction may involve the alteration of a river, stream, or lake)
- California Department of Transportation Encroachment Permits (proposed construction and operation may occur across or within state highway rights-of-way)
- State Water Resources Control Board, Federal Clean Water Act Section 401 Water Quality Certification (proposed project may result in discharge of dredged or fill materials into waters of the state)
- State Water Resources Control Board, Notice of Intent to comply with the General Construction Activity National Pollutant Discharge Elimination System (NPDES) Permit, Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, NPDES No. CAS000002 (proposed construction may involve storm water discharges to surface waters of the state)
- Los Angeles Regional Water Quality Control Board, Notice of Intent to comply with the NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters, Order No. R4-2013-0095, NPDES No. CAG994004 (proposed construction may involve temporary dewatering of groundwater and discharges of the groundwater)

#### **Local Permits**

• Roadway encroachment permits from local jurisdictions (City of Los Angeles, County of Los Angeles, and City of Santa Clarita)

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## 3 INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines (2017) to determine if the proposed project may have a significant effect on the environment.

#### 1. Project title:

Power Plant 1 and Power Plant 2 Transmission Line Conversion Project

#### 2. Lead agency name and address:

Los Angeles Department of Water and Power Environmental Affairs 111 North Hope Street, Room 1044 Los Angeles, California 90012

#### 3. Contact person and phone number:

Eduardo Cuevas Environmental Planning and Assessment Los Angeles Department of Water and Power 213.367.6376

#### 4. Project location:

The proposed project is within a linear alignment extending approximately 12 miles from the community of Sylmar in the City of Los Angeles to Haskell Canyon, located north of the City of Santa Clarita and just south of the Angeles National Forest boundary.

#### 5. Project sponsor's name and address:

Los Angeles Department of Water and Power 111 North Hope Street Los Angeles, California 90012

#### 6. City Council Districts:

District 7 and District 12

#### 7. Neighborhood Council Districts:

Sylmar Neighborhood Council and Granada Hills North Neighborhood Council

#### 8. General plan designation:

Refer to Section 1.3 of this Initial Study

#### 9. Zoning:

Refer to Section 1.3 of this Initial Study

#### 10. Description of project:

Refer to Chapter 2.0 of this Initial Study

#### 11. Surrounding land uses and setting:

Refer to Section 1.3 of this Initial Study

#### 12. Other public agencies whose approval is required:

- U.S. Army Corps
- Federal Highway Administration
- California Department of Fish and Wildlife
- State Water Resources Control Board
- California Department of Transportation
- Los Angeles Regional Water Quality Control Board
- Los Angeles County Department of Public Works
- City of Santa Clarita

# 13. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Consultation is underway. Refer to Section 3.17 of this Initial Study for further details.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural

resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

#### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

	Aesthetics	Agriculture and Forestry Resources		Air Quality
$\boxtimes$	Biological Resources	Cultural Resources	$\boxtimes$	Geology and Soils
	Greenhouse Gas Emissions	Hazards and Hazardous Materials		Hydrology and Water Quality
	Land Use and Planning	Mineral Resources	$\boxtimes$	Noise
	Population and Housing	Public Services		Recreation
	Transportation and Traffic	Tribal Cultural Resources		Utilities and Service Systems
$\boxtimes$	Mandatory Findings of Significance			

## **DETERMINATION**

On the	e basis of this initial evaluation:
	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
	harls C. Hollowy 1/17/2018
Sign	Date

#### EVALUATION OF ENVIRONMENTAL IMPACTS

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
  - a. The significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

#### 3.1 Aesthetics

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?	$\boxtimes$			
b)	Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	$\boxtimes$			
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	$\boxtimes$			

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

Potentially Significant Impact. The proposed project extends across open space and mountainous areas. The proposed project would replace an existing transmission line within an existing transmission corridor with a new line. The project would not introduce any new land uses to the area, nor would the project introduce development with the potential to obstruct a vista. However, the new transmission line and transmission structures would differ in appearance, size, and massing relative to the existing transmission line and structures that the project would replace. Additionally, the new line or portions of the new line may be placed in a slightly different location within the transmission corridor relative to the existing line. Transmission structures associated with the new line would potentially be visible from public vantage points in the Santa Clarita Valley and Angeles National Forest. As such, the project would represent a visual change in the project area, which may be observed from scenic vistas. While it is unlikely that the project would cause a substantial adverse

change in a scenic vista, the EIR will include a review of the applicable land use plans in the area to determine the presence of scenic vistas in the project area. The EIR will then evaluate the potential for the project to affect these scenic vistas.

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

No Impact. The nearest officially designated State Scenic Highway is a portion of State Highway 2 that extends through the San Gabriel Mountains, beginning just north of the City of La Cañada Flintridge (Caltrans 2011). The portion of State Highway 2 that is officially designated as a State Scenic Highway is located approximately 20 miles east of the project alignment and is physically separated from the project site by the San Gabriel Mountains. Due to this distance, the project alignment is not within the viewshed of this State Scenic Highway. Therefore, no impact on scenic resources within a state scenic highway would occur as a result of the proposed project. This issue will not be further analyzed in the EIR.

# c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Potentially Significant Impact. As described in Section 3.1(a), the new transmission line and transmission structures would differ in appearance, size, and massing relative to the transmission line and structures that the project would replace. Additionally, the new line or portions of the new line may be placed in a slightly different location within the transmission corridor relative to the existing line, and equipment would be added to the existing Sylmar Switching Station to support the new line. However, because the project would replace a transmission line within an existing transmission corridor that is already developed with a variety of transmission lines, the project is not expected to substantially alter the visual character or quality of the project alignment and its surroundings. Nevertheless, the EIR will include visual simulations that will show the anticipated change in the appearance of the project area, as viewed from a number of key observation points along the alignment. An analysis of the before-project and after-project images will lead to a determination of whether the proposed project is expected to substantially degrade visual character or quality.

# d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

**Potentially Significant Impact.** The proposed project would replace an existing transmission line with a new transmission line. The replacement transmission line would not be associated with any new daytime or nighttime lighting in the project area. However, some of the materials used for the new transmission line would be potentially reflective during the day and may produce glare. The EIR

will include a discussion of these materials and will evaluate any potential impacts that may occur to daytime views in the area as a result of glare.

#### References

Caltrans (California Department of Transportation). 2011. California Scenic Highway Mapping System. Last updated September 7, 2011. Accessed August 26, 2015. http://www.dot.ca.gov/hq/LandArch/16\_livability/scenic\_highways/index.htm.

## 3.2 Agriculture and Forestry Resources

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?			$\boxtimes$	
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				

a) Would the project 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?

Less Than Significant With Mitigation Incorporated. As shown on the Los Angeles County Important Farmland map, the project area primarily extends through land that is mapped as Urban and Built-Up Land or Grazing Land (FMMP 2016). However, the project alignment traverses a small area of designated Prime Farmland within the City of Santa Clarita, north of the Santa Clara River and south of Bouquet Canyon Road. The majority of this Prime Farmland area is currently developed as a solar energy facility and does not appear to be in agricultural production. The project traverses the Prime Farmland area at its northeastern edge, which is currently a vacant field consisting of non-native grassland. It is not developed with solar panels, nor does it appear to be in active agricultural production. This vacant field is currently traversed by transmission lines, and several transmission towers are located within and immediately adjacent to the field. During construction, this vacant field may be used as a construction pad for conductor stringing, transmission structure installation, and/or transmission tower removal. Two transmission structures are expected to be installed in this area. One would be located adjacent to the southern edge of the field, and the other would be located within the field, near its northern boundary. Tower removal activities may also occur within and adjacent to this field. Because the field is not currently in agricultural production, construction of the project within and/or near this field would not interfere with any active agricultural operations. However, construction may involve grading activities on the vacant field, which could have the potential to remove and/or disturb agricultural soils. In order to ensure that prime agricultural soils are preserved on this site, MM-AG-1 would be implemented. Implementation of MM-AG-1 would ensure that site rehabilitation activities would return any construction areas that are established within this vacant field to their original conditions.

Permanent impacts to Prime Farmland would be limited to the transmission structure foundations and work pads for the two structures that would be installed in this area. Each structure would require one foundation ranging from 4 feet to 10 feet in diameter. The total area of permanent impacts for the foundations would be approximately 160 square feet, assuming 10-foot-diameter foundations for the poles. Each structure would also have a permanent work pad for maintenance purposes that would be approximately 60 feet by 30 feet in size, for a total impact area of 3,600 square feet. These areas of permanent impact are minor in size and would not interfere with or preclude future agricultural use of the area, nor would they substantially decrease the amount of potential Farmland available in this area. Furthermore, several transmission towers are already present within and adjacent to this field, including two towers associated with the exiting 115 kV line that would be removed as part of this project. As such, the proposed monopole structures would

not substantially hinder agricultural activities relative to existing conditions. While a small portion of the project would occur on Prime Farmland, the Farmland would not be permanently converted to a new land use that would preclude agricultural use of the Farmland, and impacts would be less than significant with mitigation incorporated. This issue will not be further discussed in the EIR.

MM-AG-1 Construction activities occurring within farmland that is designated by the Farmland Mapping and Monitoring Program as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland, shall adhere to the following specifications: prior to grading or site disturbance, topsoil within the impact areas shall be salvaged and stockpiled (salvage depths shall be determined by a qualified professional). The stockpiled soils shall be covered by an anchored tarp or watered down until the site is ready for the soil to be replaced. Once construction activities are completed, the salvaged topsoil shall be replaced.

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

No Impact. As shown on the Los Angeles County Williamson Act Fiscal Year 2015/2016 map, no areas that are under a Williamson Act contract exist in the project area or in the vicinity of the project area (California Department of Conservation 2016). The proposed project would occur within an existing transmission corridor and within two electrical switching stations. For these reasons, implementation of the proposed project would not conflict with existing zoning for agricultural use, nor would it conflict with a Williamson Act contract, as none exist within the project alignment. No impact to Williamson Act contract lands or land zoned for agricultural uses would occur. This issue will not be further analyzed in the EIR.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The proposed project would be located within an existing transmission corridor and within two electrical switching stations that are generally surrounded with residential uses, commercial uses, and open space. No areas zoned for forest land, timberland, or Timberland Production are located within the project alignment or the switching stations. The project alignment consists of a transmission corridor and is subject to vegetation clearing requirements. Therefore, the proposed project would not conflict with existing zoning for forest land, timberland, or Timberland Production areas, or result in the re-zoning of such lands. No impact to forest land or timberland zoning would occur. This issue will not be further analyzed in the EIR.

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

Less Than Significant Impact. The proposed project would be located within an existing transmission corridor and within two electrical switching stations. The project area extends across a variety of land uses, including open space. While the open space within the project area is generally arid and semi-arid, some areas support tree cover. For example, several areas of the project alignment extend across eucalyptus groves and oak woodlands. However, the project would not result in permanent land use changes. The proposed 230 kV line would be installed within an existing transmission corridor. While some tree trimming and tree removals may occur during construction and operation of the project, no existing forest lands would be converted to non-forest uses; as such, impacts related to loss or conversion of forest land to non-forest uses would be less than significant. (Note that impacts related to trimming and/or removal of native trees will be addressed in the biological resources analysis in this Initial Study and in the EIR.) Impacts related to loss or conversion of forest land will not be further analyzed in the EIR.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

**No Impact.** A small area of Farmland is located along the project alignment, and some forest lands may be located in the project area as well. However, as characterized above, no Farmland or forest land would be converted to non-agricultural or non-forest uses as a result of the project. The project is located within an existing transmission corridor and existing electrical switching stations and would not, therefore, result in land use conversions. Temporary construction effects may occur outside of the corridor; however, once construction is complete site rehabilitation activities would be undertaken to return the construction areas to their original condition. For these reasons, no farmland or forest land would be converted or otherwise affected by the proposed project, and no impact would occur. This issue will not be further analyzed in the EIR.

#### References

California Department of Conservation. 2016. "Los Angeles County Williamson Act FY 2015/2016" [map]. 1:120,000. Sacramento, CA: California Department of Conservation, Division of Land Resource Protection. 2016. Accessed July 5, 2017. http://www.consrv.ca.gov/dlrp/lca/Pages/Index.aspx.

FMMP (Farmland Mapping and Monitoring Program). 2016. "Los Angeles County Important Farmland 2012" [map]. 1:120,000. Sacramento, CA: Farmland Mapping and Monitoring Program. April 2016. Accessed July 5, 2017. http://www.conservation.ca.gov/dlrp/fmmp/Pages/county\_info.aspx.

### 3.3 Air Quality

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
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 which exceed quantitative thresholds for ozone precursors)?				
d)	Expose sensitive receptors to substantial pollutant concentrations?				
e)	Create objectionable odors affecting a substantial number of people?	$\boxtimes$			

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

Potentially Significant Impact. The proposed project is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The most recent applicable air quality plan is the SCAQMD 2016 Final Air Quality Management Plan (AQMP), which includes reduction and control measures that are outlined to mitigate emissions based on existing and projected land use and development. The AQMP is designed to meet applicable federal and state requirements for ozone (O<sub>3</sub>) and particulate matter with an aerodynamic diameter equal to or less than 2.5 microns (PM<sub>2.5</sub>). The proposed project would generate short-term air quality emissions during construction activities with the use of construction equipment and vehicle trips to and from the project alignment. Operational emissions may also occur in association with maintenance activities. The EIR will evaluate the project's consistency with the SCAQMD 2016 AQMP.

# b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Potentially Significant Impact. Construction of the proposed project would generate short-term criteria air pollutant emissions associated with entrained dust (earth movement) and internal

combustion engines used by on-site construction equipment and from off-site worker vehicles and truck trips. Criteria air pollutants associated with construction of the proposed project include volatile organic compounds (VOCs), oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), sulfur oxides (SO<sub>x</sub>), particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM<sub>10</sub>), and PM<sub>2.5</sub>. Activities that would generate air pollutant emissions include site preparation, installation and removal of transmission structures, conductor stringing and conductor removal, workforce travel, construction material transport, and site rehabilitation. Project-generated maximum daily construction emissions would potentially exceed the SCAQMD regional daily construction emissions significance thresholds and localized significance thresholds. Construction activities would be short-term in nature and would not add to long-term air quality degradation; however, the impacts are potentially significant and will be analyzed further in the EIR. Operational activities may also generate VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions, although operational activities are expected to be minimal and would not differ substantially from current maintenance activities for the 115 kV line that would be replaced by the project. Nevertheless, both construction and operational emissions will be further discussed in the EIR.

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

**Potentially Significant Impact.** An area is designated as in attainment when it is in compliance with the National Ambient Air Quality Standards (NAAQS) and/or the California Ambient Air Quality Standards (CAAQS). The SCAB is a nonattainment area for O<sub>3</sub>, nitrogen dioxide (NO<sub>2</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub> under the NAAQS and/or CAAQS as a result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (e.g., VOC and NO<sub>x</sub> for O<sub>3</sub>,) can potentially contribute to poor air quality.

As discussed under Section 3.3(b), construction activities associated with the proposed project would result in short-term increases in pollutant emissions, and operational activities may also result in pollutant emissions. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution to nonattainment status in the SCAB. If a project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality. The basis for analyzing the project's cumulatively considerable contribution is if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact) as well as

consistency with the SCAQMD 2016 AQMP, which addresses the cumulative emissions in the SCAB. Criteria air pollutant emissions anticipated to result from construction and operation of the proposed project will be quantified as part of the EIR. This analysis will evaluate whether the proposed project would result in a cumulatively considerable net increase in criteria air pollutants for which the SCAB has been designated nonattainment.

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

**Potentially Significant Impact.** Sensitive receptors in proximity to the project alignment primarily consist of residential neighborhoods along the project alignment in Sylmar and Santa Clarita. Due to the proximity of sensitive receptors to the project alignment and the potential for the project to produce pollutants during the construction phase, this issue will be further analyzed in the EIR.

# e) Would the project create objectionable odors affecting a substantial number of people?

**Potentially Significant Impact.** Construction-related odors that would potentially be detected during construction of the project would include diesel exhaust, petroleum products used in motor vehicles, and freshly graded earth. Operational maintenance activities may also involve grading and use of diesel and petroleum products. However, the operation of transmissions lines is not typically associated with odor complaints. Nevertheless, the potential for the project to create objectionable odors will be further discussed in the EIR.

#### References

None.

# 3.4 Biological Resources

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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	$\boxtimes$			

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	identified in local or regional plans, policies, 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?	$\boxtimes$			
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

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

Potentially Significant Impact. The proposed project would traverse numerous habitat areas, some of which may have the potential to support special-status species. The proposed project (particularly construction activities) may have the potential to disturb such species and/or their habitat. As part of the EIR, a detailed biological resources report will be prepared that would describe the habitat types within the project area and will identify any special-status species that occur or have the potential to occur in the project area. The report will also describe any potential impacts that may occur to such species as a result of the project.

- b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
  - Potentially Significant Impact. The project alignment traverses riparian habitat, including the Santa Clara River. As described in Section 3.4(a), the EIR would include a detailed biological resources report. The report would describe sensitive natural communities in the project area, including riparian habitats. The report will also describe any potential impacts resulting from the project that may occur to sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- c) Would the project 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?
  - Potentially Significant Impact. The project alignment traverses riparian areas, such as the Santa Clara River. As described in Section 3.4(a), the EIR would include a detailed biological resources report. The report will evaluate whether there are any federally protected wetlands within the project area. In the event that such wetlands are present, they could be affected during construction of the project, due to increased ground disturbance, human activity, and vehicle activity in the vicinity. In the event that federally protected wetlands are identified within the project area, the biological resources report would also evaluate the project's potential to affect such resources. In the event that effects are identified, applicable protection measures and permits would be described in the report and in the EIR.
- d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
  - Potentially Significant Impact. The project alignment traverses numerous open space areas, portions of which may serve as a wildlife corridor. Some open spaces areas also support riparian and woodland habitat, which can be used by fish and birds for migration and/or nursery areas. As described in Section 3.4(a), the EIR would include a detailed biological resources report. The report will evaluate the potential for the project area to support wildlife corridors and/or nursery sites. In the event that corridors and/or nursery sites are identified, the report will discuss the potential for the project to affect the movement of native species within the corridors and/or the use of nursery sites by native species. In the event that effects are identified, applicable protection measures would be described in the report and in the EIR.

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

**Potentially Significant Impact.** The project alignment extends across three local jurisdictions: City of Los Angeles, unincorporated County of Los Angeles, and City of Santa Clarita. As described in Section 3.4(a), the EIR would include a detailed biological resources report. The report will include a description of local policies and/or ordinances protecting biological resources, including tree preservation policies. It will also evaluation the project's consistency with those policies and ordinances. The findings will be summarized in the EIR.

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

**No Impact.** The project alignment City is not within a habitat conservation plan or natural community conservation plan (CDFW 2017). Therefore, implementation of the proposed project would not conflict with the provisions of an adopted habitat conservation plan; natural community conservation plan; or other approved local, regional, or state habitat plan, as none apply to the project area. No impacts would occur as a result of the proposed project. This issue will not be further analyzed in the EIR.

#### References

CDFW (California Department of Fish and Wildlife). 2017. "California Regional Conservation Plans" [map]. July 2017. Accessed July 7, 2017. https://www.wildlife.ca.gov/Conservation/Planning/NCCP.

# 3.5 Cultural Resources

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				

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

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

**Potentially Significant Impact.** The proposed project would traverse areas that may have historical resources. As part of the EIR, a records search and pedestrian survey will be conducted and a detailed cultural resources report will be prepared that would describe any historical resources within the project area and any potential impacts that may occur to such resources as a result of the project.

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

**Potentially Significant Impact.** The proposed project would traverse areas that may have archaeological resources. As part of the EIR, a records search and pedestrian survey will be conducted and a detailed cultural resources report will be prepared that would describe any archaeological resources within the project area and any potential impacts that may occur to such resources as a result of the project.

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**Less Than Significant With Mitigation Incorporated.** Portions of the project area are considered highly sensitive for paleontological resources. A paleontological records search requesting an inventory of paleontological resources within a one-mile-buffer was sent to the Natural History Museum of Los Angeles (LACM) on August 25, 2017, and the results were received on September 19, 2017 (McLeod 2017). The paleontological records search results are discussed below within the context of the geological units present onsite. Based on geological mapping by Dibblee (1991, 1996a, 1996b) at a scale of 1:24,000, the project alignment is underlain by seven geological units ranging in age from recent to Cretaceous (~ 145 – 65 million years ago [Mya]). From youngest to oldest, these units include Holocene (< 12,000 years ago) terrestrial surficial gravels and

alluvium (map units Qg and Qa); Pleistocene (~ 2.6 Mya – 12,000 years ago) terrestrial older surficial sediments (map units Qog and Qoa); Pliocene to Pleistocene (~ 5.3 Mya – 12,000 years ago) terrestrial and marine Saugus Formation (map units Qts and Ts); Pliocene (~ 5.3 Mya – 2.6 Mya) shallow marine Pico Formation (map unit Tps); late Miocene to early Pliocene (~ 12 Mya – 3.6 Mya) terrestrial to shallow marine Towsley Formation (map units Ttoc, Ttos, and Ttog); late Miocene (~ 12 Mya – 5.3 Mya) marine Castaic Formation (map unit Tc), and middle Miocene (~ 16 Mya – 12 Mya) terrestrial Mint Canyon Formation (map unit Tmc). In addition to these geological units, McLeod (2017) reported the alignment possibly affecting minimal exposures of Cretaceous (~ 145 Mya – 65 Mya) or older metamorphic rocks in northeastern Grapevine Canyon. These metamorphic rocks would not yield recognizable fossils and have no paleontological sensitivity. The paleontological sensitivities of the sedimentary geological units within the alignment are presented below.

#### Surficial Holocene Gravels and Alluvium

Because of its young age, surficial Holocene gravels and alluvium have low paleontological sensitivities; however, the paleontological sensitivity increases to high with depth where young alluvium transitions into Pleistocene old alluvium (terrestrial older surficial sediments of Dibblee [1991, 1996a, 1996b]).

#### Older Surficial Gravels and Alluvium

Pleistocene older surficial sediments have yielded a multitude of "Ice Age" vertebrates throughout southern California including fishes, amphibians, reptiles, birds, and mammals (Jefferson 1991).

According to the records search results, no fossil localities are documented from older Quaternary deposits within the project area; however, specimens of mastodon (*Mammut*) and horse (*Equus*) were reported from older surficial sediment fill (McLeod 2017). Additional nearby older surficial sediment localities reported by the LACM include fossil bison (*Bison*) and mammoth (*Mammuthus*) from the Van Norman Reservoir to the south of the project area (McLeod 2017). Older surficial sediments are assigned high paleontological sensitivity.

# The Saugus Formation

The Pleistocene to Pliocene Saugus Formation has yielded marine invertebrate fossils (Groves 1991) and terrestrial vertebrates (Jefferson 1991) in northern Los Angeles County.

According to the records search results, no fossil localities are documented from the Saugus Formation within the project area; however, nearby localities produced fossil specimens of finch (Fringillidae), pocket mouse (Heteromyidae), squirrel (Sciuridae), pocket gopher (*Thomomys*), and deer mouse (*Peromyscus hagermanensis*) (McLeod 2017). These specimens were collected through

sediment screening. Additional Saugus Formation fossil specimens documented near the project area include camel (Camelidae), horses (*Equus*), and dog (Canidae) (McLeod 2017). The Saugus Formation is assigned high paleontological sensitivity.

## The Pico Formation

The Pliocene Pico Formation has produced many significant vertebrate and invertebrate fossils in Los Angeles County. Squires et al (2006) documented 53 species of fossil invertebrates from the Pico Formation of the Valencia area, and fossil fishes have been identified in and around the greater Los Angeles area (Fierstine et al. 2012).

According to the records search results, no fossil localities are documented from the Pico Formation within the project area; however, nearby localities yielded bat ray (*Myliobatis*), guitarfish (*Rhinobatos*), requiem shark (*Carcharhinus*), basking shark (*Cetorhinus*), bonito shark (*Isurus planus*), white shark (*Carcharodon sulcidens*), sheephead (*Semicossyphus*), and undetermined sea lion (Otariidae) (McLeod, 2017). The Pico Formation is assigned high paleontological sensitivity.

# The Towsley Formation

The Pliocene to late Miocene, marine Towsley Formation has yielded significant paleontological resources in the Los Angeles County. Kern (1973) documented 141 species of fossil invertebrates as well as teeth of the sharks, *Isurus planus, Carcharodon sulcidens*, and *Carcharodon megalodon* (now known as *Carcharocles megalodon*) from Towsley Formation localities in Grapevine and Elsmere canyons.

According to the records search results, no fossil localities are documented from the Towsley Formation within the project area; however, nearby fossil localities produced fossil specimens of dugong (*Dusisiren jordani*), baleen whale (*Nannocetus*), and undetermined seal or sea lion (Pinnipedia) (McLeod 2017). The Towsley Formation is assigned high paleontological sensitivity.

#### The Castaic Formation

The late Miocene Castaic Formation crops out within the project alignment and has produced marine invertebrates and vertebrates. Stanton (1960) documented an extensive invertebrate fauna in his thesis on the paleoecology of the Castaic Formation. Kellogg (1925) and Repenning and Tedford (1977) documented a pinniped flipper from near Humphreys, California.

According to the records search results, no fossil localities are documented from the Castaic Formation within the project area; however, nearby localities produced fossil specimens of sea turtles (Cheloniidae and *Psephophorus*), baleen whale (Mysticeti), tapir (Tapiridae), and carnivore (Carnivora) (McLeod 2017). The Castaic Formation is assigned high paleontological sensitivity.

# The Mint Canyon Formation

The terrestrial, middle Miocene Mint Canyon Formation is mapped within the project alignment and is known to have yielded abundant vertebrate fossil remains. The middle Miocene age of the Mint Canyon Formation is based on the occurrence of the horse species, Merychippus, being found in the bottom of the section and Hipparion on the top (Durham et al. 1954). According to the UCMP online database, the UCMP has four Mint Canyon localities that have produced vertebrate fossils, and one that has produced over 1,000 plant fossils. Mount (1971) reported a locality between Placerita and Solemint Canyons that produced eight plant species and a snail. Maxson (1928) documented 11 vertebrate species from the formation, including four types of horse.

According to the records search results, no fossil localities are documented from the Mint Canyon Formation within the project area; however, the LACM contains numerous Mint Canyon Formation localities that are near the project area. Fossil specimens from these localities include tortoise (Testudinidae), rabbit (Hypolagus apachensis), elephant (Gomphotherium), rhinoceros (Rhinoceratidae), horses (Hipparion, Pliohippus fossulatus, and Cormohipparion occidentale), camel (Alticamelus), pronghorn antelope (Merycodus necatus), peccary (Prosthenops), and dog (Canidae) (McLeod 2017). The Mint Canyon Formation is assigned high paleontological sensitivity.

Construction activities associated with the proposed project would involve ground disturbance in areas of high paleontological sensitivity. Adverse effects to paleontological resources can occur if significant resources are uncovered during ground disturbance and subsequently destroyed, otherwise harmed, and/or not properly preserved. As such, mitigation measure MM-CUL-1 would be implemented to ensure that potential impacts to paleontological resources are reduced to a level below significance.

MM-CUL-1 Prior to commencement of any grading activity on-site, LADWP shall retain a qualified paleontologist. The qualified paleontologist shall attend the preconstruction meeting and prepare a mitigation plan that outlines monitoring protocols to be followed during all rough grading and other significant ground-disturbing activities in geological units with high paleontological sensitivity. These units include previously undisturbed older surficial gravels and alluvium, Saugus Formation, Pico Formation, Castaic Formation, and Mint Canyon Formation. Towsley Formation, Paleontological monitoring shall not be required for excavations into rock units with no to low paleontological sensitivity, including Cretaceous or older metamorphic rocks, Holocene surficial sediments, previously disturbed deposits, or artificial fill. Paleontological monitoring shall be conducted by a qualified paleontological monitor. A qualified paleontological monitor is defined as having (equivalent experience acceptable as appropriate):

"A BS or BA degree in geology or paleontology and one year experience monitoring in the state or geologic province of the specific project. An associate degree and/or demonstrated experience showing ability to recognize fossils in a biostratigraphic context and recover vertebrate fossils in the field may be substituted for a degree. An undergraduate degree in geology or paleontology is preferable, but is less important than documented experience performing paleontological monitoring..." (SVP 2010)

In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 25-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find. If sedimentological indicators conducive to the preservation of microvertebrates (as defined by SVP [2010]) are encountered, test sediment samples shall be collected to determine the presence of microvertebrate fossils.

Following the paleontological monitoring program, a final report detailing the monitoring activities and any fossil specimens recovered, along with associated geological and paleontological data, shall be prepared.

# d) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. As described under Section 3.5(b), portions of the project area are considered sensitive for previously uncovered cultural resources, which include human remains. Previously undiscovered human remains have the potential to be uncovered during ground-disturbing activities, which would be required for construction of the proposed project. If proper evaluation and protection of the human remains are not conducted, such remains could be disturbed, resulting in a potentially significant effect. In the unlikely event that human remains are unexpectedly encountered during construction activities for the new transmission lines and structures, there are laws and required procedures that would preclude potentially significant effects to human remains. These laws include State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, which provide guidance with regard to the accidental discovery of human remains. In accordance with Section 7050.5 of the California Health and Safety Code, if

human remains are found during construction, the County coroner would be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains would occur until the County coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County coroner determines that the remains are, or are believed to be, Native American, he or she must notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains. Should remains be unearthed during any construction activities involved with the proposed project, required compliance with these laws would reduce any potential impact to less than significant. This issue will not be further analyzed in the EIR.

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# 3.6 Geology and Soils

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	<ul> <li>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.</li> </ul>				
	ii) Strong seismic ground shaking?				
	iii) Seismic-related ground failure, including liquefaction?				
	iv) Landslides?	$\boxtimes$			
b)	Result in substantial soil erosion or the loss of topsoil?				
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onor 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?	$\boxtimes$			
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				

- a) Would the project 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.

Potentially Significant Impact. Several major active earthquake fault zones and smaller earthquake faults are located within the general region of the proposed alignment (Division of Mines and Geology 1997, 1998a, 1998b). The San Gabriel Fault Zone is located approximately 0.5 miles west of the proposed alignment in the Santa Clarita Valley. At the southern end of the alignment, the transmission line corridor crosses the San Fernando Fault Zone. Portions of the San Fernando Fault, including the portion that is traversed by the alignment, are contained in an Alquist-Priolo Earthquake Fault Zone. The faults within the San Fernando Fault Zone ruptured in February 9, 1971, during the San Fernando Earthquake (Division of Mines and Geology 1998b). As such, portions of the immediate project area are susceptible to impacts related to surface rupture. A geologic report will be prepared for the proposed project, the results of which will be incorporated into the EIR. The report will evaluate the potential for the proposed project to expose people or structures to potential substantial adverse effects related to fault rupture. In the event that effects are identified, applicable seismic design measures would be described in the report and incorporated into the EIR analysis.

# ii) Strong seismic ground shaking?

Potentially Significant Impact. The proposed project is located within the seismically active Southern California area and, like all locations within the region, the project area is potentially subject to strong seismic ground shaking. As discussed above in Section 3.6(a)(i), several major active earthquake fault zones are located within the general region of the proposed alignment. Numerous smaller active faults are also located within the general region. The proposed project would replace a 12-mile segment of an existing 115 kV transmission line with a new 230 kV transmission line within an existing transmission line corridor. The design of the proposed project facilities would be based on a comprehensive pre-construction geotechnical analysis and would conform to the latest version of the California Building Code, the Uniform Building Code, and all other applicable federal, state, and local codes relative to seismic design criteria. Although the project is not expected to increase the exposure of people or structures to potentially adverse effects from strong

ground shaking, this issue will be evaluated in the EIR once the results of the detailed geologic report are available.

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

Potentially Significant Impact. According to state hazard zone mapping data, the alignment passes through multiple liquefaction hazard zones (California Geological Survey 1998, 1999a, 1999b). These include areas where historical occurrence of liquefaction, or local geological, geotechnical, and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required. As described in Section 3.6(a)(i), a detailed geologic report will be prepared for the project. The report will evaluate the potential for the proposed project to expose people or structures to potentially adverse effects due to seismic-related ground failure and liquefaction. In the event that impacts are identified, applicable design measures would be described in the report and incorporated into the EIR analysis.

# iv) Landslides?

Potentially Significant Impact. According to state hazard zone mapping data, the alignment passes through multiple earthquake-induced landslide zones (California Geological Survey 1998, 1999a, 1999b). These include areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required. As described in Section 3.6(a)(i), a detailed geologic report will be prepared for the project. The report will evaluate the potential for the proposed project to expose people or structures to potentially adverse effects related to landslides. In the event that impacts are identified, applicable design measures would be described in the report and incorporated into the EIR analysis.

## b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Construction of the proposed project would result in ground surface disturbance during excavation and grading that could create the potential for erosion to occur. For example, ground disturbance would occur while preparing work areas for transmission structure installations and while excavating holes for foundations and pole installations. Ground disturbance also would occur during the decommissioning and removal of existing transmission line infrastructure. Although site rehabilitation activities would be undertaken to return construction areas to their original condition (see Section 2.2 of this Initial Study), construction activities would have the potential to result in soil erosion or loss of topsoil. Under the provisions of the California State Water Resources Control Board Storm Water Program, Storm Water General Construction

Permit BMPs, including the preparation of erosion control plans and a Storm Water Pollution Prevention Plan (SWPPP), would be employed to control any potential erosion or sedimentation impacts related to the proposed project construction and operation. Upon preparation of and compliance with the SWPPP and the associated stormwater BMPs, project would not result in substantial soil erosion or the loss of topsoil. Impacts would be less than significant, and this issue will not be further analyzed in the EIR.

c) Would the project 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?

Potentially Significant Impact. See discussion under Sections 3.6(a)(iii) and 3.6(a)(iv).

d) Would the project 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?

**Potentially Significant Impact**. Soils with high shrink swell potential could potentially occur in areas of temporary and permanent disturbance. Foundation failure as a result of soil expansion could expose people or structures to risks including loss, injury, or death from a falling power line or structure, resulting in a significant impact. This issue will be further evaluated in the geologic report and incorporated into the EIR analysis.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

**No Impact.** The proposed project would replace an existing transmission line and no septic tanks or alternative wastewater disposal systems are proposed. Therefore, no impact associated with the use of alternative wastewater disposal systems would occur.

#### References

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## 3.7 Greenhouse Gas Emissions

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	$\boxtimes$			
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	$\boxtimes$			

# a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**Potentially Significant Impact.** Principal greenhouse gases (GHGs) to be evaluated include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), O<sub>3</sub>, and water vapor. GHG emissions during project construction activities would occur primarily from the operation of off-road construction equipment and on-road trucks with internal combustion engines and the use of motor vehicles by construction employees travelling to and from the work sites. The EIR will further analyze GHG emissions to quantify and evaluate potential impacts.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**Potentially Significant Impact.** The proposed project would emit GHGs, and its potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs will be included in the EIR.

## References

None.

# 3.8 Hazards and Hazardous Materials

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
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?			$\boxtimes$	
d)	Be located on a site that 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?			$\boxtimes$	
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?			$\boxtimes$	
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g)	Impair implementation of or physically interfere			$\boxtimes$	

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

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

Less Than Significant Impact. Implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction activities would be temporary in nature and would involve the limited transportation, storage, usage, and disposal of hazardous materials. Such hazardous materials could include on-site fueling/servicing of construction equipment, and the transport of fuels, lubricating fluids, and solvents. Additionally, construction debris such as scrap metals and treated wood from removal of the existing 115 kV lines and associated transmission towers would be generated during construction. Improper storage, handling, and/or disposal of construction-related hazardous materials could pose a hazard to the public or the environment. However, all storage, handling, and disposal of such hazardous materials are regulated by the California Department of Toxic Substances Control, the U.S. EPA, the Occupational Safety & Health Administration, and the Los Angeles County Fire Department. Construction debris would be removed from the work sites, sorted, characterized, and disposed of or recycled by an LADWP waste management contractor. The transport, use, and disposal of construction-related hazardous materials would occur in conformance with applicable federal, state, and local regulations governing such activities. Construction impacts would be less than significant and will not be further analyzed in the EIR.

Once construction is complete, the operational activities along the transmission line corridor would not substantially change. Transmission line maintenance activities would continue to involve fuels and fluids for equipment and herbicides for vegetation control. As with existing conditions, use of hazardous materials would be subject to federal, state, and local health and safety requirements. Because no substantial changes in operational use of hazardous materials within the project area

would occur as a result of the proposed project, operational impacts would be less than significant and will not be further analyzed in the EIR.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. See the discussion under 3.8(a). Hazardous materials (namely, petroleum products for equipment, herbicides, and construction debris) would be used during construction and operation of the project. An upset or accident involving such hazardous materials could result in the release of such materials, which could pose a hazard to the public or the environment. However, the transport, storage, use, and handling of such materials would be required to occur in accordance with applicable federal, state, and local health and safety requirements. Compliance with regulations would minimize the likelihood of an upset and accident condition involving the release of hazardous materials used for construction or operational activities in the project area. Furthermore, use of such materials during construction would be temporary, and operational use of hazardous materials within the transmission corridor and the switching stations would not substantially change after construction of the proposed project is complete. As such, project activities are unlikely to involve the use of hazardous materials in a manner that would result in a significant hazard to the public or the environment.

Portions of the transmission corridor pass by commercial and industrial sites that may currently or previously have used hazardous materials. While unlikely, hazardous materials from these land uses could have entered soil or groundwater and migrated to the transmission line corridor. In the event that contaminated soils or groundwater is present within the project alignment, ground-disturbing activities during construction could uncover a contamination site. Additionally, the Sylmar Switching Station is the site of a release of electrical insulating oil (the oil was released during the 1994 Northridge earthquake). As such, soil contamination could be uncovered during construction activities at the Sylmar Switching Station. Uncovering of contamination sites may result in the release of contaminated soils or water to the environment, which could potentially create a hazard to the public or the environment. However, in the event that contaminated soils or groundwater are encountered during construction, workers would be required to adhere to existing state and federal requirements pertaining to safe handling and proper disposal of such wastes. Due to the unlikelihood of encountering a hazardous materials site and compliance with existing regulations that would protect workers and the environment from hazardous materials that may be used for the project or uncovered as a result of project activities, impacts would be less than significant and will not be further analyzed in the EIR.

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

**Less Than Significant Impact.** There are several schools within 0.25 mile of the project alignment, including Canyon Vista Children's Academy (27757 Bouquet Canyon Road, Santa Clarita) and Golden Valley High School and William S. Hart Fire Academy (27051 Robert C. Lee Parkway, Santa Clarita) (California Department of Education 2014).

As discussed in Section 3.8(a), construction activities associated with the proposed project would involve relatively small amounts of commonly used hazardous substances such as fuels, lubricating fluids, and solvents. Construction may also involve handling, transport, and disposal of debris and scrap materials associated with removal of the existing 115 kV lines and transmission towers. Construction debris and chemicals such as fuels, fluids, and solvents used for construction would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials, which would reduce the likelihood that hazardous materials would be released to the environment. Consequently, upon compliance with applicable safety regulations, the use and handling of the materials involved with project construction would not pose a significant risk to nearby schools.

As discussed in Section 3.8(b), construction activities associated with the proposed project would involve ground disturbance. In the unlikely event that soil or groundwater contamination is encountered in the areas of ground disturbance, workers would be required to adhere to existing state and federal requirements pertaining to safe handling and proper disposal of such wastes. Adherence with regulations for safe handling and proper disposal of such wastes would minimize the likelihood of a release of hazardous materials and of adverse effects to nearby schools. For these reasons, construction effects are expected to be less than significant and will not be further analyzed in the EIR.

During operation, hazardous materials such as petroleum and herbicides may be periodically used for maintenance purposes along the project alignment and at the switching stations. However, these operational activities would occur within an existing transmission corridor and within existing switching stations that are currently maintained by LADWP. The activities and materials that are currently used to operate and maintain the facilities along the transmission corridor and within the switching stations would remain generally the same as existing conditions. As such, post-construction activities are not expected to introduce new sources of hazardous materials to the project area that could adversely affect nearby schools. As with existing conditions, use of hazardous materials during operation and maintenance activities would continue to be subject to federal, state, and local health and safety requirements. Compliance with applicable safety regulations would reduce the likelihood that hazardous materials would be released to the environment. Because no

substantial changes would result in operational use of hazardous materials within the project area, operational impacts would be less than significant and will not be further analyzed in the EIR.

d) Would the project be located on a site that 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?

Less Than Significant Impact. Several properties adjacent to the project alignment are listed on the California Department of Toxic Substances Control's EnviroStor database and the State Water Resources Control Board's GeoTracker site. For example, an oil well located approximately 300 feet northeast of a planned new transmission structure site is under investigation by the Los Angeles Regional Water Quality Control Board (RWQCB) for potentially injecting fluids produced by oil and gas extraction activities into the aquifer (RWQCB 2016). While the alignment passes through several industrial and commercial areas with sites that have reports of current and/or historical contamination, the alignment itself is not listed as a hazardous materials site on hazardous waste site lists (including the EnviroStor database, GeoTracker site, the Cortese list, the Superfund Site list, or other lists compiled pursuant to Section 65962.5 of the Government Code) (CalEPA 2017a, 2017b, 2017c, 2017d; DTSC 2007; DTSC 2017a; SWRCB 2017a; U.S. EPA 2017a, 2017b). An exception is the Sylmar Switching Station, which is identified as the site of voluntary cleanup action in the EnviroStor database. This site is owned and operated by LADWP and is the southern terminus of the project alignment. During the 1994 Northridge earthquake, on-site transformers at the Sylmar Switching Station were damaged and electrical insulating oil was spilled. Soil samples conducted after the earthquake revealed the presence of polychlorinated biphenyls (PCBs) in the soil. Subsequently, LADWP entered into a Voluntary Cleanup Agreement with the California Department of Toxic Substances Control. Remedial investigations began and are still underway at the time of this writing (DTSC 2017b). As such, the Sylmar Switching Station may contain soil contamination that has not yet been addressed. In the event that contaminated soils are encountered during work at the Sylmar Switching Station, workers would be required to adhere to existing state and federal requirements pertaining to safe handling and proper disposal of any contaminated soils. Additionally, as described above, a number of hazardous wastes sites lie outside of, but adjacent to, the project alignment. A majority of these sites consist of commercial or industrial properties with chemical spills or leaking underground storage tanks. Many sites are listed as "completed – case closed," indicating that the leak, spill, cleanup, and/or investigation has been addressed. Case closure is given when corrective action at the site has been completed and any remaining petroleum constituents from the release are considered to be low threat to human health, safety, and the environment (SWRCB 2017b). Nevertheless, contamination from these sites could have entered soil or groundwater and migrated to the transmission line corridor. In the unlikely event that soil or groundwater contamination is encountered in the areas of ground disturbance for the project, workers would be required to adhere to existing

state and federal requirements pertaining to safe handling and proper disposal of contaminated soils or water. Adherence to regulations for safe handling and proper disposal of contaminated soils or water would minimize the likelihood that significant hazards would occur to the public or to the environment as a result of ground disturbing activities within or near contamination. For these reasons and upon required compliance with laws concerning hazardous materials, impacts would be less than significant, and this issue will not be further addressed in the EIR.

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?

Less Than Significant Impact. The nearest airport to the project alignment is the Whiteman Airport, which is located approximately 5 miles southeast of the southern terminus of the project alignment (Caltrans 2017). The project alignment is located well outside of the airport influence area of this airport (County of Los Angeles 2017). As such, the project area is not located within a 2-mile radius of any public airport, and no airport land use plans apply to the project alignment. Therefore, the proposed project would not create an airplane safety hazard for people residing or working in the project area. Construction of the proposed project may involve temporary, intermittent use of helicopters to install transmission structures for the new 230 kV line, to remove the existing transmission towers for the 115 kV line, and to string new conductors. Helicopter flight paths will generally be limited to the existing transmission corridor. Helicopter use would occur in accordance with all applicable federal, state, and local aviation rules and regulations, and will not create any new hazards. In addition, LADWP would coordinate with local airports regarding helicopter operations and flight plans, as necessary. For these reasons and upon compliance with applicable aviation rules and regulations, helicopter use would not result in a safety hazard for people residing or working in the area. Impacts related to airports and aviation hazards would therefore be less than significant, and this issue will not be further analyzed in the EIR.

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?

**No Impact.** The project area is not located within the vicinity of a private airstrip (Airnav.com 2017). As such, no impact would occur related to safety hazards associated with private airstrips, and this issue will not be further analyzed in the EIR. See the discussion under Section 3.8(e) for information and analysis regarding the project's use of helicopters during construction.

# g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. There are several emergency response plans and emergency evacuation plans that apply to the project area. The Los Angeles County All-Hazards Mitigation Plan prepared by the County Chief Executive Office – Office of Emergency Management sets strategies for both natural and human-caused hazards in the County. The All-Hazards Mitigation Plan, which has been approved by the Federal Emergency Management Agency and the California Emergency Management Agency, includes a compilation of known and projected hazards in the County and describes historical disasters in the County. The plan is a County-wide compilation of future mitigation strategies and programs and addresses all major natural and humancaused disasters that fall within the responsibility of the County departments within the geographic County, including earthquakes, fires, utility loss, hazardous materials, dam filature, and landslides. The plan specifically addresses the unincorporated areas of the County; however, many of the strategies and mitigation apply to incorporated areas as well. The Office of Emergency Management also prepares the Operational Area Emergency Response Plan, which establishes the County's emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts among the various emergency departments, agencies, special districts and jurisdictions that comprise the Los Angeles County Operational Area (County of Los Angeles 2015). The City of Los Angeles has a Local Hazard Mitigation Plan, which includes a thorough hazard vulnerability analysis, community disaster mitigation priorities, and plans for mitigation strategies and projects. The City of Los Angeles is currently in the process of updating its Local Hazard Mitigation Plan, and a draft of the revised plan was made available for review in June 2017 (City of Los Angeles 2017). The City of Santa Clarita also has a Hazard Mitigation Plan and is in the process of updating the plan. As with the County and City of Los Angeles, the City of Santa Clarita's Hazard Mitigation Plan contains provisions to reduce risks and effects from natural hazards (City of Santa Clarita 2017). Additionally, the Los Angeles County Department of Public Works designates disaster routes throughout the County. The project alignment crosses several designated "Primary Disaster Routes" and "Secondary Disaster Routes." From north to south, the project alignment would cross over the following County-designated disaster routes: Copper Hill Drive, an east-west trending Secondary Disaster Route located along the northern boundary of the City of Santa Clarita; Bouquet Canyon Road, a northeast-southwest trending Secondary Disaster Route within the northern portion of the City of Santa Clarita; Soledad Canyon Road, an east-west trending Secondary Disaster Route extending across the City of Santa Clarita; Golden Valley Road, a Secondary Disaster Route in the City of Santa Clarita that connects Soledad Canyon Road to SR 14; Sierra Highway, a northeast-southwest trending Secondary Disaster Route within the southeastern portion of the City of Santa Clarita; SR 14, a Primary Disaster Route that extends through the southeastern portion of the City of Santa Clarita; and, Interstate 210 and Interstate 5, Primary Disaster Routes in the City of Los Angeles (County of Los Angeles 2012).

During construction of the proposed project, temporary road closures may be periodically required, which could interfere with use of an emergency evacuation route and/or implementation of an emergency response or evacuation plan, in the unlikely event that an emergency coincided with a road closure. LADWP would prepare and implement traffic control plans for the project. The traffic control plans would define the locations of road closures and would define the use of flag persons, warning signs, lights, barricades, cones, etc. that would be used to safely direct vehicles around road closures. The traffic control plans would set forth construction practices that would help avoid disruptions or delays in access for emergency service vehicles. The traffic control plans would also include provisions for coordination between local emergency service agencies and LADWP or its construction contractor. Local police departments, fire departments, ambulance services, and paramedic services would be notified in advance of each road closure. Upon preparation and compliance with traffic control plans, project construction is not expected to interfere with implementation of an adopted emergency response plan or emergency evacuation plan.

Operation of the proposed project would involve maintenance of a 230 kV transmission line within an existing transmission corridor, in place of the existing 115 kV line that would be removed under the project. LADWP already conducts operational and maintenance activities within this existing transmission corridor. Converting an existing 115 kV line to a 230 kV line would not result in any land use changes or substantial changes in LADWP's operational activities. In the event of an emergency, the evacuation and response plans for the County of Los Angeles, City of Santa Clarita, and City of Los Angeles would be implemented and would proceed in the same manner with or without the proposed project. For these reasons, impacts would be less than significant, and this issue will not be further analyzed in the EIR.

h) Would the project 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?

Less Than Significant With Mitigation Incorporated. The proposed project extends across several wildland areas and areas where wildlands converge with residential neighborhoods. As such, the project is located in an area that is susceptible to wildfire, and the project alignment is primarily located within areas that have been designated as Very High Fire Hazard Severity Zones, as shown in the County of Los Angeles General Plan (County of Los Angeles 2015). During construction of the project, heat or sparks from construction equipment, vehicles, tools, and helicopters, as well as the use of flammable hazardous materials, have the potential to ignite adjacent vegetation and start a

fire, especially during weather events that include low humidity and high wind speeds. In the event that construction were to cause ignition of a wildland fire in the project area, and the fire is not properly contained, potentially significant risk of loss, injury, or death could occur. As such, MM-HAZ-1 is set forth to ensure that the potential risk of wildfire ignition and spread associated with construction of the proposed project is reduced.

Operations and maintenance activities for the proposed project would resemble those currently administered by LADWP and activities are not expected to increase in duration, intensity, or frequency. The project would continue to be maintained in accordance with clearance requirements for safe operation and use of overhead lines. Therefore, impacts related to wildland fire hazards due to operations and maintenance activities would be less than significant; however, mitigation would be required during construction to reduce impacts to below a level of significance. Therefore, upon implementation of MM-HAZ-1, impacts would be less than significant with mitigation incorporated. This issue will not be further analyzed in the EIR.

- MM-HAZ-1 Prior to construction, the Los Angeles Department of Water and Power shall develop a Fire Risk Management Plan that addresses training of construction crews and provides details of fire suppression and reporting procedures and equipment to be maintained on site during construction. The Los Angeles Department of Water and Power shall monitor construction activities to ensure implementation and effectiveness of the Fire Risk Management Plan. The final plan shall be implemented during all construction activities. At minimum, the plan will include the following:
  - Requirements for workers to park away from dry vegetation.
  - Requirements for flammable materials to be properly handled and stored.
  - Procedures for minimizing potential ignition, including, but not limited to, helicopter operations, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, use of spark arrestors, and hot work restrictions.
  - Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days.
  - Detailed information for reporting started or observed fires to appropriate fire agencies.
  - Worker training for fire prevention, initial attack firefighting, and fire reporting.
  - Emergency communication, response, and reporting procedures.

- Coordination with local fire agencies to facilitate emergency access to the project alignment, if necessary.
- Emergency contact information.
- Requirements for fire-suppression equipment and materials to be kept in vehicles and adjacent to all work areas and staging areas and to be clearly marked.
- Requirements for all vehicles to carry fire suppression equipment.

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# 3.9 Hydrology and Water Quality

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements?				
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 preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			$\boxtimes$	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or 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 or provide substantial additional sources of polluted runoff?				
f)	Otherwise substantially degrade water quality?				$\boxtimes$
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?			$\boxtimes$	
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?			$\boxtimes$	
j)	Inundation by seiche, tsunami, or mudflow?			$\boxtimes$	

# a) Would the project violate any water quality standards or waste discharge requirements?

**Less Than Significant Impact.** The project is not anticipated to violate any water quality standards or waste discharge requirements during construction or operation, for the reasons described below.

## **Stormwater Runoff During Construction**

During construction, stormwater runoff could potentially violate applicable water quality standards by introducing pollutants to stormwater runoff. There are two primary ways that construction activities could adversely affect water quality:

- Land disturbances: Land disturbances such as vegetation removal, compaction, grading, and temporary soil stockpiling could potentially increase sediment levels in stormwater runoff by eroding soils that have been loosened or newly exposed by construction activity. Land disturbances can also decrease the infiltration capacity of soils in the work area through compaction of native soils from foot traffic, heavy machinery, and equipment laydown. Depending on the pattern, magnitude, and extent of construction activities, stormwater flows that would otherwise not be erosive can become both channelized and accelerated, leading to soil loss, rilling, and/or gullying on site or downgradient.
- Spill and/or leaks: Materials that could spill or leak include diesel fuel, gasoline, lubrication oil, cement slurry, hydraulic fluid, antifreeze, transmission fluid, lubricating grease, and construction-related trash and debris. Due to the nature of the proposed construction activities, only minor quantities of these materials would be required in any one work area along the project alignment. The amount used would be the minimum necessary to fuel vehicles, power equipment, and complete activities. Improper management of hazardous materials could result in accidental spills or leaks, which could locally contaminate either shallow groundwater or the closest surface water body.

Potential water quality impacts associated with construction would be temporary and highly localized, because all work areas would be restored to preconstruction conditions to the extent practicable and in accordance with the project-specific SWPPP, which is further described below. In some cases, small streams may need to be crossed to access work areas during construction. However, this work would be performed in accordance with the requirements of federal and state permits under Clean Water Act Sections 404 and 401 and California Fish and Game Code Section 1602, as applicable (see Section 2.4 of this document for a list of the required permits that are anticipated for this project). In addition, small quantities of fuels, lubricants, and solid and liquid wastes could temporarily be stored within work areas. It should be noted that hazardous materials impacts are addressed in Section 3.8, Hazards and Hazardous Materials, and direct impacts on

jurisdictional waters are addressed in Section 3.4, Biological Resources. (As described in Section 3.4, impacts to jurisdictional waters will be further analyzed in the EIR.)

Nearly all temporary work areas would overlap with LADWP's existing right-of-way, existing roads, or locations that have been previously disturbed due to routine operation and maintenance activities along the transmission corridor. However, in certain locations, new land disturbances may be required to establish or rehabilitate access roads and to prepare work pads for construction and maintenance purposes. The required land disturbances would be highly dispersed both geographically and over time. This means that at any one time, disturbance areas would be minor, and construction activities would proceed incrementally along the project alignment. However, because land disturbances associated with the project would cumulatively be greater than one acre in size, LADWP and/or its contractor would be required to submit a Notice of Intent to the State Water Resources Control Board (SWRCB) in order to obtain approval to carry out construction activities under the Construction General Permit. This permit includes a number of design, management, and monitoring requirements for the protection of water quality and the reduction of construction-phase impacts related to stormwater (and some non-stormwater) discharges. Compliance with the Construction General Permit requires that a SWPPP be developed and implemented by qualified individuals, as defined by the SWRCB. The SWPPP includes BMPs for preventing water quality degradation, identifying stormwater collection and discharge points, and maintaining drainage patterns across the project area. The exact type and location of construction site BMPs in the final SWPPP would be based on site-specific conditions and receiving water risk. At a minimum, BMPs would include erosion controls (e.g., mulches, soil binders, erosion control blankets/mats, outlet projection/energy dissipation devices), sediment controls (e.g., silt fences, fiber rolls, gravel bags), tracking controls (e.g., stabilized construction entrance/exit, entrance/outlet tire wash), wind erosion controls, non-stormwater management, and materials and water management (cleanup and containment of trash and debris, stockpile management, spill prevention and control, hazardous waste management). Implementation of these BMPs included in the SWPPP would protect water quality due to construction-induced erosion and sedimentation within the project alignment, and would include hazardous materials BMPs necessary to prevent or contain spills or leaks associated with construction equipment and materials.

Although construction activities have the potential to adversely affect water quality, required coverage under the statewide Construction General Permit would be adequate to ensure that potential construction-related impacts on water quality are avoided or substantially minimized. It would also ensure that the project would not violate any SWRCB or RWQCB standards or waste discharge requirements. Following construction, all work areas would be restored to preconstruction conditions to the extent practicable, as described in Section 2.2 of this Initial Study. For

these reasons, construction impacts on stormwater quality would be less than significant, and this issue will not be further analyzed in the EIR.

## **Non-Stormwater Impacts During Construction**

Construction activities may involve dewatering discharges of groundwater to allow for dry working conditions in areas of the alignment that have high groundwater. While unlikely, there could be pollutants present in the groundwater. If contaminated groundwater is discharged into the stormwater drainage system or into a waterway, it could affect the quality of the receiving water. However, such discharges are governed under the General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters (Order No. R4-2013-0095, NPDES No. CAG994004). This permit requires permittees to conduct monitoring of dewatering discharges and adhere to effluent and receiving water limitations set forth in the permit so that the water quality of surface waters is protected. Compliance with the dewatering permit would minimize the potential effects of dewatering discharges. Compliance with RWQCB permit requirements for the discharge of groundwater during construction is expected to reduce any potential water quality impacts to a less than significant level. This issue will not be further analyzed in the EIR.

# **Operation and Maintenance**

Stormwater runoff during operation and maintenance activities would be similar to the existing conditions, because the new transmission line would remain aboveground and would generally be situated along the same alignment as the existing transmission line that is being replaced. Although the location of transmission structures would change slightly, the footprints of the proposed transmission structures are insufficient to cause any appreciable or measurable change in stormwater drainage or flow patterns. Operation and maintenance activities would not involve any permanent non-stormwater discharges. For these reasons, the operation and maintenance impacts of the project on water quality would be less than significant, and this issue will not be further analyzed in the EIR.

Would the project 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 (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

**Less Than Significant Impact.** The project would not involve construction, alteration, or removal of any groundwater wells. As such, no direct impacts to groundwater would occur as a result of the project. The project would not result in a land use change that would lead to a substantial increase in

water use, having the potential to substantially lower groundwater levels. Any amount of water used for workers or for cleaning activities during construction and/or operations and maintenance activities would be minor and would be commercially sourced. Construction water use would be temporary, and operational water use for maintenance activities would be generally the same as existing conditions. As such, the proposed project would not result in water consumption that would substantially lower groundwater levels.

Some dewatering may be required during construction. Dewatering activities could potentially result in temporary and localized fluctuations in the depth of groundwater near the site of dewatering. However, such fluctuations would not substantially deplete groundwater supplies. They would be limited in duration and scope and would not permanently lower the groundwater table.

The location of transmission structures for the replacement 230 kV line would slightly change upon project implementation relative to the location of the existing towers for the 115 kV line. However, the footprints of the new transmission structures would not cause any appreciable or measurable change in groundwater infiltration. For these reasons, impacts related to groundwater would be less than significant, and this issue will not be further analyzed in the EIR.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Crossing existing drainages may be necessary to access some of the work areas. Any work in such areas would be performed in accordance with the requirements of applicable federal and/or state permits under Clean Water Act Sections 404 and 401 and California Fish and Game Code Section 1602, as applicable. Minor temporary grading would be performed in select locations to improve project access or to establish work areas to accommodate equipment; however, this grading would be limited in scope and would not substantially alter site drainage or result in substantially increased erosion or siltation. Work areas would be restored after completion of work, as described in Section 2.2 of this document. Additionally, as described in Section 3.9(a), BMPs that would be required in accordance with the SWPPP would minimize the potential for erosion to occur as a result of project construction. Once construction is complete, disturbed areas would be restored to pre-construction conditions to the extent practicable, thereby minimizing any permanent changes to existing drainage patterns along the project alignment. Operation and maintenance activities would occur consistent with current LADWP operation and maintenance activities along the existing transmission corridor and at the switching stations. As such, operation and maintenance of the project is not expected to increase erosion or siltation in the project area. Impacts would be less than significant, and this issue will not be further analyzed in the EIR.

- d) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding onor off-site?
  - **Less Than Significant Impact.** For the same reasons discussed in Sections 3.9(a) and 3.9(c), the project's impacts on flooding from altered drainage patterns would be less than significant. This issue will not be further analyzed in the EIR.
- e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. Portions of the project alignment are located within open space areas where municipal or otherwise developed stormwater collection systems are not established. The stormwater conveyance systems that are present in these undeveloped areas typically consist of open stormwater ditches and waterways along the alignment. Where the project crosses more urbanized areas, the commercial and/or residential areas adjacent to the transmission corridor are typically supported by developed stormwater collection systems. Impacts related to stormwater drainage systems could occur if the project causes runoff volumes to increase to the extent that the capacity of drainage systems are exceeded or if the project causes a substantial new source of polluted runoff. Construction impacts would include temporary ground disturbance and potential small-scale, highly localized changes in the existing drainage patterns due to the establishment of construction pads and the rehabilitation and/or establishment of access roads. Temporary impacts would be spread out along the linear footprint of the project work areas; therefore, no one area would have drainage patterns significantly altered. Construction activities would have the potential to create a temporary source of polluted runoff by introducing sediments or construction-related chemicals to stormwater. Dewatering may also occur at select work areas. In the event that any contaminated groundwater were encountered, discharges of the groundwater during dewatering could also introduce a source of polluted runoff. However, BMPs to minimize stormwater volumes and pollutants would be implemented during construction in accordance with the required SWPPP (see Section 3.9(a) for more details on BMPs that would be required during construction in accordance with the SWPPP). Additionally, compliance with the NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters would minimize the potential for dewatering to cause adverse effects to water quality. Once construction is complete, disturbed areas would be restored to pre-construction conditions to the extent practicable. This practice would minimize any permanent changes to existing drainage patterns along the project alignment.

Operation of the proposed project is not anticipated to substantially increase stormwater volumes such that the capacity of existing drainage systems are exceeded, nor is it anticipated to create a substantial additional source of polluted runoff. This is because the proposed project would not involve land use changes that would increase stormwater runoff or polluted runoff from the project area. The footprints of the new transmission structures would be located within the existing transmission corridor and would be insufficient in surface area to cause any appreciable or measurable change in stormwater drainage volume or flow patterns. The upgrades and tie-ins at the Haskell Canyon Switching Station and the Sylmar Switching Station would occur within the existing boundaries of the switching stations, which are already paved and developed with existing electrical equipment. As such, the project is not anticipated to substantially alter existing drainage patterns in the project area during operation. Operation and maintenance activities would occur consistent with current LADWP operation and maintenance activities in the project area. As such, operation and maintenance of the project is not expected to increase stormwater volumes or stormwater pollutants in the project area. For the reasons described above, construction and operational impacts would be less than significant, and this issue will not be further analyzed in the EIR.

# f) Would the project otherwise substantially degrade water quality?

**No Impact.** There are no reasons, other than those already discussed in the preceding sections, that the project would degrade water quality. No impact would occur, and this issue will not be further analyzed in the EIR.

# g) Would the project 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?

**No Impact.** The project does not involve housing. Therefore, no impact would occur, and this issue will not be further analyzed in the EIR.

# h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less Than Significant Impact. Portions of the alignment extend across areas designated as 100-year floodplains, such as the Santa Clara River (DWR 2017). However, the project would not affect or be affected by flooding. Where the new 230 kV line crosses 100-year floodplains, it would be replacing an existing 115 kV line that currently crosses the same floodplains. Therefore, the new line would not alter existing conditions. Although the locations of new transmission structures may differ slightly from the location of the existing 115 kV line's transmission towers, the footprint of each new structure would be insufficient in size to result in measurable changes in the volume,

velocity, or extent of flood hazards, due to the small cross-sectional area that the transmission structure footings would occupy. Transmission structures are designed to withstand loads from a variety of natural disasters, including earthquakes and strong wind events. As such, the new transmission structures would not affect or be damaged by a 100-year flood flow. Given these factors, the project would have a less than significant impact with regard to impeding or redirecting flood flows, and this issue will not be further analyzed in the EIR.

# i) Would the project 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?

Less Than Significant Impact. As described in Section 3.9(h), the project alignment extends across several areas that may be susceptible to 100-year floods. Additionally, there are levees in the project area that are associated with the Santa Clara River. Castaic Lake is located approximately 5 miles northwest of the project site. In the unlikely event of dam or levee failure, areas south of Castaic Lake and the Santa Clara River, including the project area, could potentially be affected. However, as described in Section 3.9(h), the project is not expected to be damaged by flood flows, due to the design requirements for transmission structures. The project does not involve any habitable structures; as such, it would not introduce additional inhabitants of areas that are at risk for flooding, including flooding as a result of levee or dam failure. Impacts would therefore be less than significant, and this issue will not be further analyzed in the EIR.

# j) Inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact. The project alignment is located over 20 miles north of the Pacific Ocean; as such, it is not expected to be susceptible to inundation by tsunami. The project alignment is approximately 5 miles south/southeast of Castaic Lake. In the unlikely event of a seiche, portions of the Santa Clarita Valley could be affected. However, as explained in Section 3.9(h), the project is not expected to be damaged by flood flows, due to the design requirements for transmission structures. (This would include flooding as a result of a seiche.) The project alignment crosses a number of steep, hilly areas, which could be subject to mudflow. However, as described in Section 3.9(h), transmission structures are generally designed to withstand a variety of natural hazards. As such, substantial damage from mudflow is not anticipated. For these reasons, impacts would be less than significant, and this issue will not be further analyzed in the EIR.

#### References

DWR (Department of Water Resources). 2017. "Best Available Maps." Accessed August 29, 2017. http://gis.bam.water.ca.gov/bam/.

## 3.10 Land Use and Planning

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

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

No Impact. The project would involve replacing an existing 115 kV transmission line with a new 230 kV transmission line within an existing transmission corridor. While the existing transmission corridor extends through neighborhoods and commercial areas, this existing transmission corridor would remain in place with or without the proposed project. The location of the new 230 kV line would be slightly different from that of the existing line. However, the new line would still be situated within the existing transmission corridor, which has been used for such purposes for nearly 100 years. The project would also involve switching station tie-ins and upgrades to an existing electrical switching station. However, this work would occur within the boundaries of the existing switching stations. As such, the project would not result in any land use changes that would introduce a physical division within an established community.

Would the project 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?

**No Impact.** The proposed project would involve replacing an existing transmission line within an existing transmission corridor, upgrading an existing electrical switching station, and switching station tie-ins. As such, the project would not result in a land use change that could conflict with existing land use policies or plans adopted by agencies with jurisdiction over local land uses. No impact would occur, and this issue will not be further analyzed in the EIR.

# c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

**No Impact.** The project alignment is not within a habitat conservation plan or natural community conservation plan (CDFW 2017). Therefore, implementation of the proposed project would not conflict with the provisions of an adopted habitat conservation plan; natural community conservation plan; or other approved local, regional, or state habitat plan, as none apply to the project area. No impacts would occur as a result of the proposed project. This issue will not be further analyzed in the EIR.

#### References

CDFW (California Department of Fish and Wildlife). 2017. "California Regional Conservation Plans" [map]. July 2017. Accessed July 7, 2017. https://www.wildlife.ca.gov/Conservation/Planning/NCCP.

#### 3.11 Mineral Resources

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				

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

No Impact. Within the community of Sylmar, the project alignment extends through areas mapped by the Division of Mines and Geology as Mineral Resource Zone (MRZ) 3 for aggregate resources. Mineral Resource Zone 3 is defined as "areas containing mineral deposits the significance of which cannot be evaluated from available data" (Division of Mines and Geology 1979). North of Sylmar, within the City of Santa Clarita and unincorporated areas, the project alignment extends through areas designated primarily as MRZ 3. However, small portions of the alignment also extend through

areas designated as MRZ 1 and MRZ 2. MRZ 1 is defined as "areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence." MRZ 2 is defined as "areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists" (Division of Mines and Geology 1979, 1983). As such, the project alignment extends through areas where mineral deposits are present or may be present. However, the project is located within an existing transmission corridor that has been used for electricity transmission purposes for nearly 100 years and within existing electrical switching stations. The proposed project involves replacing an existing 115 kV line with a new 230 kV line within the existing corridor, upgrading equipment at an existing electrical switching station, and switching station tie-ins. The project does not involve acquisition of additional right-of-way. As such, the project would not involve any land use changes that would affect availability of mineral resources. As such, no impact would occur, and this issue will not be further examined in the EIR.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

**No Impact.** See the discussion under Section 3.11(a). As described above, the project alignment extends through areas that may contain mineral resources. However, the project would occur within an existing transmission corridor and within existing electrical switching stations. As such, the project would not involve any land use changes that would affect availability of mineral resources. No impact would occur, and this issue will not be further examined in the EIR.

#### References

Division of Mines and Geology. 1979. "Mineral Land Classification Map – Aggregate Resources Only" [map]. San Fernando Quadrangle. May 25, 1979. Accessed September 1, 2017. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc.

Division of Mines and Geology. 1983. "Mineral Land Classification and Index to Detailed Zone and Sector Maps for the Saugus – Newhall and Palmdale Production–Consumption Regions" [map]. Accessed September 1, 2017. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc.

#### 3.12 Noise

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

a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**Potentially Significant Impact.** The project alignment is adjacent to several residential neighborhoods and recreational areas and also passes within one-quarter mile of several schools. As such, proposed project construction and operation would occur in the vicinity of a variety of noise-sensitive receptors. (Noise-sensitive receptors are typically land uses such as residences, schools, hospitals, religious facilities, theaters, concert halls, libraries, and parks). The proposed project (particularly construction activities) may have the potential to generate noise in excess of standards that have been established by the local jurisdictions through which the alignment passes (namely,

County of Los Angeles, City of Santa Clarita, and City of Los Angeles). As part of the EIR, a detailed noise study will be conducted that will describe applicable noise standards and characterize the noise that is expected to be generated by the project during construction and operation. The noise analysis will then determine whether the project has the potential to exceed applicable standards and will assess whether a potentially significant impact could result.

# b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Potentially Significant Impact. Temporary sources of groundborne vibration would be present during construction of the project. Operation of conventional heavy construction equipment such as drill rigs, bulldozers, and loaded haul trucks are potential sources of construction vibration. Typical peak particle velocity (PPV) levels for drill rigs and bulldozers measured at 25 feet from the source are approximately 0.085 inches per second. Typical levels from loaded haul trucks are 0.076 inches per second at 25 feet (FTA 2006). These vibration levels are below the Federal Transit Administration's threshold of potential damage for normal structures (0.20 peak particle velocity in inches per second). As such, the vibration produced during construction of the project would not normally be high enough to cause structural damage to nearby buildings and would not be considered excessive. Groundborne vibration and groundborne noise associated with construction would occur almost exclusively during daytime hours and would be of short duration at any one point along the project alignment. Further, project construction would not involve blasting, which is a significant source of groundborne vibration. However, project construction may require the use of pile drivers in certain areas along the alignment due to rough terrain, and upgrades at the Sylmar Switching Station may also involve pile drivers to establish foundations for new electrical equipment. Pile drivers can create a significant source of groundborne vibration; as such, construction-related vibration effects would be evaluated in the EIR. The noise study that would be conducted as part of the EIR would include an analysis of construction vibration and will determine whether the proposed use of pile drivers would create excessive groundborne vibration. During operation, the operational and maintenance activities for the project would not be substantially different from those that currently occur in the project area. Thus, no operational impacts related to vibration or groundborne noise would occur as a result of the project. For these reasons, operational impacts related to vibration and groundborne noise would be less than significant, and operational vibration will not be further analyzed in the EIR.

c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. See the discussion under Section 3.12(a). As stated in that section, the project alignment is adjacent to several residential neighborhoods and recreational areas and also passes within one-quarter mile of several schools. As such, the project would occur within the vicinity of a variety of noise-sensitive receptors. In the event that the project resulted in a substantial permanent increase in ambient noise levels in the project vicinity, significant effects may occur. As part of the EIR, a detailed study will be conducted that will characterize permanent noise that may be associated with the project, if any. The noise analysis will then determine whether the project has the potential to cause a substantial permanent increase in ambient noise levels in the project vicinity and will assess whether a potentially significant impact could result.

d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. See the discussion under Section 3.12(a). As stated in that section, the project alignment is adjacent to several residential neighborhoods and recreational areas and also passes within one-quarter mile of several schools. As such, the project would occur within the vicinity of a variety of noise-sensitive receptors. The proposed project (particularly construction activities) may have the potential to result in temporary, intermittent noise levels that are above the existing ambient noise levels in the project vicinity. As part of the EIR, a detailed study will be conducted that will characterize noise that would be caused by project construction activities. The noise analysis will then determine whether the temporary and periodic increases in noise that would be associated with project construction are considered significant.

e) Would the project be 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?

**No Impact.** As described in Section 3.8(e), the project area is not located within a 2-mile radius of any public airport or public use airport, and no airport land use plans apply to the project alignment. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with a nearby airport. No impact would occur, and this issue will not be further analyzed in the EIR.

f) Would the project be within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

**No Impact.** As described in Section 3.8(f), the project area is not located within the vicinity of a private airstrip. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with a nearby airport. No impact would occur, and this issue will not be further analyzed in the EIR.

#### References

FTA (Federal Transit Administration). 2006. Transit Noise and Vibration Impact Assessment. FTA-VA-90-1003-06. May 2006.

### 3.13 Population and Housing

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

a) Would the project 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)?

**No Impact.** The proposed project would replace an existing 115 kV transmission line with a new 230 kV transmission line within the same transmission corridor, would involve equipment upgrades within an existing electrical switching station, and would involve tie-ins of the new line at two existing switching stations. The proposed project would not include construction or operation of any new residential or commercial land uses and, therefore, would not result in a direct population

increase from construction of new homes or businesses. During the proposed construction activities, construction personnel would be required. The need for these workers would be accommodated within the existing and future labor market in the City of Los Angeles, City of Santa Clarita, and the nearby Los Angeles metropolitan area. When the new transmission line is operational, the proposed project would be unmanned, requiring only periodic maintenance, and would therefore not require permanent employees for operation. As such, implementation of the proposed project would not result in a direct increase in the permanent population of the area due to increases in employment opportunities.

The proposed project would involve replacement of an existing transmission line within an existing transmission corridor, equipment upgrades within an existing electrical switching station, and switching station tie-ins. The project would not extend electrical service to areas that are not currently served. Rather, the project would replace and upgrade an existing line that has been in place since the early 1900s. While the portion proposed for replacement would increase in voltage relative to existing conditions, the increased transfer capacity is required to accommodate the increasing renewable power sources that are being developed to the north of Haskell Canyon Switching Station. Although the system upgrades included in the proposed project would accommodate increased load growth in the service area, which could accommodate additional development and population in the area served, growth in the study area is planned and regulated by applicable local planning and zoning ordinances. The proposed project would result in no change in zoning or land use in the project area. Rather, the project would allow for additional renewable energy supplies to be delivered to the Los Angeles basin. The proposed project would not induce population growth beyond that which is already anticipated and allowable under existing, adopted plans and land use regulations. Accordingly, the proposed project would not indirectly induce population growth and impacts would be less than significant. This issue will not be further analyzed in the EIR.

# b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

**No Impact.** The proposed project would be constructed entirely within the existing transmission corridor and within the existing footprints of LADWP substation facilities and would result in no displacement of existing housing in the project area. No dwelling units would be demolished or otherwise made unusable as a result of the proposed project. Therefore, the proposed project would result in no impact associated with displacement of existing housing. This issue will not be further analyzed in the EIR.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

**No Impact.** As discussed above, the proposed project would result in no displacement of existing dwelling units. The proposed project would be constructed entirely within an existing transmission corridor and existing substation facilities and includes no components that would displace housing or people from any area along the alignment. The proposed project would have no impact associated with the displacement of people or the construction of replacement housing, and this issue will not be further analyzed in the EIR.

#### References

None.

#### 3.14 Public Services

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

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

**No Impact.** The need for new or altered fire facilities is typically associated with an increase in population. As described under Section 3.13(a), the proposed project would not alter population in the project area. As such, the proposed project would not substantially alter service ratios, response times, or other performance objectives to the extent that new or expanded fire protection facilities,

equipment, or staff would be required. No impacts would occur, and this issue will not be further analyzed in the EIR.

#### Police Protection

**No Impact.** The need for new or altered police facilities is typically associated with an increase in population. As described under Section 3.13(a), the proposed project would not alter population in the project area. As such, the proposed project would not substantially alter service ratios, response times, or other performance objectives to the extent that new or expanded police protection facilities, equipment, or staff would be required. No impacts would occur, and this issue will not be further analyzed in the EIR.

#### **Schools**

**No Impact.** The need for new or altered schools is typically associated with an increase in population. As described under Section 3.13(a), the proposed project would not alter population in the project area. As such, the proposed project would not substantially alter the ability of existing schools to accommodate students to the extent that new or expanded school facilities, materials, or staff would be required. No impacts would occur, and this issue will not be further analyzed in the EIR.

#### **Parks**

**No Impact.** The need for new or altered parks is typically associated with an increase in population. As described under Section 3.13(a), the proposed project would not alter population in the project area. As such, the proposed project would not substantially alter the ability of parks to serve the region to the extent that new or expanded parks would be required. No impacts would occur, and this issue will not be further analyzed in the EIR.

#### Other Public Facilities

**No Impact.** Other public facilities include libraries and government administrative services. The need for new or altered libraries or administrative services is typically associated with an increase in population. As described under Section 3.13(a), the proposed project would not result in the need for libraries or other government administrative services to the extent that new or expanded facilities would be required. No impacts would occur, and this issue will not be further analyzed in the EIR.

#### References

None.

### 3.15 Recreation

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

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?

Less Than Significant Impact. The proposed project is located within an existing transmission corridor and within existing substation facilities. Recreational resources located in the vicinity of the alignment include Copper Hill Park (approximately 350 feet east of a proposed transmission structure site), Caraway Park (approximately 900 feet west of a proposed transmission structure site), and Bouquet Canyon Park (approximately 1,000 feet east of a proposed transmission structure site); however none of these facilities would be affected by the project. In the southern portion of the alignment, the corridor passes through the Elsmere Canyon Open Space Preserve and Whitney Canyon Park. These open space preserves are managed by the Santa Monica Mountains Conservancy and the Mountains Recreation Conservation Authority (MRCA). Public hiking trails are located along a portion of the transmission line corridor. During construction in this segment, temporary recreational impacts would occur if trail closures or detours are required for laydown or stringing activities. For example, a proposed stringing pad may occupy a small segment of an existing trail within the Elsmere Canyon Open Space Preserve. To ensure public safety, a portion of the trail would potentially be closed during stringing activities at this site. Warning signs would be placed on the trail, and construction workers may be stationed near the trail to ensure that the public does not enter the temporarily blocked areas. Impacts to recreational users would be brief (less than one week) and the trail would be returned to its existing condition upon completion of stringing activities. The project would not otherwise overlap with an existing park or recreational facility such that deterioration of facilities would occur or be accelerated as a result of the proposed project. As

discussed in Section 3.13(a), the proposed project would not result in population increases resulting in an increased need for park facilities. Effects to recreational facilities would be temporary and minor. For these reasons, impacts would be less than significant, and this issue will not be further addressed in the EIR.

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

**No Impact.** The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse impact on the environment. As such, no impact would occur.

#### References

None.

## 3.16 Transportation and Traffic

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of 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?	$\boxtimes$			
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?			$\boxtimes$	
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			$\boxtimes$	

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	Result in inadequate emergency access?			$\boxtimes$	
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			$\boxtimes$	

a) Would the project 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?

**Potentially Significant Impact.** Measures of effectiveness for the performance of the circulation system in the project area are established by the local jurisdictions through which the project alignment extends (i.e., the County of Los Angeles, the City of Santa Clarita, and the City of Los Angeles). State and federal regulations may also apply to the proposed project, since the project alignment traverses several state and federal transportation facilities (I-5, I-210, and SR 14).

#### **Proposed Project Construction**

Construction of the project is expected to take approximately 2 years, beginning in 2020 and ending in 2022. The number of construction workers along the project alignment would vary based on the construction phase and crews working simultaneously on multiple segments of the alignment. Each crew would have approximately 12 workers, equating to a maximum total of 84 workers per day throughout construction. Construction working hours would vary from 8 hours to 15 hours or more, if necessary. Construction would generally occur on weekdays during the daytime; however, weekend construction may also occur during some of the phases. Nighttime construction would be required for major roadway, freeway, and railroad crossings. Construction-related vehicle trips would consist of worker vehicle trips, truck trips, and trips required to transport construction equipment to and from work areas. The EIR will include a construction traffic analysis to determine whether construction-related trips could exceed standards or policies established by the City of Santa Clarita, the City of Los Angeles, and/or the County of Los Angeles for the effectiveness of their respective circulation systems.

Portions of the project would be constructed over roadways. Guard structures may be installed to minimize roadway interferences and allow safe roadway operations while crews are removing and replacing electrical conductor. Temporary lane and road closures could also be required in some locations to ensure public safety. The EIR will include a discussion of these roadway and/or lane closures and will identify any potential permitting requirements associated with construction work that is planned to occur near or over roadways.

#### **Proposed Project Operation**

Operation of the project would require regular inspection and maintenance activities of overhead facilities. As with the existing 115 kV line, the 230 kV transmission line would be inspected several times annually by both ground and air patrols. Maintenance would be performed as needed and would include emergency maintenance activities, vegetation management, access road maintenance, and safety practices.

Since the proposed 230 kV line would be located within the same corridor as the existing 115 kV lines, the proposed project would not be changing land uses or adding new land uses that would generate additional traffic. Vehicle trips required for operation and maintenance of the proposed project are anticipated to be similar to those required for operations and maintenance of the existing 115 kV line. As such, operation of the project is not anticipated to result in an increase in vehicle trips. Furthermore, as with existing conditions, operational and maintenance activities would occur periodically and intermittently throughout the lifetime of the project. As such, operation and maintenance of the proposed project would not cause an increase in daily vehicle trips in the project area. Therefore, operation of the project would not change traffic conditions in the project area, and the proposed project would not create any conflicts with applicable plans, ordinances, or policies establishing measures of effectiveness for the performance of the circulation system in the project area. Operational traffic impacts will not be further analyzed in the EIR.

b) Would the project 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?

Potentially Significant Impact. The applicable congestion management program (CMP) for the project area and the surrounding metropolitan area is the Los Angeles County Metropolitan Transportation Authority's 2010 CMP. This program monitors and sets performance indicators for a transportation network of numerous highway segments, freeways, and key roadway intersections throughout Los Angeles County (called the CMP Highway and Roadway System). Along the project alignment, I-5, I-210, and SR-14 are part of the CMP Highway and Roadway System. During the

construction of the project, there could be impacts to the CMP highway and roadway system due to the traffic generated by trucks and construction workers. The EIR will include a construction traffic analysis to determine whether construction-related trips could exceed thresholds established in the CMP.

Since the operation and maintenance of the proposed project would be similar to that of the existing project, it would not exceed CMP thresholds. Therefore, conflicts with congestion management programs would not occur during operation. No impact would occur, and operational impacts related to conflicts with the CMP will not be further analyzed in the EIR.

# c) Would the project 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?

Less Than Significant Impact. Project construction would employ helicopters for installation and removal of transmission lines and structures. (Generally, helicopters would be employed in particularly steep and/or environmentally sensitive areas.) As such, air traffic would temporarily and intermittently increase in the project area during construction. However, helicopter flight paths would generally follow the existing transmission corridor alignment. As such, helicopters used for construction along the alignment are not expected to substantially interfere with existing air traffic in the project area, since their paths would be confined to the project alignment, which consists of an existing transmission corridor. LADWP would be required to comply with all applicable Federal Aviation Administration (FAA) regulations for helicopter construction activities. For example, the FAA requires a Helicopter Lift Plan for operating a helicopter within 1,500 feet of residential dwellings. Additionally, LADWP's helicopter pilots would coordinate helicopter air operations with local airports before and during project construction. Compliance with FAA regulations and coordination with nearby airports would minimize the potential for safety risks to occur as a result of helicopter use during construction.

Substantial growth in residential populations can lead to an increase in air traffic; however, the project would not increase the population of the area (see Section 3.13(a) for details). Air safety risks can result when an obstruction to air traffic is introduced by a project. However, the proposed project would replace an existing transmission line within an existing transmission corridor that currently supports three transmission lines of varying heights. The new transmission structures would range in height from 80 to 180 feet. LADWP would coordinate with FAA to determine whether markings would be required to warn aircraft of the transmission lines and/or structures. As described in Section 3.8(e), the project alignment is not within an airport land use plan area. Because the project would occur within an existing transmission corridor that already supports transmission towers, and because LADWP would implement any marking requirements that are identified through coordination with FAA, the project is not expected to cause a

substantial safety risk related to air traffic. For these reasons, impacts would be less than significant, and this issue will not be further analyzed in the EIR.

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

Less Than Significant Impact. Most of the roads have been previously used for maintenance of existing lines. The project would identify new access roads to be used, and existing access roads would be improved or repaired as necessary. Construction of the project would include truck deliveries of materials, components, and supplies to the site. For oversize loads, permits specifying route and time limits, as well as any necessary traffic control measures, would be required from Caltrans or applicable jurisdictions. No incompatible uses on public roads would occur from either construction or operation of the project. Therefore, the impact due to incompatible uses on roadways or hazardous roadway design features would be less than significant. This issue will not be further discussed in the EIR.

e) Would the project result in inadequate emergency access?

Less Than Significant Impact. The project would not hinder emergency access along the project alignment. Emergency access routes would be maintained along the project alignment during construction as well as operation of the project. Truck routes and access routes would be established along the project alignment to access various construction pads via paved, dirt, or gravel roads. Heavy-duty helicopters would also be used for installation and removal of transmission structures, where feasible. Helicopter use would minimize potential effects to roadways in the project area. Any road closures required would be consistent with applicable regulations, and would be coordinated with Caltrans, the local jurisdiction or the property owner, and access for emergency vehicles would be ensured. Therefore, the potential impacts related to emergency access would be less than significant. This issue will not be further evaluated in the EIR.

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant Impact. The project would not conflict with public transit, bicycle, or pedestrian facilities. Construction activities would take place primarily within LADWP right-of-way and would not remove, alter, or otherwise affect nearby alternative transportation facilities, such as bus stops, bicycle lanes, or sidewalks. Similarly, operational activities would take place along the project alignment and would not preclude the use of nearby non-vehicular transportation facilities. The project would not conflict with adopted policies, plans, or programs adopted for transit, bicycle,

or pedestrian facilities. Impacts would be less than significant, and this issue will not be further evaluated in the EIR.

#### References

None.

#### 3.17 Tribal Cultural Resources

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significar section 21074 as either a site, feature, place, cultura scope of the landscape, sacred place, or object with	al landscape that i	s geographically def	ined in terms of th	ne size and
	i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
	ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

**Potentially Significant Impact.** The project would involve ground-disturbing activities that would have the potential to disturb tribal cultural resources, in the event that any are present within project work areas. Outreach to local tribes in the vicinity of the proposed project is

currently being undertaken by LADWP. If any issues related to tribal cultural resources are identified as a result of LADWP's ongoing outreach activities, this issue will be further discussed in the EIR. If no tribal cultural resources are identified, no further analysis will be required. Records from the tribal outreach process are available at LADWP's office (Environmental Affairs Division).

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? (In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)

Potentially Significant Impact. See the discussion in Section 3.17(a)(i).

#### References

None.

## 3.18 Utilities and Service Systems

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
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 with Mitigation Incorporated	Less Than Significant Impact	No Impact
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			$\boxtimes$	
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				

# a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The proposed project would involve replacing an existing 115 kV transmission line with a 230 kV transmission line within the same transmission corridor. Construction activities required for the project would include removing existing transmission towers and conductors, installing new transmission structures and conductors, establishing work pads along the project alignment for staging these activities, establishing or rehabilitating access roads, upgrading electrical equipment at an existing switching station, and switching station tie-ins. A discussion of treatment requirements for construction-related discharges is provided in Section 3.9(a). As explained in Section 3.13(a), the proposed project would not result in population increases that could generate additional wastewater with the potential to cause existing facilities to exceed wastewater treatment standards. Because the project would not involve sanitary wastewater discharges, wastewater treatment requirements of the RWQCB are not applicable. For these reasons, no impact would occur, and this issue will not be further analyzed in the EIR.

# b) Would the project 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?

No Impact. The proposed project would involve replacing an existing 115 kV transmission line with a 230 kV transmission line, within the same transmission corridor. Construction activities required for the project would include removing existing transmission towers and conductors, installing new transmission structures and conductors, establishing or rehabilitating access roads, upgrading electrical equipment at an existing switching station, and switching station tie-ins. These activities would not increase the amount of water used or wastewater generated at the work areas. As described in Section 3.13(a), the proposed project would not alter population in the project area. As such, the project would not generate a permanent change in water demand or wastewater generation

that could result in a need for new or expanded facilities. Any water associated with the proposed project would consist of water used for dust control during construction and maintenance activities. Water for dust control may be obtained from local municipal sources, trucked in by a water supply vendor, or derived from local wells. Water of suitable quality for the intended use would be obtained from the nearest feasible and available source, meaning that the project's water needs would not require additional treatment capacity or new treatment facilities. For these reasons, no impact would occur, and this issue will not be further analyzed in the EIR.

# c) Would the project 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?

No Impact. The proposed project would involve replacing an existing 115 kV transmission line with a 230 kV transmission line, within the same transmission corridor. Construction activities required for the project would include removing existing transmission towers and conductors, installing new transmission structures and conductors, establishing construction pads along the project alignment for staging these activities, establishing or rehabilitating access roads, upgrading electrical equipment at an existing switching station, and switching station tie-ins. As described in Section 3.9(e), portions of the project alignment are located within open space areas where municipal or otherwise developed stormwater collection systems are not established. The stormwater conveyance systems that are present in these undeveloped areas typically consist of open stormwater ditches and waterways along the alignment. Where the project crosses more urbanized areas, the commercial and/or residential areas adjacent to the transmission corridor are typically supported by developed stormwater collection systems. New storm drain facilities or the expansion of existing facilities could be required if the project were to increase permeable surfaces in the project area such that stormwater flows exceed the capacity of the current stormwater drainage systems. However, any changes to existing drainage patterns attributable to the project would be minor and localized and would be spread out along the linear footprint of the project alignment. Furthermore, construction BMPs would be implemented in accordance with the required SWPPP, which would minimize stormwater runoff volumes from construction work areas. After construction, disturbed areas would be restored to pre-construction conditions to the extent practicable, which would minimize any permanent changes to existing drainage patterns along the project alignment. As such, minor changes in drainage patterns during construction would not increase stormwater runoff to the extent that new or expanded stormwater drainage facilities would be required.

After construction is complete, stormwater runoff would occur similar to existing conditions, as the proposed transmission line would be located aboveground and along the same transmission corridor as the line that is proposed for removal. Although the location of replaced poles would slightly

change, the footprints of the proposed transmission structures are insufficient to cause any appreciable or measurable change in stormwater drainage or flow patterns. The upgrades and tie-ins at the Haskell Canyon Switching Station and the Sylmar Switching Station would occur within the existing boundaries of the switching stations, which are already paved and developed with existing electrical equipment. As such, the project would not cause substantial changes in the stormwater drainage or flow patterns at the switching stations. Operation and maintenance activities would occur consistent with current LADWP operation and maintenance activities in the project area. As such, operation and maintenance of the project is not expected to increase stormwater volumes in the project area. Accordingly, the project would not trigger the need for construction or expansion of stormwater drainage facilities. Implementation of the proposed project would have no impact with regard to construction or expansion of permanent stormwater drainage facilities. For these reasons, no impact would occur, and this issue will not be further analyzed in the EIR.

# d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. Any water associated with the proposed project would consist of water used for dust control during construction and maintenance activities. Water for dust control may be obtained from local municipal sources, trucked in by a water supply vendor, or derived from local wells. LADWP would not require or seek expanded entitlements to water for temporary construction-related purposes. Rather, LADWP would purchase water for dust control from the nearest feasible and available source of suitable quality. Construction and operational water demands would be minimal, as they would occur temporarily and intermittently. Furthermore, water demands during operation would be similar to existing conditions, since LADWP's operational and maintenance activities in the project area would not substantially change after project implementation. For these reasons, no impact would occur, and this issue will not be further analyzed in the EIR.

# e) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

**No Impact.** As described under Section 3.18(a), the proposed project includes electrical utility upgrades and would result in no permanent increase in population that would generate additional wastewater. As such, the project would not cause or exacerbate a wastewater treatment capacity issue. For this reason, no impact would occur, and this issue will not be further analyzed in the EIR.

# f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. Construction of the proposed project would generate solid waste, particularly in association with removal of the existing 115 kV line. Removal of the line would require recycling or disposal of removed transmission tower segments, concrete from removed transmission tower footings, and conductors. State regulations (i.e., Integrated Waste Management Act) require diversion (i.e., recycling/reuse) of at least 50% of construction and demolition debris. As such, LADWP would require its employees and/or contractors to comply with these regulations or to contract with a local franchise waste hauler. The remaining construction material that is not recycled or reused would be disposed of at an approved solid waste facility with available capacity. Any construction debris that are considered hazardous wastes would be recycled or disposed of at a landfill that is permitted to handle hazardous wastes. Compliance with the state's construction and demolition debris requirement would substantially reduce solid waste associated with project construction. During operation, the proposed project would intermittently generate nominal quantities of solid waste associated with normal maintenance activities and would result in little to no change in the existing conditions. For these reasons, impacts during construction and operation would be less than significant, and this issue will not be analyzed in the EIR.

## g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

**No Impact.** See the discussion under Section 3.18(f). All solid waste generated by the proposed project during and following construction would be handled in accordance with federal, state, and local statutes and regulations and hauled to an approved solid waste facility with permitted capacity to accept the waste materials. Implementation of the proposed project would have no impact regarding solid waste statutes and regulations. As such, this issue will not be further analyzed in the EIR.

#### References

None.

## 3.19 Mandatory Findings of Significance

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	$\boxtimes$			
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	$\boxtimes$			

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?

**Potentially Significant Impact.** As described in Section 3.4 of this Initial Study, further biological resource investigations will be conducted as part of the EIR to determine any potential impacts that the proposed project would have on wildlife or fish habitats, plant and animal communities, and rare or endangered plants and animals. As such, these issues will be further analyzed in the EIR.

As described in Section 3.5 of this Initial Study, the proposed project would traverse areas that may have historical and archaeological resources, some of which could serve as examples of the major periods of California prehistory or history. Further cultural resource investigations will be conducted as part of the EIR to determine any potential impacts that the proposed project would have on resources that may be considered important examples of major periods in history or prehistory. As such, these issues will be further analyzed in the EIR.

- 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)?
  - Potentially Significant Impact. The proposed project would have the potential to result in significant cumulative impacts if the independent impacts of the project were to combine with the impacts of related projects in the area such that the combined effects are considered significant. The project alignment is located in an existing transmission corridor that extends through several jurisdictions and a variety of land uses. It is currently unknown whether there are any nearby or related projects whose effects could combine with those of the proposed project to create a significant impact. The EIR will identify nearby and/or related projects that could lead to a cumulatively considerable impact (if any) and will analyze whether the proposed project would considerably contribute to any such impacts.
- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**Potentially Significant Impact.** As discussed in this Initial Study, the project could result in potentially significant impacts in the categories of aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, noise, transportation/traffic, and tribal cultural resources. Some of these impacts could have potentially adverse effects on human beings. As such, further analysis of these impacts will be provided in the EIR.

#### References

None.

## 4 REPORT PREPARERS

#### **Lead Agency**

Los Angeles Department of Water and Power Environmental Affairs 111 North Hope Street, Room 1044 Los Angeles, California 90012

Charles C. Holloway, Manager of Environmental Planning and Assessment Eduardo Cuevas, Project Manager

#### **Technical Assistance Provided By**

Dudek 38 North Marengo Avenue Pasadena, California 91101

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Sabita Tewani, Traffic Analyst
Tyler Friesen, GIS
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Devin Brookhart, Publications Specialist Lead

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Regional Map

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Southern portion of the alignment, where the alignment crosses open space areas in unincorporated Los Angeles County.



Northern portion of the alignment, where the alignment crosses a single-family residential neighborhood in the City of Santa Clarita, north of Bouquet Canyon Road.

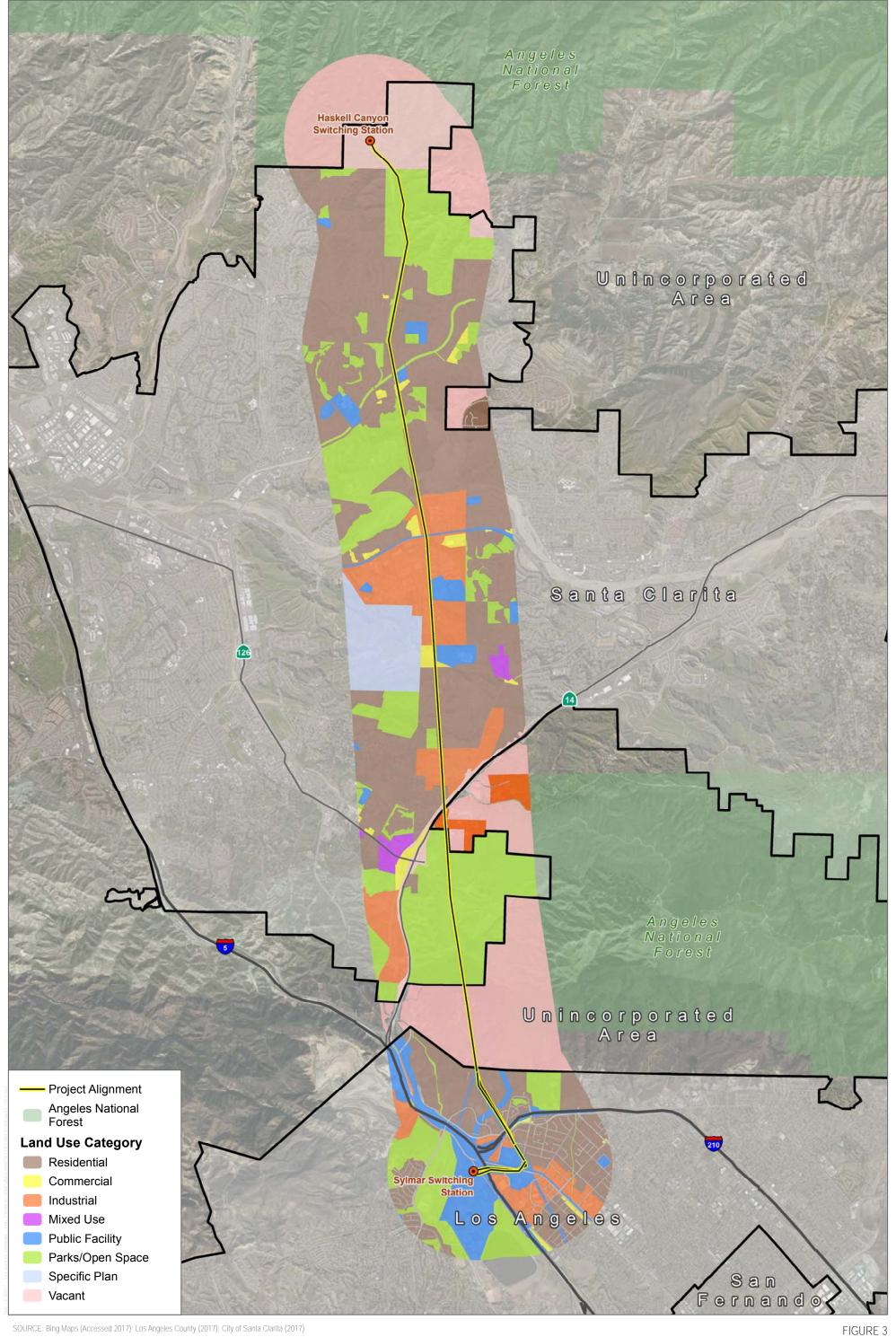


Center portion of the alignment, where the alignment crosses an industrial area in the City of Santa Clarita, just south of the Santa Clara River.



Northern portion of the alignment, where the alignment extends from open space to a single-family residential neighborhood in unincorporated Los Angeles County, north of the City of Santa Clarita.

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SOURCE: Bing Maps (Accessed 2017); Los Angeles County (2017); City of Santa Clarita (2017)

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## APPENDIX A2 SCOPING REPORT

## SCOPING REPORT

#### 1.1 Introduction

The Los Angeles Department of Water and Power (LADWP) issued a Notice of Preparation (NOP) to prepare an Environmental Impact Report (EIR) for the proposed Power Plant 1 (PP1) and Power Plant 2 (PP2) Transmission Line Conversion Project (proposed project). Issuance of the NOP began the scoping process for proposed project. Scoping is the agency and public participation process used to assist lead agencies in determining the potential environmental issues and alternatives to be analyzed in an EIR for a project. This Scoping Report describes the scoping process undertaken by LADWP and provides as attachments the NOP, the NOP distribution list for potentially interested agencies and organizations, the NOP distribution list for properties within the vicinity of the project, newspaper notices, State Clearinghouse correspondence, the sign-in sheet from the scoping meeting, and written comments received during the scoping period.

### 1.2 CEQA Scoping Process

The formal CEQA scoping process provides an opportunity for governmental agencies, organizations, and the public to provide comments on the potential environmental issues that may be associated with a project and suggestions for the scope of the environmental analysis in an EIR. CEQA Guidelines Section 15082 requires lead agencies to send an NOP to the Office of Planning and Research and to each responsible and trustee agency stating that an environmental impact report will be prepared. The issuance of the NOP begins the scoping period, during which responses to the NOP may be sent to the lead agency providing specific detail about the scope and content of the EIR. A lead agency may also hold a scoping meeting to collect both verbal and written comments on the scope of the EIR.

## 1.3 Notice of Preparation

In accordance with CEQA Guidelines Section 15082, an NOP was prepared by LADWP and distributed to 48 agencies and organizations, along with a copy of the Initial Study on compact disc. The NOP was also filed with the State Clearinghouse. Additionally, LADWP sent the NOP to addresses within a 500-foot buffer of the project alignment and published the NOP in local newspapers (Santa Clarita Valley Signal and Los Angeles Daily News). Hardcopies of the Initial Study were available for review at two local libraries (Old Town Newhall Library and Sylmar Branch Library) and at the LADWP Environmental Affairs office. An electronic copy of the Initial Study was made available on LADWP's website. The review period for the NOP began on January 24, 2018, and ended on March 9, 2018. The NOP, the distribution list for agencies and organizations, the distribution list for properties within the vicinity of the project, newspaper publications of the NOP, and the State Clearinghouse NOP letter to state agencies are included as attachments to this scoping report.

#### 1.4 Comment Letters

During the scoping process, 13 comment letters were received from agencies, organizations, and individuals regarding the scope and content of the EIR. These comment letters are included as an attachment to this report.

## 1.5 Scoping Meeting

A scoping meeting for the proposed project was held on February 7, 2018, at 6:00 pm at the City of Santa Clarita Activities Center, located at 20880 Centre Pointe Parkway in Santa Clarita. The purpose of this meeting was to seek input from public agencies and the general public regarding the environmental issues and concerns that may potentially result from the proposed project. One person, who was a planner from the City of Santa Clarita Community Development department, attended the meeting. The sign-in sheet from the meeting is included as an attachment to this report. A summary of the proposed project and the CEQA process was presented at the meeting.

THIS NOTICE WAS POSTED

os Angeles

Department of Water & Power

January 23 2018

February 22 2018

REGISTRAR - RECORDER/COUNTY CLERK

Commission MEL LEVINE, President WILLIAM W. FUNDERBURK JR., Vice President JILL BANKS BARAD CHRISTINA E, NOONAN AURA VASOUEZ BARBARA E. MOSCHOS, Secretary



Electronically signed by CARINA CHE

#### NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Date:

January 23, 2018

To:

Affected Agencies, Organizations, and Interested Persons

Subject:

Notice of Preparation of a Draft Environmental Impact Report for the

Power Plant 1 and Power Plant 2 Transmission Line Conversion Project

This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that the Los Angeles Department of Water and Power (LADWP), as the Lead Agency, will prepare an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed Power Plant 1 (PP1) and Power Plant 2 (PP2) Transmission Line Conversion Project (proposed project).

LADWP is requesting input from interested individuals, organizations, and agencies regarding the scope and content of the environmental analysis to be included in the EIR for the proposed project. In accordance with CEQA, LADWP requests that agencies review the project description and provide comments on environmental issues related to the statutory responsibilities of the agency. A description of the project and preliminary determination of the environmental resource topics to be addressed in the EIR are included in the Initial Study for the proposed project.

#### PROJECT DESCRIPTION

The proposed project would involve replacing a 12-mile segment of an existing 115 kilovolt (kV) double circuit transmission line with a new 230 kV double circuit transmission line (hereafter referred to as the "115 kV line" and the "230 kV line," respectively). This process would involve demolishing the existing 115 kV line and constructing an approximately 12-mile segment of 230 kV lines and associated transmission structures generally adjacent to the existing 115 kV line. The 115 kV line and its associated transmission towers would be removed after the 115 kV line is terminated at Haskell Canyon Switching Station from the north. The existing line that would be replaced is located within an alignment that extends from Haskell Canyon Switching Station in the north to Olive Switching Station in the south (within the City of Los Angeles). The proposed new line would also originate at Haskell Canyon Switching Station but would instead terminate at Sylmar Switching Station. The project alignment is approximately 12 miles long and consists of LADWP-owned land and private properties within an LADWP right-of-way. The purpose of the proposed project is to increase the transmission capacity between Haskell Canyon Switching Station and Sylmar Switching Station so that additional renewable energy supplies can be transmitted to the Los Angeles basin.

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#### PROJECT LOCATION

The project alignment is located within an established transmission corridor that has been used for electricity transmission since the early 1900s. The corridor is an LADWP right-of-way, consisting of LADWP-owned land and private property that is 250 feet in width and contains three existing transmission lines: a 500 kV DC line, the 115 kV line that is proposed for replacement as part of this project, and a 4-circuit 230 kV line.

The project alignment extends from Haskell Canyon Switching Station in the north to Sylmar Switching Station in the south. The southern extent of the alignment is located within the Granada Hills—Knollwood Community Plan area within the City of Los Angeles, immediately west of Interstate 5 (I-5), near the interchange of I-5 and I-210. The alignment then angles north before exiting the City of Los Angeles and extending through an undeveloped mountainous area in the San Gabriel Mountains, north of Sylmar and within an unincorporated area of Los Angeles County. The portion of the alignment that crosses the San Gabriel Mountains extends between State Route 14 (SR 14) to the west and the Angeles National Forest boundary to the east. Next, the alignment descends into the Santa Clara River basin in the City of Santa Clarita. The alignment then extends in a north—south orientation across the City of Santa Clarita, terminating at the Haskell Canyon Switching Station, located just south of the Angeles National Forest.

#### POTENTIAL ENVIRONMENTAL EFFECTS

As determined by the analysis in the Initial Study, the potential environmental effects of the proposed project to be addressed in the Draft EIR will include, but may not be limited to the following:

- Aesthetics
- Air Quality
- Biological Resources
- Geology and Soils

- Greenhouse Gas Emissions
- Noise
- Transportation and Traffic
- Tribal Cultural Resources

#### **PUBLIC SCOPING MEETING**

LADWP will hold a scoping meeting to share information regarding the proposed project and environmental review process, and to receive written comments regarding the scope and content of the environmental analysis to be addressed in the EIR. LADWP encourages all interested individuals and organizations to attend this meeting. The date, time, and location of the public scoping meeting are provided below:

Wednesday, February 7, 2018
6:00 PM
City of Santa Clarita – The Centre – Sycamore Rooms A/B
20880 Centre Pointe Parkway
Santa Clarita, CA 91351

2018 018785 FILED Jan 23 2018

Dean C. Logan, Registrar - Recorder/County Clerk

Electronically signed by CARINA CHEN

Page 3 January 23, 2018

#### PUBLIC REVIEW AND COMMENTS

The public comment period for this NOP and review of the Initial Study will commence on January 24, 2018 and will conclude on March 9, 2018.

Please ensure that comments are postmarked or emailed on or before March 9, 2018.

The Initial Study is available for review at the locations below, or may be accessed electronically and/or downloaded at the following website: www.LADWP.com/envnotices.

LADWP Environmental Affairs 111 North Hope Street, Room 1044 Los Angeles, CA 90012 Old Town Newhall Library 24500 Main Street Santa Clarita, CA 91321 Sylmar Branch Library 14561 Polk Street Sylmar, CA 91342

Please mail or email your comments, and direct any questions to:

Mr. Eduardo Cuevas Los Angeles Department of Water and Power Environmental Planning and Assessment 111 North Hope Street, Room 1044 Los Angeles, CA 90012 Phone: (213) 367-6376

Email: eduardo.cuevas@ladwp.com

Signature: Charles & Holleng

Charles C. Holloway, Manager of Environmental Planning and Assessment, LADWP



Power Plant 1 and Power Plant 2 Transmission Line Conversation Project: IS/NOP Distribution List The following agencies received a copy of the Notice of Preparation and a copy of the Intial Study on compact disc.

ENTITY	FIRST NAME	LAST NAME	TITLE	COMPANY/ORGANIZATION	ADDRESS	CITY	STATE	ZIP
			Division Chief, Los Angeles					
Federal Agency	Johnathan	Snyder	and Orange Counties	United States Fish and Wildlife Service	2177 Salk Avenue, Suite 250	Carlsbad	CA	92008
- I IA				luca o co	045 William Bl. 1 6 ii 4404			00047
Federal Agency				U.S. Army Corps of Engineers	915 Wilshire Blvd., Suite 1101	Los Angeles	CA	90017
Fodoral Agonay	Dachal	C mai+h	Danuty Farast Suparvisor	Angeles National Forest	701 N. Santa Anita Ava	Arcadia		01006
Federal Agency	Rachel	Smith	Deputy Forest Supervisor	Angeles National Forest, Santa Clara/Mojave Rivers Ranger	701 N. Santa Anita Ave.	Arcadia	CA	91006
Federal Agency	Bob	Blount	District Ranger	District	33708 Crown Valley Road	Acton	CA	93510
Federal Agency	Dennis	Roberts	Regional Administrator	Federal Aviation Administration, Western-Pacific Region		Los Angeles	CA	90009
rederal Agency	Deliliis	Roberts	Regulatory Assistance	rederal Aviation Administration, western-racine Region	F.O. BOX 92007	LOS Aligeles	CA	90009
State Agency			Office	California Department of Toxic Substances Control	P.O. Box 806	Sacramento	CA	95812
State Agency	Suzann	Ikeuchi	Office	California Highway Patrol		Sacramento	CA	95812
state Agency	Juzanni	incuciii		Caltrans District 7 IGR/CEQA Branch	100 South Main Street, MS	Sacramento		33011
State Agency	DiAnna	Watson		Cartains District 7 Tony CEQA Branch		Los Angeles	CA	90012
State Agency	Terri	Pencovic		Department of Transportation Planning	PO Box 942874, MS 32	Sacramento	CA	94274-0001
State Agency State Agency	Frank	Roddy		SWRCB Division of Water Quality	P.O. Box 806	Sacramento	CA	95812
State Agency	Russell	Hansen		SWRCB Storm Water Section		Sacramento	CA	95812
					320 West 4th Street, Suite			
State Agency				Los Angeles Regional Water Quality Control Board (Region 4)	·	Los Angeles	CA	90013
State Agency	Cindy	Halley		California Department of Fish and Wildlife Region 5		San Diego	CA	92123
State Agency	Debbie	Treadway		Native American Heritage Commission		West Sacramento	CA	95691
State Agency	Ron	Parsons		Office of Historic Preservation	P.O. Box 942896	Sacramento	CA	94296
State Agency	Cathi	Slaminski		Air Resources Board, Legal Office/CEQA Unit	P.O. Box 2815	Sacramento	CA	95812
State Agency				Santa Monica Mountains Conservancy, Ramirez Canyon Park	5750 Ramirez Canyon Road	Malibu	CA	90265
Regional	Philip	Fine	Executive Officer	SCAQMD Planning & Rule Development Department	21865 Copley Drive	Diamond Bar	CA	91765
				Southern California Association of Governments, Inter-	818 West 7th Street, 12th			
Regional				Governmental Review	Floor	Los Angeles	CA	90017
					570 West Avenue 26, Suite	_		
Regional	George	Lange	Chair	Mountains Recreation and Conservation Authority	100	Los Angeles	CA	90065
		_				_		
Regional	Zakee	Singleton	Pipeline Planning Assistant	Southern California Gas Company	701 N. Bullis Road	Compton	CA	90221
		_			500 West Temple Street,			
County	Kathryn	Barger	Supervisor	Los Angeles County Board of Supervisors, 5th District	Room 869	Los Angeles	CA	90012
				Los Angeles County Department of Regional Planning, Impact	320 West Temple Street, 13th			
County	Patricia	Hachiya		Analysis Section	•	Los Angeles	CA	90012
		7			23740 Magic Mountain	0		
County	Robert	Lewis	Captain	   Santa Clarita Valley Sherriff Station	<u> </u>	Santa Clarita	CA	91355
			Captain	·				90040
County	Chief Kevin T.	Johnson		Los Angeles County Fire Department	5823 Rickenbacker Road	Commerce	CA	90040
				Los Angeles County Department of Public Works, Land				
County				Development Division	900 S. Fremont Avenue	Alhambra	CA	91803-1331
				Los Angeles County Metropolitan Transportation Authority,	One Gateway Plaza MS 99-18-			1
County				Development Review	1	Los Angeles	CA	90012
·				·				
County	Craco Dobinson	Lludo		County Conitation Districts of Los Angeles County	D.O. Boy 4009	M/hittion		00607 4009
County	Grace Robinson	Hyde		County Sanitation Districts of Los Angeles County		Whittier	CA	90607-4998
City of Los Angeles	Vince	Bertoni	Director of Planning	City of Los Angeles, Department of City Planning	200 North Spring Street	Los Angeles	CA	90012

Power Plant 1 and Power Plant 2 Transmission Line Conversation Project: IS/NOP Distribution List The following agencies received a copy of the Notice of Preparation and a copy of the Intial Study on compact disc.

Cit. 1	E I II	6 1 25		Los Angeles Department of Transportation - Valley	6262 Van Nuys Boulevard,	., .,		01.101
City of Los Angeles	Eddie	Guerrero Jr., P.E.		Development Review		Van Nuys	CA	91401
City of Los Angeles	Michael	Greenwald	President	Granada Hills North Neighborhood Council	,	Granada Hills	CA	91344
			PLUM Committee	Granada Hills North Neighborhood Council		Granada Hills North	CA	91344
City of Los Angeles	Kurt	Cabrera-Miller	President	Sylmar Neighborhood Council	P.O Box 921023	Sylmar	CA	91392
City of Los Angeles	Monica	Rodriguez	Councilwoman	Los Angeles City Council District 7	455	Los Angeles	CA	90012
City of Los Angeles	Mitchell	Englander	Councilman	Los Angeles City Council District 12	405	Los Angeles	CA	90012
			Fire Development Services					
			Unit, Van Nuys Office		6262 Van Nuys Blvd., 2nd			
City of Los Angeles			onic, van rays onice	City of Los Angeles Fire Department	Floor	Van Nuys	CA	91401
City of Santa Clarita			Mayor's Office	Santa Clarita City Hall		Santa Clarita	CA	91355
			Community Development		23920 W. Valencia Blvd. Suite			
City of Santa Clarita	Tom	Cole	Director	City of Santa Clarita Community Development Department	302	Santa Clarita	CA	91355
City of Santa Clarita	Robert	Newman	Director of Public Works	City of Santa Clarita Public Works	25663 W. Avenue Stanford	Santa Clarita	CA	91355
			Director of Recreation,					
			•	City of Santa Clarita Recreation, Community Services, and Open	· · · · · · · · · · · · · · · · · · ·			
City of Santa Clarita	Rick	Gould	Open Space	Space Department	300	Santa Clarita	CA	91355
					23920 Valencia Blvd., Suite			
City of Santa Clarita	Patrick	Leclair	Senior Planner	City of Santa Clarita Planning Division	302	Santa Clarita	CA	91355
Tribe	Rudy	Ortega	Tribal President	Fernandeno Tataviam Band of Mission Indians	1019 Second Street, Suite 1	San Fernando	CA	91340
Tribe	Andrew	Salas	Chairperson	Gabrieleno Band of Mission Indians - Kizh Nation	P.O. Box 393	Covina	CA	91723
Tribe	Anthony	Morales	Chairperson	Gabrieleno/Tongva San Gabriel Band of Mission Indians		San Gabriel	CA	91778
					106 1/2 Judge John Aiso St.,			
Tribe	Sandonne	Goad	Chairperson	Gabrielino/Tongva Nation		Los Angeles	CA	90012
Tribe	Robert	Dorame	Chairperson	Gabrielino Tongva Indians of California Tribal Council		Bellflower	CA	90707
Tribe	Charles	Alvarez	1	Gabrielino-Tongva Tribe		West Hills	CA	91307
Tribe	John	Valenzuela	Chairperson	San Fernando Band of Mission Indians	P.O. Box 221838	Newhall	CA	91322
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UseType	ADDRESS						
Recreational	16325	SILVER OAKS DR		LOS ANGELES	16325 SILVER OAKS DR	CA	91342
Residential	16410	NICKLAUS DR	#141	SYLMAR	16410 NICKLAUS DR #141	CA	91342
Residential	16410	NICKLAUS DR	#142	SYLMAR	16410 NICKLAUS DR #142	CA	91342
Residential	16410	NICKLAUS DR	#143	SYLMAR	16410 NICKLAUS DR #143	CA	91342
Residential	16410	NICKLAUS DR	#144	SYLMAR	16410 NICKLAUS DR #144	CA	91342
Residential	16414	NICKLAUS DR	#145	SYLMAR	16414 NICKLAUS DR #145	CA	91342
Residential	16414	NICKLAUS DR	#146	SYLMAR	16414 NICKLAUS DR #146	CA	91342
Residential	16479	NICKLAUS DR	#122	SYLMAR	16479 NICKLAUS DR #122	CA	91342
Residential	16707	NICKLAUS DR	#32	LOS ANGELES	16707 NICKLAUS DR #32	CA	91342
Industrial	14069	BALBOA BLVD		LOS ANGELES	14069 BALBOA BLVD	CA	91342
Industrial	14093	BALBOA BLVD		LOS ANGELES	14093 BALBOA BLVD	CA	91342
Residential	16079	YARNELL ST		LOS ANGELES	16079 YARNELL ST	CA	91342
Industrial	16045	FOOTHILL BLVD		SYLMAR	16045 FOOTHILL BLVD	CA	91342
Residential	16151	YARNELL ST		LOS ANGELES	16151 YARNELL ST	CA	91342
Industrial	16250	FILBERT ST		LOS ANGELES	16250 FILBERT ST	CA	91342
Industrial	16230	FILBERT ST		LOS ANGELES	16230 FILBERT ST	CA	91342
Government	16350	FILBERT ST		SYLMAR	16350 FILBERT ST	CA	91342
Industrial	15853	OLDEN ST		LOS ANGELES	15853 OLDEN ST	CA	91342
Residential	15831	OLDEN ST		LOS ANGELES	15831 OLDEN ST	CA	91342
Residential	13831	BRADLEY AVE		LOS ANGELES	13831 BRADLEY AVE	CA	91342
Residential	13528	PALA AVE		LOS ANGELES	13528 PALA AVE	CA	91342
Residential	13536	PALA AVE		LOS ANGELES	13536 PALA AVE	CA	91342
Residential	13540	PALA AVE		LOS ANGELES	13540 PALA AVE	CA	91342
Residential	13542	PALA AVE		LOS ANGELES	13542 PALA AVE	CA	91342
Residential	13546	PALA AVE		LOS ANGELES	13546 PALA AVE	CA	91342
Residential	13547	PALA AVE		LOS ANGELES	13547 PALA AVE	CA	91342
Residential	13543	PALA AVE		LOS ANGELES	13543 PALA AVE	CA	91342
Residential	13539	PALA AVE		LOS ANGELES	13539 PALA AVE	CA	91342
Residential	13531	PALA AVE		LOS ANGELES	13531 PALA AVE	CA	91342
Residential	13525	PALA AVE		LOS ANGELES	13525 PALA AVE	CA	91342
Residential	13517	PALA AVE		LOS ANGELES	13517 PALA AVE	CA	91342
Residential	13509	PALA AVE		LOS ANGELES	13509 PALA AVE	CA	91342
Residential	13501	PALA AVE		LOS ANGELES	13501 PALA AVE	CA	91342

Residential	16140	FILBERT ST	LOS ANGELES	16140 FILBERT ST	CA	91342
Residential	16134	FILBERT ST	LOS ANGELES	16134 FILBERT ST	CA	91342
Residential	16128	FILBERT ST	LOS ANGELES	16128 FILBERT ST	CA	91342
Residential	16122	FILBERT ST	LOS ANGELES	16122 FILBERT ST	CA	91342
Residential	16114	FILBERT ST	LOS ANGELES	16114 FILBERT ST	CA	91342
Residential	16108	FILBERT ST	LOS ANGELES	16108 FILBERT ST	CA	91342
Residential	16100	FILBERT ST	LOS ANGELES	16100 FILBERT ST	CA	91342
Residential	14077	BRIDLE RIDGE RD	LOS ANGELES	14077 BRIDLE RIDGE RD	CA	91342
Residential	14071	BRIDLE RIDGE RD	LOS ANGELES	14071 BRIDLE RIDGE RD	CA	91342
Residential	14076	BRIDLE RIDGE RD	LOS ANGELES	14076 BRIDLE RIDGE RD	CA	91342
Residential	16082	FILBERT ST	LOS ANGELES	16082 FILBERT ST	CA	91342
Residential	16076	FILBERT ST	LOS ANGELES	16076 FILBERT ST	CA	91342
Residential	16070	FILBERT ST	LOS ANGELES	16070 FILBERT ST	CA	91342
Residential	16139	FILBERT ST	LOS ANGELES	16139 FILBERT ST	CA	91342
Residential	16133	FILBERT ST	LOS ANGELES	16133 FILBERT ST	CA	91342
Residential	16127	FILBERT ST	LOS ANGELES	16127 FILBERT ST	CA	91342
Residential	16121	FILBERT ST	LOS ANGELES	16121 FILBERT ST	CA	91342
Residential	16115	FILBERT ST	LOS ANGELES	16115 FILBERT ST	CA	91342
Residential	16107	FILBERT ST	LOS ANGELES	16107 FILBERT ST	CA	91342
Residential	16101	FILBERT ST	LOS ANGELES	16101 FILBERT ST	CA	91342
Residential	16089	FILBERT ST	LOS ANGELES	16089 FILBERT ST	CA	91342
Residential	16083	FILBERT ST	LOS ANGELES	16083 FILBERT ST	CA	91342
Residential	16077	FILBERT ST	LOS ANGELES	16077 FILBERT ST	CA	91342
Residential	16071	FILBERT ST	LOS ANGELES	16071 FILBERT ST	CA	91342
Residential	16063	FILBERT ST	LOS ANGELES	16063 FILBERT ST	CA	91342
Residential	14101	SADDLETREE CT	LOS ANGELES	14101 SADDLETREE CT	CA	91342
Residential	14109	SADDLETREE CT	LOS ANGELES	14109 SADDLETREE CT	CA	91342
Residential	14115	SADDLETREE CT	LOS ANGELES	14115 SADDLETREE CT	CA	91342
Residential	14123	SADDLETREE CT	LOS ANGELES	14123 SADDLETREE CT	CA	91342
Residential	14131	SADDLETREE CT	LOS ANGELES	14131 SADDLETREE CT	CA	91342
Residential	14139	SADDLETREE CT	LOS ANGELES	14139 SADDLETREE CT	CA	91342
Residential	14147	SADDLETREE CT	LOS ANGELES	14147 SADDLETREE CT	CA	91342
Residential	14155	SADDLETREE CT	LOS ANGELES	14155 SADDLETREE CT	CA	91342
Residential	14163	SADDLETREE CT	LOS ANGELES	14163 SADDLETREE CT	CA	91342

Residential	14175	SADDLETREE CT	LOS ANGELES	14175 SADDLETREE CT	CA	91342
Residential	14184	SADDLETREE CT	LOS ANGELES	14184 SADDLETREE CT	CA	91342
Residential	14176	SADDLETREE CT	LOS ANGELES	14176 SADDLETREE CT	CA	91342
Residential	14168	PONY LN	LOS ANGELES	14168 PONY LN	CA	91342
Residential	14160	PONY LN	LOS ANGELES	14160 PONY LN	CA	91342
Residential	14154	PONY LN	LOS ANGELES	14154 PONY LN	CA	91342
Residential	14148	PONY LN	LOS ANGELES	14148 PONY LN	CA	91342
Residential	14142	PONY LN	LOS ANGELES	14142 PONY LN	CA	91342
Residential	14136	SADDLETREE CT	LOS ANGELES	14136 SADDLETREE CT	CA	91342
Residential	14130	SADDLETREE CT	LOS ANGELES	14130 SADDLETREE CT	CA	91342
Residential	14124	SADDLETREE CT	LOS ANGELES	14124 SADDLETREE CT	CA	91342
Residential	14118	SADDLETREE CT	LOS ANGELES	14118 SADDLETREE CT	CA	91342
Industrial	13955	BALBOA BLVD	LOS ANGELES	13955 BALBOA BLVD	CA	91342
Residential	14000	CAROL LN	SYLMAR	14000 CAROL LN	CA	91342
Residential	14004	CAROL LN	SYLMAR	14004 CAROL LN	CA	91342
Residential	14010	CAROL LN	SYLMAR	14010 CAROL LN	CA	91342
Residential	14014	CAROL LN	SYLMAR	14014 CAROL LN	CA	91342
Residential	14020	CAROL LANE	SYLMAR	14020 CAROL LANE	CA	91342
Residential	14024	CAROL LN	SYLMAR	14024 CAROL LN	CA	91342
Residential	14028	CAROL LN	SYLMAR	14028 CAROL LN	CA	91342
Residential	14032	CAROL LN	SYLMAR	14032 CAROL LN	CA	91342
Residential	14036	CAROL LN	SYLMAR	14036 CAROL LN	CA	91342
Residential	14040	CAROL LN	SYLMAR	14040 CAROL LN	CA	91342
Residential	14044	CAROL LN	SYLMAR	14044 CAROL LN	CA	91342
Residential	14050	CAROL LN	SYLMAR	14050 CAROL LN	CA	91342
Residential	14056	CAROL LANE	SYLMAR	14056 CAROL LANE	CA	91342
Residential	14060	CAROL LN	SYLMAR	14060 CAROL LN	CA	91342
Residential	14064	CAROL LN	SYLMAR	14064 CAROL LN	CA	91342
Residential	14039	CAROL LN	SYLMAR	14039 CAROL LN	CA	91342
Residential	14033	CAROL LN	SYLMAR	14033 CAROL LN	CA	91342
Residential	14011	CAROL LANE	SYLMAR	14011 CAROL LANE	CA	91342
Residential	13967	CAROL LN	LOS ANGELES	13967 CAROL LN	CA	91342
Residential	13963	CAROL LN	SYLMAR	13963 CAROL LN	CA	91342
Residential	13955	CAROL LN	SYLMAR	13955 CAROL LN	CA	91342

Residential	14025	CAROL LN	SYLMAR	14025 CAROL LN	CA	91342
Residential	14019	CAROL LN	SYLMAR	14019 CAROL LN	CA	91342
Industrial	13275	GOLDEN STATE RD	LOS ANGELES	13275 GOLDEN STATE RD	CA	91342
Industrial	13235	GOLDEN STATE ROAD	LOS ANGELES	13235 GOLDEN STATE ROAD	CA	91342
Commercial	20833	SANTA CLARA ST	SANTA CLARITA	20833 SANTA CLARA ST	CA	91351
Industrial	26825	OAK AVE	SANTA CLARITA	26825 OAK AVE	CA	91351
Industrial	26845	OAK AVE	SANTA CLARITA	26845 OAK AVE	CA	91351
Industrial	20830	SANTA CLARA ST	SANTA CLARITA	20830 SANTA CLARA ST	CA	91351
Commercial	26707	OAK AVE	SANTA CLARITA	26707 OAK AVE	CA	91351
Commercial	26741	OAK AVE	SANTA CLARITA	26741 OAK AVE	CA	91351
Industrial	26763	OAK AVE	SANTA CLARITA	26763 OAK AVE	CA	91351
Industrial	26751	OAK AVE	SANTA CLARITA	26751 OAK AVE	CA	91351
Commercial	26723	OAK AVE	SANTA CLARITA	26723 OAK AVE	CA	91351
Industrial	20820	SOLEDAD ST	SANTA CLARITA	20820 SOLEDAD ST	CA	91351
Residential	21250	ALAMINOS DR	SANTA CLARITA	21250 ALAMINOS DR	CA	91350
Residential	21244	ALAMINOS DR	SANTA CLARITA	21244 ALAMINOS DR	CA	91350
Residential	21238	ALAMINOS DR	SANTA CLARITA	21238 ALAMINOS DR	CA	91350
Residential	21232	ALAMINOS DR	SANTA CLARITA	21232 ALAMINOS DR	CA	91350
Residential	21226	ALAMINOS DR	SANTA CLARITA	21226 ALAMINOS DR	CA	91350
Residential	21220	ALAMINOS DR	SANTA CLARITA	21220 ALAMINOS DR	CA	91350
Residential	21214	ALAMINOS DR	SANTA CLARITA	21214 ALAMINOS DR	CA	91350
Residential	21208	ALAMINOS DR	SANTA CLARITA	21208 ALAMINOS DR	CA	91350
Commercial	27761	BOUQUET CANYON RD	SANTA CLARITA	27761 BOUQUET CANYON RD	CA	91350
Commercial	27757	BOUQUET CANYON RD	SANTA CLARITA	27757 BOUQUET CANYON RD	CA	91350
Commercial	27737	BOUQUET CANYON RD	SANTA CLARITA	27737 BOUQUET CANYON RD	CA	91350
Residential	21430	ROSEDELL DR	SANTA CLARITA	21430 ROSEDELL DR	CA	91350
Residential	21422	ROSEDELL DR	SANTA CLARITA	21422 ROSEDELL DR	CA	91350
Residential	21416	ROSEDELL DR	SANTA CLARITA	21416 ROSEDELL DR	CA	91350
Residential	21410	ROSEDELL DR	SANTA CLARITA	21410 ROSEDELL DR	CA	91350
Residential	21404	ROSEDELL DR	SANTA CLARITA	21404 ROSEDELL DR	CA	91350
Residential	27700	STARDALE DR	SANTA CLARITA	27700 STARDALE DR	CA	91350
Residential	27708	STARDALE DR	SANTA CLARITA	27708 STARDALE DR	CA	91350
Residential	27714	STARDALE DR	SANTA CLARITA	27714 STARDALE DR	CA	91350
Residential	27720	STARDALE DR	SANTA CLARITA	27720 STARDALE DR	CA	91350

Residential	27726	STARDALE DR	SANTA CLARITA	27726 STARDALE DR	CA	91350
Residential	27728	STARDALE DR	SANTA CLARITA	27728 STARDALE DR	CA	91350
Residential	27727	STARDALE DR	SANTA CLARITA	27727 STARDALE DR	CA	91350
Residential	27723	STARDALE DR	SANTA CLARITA	27723 STARDALE DR	CA	91350
Residential	27719	STARDALE DR	SANTA CLARITA	27719 STARDALE DR	CA	91350
Residential	27711	STARDALE DR	SANTA CLARITA	27711 STARDALE DR	CA	91350
Residential	27701	STARDALE DR	SANTA CLARITA	27701 STARDALE DR	CA	91350
Residential	27700	HEYWOOD DR	SANTA CLARITA	27700 HEYWOOD DR	CA	91350
Residential	27708	HEYWOOD DR	SANTA CLARITA	27708 HEYWOOD DR	CA	91350
Residential	27712	HEYWOOD DR	SANTA CLARITA	27712 HEYWOOD DR	CA	91350
Residential	21500	ALAMINOS DR	SANTA CLARITA	21500 ALAMINOS DR	CA	91350
Residential	21426	ALAMINOS DR	SANTA CLARITA	21426 ALAMINOS DR	CA	91350
Residential	21420	ALAMINOS DR	SANTA CLARITA	21420 ALAMINOS DR	CA	91350
Residential	21414	ALAMINOS DR	SANTA CLARITA	21414 ALAMINOS DR	CA	91350
Residential	21408	ALAMINOS DR	SANTA CLARITA	21408 ALAMINOS DR	CA	91350
Residential	21400	ALAMINOS DR	SANTA CLARITA	21400 ALAMINOS DR	CA	91350
Residential	27800	FEATHERSTAR AVE	SANTA CLARITA	27800 FEATHERSTAR AVE	CA	91350
Residential	27816	FEATHERSTAR AVE	SANTA CLARITA	27816 FEATHERSTAR AVE	CA	91350
Residential	27826	FEATHERSTAR AVE	SANTA CLARITA	27826 FEATHERSTAR AVE	CA	91350
Residential	27834	FEATHERSTAR AVE	SANTA CLARITA	27834 FEATHERSTAR AVE	CA	91350
Residential	21500	WINTERSET DR	SANTA CLARITA	21500 WINTERSET DR	CA	91350
Residential	27823	FEATHERSTAR AVE	SANTA CLARITA	27823 FEATHERSTAR AVE	CA	91350
Residential	27815	FEATHERSTAR AVE	SANTA CLARITA	27815 FEATHERSTAR AVE	CA	91350
Residential	27809	FEATHERSTAR AVE	SANTA CLARITA	27809 FEATHERSTAR AVE	CA	91350
Residential	27801	FEATHERSTAR AVE	SANTA CLARITA	27801 FEATHERSTAR AVE	CA	91350
Residential	27800	RIDGEGROVE DR	SANTA CLARITA	27800 RIDGEGROVE DR	CA	91350
Residential	27810	RIDGEGROVE DR	SANTA CLARITA	27810 RIDGEGROVE DR	CA	91350
Residential	27816	RIDGEGROVE DR	SANTA CLARITA	27816 RIDGEGROVE DR	CA	91350
Residential	27824	RIDGEGROVE DR	SANTA CLARITA	27824 RIDGEGROVE DR	CA	91350
Residential	21510	WINTERSET DR	SANTA CLARITA	21510 WINTERSET DR	CA	91350
Residential	21515	WINTERSET DR	SANTA CLARITA	21515 WINTERSET DR	CA	91350
Residential	27840	FEATHERSTAR AVE	SANTA CLARITA	27840 FEATHERSTAR AVE	CA	91350
Residential	27848	FEATHERSTAR AVE	SANTA CLARITA	27848 FEATHERSTAR AVE	CA	91350
Residential	27854	FEATHERSTAR AVE	SANTA CLARITA	27854 FEATHERSTAR AVE	CA	91350

Residential	27904	FEATHERSTAR AVE	SANTA CLARITA	27904 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27910 FEATHERSTAR AVE	CA	91350
Residential		FEATHERSTAR AVE	SANTA CLARITA	27920 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27930 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27938 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27944 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27952 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27960 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27966 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27968 FEATHERSTAR AVE	CA	91350
Residential		FEATHERSTAR AVE	SANTA CLARITA	27970 FEATHERSTAR AVE	CA	91350
Residential	<b>-</b>	FEATHERSTAR AVE	SANTA CLARITA	27970 FEATHERSTAR AVE	CA	91350
Residential		FEATHERSTAR AVE	SANTA CLARITA	27971 FEATHERSTAR AVE	CA	91350
		_	<del>                                     </del>		CA	
Residential		FEATHERSTAR AVE	SANTA CLARITA SANTA CLARITA	27959 FEATHERSTAR AVE 27951 FEATHERSTAR AVE	CA	91350 91350
Residential	+		+ + + + + + + + + + + + + + + + + + + +			
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27945 FEATHERSTAR AVE	CA	91350
Residential		FEATHERSTAR AVE	SANTA CLARITA	27937 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27929 FEATHERSTAR AVE	CA	91350
Residential		FEATHERSTAR AVE	SANTA CLARITA	27921 FEATHERSTAR AVE	CA	91350
Residential		FEATHERSTAR AVE	SANTA CLARITA	27915 FEATHERSTAR AVE	CA	91350
Residential		FEATHERSTAR AVE	SANTA CLARITA	27907 FEATHERSTAR AVE	CA	91350
Residential	+	FEATHERSTAR AVE	SANTA CLARITA	27857 FEATHERSTAR AVE	CA	91350
Residential	+	WINTERSET DR	SANTA CLARITA	21501 WINTERSET DR	CA	91350
Residential	+	WINTERSET DR	SANTA CLARITA	21509 WINTERSET DR	CA	91350
Residential		URBANDALE AVE	SANTA CLARITA	28123 URBANDALE AVE	CA	91350
Residential	+	URBANDALE AVE	SANTA CLARITA	28115 URBANDALE AVE	CA	91350
Residential	28109	URBANDALE AVE	SANTA CLARITA	28109 URBANDALE AVE	CA	91350
Residential	28101	URBANDALE AVE	SANTA CLARITA	28101 URBANDALE AVE	CA	91350
Residential	28071	URBANDALE AVE	SANTA CLARITA	28071 URBANDALE AVE	CA	91350
Residential	28063	URBANDALE AVE	SANTA CLARITA	28063 URBANDALE AVE	CA	91350
Residential	28057	URBANDALE AVE	SANTA CLARITA	28057 URBANDALE AVE	CA	91350
Residential	28049	URBANDALE AVE	SANTA CLARITA	28049 URBANDALE AVE	CA	91350
Residential	28043	URBANDALE AVE	SANTA CLARITA	28043 URBANDALE AVE	CA	91350
Residential	28037	URBANDALE AVE	SANTA CLARITA	28037 URBANDALE AVE	CA	91350

Residential	28031	URBANDALE AVE	SANTA CLARITA	28031 URBANDALE AVE	CA	91350
Residential	21315	ALTENA DR	SANTA CLARITA	21315 ALTENA DR	CA	91350
Residential	21319	ALTENA DR	SANTA CLARITA	21319 ALTENA DR	CA	91350
Residential	21318	ALTENA DR	SANTA CLARITA	21318 ALTENA DR	CA	91350
Residential	21314	ALTENA DR	SANTA CLARITA	21314 ALTENA DR	CA	91350
Residential	28015	URBANDALE AVE	SANTA CLARITA	28015 URBANDALE AVE	CA	91350
Residential	28011	URBANDALE AVE	SANTA CLARITA	28011 URBANDALE AVE	CA	91350
Residential	28003	URBANDALE AVE	SANTA CLARITA	28003 URBANDALE AVE	CA	91350
Residential	27987	URBANDALE AVE	SANTA CLARITA	27987 URBANDALE AVE	CA	91350
Residential	27981	URBANDALE AVE	SANTA CLARITA	27981 URBANDALE AVE	CA	91350
Residential	27973	URBANDALE AVE	SANTA CLARITA	27973 URBANDALE AVE	CA	91350
Residential	27967	URBANDALE AVE	SANTA CLARITA	27967 URBANDALE AVE	CA	91350
Residential	27900	YOUNGBERRY DR	SANTA CLARITA	27900 YOUNGBERRY DR	CA	91350
Residential	27908	YOUNGBERRY DR	SANTA CLARITA	27908 YOUNGBERRY DR	CA	91350
Residential	27916	YOUNGBERRY DR	SANTA CLARITA	27916 YOUNGBERRY DR	CA	91350
Residential	27922	YOUNGBERRY DR	SANTA CLARITA	27922 YOUNGBERRY DR	CA	91350
Residential	27928	YOUNGBERRY DR	SANTA CLARITA	27928 YOUNGBERRY DR	CA	91350
Residential	27934	YOUNGBERRY DR	SANTA CLARITA	27934 YOUNGBERRY DR	CA	91350
Residential	27929	YOUNGBERRY DR	SANTA CLARITA	27929 YOUNGBERRY DR	CA	91350
Residential	27921	YOUNGBERRY DR	SANTA CLARITA	27921 YOUNGBERRY DR	CA	91350
Residential	27917	YOUNGBERRY DR	SANTA CLARITA	27917 YOUNGBERRY DR	CA	91350
Residential	27909	YOUNGBERRY DR	SANTA CLARITA	27909 YOUNGBERRY DR	CA	91350
Residential	27901	YOUNGBERRY DR	SANTA CLARITA	27901 YOUNGBERRY DR	CA	91350
Residential	21249	ALAMINOS DR	SANTA CLARITA	21249 ALAMINOS DR	CA	91350
Residential	21233	WINTERSET DR	SANTA CLARITA	21233 WINTERSET DR	CA	91350
Residential	21258	ALTENA DR	SANTA CLARITA	21258 ALTENA DR	CA	91350
Residential	21250	ALTENA DR	SANTA CLARITA	21250 ALTENA DR	CA	91350
Residential	28133	MEADBURY DR	SANTA CLARITA	28133 MEADBURY DR	CA	91350
Residential	28127	MEADBURY DR	SANTA CLARITA	28127 MEADBURY DR	CA	91350
Residential	28121	MEADBURY DR	SANTA CLARITA	28121 MEADBURY DR	CA	91350
Residential	28115	MEADBURY DR	SANTA CLARITA	28115 MEADBURY DR	CA	91350
Residential	21243	ALTENA DR	SANTA CLARITA	21243 ALTENA DR	CA	91350
Residential	21249	ALTENA DR	SANTA CLARITA	21249 ALTENA DR	CA	91350
Residential	21257	ALTENA DR	SANTA CLARITA	21257 ALTENA DR	CA	91350

Residential	28048	URBANDALE AVE	SANTA CLARITA	28048 URBANDALE AVE	CA	91350
Residential	28058	URBANDALE AVE	SANTA CLARITA	28058 URBANDALE AVE	CA	91350
Residential	28066	URBANDALE AVE	SANTA CLARITA	28066 URBANDALE AVE	CA	91350
Residential	28074	URBANDALE AVE	SANTA CLARITA	28074 URBANDALE AVE	CA	91350
Residential	28106	URBANDALE AVE	SANTA CLARITA	28106 URBANDALE AVE	CA	91350
Residential	28112	URBANDALE AVE	SANTA CLARITA	28112 URBANDALE AVE	CA	91350
Residential	28120	URBANDALE AVE	SANTA CLARITA	28120 URBANDALE AVE	CA	91350
Government	20690	PLACERITA CANYON RD	SANTA CLARITA	20690 PLACERITA CANYON RD	CA	91321
Commercial	20885	PLACERITA CANYON RD	SANTA CLARITA	20885 PLACERITA CANYON RD	CA	91321
Residential	25505	SIERRA HWY	SANTA CLARITA	25505 SIERRA HWY	CA	91321
Industrial	20744	SOLEDAD CANYON RD	CANYON	20744 SOLEDAD CANYON RD	CA	91351
Commercial	26468	CARL BOYER DR	SANTA CLARITA	26468 CARL BOYER DR	CA	91350
Commercial	26468	CARL BOYER DR	SANTA CLARITA	26468 CARL BOYER DR	CA	91350
Commercial	26595	GOLDEN VALLEY RD	SANTA CLARITA	26595 GOLDEN VALLEY RD	CA	91350
Commercial	26571	GOLDEN VALLEY ROAD	SANTA CLARITA	26571 GOLDEN VALLEY ROAD	CA	91350
Commercial	26475	GOLDEN VALLEY RD	SANTA CLARITA	26475 GOLDEN VALLEY RD	CA	91350
Commercial	26539	GOLDEN VALLEY RD	SANTA CLARITA	26539 GOLDEN VALLEY RD	CA	91350
Industrial	26541	RUETHER AVE	SANTA CLARITA	26541 RUETHER AVE	CA	91350
Industrial	26515	RUETHER AVE	SANTA CLARITA	26515 RUETHER AVE	CA	91350
Industrial	26477	REUTHER AVE	SANTA CLARITA	26477 REUTHER AVE	CA	91350
Industrial	26455	RUETHER AVE	SANTA CLARITA	26455 RUETHER AVE	CA	91350
Industrial	26421	RUETHER AVE	SANTA CLARITA	26421 RUETHER AVE	CA	91350
Industrial	20800	GOLDEN TRIANGLE RD	SANTA CLARITA	20800 GOLDEN TRIANGLE RD	CA	91350
Industrial	20950	CENTRE POINTE PKWY	SANTA CLARITA	20950 CENTRE POINTE PKWY	CA	91350
Industrial	26575	RUETHER AVE	SANTA CLARITA	26575 RUETHER AVE	CA	91350
Recreational	26455	GOLDEN VALLEY RD	SANTA CLARITA	26455 GOLDEN VALLEY RD	CA	91350
Irrigated Farm	17600	SIERRA HWY	SANTA CLARITA	17600 SIERRA HWY	CA	91351
Residential	27641	SUTTERS POINTE DR	SANTA CLARITA	27641 SUTTERS POINTE DR	CA	91350
Residential	27633	SUTTERS POINTE DR	SANTA CLARITA	27633 SUTTERS POINTE DR	CA	91350
Residential	27627	SUTTERS POINTE DR	SANTA CLARITA	27627 SUTTERS POINTE DR	CA	91350
Residential	27615	SUTTERS POINTE DR	SANTA CLARITA	27615 SUTTERS POINTE DR	CA	91350
Residential	21425	PEGGY JOYCE LN	SANTA CLARITA	21425 PEGGY JOYCE LN	CA	91350
Residential	21419	PEGGY JOYCE LN	SANTA CLARITA	21419 PEGGY JOYCE LN	CA	91350
Residential	21415	PEGGY JOYCE LN	SANTA CLARITA	21415 PEGGY JOYCE LN	CA	91350

Residential	21409	PEGGY JOYCE LN	SANTA CLARITA	21409 PEGGY JOYCE LN	CA	91350
Residential	21405	PEGGY JOYCE LN	SANTA CLARITA	21405 PEGGY JOYCE LN	CA	91350
Residential	21401	PEGGY JOYCE LN	SANTA CLARITA	21401 PEGGY JOYCE LN	CA	91350
Residential	21402	PEGGY JOYCE LN	SANTA CLARITA	21402 PEGGY JOYCE LN	CA	91350
Residential	21410	PEGGY JOYCE LN	SANTA CLARITA	21410 PEGGY JOYCE LN	CA	91350
Residential	21416	PEGGY JOYCE LN	SANTA CLARITA	21416 PEGGY JOYCE LN	CA	91350
Residential	21420	PEGGY JOYCE LN	SANTA CLARITA	21420 PEGGY JOYCE LN	CA	91350
Residential	21426	PEGGY JOYCE LN	SANTA CLARITA	21426 PEGGY JOYCE LN	CA	91350
Residential	21430	PEGGY JOYCE LN	SANTA CLARITA	21430 PEGGY JOYCE LN	CA	91350
Residential	21405	CAROL SUE LN	SANTA CLARITA	21405 CAROL SUE LN	CA	91350
Residential	21401	CAROL SUE LN	SANTA CLARITA	21401 CAROL SUE LN	CA	91350
Residential	21400	CAROL SUE LN	SANTA CLARITA	21400 CAROL SUE LN	CA	91350
Residential	21404	CAROL SUE LN	SANTA CLARITA	21404 CAROL SUE LN	CA	91350
Residential	21408	CAROL SUE LN	SANTA CLARITA	21408 CAROL SUE LN	CA	91350
Residential	21412	CAROL SUE LN	SANTA CLARITA	21412 CAROL SUE LN	CA	91350
Residential	21418	CAROL SUE LN	SANTA CLARITA	21418 CAROL SUE LN	CA	91350
Residential	21405	PEGGY JOYCE LN	SANTA CLARITA	21405 PEGGY JOYCE LN	CA	91350
Residential	21422	CAROL SUE LN	SANTA CLARITA	21422 CAROL SUE LN	CA	91350
Residential	21407	ANGELA YVONNE AVE	SANTA CLARITA	21407 ANGELA YVONNE AVE	CA	91350
Residential	21403	ANGELA YVONNE AVE	SANTA CLARITA	21403 ANGELA YVONNE AVE	CA	91350
Residential	21401	ANGELA YVONNE AVE	SANTA CLARITA	21401 ANGELA YVONNE AVE	CA	91350
Residential	27755	SUTTERS POINTE DR	SANTA CLARITA	27755 SUTTERS POINTE DR	CA	91350
Residential	27743	SUTTERS POINTE DR	SANTA CLARITA	27743 SUTTERS POINTE DR	CA	91350
Residential	27735	SUTTERS POINTE DR	SANTA CLARITA	27735 SUTTERS POINTE DR	CA	91350
Residential	27729	SUTTERS POINTE DR	SANTA CLARITA	27729 SUTTERS POINTE DR	CA	91350
Residential	27721	SUTTERS POINTE DR	SANTA CLARITA	27721 SUTTERS POINTE DR	CA	91350
Residential	27715	SUTTERS POINTE DR	SANTA CLARITA	27715 SUTTERS POINTE DR	CA	91350
Residential	27707	SUTTERS POINTE DR	SANTA CLARITA	27707 SUTTERS POINTE DR	CA	91350
Residential	27679	SUTTERS POINTE DR	SANTA CLARITA	27679 SUTTERS POINTE DR	CA	91350
Residential	27673	SUTTERS POINTE DR	SANTA CLARITA	27673 SUTTERS POINTE DR	CA	91350
Residential	27665	SUTTERS POINTE DR	SANTA CLARITA	27665 SUTTERS POINTE DR	CA	91350
Residential	27657	SUTTERS POINTE DR	SANTA CLARITA	27657 SUTTERS POINTE DR	CA	91350
Residential	27651	SUTTERS POINTE DR	SANTA CLARITA	27651 SUTTERS POINTE DR	CA	91350
Residential	21156	MILL RIDGE DR	SANTA CLARITA	21156 MILL RIDGE DR	CA	91350

Residential	21144	MILL RIDGE DR		SANTA CLARITA	21144 MILL RIDGE DR	CA	91350
Residential	21136	MILL RIDGE DR		SANTA CLARITA	21136 MILL RIDGE DR	CA	91350
Residential	21124	MILL RIDGE DR		SANTA CLARITA	21124 MILL RIDGE DR	CA	91350
Residential	21141	MILL RIDGE DR		SANTA CLARITA	21141 MILL RIDGE DR	CA	91350
Residential	21147	MILL RIDGE DR		SANTA CLARITA	21147 MILL RIDGE DR	CA	91350
Residential	27648	SUTTERS POINTE DR		SANTA CLARITA	27648 SUTTERS POINTE DR	CA	91350
Residential	27656	SUTTERS POINTE DR		SANTA CLARITA	27656 SUTTERS POINTE DR	CA	91350
Residential	27660	SUTTERS POINTE DR		SANTA CLARITA	27660 SUTTERS POINTE DR	CA	91350
Residential	21162	ELDER CREEK DR		SANTA CLARITA	21162 ELDER CREEK DR	CA	91350
Residential	21154	ELDER CREEK DR		SANTA CLARITA	21154 ELDER CREEK DR	CA	91350
Residential	21144	ELDER CREEK DR		SANTA CLARITA	21144 ELDER CREEK DR	CA	91350
Residential	21151	ELDER CREEK DR		SANTA CLARITA	21151 ELDER CREEK DR	CA	91350
Residential	21155	ELDER CREEK DR		SANTA CLARITA	21155 ELDER CREEK DR	CA	91350
Residential	21159	ELDER CREEK DR		SANTA CLARITA	21159 ELDER CREEK DR	CA	91350
Residential	21165	ELDER CREEK DR		SANTA CLARITA	21165 ELDER CREEK DR	CA	91350
Residential	27714	SUTTERS POINTE DR		SANTA CLARITA	27714 SUTTERS POINTE DR	CA	91350
Residential	27722	SUTTERS POINTE DR		SANTA CLARITA	27722 SUTTERS POINTE DR	CA	91350
Residential	27730	SUTTERS POINTE DR		SANTA CLARITA	27730 SUTTERS POINTE DR	CA	91350
Residential	27738	SUTTERS POINTE DR		SANTA CLARITA	27738 SUTTERS POINTE DR	CA	91350
Residential	21236	GEORGETOWN DR		SANTA CLARITA	21236 GEORGETOWN DR	CA	91350
Residential	21228	GEORGETOWN DR		SANTA CLARITA	21228 GEORGETOWN DR	CA	91350
Residential	21221	GEORGETOWN DR		SANTA CLARITA	21221 GEORGETOWN DR	CA	91350
Residential	21225	GEORGETOWN DR		SANTA CLARITA	21225 GEORGETOWN DR	CA	91350
Residential	27520	ALTA KNOLL DR		SANTA CLARITA	27520 ALTA KNOLL DR	CA	91350
Residential	27519	ALTA KNOLL DR		SANTA CLARITA	27519 ALTA KNOLL DR	CA	91350
Residential	27541	ALTA KNOLL DR		SANTA CLARITA	27541 ALTA KNOLL DR	CA	91350
Residential	21233	GEORGETOWN DR		SANTA CLARITA	21233 GEORGETOWN DR	CA	91350
Residential	21239	GEORGETOWN DR		SANTA CLARITA	21239 GEORGETOWN DR	CA	91350
Commercial	21021	SOLEDAD CANYON RD		SANTA CLARITA	21021 SOLEDAD CANYON RD	CA	91351
Residential	21400	ANGELA YVONNE AVE		SANTA CLARITA	21400 ANGELA YVONNE AVE	CA	91350
Residential	21404	ANGELA YVONNE AVE		SANTA CLARITA	21404 ANGELA YVONNE AVE	CA	91350
Residential	28102	BOBWHITE CIR	# 1	SANTA CLARITA	28102 BOBWHITE CIR # 1	CA	91350
Residential	28102	BOBWHITE CIR	# 2	SANTA CLARITA	28102 BOBWHITE CIR # 2	CA	91350
Residential	28102	BOBWHITE CIR	# 3	SANTA CLARITA	28102 BOBWHITE CIR # 3	CA	91350

Residential	28102	BOBWHITE CIR	# 4	SANTA CLARITA	28102 BOBWHITE CIR # 4	CA	91350
Residential	28102	BOBWHITE CIR	# 5	SANTA CLARITA	28102 BOBWHITE CIR # 5	CA	91350
Residential	28104	BOBWHITE CIR	# 6	SANTA CLARITA	28104 BOBWHITE CIR # 6	CA	91350
Residential	28104	BOBWHITE CIR	# 7	SANTA CLARITA	28104 BOBWHITE CIR # 7	CA	91350
Residential	28104	BOBWHITE CIR	# 8	SANTA CLARITA	28104 BOBWHITE CIR # 8	CA	91350
Residential	28104	BOBWHITE CIR	# 9	SANTA CLARITA	28104 BOBWHITE CIR # 9	CA	91350
Residential	28104	BOBWHITE CIR	# 10	SANTA CLARITA	28104 BOBWHITE CIR # 10	CA	91350
Residential	28108	BOBWHITE CIR	# 11	SANTA CLARITA	28108 BOBWHITE CIR # 11	CA	91350
Residential	28104	BOBWHITE CIR	# 12	SANTA CLARITA	28104 BOBWHITE CIR # 12	CA	91350
Residential	28108	BOBWHITE CIR	# 13	SANTA CLARITA	28108 BOBWHITE CIR # 13	CA	91350
Residential	28108	BOBWHITE CIR	# 14	SANTA CLARITA	28108 BOBWHITE CIR # 14	CA	91350
Residential	28108	BOBWHITE CIR	# 15	SANTA CLARITA	28108 BOBWHITE CIR # 15	CA	91350
Residential	28110	BOBWHITE CIR	# 16	SANTA CLARITA	28110 BOBWHITE CIR # 16	CA	91350
Residential	28110	BOBWHITE CIR	# 17	SANTA CLARITA	28110 BOBWHITE CIR # 17	CA	91350
Residential	28110	BOBWHITE CIR	# 18	SANTA CLARITA	28110 BOBWHITE CIR # 18	CA	91350
Residential	28110	BOBWHITE CIR	# 19	SANTA CLARITA	28110 BOBWHITE CIR # 19	CA	91350
Residential	28110	BOBWHITE CIR	# 20	SANTA CLARITA	28110 BOBWHITE CIR # 20	CA	91350
Residential	28112	BOBWHITE CIR	# 21	SANTA CLARITA	28112 BOBWHITE CIR # 21	CA	91350
Residential	28112	BOBWHITE CIR	# 22	SANTA CLARITA	28112 BOBWHITE CIR # 22	CA	91350
Residential	28112	BOBWHITE CIR	# 23	SANTA CLARITA	28112 BOBWHITE CIR # 23	CA	91350
Residential	28112	BOBWHITE CIR	# 24	SANTA CLARITA	28112 BOBWHITE CIR # 24	CA	91350
Residential	28112	BOBWHITE CIR	# 25	SANTA CLARITA	28112 BOBWHITE CIR # 25	CA	91350
Residential	28114	BOBWHITE CIR	# 26	SANTA CLARITA	28114 BOBWHITE CIR # 26	CA	91350
Residential	28114	BOBWHITE CIR	# 27	SANTA CLARITA	28114 BOBWHITE CIR # 27	CA	91350
Residential	28114	BOBWHITE CIR	# 28	SANTA CLARITA	28114 BOBWHITE CIR # 28	CA	91350
Residential	28114	BOBWHITE CIR	# 29	SANTA CLARITA	28114 BOBWHITE CIR # 29	CA	91350
Residential	28114	BOBWHITE CIR	# 30	SANTA CLARITA	28114 BOBWHITE CIR # 30	CA	91350
Residential	28120	BOBWHITE CIR	# 31	SANTA CLARITA	28120 BOBWHITE CIR # 31	CA	91350
Residential	28120	BOBWHITE CIR	# 32	SANTA CLARITA	28120 BOBWHITE CIR # 32	CA	91350
Residential	28120	BOBWHITE CIR	# 33	SANTA CLARITA	28120 BOBWHITE CIR # 33	CA	91350
Residential	28120	BOBWHITE CIR	# 34	SANTA CLARITA	28120 BOBWHITE CIR # 34	CA	91350
Residential	28120	BOBWHITE CIR	# 35	SANTA CLARITA	28120 BOBWHITE CIR # 35	CA	91350
Residential	28122	BOBWHITE CIR	# 36	SANTA CLARITA	28122 BOBWHITE CIR # 36	CA	91350
Residential	28122	BOBWHITE CIR	# 37	SANTA CLARITA	28122 BOBWHITE CIR # 37	CA	91350

Residential	28122	BOBWHITE CIR	# 38	SANTA CLARITA	28122 BOBWHITE CIR # 38	CA	91350
Residential	28122	BOBWHITE CIR	# 39	SANTA CLARITA	28122 BOBWHITE CIR # 39	CA	91350
Residential	28122	BOBWHITE CIR	# 40	SANTA CLARITA	28122 BOBWHITE CIR # 40	CA	91350
Residential	28128	BOBWHITE CIR	# 41	SANTA CLARITA	28128 BOBWHITE CIR # 41	CA	91350
Residential	28128	BOBWHITE CIR	# 42	SANTA CLARITA	28128 BOBWHITE CIR # 42	CA	91350
Residential	28128	BOBWHITE CIR	# 43	SANTA CLARITA	28128 BOBWHITE CIR # 43	CA	91350
Residential	28128	BOBWHITE CIR	# 44	SANTA CLARITA	28128 BOBWHITE CIR # 44	CA	91350
Residential	28130	BOBWHITE CIR	# 45	SANTA CLARITA	28130 BOBWHITE CIR # 45	CA	91350
Residential	28130	BOBWHITE CIR	# 46	SANTA CLARITA	28130 BOBWHITE CIR # 46	CA	91350
Residential	28130	BOBWHITE CIR	# 47	SANTA CLARITA	28130 BOBWHITE CIR # 47	CA	91350
Residential	28130	BOBWHITE CIR	# 48	SANTA CLARITA	28130 BOBWHITE CIR # 48	CA	91350
Residential	28134	BOBWHITE CIR	# 49	SANTA CLARITA	28134 BOBWHITE CIR # 49	CA	91350
Residential	28134	BOBWHITE CIR	# 50	SANTA CLARITA	28134 BOBWHITE CIR # 50	CA	91350
Residential	28134	BOBWHITE CIR	# 51	SANTA CLARITA	28134 BOBWHITE CIR # 51	CA	91350
Residential	28136	BOBWHITE CIR	# 52	SANTA CLARITA	28136 BOBWHITE CIR # 52	CA	91350
Residential	28136	BOBWHITE CIR	# 53	SANTA CLARITA	28136 BOBWHITE CIR # 53	CA	91350
Residential	28136	BOBWHITE CIR	# 54	SANTA CLARITA	28136 BOBWHITE CIR # 54	CA	91350
Residential	28140	BOBWHITE CIR	# 55	SANTA CLARITA	28140 BOBWHITE CIR # 55	CA	91350
Residential	28140	BOBWHITE CIR	# 56	SANTA CLARITA	28140 BOBWHITE CIR # 56	CA	91350
Residential	28140	BOBWHITE CIR	# 57	SANTA CLARITA	28140 BOBWHITE CIR # 57	CA	91350
Residential	28142	BOBWHITE CIR	# 58	SANTA CLARITA	28142 BOBWHITE CIR # 58	CA	91350
Residential	28142	BOBWHITE CIR	# 59	SANTA CLARITA	28142 BOBWHITE CIR # 59	CA	91350
Residential	28142	BOBWHITE CIR	# 60	SANTA CLARITA	28142 BOBWHITE CIR # 60	CA	91350
Residential	28146	BOBWHITE CIR	# 61	SANTA CLARITA	28146 BOBWHITE CIR # 61	CA	91350
Residential	28146	BOBWHITE CIR	# 62	SANTA CLARITA	28146 BOBWHITE CIR # 62	CA	91350
Residential	28146	BOBWHITE CIR	# 63	SANTA CLARITA	28146 BOBWHITE CIR # 63	CA	91350
Residential	28148	BOBWHITE CIR	# 64	SANTA CLARITA	28148 BOBWHITE CIR # 64	CA	91350
Residential	28148	BOBWHITE CIR	# 65	SANTA CLARITA	28148 BOBWHITE CIR # 65	CA	91350
Residential	28148	BOBWHITE CIR	# 66	SANTA CLARITA	28148 BOBWHITE CIR # 66	CA	91350
Residential	28152	BOBWHITE CIR	# 67	SANTA CLARITA	28152 BOBWHITE CIR # 67	CA	91350
Residential	28152	BOBWHITE CIR	# 68	SANTA CLARITA	28152 BOBWHITE CIR # 68	CA	91350
Residential	28152	BOBWHITE CIR	# 69	SANTA CLARITA	28152 BOBWHITE CIR # 69	CA	91350
Residential	28154	BOBWHITE CIR	# 70	SANTA CLARITA	28154 BOBWHITE CIR # 70	CA	91350
Residential	28154	BOBWHITE CIR	# 71	SANTA CLARITA	28154 BOBWHITE CIR # 71	CA	91350

Residential	28154	BOBWHITE CIR	# 72	SANTA CLARITA	28154 BOBWHITE CIR # 72	CA	91350
Residential	28154	BOBWHITE CIR	# 73	SANTA CLARITA	28154 BOBWHITE CIR # 73	CA	91350
Residential	28154	BOBWHITE CIR	# 74	SANTA CLARITA	28154 BOBWHITE CIR # 74	CA	91350
Residential	28156	BOBWHITE CIR	# 75	SANTA CLARITA	28156 BOBWHITE CIR # 75	CA	91350
Residential	28156	BOBWHITE CIR	# 76	SANTA CLARITA	28156 BOBWHITE CIR # 76	CA	91350
Residential	28156	BOBWHITE CIR	# 77	SANTA CLARITA	28156 BOBWHITE CIR # 77	CA	91350
Residential	28151	BOBWHITE CIR	# 78	SANTA CLARITA	28151 BOBWHITE CIR # 78	CA	91350
Residential	28151	BOBWHITE CIR	# 79	SANTA CLARITA	28151 BOBWHITE CIR # 79	CA	91350
Residential	28151	BOBWHITE CIR	# 80	SANTA CLARITA	28151 BOBWHITE CIR # 80	CA	91350
Residential	28151	BOBWHITE CIR	# 81	SANTA CLARITA	28151 BOBWHITE CIR # 81	CA	91350
Residential	28145	BOBWHITE CIR	# 82	SANTA CLARITA	28145 BOBWHITE CIR # 82	CA	91350
Residential	28145	BOBWHITE CIR	# 83	SANTA CLARITA	28145 BOBWHITE CIR # 83	CA	91350
Residential	28145	BOBWHITE CIR	# 84	SANTA CLARITA	28145 BOBWHITE CIR # 84	CA	91350
Residential	28145	BOBWHITE CIR	# 85	SANTA CLARITA	28145 BOBWHITE CIR # 85	CA	91350
Residential	28145	BOBWHITE CIR	# 86	SANTA CLARITA	28145 BOBWHITE CIR # 86	CA	91350
Residential	28139	BOBWHITE CIR	# 87	SANTA CLARITA	28139 BOBWHITE CIR # 87	CA	91350
Residential	28139	BOBWHITE CIR	# 88	SANTA CLARITA	28139 BOBWHITE CIR # 88	CA	91350
Residential	28139	BOBWHITE CIR	# 89	SANTA CLARITA	28139 BOBWHITE CIR # 89	CA	91350
Residential	28139	BOBWHITE CIR	# 90	SANTA CLARITA	28139 BOBWHITE CIR # 90	CA	91350
Residential	28139	BOBWHITE CIR	# 91	SANTA CLARITA	28139 BOBWHITE CIR # 91	CA	91350
Residential	28131	BOBWHITE CIR	# 92	SANTA CLARITA	28131 BOBWHITE CIR # 92	CA	91350
Residential	28131	BOBWHITE CIR	# 93	SANTA CLARITA	28131 BOBWHITE CIR # 93	CA	91350
Residential	28131	BOBWHITE CIR	# 94	SANTA CLARITA	28131 BOBWHITE CIR # 94	CA	91350
Residential	28131	BOBWHITE CIR	# 95	SANTA CLARITA	28131 BOBWHITE CIR # 95	CA	91350
Residential	28131	BOBWHITE CIR	# 96	SANTA CLARITA	28131 BOBWHITE CIR # 96	CA	91350
Residential	28127	BOBWHITE CIR	# 97	SANTA CLARITA	28127 BOBWHITE CIR # 97	CA	91350
Residential	28127	BOBWHITE CIR	# 98	SANTA CLARITA	28127 BOBWHITE CIR # 98	CA	91350
Residential	28127	BOBWHITE CIR	# 99	SANTA CLARITA	28127 BOBWHITE CIR # 99	CA	91350
Residential	28127	BOBWHITE CIR	# 100	SANTA CLARITA	28127 BOBWHITE CIR # 100	CA	91350
Residential	28127	BOBWHITE CIR	# 101	SANTA CLARITA	28127 BOBWHITE CIR # 101	CA	91350
Residential	28123	BOBWHITE CIR	# 102	SANTA CLARITA	28123 BOBWHITE CIR # 102	CA	91350
Residential	28123	BOBWHITE CIR	# 103	SANTA CLARITA	28123 BOBWHITE CIR # 103	CA	91350
Residential	28123	BOBWHITE CIR	# 104	SANTA CLARITA	28123 BOBWHITE CIR # 104	CA	91350
Residential	28123	BOBWHITE CIR	# 105	SANTA CLARITA	28123 BOBWHITE CIR # 105	CA	91350

Residential	28123	BOBWHITE CIR	# 106	SANTA CLARITA	28123 BOBWHITE CIR # 106	CA	91350
Residential	28119	BOBWHITE CIR	# 107	SANTA CLARITA	28119 BOBWHITE CIR # 107	CA	91350
Residential	28119	BOBWHITE CIR	# 108	SANTA CLARITA	28119 BOBWHITE CIR # 108	CA	91350
Residential	28119	BOBWHITE CIR	# 109	SANTA CLARITA	28119 BOBWHITE CIR # 109	CA	91350
Residential	28119	BOBWHITE CIR	# 110	SANTA CLARITA	28119 BOBWHITE CIR # 110	CA	91350
Residential	28119	BOBWHITE CIR	# 111	SANTA CLARITA	28119 BOBWHITE CIR # 111	CA	91350
Residential	28117	BOBWHITE CIR	# 112	SANTA CLARITA	28117 BOBWHITE CIR # 112	CA	91350
Residential	28117	BOBWHITE CIR	# 113	SANTA CLARITA	28117 BOBWHITE CIR # 113	CA	91350
Residential	28117	BOBWHITE CIR	# 114	SANTA CLARITA	28117 BOBWHITE CIR # 114	CA	91350
Residential	28117	BOBWHITE CIR	# 115	SANTA CLARITA	28117 BOBWHITE CIR # 115	CA	91350
Residential	28117	BOBWHITE CIR	# 116	SANTA CLARITA	28117 BOBWHITE CIR # 116	CA	91350
Residential	28105	BOBWHITE CIR	# 117	SANTA CLARITA	28105 BOBWHITE CIR # 117	CA	91350
Residential	28105	BOBWHITE CIR	# 118	SANTA CLARITA	28105 BOBWHITE CIR # 118	CA	91350
Residential	28105	BOBWHITE CIR	# 119	SANTA CLARITA	28105 BOBWHITE CIR # 119	CA	91350
Residential	28105	BOBWHITE CIR	# 120	SANTA CLARITA	28105 BOBWHITE CIR # 120	CA	91350
Residential	28105	BOBWHITE CIR	# 121	SANTA CLARITA	28105 BOBWHITE CIR # 121	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27614 SUSAN BETH WAY UNIT A	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27614 SUSAN BETH WAY UNIT B	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27614 SUSAN BETH WAY UNIT C	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27614 SUSAN BETH WAY UNIT D	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27614 SUSAN BETH WAY UNIT E	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27614 SUSAN BETH WAY UNIT F	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27612 SUSAN BETH WAY UNIT A	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27612 SUSAN BETH WAY UNIT B	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27612 SUSAN BETH WAY UNIT C	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27612 SUSAN BETH WAY UNIT D	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27612 SUSAN BETH WAY UNIT E	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27612 SUSAN BETH WAY UNIT F	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27610 SUSAN BETH WAY UNIT A	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27610 SUSAN BETH WAY UNIT B	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27610 SUSAN BETH WAY UNIT C	CA	91350
Residential	27610	SUSAN BETH WAY	# D	SANTA CLARITA	27610 SUSAN BETH WAY # D	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27610 SUSAN BETH WAY UNIT E	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27610 SUSAN BETH WAY UNIT F	CA	91350

Residential	27614	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27614 SUSAN BETH WAY UNIT G	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27614 SUSAN BETH WAY UNIT H	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT I	SANTA CLARITA	27614 SUSAN BETH WAY UNIT I	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27614 SUSAN BETH WAY UNIT J	CA	91350
Residential	27614	SUSAN BETH WAY	UNIT K	SANTA CLARITA	27614 SUSAN BETH WAY UNIT K	CA	91350
Residential	27614	SUSAN BETH WAY	# L	SANTA CLARITA	27614 SUSAN BETH WAY # L	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27612 SUSAN BETH WAY UNIT G	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27612 SUSAN BETH WAY UNIT H	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT I	SANTA CLARITA	27612 SUSAN BETH WAY UNIT I	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27612 SUSAN BETH WAY UNIT J	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT K	SANTA CLARITA	27612 SUSAN BETH WAY UNIT K	CA	91350
Residential	27612	SUSAN BETH WAY	UNIT L	SANTA CLARITA	27612 SUSAN BETH WAY UNIT L	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27610 SUSAN BETH WAY UNIT G	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27610 SUSAN BETH WAY UNIT H	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT I	SANTA CLARITA	27610 SUSAN BETH WAY UNIT I	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27610 SUSAN BETH WAY UNIT J	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT K	SANTA CLARITA	27610 SUSAN BETH WAY UNIT K	CA	91350
Residential	27610	SUSAN BETH WAY	UNIT L	SANTA CLARITA	27610 SUSAN BETH WAY UNIT L	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27620 SUSAN BETH WAY UNIT A	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27620 SUSAN BETH WAY UNIT B	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27620 SUSAN BETH WAY UNIT C	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27620 SUSAN BETH WAY UNIT D	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27620 SUSAN BETH WAY UNIT E	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27620 SUSAN BETH WAY UNIT F	CA	91350
Residential	27618	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27618 SUSAN BETH WAY UNIT A	CA	91350
Residential	27618	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27618 SUSAN BETH WAY UNIT B	CA	91350
Residential	27618	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27618 SUSAN BETH WAY UNIT C	CA	91350
Residential	27618	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27618 SUSAN BETH WAY UNIT D	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27616 SUSAN BETH WAY UNIT A	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27616 SUSAN BETH WAY UNIT B	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27616 SUSAN BETH WAY UNIT C	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27616 SUSAN BETH WAY UNIT D	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27616 SUSAN BETH WAY UNIT E	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27616 SUSAN BETH WAY UNIT F	CA	91350

Residential	27620	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27620 SUSAN BETH WAY UNIT G	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27620 SUSAN BETH WAY UNIT H	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT I	SANTA CLARITA	27620 SUSAN BETH WAY UNIT I	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27620 SUSAN BETH WAY UNIT J	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT K	SANTA CLARITA	27620 SUSAN BETH WAY UNIT K	CA	91350
Residential	27620	SUSAN BETH WAY	UNIT L	SANTA CLARITA	27620 SUSAN BETH WAY UNIT L	CA	91350
Residential	27618	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27618 SUSAN BETH WAY UNIT E	CA	91350
Residential	27618	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27618 SUSAN BETH WAY UNIT F	CA	91350
Residential	27618	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27618 SUSAN BETH WAY UNIT G	CA	91350
Residential	27618	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27618 SUSAN BETH WAY UNIT H	CA	91350
Residential	27616	SUSAN BETH WAY	# G	SANTA CLARITA	27616 SUSAN BETH WAY # G	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27616 SUSAN BETH WAY UNIT H	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT I	SANTA CLARITA	27616 SUSAN BETH WAY UNIT I	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27616 SUSAN BETH WAY UNIT J	CA	91350
Residential	27616	SUSAN BETH WAY	UNIT K	SANTA CLARITA	27616 SUSAN BETH WAY UNIT K	CA	91350
Residential	27616	SUSAN BETH WAY	UNIL L	SANTA CLARITA	27616 SUSAN BETH WAY UNIL L	CA	91350
Residential	27644	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27644 SUSAN BETH WAY UNIT A	CA	91350
Residential	27644	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27644 SUSAN BETH WAY UNIT B	CA	91350
Residential	27644	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27644 SUSAN BETH WAY UNIT C	CA	91350
Residential	27644	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27644 SUSAN BETH WAY UNIT D	CA	91350
Residential	27644	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27644 SUSAN BETH WAY UNIT E	CA	91350
Residential	27644	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27644 SUSAN BETH WAY UNIT F	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27646 SUSAN BETH WAY UNIT A	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27646 SUSAN BETH WAY UNIT B	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27646 SUSAN BETH WAY UNIT C	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27646 SUSAN BETH WAY UNIT D	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27646 SUSAN BETH WAY UNIT E	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27646 SUSAN BETH WAY UNIT F	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27648 SUSAN BETH WAY UNIT A	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27648 SUSAN BETH WAY UNIT B	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27648 SUSAN BETH WAY UNIT C	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27648 SUSAN BETH WAY UNIT D	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27648 SUSAN BETH WAY UNIT E	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27648 SUSAN BETH WAY UNIT F	CA	91350

Residential	27644	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27644 SUSAN BETH WAY UNIT G	CA	91350
Residential	27644	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27644 SUSAN BETH WAY UNIT H	CA	91350
Residential	27644	SUSAN BETH WAY	# 1	SANTA CLARITA	27644 SUSAN BETH WAY # 1	CA	91350
Residential	27644	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27644 SUSAN BETH WAY UNIT J	CA	91350
Residential	27644	SUSAN BETH WAY	# K	SANTA CLARITA	27644 SUSAN BETH WAY # K	CA	91350
Residential	27644	SUSAN BETH WAY	UNIT L	SANTA CLARITA	27644 SUSAN BETH WAY UNIT L	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27646 SUSAN BETH WAY UNIT G	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27646 SUSAN BETH WAY UNIT H	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT I	SANTA CLARITA	27646 SUSAN BETH WAY UNIT I	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27646 SUSAN BETH WAY UNIT J	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT K	SANTA CLARITA	27646 SUSAN BETH WAY UNIT K	CA	91350
Residential	27646	SUSAN BETH WAY	UNIT L	SANTA CLARITA	27646 SUSAN BETH WAY UNIT L	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27648 SUSAN BETH WAY UNIT G	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27648 SUSAN BETH WAY UNIT H	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT I	SANTA CLARITA	27648 SUSAN BETH WAY UNIT I	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27648 SUSAN BETH WAY UNIT J	CA	91350
Residential	27648	SUSAN BETH WAY	UNIT K	SANTA CLARITA	27648 SUSAN BETH WAY UNIT K	CA	91350
Residential	27648	SUSAN BETH WAY	# L	SANTA CLARITA	27648 SUSAN BETH WAY # L	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27642 SUSAN BETH WAY UNIT A	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27642 SUSAN BETH WAY UNIT B	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27642 SUSAN BETH WAY UNIT C	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27642 SUSAN BETH WAY UNIT D	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27642 SUSAN BETH WAY UNIT E	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27642 SUSAN BETH WAY UNIT F	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT A	SANTA CLARITA	27640 SUSAN BETH WAY UNIT A	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT B	SANTA CLARITA	27640 SUSAN BETH WAY UNIT B	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT C	SANTA CLARITA	27640 SUSAN BETH WAY UNIT C	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT D	SANTA CLARITA	27640 SUSAN BETH WAY UNIT D	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT E	SANTA CLARITA	27640 SUSAN BETH WAY UNIT E	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT F	SANTA CLARITA	27640 SUSAN BETH WAY UNIT F	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27642 SUSAN BETH WAY UNIT G	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27642 SUSAN BETH WAY UNIT H	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT I	SANTA CLARITA	27642 SUSAN BETH WAY UNIT I	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27642 SUSAN BETH WAY UNIT J	CA	91350

Residential	27642	SUSAN BETH WAY	UNIT K	SANTA CLARITA	27642 SUSAN BETH WAY UNIT K	CA	91350
Residential	27642	SUSAN BETH WAY	UNIT L	SANTA CLARITA	27642 SUSAN BETH WAY UNIT L	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT G	SANTA CLARITA	27640 SUSAN BETH WAY UNIT G	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT H	SANTA CLARITA	27640 SUSAN BETH WAY UNIT H	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT I	SANTA CLARITA	27640 SUSAN BETH WAY UNIT I	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT J	SANTA CLARITA	27640 SUSAN BETH WAY UNIT J	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT K	SANTA CLARITA	27640 SUSAN BETH WAY UNIT K	CA	91350
Residential	27640	SUSAN BETH WAY	UNIT L	SANTA CLARITA	27640 SUSAN BETH WAY UNIT L	CA	91350
Residential	28479	OLD SPANISH TRL		SAUGUS	28479 OLD SPANISH TRL	CA	91390
Residential	28483	OLD SPANISH TRL		SAUGUS	28483 OLD SPANISH TRL	CA	91390
Residential	28487	OLD SPANISH TRL		SAUGUS	28487 OLD SPANISH TRL	CA	91390
Residential	21502	STOVER FLAT CT		SAUGUS	21502 STOVER FLAT CT	CA	91390
Residential	28503	OLD SPANISH TRL		SAUGUS	28503 OLD SPANISH TRL	CA	91390
Residential	28509	OLD SPANISH TRL		SAUGUS	28509 OLD SPANISH TRL	CA	91390
Residential	28515	OLD SPANISH TRL		SAUGUS	28515 OLD SPANISH TRL	CA	91390
Residential	28519	OLD SPANISH TRL		SAUGUS	28519 OLD SPANISH TRL	CA	91390
Residential	28523	OLD SPANISH TRL		SAUGUS	28523 OLD SPANISH TRL	CA	91390
Residential	28527	OLD SPANISH TRL		SAUGUS	28527 OLD SPANISH TRL	CA	91390
Residential	28528	OLD SPANISH TRL		SAUGUS	28528 OLD SPANISH TRL	CA	91390
Residential	28524	OLD SPANISH TRL		SAUGUS	28524 OLD SPANISH TRL	CA	91390
Residential	28518	OLD SPANISH TRL		SAUGUS	28518 OLD SPANISH TRL	CA	91390
Residential	28514	OLD SPANISH TRL		SAUGUS	28514 OLD SPANISH TRL	CA	91390
Residential	28510	OLD SPANISH TRL		SAUGUS	28510 OLD SPANISH TRL	CA	91390
Residential	28506	OLD SPANISH TRL		SAUGUS	28506 OLD SPANISH TRL	CA	91390
Residential	28502	OLD SPANISH TRL		SAUGUS	28502 OLD SPANISH TRL	CA	91390
Residential	28498	OLD SPANISH TRL		SAUGUS	28498 OLD SPANISH TRL	CA	91390
Residential	28494	OLD SPANISH TRL		SANTA CLARITA	28494 OLD SPANISH TRL	CA	91390
Residential	28490	OLD SPANISH TRL		SAUGUS	28490 OLD SPANISH TRL	CA	91390
Residential	28486	OLD SPANISH TRL		SAUGUS	28486 OLD SPANISH TRL	CA	91390
Residential	28482	OLD SPANISH TRL		SAUGUS	28482 OLD SPANISH TRL	CA	91390
Residential	28425	OLD SPANISH TRL		SAUGUS	28425 OLD SPANISH TRL	CA	91390
Residential	28429	OLD SPANISH TRL		SAUGUS	28429 OLD SPANISH TRL	CA	91390
Residential	21504	BIRCH CANYON WAY		SANTA CLARITA	21504 BIRCH CANYON WAY	CA	91390
Residential	28453	OLD SPANISH TRL		SAUGUS	28453 OLD SPANISH TRL	CA	91390

Residential	28457	OLD SPANISH TRL	SAUGUS	28457 OLD SPANISH TRL	CA	91390
Residential	28461	OLD SPANISH TRL	SAUGUS	28461 OLD SPANISH TRL	CA	91390
Residential	28465	OLD SPANISH TRL	SAUGUS	28465 OLD SPANISH TRL	CA	91390
Residential	28471	OLD SPANISH TRL	SAUGUS	28471 OLD SPANISH TRL	CA	91390
Residential	28475	OLD SPANISH TRL	SAUGUS	28475 OLD SPANISH TRL	CA	91390
Residential	28478	OLD SPANISH TRL	SAUGUS	28478 OLD SPANISH TRL	CA	91390
Residential	28472	OLD SPANISH TRL	SAUGUS	28472 OLD SPANISH TRL	CA	91390
Residential	28468	OLD SPANISH TRL	SAUGUS	28468 OLD SPANISH TRL	CA	91390
Residential	28464	OLD SPANISH TRL	SAUGUS	28464 OLD SPANISH TRL	CA	91390
Residential	28458	OLD SPANISH TRL	SAUGUS	28458 OLD SPANISH TRL	CA	91390
Residential	28454	OLD SPANISH TRL	SAUGUS	28454 OLD SPANISH TRL	CA	91390
Residential	28448	OLD SPANISH TRL	SAUGUS	28448 OLD SPANISH TRL	CA	91390
Residential	28444	OLD SPANISH TRL	SAUGUS	28444 OLD SPANISH TRL	CA	91390
Residential	28438	OLD SPANISH TRL	SAUGUS	28438 OLD SPANISH TRL	CA	91390
Residential	28434	OLD SPANISH TRL	SAUGUS	28434 OLD SPANISH TRL	CA	91390
Residential	28430	OLD SPANISH TRL	SAUGUS	28430 OLD SPANISH TRL	CA	91390
Residential	28424	OLD SPANISH TRL	SAUGUS	28424 OLD SPANISH TRL	CA	91390
Commercial	28460	HASKELL CANYON RD	SANTA CLARITA	28460 HASKELL CANYON RD	CA	91390
Residential	28533	OLD SPANISH TRL	SAUGUS	28533 OLD SPANISH TRL	CA	91390
Residential	28534	OLD SPANISH TRL	SAUGUS	28534 OLD SPANISH TRL	CA	91390
Residential	28540	OLD SPANISH TRL	SAUGUS	28540 OLD SPANISH TRL	CA	91390
Residential	28546	OLD SPANISH TRL	SAUGUS	28546 OLD SPANISH TRL	CA	91390
Residential	28640	PLACERVIEW TRL	SAUGUS	28640 PLACERVIEW TRL	CA	91390
Residential	28650	PLACERVIEW TRL	SAUGUS	28650 PLACERVIEW TRL	CA	91390
Residential	28654	PLACERVIEW TRL	SAUGUS	28654 PLACERVIEW TRL	CA	91390
Residential	28658	PLACERVIEW TRL	SAUGUS	28658 PLACERVIEW TRL	CA	91390
Residential	28662	PLACERVIEW TRL	SAUGUS	28662 PLACERVIEW TRL	CA	91390
Residential	28668	PLACERVIEW TRAIL	SAUGUS	28668 PLACERVIEW TRAIL	CA	91390
Residential	28672	PLACERVIEW TRL	SAUGUS	28672 PLACERVIEW TRL	CA	91390
Residential	28676	PLACERVIEW TRL	SAUGUS	28676 PLACERVIEW TRL	CA	91390
Residential	28680	PLACERVIEW TRAIL	SAUGUS	28680 PLACERVIEW TRAIL	CA	91390
Residential	28684	PLACERVIEW TRL	SAUGUS	28684 PLACERVIEW TRL	CA	91390
Residential	28688	PLACERVIEW TRL	SAUGUS	28688 PLACERVIEW TRL	CA	91390
Residential	28692	PLACERVIEW TRAIL	SAUGUS	28692 PLACERVIEW TRAIL	CA	91390

Residential	28698	PLACERVIEW TRL	SAUGUS	28698 PLACERVIEW TRL	CA	91390
Residential	28702	PLACERVIEW TRL	SAUGUS	28702 PLACERVIEW TRL	CA	91390
Residential	28708	PLACERVIEW TRL	SAUGUS	28708 PLACERVIEW TRL	CA	91390
Residential	28374	SYCAMORE DR	SAUGUS	28374 SYCAMORE DR	CA	91350
Residential	28368	SYCAMORE DR	SAUGUS	28368 SYCAMORE DR	CA	91350
Residential	28362	SYCAMORE DR	SAUGUS	28362 SYCAMORE DR	CA	91350
Residential	28358	SYCAMORE DR	SAUGUS	28358 SYCAMORE DR	CA	91350
Residential	28352	SYCAMORE DR	SAUGUS	28352 SYCAMORE DR	CA	91350
Residential	28348	SYCAMORE DR	SAUGUS	28348 SYCAMORE DR	CA	91350
Residential	28344	SYCAMORE DR	SAUGUS	28344 SYCAMORE DR	CA	91350
Residential	28340	SYCAMORE DR	SAUGUS	28340 SYCAMORE DR	CA	91350
Residential	28334	SYCAMORE DR	SAUGUS	28334 SYCAMORE DR	CA	91350
Residential	28330	SYCAMORE DR	SAUGUS	28330 SYCAMORE DR	CA	91350
Residential	28326	SYCAMORE DR	SAUGUS	28326 SYCAMORE DR	CA	91350
Residential	28320	SYCAMORE DR	SAUGUS	28320 SYCAMORE DR	CA	91350
Residential	28316	SYCAMORE DR	SAUGUS	28316 SYCAMORE DR	CA	91350
Residential	28312	SYCAMORE DR	SAUGUS	28312 SYCAMORE DR	CA	91350
Residential	28306	SYCAMORE DR	SAUGUS	28306 SYCAMORE DR	CA	91350
Residential	28302	SYCAMORE DR	SAUGUS	28302 SYCAMORE DR	CA	91350
Residential	28272	SYCAMORE DR	SAUGUS	28272 SYCAMORE DR	CA	91350
Residential	28268	SYCAMORE DR	SAUGUS	28268 SYCAMORE DR	CA	91350
Residential	28264	SYCAMORE DR	SAUGUS	28264 SYCAMORE DR	CA	91350
Residential	28260	SYCAMORE DR	SAUGUS	28260 SYCAMORE DR	CA	91350
Residential	28254	SYCAMORE DR	SAUGUS	28254 SYCAMORE DR	CA	91350
Residential	28248	SYCAMORE DR	SAUGUS	28248 SYCAMORE DR	CA	91350
Residential	28244	SYCAMORE DR	SAUGUS	28244 SYCAMORE DR	CA	91350
Residential	28240	SYCAMORE DR	SAUGUS	28240 SYCAMORE DR	CA	91350
Residential	28236	SYCAMORE DR	SAUGUS	28236 SYCAMORE DR	CA	91350
Residential	28253	CEDAR LN	SAUGUS	28253 CEDAR LN	CA	91350
Residential	28257	CEDAR LN	SANTA CLARITA	28257 CEDAR LN	CA	91350
Residential	21558	CHERRY CT	SAUGUS	21558 CHERRY CT	CA	91350
Residential	28256	CEDAR LN	SAUGUS	28256 CEDAR LN	CA	91350
Residential	28252	CEDAR LN	SAUGUS	28252 CEDAR LN	CA	91350
Residential	21552	CHERRY CT	SAUGUS	21552 CHERRY CT	CA	91350

Residential	28255	SYCAMORE DR	SAUGUS	28255 SYCAMORE DR	CA	91350
Residential	28259	SYCAMORE DR	SAUGUS	28259 SYCAMORE DR	CA	91350
Residential	28263	SYCAMORE DR	SAUGUS	28263 SYCAMORE DR	CA	91350
Residential	28267	SYCAMORE DR	SAUGUS	28267 SYCAMORE DR	CA	91350
Residential	28303	SYCAMORE DR	SAUGUS	28303 SYCAMORE DR	CA	91350
Residential	28309	SYCAMORE DR	SAUGUS	28309 SYCAMORE DR	CA	91350
Residential	28313	SYCAMORE DR	SAUGUS	28313 SYCAMORE DR	CA	91350
Residential	28317	SYCAMORE DR	SAUGUS	28317 SYCAMORE DR	CA	91350
Residential	21556	JUNIPER CT	SAUGUS	21556 JUNIPER CT	CA	91350
Residential	21564	JUNIPER CT	SAUGUS	21564 JUNIPER CT	CA	91350
Residential	21572	JUNIPER CT	SAUGUS	21572 JUNIPER CT	CA	91350
Residential	21573	JUNIPER CT	SAUGUS	21573 JUNIPER CT	CA	91350
Residential	21563	JUNIPER CT	SAUGUS	21563 JUNIPER CT	CA	91350
Residential	21555	JUNIPER CT	SAUGUS	21555 JUNIPER CT	CA	91350
Residential	28335	SYCAMORE DR	SAUGUS	28335 SYCAMORE DR	CA	91350
Residential	28343	SYCAMORE DR	SAUGUS	28343 SYCAMORE DR	CA	91350
Residential	21560	HIBISCUS CT	SAUGUS	21560 HIBISCUS CT	CA	91350
Residential	21568	HIBISCUS CT	SAUGUS	21568 HIBISCUS CT	CA	91350
Residential	21569	HIBISCUS CT	SAUGUS	21569 HIBISCUS CT	CA	91350
Residential	21563	HIBISCUS CT	SAUGUS	21563 HIBISCUS CT	CA	91350
Residential	21555	HIBISCUS CT	SAUGUS	21555 HIBISCUS CT	CA	91350
Residential	21551	HIBISCUS CT	SAUGUS	21551 HIBISCUS CT	CA	91350
Residential	21558	OAK DR	SAUGUS	21558 OAK DR	CA	91350
Residential	21562	OAK DR	SAUGUS	21562 OAK DR	CA	91350
Residential	21566	OAK DR	SAUGUS	21566 OAK DR	CA	91350
Residential	21570	OAK DR	SAUGUS	21570 OAK DR	CA	91350
Residential	28354	WILLOW CT	SAUGUS	28354 WILLOW CT	CA	91350
Residential	28350	WILLOW CT	SAUGUS	28350 WILLOW CT	CA	91350
Residential	28346	WILLOW CT	SAUGUS	28346 WILLOW CT	CA	91350
Residential	28342	WILLOW CT	SAUGUS	28342 WILLOW CT	CA	91350
Residential	28338	WILLOW CT	SAUGUS	28338 WILLOW CT	CA	91350
Residential	28332	WILLOW CT	SAUGUS	28332 WILLOW CT	CA	91350
Residential	28328	WILLOW CT	SAUGUS	28328 WILLOW CT	CA	91350
Residential	28324	WILLOW CT	SAUGUS	28324 WILLOW CT	CA	91350

Residential	28318	WILLOW CT	SAUGUS	28318 WILLOW CT	CA	91350
Residential	28314	WILLOW CT	SAUGUS	28314 WILLOW CT	CA	91350
Residential	28310	WILLOW CT	SAUGUS	28310 WILLOW CT	CA	91350
Residential	28306	WILLOW CT	SAUGUS	28306 WILLOW CT	CA	91350
Residential	28301	WILLOW CT	SAUGUS	28301 WILLOW CT	CA	91350
Residential	28307	WILLOW CT	SAUGUS	28307 WILLOW CT	CA	91350
Residential	28311	WILLOW CT	SAUGUS	28311 WILLOW CT	CA	91350
Residential	28315	WILLOW CT	SAUGUS	28315 WILLOW CT	CA	91350
Residential	28319	WILLOW CT	SAUGUS	28319 WILLOW CT	CA	91350
Residential	28325	WILLOW CT	SAUGUS	28325 WILLOW CT	CA	91350
Residential	28329	WILLOW CT	SAUGUS	28329 WILLOW CT	CA	91350
Residential	28333	WILLOW CT	SAUGUS	28333 WILLOW CT	CA	91350
Residential	28337	WILLOW CT	SAUGUS	28337 WILLOW CT	CA	91350
Residential	28341	WILLOW CT	SAUGUS	28341 WILLOW CT	CA	91350
Residential	28345	WILLOW CT	SAUGUS	28345 WILLOW CT	CA	91350
Residential	28349	WILLOW CT	SAUGUS	28349 WILLOW CT	CA	91350
Residential	28355	WILLOW CT	SAUGUS	28355 WILLOW CT	CA	91350
Residential	28361	WILLOW CT	SAUGUS	28361 WILLOW CT	CA	91350
Residential	28365	WILLOW CT	SAUGUS	28365 WILLOW CT	CA	91350
Residential	21579	OAK DR	SAUGUS	21579 OAK DR	CA	91350
Residential	21575	OAK DR	SAUGUS	21575 OAK DR	CA	91350
Residential	21571	OAK DR	SAUGUS	21571 OAK DR	CA	91350
Residential	21567	OAK DR	SAUGUS	21567 OAK DR	CA	91350
Residential	21561	OAK DR	SAUGUS	21561 OAK DR	CA	91350
Residential	21557	OAK DR	SAUGUS	21557 OAK DR	CA	91350
Residential	21553	OAK DR	SAUGUS	21553 OAK DR	CA	91350
Residential	28232	SYCAMORE DR	SAUGUS	28232 SYCAMORE DR	CA	91350
Residential	28228	SYCAMORE DR	SAUGUS	28228 SYCAMORE DR	CA	91350
Residential	28222	SYCAMORE DR	SAUGUS	28222 SYCAMORE DR	CA	91350
Residential	28218	SYCAMORE DR	SAUGUS	28218 SYCAMORE DR	CA	91350
Residential	28214	SYCAMORE DR	SAUGUS	28214 SYCAMORE DR	CA	91350
Residential	28210	SYCAMORE DR	SAUGUS	28210 SYCAMORE DR	CA	91350
Residential	28202	SYCAMORE DR	SAUGUS	28202 SYCAMORE DR	CA	91350
Residential	28203	SYCAMORE DR	SANTA CLARITA	28203 SYCAMORE DR	CA	91350

Residential	28225	SYCAMORE DR	SAUGUS	28225 SYCAMORE DR	CA	91350
Residential	28265	CEDAR LN	SAUGUS	28265 CEDAR LN	CA	91350
Residential	28269	CEDAR LN	SAUGUS	28269 CEDAR LN	CA	91350
Residential	28273	CEDAR LN	SAUGUS	28273 CEDAR LN	CA	91350
Residential	28279	CEDAR LN	SAUGUS	28279 CEDAR LN	CA	91350
Residential	28283	CEDAR LN	SAUGUS	28283 CEDAR LN	CA	91350
Residential	28291	CEDAR LN	SAUGUS	28291 CEDAR LN	CA	91350
Residential	28295	CEDAR LN	SAUGUS	28295 CEDAR LN	CA	91350
Residential	28296	CEDAR LN	SAUGUS	28296 CEDAR LN	CA	91350
Residential	28292	CEDAR LN	SAUGUS	28292 CEDAR LN	CA	91350
Residential	28286	CEDAR LN	SAUGUS	28286 CEDAR LN	CA	91350
Residential	28282	CEDAR LN	SAUGUS	28282 CEDAR LN	CA	91350
Residential	28206	SYCAMORE DR	SAUGUS	28206 SYCAMORE DR	CA	91350
Residential	28207	SYCAMORE DR	SAUGUS	28207 SYCAMORE DR	CA	91350
Residential	28261	CEDAR LN	SAUGUS	28261 CEDAR LN	CA	91350
Residential	28287	CEDAR LN	SAUGUS	28287 CEDAR LN	CA	91350
Residential	28387	BROOKVIEW TER	SANTA CLARITA	28387 BROOKVIEW TER	CA	91350
Residential	28381	BROOKVIEW TER	SANTA CLARITA	28381 BROOKVIEW TER	CA	91350
Residential	28373	BROOKVIEW TER	SANTA CLARITA	28373 BROOKVIEW TER	CA	91350
Residential	28359	BROOKVIEW TER	SANTA CLARITA	28359 BROOKVIEW TER	CA	91350
Residential	28355	BROOKVIEW TER	SANTA CLARITA	28355 BROOKVIEW TER	CA	91350
Residential	28351	BROOKVIEW TER	SANTA CLARITA	28351 BROOKVIEW TER	CA	91350
Residential	28347	BROOKVIEW TER	SANTA CLARITA	28347 BROOKVIEW TER	CA	91350
Residential	28341	BROOKVIEW TER	SANTA CLARITA	28341 BROOKVIEW TER	CA	91350
Residential	28335	BROOKVIEW TER	SANTA CLARITA	28335 BROOKVIEW TER	CA	91350
Residential	28329	BROOKVIEW TER	SANTA CLARITA	28329 BROOKVIEW TER	CA	91350
Residential	28323	BROOKVIEW TER	SANTA CLARITA	28323 BROOKVIEW TER	CA	91350
Residential	28319	BROOKVIEW TER	SANTA CLARITA	28319 BROOKVIEW TER	CA	91350
Residential	28311	BROOKVIEW TER	SANTA CLARITA	28311 BROOKVIEW TER	CA	91350
Residential	28307	BROOKVIEW TER	SANTA CLARITA	28307 BROOKVIEW TER	CA	91350
Residential	28301	BROOKVIEW TER	SANTA CLARITA	28301 BROOKVIEW TER	CA	91350
Residential	28302	BROOKVIEW TER	SANTA CLARITA	28302 BROOKVIEW TER	CA	91350
Residential	28308	BROOKVIEW TER	SANTA CLARITA	28308 BROOKVIEW TER	CA	91350
Residential	28314	BROOKVIEW TER	SANTA CLARITA	28314 BROOKVIEW TER	CA	91350

Residential	28320	BROOKVIEW TER	SANTA CLARITA	28320 BROOKVIEW TER	CA	91350
Residential	28326	BROOKVIEW TER	SANTA CLARITA	28326 BROOKVIEW TER	CA	91350
Residential	28332	BROOKVIEW TER	SAUGUS	28332 BROOKVIEW TER	CA	91350
Residential	28338	BROOKVIEW TER	SANTA CLARITA	28338 BROOKVIEW TER	CA	91350
Residential	28344	BROOKVIEW TER	SANTA CLARITA	28344 BROOKVIEW TER	CA	91350
Residential	28352	BROOKVIEW TER	SANTA CLARITA	28352 BROOKVIEW TER	CA	91350
Residential	28358	BROOKVIEW TER	SANTA CLARITA	28358 BROOKVIEW TER	CA	91350
Residential	28366	BROOKVIEW TER	SANTA CLARITA	28366 BROOKVIEW TER	CA	91350
Residential	28372	BROOKVIEW TER	SANTA CLARITA	28372 BROOKVIEW TER	CA	91350
Residential	28378	BROOKVIEW TER	SANTA CLARITA	28378 BROOKVIEW TER	CA	91350
Residential	28501	DEER SPRINGS DR	SAUGUS	28501 DEER SPRINGS DR	CA	91390
Residential	28507	DEER SPRINGS DR	SAUGUS	28507 DEER SPRINGS DR	CA	91390
Residential	28513	DEER SPRINGS DR	SAUGUS	28513 DEER SPRINGS DR	CA	91390
Residential	28517	DEER SPRINGS DR	SAUGUS	28517 DEER SPRINGS DR	CA	91390
Residential	28523	DEER SPRINGS DR	SAUGUS	28523 DEER SPRINGS DR	CA	91390
Residential	28529	DEER SPRINGS DR	SAUGUS	28529 DEER SPRINGS DR	CA	91390
Residential	28535	DEER SPRINGS DR	SAUGUS	28535 DEER SPRINGS DR	CA	91390
Residential	28543	DEER SPRINGS DR	SAUGUS	28543 DEER SPRINGS DR	CA	91390
Residential	28551	DEER SPRINGS DR	SAUGUS	28551 DEER SPRINGS DR	CA	91390
Residential	28559	DEER SPRINGS DR	SAUGUS	28559 DEER SPRINGS DR	CA	91390
Residential	28567	DEER SPRINGS DR	SAUGUS	28567 DEER SPRINGS DR	CA	91390
Residential	28575	DEER SPRINGS DR	SAUGUS	28575 DEER SPRINGS DR	CA	91390
Residential	28581	DEER SPRINGS DR	SAUGUS	28581 DEER SPRINGS DR	CA	91390
Residential	28587	DEER SPRINGS DR	SAUGUS	28587 DEER SPRINGS DR	CA	91390
Residential	28593	DEER SPRINGS DR	SAUGUS	28593 DEER SPRINGS DR	CA	91390
Residential	28599	DEER SPRINGS DR	SAUGUS	28599 DEER SPRINGS DR	CA	91390
Residential	28598	DEER SPRINGS DR	SAUGUS	28598 DEER SPRINGS DR	CA	91390
Residential	28592	DEER SPRINGS DR	SAUGUS	28592 DEER SPRINGS DR	CA	91390
Residential	28584	DEER SPRINGS DR	SAUGUS	28584 DEER SPRINGS DR	CA	91390
Residential	28578	DEER SPRINGS DR	SAUGUS	28578 DEER SPRINGS DR	CA	91390
Residential	28568	DEER SPRINGS DR	SAUGUS	28568 DEER SPRINGS DR	CA	91390
Residential	28560	DEER SPRINGS DR	SAUGUS	28560 DEER SPRINGS DR	CA	91390
Residential	28546	DEER SPRINGS DR	SAUGUS	28546 DEER SPRINGS DR	CA	91390
Residential	28532	DEER SPRINGS DR	SAUGUS	28532 DEER SPRINGS DR	CA	91390

Residential	21239	LONE STAR WAY	SAUGUS	21239 LONE STAR WAY	CA	91390
Residential	21227	LONE STAR WAY	SAUGUS	21227 LONE STAR WAY	CA	91390
Residential	28519	OLD COACH CT	SANTA CLARITA	28519 OLD COACH CT	CA	91390
Residential	28531	OLD COACH CT	SANTA CLARITA	28531 OLD COACH CT	CA	91390
Residential	21240	LONE STAR WAY	SAUGUS	21240 LONE STAR WAY	CA	91390
Residential	28518	DEER SPRINGS DR	SAUGUS	28518 DEER SPRINGS DR	CA	91390
Residential	28510	DEER SPRINGS DR	SAUGUS	28510 DEER SPRINGS DR	CA	91390
Residential	28502	DEER SPRINGS DR	SAUGUS	28502 DEER SPRINGS DR	CA	91390
Residential	28542	OLD COACH CT	SAUGUS	28542 OLD COACH CT	CA	91390
Residential	28603	DEER SPRINGS DR	SAUGUS	28603 DEER SPRINGS DR	CA	91390
Residential	28611	DEER SPRINGS DR	SAUGUS	28611 DEER SPRINGS DR	CA	91390
Residential	28619	DEER SPRINGS DR	SAUGUS	28619 DEER SPRINGS DR	CA	91390
Residential	28625	DEER SPRINGS DR	SAUGUS	28625 DEER SPRINGS DR	CA	91390
Residential	28633	DEER SPRINGS DR	SAUGUS	28633 DEER SPRINGS DR	CA	91390
Residential	28639	DEER SPRINGS DR	SAUGUS	28639 DEER SPRINGS DR	CA	91390
Residential	28604	DEER SPRINGS DR	SAUGUS	28604 DEER SPRINGS DR	CA	91390
Residential	28608	DEER SPRINGS DR	SAUGUS	28608 DEER SPRINGS DR	CA	91390
Residential	28614	DEER SPRINGS DR	SAUGUS	28614 DEER SPRINGS DR	CA	91390
Residential	28626	DEER SPRINGS DR	SAUGUS	28626 DEER SPRINGS DR	CA	91390
Residential	21198	CIMARRON WAY	SAUGUS	21198 CIMARRON WAY	CA	91390
Residential	28643	DEER SPRINGS DR	SAUGUS	28643 DEER SPRINGS DR	CA	91390
Residential	28649	DEER SPRINGS DR	SAUGUS	28649 DEER SPRINGS DR	CA	91390
Residential	28655	DEER SPRINGS DR	SAUGUS	28655 DEER SPRINGS DR	CA	91390
Residential	28659	DEER SPRINGS DR	SAUGUS	28659 DEER SPRINGS DR	CA	91390
Residential	28648	DEER SPRINGS DR	SAUGUS	28648 DEER SPRINGS DR	CA	91390
Residential	28652	DEER SPRINGS DR	SAUGUS	28652 DEER SPRINGS DR	CA	91390
Residential	28660	DEER SPRINGS DR	SANTA CLARITA	28660 DEER SPRINGS DR	CA	91390



# The Signal SANTA CLARITA VALLEY

SignalSCV.com 661-259-1234

Today's Forecast 71°/53°



75¢ Tuesday - Friday \$1 Weekender

CANYON COUNTRY | NEWHALL | SAUGUS | VALENCIA | STEVENSON RANCH | CASTAIC | VAL VERDE | AGUA DULCE

# Lights, camera, action for SCV family

Krieg family signs up for new Lifetime series in order to help other families

By Christina Cox Signal Staff Writer

ore than a year ago, Sarah Krieg and her husband, Dan, were emotionally exhausted.

The couple had been trying for eight years to grow their family and had recently gone through two unsuccessful rounds of In Vitro Fertilization (IVF).

"I was emotionally and physically in the worst state I had ever been in," Sarah Krieg said.

The couple has one 3-yearold son, Lloyd, but they desperately wanted to give him a



Austin Dave/The Signal (See additional photos on signalscv.com)

(Above) The Hughes family poses for a photo in their living room in January 2018. (Below) Cheyenne Hughes plays with her sisters in their home. Hughes pulled through a 10-hour surgery about one year ago to remove a tumor found by her brain. She now faces another struggle.

## Fighting for her life

Cheyenne Hughes stays positive through new health struggles



By Christina Cox Signal Staff Writer

A bout one year ago, Golden Valley High School student Cheyenne Hughes shocked doctors when she pulled through a maior. 10-hour surgery to were expecting a 30-hour surgery, but it was 10 hours and they got most of the tumor... She did really well and was able to walk and come home five days later."

The surgery was part of Cheyenne's nearly sevenyear battle against cancer

# Deputies arrest 5 in gang sweep

Half of the people detained part of the Brown Familia, authorities report

By Jim Holt Signal Senior Staff Writer

Members of two Sheriff's Station's specialty teams carried out a sweep of suspected gang members, arresting five of at least 12 people detained this week.

The sweep was carried out Wednesday, when members of the Santa Clarita Valley Sheriff Station's Special Assignment and Crime Impact teams began "patrolling in SCV areas where possible gang activity was reported," Shirley Miller, spokeswoman for the SCV Sheriff's Station told The Signal.

"On Thursday afternoon around 3:15, our deputies from the SAT and CIT teams were patrolling the area of 18500 of Soledad canyon road," Sgt. Chris Craft who oversees the stations Zone 4 area in Saugus

## Search and rescue in ANF

Sheriff's Department Search and Rescue Team looks for man off San Francisquito Canyon Road who was reportedly last seen on Jan. 16

**By Perry Smith** Signal Deputy Managing Editor

An investigation is now underway and being handled by LASD's Homicide/Missing Persons Unit, which was assisted by the deployment of the station's Search and Rescue Team, in addition to assistance from an aerial unit, on Thursday.

The name of the missing person is Jason Alen Brice, who was described as 52 years old, 5'11" and 320 pounds, with brown/ gray medium-length hair and blue eyes.

Santa Clarita Valley Sheriff's Station officials activated search and rescue resources Thursday

evening in the Angeles National Forest region.

The search units were seen near an Angeles National Forest ranger station, off San Francisquito Canyon Road, north of Drinkwater Flats, which Persons Unit. is a popular off-road rec-

reation area.

One of the detectives handling the investigation confirmed a few preliminary details regarding the nature of the missing person, but the identity of the man sought is expected to be released later this afternoon.

"It is a DWP worker,



Brice

there is nothing suspicious (about the disappearance),

there's nothing criminal (suspected at this time)," said Detective Abraham of the Homicide Bureau/Missing

"(Thursday's search) was a due diligence search so to speak, because he lives in that area, but we're giving it our best shot to search out there because of the terrain," she said, adding that officials don't have any specific information about the person's last known whereabouts.

The station's Search and Rescue Team was Thursday activated afternoon.

The person was reported missing on Jan. 23, but believed to have been last seen about a week prior to the report, around Jan. 16, according to officials.

"Nobody was located, we still don't have the specifics on the reason they were there," said Deputy Navarro of the Sheriff's Information Bureau, regarding Thursday's search efforts. "My understanding is that there was an investigation that did not yield (what detectives sought).

SIB officials confirmed initial reports that no foul



Austin Dave/The Signal (See additional photos on signalscv.com) The Santa Clarita Valley Sheriff's Station's Search and Rescue Team assisted in a search for Jason Brice, who was reported missing Jan. 23. Brice was last seen Jan. 16, according to Sheriff's Department officials.

play has been suspected, and that the search was a routine follow-up, as the person missing lived in the area being searched.

"We're just trying to

do the best we can on this one," Abraham said, "because we don't have any leads."

psmith@ signalSCV.com

### D.A. warns residents about contractor fraud

By Signal Staff

The Los Angeles County District Attorney's Office issued a warning Friday to residents who might be in need of a contractor's services after the recent natural disasters.

Property owners rebuilding homes damaged or destroyed by the recent fires should be cautious of contractors seeking to take advantage of their misfortune.

Fraudulent contractor scams typically fall into two categories: contractors working without a license and contractors — licensed or not whose work is substandard or never completed.

Criminal penalties for either during a declared state of emergency are significantly higher, according to the D.A.'s

Unlicensed contractors who seek to repair property damaged by a natural

disaster face fines of up to \$10,000, three years in jail or both. Contractors convicted of defrauding a property owner or tenant for repairs to a structure damaged by a natural disaster can be fined up to \$25,000.

The Los Angeles County D.A's Office also offered the following:

Hire licensed and insured contractors. Check a contractor's license status with the Contractors State License Board at http://cslb.ca.gov. Disaster victims may call the board's hotline at (800) 962-1125.

Ask friends, relatives, neighbors and co-workers for contractor recommendations.

Ask contractors to provide references.

Don't hire contractors who ask for the entire payment up front.

Have a knowledgeable friend, relative or attorney review the repair contract before signing it.

#### **Guaranteed Sale Program - Local Real Estate Agent Will Buy Your Santa Clarita** home for Cash

Santa Clarita - Every month, thousands of homeowners are faced with the stressful dilemma of whether to buy first or sell first. You see, if you buy before selling, you could run the risk of owning two homes. Or, just as bad, if you sell first, you could end up homeless. It's what insiders in the industry call the Real Estate Catch 22, and it's an extremely anxious position to find yourself in.

This financial and emotional tightrope is one you usually have to walk alone because most agents have no way of helping you with this predicament. But one local realtor is using a unique Guaranteed Sale Program which solves this dilemma. This program guarantees the sale of your present home before you take possession of your new one. If your home doesn't sell in 120 days, they will buy it from you themselves for the previously agreed price ensuring that you never get caught in the Real Estate Catch 22. Before you hire any professional, you should research the market to find out who can do the best job for you. When interviewing agents, find out what kind of guarantee they are willing to give you with respect to the selling of your home. Unfortunately, you'll find that most agents simply cannot make such a guarantee.

To help you learn more about this program and how it can make your move less stressful, a FREE special report has been prepared entitled "How to Avoid Getting Stuck with Two Homes".

To order a FREE Special Report, visit www.santaclaritahomeevaluation.com or to hear a brief recorded message about how to order your FREE copy of this report call toll-free 1-844-318-6557 and enter 1022. You can call any time, 24 hours a day, 7 days a week.

Get your free special report NOW to find out how to guarantee the cash sale of your home.

This report is courtesy of Sarah Darabi, Broker DRE#01018170. Not intended to solicit buyers or sellers currently under contract. Copyright @ 2018

# Notice of Preparation of a Draft Environmental Impact Report for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project

The City of Los Angeles Department of Water and Power (LADWP) has prepared a Notice of Preparation (NOP) to notify agencies and interested parties that, as the lead agency, LAWDP will prepare an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed Power Plant 1 and Power Plant 2 Transmission Line Conversion Project (proposed project). The proposed project would be located within a linear alignment in northwestern Los Angeles County that generally extends from Haskell Canyon to the community of Sylmar, located south of the City of Santa Clarita. The project would involve demolishing an existing 12-mile segment of a 115 kilovolt (kV) transmission line, and replacing it with a new 230 kV transmission line. The new transmission line would be located generally adjacent to the existing 115 kV line. The purpose of the proposed project is to increase the transmission capacity between Haskell Canyon Switching Station and Sylmar Switching Station so additional renewable energy supplies can be transmitted to the Los Angeles basin. LADWP will hold a scoping meeting to share information regarding the proposed project and environmental review process, and to receive written comments about the scope and content of the environmental analysis to be addressed in the EIR. The scoping meeting will be held at The Centre in Santa Clarita, 20880 Centre Pointe Parkway, Santa Clarita, CA 91351 at 6:00PM on Wednesday, February 7, 2018. The public review period for the NOP and the Initial Study will commence on January 24, 2018 and conclude on March 9, 2018. During this review period, written comments regarding the scope and content of the environmental analysis to be addressed in the EIR and concerning the adequacy of the Initial Study may be submitted. The Initial Study is available for review at http://www.ladwp.com/envnotices and at the following locations: LADWP - 111 N. Hope Street, Room 1044, Los Angeles, CA 90012; Old Town Newhall Library - 24500 Main Street, Santa Clarita, CA 91321; and Sylmar Branch Library - 14561 Polk Street, Sylmar, CA 91342. Please submit your comments to the attention of Mr. Eduardo Cuevas, LADWP, 111 N. Hope Street, Room 1044, Los Angeles, CA 90012, or to Eduardo.Cuevas@ladwp.com, by March 9, 2018.

As a covered entity under Title II of the Americans with Disabilities Act, the Department of Water and Power does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.



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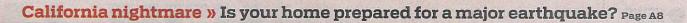
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Taliban bomber in ambulance slays 95

Nation+World » A12



Who will dominate the Grammys?

Spotlight



Ice skater's path started with a leap of faith

Sports

### Local. News. Matters.

Los Angeles Daily News

H: 82

H: 84 L: 57 See the full weather forecast » PAGE A16

Sunday, January 28, 2018

\$2.00 FACEBOOK.COM/LADAILYNEWS TWITTER.COM/LADAILYNEWS

dailynews.com

#### THIN MINTS AND MORE



Valencia Girl Scout Beverly Johnson, 15, joins more than 200 volunteers on Saturday at a Babies R Us parking lot in Santa Clarita, where more than 17,000 cases of cookies were distributed for the Scouts' annual cookie fundraiser.

# COOKEDOUGH: IT

CALIFORNIA

## Sexual assault rampant in rehab

No criminal checks required for treatment counselors, allowing unscrupulous to prey on addicts

By Teri Sforza and Tony Saavedra Staff Writers

The woman's voice trembled.

She was being treated for addiction at the rehab center Hope by the Sea, she told the 911 operator, but her counselor was showing her porn and pressing his body against her. She reported him to management, she added, but no one be-

Now the counselor is angry, she wept, saying he might lose his job because of her. She didn't know what to do. If she left, she'd go to jail. But if she stayed ...

Then she hung up, according to emergency

#### INTERNATIONAL HOLOCAUST REMEMBRANCE DAY



CZAREK SOKOLOWSKI - THE ASSOCIATED PRESS

Survivors and guests walk past the "Arbeit Macht Frei" (Work Sets You Free) sign Saturday at the former Nazi German concentration camp in Oswiecim, Poland, on International Holocaust Remembrance Day.

## World recalls genocide amid signs of rising hate

By Vanessa Gera and Matthew Lee The Associated Press

WARSAW, POLAND » Elderly Holocaust survivors wearing striped scarves that recalled their uniforms as once the Warsaw Ghetto. prisoners of Nazi Germany to Auschwitz on Saturday, exactly 73 years after the Soviet army liberated the death camp in occupied Poland.

On the date now commemorated as Interna- minds us that we can never, tional Holocaust Remembrance Day, political leaders and Jewish officials warned that the Nazi genocide must never cease serving as a reminder of the evil of which humans are capable.

saw Ghetto Uprising of Never again."

uniformed Polish military officers and readjusted a wreath underneath the are on the rise. monument, a hulking structure located in what was

The head of Warsaw's made a yearly pilgrimage Jewish community read a prayer, and Tillerson made brief remarks about the importance of not forgetting the horrors of the Holocaust.

> "On this occasion, it rewe can never, be indifferent to the face of evil," Tillerson said.

"The Western alliance which emerged from World War II has committed itself to ensuring the security of In Warsaw, Poland, Sec- all that this would never retary of State Rex Tiller- happen again," he said. "As son attended a solemn cer- we mark this day in solemn premacy groups are among emony at a memorial to the remembrance, let us re-Jews who died fighting the peat the words of our own German forces in the War- commitment: Never again. retary-General Antonio

His words came amid Tillerson trailed two signs in Europe and beyond that ultranationalism and extreme right-wing groups

> In Germany and Austria, the nations that perpetrated the killing of 6 million Jews and millions of others during World War II, far-right parties with their roots in the Nazi era are gaining strength.

> The anti-migrant, anti-Muslim AfD party won seats in the German parliament for the first time last year, while the nationalist, anti-migrant Freedom Party is part of the coalition running the Austrian government.

> Both parties have members who have made anti-Semitic remarks.

> "Neo-Nazis and white suthe main purveyors of extreme hatred," U.N. Sec-Guterres said.

#### **Notice of Preparation** of a Draft Environmental Impact Report for the Power Plant 1 and Power Plant 2 **Transmission Line Conversion Project**

The City of Los Angeles Department of Water and Power (LADWP) has prepared a Notice of Preparation (NOP) to notify agencies and interested parties that, as the lead agency, LAWDP will prepare an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed Power Plant 1 and Power Plant 2 Transmission Line Conversion Project (proposed project). The proposed project would be located within a linear alignment in northwestern Los Angeles County that generally extends from Haskell Canyon to the community of Sylmar, located south of the City of Santa Clarita. The project would involve demolishing an existing 12-mile segment of a 115 kilovolt (kV) transmission line, and replacing it with a new 230 kV transmission line. The new transmission line would be located generally adjacent to the existing 115 kV line. The purpose of the proposed project is to increase the transmission capacity between Haskell Canyon Switching Station and Sylmar Switching Station so additional renewable energy supplies can be transmitted to the Los Angeles basin. LADWP will hold a scoping meeting to share information regarding the proposed project and environmental review process, and to receive written comments about the scope and content of the environmental analysis to be addressed in the EIR. The scoping meeting will be held at The Centre in Santa Clarita, 20880 Centre Pointe Parkway, Santa Clarita, CA 91351 at 6:00PM on Wednesday, February 7, 2018. The public review period for the NOP and the Initial Study will commence on January 24, 2018 and conclude on March 9, 2018. During this review period, written comments regarding the scope and content of the environmental analysis to be addressed in the EIR and concerning the adequacy of the Initial Study may be submitted. The Initial Study is available for review at http://www.ladwp.com/envnotices and at the following locations: LADWP - 111 N. Hope Street, Room 1044, Los Angeles, CA 90012; Old Town Newhall Library - 24500 Main Street, Santa Clarita, CA 91321; and Sylmar Branch Library - 14561 Polk Street, Sylmar, CA 91342. Please submit your comments to the attention of Mr. Eduardo Cuevas, LADWP, 111 N. Hope Street, Room 1044, Los Angeles, CA 90012, or to Eduardo. Cuevas@ladwp.com, by March 9, 2018.

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#### STATE OF CALIFORNIA

#### Governor's Office of Planning and Research State Clearinghouse and Planning Unit



#### Notice of Preparation

January 24, 2018

To:

Reviewing Agencies

Re:

Power Plant 1 and Power Plant 2 Transmission Line Conversion Project

SCH# 2018011039

Attached for your review and comment is the Notice of Preparation (NOP) for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Charles Holloway Los Angeles Department of Water and Power 111 North Hope Street, Room 1044 Los Angeles, CA 90012

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan

Director, State Clearinghouse

Attachments cc: Lead Agency

#### **Document Details Report** State Clearinghouse Data Base

SCH# 2018011039

Project Title Power Plant 1 and Power Plant 2 Transmission Line Conversion Project

Lead Agency Los Angeles Department of Water and Power

> Type NOP Notice of Preparation

The Power Plant 1 and Power Plant 2 Transmission Line Conversion Project is being proposed by the Description

> LADWP and would involve the demolition of an approx 12-mile segment of an existing 115 kV transmission line, and the construction of a new 230 kV transmission line. The new transmission line would also extend approx 12 mi and would be located generally adjacent to the existing 115 kV line within an existing transmission corridor. The project would begin at the Haskell Canyon Switching Station in the north and terminate at the Sylmar Switching Station in the south. The purpose of the project is to increase the transmission capacity between HCSS and SSS so additional renewable energy supplies can be transmitted to the LA basin.

> > Fax

#### **Lead Agency Contact**

Name Charles Holloway

Los Angeles Department of Water and Power Agency

Phone 213 367 0285

email

Address 111 North Hope Street, Room 1044

City Los Angeles State CA Zip 90012

#### **Project Location**

County Los Angeles

City Santa Clarita

Region Cross Streets

Lat / Long

Parcel No.

Township Range Section Base

#### Proximity to:

Highways 5, 14, 210

**Airports** 

Railways

Santa Clara River Waterways

Schools Canyon Vista Academy Land Use multiple land uses

#### Project Issues

Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

#### Reviewing Agencies

Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Wildlife, Region 5; Office of Emergency Services, California; California Energy Commission; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; California Highway Patrol; Caltrans, District 7; State Water Resources Control Board, Division of Drinking Water; Regional Water Quality Control Board, Region 4

Date Received 01/24/2018

Start of Review 01/24/2018

End of Review 02/22/2018

Note: Blanks in data fields result from insufficient information provided by lead agency.

P	r	i	r	ľ	t	F	O	r	r	n	

Appendix C

### Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613 SCH# For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

Lead Agency: City of Los An	geles Department of Water an	Contact Person: Charles Holloway				
Mailing Address: 111 North F	Hope Street, Room 1044		Phone: (213) 367-0285 County: Los Angeles			
City: Los Angeles		Zip: 90012				
Project Location: County: L	os Angeles	7. (150 - 150 ) (150 ) (150 ) (150 ) (150 ) (150 ) (150 ) (150 ) (150 ) (150 ) (150 ) (150 ) (150 ) (150 ) (150 )	nmunity: Sylmar & C			
Cross Streets:				Zip Code:		
Longitude/Latitude (degrees, m	ninutes and seconds);°		°″W To	tal Acres:		
Assessor's Parcel No.:		Section:	Twp.: Ra	nge: Base:		
Within 2 Miles: State Hwy	#: <u>5, 14, 210</u>	Waterways: Santa				
Airports:		Railways:	Sc	Schools: Canyon Vista Academy		
Document Type:						
CEQA: NOP     Early Cons     Neg Dec     Mit Neg Dec	Draft EIR Supplement/Subsequent EIR (Prior SCH No.) Other:	Mice of Plannino & R	NOI Other:    FA ch   Draft EIS   FONSI	Joint Document Final Document Other:		
Local Action Type:  General Plan Update General Plan Amendment General Plan Element Community Plan	Specific Plan STATE( Master Plan Planned Unit Development Site Plan	Prezone  Use Perm		Annexation Redevelopment Coastal Permit Other:		
Development Type:						
Commercial:Sq.ft.	Acres Employees_	☐ Mining: ☐ Power: ☐ Waste T	Type Transn reatment: Type	MGD		
	MGD	Hazardous Waste:Type Other:				
Project Issues Discussed in  Aesthetic/Visual  Agricultural Land  Air Quality  Archeological/Historical  Biological Resources	n Document:  ☐ Fiscal ☐ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☐ Geologic/Seismic ☐ Minerals ☐ Noise	□ Recreation/Pa     □ Schools/Univ     □ Septic System     □ Sewer Capac     □ Soil Erosion/     □ Solid Waste	versities ns	<ul> <li>X Vegetation</li> <li>X Water Quality</li> <li>X Water Supply/Groundwate</li> <li>X Wetland/Riparian</li> <li>☐ Growth Inducement</li> <li>X Land Use</li> </ul>		

Multiple land uses

Project Description: (please use a separate page if necessary)
The Power Plant 1 and Power Plant 2 Transmission Line Conversion Project (Project) is being proposed by the Los Angeles Department of Water and Power (LADWP) and would involve the demolition of an approximately 12-mile segment of an existing 115 kilovolt (kV) transmission line, and the construction of a new 230 kV transmission line. The new transmission line would also extend approximately 12 miles and would be located generally adjacent to the existing 115 kV line within an existing transmission corridor. The Project would begin at the Haskell Canyon Switching Station (HCSS) in the north and terminate at the Sylmar Switching Station (SSS) in the south. The purpose of the Project is to increase the transmission capacity between HCSS and SSS so additional renewable energy supplies can be transmitted to the Los Angeles basin.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Regulation

CEQA Coordinator

Last Updated 12/01 /17

# Power Plant 1 and Power Plant 2 Transmission Line Conversion Project Public Scoping Meeting Sign-In Sheet February 7, 2018

## Los Angeles Department of Water and Power

Name  1. BEN JARVIS	Agency/Organization	Address	City, State, Zip Code	Add me to the mailing list?		
	BEN JARNIS		ZZIZO VALENCIA BLVD	SANTA CLARITA CX 9355	Yes:	No:
2.					Yes:	No:
3.	- x				Yes;	No:
4.					Yes:	No:
5.					Yes:	No:
6.				=	Yes:	No:
7.					Yes:	No:
8.					Yes:	No:
9.	4				Yes:	No:
10.					Yes:	No:
11.					Yes:	No:
12.					Yes:	No:
13.					Yes:	No:
14.					Yes:	No:

#### Cuevas, Eduardo

From: Howard Bloch <a href="https://www.horowlite36@yahoo.com">horowlite36@yahoo.com</a> Sent: Monday, January 29, 2018 11:25 AM

**To:** Cuevas, Eduardo

**Subject:** RE: Notice of Preparation of a Draft Environmental Impact Report for the Power Plant 1

and Power Plant 2 Transmission Line Conversion Project

**Attachments:** CCF01292018.pdf

Follow Up Flag: Follow up Flag Status: Completed

Mr. Eduardo Cuevas Los Angeles Department of Water and Power Environmental Planning and Assessment 111 North Hope Street, Room 1044 Los Angeles, CA 90012

Dear Mr. Cuevas,

I received a letter regarding a proposed new line which would originate at Haskell Canyon Switching Station and terminate at Sylmar Switching Station. I have a question. Is Los Angeles Department of Water and Power planning to seize any privately owned homes by eminent domain and demolish them in the proposed project? If so, where would the planned seizures and demolitions be? I have attached a copy of the 2 page letter I received from The Los Angeles Department of Water and Power.

Yours truly,

Howard Bloch Santa Clarita Resident

#### NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department 1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 Phone (916) 373-3710



January 29, 2018

Charles Holloway / Eduardo Cuevas Los Angeles Department of Water and Power 111 North Hope Street, Room 1044 Los Angeles, Ca 90012

Sent via e-mail: Eduardo.cuevas@ladwp.com

RE: SCH# 2018011039; Power Plant 1 and Power Plant 2 Transmission Line Conversion Project, City of Santa Clarita; Los Angeles County, California

Dear Mr. Holloway and Mr. Cuevas:

The Native American Heritage Commission has received the Notice of Preparation (NOP) for Draft Environmental Impact Report for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd. (a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (Pub. Resources Code § 21084.2). Please reference California Natural Resources Agency (2016) "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form," <a href="http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf">http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf</a>. Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015. If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). Both SB 18 and AB 52 have tribal consultation requirements. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

#### AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
- 3. <u>Mandatory Topics of Consultation If Requested by a Tribe</u>: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
- 4. <u>Discretionary Topics of Consultation</u>: The following topics are discretionary topics of consultation:
  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
- 6. <u>Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:</u> If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

- 7. <u>Conclusion of Consultation</u>: Consultation with a tribe shall be considered concluded when either of the following occurs:
  - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - **b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
  - a. Avoidance and preservation of the resources in place, including, but not limited to:
    - i. Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - **b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i. Protecting the cultural character and integrity of the resource.
    - ii. Protecting the traditional use of the resource.
    - iii. Protecting the confidentiality of the resource.
  - **c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
  - e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
  - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
  - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
  - **b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

This process should be documented in the Cultural Resources section of your environmental document.

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\_CalEPAPDF.pdf

#### SB 18

SB 18 applies to local governments and requires **local governments** to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09\_14\_05\_Updated\_Guidelines\_922.pdf

Some of SB 18's provisions include:

- 1. <u>Tribal Consultation</u>: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe. (Gov. Code § 65352.3 (a)(2)).
- 2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
- 3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
- 4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
  - **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

#### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page\_id=1068) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
- 2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.
- 3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
- 4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

Please contact me if you need any additional information at gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.

Associate Governmental Program Analyst

(916) 373-3714

cc: State Clearinghouse

### Cuevas, Eduardo

From: Denise Jens <DJENS@santa-clarita.com>
Sent: Tuesday, February 06, 2018 8:55 AM

**To:** Cuevas, Eduardo

**Subject:** Power Plants 1 & 2 Transmission Line Conversion Project

Follow Up Flag: Follow up Flag Status: Completed

Good morning, Mr. Cuevas.

I recently read about the Los Angeles Department of Water & Power Transmission Line Conversion Project for Power Plants 1 and 2.

Where might I find a map, or more information, to see where the new transmission structures will be installed between Haskell Canyon Switching Station and the Sylmar Switching Station?

Thank you,

Denise Jens 661.600.3232

#### DEPARTMENT OF TRANSPORTATION

DISTRICT 7- OFFICE OF REGIONAL PLANNING 100 S. MAIN STREET, SUITE 100 LOS ANGELES, CA 90012 PHONE (213) 897-6536 FAX (213) 897-1337 TTY 711 www.dot.ca.gov



February 9, 2018

Mr. Eduardo Cuevas Los Angeles Department of Water and Power 111 North Hope Street, Room 1044 Los Angeles, CA 90012

> RE: Power Plant 1 and 2 Transmission Line Conversion Project SCH# 2018011039

GTS# 07-LA-2018-01320ME-NOP

Dear Mr. Cuevas:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project would demolish the existing 115 kV line and construct an approximately 12-mile segment of 230 kV lines and associated transmission structures generally adjacent to the existing 115 kV line.

Caltrans has reviewed the Notice of Preparation and does not expect project approval to result in a direct adverse impact to the existing State transportation facilities. However, if State facilities will be utilized during the construction phase, a Traffic Management Plan (TMP) for construction vehicles should be submitted to Caltrans to review in order to minimize the impacts.

Any transporting of heavy construction equipment and/or materials, which require the use of oversized-transport vehicles on State highways, will require a Caltrans transportation permit. Any hauling of materials should not occur during A.M and P.M peak periods of travel on State facilities during demolition and construction of the proposed project.

In addition, oversized construction truck deliveries expected to utilize State Highways will need a transportation permit and possible a California Highway Patrol (CHP) escort.

Please keep in mind, an encroachment permit will be required for any project work proposed on or in the vicinity of the Caltrans Right of Way and all environmental concerns must be adequately addressed.

Mr. Cuevas February 9, 2018 Page 2

Caltrans looks forward to reviewing the Draft Environmental Impact Report. If you have any questions regarding these comments, please contact project coordinator Ms. Miya Edmonson, at (213) 897-6536 and refer to GTS# LA-2018-01320ME.

Sincerely,

FRANCES/LEE

IGR/CEQA Acting Branch Chief

cc: Scott Morgan, State Clearinghouse



## COUNTY OF LOS ANGELES FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE LOS ANGELES, CALIFORNIA 90063-3294 (323) 881-2401 www.fire.lacounty.gov

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February 20, 2018

FORESTER & FIRE WARDEN

DARYL L. OSBY FIRE CHIEF

Eduardo Cuevas, Analyst Los Angeles Department of Water and Power **Environmental Planning and Assessment** 111 North Hope Street Los Angeles, CA 90012

Dear Mr. Cuevas:

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT, "POWER PLANT 1 AND POWER PLANT 2 TRANSMISSION LINE CONVERSION PROJECT," WOULD INVOLVE REPLACING A 12-MILE SEGMENT OF AN EXISTING 115 KILOVOLT DOUBLE CIRCUIT TRANSMISSION LINE WITH NEW 230 KV DOUBLE CIRCUIT TRANSMISSION LINE, THIS PROCESS WOULD INVOLVE DEMOLISHING THE EXISTING LINE, SANTA CLARITA, FFER 201800015

The Notice of Preparation of a Draft Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

The following are their comments:

## PLANNING DIVISION:

We have no comments.

## LAND DEVELOPMENT UNIT:

1. Notify the County of Los Angeles Fire Department's Fire Stations at least three days in advance of any street closures that may affect Fire/Paramedic responses in the area.

Eduardo Cuevas, Analyst February 20, 2018 Page 2

- Provide three sets of alternate route (detour) plans with a tentative schedule of planned closures prior to the beginning of construction. Complete architectural/ structural plans are not necessary.
- Disruptions to water service shall be coordinated with the County of Los Angeles Fire
  Department and alternate water sources shall be provided for fire protection during
  such disruptions.

This project does not propose construction of structures or any other improvements at this time. Therefore, until actual construction is proposed the project will not have a significant impact to the Fire Department's Land Development Unit.

The County of Los Angeles Fire Department, Land Development Unit appreciates the opportunity to comment on this project.

#### **FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:**

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

#### **HEALTH HAZARDOUS MATERIALS DIVISION:**

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments or requirements for the project at this time.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

Mary

MICHAEL Y. TAKESHITA, ACTING CHIEF, FORESTRY DIVISION

PREVENTION SERVICES BUREAU

MYT:ac

#### Cuevas, Eduardo

From: Lessor, Aly <alessor@mom365.com>
Sent: Wednesday, February 21, 2018 12:01 PM

**To:** Cuevas, Eduardo

**Subject:** Power Plant 1 and Power Plant 2 Transmission Line Conversion Project

Follow Up Flag: Follow up Flag Status: Flagged

Hi Eduardo,

I received the notice that LADWP is planning on converting the lines directly behind my house to 230kV from 115kV. My neighbors and I are not happy about this and we would like to know how this will effect our health. We have 4 people on our street with Cancer and do not want any more victims. Is there a way you can move the lines further away from our homes? They are currently 100yds or less from my home. Please give me a call to discuss. What do we need to do to stop this? A petition? I would like to ask if you would raise your family in a home less than 100yds from these towers outputting 115 or 230kV? I can hear the buzzing when I step outside as it is. Is this going to make the noise twice as loud? Is LADWP prepared to buy our home from us at current value so we can move? Please advise.

Thank you for your help in this matter,



Aly Lessor • Distric Manager Los Angeles/ Ventura/ Bakersfield/Fresno <a href="mailto:alessor@mom365.com">alessor@mom365.com</a> • phone: 800.422.3686 • mobile: 615.364.8960. 3613 Mueller Road • St. Charles, MO 63301

www.mom365.com





# COUNTY OF LOS ANGELES HALLOF JUSTICE



JIM McDonnell, Sheriff

February 28, 2018

Mr. Eduardo Cuevas Los Angeles Department of Water and Power Environmental Planning and Assessment 111 North Hope Street, Room 1044 Los Angeles, California 90012

Dear Mr. Cuevas:

# REVIEW COMMENTS NOTICE OF PREPARATION AND INITIAL STUDY OF A DRAFT ENVIRONMENTAL IMPACT REPORT POWER PLANT 1 AND POWER PLANT 2 TRANSMISSION LINE PROJECT

Thank you for inviting the Los Angeles County Sheriff's Department (Department) to review and comment on the January 2018 Notice of Preparation (NOP) and Initial Study (IS) of a Draft Environmental Impact Report for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project (Project), proposed by Los Angeles Department of Water and Power. The proposed Project would involve replacing a 12-mile segment of an existing 115 kilovolt (kV) double circuit transmission line with a new 230 kV double circuit transmission line for the purpose of increasing the transmission capacity between Haskell Canyon Switching Station and Sylmar Switching Station so that additional renewable energy supplies can be transmitted to the Los Angeles basin.

The proposed Project would be located within a linear alignment in northwestern Los Angeles County that generally extends from Haskell Canyon on the community of Sylmar, located south of the City of Santa Clarita. The proposed Project is within the service area of the Department's Santa Clarita Valley Station (Station). Accordingly, the Station reviewed the NOP/IS and authored the attached review comments (see correspondence, dated February 20, 2018, from Captain Robert J. Lewis).

211 WEST TEMPLE STREET, Los Angeles, California 90012

A Tradition of Service

Should you have any questions regarding this matter, please contact me, at (323) 526-5657, or your staff may contact Ms. Maynora Castro, of my staff at (323) 526-5578.

Sincerely,

JIM McDONNELL, SHERIFF

Tracey Jue, Director

Facilities Planning Bureau

# SHERIFF'S DEPARTMENT

"A Tradition of Service Since 1850"

DATE:

February 20, 2018

FILE NO:

OFFICE CORRESPONDENCE

FROM:

ROBERT JAEWIS, CAPTAIN SANTA CLARITA VALLEY

STATION

TO: TRACEY JUE, DIRECTOR FACILITIES PLANNING

**BUREAU** 

SUBJECT:

REVIEW COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE POWER PLANT 1 AND POWER PLANT 2 TRANSMISSION LINE CONVERSION PROJECT

The Santa Clarita Valley Sheriff's Station (Station) reviewed the January 2018 Initial Study (IS) and Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project (Project). The proposed Project, by Los Angeles Department of Water and Power (LADWP), would be located within a linear alignment in northwestern Los Angeles County that generally extends from Haskell Canyon to the community of Sylmar, located south of the City of Santa Clarita. The proposed Project would involve replacing a 12-mile segment of an existing 115 kilovolt (kV) double circuit transmission line with a new 230 kV double circuit transmission line. The proposed Project alignment consists of LADWP-owned land and private properties within an LADWP right-of-way. (IS Section 1.1 Project Overview)

According to IS (Section 3.13, Population and Housing), the proposed Project would not alter population in the Project area, therefore would not substantially alter service ratios, response times, or other performance objectives to the extent that new or expanded police protection facilities, equipment, or staff would be required. Therefore, no impacts would occur. The Station does not dispute the conclusion contained in the IS.

IS Section 3.16, Transportation and Traffic, indicates that construction of the Project will take approximately 2 years beginning 2020 and ending in 2022, and will possibly have temporary lane and road closures during this period. The Station remain concerned with construction-related traffic because of potentially significant impacts on commuters, pedestrians, emergency responders, and our patrol operations. Therefore, the Station recommends the preparation of a Construction Traffic Management Plan to ensure safe



management of vehicular, cyclists and pedestrian traffic during the construction phase of the Project. The Station also requests advance notification of temporary lane closures, realignments, etc., and requires the provision of one or more emergency lane through the Project site at all times.

Thank you for including the Station in the environmental review process for the proposed Project. Should you have any questions regarding this matter, please contact me at (661) 799-5101, or Operations Lieutenant Justin Diez at (661) 799-5102.

RJL:JRD:jd

#### SENT VIA USPS AND E-MAIL:

eduardo.cuevas@ladwp.com

Mr. Eduardo Cuevas Los Angeles Department of Water and Power Environmental Planning and Assessment 111 North Hope Street, Room 1044 Los Angeles, CA 90012 March 6, 2018

# Notice of Preparation of a Draft Environmental Impact Report for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send SCAQMD a copy of the EIR upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address shown in the letterhead. In addition, please send with the Draft EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files<sup>1</sup>. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, SCAQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.

#### **Air Quality Analysis**

SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from SCAQMD's Subscription Services Department by calling (909) 396-3720. More guidance developed since this Handbook is also available on SCAQMD's website at: <a href="http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)">http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)</a>. SCAQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: <a href="https://www.caleemod.com">www.caleemod.com</a>.

SCAQMD has also developed both regional and localized significance thresholds. SCAQMD staff requests that the Lead Agency quantify criteria pollutant emissions and compare the results to

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<sup>&</sup>lt;sup>1</sup> Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

SCAOMD's CEOA regional pollutant emissions significance thresholds to determine air quality impacts. SCAQMD's CEQA regional pollutant emissions significance thresholds can be found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. In addition to analyzing regional air quality impacts, SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the Proposed Project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by SCAQMD staff or performing dispersion modeling as necessary. Guidance for performing localized quality analysis can found air be http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significancethresholds.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis.

In the event that the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found at: <a href="http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis">http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis</a>. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: <a href="http://www.arb.ca.gov/ch/handbook.pdf">http://www.arb.ca.gov/ch/handbook.pdf</a>. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Guidance<sup>2</sup> on strategies to reduce air pollution exposure near high-volume roadways can be found at: <a href="https://www.arb.ca.gov/ch/rd\_technical\_advisory\_final.PDF">https://www.arb.ca.gov/ch/rd\_technical\_advisory\_final.PDF</a>.

#### **Mitigation Measures**

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are

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<sup>&</sup>lt;sup>2</sup> In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: <a href="https://www.arb.ca.gov/ch/landuse.htm">https://www.arb.ca.gov/ch/landuse.htm</a>.

available to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project, including:

- Chapter 11 of SCAQMD's CEQA Air Quality Handbook
- SCAQMD's CEQA web pages available here: <a href="http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies">http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies</a>
- SCAQMD's Rule 403 Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 Asbestos Emissions from Demolition/Renovation Activities
- SCAQMD's Mitigation Monitoring and Reporting Plan (MMRP) for the 2016 Air Quality Management Plan (2016 AQMP) available here (starting on page 86): <a href="http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf">http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf</a>
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: <a href="http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf">http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf</a>

#### **Alternatives**

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a "no project" alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the Draft EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

#### **Permits**

In the event that the Proposed Project requires a permit from SCAQMD, SCAQMD should be identified as a responsible agency for the Proposed Project. For more information on permits, please visit SCAQMD webpage at: <a href="http://www.aqmd.gov/home/permits">http://www.aqmd.gov/home/permits</a>. Questions on permits can be directed to SCAQMD's Engineering and Permitting staff at (909) 396-3385.

#### **Data Sources**

SCAQMD rules and relevant air quality reports and data are available by calling SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available at SCAQMD's webpage at: <a href="http://www.aqmd.gov">http://www.aqmd.gov</a>.

SCAQMD staff is available to work with the Lead Agency to ensure that project air quality impacts are accurately evaluated and any significant impacts are mitigated where feasible. If you have any questions regarding this letter, please contact me at <a href="mailto:lsun@aqmd.gov">lsun@aqmd.gov</a> or call me at (909) 396-3308.

Sincerely,

lijin Sun

Lijin Sun, J.D. Program Supervisor, CEQA IGR Planning, Rule Development & Area Sources

LS <u>LAC180125-06</u> Control Number



# COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601–1400 Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998 Telephone: (562) 699–7411, FAX: (562) 699-5422 www.lacsd.org

GRACE ROBINSON HYDE Chief Engineer and General Manager

March 7, 2018

Ref. Doc. No.: 4436581

Mr. Eduardo Cuevas Los Angeles Department of Water and Power Environmental Planning and Assessment 111 North Hope Street, Room 144 Los Angeles, CA 90012

Dear Mr. Cuevas:

#### NOP Response for the Power Plant 1 and Power Plan 2 Transmission Line Conversion Project

The Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on January 25, 2018. We offer the following comment:

• The proposed project may impact existing and/or proposed Districts' facilities (e.g. trunk sewers, recycled waterlines, etc.) over which it will be constructed. Districts' facilities are located directly under and/or cross directly beneath the proposed project alignment. The Districts cannot issue a detailed response to or permit construction of, the proposed project until project plans and specification that incorporate Districts' facilities are submitted for our review. To obtain copies of as-built drawings of the Districts' facilities within the project limits, please contact the Districts' Engineering Counter at <a href="mailto:engineeringcounter@lacsd.org">engineeringcounter@lacsd.org</a> or (562) 908-4288, extension 1205. When project plans that incorporate our facilities have been prepared, please submit copies of the same to the Engineering Counter for our review and comment.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza

Customer Service Specialist Facilities Planning Department

AR:ar

cc:

Engineering Counter

M. Tatalovich

DOC: #4480121.D99

#### SANTA MONICA MOUNTAINS CONSERVANCY

RAMIREZ CANYON PARK 5750 RAMIREZ CANYON ROAD MALIBU, CALIFORNIA 90265 PHONE (310) 589-3200 FAX (310) 589-3207 WWW.SMMC.CA.GOV



March 8, 2018

Mr. Eduardo Cuevas Los Angeles Department of Water and Power Environmental Planning and Assessment 111 North Hope Street, Room 1044 Los Angeles, California 90012

Notice of Preparation Comments

Draft Environmental Impact Report for the Power Plant 1 and Power Plant 2

Transmission Line Conversion Project (SCH 2018011039)

Dear Mr. Cuevas:

The proposed 12-mile long Power Plant 1 and Power Plant 2 Transmission Line Conversion Project (Project) to replace transmission lines from the Haskell Canyon Switching Station to the Sylmar Switching Station is a growth-inducing/growth-accommodating infrastructure development that will result in numerous unavoidable significant adverse ecological impacts on both public and private lands. The Project route traverses several ecologically significant habitat communities and public lands through which the Project's Notice of Preparation (NOP) currently identifies temporary impacts of at least 12.8 acres and permanent impacts of at least 6.6 acres. The NOP states additional, undefined impacts related to new roads, improvements to existing roads, right-of-way brush clearance, staging areas or counterpoise installation will result from Project construction and operation.

Habitat restoration alone does not mitigate for permanent loss of habitat and permanent edge effects. The Project will also facilitate additional commercial, industrial and residential growth in the greater Los Angeles metropolitan area. The Conservancy contends that including open space preservation is a necessary and vital mitigation measure to compensate for the direct, indirect, and growth-inducing/growth-accommodating infrastructure development this Project will result in.

Acquisition funding must be set aside to protect existing unprotected habitat through the establishment of an escrow account administered by a public agency to fund the acquisition of fee simple title and/or conservation easements on lands within approximately 1,500 feet of the Project's 12-mile span. With this fund, the proposed Project would be able to offset some of the impacts directly related to Project's construction and operation as well as preserve ecologically significant habitats under increasing threat of urbanization facilitated by the Project. The Mountains Recreation and Conservation Authority (MRCA) is the optimal public agency to contract with for permanent land protection. The escrow account should also fund appraisals, title reports and insurance, and any necessary closing costs.

Mr. Eduardo Cuevas
NOP Comments Power Plant 1 and Power Plant 2 Transmission Line
Conversion Project (SCH 2018011039)
March 8, 2018
Page 2

Several feasible opportunities for open space preservation within an approximate 1,500 feet of the Project include, but are not limited to, the following areas (north to south):

- Lands between City of Santa Clarita's Copper Hill Park and Bouquet Canyon Park
- Lands east of City of Santa Clarita's Central Park
- Santa Clara River open space lands
- Lands northwest of Golden Valley High School
- Lands next to City of Santa Clarita's Placerita Quigley Open Space, and
- Lands north and south of Whitney Canyon Park and Elsmere Canyon Open Space

Thus, the Conservancy's recommends the Project include a Project-applicant-funded escrow account to offset the unavoidable significant adverse biological impacts. Acquisition agencies could include the MRCA, Santa Clarita Watershed Recreation and Conservation Authority, or the City of Santa Clarita. Adequate mitigation for habitat loss should include at least a 1:1 replenishment ratio. At a rate of \$15,000 per acre, that fund would include \$105,000 to replace approximately 7 acres. The fund should also include \$2,000 for preacquisition costs. If lands cannot be acquired in the 1,500-foot project margin, the acquisition area should be expanded.

If you have any questions for our agency, please contact me, at (310) 589-3200, ext. 128, by email at <a href="mailto:edelman@smmc.ca.gov">edelman@smmc.ca.gov</a>, or at the above letterhead address. Thank you for your time and consideration.

Sincerely,

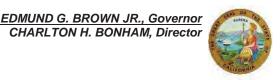
PAUL EDELMAN

Deputy Director of Natural Resources and

Planning

DEPARTMENT OF FISH AND WILDLIFE

South Coast Region 3883 Ruffin Road San Diego, CA 92123 (858) 467-4201 www.wildlife.ca.gov



March 9, 2018

Mr. Eduardo Cuevas
City of Los Angeles
Department of Water and Power
Environmental Planning and Assessment
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Phone: 213-367-6376

Eduardo.Cuevas@ladwp.com

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Power

Plant 1 and Power Plant 2 Transmission Line Conversion Project, City of Los

Angeles, County of Los Angeles, California

Dear Mr. Cuevas:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Notice of Preparation (NOP) and associated *Initial Study (IS)* for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project (Project). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

#### CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; CEQA Guidelines § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & Game Code, § 2050 et seq.), or state-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish and Game Code §1900 et seq.) authorization as provided by the applicable Fish and Game Code will be required.

Mr. Eduardo Cuevas City of Los Angeles, Environmental Planning and Assessment March 9, 2018 Page 2 of 8

#### **Project Description and Summary**

**Objective:** The Power Plant 1 (PP1) and Power Plant 2 (PP2) Transmission Line Conversion Project (Project) is a transmission line replacement project proposed by the City of Los Angeles Department of Water and Power (LADWP). The Project will be located within a linear alignment in northwestern Los Angeles County (County) that extends from the Haskell Canyon Switching Station to the Sylmar Switching Station. The project would involve replacing a 12-mile segment of an existing 115 kilovolt (kV) double circuit transmission line with a new 230 kV double circuit transmission line.

**Location:** The proposed 230 kV line would be located within the same corridor as the existing 115 kV line. The project alignment extends from the Sylmar Switching Station in the south to the Haskell Canyon Switching Station in the north. The southern extent of the alignment is located within the Granada Hills-Knollwood Community Plan area immediately west of Interstate 5 (I-5), near the interchange of I-5 and I-210 and approximately 825 feet south-southeast of the intersection of San Fernando Road and Sepulveda Boulevard. The alignment then extends east for approximately 0.6-mile, crossing I-5 and entering the Sylmar Community Plan area within the City of Los Angeles, paralleling San Fernando Road. The alignment then angles north, crosses I-210, and extends through an industrial area in Sylmar before exiting the City of Los Angeles and extending through an undeveloped mountainous area in the San Gabriel Mountains (north of Sylmar) within the County. The portion of the alignment that crosses the San Gabriel Mountains extends between State Route 14 (SR 14) to the west and the Angeles National Forest boundary to the east is comprised of rugged, hilly terrain. Next, the alignment descends into the Santa Clara River basin and extends through the City of Santa Clarita for approximately 7 miles, crossing SR-14, the Santa Clara River, and single-family residential neighborhoods and commercial areas. The alignment then extends for approximately 2 miles through the Haskell Canyon area, comprised of single-family residential neighborhoods and undeveloped hillsides, and then finally terminates just south of the Angeles National Forest at the Haskell Canyon Switching Station.

#### **Comments and Recommendations**

CDFW offers the comments and recommendations below to assist the City in adequately identifying, avoiding and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

#### **Project Description and Related Impact Shortcoming**

#### Comment #1: Impacts to Burrowing Owl (Athene cunicularia)

**Issue:** A review of California Natural Diversity Database (CNDDB) indicates that burrowing owl (*Athene cunicularia*) has been recorded in the area and the site contains undeveloped land that could provide potential nesting and foraging habitat. The CNDDB record is located less than 2 miles east of the Project site along the Santa Clara River.

**Specific impact:** The Project may result in direct and indirect burrowing owl mortality or injury, the disruption of natural burrowing owl breeding behavior, and loss of breeding, wintering and foraging habitat for the species. Project impacts would continue to contribute to statewide

Mr. Eduardo Cuevas City of Los Angeles, Environmental Planning and Assessment March 9, 2018 Page 3 of 8

population declines for burrowing owl that have essentially been extirpated from the County, except for the Antelope Valley where it still persists in low densities and continues to experience significant direct and cumulative habitat loss.

Why impact would occur: Impacts to burrowing owl could result from vegetation clearing and other ground disturbing activities. Project disturbance activities may result in crushing or filling of active owl burrows causing the death or injury of adults, eggs and young. The Project will remove potential foraging habitat by eliminating native vegetation that supports essential rodent, insect and reptile populations that are prey for burrowing owl. Rodent control activities could result in direct and secondary poisoning of burrowing owl through ingesting treated rodents.

**Evidence impact would be significant**: Project impacts may result in substantial adverse effects, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. Adverse impacts to burrowing owl may occur because the measures provided do not condition the Project to implement take avoidance surveys prior to operations, including, but not limited to, ground and vegetation disturbing activities and rodent control activities.

#### **Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** To reduce Project impacts to burrowing owl to less than significant, we recommend that the Project conduct surveys for this species in accordance with CDFW's March 7, 2012, *Staff Report on Burrowing Owl Mitigation*. All survey efforts should be conducted prior to any Project habitat disturbance to soil, vegetation or other sheltering habitat for burrowing owl.

**Mitigation Measure #2**: Permanent impacts to occupied burrowing owl burrows and adjacent foraging habitat should be mitigated for by setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy. CDFW recommends the City require a burrowing owl mitigation plan be submitted to CDFW for review and approval prior to Project implementation.

**Mitigation Measure #3**: Project use of rodenticides that could result in direct or secondary poisoning to burrowing owl should be avoided.

#### Comment #2: Impacts to Least Bell's Vireo (Vireo bellii pusillus)

**Issue:** A review of CNDDB indicates that least Bell's vireo (*Vireo bellii pusillus*) has been recorded in the area and the site contains potential nesting and foraging habitat. The CNDDB record is located less than a mile from the southern terminus of the Project at the Sylmar Switching Station.

**Specific impacts:** The Project has a high potential to impact least Bell's vireo and their habitat. CDFW considers adverse impacts to a species protected by CESA, for the purposes of CEQA, to be significant without mitigation. As to CESA, take of any endangered, threatened, candidate species, or state-listed rare plant species that results from the projects prohibited, except as authorized by State law (Fish and Game Code, §§ 2080, 2085; California Code of Regulations., tit. 14, §786.9). Consequently, if the Project, project construction, or any Project-related activity

Mr. Eduardo Cuevas City of Los Angeles, Environmental Planning and Assessment March 9, 2018 Page 4 of 8

during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) or a consistency determination in certain circumstances, among other options [Fish and Game Code §§ 2080.1, 2081, subds. (b),(c)]. Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

Why impact would occur: Impacts to least Bell's vireo could result from vegetation clearing and other ground disturbing activities. Project disturbance activities could result in mortality or injury to nestlings, as well temporary or long-term loss of suitable nesting and foraging habitats. Construction during the breeding season of nesting birds could result in the incidental loss of breeding success or otherwise lead to nest abandonment.

**Evidence impact would be significant**: Project impacts may result in substantial adverse effects, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. Adverse impacts to least Bell's vireo may occur because the measures provided do not condition the Project to implement take avoidance surveys prior to operations, including, but not limited to, ground and vegetation disturbing activities.

#### **Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** To protect nesting birds that may occur on-site, CDFW recommends that the final environmental document include a measure that no construction shall occur from February 15 through August 31 unless a qualified biologist completes a survey for nesting bird activity within a 500-foot radius of the construction site. The nesting bird surveys shall be conducted at appropriate nesting times and concentrate on potential roosting or perch sites. If any nests of birds of prey are observed, these nests shall be designated an ecologically sensitive area and protected (while occupied) by a minimum 500-foot radius during project construction.

#### **Comment #3: Impacts to passerine birds**

**Issue:** The Project alignment passes through miles of open space in the San Gabriel Mountains and crosses the Santa Clara River, which support numerous nesting bird species. Impacts resulting from Project related activities, such as vegetation clearing or noise from construction equipment, could result in mortality of birds or loss of foraging or nesting habitat.

**Specific impacts:** Construction during the breeding season of nesting birds could result in the incidental loss of breeding success or otherwise lead to nest abandonment.

Mr. Eduardo Cuevas City of Los Angeles, Environmental Planning and Assessment March 9, 2018 Page 5 of 8

Why impact would occur: Impacts to passerine birds could result from vegetation clearing and other ground disturbing activities. Project disturbance activities could result in mortality or injury to nestlings, as well temporary or long-term loss of suitable nesting and foraging habitats. Construction during the breeding season of nesting birds could result in the incidental loss of breeding success or otherwise lead to nest abandonment.

**Evidence impact would be significant:** The loss of occupied habitat or reductions in the number of rare species, either directly or indirectly through nest abandonment or reproductive suppression, would constitute a significant impact absent appropriate mitigation. Furthermore, nests of all native bird species are protected under both federal and State laws and regulations, including the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503 and 3503.5, respectively.

#### **Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** To protect nesting birds that may occur on-site, CDFW recommends that the final environmental document include a measure that no construction shall occur from February 15 through August 31 unless a qualified biologist completes a survey for nesting bird activity within a 500-foot radius of the construction site. The nesting bird surveys shall be conducted at appropriate nesting times and concentrate on potential roosting or perch sites. If any nests of birds of prey are observed, these nests shall be designated an ecologically sensitive area and protected (while occupied) by a minimum 500-foot radius during project construction.

#### **Comment #4: Impacts to Sensitive Plant Species**

**Issue:** A review of CNDDB indicates that multiple sensitive plant species have potential to be located along the Project alignment. The documentation provided with the IS (*Dudek*, 2018) is not detailed enough to assess site-specific impacts to rare/sensitive plant species or habitats; therefore, additional assessments are needed to adequately determine Project impacts to such resources. To adequately analyze potential impacts to biological resources, it will be necessary to: 1) identify specific vegetation (both coverage and quality) within each of the on-site habitat types currently presented; and, 2) assess potential impacts to rare/sensitive plant species and habitats based on focused surveys.

**Specific impact:** Due to Project related activities, such as grading or vegetation clearing for road maintenance, the Project may result in a substantial adverse effect, either directly or indirectly, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service.

**Why impact would occur:** Take of special status plant species, including state- and federally-listed species, may occur without adequate detection, avoidance and mitigation measures.

**Evidence impact would be significant:** Impacts to special status plant species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. To fully mitigate for take of plants listed under CESA, or rare plants listed under the Native Plant Protection Act (NPPA, Fish and Game Code §1900 *et seq.*), further consultation with CDFW may be required.

Mr. Eduardo Cuevas City of Los Angeles, Environmental Planning and Assessment March 9, 2018 Page 6 of 8

#### **Recommended Potentially Feasible Mitigation Measure(s):**

**Mitigation Measure #1:** CDFW recommends the biological assessment refine the vegetation mapping to include a smaller scale to accurately capture site conditions and distinguish between patches with differing vegetation alliances and densities. All unique vegetation patches, or stands, regardless of size, should be mapped on a site-specific resource map. Defined minimum mapping units should only be used on very large-scale projects, such as mapping the vegetation at the county level. A project-level assessment should have 100% fine-scale coverage of vegetation mapped using recent aerial imagery and ground-truthing.

CDFW requests the entire project alignment, be mapped using the *Manual of California Vegetation* second edition protocol

(https://www.dfg.ca.gov/biogeodata/vegcamp/veg manual.asp). The method of vegetation classification presented in the *Manual of California Vegetation* second edition represents the vegetation classification standards for vegetation maps adopted by the State (since 2009) that meet the National Vegetation Classification System standards followed by federal agencies. CDFW's vegetation classification standard makes it easier to evaluate effects to rare habitat because it is based on "alliances" (or series), which are identified by dominant and/or characteristic plant species, and allows more meaningful assessment of local project impacts. Once the habitat is mapped accordingly, CDFW can provide meaningful feedback regarding impacts to biological resources.

CDFW further recommends focused botanical surveys be conducted on the Project site to maximize the potential for documenting special status plant species, and to avoid or mitigate for Project impacts to special status botanical resources below a level of significance under CEQA. We recommend that any focused botanical surveys be conducted following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (2009). The timing of surveys should adhere to blooming periods on nearby reference sites that are known to support populations of target special status plants. The CEQA document for the Project should provide a discussion on the potential for the presence or absence of special status plant species, Project impacts, avoidance and mitigation measures (e.g., off-site acquisition and protection of occupied habitat) based upon current focused botanical surveys. Impacts to special status plant species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. To fully mitigate for take of plants listed under CESA, or rare plants listed under the Native Plant Protection Act (NPPA, Fish and Game Code §1900 *et seq.*), further consultation with CDFW may be required.

#### Comment #5: Impacts to streams

**Issue:** The documentation provided with the IS (Dudek, 2018) indicates that the Project alignment will cross the Santa Clara River, a major watercourse in the area that supports biological resources. CDFW is concerned that the proposed Project includes activities that would be subject to notification under Fish and Game code section 1600 *et seq*.

**Specific impacts:** The Project may result in direct and/or indirect impacts to streams and associated plant and animal species, watershed function, and biological diversity.

Mr. Eduardo Cuevas City of Los Angeles, Environmental Planning and Assessment March 9, 2018 Page 7 of 8

Why impacts would occur: Ground disturbing activities from grading and filling, water diversions, and dewatering would physically remove or otherwise alter existing streams or their function and associated riparian habitat on the Project site. Downstream watercourses and associated biological resources beyond the development footprint also may be impacted by Project-related activities including releases of sediment, altered drainage patterns, and other changes to the watershed.

**Evidence impacts would be significant**: Project construction and operation may substantially adversely affect the existing stream resources on and adjacent to the Project site through filling, alteration or diversion. Absent specific mitigation, such activities could result in substantial loss of stream resources, on- or off-site erosion/siltation, and fragmentation of wildlife habitat.

#### Recommended Potentially Feasible Mitigation Measure(s):

**Mitigation Measure #1:** Based on information provided with the NOP, CDFW has concluded that proposed Project activities may result in the substantial alteration of streams. For any such activities, the Project applicant (or "entity") must provide written notification to CDFW pursuant to section 1600 et seq. of the Fish and Game Code. Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration Agreement (LSA) with the applicant is required prior to conducting the proposed activities. A notification package for a LSA may be obtained by accessing CDFW's web site at <a href="www.wildlife.ca.gov/habcon/1600">www.wildlife.ca.gov/habcon/1600</a>.

CDFW's issuance of an LSA for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document of the Lead Agency for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA.

**Mitigation Measure #2**: Any LSA issued for the Project by CDFW may include measures to protect resources on and downstream of the site, including additional erosion and pollution control measures. Mitigation conditioned in any LSA to compensate for impacts to streams may include resource avoidance, on- or off-site creation, enhancement or restoration, and protection/management of any mitigation lands in perpetuity.

#### Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife resources, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (California Code of Regulations, tit. 14, § 753.5; Fish and Game Code, § 711.4; Public Resources Code, § 21089).

Mr. Eduardo Cuevas City of Los Angeles, Environmental Planning and Assessment March 9, 2018 Page 8 of 8

#### Conclusion

We appreciate the opportunity to comment on the Project to assist the City of Lancaster in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City has to our comments and receive notification of any forthcoming hearing date(s) for the Project (CEQA Guidelines; §15073[e]). If you have any questions or comments regarding this letter, please contact Andrew Valand, Environmental Scientist at <a href="mailto:Andrew-Valand@wildlife.ca.gov">Andrew-Valand@wildlife.ca.gov</a> or (562) 342-2142.

Sincerely,

Betty of Courtney

Betty J. Courtney Environmental Program Manager I

ec: Erinn Wilson – CDFW, Los Alamitos Randy Rodriquez – CDFW, Los Alamitos Andrew Valand – CDFW, Los Alamitos Scott Morgan - State Clearinghouse, Sacramento



23920 Valencia Boulevard • Suite 300 • Santa Clarita, California 91355-2196 Phone: (661) 259-2489 • FAX: (661) 259-8125 www.santa-clarita.com

March 9, 2018

Mr. Eduardo Cuevas Los Angeles Department of Water and Power **Environmental Planning and Assessment** 111 North Hope Street, Room 1044 Los Angeles, CA 90012

Comments on Notice of Preparation (NOP) of a Draft Environmental Impact Report Subject: for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project

Thank you for the opportunity to review and comment on the above referenced Notice of Preparation.

The proposed project would involve replacing a 12-mile segment of an existing 115 kilovolt (kV) double circuit transmission line with a new 230 kV double circuit transmission line. The process would involve demolishing the existing 115 kV line and constructing an approximately 12-mile segment of new 230 kV lines and associated transmission structures, generally adjacent to the existing 115 kV line and associated structures to be demolished. The proposed new line would originate at the Haskell Canyon Switching Station, within a northern portion of the jurisdictional limits of the City of Santa Clarita, and would terminate at the Sylmar Switching Station within the City of Los Angeles, thus traversing through the City of Santa Clarita for a significant portion of the 12-mile segment.

The City requests specific discussion and/or particular analytic emphasis in the area of aesthetics. The new transmission towers are proposed at a height of 80 feet to 180 feet and may have significant visual impacts to residents. The City requests that the DEIR includes the following:

- A site-by-site analysis of the height of the existing structure to be removed versus the proposed replacement structure.
- Visual simulations from the nearest residential uses and/or public right-of-way for each site demonstrating any potential visual impact or lack thereof.
- Demonstration of the public outreach effort made to each of the neighborhoods potentially impacted by the installation of the new transmission towers.





Mr. Eduardo Cuevas, Los Angeles Department of Water and Power March 9, 2018 Page 2

The City would also like to request that LADWP work with the City of Santa Clarita on any proposed road closures and traffic mitigation throughout the implementation of the project.

Thank you again for the opportunity to comment on the NOP. The City looks forward to reviewing the DEIR when it is available.

If you have any additional questions, please contact me at (661) 255-4305.

Sincerely,

Thomas B. Cole

Director of Community Development

TC:MM:cf

SACDAPLANNING DIVISION/CURRENT/County Monitoring/2018/LADWP/NOP Comment Letter 3-9-18.doc

cc: Jason Crawford, Planning Manager



SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS 900 Wilshire Blvd., Ste. 1700 Los Angeles, CA 90017 Ti (213) 236 1800 www.scag.ca.gov

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March 9, 2018

Mr. Eduardo Cuevas Los Angeles Department of Water and Power, Environmental Planning and Assessment 111 North Hope Street, Room 1044 Los Angeles, CA 90012

Phone: (213) 367-6376

E-mail: Eduardo.cuevas@ladwp.com

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project [SCAG NO. IGR9516]

Dear Mr. Cuevas,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS) pursuant to Senate Bill (SB) 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans. SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS) goals and align with RTP/SCS policies.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Power Plant 1 and Power Plant 2 Transmission Line Conversion Project in Los Angeles County. The proposed project includes construction of new 230 kilovolt transmission lines and associated structures along a 12-mile segment of Los Angeles Department of Water and Power-owned land and private properties.

When available, please send environmental documentation to SCAG's office in Los Angeles or by email to au@scag.ca.gov providing, at a minimum, the full public comment period for review. Please note our new headquarters in Downtown Los Angeles is at 900 Wilshire Boulevard, Ste. 1700, Los Angeles, California 90017.

If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Anita Au, Associate Regional Planner, at (213) 236-1874 or <a href="mailto:au@scag.ca.gov">au@scag.ca.gov</a>. Thank you.

Sincerely,

Fing Chang Ping Chang

Acting Manager, Compliance and Performance Monitoring

<sup>&</sup>lt;sup>1</sup> Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2016 RTP/SCS for the purpose of determining consistency for CEQA. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a determination of consistency with the 2016 RTP/SCS for CEQA.

# COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE POWER PLANT 1 AND POWER PLANT 2 TRANSMISSION LINE CONVERSION PROJECT [SCAG NO. IGR9516]

#### **CONSISTENCY WITH RTP/SCS**

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the RTP/SCS.

#### 2016 RTP/SCS GOALS

The SCAG Regional Council adopted the 2016 RTP/SCS in April 2016. The 2016 RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health (see <a href="http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx">http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx</a>). The goals included in the 2016 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2016 RTP/SCS are the following:

	SCAG 2016 RTP/SCS GOALS
RTP/SCS G1:	Align the plan investments and policies with improving regional economic development and competitiveness
RTP/SCS G2:	Maximize mobility and accessibility for all people and goods in the region
RTP/SCS G3:	Ensure travel safety and reliability for all people and goods in the region
RTP/SCS G4:	Preserve and ensure a sustainable regional transportation system
RTP/SCS G5:	Maximize the productivity of our transportation system
RTP/SCS G6:	Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking)
RTP/SCS G7:	Actively encourage and create incentives for energy efficiency, where possible
RTP/SCS G8:	Encourage land use and growth patterns that facilitate transit and active transportation
RTP/SCS G9:	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies*
	*SCAG does not yet have an agreed-upon security performance measure.

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG 2016 RTP/SCS GOALS				
	Goal	Analysis		
RTP/SCS G1:	Align the plan investments and policies with improving regional economic development and competitiveness	Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference		
RTP/SCS G2:	Maximize mobility and accessibility for all people and goods in the region	Consistent: Statement as to why; Not-Consistent: Statement as to why; Or Not Applicable: Statement as to why; DEIR page number reference		
etc.		etc.		

#### **2016 RTP/SCS STRATEGIES**

To achieve the goals of the 2016 RTP/SCS, a wide range of land use and transportation strategies are included in the 2016 RTP/SCS. Technical appendances of the 2016 RTP/SCS provide additional detail. To view 2016 RTP/SCS. supporting information in the http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx. The 2016 RTP/SCS builds upon the progress from the 2012 RTP/SCS and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that the SCAG region strives toward a more sustainable region, while the region meets and exceeds in meeting all of applicable statutory requirements pertinent to the 2016 RTP/SCS. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

#### **DEMOGRAPHICS AND GROWTH FORECASTS**

Local input plays an important role in developing a reasonable growth forecast for the 2016 RTP/SCS. SCAG used a bottom-up local review and input process and engaged local jurisdictions in establishing the base geographic and socioeconomic projections including population, household and employment. At the time of this letter, the most recently adopted SCAG jurisdictional-level growth forecasts that were developed in accordance with the bottom-up local review and input process consist of the 2020, 2035, and 2040 population, households and employment forecasts. To view them, please visit <a href="http://www.scag.ca.gov/Documents/2016GrowthForecastByJurisdiction.pdf">http://www.scag.ca.gov/Documents/2016GrowthForecastByJurisdiction.pdf</a>. The growth forecasts for the region and applicable jurisdictions are below.

1	Adopted SCAG Region Wide Forecasts			Adopt	ed City of Los A	ngeles
	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040
Population	19,663,000	22,091,000	22,138,800	4,017,000	4,442,500	4,609,400
Households	6,458,000	7,325,000	7,412,300	1,441,400	1,618,900	1,690,300
Employment	8,414,000	9,441,000	9,871,500	1,899,500	2,104,100	2,169,100

#### **MITIGATION MEASURES**

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for the 2016 RTP/SCS for guidance, as appropriate. SCAG's Regional Council certified the Final PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on April 7, 2016 (please see: <a href="http://scagrtpscs.net/Pages/FINAL2016PEIR.aspx">http://scagrtpscs.net/Pages/FINAL2016PEIR.aspx</a>). The Final PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project-and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

### APPENDIX B1 LIST OF PROPOSED STRUCTURES

#### Haskell - Sylmar L2 Structure Tabulation

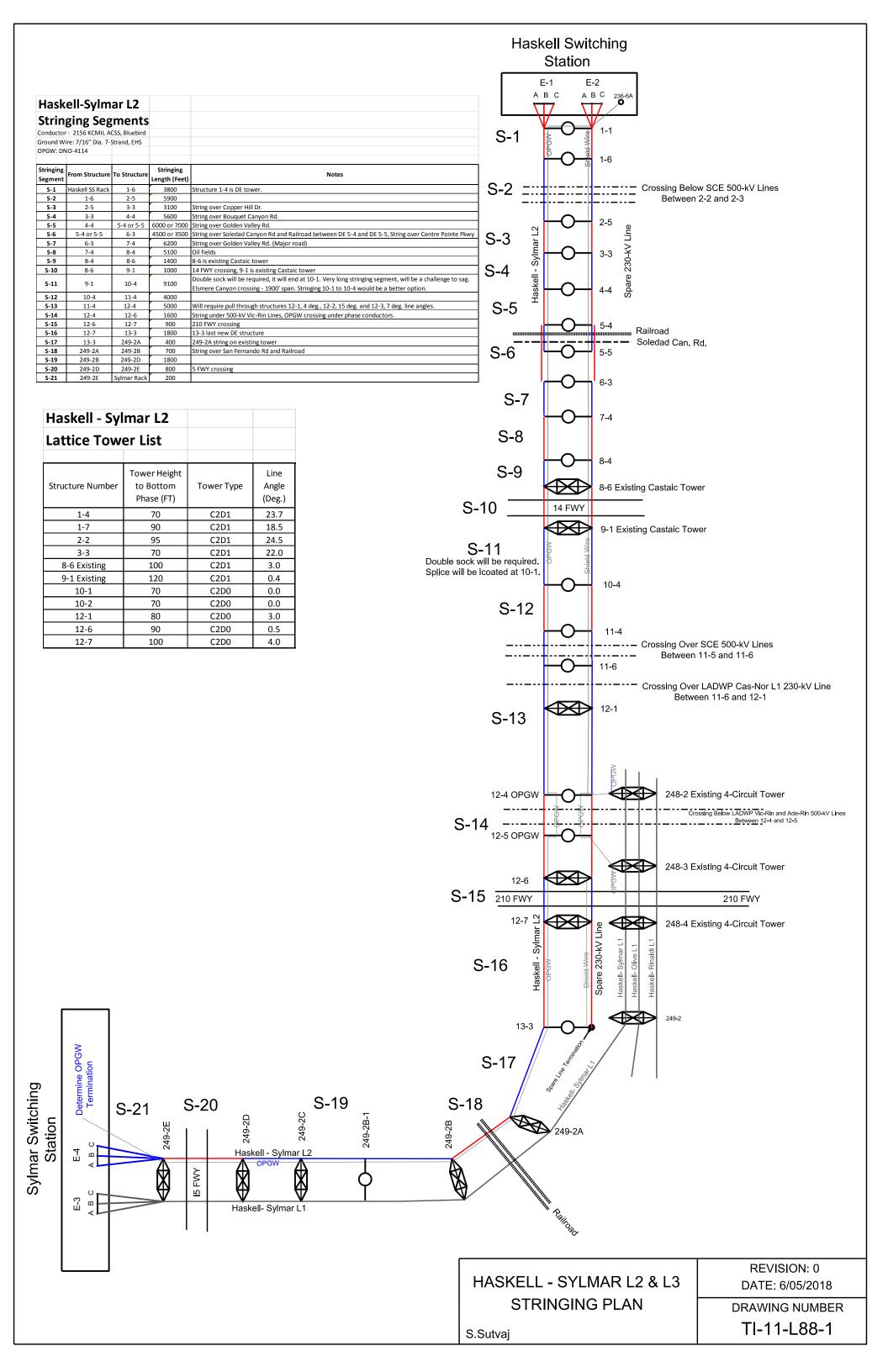
Total Number of New Structures: 72 (Not counting station racks)

New 2-Circuit Steel Monopoles: 62 New 2-Circuit Lattice Towers: 10 Existing Lattice Towers to Remain: 7

Structure Number	Structure Description	Ahead Span (ft)	Line Angle (deg)	Structure Height (ft)	Structure Description
Haskell SS Rack	Rack 55	203.741	0	55	Haskell Rack
1-1	P2DH	499.603	-8.558	148.7	Pole DE
1-2	P2DH	915.125	-12.0942	164	Pole DE
1-3	P2SV	511.71	0	162	Pole Susp
1-4	C2D1	761.475	23.1453	130	Tower DE
1-5	P2SV	968.891	0	146.8	Pole Susp
1-6	P2DH	616.354	0	155	Pole DE
1-7	P2D0	492.282	-9.5241	135	Pole DE
1-8	C2D1	731.219	18.7396	147.3	Tower DE
2-1	P2D0	1146.884	-8.4951	155	Pole DE
2-2	C2D1	979.054	24.5373	157.1	Tower DE
2-3	P2SV	978.052	0	155.3	Pole Susp
2-4	P2SV	1041.615	0	147	Pole Susp
2-5	P2DH	1207.068	0	150.3	Pole DE
3-1	P2SV	1038.935	0	142.4	Pole Susp
3-2	P2SV	752.297	0	126.4	Pole Susp
3-3	C2D1	858.519	-21.8655	128.8	Tower DE
3-4	P2SV	1019.459	0	158.9	Pole Susp
3-5	P2SV	1111.716	0	156.7	Pole Susp
4-1	P2SV	935.478	0	161	Pole Susp
4-2	P2D0	1023.751	0	137.3	Pole DE
4-3	P2SV	634.6	0	137	Pole Susp
4-4	P2DH	572.621	0	125.1	Pole DE
4-5	P2D0	613.64	3.6484	115	Pole DE
4-6	P2D0	1522.896	-4.2327	147	Pole DE
5-1	P2SV	880.746	-0.8475	154	Pole Susp
5-2	P2SV	1140.14	1.4368	135.7	Pole Susp
5-3	P2SV	1066.238	0	146.9	Pole Susp
5-4	P2DH	1057.117	0	155	Pole DE
5-5	P2DH	751.946	7.137	150	Pole DE
5-6	P2SV	789.038	0	137	Pole Susp
6-1	P2SV	1166.588	0	167	Pole Susp
6-2	P2SV	810.299	0	161.7	Pole Susp
6-3	P2DH	678.578	0	130.4	Pole DE
6-4	P2SV	1220.588	0	155.7	Pole Susp
6-5	P2SV	576.696	0	144.5	Pole Susp
6-6	P2D0	944.898	0	114.5	Pole DE
7-1	P2SV	728.3	0	120.9	Pole Susp
7-2	P2SV	983.681	0	104.7	Pole Susp
7-3	P2SV	991.511	0	146.9	Pole Susp
7-4	P2DH	1410.442	0	144	Pole DE

Structure Number	Structure Description	Ahead Span (ft)	Line Angle (deg)	Structure Height (ft)	Structure Description
7-5	P2SV	1047.143	0	106.3	Pole Susp
8-1	P2SV	444.195	0	107.1	Pole Susp
8-2	P2SV	838.824	0	104.8	Pole Susp
8-3	P2SV	1348.848	0	110	Pole Susp
8-4	P2DH	566.463	0	125	Pole DE
8-5	P2D0	671.593	0	131.2	Pole DE
8-6	C2D1	910.197	-0.052	156	Tower DE
9-1	C2D1	286.683	0	202.2	Tower DE
9-2	P2D0	1207.446	0.4868	112.8	Pole DE
9-3	P2SV	1390.407	0.3932	112.1	Pole Susp
9-4	P2D0	1093.177	-0.8933	112.6	Pole DE
9-5	P2SV	1049.342	0.5001	122.8	Pole Susp
9-6	P2D0	604.361	-5.133	123.1	Pole DE
10-1	C2D1	1900.384	0.2576	127.6	Tower DE
10-2	C2D1	478.27	0	129.7	Tower DE
10-3	P2SV	1015.806	-0.4432	105.4	Pole Susp
10-4	P2DH	1470.554	1.0611	145.2	Pole DE
11-1	P2D0	580.147	-3.4717	170	Pole DE
11-2	P2D0	928.428	2.6131	134.9	Pole DE
11-3	P2SV	974.128	0.7881	125.9	Pole Susp
11-4	P2DH	571.492	-0.7762	124.9	Pole DE
11-5	P2D0	1090.189	0	159.8	Pole DE
11-6	P2SV	1319.721	0	161.8	Pole Susp
12-1	TC2SX	909.352	-3.4824	124.8	Tower Susp
12-2	C2D1	486.449	-14.5204	151.2	Tower DE
12-3	P2D0	588.801	-6.8755	123.9	Pole DE
12-4	P2DH_OPGW	756.705	1.8512	144.6	Pole DE
12-5	P2D0_OPGW	824.034	0.7022	119.7	Pole DE
12-6	C2D0	850.761	-0.6086	144.6	Tower DE
12-7	C2D0	517.702	3.6809	153.9	Tower DE
13-1	P2D0	619.273	-3.6652	124.9	Pole DE
13-2	P2SV	629.175	0	122	Pole Susp
13-3	P2DH	424.658	14.5621	120	Pole DE
249-2A (E)	C2D4	625.203	81.0909	174.6	Tower DE
249-2B (E)	c2d1	527.981	31.1074	168.3	Tower DE
249-2B-1	P2DM	363.992	0	123	Pole DE
249-2C (E)	C2S	893.072	0	142	Tower DE
249-2D (E)	GL1	707.315	-18.5213	183.2	Tower DE
249-2E (E)	GL0	191.573	-1.7672	186.6	Tower DE
Sylmar SS Rack	Rack 55	0	0	70	Sylmar Rack

### APPENDIX B2 STRINGING PLAN



# APPENDIX B3 DETAILED PROJECT MAP



- Proposed Pole Location (Approx.)
- Existing Poles to be Removed

- New Pole Work Area
- Helicopter Laydown

- Stringing Pad/Laydown Yard
- Structure Removal





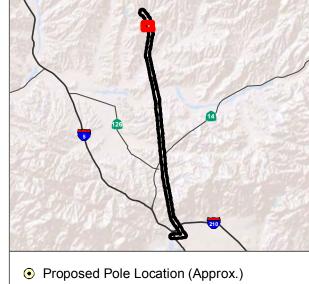












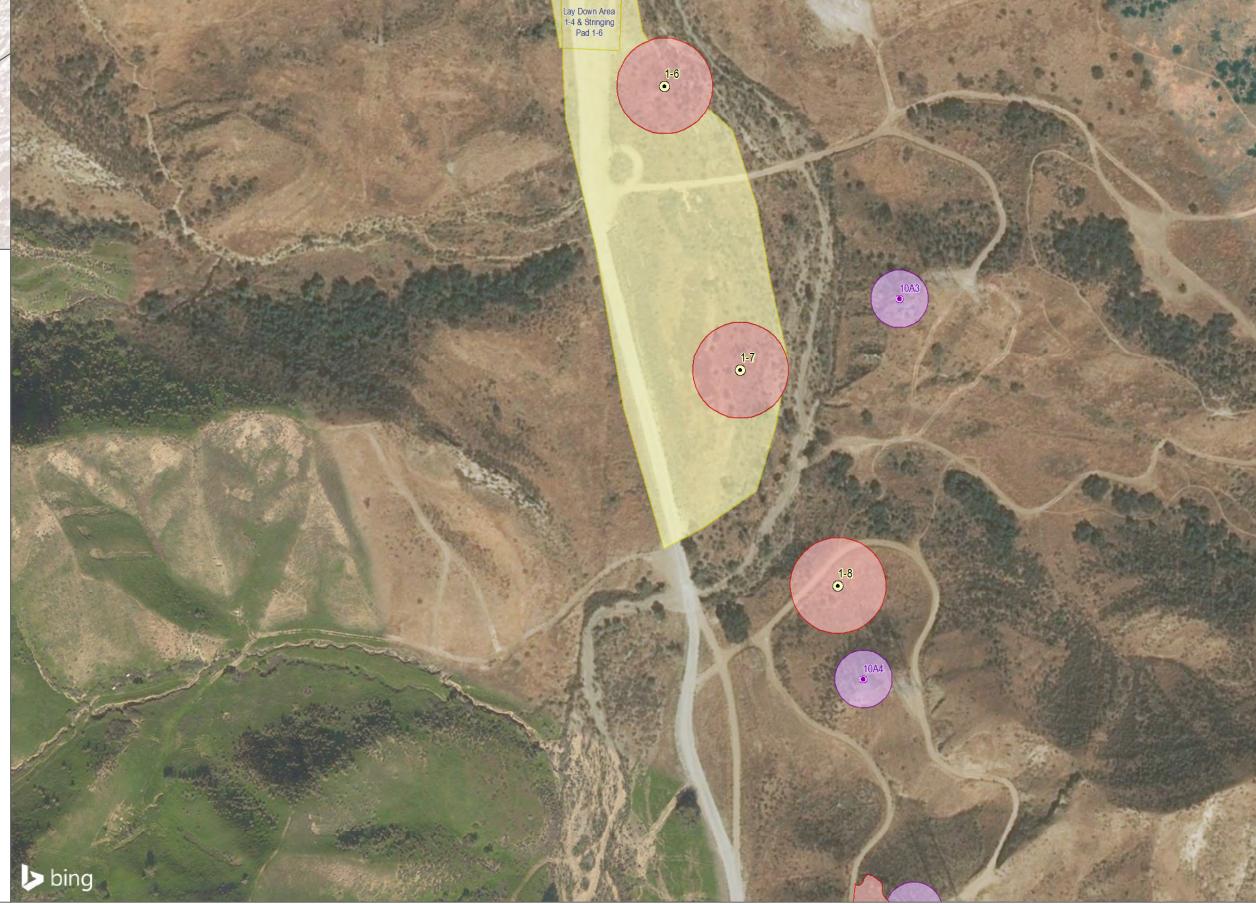
Existing Poles to be Removed

## Environmental Impact Footprint Permanent Disturbance

- New Pole Work Area
- Helicopter Laydown

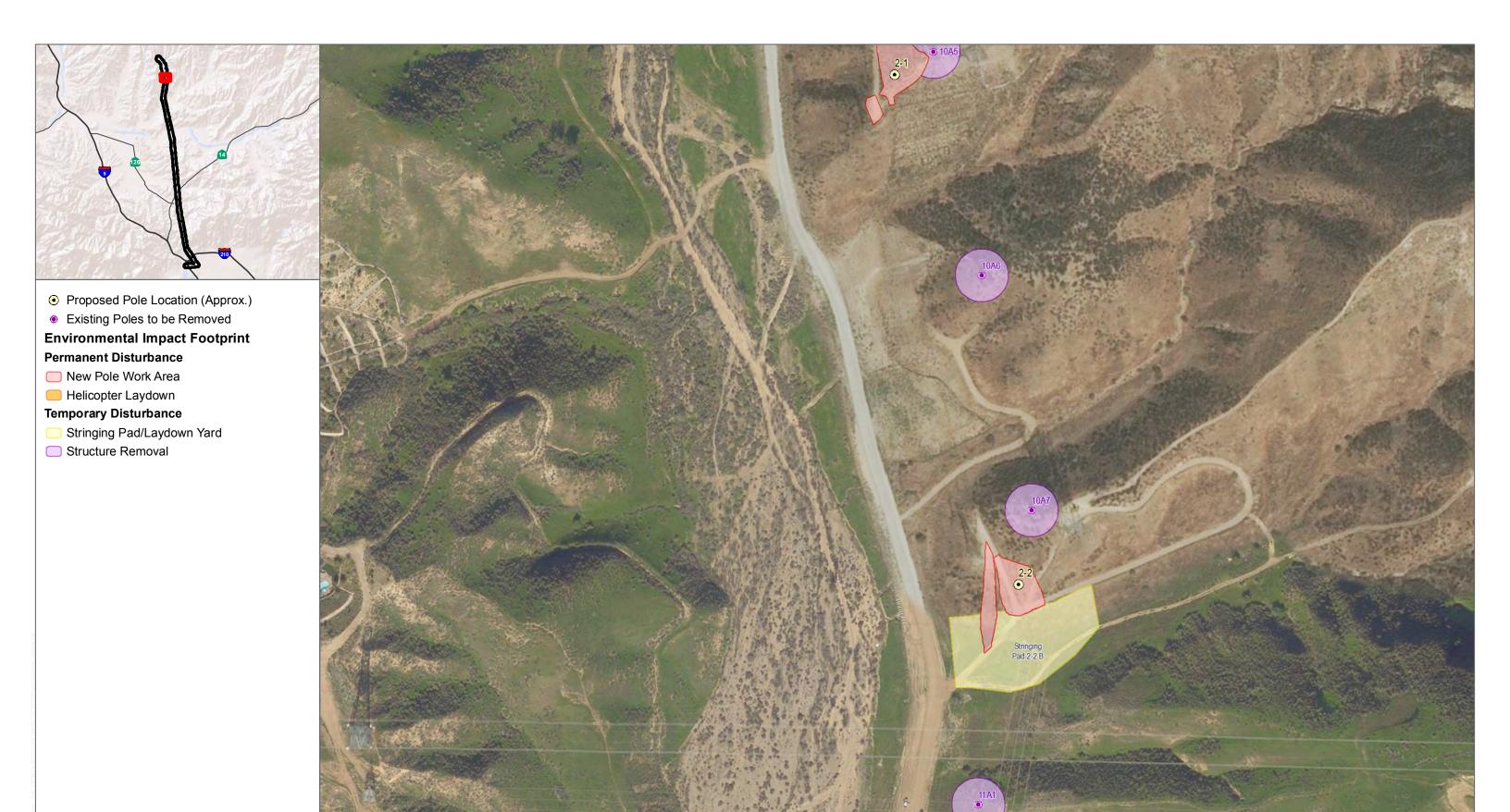
### **Temporary Disturbance**

- Stringing Pad/Laydown Yard
- Structure Removal









SOURCE: Bing Maps 2019, LADWP 2018





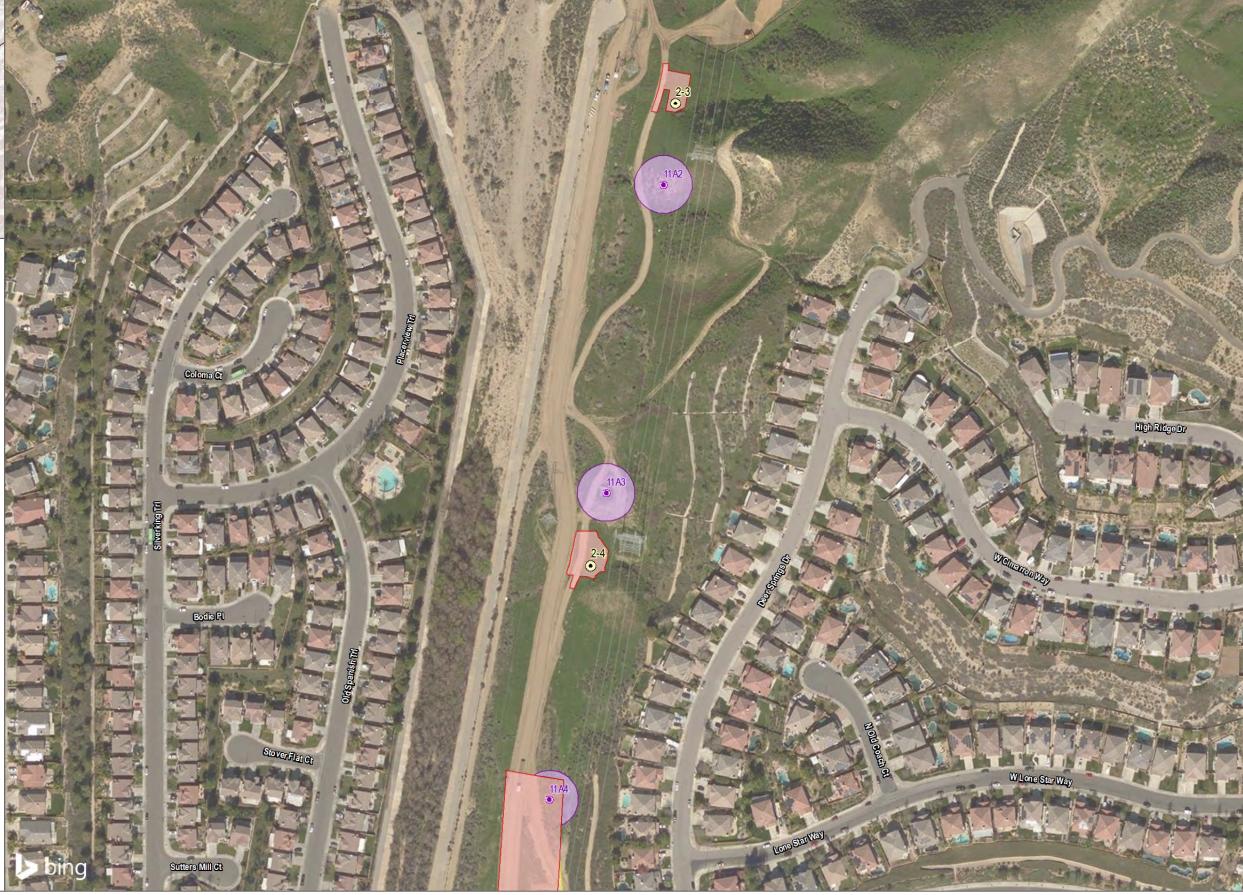
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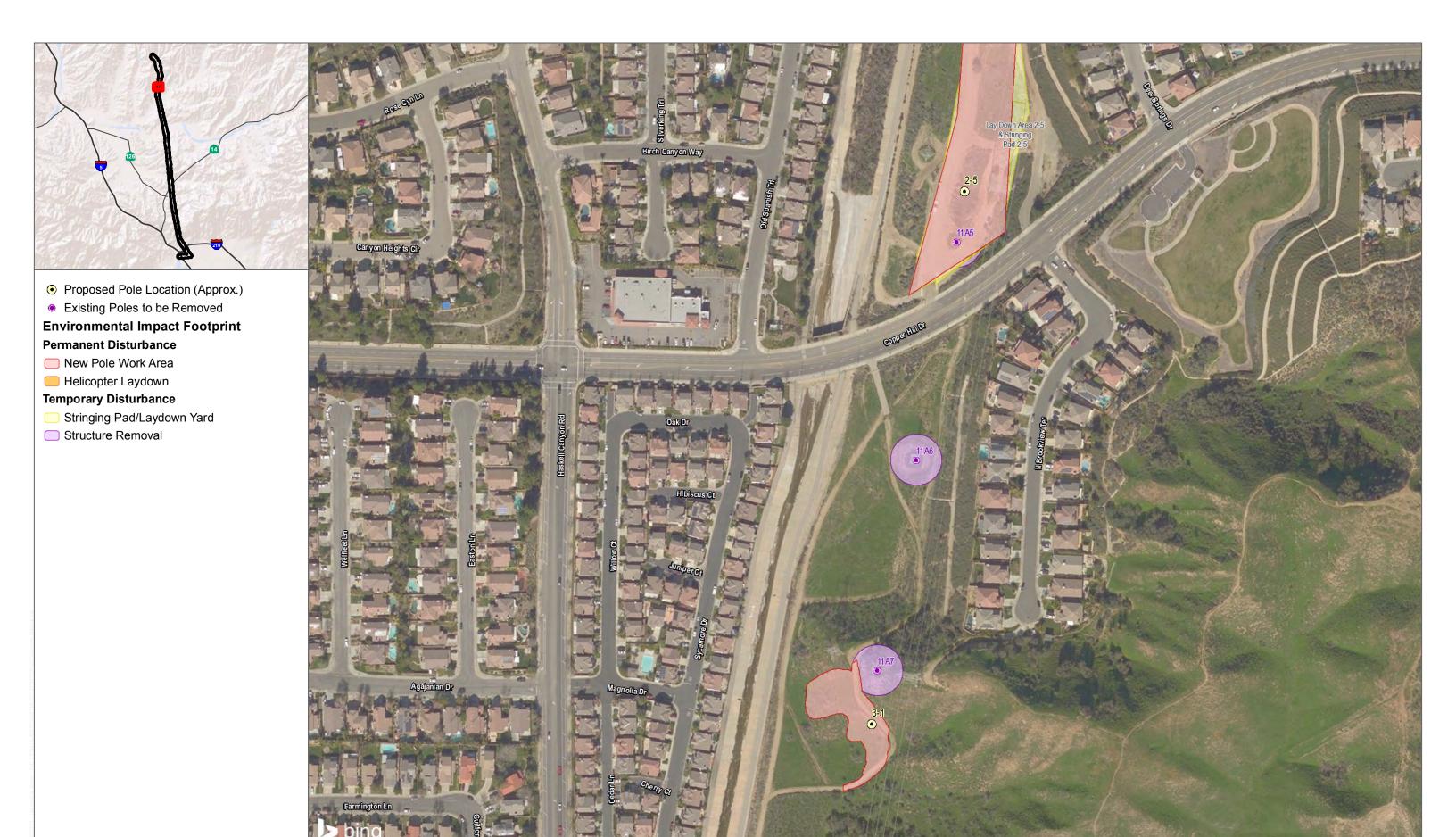
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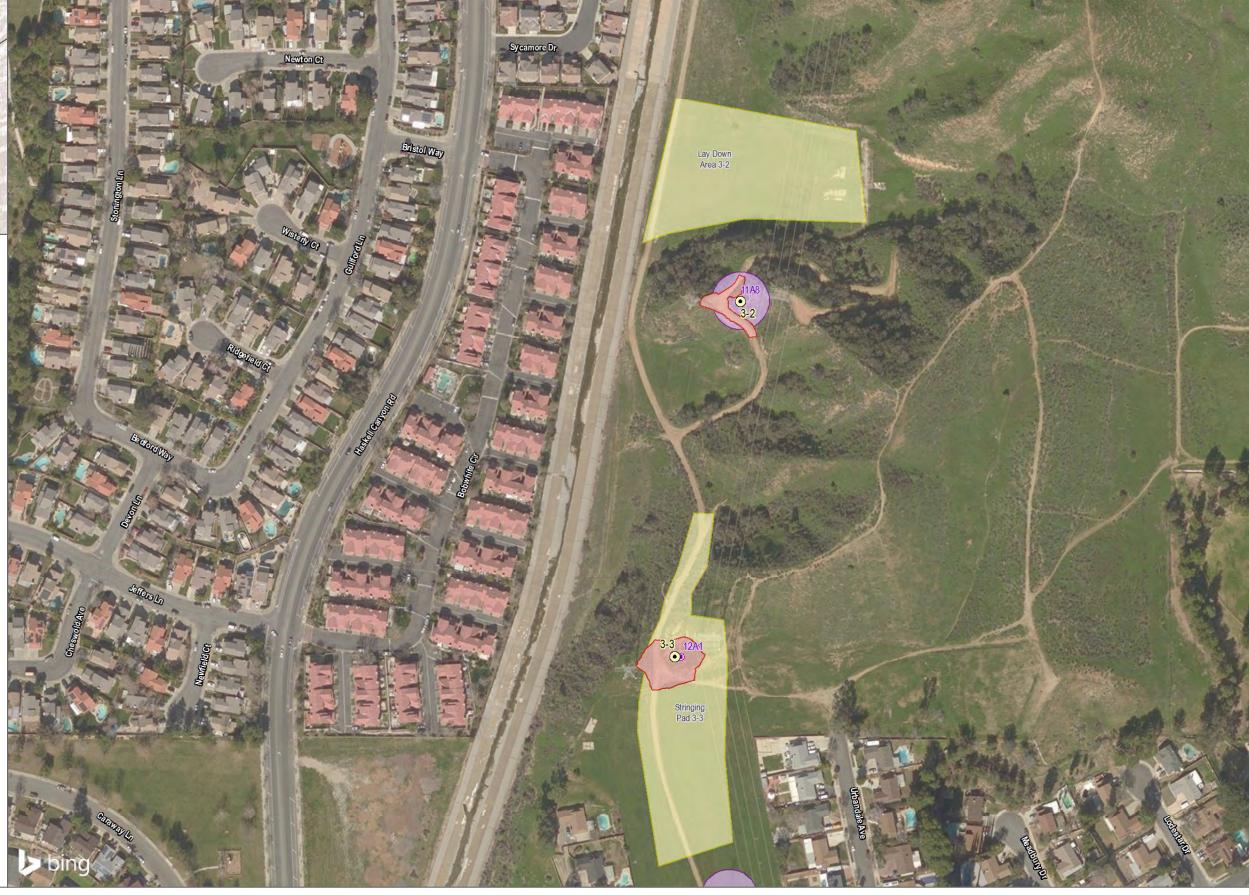


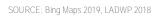


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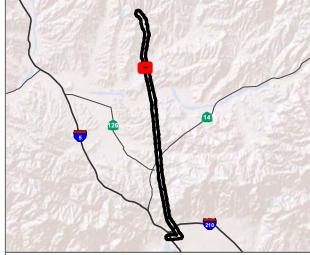








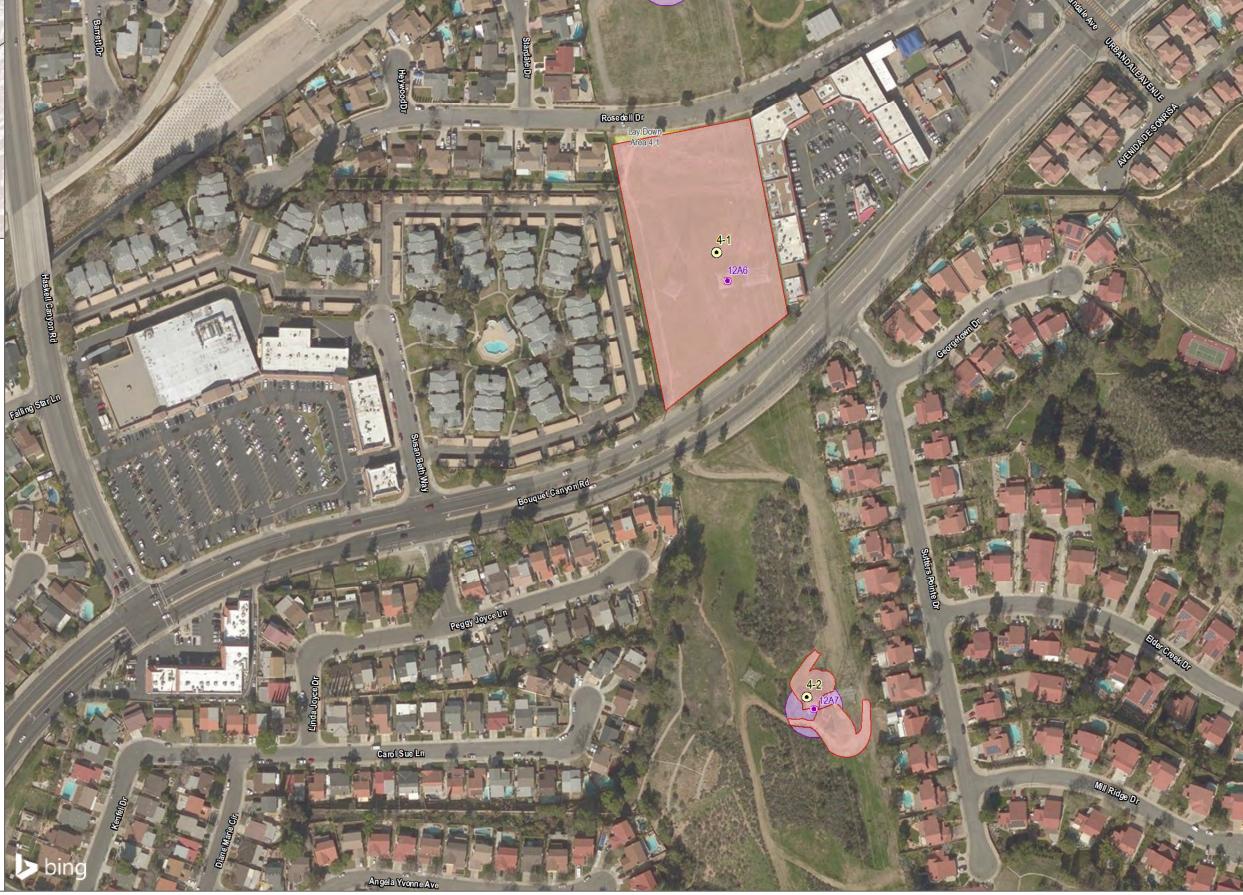




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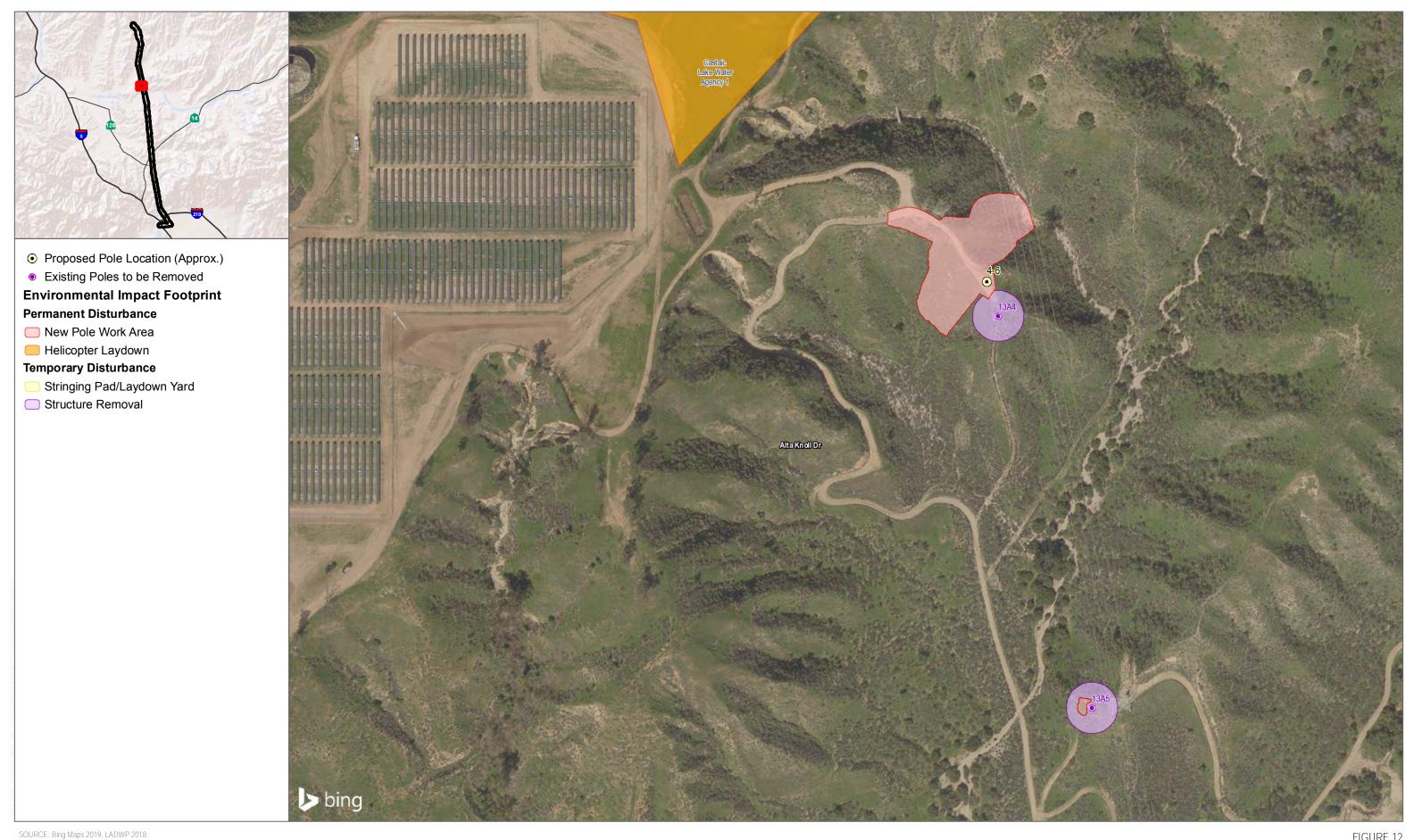
### **Temporary Disturbance**

- Stringing Pad/Laydown Yard
- Structure Removal











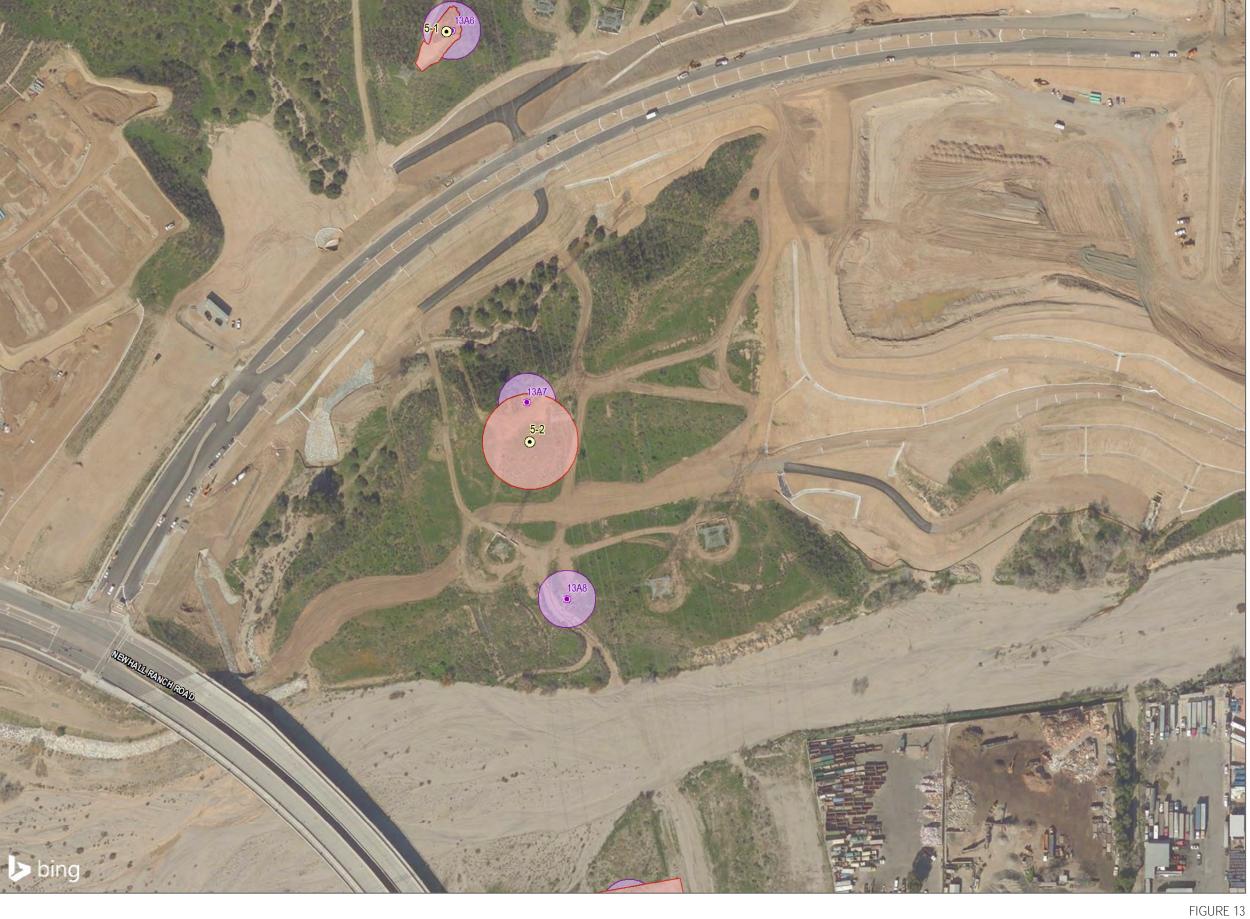




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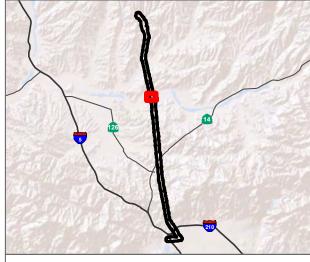
- Stringing Pad/Laydown Yard
- Structure Removal









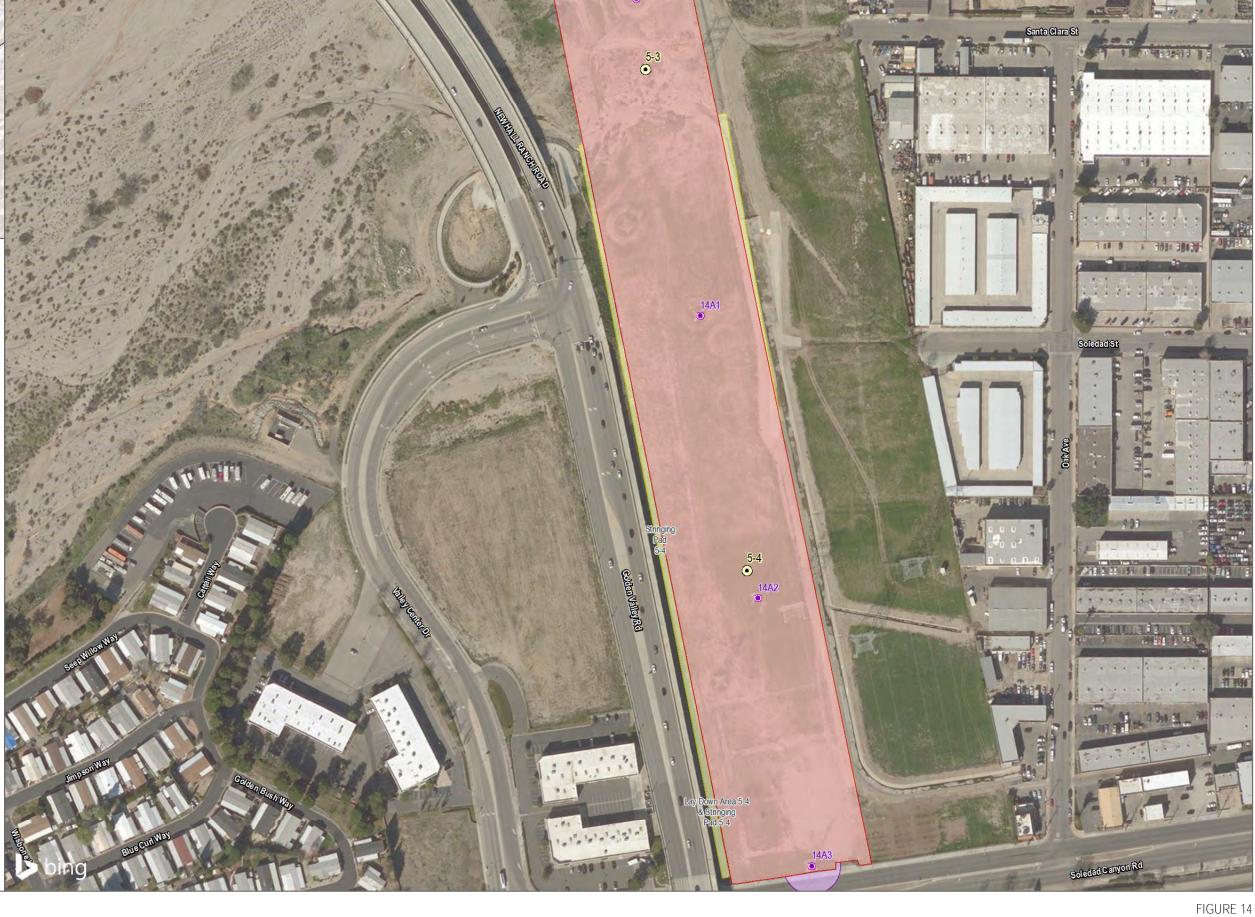


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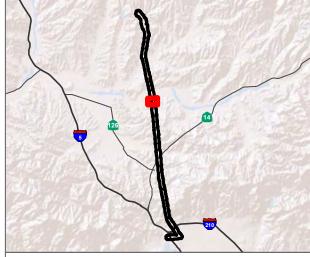
### **Temporary Disturbance**

- Stringing Pad/Laydown Yard
- Structure Removal





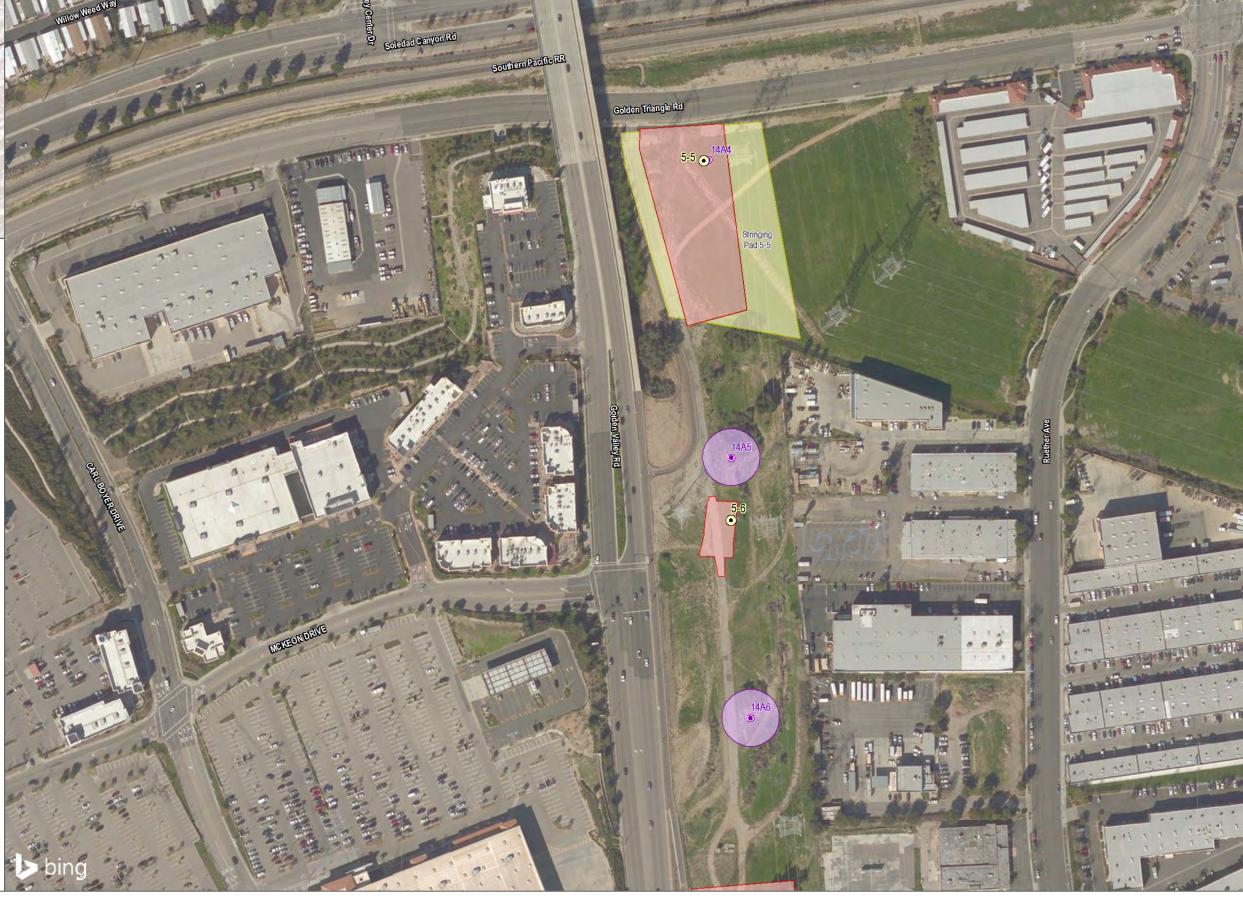




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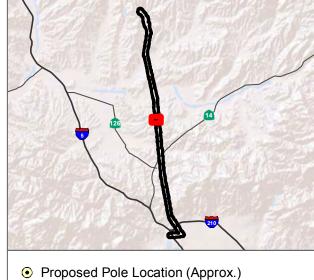
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### **Temporary Disturbance**

- Stringing Pad/Laydown Yard
- Structure Removal





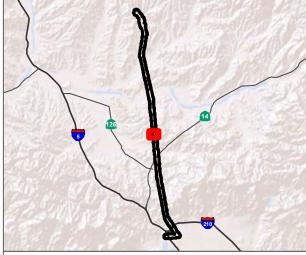








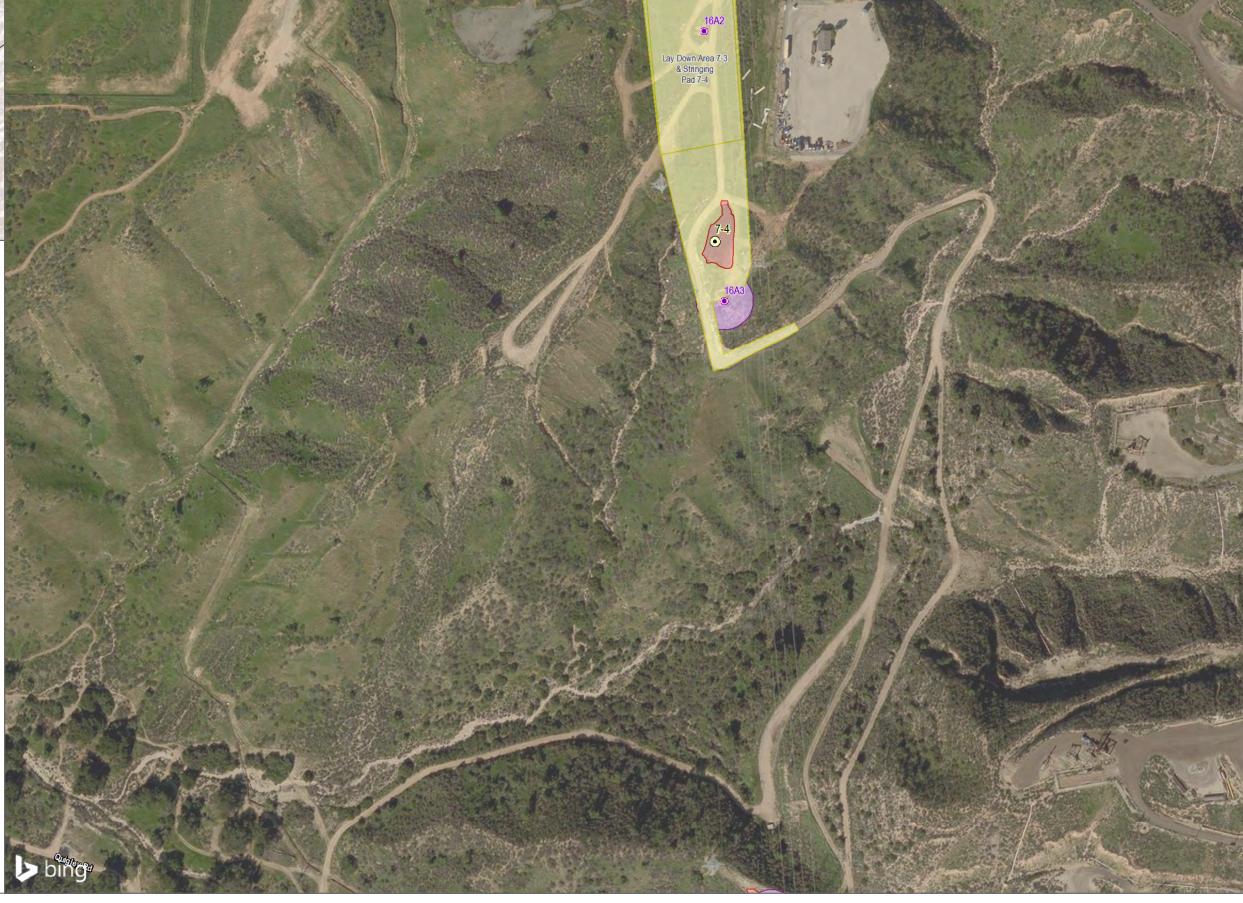




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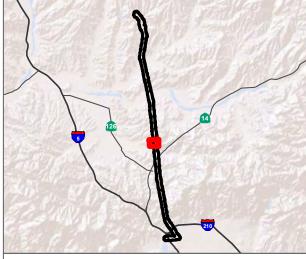
- Stringing Pad/Laydown Yard
- Structure Removal











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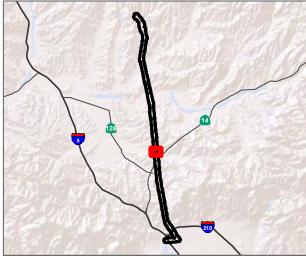
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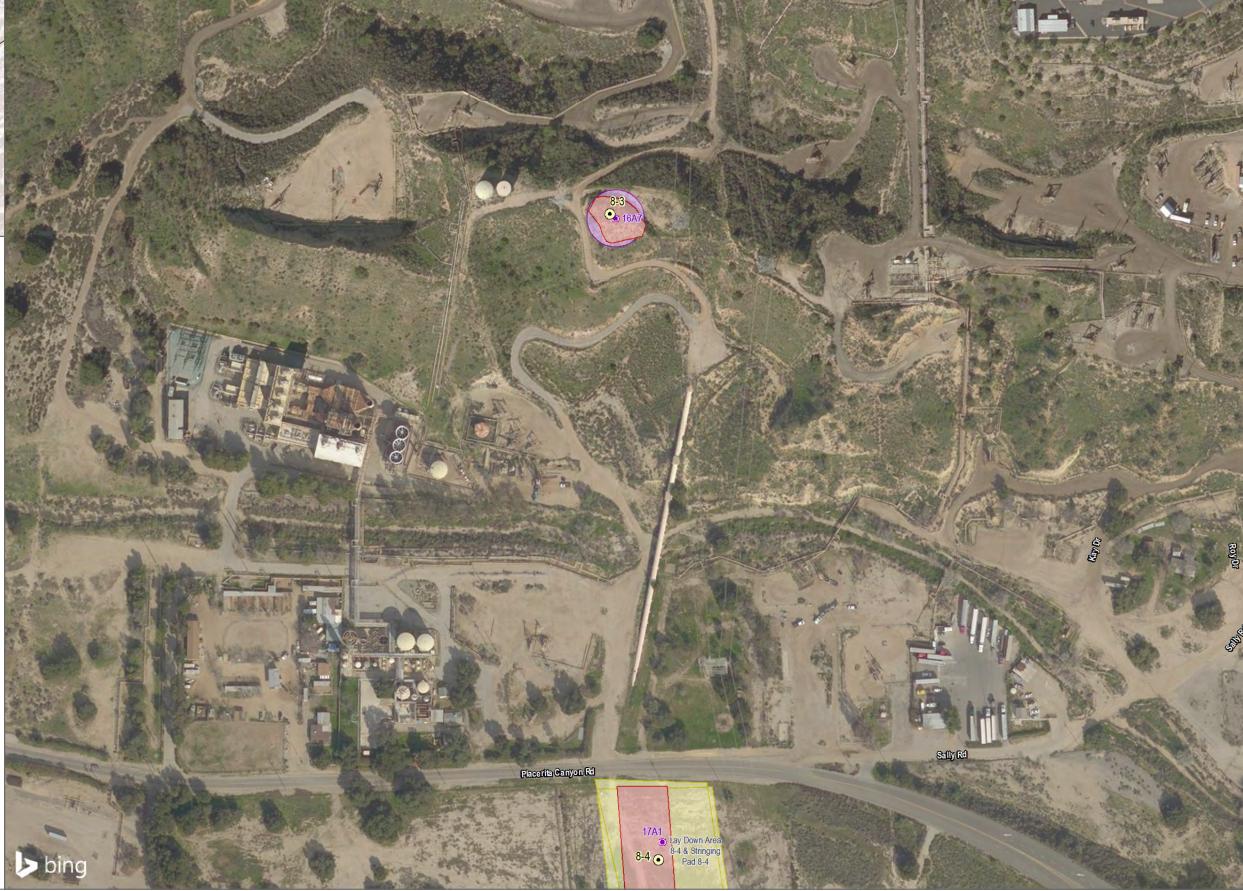


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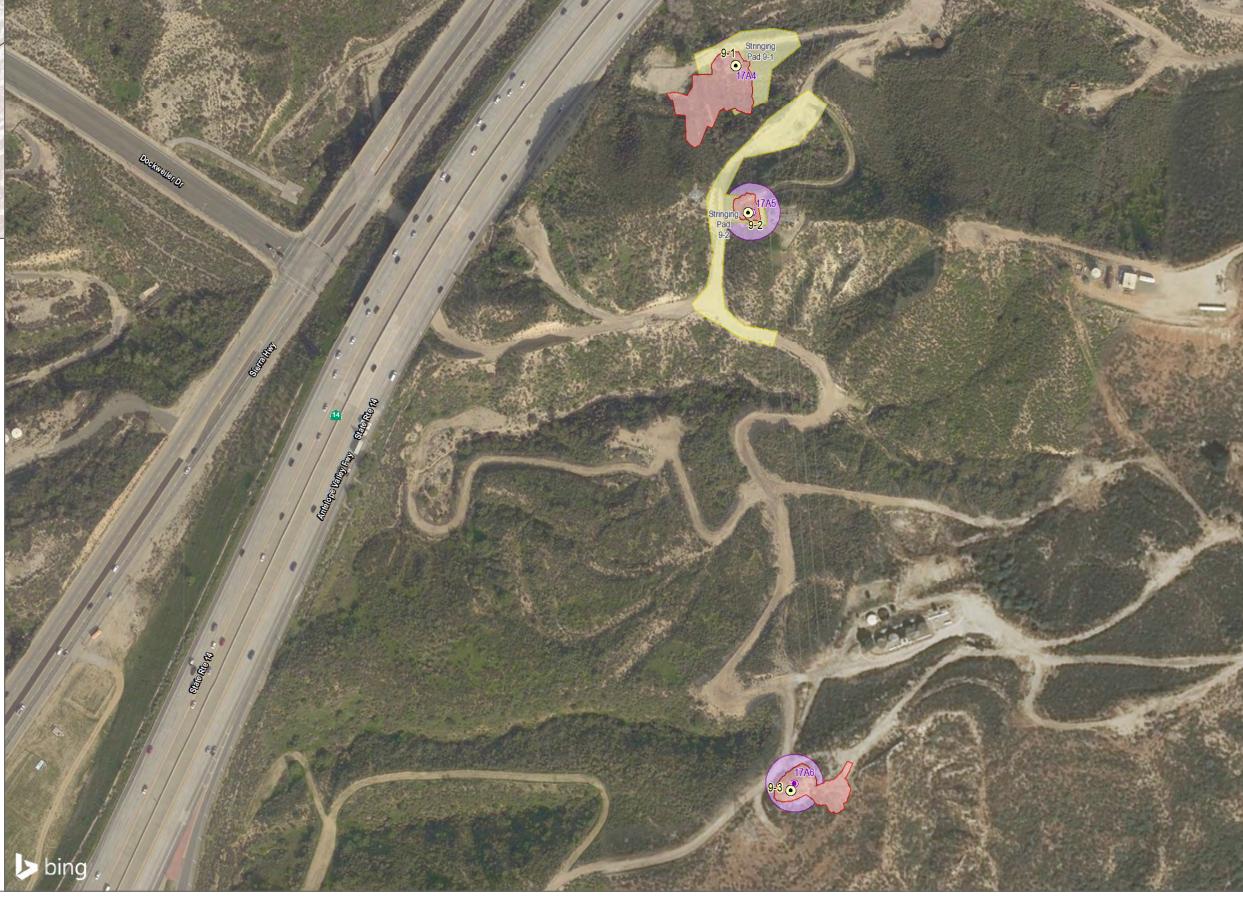




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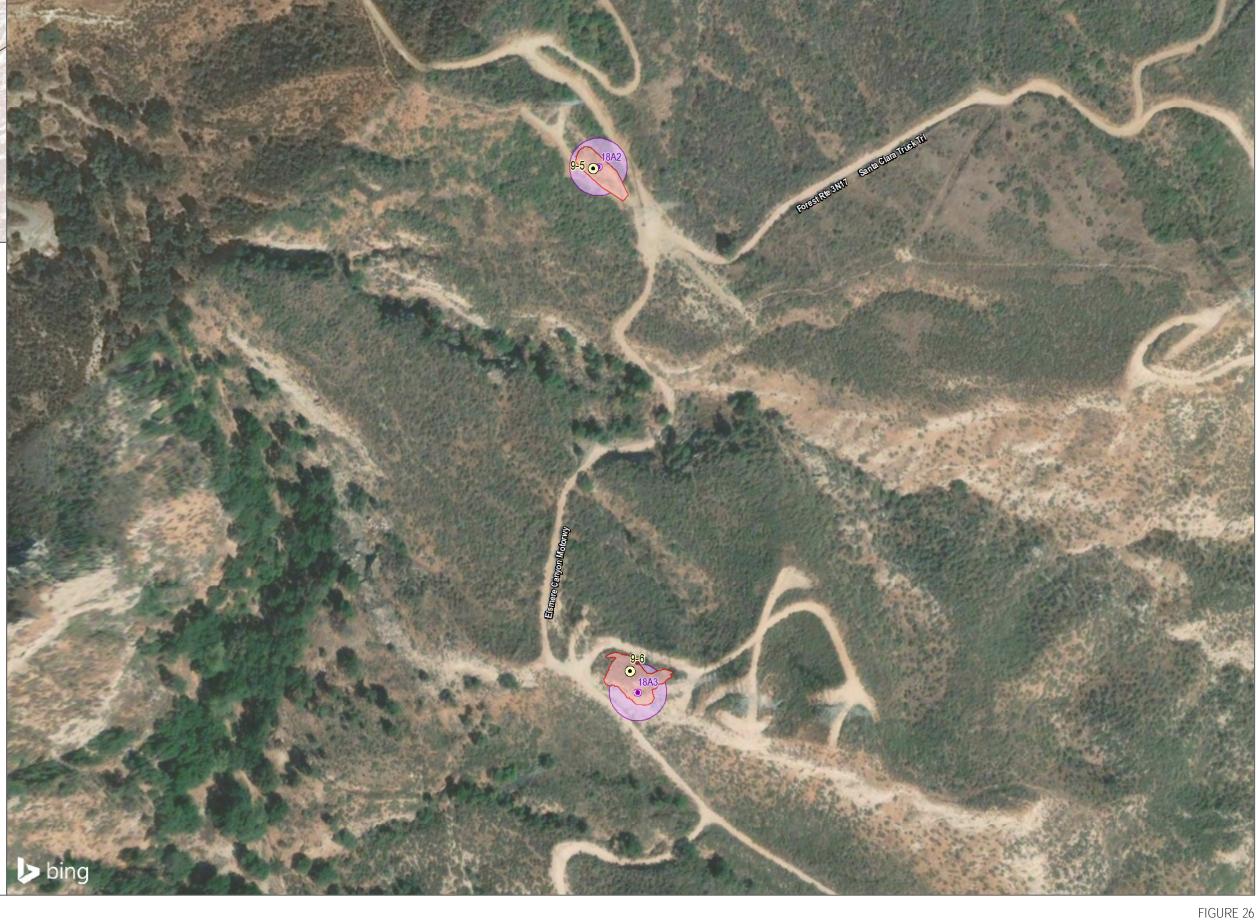


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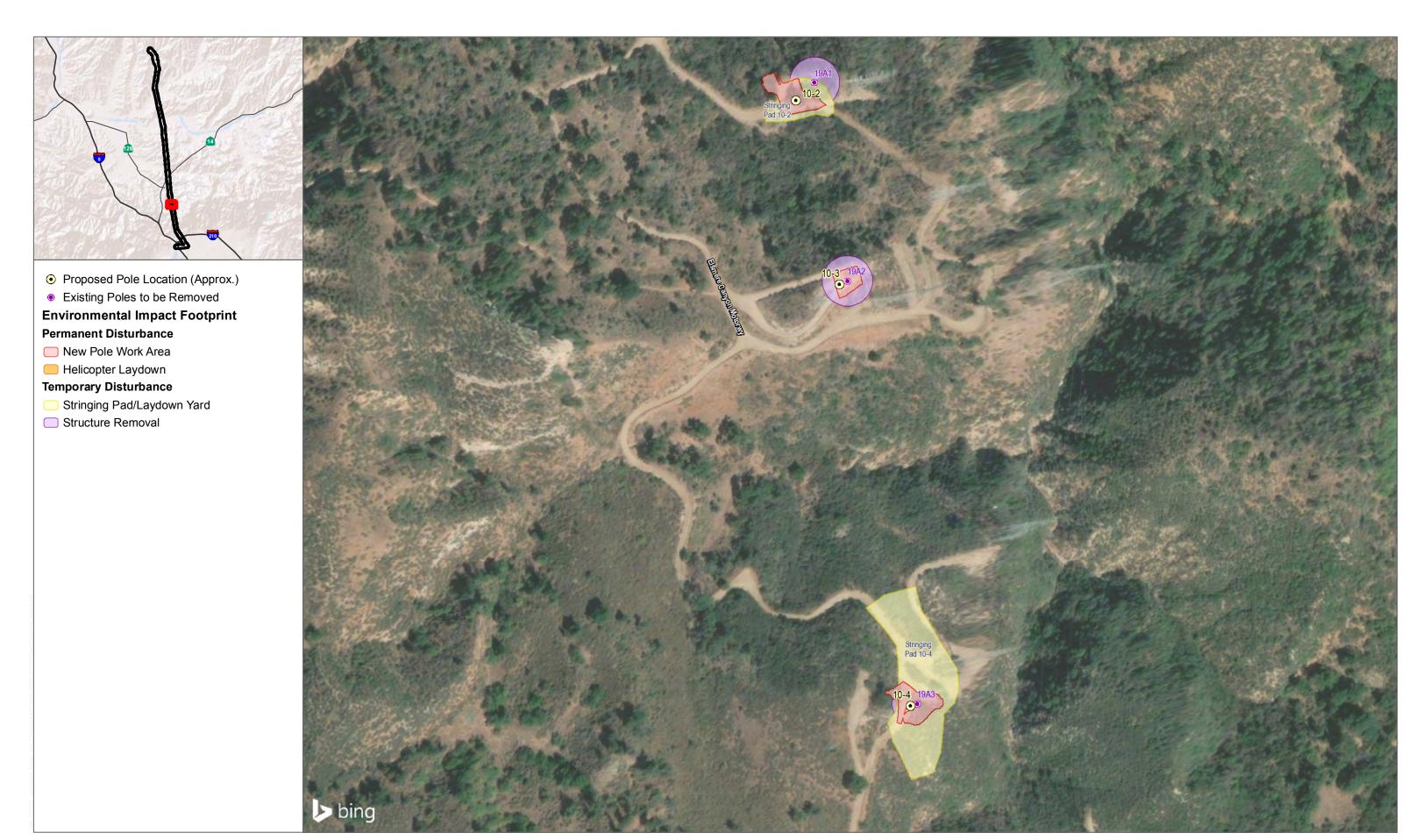


















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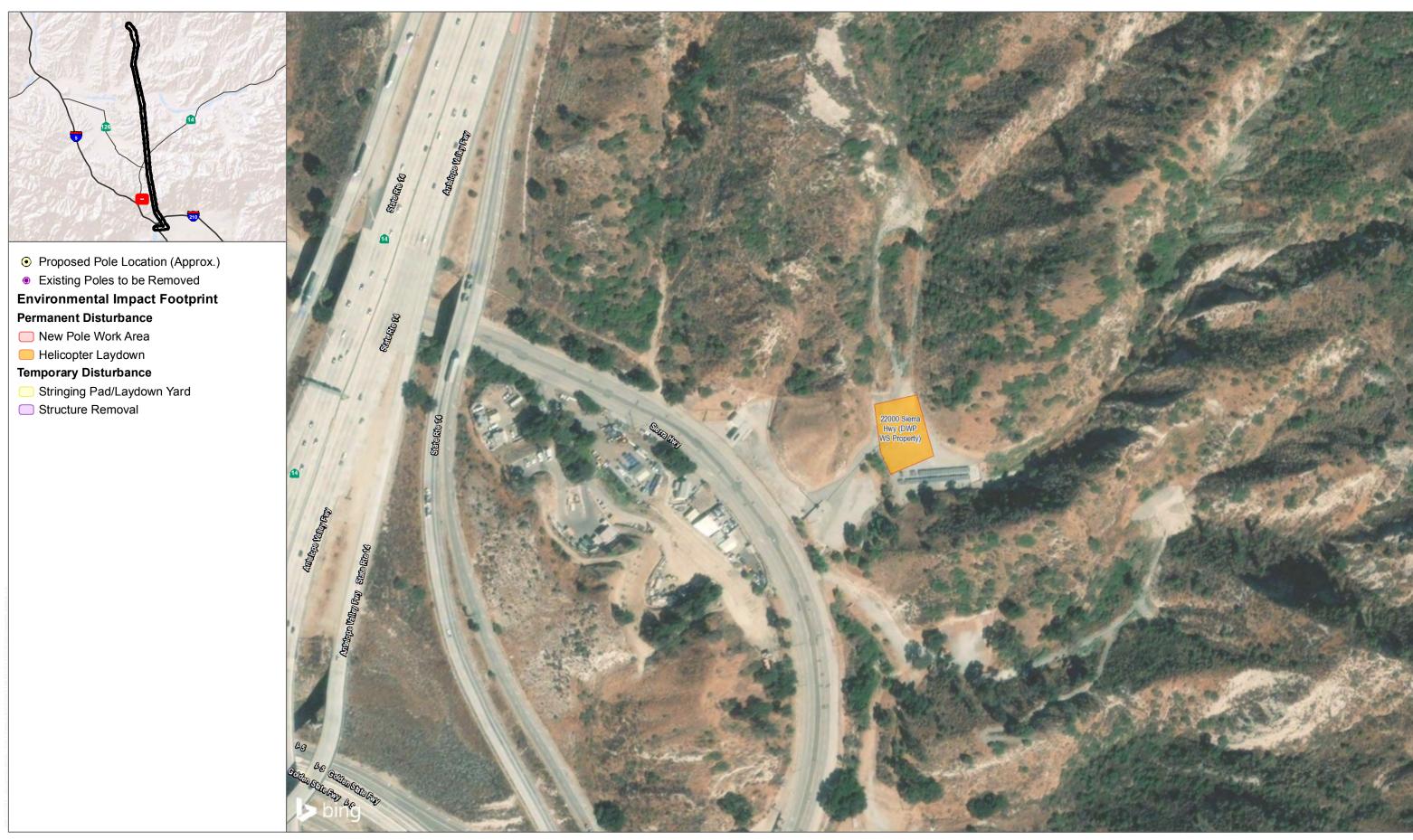
















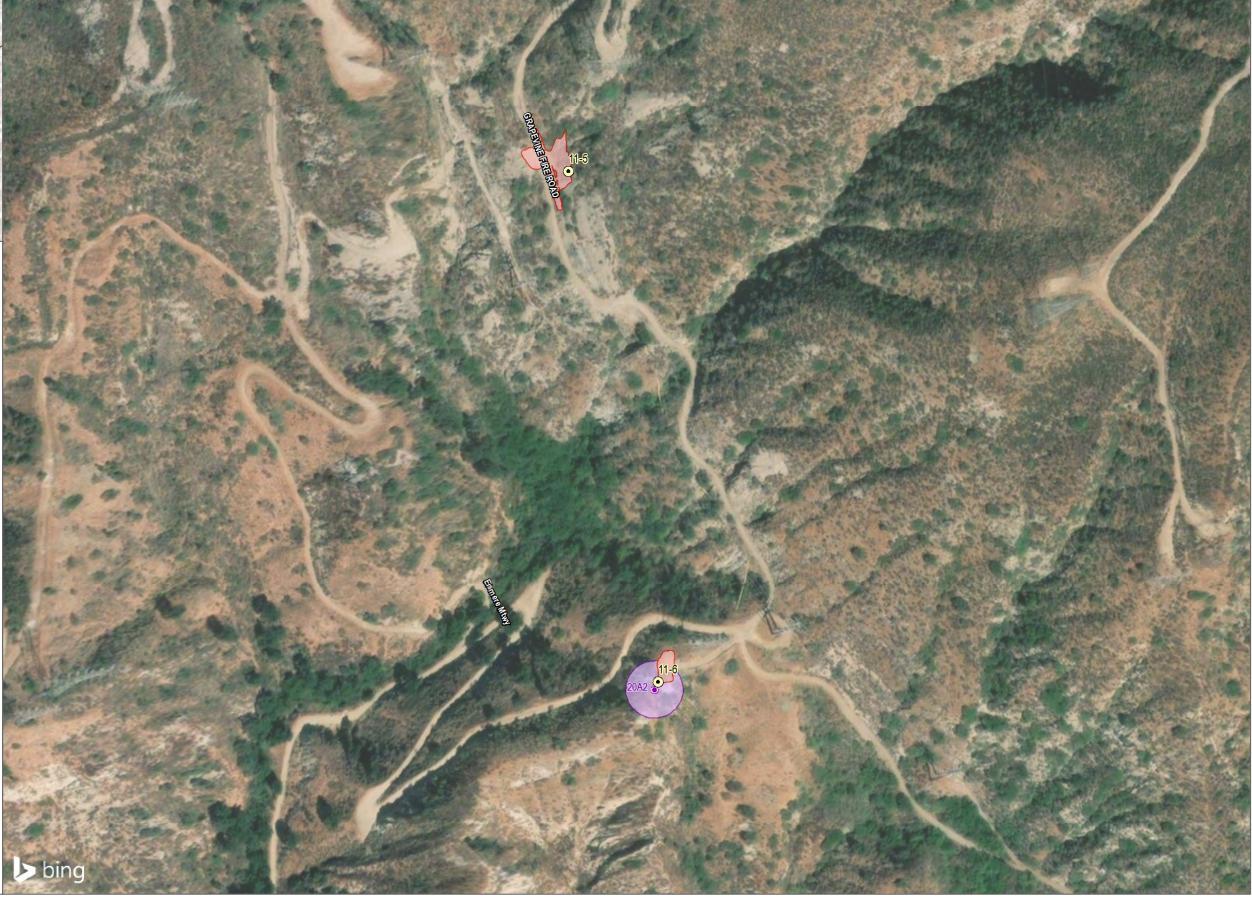


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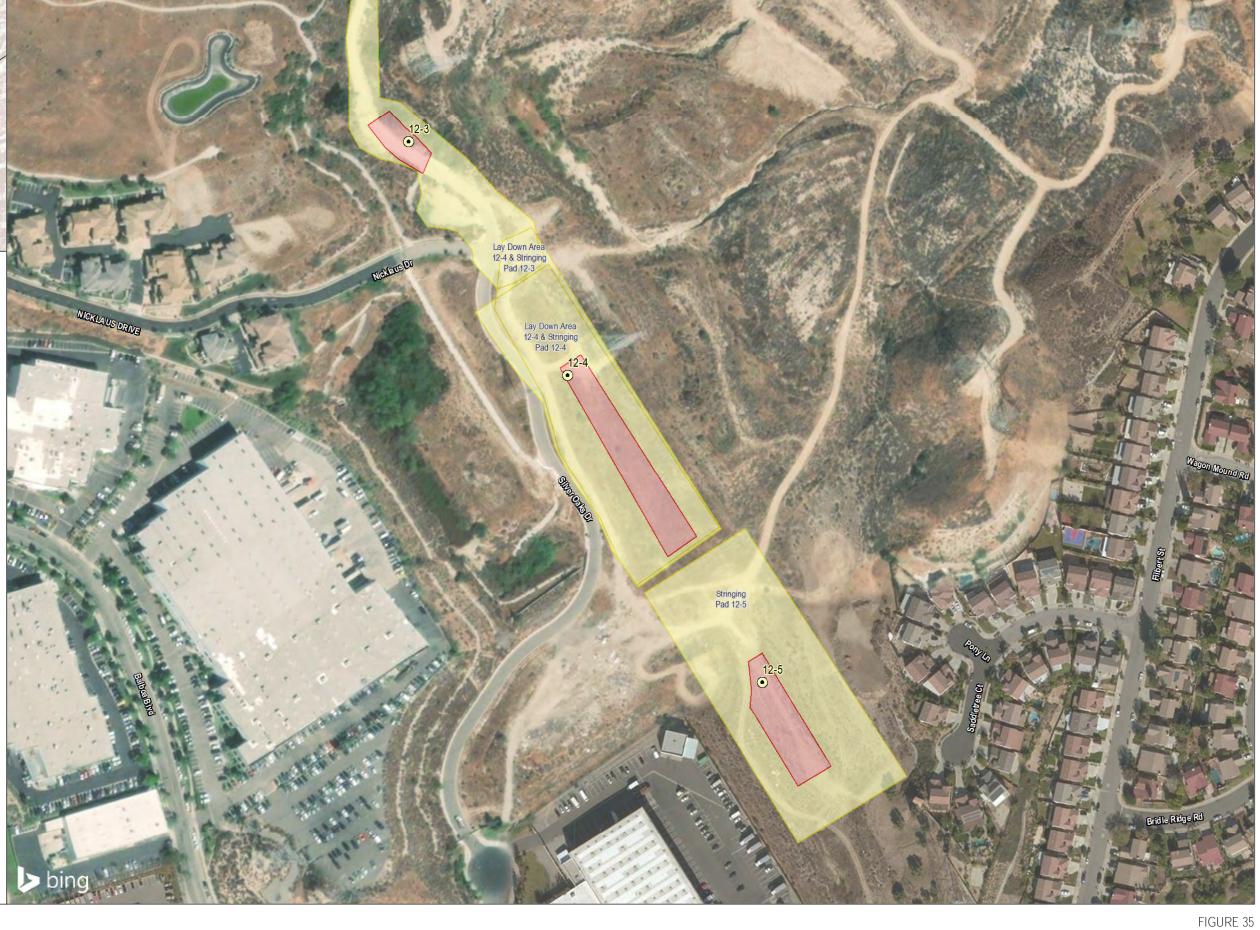




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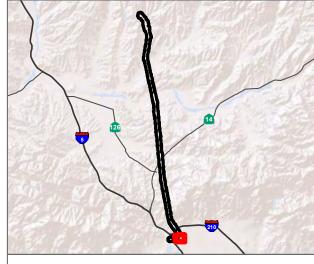








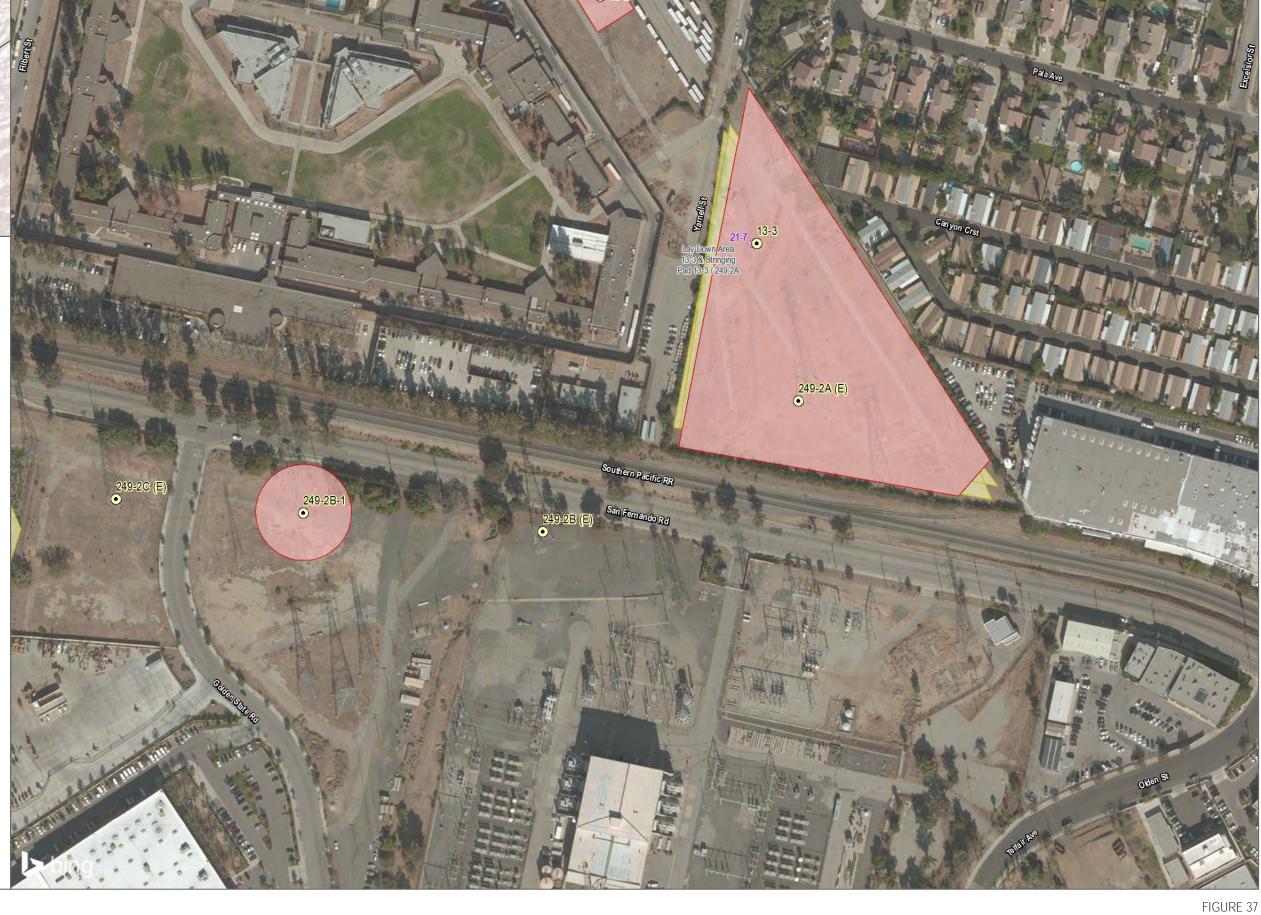




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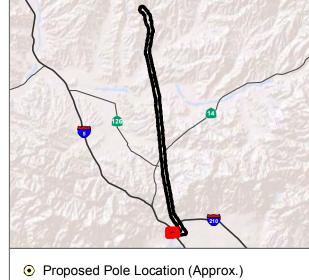
- Stringing Pad/Laydown Yard
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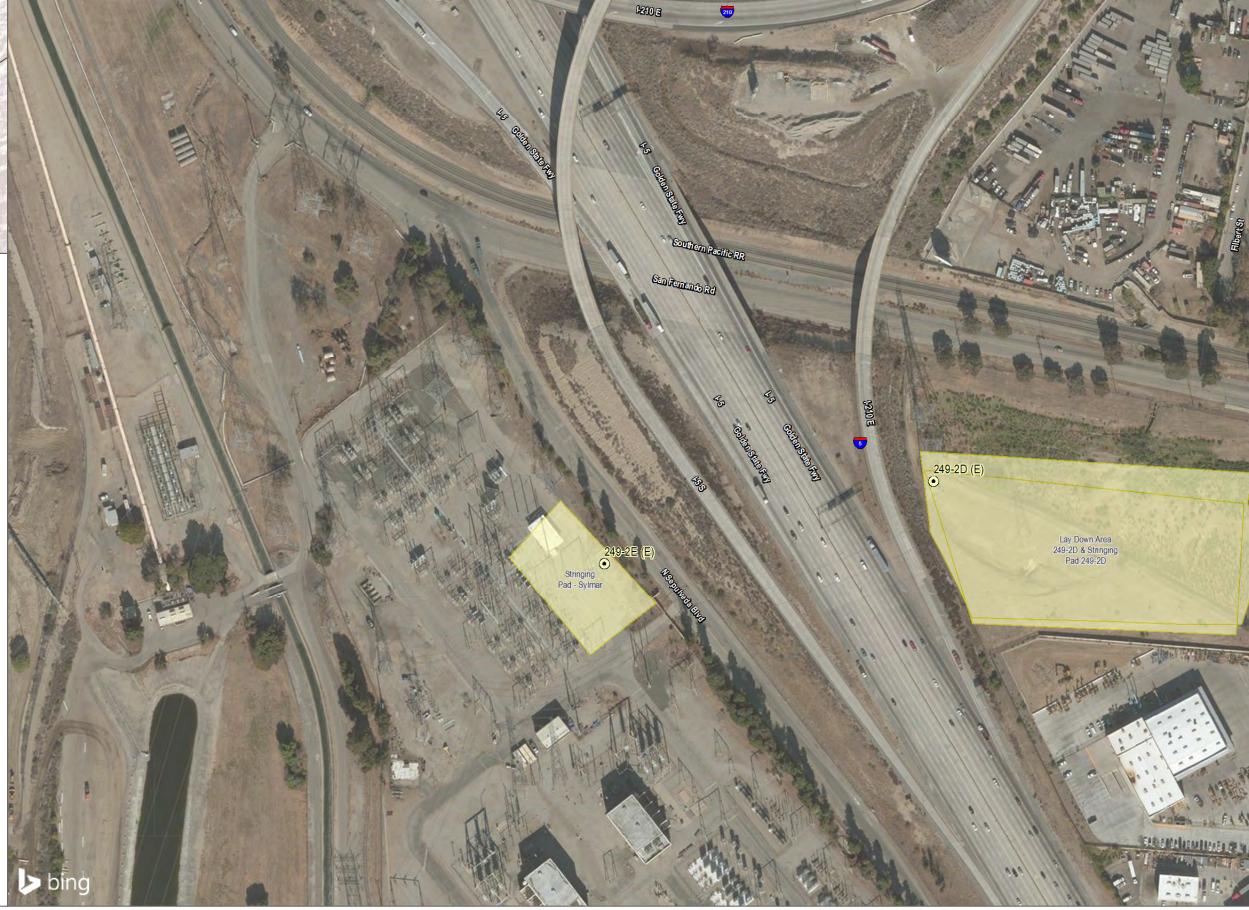


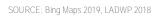
Existing Poles to be Removed

# Environmental Impact Footprint Permanent Disturbance

- New Pole Work Area
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## APPENDIX C AIR QUALITY AND GREENHOUSE GAS EMISSIONS DATA

#### **Total Air Quality Emissions**

CaEEMod Emissions Estiamtes	Emissions (lbs/day)					
Unmitigated	VOC	NOX	СО	SOX	PM10	PM2.5
2019	1.97	21.92	14.96	0.04	3.35	1.22
2020	10.78	120.24	69.55	0.17	22.26	12.26
2021	10.02	111.47	67.42	0.17	21.74	11.78
2022	8.77	96.52	64.64	0.17	21.00	11.09
2023	7.84	83.54	62.04	0.17	20.42	10.55

CaEEMod Emissions Estiamtes	Emissions (lbs/day)					
Mitigated	VOC	NOX	СО	SOX	PM10	PM2.5
2019	0.94	14.70	16.96	0.04	2.11	0.92
2020	4.00	73.56	81.87	0.17	11.41	6.52
2021	3.89	72.28	81.08	0.17	11.36	6.47
2022	3.82	71.20	80.49	0.17	11.36	6.47
2023	3.70	68.72	79.81	0.17	11.35	6.46

Helicotper Emissions	Emissions (lbs/day)					
	VOC	NOx	CO	PM <sub>10</sub>		
Bell 407	10.87	17.92	13.39	0.50		
SIKORSKY CH-53G (S-65)	13.41	268.91	15.79	6.05		
Total	24.28	286.83	29.18	6.56		

Total Emissions		Emissions (lbs/day)				
Unmitigated	VOC	NOX	СО	SOX	PM10	PM2.5
2019	1.97	21.92	14.96	0.04	3.35	1.22
2020	35.06	407.07	98.73	0.17	28.30	12.26
2021	10.02	111.47	67.42	0.17	28.30	11.78
2022	8.77	96.52	64.64	0.17	21.00	11.09
2023	7.84	83.54	62.04	0.17	20.42	10.55
Maximum	35.06	407.07	98.73	0.17	28.30	12.26

Total Emissions		Emissions (lbs/day)				
Mitigated	VOC	NOX	СО	SOX	PM10	PM2.5
2019	0.94	14.70	16.96	0.04	2.11	0.92
2020	28.28	360.39	111.05	0.17	17.97	6.52
2021	3.89	72.28	81.08	0.17	11.36	6.47
2022	3.82	71.20	80.49	0.17	11.36	6.47
2023	3.70	68.72	79.81	0.17	11.35	6.46
Maximum	28.28	360.39	111.05	0.17	17.97	6.52

#### **Total GHG Emissions**

CaEEMod Emissions Estiamtes	Em	Emissions (Tons/Year)		
	CO2	CH4	N20	CO2E
2019	143.54	0.30	0.00	144.27
2020	1733.23	0.38	0.00	1742.82
2021	1973.18	0.44	0.00	1984.12
2022	1955.33	0.43	0.00	1966.18
2023	1779.99	0.40	0.00	1789.86
Total	7,585.27	1.95	0.00	7,627.25

Helicotper Emissions or Bell407	Emissions (Tons/Year)				
	CO2	CH4	N20	CO2E	
Bell 407	109.54	0.00	0.00	109.64	
SIKORSKY CH-53G (S-65)	375.40	0.02	0.00	376.67	
Total	484.94	0.02	0.00	486.31	

Total Emissions	Emissions (Tons/Year)			
	CO2	CH4	N20	CO2E
2019	143.54	0.30	0.00	144.27
2020	2,218.17	0.40	0.00	2,229.13
2021	1,973.18	0.44	0.00	1,984.12
2022	1,955.33	0.43	0.00	1,966.18
2023	1,779.99	0.40	0.00	1,789.86
Total	8,070.21	1.97	0.00	8,113.56
Amortirzed				270.45

CalEEMod Version: CalEEMod.2016.3.2

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PP1&2 Transmission Line - South Coast AQMD Air District, Annual

## PP1&2 Transmission Line South Coast AQMD Air District, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.64	Acre	2.64	114,998.40	0

#### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2024
Utility Company	Los Angeles Department	t of Water & Power			
CO2 Intensity (lb/MWhr)	1227.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational year 2024.

Land Use - Total construction area graded in a day based on grading eqipment available would total approximately 2.64 acres.

Construction Phase - Construction phasing information provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Trips and VMT - Construction trip information was provided by LADWP.

Grading - Grading estiamtes provided by LADWP.

Construction Off-road Equipment Mitigation - Tier 3 eqipment and dust suppresson mitigation to comply with SCAQMD rule.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_Parking	6900	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	979.00
tblConstructionPhase	NumDays	20.00	979.00
tblConstructionPhase	NumDays	3.00	1,109.00
tblConstructionPhase	NumDays	3.00	979.00
tblConsumerProducts	ROG_EF	1.98E-05	2.14E-05
tblFleetMix	HHD	0.04	0.00

41.151. 45.5	1.54	0.55	0.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.8060e-003	0.00
tblFleetMix	MCY	4.8910e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	8.4500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.1340e-003	0.00
tblFleetMix	SBUS	7.1200e-004	0.00
tblFleetMix	UBUS	1.7360e-003	0.00
tblGrading	AcresOfGrading	0.00	1,663.50
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	HorsePower	97.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Switching Station Tie-ins and
tblOffRoadEquipment	PhaseName		Switching Station Tie-ins and Ungrades
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	300.00
tblTripsAndVMT	HaulingTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	19.00	56.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	23.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	48.00	24.00

## 2.0 Emissions Summary

## 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tons	s/yr							MT	/yr		
2019	0.0857	0.9575	0.6444	1.5700e- 003	0.9195	0.0385	0.9580	0.1054	0.0354	0.1408	0.0000	143.5410	143.5410	0.0293	0.0000	144.2738
2020	1.2173	13.6255	7.8892	0.0193	3.0118	0.5671	3.5789	0.9558	0.5255	1.4813	0.0000	1,733.229 1	1,733.2291	0.3838	0.0000	1,742.823 6
2021	1.3076	14.5776	8.7652	0.0220	3.2983	0.5889	3.8872	1.1041	0.5455	1.6496	0.0000	1,973.177 7	1,973.1777	0.4377	0.0000	1,984.121 1
2022	1.1402	12.5738	8.3716	0.0218	3.2910	0.4895	3.7805	1.1004	0.4536	1.5540	0.0000	1,955.330 8	1,955.3308	0.4341	0.0000	1,966.184 1
2023	0.9365	9.9968	7.3841	0.0199	3.1385	0.3808	3.5193	1.0238	0.3528	1.3766	0.0000	1,779.990 0	1,779.9900	0.3950	0.0000	1,789.865 6
Maximum	1.3076	14.5776	8.7652	0.0220	3.2983	0.5889	3.8872	1.1041	0.5455	1.6496	0.0000	1,973.177 7	1,973.1777	0.4377	0.0000	1,984.121 1

#### **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	-/yr		
2019	0.0406	0.6438	0.7314	1.5700e- 003	0.3814	0.0267	0.4081	0.0473	0.0266	0.0739	0.0000	143.5409	143.5409	0.0293	0.0000	144.2737
2020	0.4567	8.3973	9.2897	0.0193	1.3526	0.3562	1.7088	0.4213	0.3558	0.7771	0.0000	1,733.227 7	1,733.2277	0.3838	0.0000	1,742.822 2
2021	0.5071	9.4632	10.5477	0.0220	1.4848	0.4035	1.8883	0.4847	0.4032	0.8880	0.0000	1,973.176 1	1,973.1761	0.4377	0.0000	1,984.119 4
2022	0.4971	9.3368	10.4326	0.0218	1.4812	0.4015	1.8826	0.4831	0.4012	0.8843	0.0000	1,955.329 1	1,955.3291	0.4341	0.0000	1,966.182 5
2023	0.4424	8.2268	9.5074	0.0199	1.4059	0.3676	1.7735	0.4489	0.3674	0.8163	0.0000	1,779.988 5	1,779.9885	0.3950	0.0000	1,789.864 1
Maximum	0.5071	9.4632	10.5477	0.0220	1.4848	0.4035	1.8883	0.4847	0.4032	0.8880	0.0000	1,973.176 1	1,973.1761	0.4377	0.0000	1,984.119 4
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	58.53	30.28	-22.55	0.00	55.30	24.66	51.28	56.05	18.74	44.54	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-2-2019	12-1-2019	0.7776	0.5095
2	12-2-2019	3-1-2020	0.7281	0.5018
3	3-2-2020	6-1-2020	4.3057	2.5495
4	6-2-2020	9-1-2020	4.3045	2.5483
5	9-2-2020	12-1-2020	4.2602	2.5231
6	12-2-2020	3-1-2021	4.0100	2.4661
7	3-2-2021	6-1-2021	3.9928	2.5035
8	6-2-2021	9-1-2021	3.9919	2.5027
9	9-2-2021	12-1-2021	3.9503	2.4773
10	12-2-2021	3-1-2022	3.5601	2.4349
11	3-2-2022	6-1-2022	3.4601	2.4794
12	6-2-2022	9-1-2022	3.4594	2.4787
13	9-2-2022	12-1-2022	3.4233	2.4532
14	12-2-2022	3-1-2023	3.0877	2.3620
15	3-2-2023	6-1-2023	3.0027	2.3802
16	6-2-2023	9-1-2023	3.0023	2.3797
17	9-2-2023	9-30-2023	0.9464	0.7501
		Highest	4.3057	2.5495

## 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Area	7.4400e- 003	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.4400e- 003	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr				-			МТ	/yr		
Area	7.4400e- 003	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.4400e- 003	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005
	ROG	N	IOx C	0 8	_				_		l2.5 Bio- otal	CO2 NBio	-CO2 Total	CO2 CI	14 N	20 C
Percent	0.00	0	0.00	.00 (	0.00	.00 0	.00 0	.00 (	0.00	.00 0.	00 0.	00 0.	0.0	0.0	00 0.	00 (

## 3.0 Construction Detail

#### **Construction Phase**

Reduction

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days N Week	Num Days	Phase Description
1	Switching Station Tie-ins and	Site Preparation	9/2/2019	11/30/2023	5	1109	

2	Demolition (Removal of 115kV	Demolition	3/2/2020	11/30/2023	5	979	
	line)						
3	Site Preparation	Site Preparation	3/2/2020	11/30/2023	5	979	
4	Site Rehabilitation	Trenching	3/2/2020	11/30/2023	5	979	
5	Transmission Structure	Building Construction	3/2/2020	11/30/2023	5	979	

Acres of Grading (Site Preparation Phase): 979

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.64

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Switching Station Tie-ins and Upgrades	Aerial Lifts	2	8.00	63	0.31
Switching Station Tie-ins and Upgrades	Cranes	2	8.00	231	0.29
Switching Station Tie-ins and Upgrades	Graders	0	0.00	174	0.41
Switching Station Tie-ins and Upgrades	Scrapers	0	0.00	367	0.48
Switching Station Tie-ins and Upgrades	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Switching Station Tie-ins and Upgrades	Tractors/Loaders/Backhoes	2	8.00	97	0.37
	Aerial Lifts	2	8.00	63	0.31
	Cranes	2	8.00	231	0.29
Conductor Stringing Transmission Structure Installation &	Forklifts	0	7.00	89	0.20
Conductor Stringing Transmission Structure Installation &	Generator Sets	0	8.00	84	0.74
Conductor Stringing Transmission Structure Installation &	Tractors/Loaders/Backhoes	2	8.00	0	0.37
Conductor Stringing	Welders	0	0.00	46	0.45
Conductor Stringing Site Rehabilitation	Air Compressors	0		78	0.48
Site Preparation	Cranes	0	0.00	231	0.29
Site Preparation	Graders	2	8.00	187	0.41
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Scrapers	0		367	
Site Preparation	Scrapers	0	0.00	367	0.48

Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition (Removal of 115kV line)	Aerial Lifts	2	8.00	63	0.31
Demolition (Removal of 115kV line)	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition (Removal of 115kV line)	Cranes	2	8.00	231	0.29
Demolition (Removal of 115kV line)	Rubber Tired Dozers	1	8.00	247	0.40
Demolition (Removal of 115kV line)	Tractors/Loaders/Backhoes	2	8.00	97	0.37

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Switching Station Tie- ins and Upgrades	6	60.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Transmission Structure Installation &	6	24.00	56.00	40.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Rehabilitation	0	8.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	8	40.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition (Removal	9	20.00	20.00	300.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads

## 3.2 Switching Station Tie-ins and Upgrades - 2019 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.8821	0.0000	0.8821	0.0952	0.0000	0.0952	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0677	0.7852	0.4949	9.2000e- 004		0.0372	0.0372		0.0342	0.0342	0.0000	82.4756	82.4756	0.0261	0.0000	83.1280
Total	0.0677	0.7852	0.4949	9.2000e- 004	0.8821	0.0372	0.9193	0.0952	0.0342	0.1295	0.0000	82.4756	82.4756	0.0261	0.0000	83.1280

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4700e- 003	0.1623	0.0407	3.6000e- 004	8.7700e- 003	1.0600e- 003	9.8400e- 003	2.5300e- 003	1.0200e- 003	3.5500e- 003	0.0000	34.4619	34.4619	2.3800e- 003	0.0000	34.5215
Worker	0.0126	0.0100	0.1088	2.9000e- 004	0.0286	2.3000e- 004	0.0289	7.6000e- 003	2.1000e- 004	7.8100e- 003	0.0000	26.6035	26.6035	8.3000e- 004	0.0000	26.6243
Total	0.0181	0.1723	0.1495	6.5000e- 004	0.0374	1.2900e- 003	0.0387	0.0101	1.2300e- 003	0.0114	0.0000	61.0654	61.0654	3.2100e- 003	0.0000	61.1458

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.3440	0.0000	0.3440	0.0371	0.0000	0.0371	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0225	0.4715	0.5819	9.2000e- 004		0.0254	0.0254		0.0254	0.0254	0.0000	82.4755	82.4755	0.0261	0.0000	83.1279
Total	0.0225	0.4715	0.5819	9.2000e- 004	0.3440	0.0254	0.3694	0.0371	0.0254	0.0625	0.0000	82.4755	82.4755	0.0261	0.0000	83.1279

### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4700e- 003	0.1623	0.0407	3.6000e- 004	8.7700e- 003	1.0600e- 003	9.8400e- 003	2.5300e- 003	1.0200e- 003	3.5500e- 003	0.0000	34.4619	34.4619	2.3800e- 003	0.0000	34.5215
Worker	0.0126	0.0100	0.1088	2.9000e- 004	0.0286	2.3000e- 004	0.0289	7.6000e- 003	2.1000e- 004	7.8100e- 003	0.0000	26.6035	26.6035	8.3000e- 004	0.0000	26.6243
Total	0.0181	0.1723	0.1495	6.5000e- 004	0.0374	1.2900e- 003	0.0387	0.0101	1.2300e- 003	0.0114	0.0000	61.0654	61.0654	3.2100e- 003	0.0000	61.1458

### 3.2 Switching Station Tie-ins and Upgrades - 2020

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.8821	0.0000	0.8821	0.0952	0.0000	0.0952	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1841	2.1328	1.4382	2.7700e- 003		0.0969	0.0969		0.0891	0.0891	0.0000	242.9537	242.9537	0.0786	0.0000	244.9181
Total	0.1841	2.1328	1.4382	2.7700e- 003	0.8821	0.0969	0.9789	0.0952	0.0891	0.1844	0.0000	242.9537	242.9537	0.0786	0.0000	244.9181

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0140	0.4474	0.1108	1.0700e- 003	0.0264	2.1900e- 003	0.0286	7.6200e- 003	2.1000e- 003	9.7200e- 003	0.0000	103.1030	103.1030	6.7700e- 003	0.0000	103.2722
Worker	0.0351	0.0269	0.2977	8.6000e- 004	0.0862	6.7000e- 004	0.0869	0.0229	6.1000e- 004	0.0235	0.0000	77.6306	77.6306	2.2300e- 003	0.0000	77.6862
Total	0.0491	0.4743	0.4085	1.9300e- 003	0.1127	2.8600e- 003	0.1155	0.0305	2.7100e- 003	0.0332	0.0000	180.7336	180.7336	9.0000e- 003	0.0000	180.9585

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.3440	0.0000	0.3440	0.0371	0.0000	0.0371	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0679	1.4199	1.7524	2.7700e- 003		0.0764	0.0764		0.0764	0.0764	0.0000	242.9534	242.9534	0.0786	0.0000	244.9178
Total	0.0679	1.4199	1.7524	2.7700e- 003	0.3440	0.0764	0.4204	0.0371	0.0764	0.1136	0.0000	242.9534	242.9534	0.0786	0.0000	244.9178

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0140	0.4474	0.1108	1.0700e- 003	0.0264	2.1900e- 003	0.0286	7.6200e- 003	2.1000e- 003	9.7200e- 003	0.0000	103.1030	103.1030	6.7700e- 003	0.0000	103.2722
Worker	0.0351	0.0269	0.2977	8.6000e- 004	0.0862	6.7000e- 004	0.0869	0.0229	6.1000e- 004	0.0235	0.0000	77.6306	77.6306	2.2300e- 003	0.0000	77.6862
Total	0.0491	0.4743	0.4085	1.9300e- 003	0.1127	2.8600e- 003	0.1155	0.0305	2.7100e- 003	0.0332	0.0000	180.7336	180.7336	9.0000e- 003	0.0000	180.9585

### 3.2 Switching Station Tie-ins and Upgrades - 2021

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.8821	0.0000	0.8821	0.0952	0.0000	0.0952	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1664	1.9172	1.3930	2.7600e- 003		0.0836	0.0836		0.0769	0.0769	0.0000	242.0455	242.0455	0.0783	0.0000	244.0026
Total	0.1664	1.9172	1.3930	2.7600e- 003	0.8821	0.0836	0.9656	0.0952	0.0769	0.1721	0.0000	242.0455	242.0455	0.0783	0.0000	244.0026

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0119	0.4041	0.1002	1.0500e- 003	0.0263	8.1000e- 004	0.0271	7.6000e- 003	7.8000e- 004	8.3700e- 003	0.0000	101.9556	101.9556	6.4500e- 003	0.0000	102.1168
Worker	0.0326	0.0241	0.2729	8.3000e- 004	0.0859	6.4000e- 004	0.0866	0.0228	5.9000e- 004	0.0234	0.0000	74.8282	74.8282	2.0100e- 003	0.0000	74.8784
Total	0.0445	0.4282	0.3730	1.8800e- 003	0.1122	1.4500e- 003	0.1137	0.0304	1.3700e- 003	0.0318	0.0000	176.7838	176.7838	8.4600e- 003	0.0000	176.9951

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.3440	0.0000	0.3440	0.0371	0.0000	0.0371	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0676	1.4144	1.7457	2.7600e- 003		0.0761	0.0761		0.0761	0.0761	0.0000	242.0452	242.0452	0.0783	0.0000	244.0023
Total	0.0676	1.4144	1.7457	2.7600e- 003	0.3440	0.0761	0.4201	0.0371	0.0761	0.1133	0.0000	242.0452	242.0452	0.0783	0.0000	244.0023

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0119	0.4041	0.1002	1.0500e- 003	0.0263	8.1000e- 004	0.0271	7.6000e- 003	7.8000e- 004	8.3700e- 003	0.0000	101.9556	101.9556	6.4500e- 003	0.0000	102.1168
Worker	0.0326	0.0241	0.2729	8.3000e- 004	0.0859	6.4000e- 004	0.0866	0.0228	5.9000e- 004	0.0234	0.0000	74.8282	74.8282	2.0100e- 003	0.0000	74.8784
Total	0.0445	0.4282	0.3730	1.8800e- 003	0.1122	1.4500e- 003	0.1137	0.0304	1.3700e- 003	0.0318	0.0000	176.7838	176.7838	8.4600e- 003	0.0000	176.9951

## 3.2 Switching Station Tie-ins and Upgrades - 2022 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.8821	0.0000	0.8821	0.0952	0.0000	0.0952	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

I	Off-Road	0.1492	1.6693	1.3583	2.7500e- 003		0.0713	0.0713		0.0656	0.0656	0.0000	241.2197	241.2197	0.0780	0.0000	243.1701
	Total	0.1492	1.6693	1.3583	2.7500e- 003	0.8821	0.0713	0.9534	0.0952	0.0656	0.1608	0.0000	241.2197	241.2197	0.0780	0.0000	243.1701

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0111	0.3817	0.0943	1.0400e- 003	0.0262	7.0000e- 004	0.0269	7.5700e- 003	6.7000e- 004	8.2400e- 003	0.0000	100.6707	100.6707	6.1800e- 003	0.0000	100.8252
Worker	0.0305	0.0217	0.2510	7.9000e- 004	0.0856	6.2000e- 004	0.0862	0.0227	5.7000e- 004	0.0233	0.0000	71.8690	71.8690	1.8100e- 003	0.0000	71.9141
Total	0.0416	0.4034	0.3453	1.8300e- 003	0.1118	1.3200e- 003	0.1131	0.0303	1.2400e- 003	0.0315	0.0000	172.5397	172.5397	7.9900e- 003	0.0000	172.7393

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.3440	0.0000	0.3440	0.0371	0.0000	0.0371	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0674	1.4090	1.7390	2.7500e- 003		0.0758	0.0758		0.0758	0.0758	0.0000	241.2194	241.2194	0.0780	0.0000	243.1698
Total	0.0674	1.4090	1.7390	2.7500e- 003	0.3440	0.0758	0.4198	0.0371	0.0758	0.1130	0.0000	241.2194	241.2194	0.0780	0.0000	243.1698

### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0111	0.3817	0.0943	1.0400e- 003	0.0262	7.0000e- 004	0.0269	7.5700e- 003	6.7000e- 004	8.2400e- 003	0.0000	100.6707	100.6707	6.1800e- 003	0.0000	100.8252
Worker	0.0305	0.0217	0.2510	7.9000e- 004	0.0856	6.2000e- 004	0.0862	0.0227	5.7000e- 004	0.0233	0.0000	71.8690	71.8690	1.8100e- 003	0.0000	71.9141
Total	0.0416	0.4034	0.3453	1.8300e- 003	0.1118	1.3200e- 003	0.1131	0.0303	1.2400e- 003	0.0315	0.0000	172.5397	172.5397	7.9900e- 003	0.0000	172.7393

### 3.2 Switching Station Tie-ins and Upgrades - 2023

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.8821	0.0000	0.8821	0.0952	0.0000	0.0952	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1284	1.4064	1.2327	2.5300e- 003		0.0584	0.0584		0.0537	0.0537	0.0000	221.8073	221.8073	0.0717	0.0000	223.6008
Total	0.1284	1.4064	1.2327	2.5300e- 003	0.8821	0.0584	0.9405	0.0952	0.0537	0.1490	0.0000	221.8073	221.8073	0.0717	0.0000	223.6008

### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6100e- 003	0.2640	0.0775	9.2000e- 004	0.0241	3.0000e- 004	0.0244	6.9500e- 003	2.9000e- 004	7.2400e- 003	0.0000	89.7502	89.7502	4.9400e- 003	0.0000	89.8737
Worker	0.0264	0.0181	0.2127	7.0000e- 004	0.0787	5.6000e- 004	0.0792	0.0209	5.1000e- 004	0.0214	0.0000	63.6004	63.6004	1.5000e- 003	0.0000	63.6377
Total	0.0340	0.2820	0.2902	1.6200e- 003	0.1028	8.6000e- 004	0.1036	0.0278	8.0000e- 004	0.0287	0.0000	153.3506	153.3506	6.4400e- 003	0.0000	153.5115

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.3440	0.0000	0.3440	0.0371	0.0000	0.0371	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0619	1.2952	1.5985	2.5300e- 003		0.0697	0.0697		0.0697	0.0697	0.0000	221.8071	221.8071	0.0717	0.0000	223.6005
Total	0.0619	1.2952	1.5985	2.5300e- 003	0.3440	0.0697	0.4137	0.0371	0.0697	0.1068	0.0000	221.8071	221.8071	0.0717	0.0000	223.6005

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr									MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6100e- 003	0.2640	0.0775	9.2000e- 004	0.0241	3.0000e- 004	0.0244	6.9500e- 003	2.9000e- 004	7.2400e- 003	0.0000	89.7502	89.7502	4.9400e- 003	0.0000	89.8737
Worker	0.0264	0.0181	0.2127	7.0000e- 004	0.0787	5.6000e- 004	0.0792	0.0209	5.1000e- 004	0.0214	0.0000	63.6004	63.6004	1.5000e- 003	0.0000	63.6377
Total	0.0340	0.2820	0.2902	1.6200e- 003	0.1028	8.6000e- 004	0.1036	0.0278	8.0000e- 004	0.0287	0.0000	153.3506	153.3506	6.4400e- 003	0.0000	153.5115

# 3.3 Demolition (Removal of 115kV line) - 2020

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.3636	3.7460	2.4619	4.6200e- 003		0.1851	0.1851		0.1738	0.1738	0.0000	403.0119	403.0119	0.0997	0.0000	405.5049
Total	0.3636	3.7460	2.4619	4.6200e- 003		0.1851	0.1851		0.1738	0.1738	0.0000	403.0119	403.0119	0.0997	0.0000	405.5049

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	2.6000e- 004	9.4200e- 003	1.8800e- 003	3.0000e- 005	2.0800e- 003	3.0000e- 005	2.1100e- 003	5.3000e- 004	3.0000e- 005	5.6000e- 004	0.0000	2.5322	2.5322	1.7000e- 004	0.0000	2.5365
Vendor	7.3400e- 003	0.2337	0.0579	5.6000e- 004	0.0138	1.1500e- 003	0.0150	3.9800e- 003	1.1000e- 003	5.0800e- 003	0.0000	53.8635	53.8635	3.5400e- 003	0.0000	53.9519
Worker	9.7800e- 003	7.5000e- 003	0.0829	2.4000e- 004	0.0240	1.9000e- 004	0.0242	6.3800e- 003	1.7000e- 004	6.5500e- 003	0.0000	21.6299	21.6299	6.2000e- 004	0.0000	21.6454
Total	0.0174	0.2506	0.1427	8.3000e- 004	0.0399	1.3700e- 003	0.0413	0.0109	1.3000e- 003	0.0122	0.0000	78.0255	78.0255	4.3300e- 003	0.0000	78.1338

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.1070	2.2553	2.8059	4.6200e- 003		0.1245	0.1245		0.1245	0.1245	0.0000	403.0114	403.0114	0.0997	0.0000	405.5044
Total	0.1070	2.2553	2.8059	4.6200e- 003		0.1245	0.1245		0.1245	0.1245	0.0000	403.0114	403.0114	0.0997	0.0000	405.5044

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	2.6000e- 004	9.4200e- 003	1.8800e- 003	3.0000e- 005	2.0800e- 003	3.0000e- 005	2.1100e- 003	5.3000e- 004	3.0000e- 005	5.6000e- 004	0.0000	2.5322	2.5322	1.7000e- 004	0.0000	2.5365
Vendor	7.3400e- 003	0.2337	0.0579	5.6000e- 004	0.0138	1.1500e- 003	0.0150	3.9800e- 003	1.1000e- 003	5.0800e- 003	0.0000	53.8635	53.8635	3.5400e- 003	0.0000	53.9519
Worker	9.7800e- 003	7.5000e- 003	0.0829	2.4000e- 004	0.0240	1.9000e- 004	0.0242	6.3800e- 003	1.7000e- 004	6.5500e- 003	0.0000	21.6299	21.6299	6.2000e- 004	0.0000	21.6454
Total	0.0174	0.2506	0.1427	8.3000e- 004	0.0399	1.3700e- 003	0.0413	0.0109	1.3000e- 003	0.0122	0.0000	78.0255	78.0255	4.3300e- 003	0.0000	78.1338

# 3.3 Demolition (Removal of 115kV line) - 2021 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.4034	4.1419	2.8789	5.5000e- 003		0.1982	0.1982		0.1860	0.1860	0.0000	480.3221	480.3221	0.1181	0.0000	483.2748

Total	0.4034	4.1419	2.8789	5.5000e-	0.1982	0.1982	0.1860	0.1860	0.0000	480.3221	480.3221	0.1181	0.0000	483.2748
				003										

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	2.9000e- 004	0.0104	2.2100e- 003	3.0000e- 005	2.1100e- 003	3.0000e- 005	2.1400e- 003	5.4000e- 004	3.0000e- 005	5.7000e- 004	0.0000	2.9860	2.9860	2.0000e- 004	0.0000	2.9912
Vendor	7.4200e- 003	0.2525	0.0626	6.6000e- 004	0.0165	5.1000e- 004	0.0170	4.7500e- 003	4.9000e- 004	5.2300e- 003	0.0000	63.7222	63.7222	4.0300e- 003	0.0000	63.8230
Worker	0.0109	8.0400e- 003	0.0910	2.8000e- 004	0.0286	2.1000e- 004	0.0289	7.6000e- 003	2.0000e- 004	7.8000e- 003	0.0000	24.9427	24.9427	6.7000e- 004	0.0000	24.9595
Total	0.0186	0.2710	0.1558	9.7000e- 004	0.0472	7.5000e- 004	0.0480	0.0129	7.2000e- 004	0.0136	0.0000	91.6510	91.6510	4.9000e- 003	0.0000	91.7736

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.1276	2.6878	3.3440	5.5000e- 003		0.1484	0.1484		0.1484	0.1484	0.0000	480.3215	480.3215	0.1181	0.0000	483.2742
Total	0.1276	2.6878	3.3440	5.5000e- 003		0.1484	0.1484		0.1484	0.1484	0.0000	480.3215	480.3215	0.1181	0.0000	483.2742

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	2.9000e- 004	0.0104	2.2100e- 003	3.0000e- 005	2.1100e- 003	3.0000e- 005	2.1400e- 003	5.4000e- 004	3.0000e- 005	5.7000e- 004	0.0000	2.9860	2.9860	2.0000e- 004	0.0000	2.9912
Vendor	7.4200e- 003	0.2525	0.0626	6.6000e- 004	0.0165	5.1000e- 004	0.0170	4.7500e- 003	4.9000e- 004	5.2300e- 003	0.0000	63.7222	63.7222	4.0300e- 003	0.0000	63.8230
Worker	0.0109	8.0400e- 003	0.0910	2.8000e- 004	0.0286	2.1000e- 004	0.0289	7.6000e- 003	2.0000e- 004	7.8000e- 003	0.0000	24.9427	24.9427	6.7000e- 004	0.0000	24.9595
Total	0.0186	0.2710	0.1558	9.7000e- 004	0.0472	7.5000e- 004	0.0480	0.0129	7.2000e- 004	0.0136	0.0000	91.6510	91.6510	4.9000e- 003	0.0000	91.7736

# 3.3 Demolition (Removal of 115kV line) - 2022

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.3510	3.5407	2.7768	5.4800e- 003		0.1646	0.1646		0.1546	0.1546	0.0000	478.5459	478.5459	0.1172	0.0000	481.4756
Total	0.3510	3.5407	2.7768	5.4800e- 003		0.1646	0.1646		0.1546	0.1546	0.0000	478.5459	478.5459	0.1172	0.0000	481.4756

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		

Hauling	2.8000e-	9.5800e-	2.1700e-	3.0000e-	2.1100e-	3.0000e-	2.1400e-	5.4000e-	3.0000e-	5.6000e-	0.0000	2.9393	2.9393	2.0000e-	0.0000	2.9443
	004	003	003	005	003	005	003	004	005	004				004		
Vendor	6.9400e- 003	0.2385	0.0590	6.5000e- 004	0.0164	4.4000e- 004	0.0168	4.7300e- 003	4.2000e- 004	5.1500e- 003	0.0000	62.9192	62.9192	3.8600e- 003	0.0000	63.0158
Worker	0.0102	7.2300e- 003	0.0837	2.6000e- 004	0.0285	2.1000e- 004	0.0287	7.5800e- 003	1.9000e- 004	7.7700e- 003	0.0000	23.9563	23.9563	6.0000e- 004	0.0000	23.9714
Total	0.0174	0.2554	0.1448	9.4000e- 004	0.0470	6.8000e- 004	0.0477	0.0129	6.4000e- 004	0.0135	0.0000	89.8148	89.8148	4.6600e- 003	0.0000	89.9315

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.1271	2.6775	3.3312	5.4800e- 003		0.1478	0.1478		0.1478	0.1478	0.0000	478.5454	478.5454	0.1172	0.0000	481.4750
Total	0.1271	2.6775	3.3312	5.4800e- 003		0.1478	0.1478		0.1478	0.1478	0.0000	478.5454	478.5454	0.1172	0.0000	481.4750

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	2.8000e- 004	9.5800e- 003	2.1700e- 003	3.0000e- 005	2.1100e- 003	3.0000e- 005	2.1400e- 003	5.4000e- 004	3.0000e- 005	5.6000e- 004	0.0000	2.9393	2.9393	2.0000e- 004	0.0000	2.9443
Vendor	6.9400e- 003	0.2385	0.0590	6.5000e- 004	0.0164	4.4000e- 004	0.0168	4.7300e- 003	4.2000e- 004	5.1500e- 003	0.0000	62.9192	62.9192	3.8600e- 003	0.0000	63.0158
Worker	0.0102	7.2300e- 003	0.0837	2.6000e- 004	0.0285	2.1000e- 004	0.0287	7.5800e- 003	1.9000e- 004	7.7700e- 003	0.0000	23.9563	23.9563	6.0000e- 004	0.0000	23.9714
Total	0.0174	0.2554	0.1448	9.4000e- 004	0.0470	6.8000e- 004	0.0477	0.0129	6.4000e- 004	0.0135	0.0000	89.8148	89.8148	4.6600e- 003	0.0000	89.9315

# 3.3 Demolition (Removal of 115kV line) - 2023

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.2900	2.8757	2.4780	5.0400e- 003		0.1274	0.1274		0.1197	0.1197	0.0000	439.9614	439.9614	0.1071	0.0000	442.6380
Total	0.2900	2.8757	2.4780	5.0400e- 003		0.1274	0.1274		0.1197	0.1197	0.0000	439.9614	439.9614	0.1071	0.0000	442.6380

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	1.7000e- 004	5.6600e- 003	1.8100e- 003	3.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.3000e- 004	1.0000e- 005	5.4000e- 004	0.0000	2.5949	2.5949	1.7000e- 004	0.0000	2.5991
Vendor	4.7600e- 003	0.1650	0.0485	5.8000e- 004	0.0151	1.9000e- 004	0.0153	4.3500e- 003	1.8000e- 004	4.5300e- 003	0.0000	56.0939	56.0939	3.0900e- 003	0.0000	56.1711
Worker	8.8100e- 003	6.0200e- 003	0.0709	2.3000e- 004	0.0262	1.9000e- 004	0.0264	6.9600e- 003	1.7000e- 004	7.1400e- 003	0.0000	21.2001	21.2001	5.0000e- 004	0.0000	21.2126
Total	0.0137	0.1767	0.1212	8.4000e- 004	0.0434	3.9000e- 004	0.0438	0.0118	3.6000e- 004	0.0122	0.0000	79.8889	79.8889	3.7600e- 003	0.0000	79.9828

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.1168	2.4612	3.0622	5.0400e- 003		0.1359	0.1359		0.1359	0.1359	0.0000	439.9609	439.9609	0.1071	0.0000	442.6375
Total	0.1168	2.4612	3.0622	5.0400e- 003		0.1359	0.1359		0.1359	0.1359	0.0000	439.9609	439.9609	0.1071	0.0000	442.6375

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	1.7000e- 004	5.6600e- 003	1.8100e- 003	3.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.3000e- 004	1.0000e- 005	5.4000e- 004	0.0000	2.5949	2.5949	1.7000e- 004	0.0000	2.5991
Vendor	4.7600e- 003	0.1650	0.0485	5.8000e- 004	0.0151	1.9000e- 004	0.0153	4.3500e- 003	1.8000e- 004	4.5300e- 003	0.0000	56.0939	56.0939	3.0900e- 003	0.0000	56.1711
Worker	8.8100e- 003	6.0200e- 003	0.0709	2.3000e- 004	0.0262	1.9000e- 004	0.0264	6.9600e- 003	1.7000e- 004	7.1400e- 003	0.0000	21.2001	21.2001	5.0000e- 004	0.0000	21.2126
Total	0.0137	0.1767	0.1212	8.4000e- 004	0.0434	3.9000e- 004	0.0438	0.0118	3.6000e- 004	0.0122	0.0000	79.8889	79.8889	3.7600e- 003	0.0000	79.9828

# 3.4 Site Preparation - 2020 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr				МТ	/yr					
Fugitive Dust					1.8380	0.0000	1.8380	0.7810	0.0000	0.7810	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.4321	4.7839	2.2161	4.5800e- 003		0.2240	0.2240		0.2061	0.2061	0.0000	402.2931	402.2931	0.1301	0.0000	405.5459
Total	0.4321	4.7839	2.2161	4.5800e- 003	1.8380	0.2240	2.0620	0.7810	0.2061	0.9871	0.0000	402.2931	402.2931	0.1301	0.0000	405.5459

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9300e- 003	0.0935	0.0232	2.2000e- 004	5.5200e- 003	4.6000e- 004	5.9800e- 003	1.5900e- 003	4.4000e- 004	2.0300e- 003	0.0000	21.5454	21.5454	1.4100e- 003	0.0000	21.5807
Worker	0.0196	0.0150	0.1659	4.8000e- 004	0.0481	3.7000e- 004	0.0484	0.0128	3.4000e- 004	0.0131	0.0000	43.2598	43.2598	1.2400e- 003	0.0000	43.2908
Total	0.0225	0.1085	0.1890	7.0000e- 004	0.0536	8.3000e- 004	0.0544	0.0144	7.8000e- 004	0.0151	0.0000	64.8052	64.8052	2.6500e- 003	0.0000	64.8716

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.7168	0.0000	0.7168	0.3046	0.0000	0.3046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1121	2.2740	2.7095	4.5800e- 003		0.1088	0.1088		0.1088	0.1088	0.0000	402.2926	402.2926	0.1301	0.0000	405.5454
Total	0.1121	2.2740	2.7095	4.5800e- 003	0.7168	0.1088	0.8256	0.3046	0.1088	0.4134	0.0000	402.2926	402.2926	0.1301	0.0000	405.5454

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9300e- 003	0.0935	0.0232	2.2000e- 004	5.5200e- 003	4.6000e- 004	5.9800e- 003	1.5900e- 003	4.4000e- 004	2.0300e- 003	0.0000	21.5454	21.5454	1.4100e- 003	0.0000	21.5807
Worker	0.0196	0.0150	0.1659	4.8000e- 004	0.0481	3.7000e- 004	0.0484	0.0128	3.4000e- 004	0.0131	0.0000	43.2598	43.2598	1.2400e- 003	0.0000	43.2908
Total	0.0225	0.1085	0.1890	7.0000e- 004	0.0536	8.3000e- 004	0.0544	0.0144	7.8000e- 004	0.0151	0.0000	64.8052	64.8052	2.6500e- 003	0.0000	64.8716

# 3.4 Site Preparation - 2021

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					2.0909	0.0000	2.0909	0.9200	0.0000	0.9200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4897	5.4069	2.5958	5.4500e- 003		0.2478	0.2478		0.2280	0.2280	0.0000	479.2390	479.2390	0.1550	0.0000	483.1139
Total	0.4897	5.4069	2.5958	5.4500e- 003	2.0909	0.2478	2.3387	0.9200	0.2280	1.1480	0.0000	479.2390	479.2390	0.1550	0.0000	483.1139

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9700e- 003	0.1010	0.0251	2.6000e- 004	6.5800e- 003	2.0000e- 004	6.7800e- 003	1.9000e- 003	1.9000e- 004	2.0900e- 003	0.0000	25.4889	25.4889	1.6100e- 003	0.0000	25.5292
Worker	0.0218	0.0161	0.1819	5.5000e- 004	0.0573	4.3000e- 004	0.0577	0.0152	4.0000e- 004	0.0156	0.0000	49.8855	49.8855	1.3400e- 003	0.0000	49.9189
Total	0.0247	0.1171	0.2070	8.1000e- 004	0.0639	6.3000e- 004	0.0645	0.0171	5.9000e- 004	0.0177	0.0000	75.3744	75.3744	2.9500e- 003	0.0000	75.4481

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.8154	0.0000	0.8154	0.3588	0.0000	0.3588	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1336	2.7101	3.2292	5.4500e- 003		0.1297	0.1297		0.1297	0.1297	0.0000	479.2385	479.2385	0.1550	0.0000	483.1133
Total	0.1336	2.7101	3.2292	5.4500e- 003	0.8154	0.1297	0.9451	0.3588	0.1297	0.4885	0.0000	479.2385	479.2385	0.1550	0.0000	483.1133

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9700e- 003	0.1010	0.0251	2.6000e- 004	6.5800e- 003	2.0000e- 004	6.7800e- 003	1.9000e- 003	1.9000e- 004	2.0900e- 003	0.0000	25.4889	25.4889	1.6100e- 003	0.0000	25.5292
Worker	0.0218	0.0161	0.1819	5.5000e- 004	0.0573	4.3000e- 004	0.0577	0.0152	4.0000e- 004	0.0156	0.0000	49.8855	49.8855	1.3400e- 003	0.0000	49.9189
Total	0.0247	0.1171	0.2070	8.1000e- 004	0.0639	6.3000e- 004	0.0645	0.0171	5.9000e- 004	0.0177	0.0000	75.3744	75.3744	2.9500e- 003	0.0000	75.4481

## 3.4 Site Preparation - 2022

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					2.0849	0.0000	2.0849	0.9167	0.0000	0.9167	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4116	4.5377	2.4445	5.4300e- 003		0.2013	0.2013		0.1852	0.1852	0.0000	477.3160	477.3160	0.1544	0.0000	481.1754
Total	0.4116	4.5377	2.4445	5.4300e- 003	2.0849	0.2013	2.2861	0.9167	0.1852	1.1019	0.0000	477.3160	477.3160	0.1544	0.0000	481.1754

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7700e- 003	0.0954	0.0236	2.6000e- 004	6.5600e- 003	1.8000e- 004	6.7300e- 003	1.8900e- 003	1.7000e- 004	2.0600e- 003	0.0000	25.1677	25.1677	1.5500e- 003	0.0000	25.2063
Worker	0.0204	0.0145	0.1673	5.3000e- 004	0.0571	4.2000e- 004	0.0575	0.0152	3.8000e- 004	0.0155	0.0000	47.9126	47.9126	1.2000e- 003	0.0000	47.9427
Total	0.0231	0.1099	0.1909	7.9000e- 004	0.0636	6.0000e- 004	0.0642	0.0170	5.5000e- 004	0.0176	0.0000	73.0803	73.0803	2.7500e- 003	0.0000	73.1490

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.8131	0.0000	0.8131	0.3575	0.0000	0.3575	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1330	2.6997	3.2168	5.4300e- 003		0.1292	0.1292		0.1292	0.1292	0.0000	477.3154	477.3154	0.1544	0.0000	481.1748
Total	0.1330	2.6997	3.2168	5.4300e- 003	0.8131	0.1292	0.9423	0.3575	0.1292	0.4867	0.0000	477.3154	477.3154	0.1544	0.0000	481.1748

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7700e- 003	0.0954	0.0236	2.6000e- 004	6.5600e- 003	1.8000e- 004	6.7300e- 003	1.8900e- 003	1.7000e- 004	2.0600e- 003	0.0000	25.1677	25.1677	1.5500e- 003	0.0000	25.2063
Worker	0.0204	0.0145	0.1673	5.3000e- 004	0.0571	4.2000e- 004	0.0575	0.0152	3.8000e- 004	0.0155	0.0000	47.9126	47.9126	1.2000e- 003	0.0000	47.9427
Total	0.0231	0.1099	0.1909	7.9000e- 004	0.0636	6.0000e- 004	0.0642	0.0170	5.5000e- 004	0.0176	0.0000	73.0803	73.0803	2.7500e- 003	0.0000	73.1490

# 3.4 Site Preparation - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					1.9584	0.0000	1.9584	0.8472	0.0000	0.8472	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

I	Off-Road	0.3282	3.5673	2.1229	4.9900e- 003		0.1520	0.1520		0.1399	0.1399	0.0000	438.7382	438.7382	0.1419	0.0000	442.2856
	Total	0.3282	3.5673	2.1229	4.9900e- 003	1.9584	0.1520	2.1104	0.8472	0.1399	0.9871	0.0000	438.7382	438.7382	0.1419	0.0000	442.2856

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr					MT	/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e- 003	0.0660	0.0194	2.3000e- 004	6.0300e- 003	8.0000e- 005	6.1000e- 003	1.7400e- 003	7.0000e- 005	1.8100e- 003	0.0000	22.4376	22.4376	1.2300e- 003	0.0000	22.4684
Worker	0.0176	0.0120	0.1418	4.7000e- 004	0.0524	3.7000e- 004	0.0528	0.0139	3.4000e- 004	0.0143	0.0000	42.4002	42.4002	1.0000e- 003	0.0000	42.4252
Total	0.0195	0.0780	0.1612	7.0000e- 004	0.0585	4.5000e- 004	0.0589	0.0157	4.1000e- 004	0.0161	0.0000	64.8378	64.8378	2.2300e- 003	0.0000	64.8936

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.7638	0.0000	0.7638	0.3304	0.0000	0.3304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1223	2.4816	2.9570	4.9900e- 003		0.1187	0.1187		0.1187	0.1187	0.0000	438.7377	438.7377	0.1419	0.0000	442.2851
Total	0.1223	2.4816	2.9570	4.9900e- 003	0.7638	0.1187	0.8825	0.3304	0.1187	0.4492	0.0000	438.7377	438.7377	0.1419	0.0000	442.2851

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e- 003	0.0660	0.0194	2.3000e- 004	6.0300e- 003	8.0000e- 005	6.1000e- 003	1.7400e- 003	7.0000e- 005	1.8100e- 003	0.0000	22.4376	22.4376	1.2300e- 003	0.0000	22.4684
Worker	0.0176	0.0120	0.1418	4.7000e- 004	0.0524	3.7000e- 004	0.0528	0.0139	3.4000e- 004	0.0143	0.0000	42.4002	42.4002	1.0000e- 003	0.0000	42.4252
Total	0.0195	0.0780	0.1612	7.0000e- 004	0.0585	4.5000e- 004	0.0589	0.0157	4.1000e- 004	0.0161	0.0000	64.8378	64.8378	2.2300e- 003	0.0000	64.8936

#### 3.5 Site Rehabilitation - 2020

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e- 003	0.1402	0.0347	3.3000e- 004	8.2800e- 003	6.9000e- 004	8.9700e- 003	2.3900e- 003	6.6000e- 004	3.0500e- 003	0.0000	32.3181	32.3181	2.1200e- 003	0.0000	32.3711
Worker	3.9100e- 003	3.0000e- 003	0.0332	1.0000e- 004	9.6100e- 003	7.0000e- 005	9.6900e- 003	2.5500e- 003	7.0000e- 005	2.6200e- 003	0.0000	8.6520	8.6520	2.5000e- 004	0.0000	8.6582
Total	8.3100e- 003	0.1432	0.0679	4.3000e- 004	0.0179	7.6000e- 004	0.0187	4.9400e- 003	7.3000e- 004	5.6700e- 003	0.0000	40.9700	40.9700	2.3700e- 003	0.0000	41.0293

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e- 003	0.1402	0.0347	3.3000e- 004	8.2800e- 003	6.9000e- 004	8.9700e- 003	2.3900e- 003	6.6000e- 004	3.0500e- 003	0.0000	32.3181	32.3181	2.1200e- 003	0.0000	32.3711
Worker	3.9100e- 003	3.0000e- 003	0.0332	1.0000e- 004	9.6100e- 003	7.0000e- 005	9.6900e- 003	2.5500e- 003	7.0000e- 005	2.6200e- 003	0.0000	8.6520	8.6520	2.5000e- 004	0.0000	8.6582
Total	8.3100e- 003	0.1432	0.0679	4.3000e- 004	0.0179	7.6000e- 004	0.0187	4.9400e- 003	7.3000e- 004	5.6700e- 003	0.0000	40.9700	40.9700	2.3700e- 003	0.0000	41.0293

#### 3.5 Site Rehabilitation - 2021

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4500e- 003	0.1515	0.0376	3.9000e- 004	9.8700e- 003	3.0000e- 004	0.0102	2.8500e- 003	2.9000e- 004	3.1400e- 003	0.0000	38.2333	38.2333	2.4200e- 003	0.0000	38.2938
Worker	4.3500e- 003	3.2200e- 003	0.0364	1.1000e- 004	0.0115	9.0000e- 005	0.0115	3.0400e- 003	8.0000e- 005	3.1200e- 003	0.0000	9.9771	9.9771	2.7000e- 004	0.0000	9.9838
Total	8.8000e- 003	0.1547	0.0740	5.0000e- 004	0.0213	3.9000e- 004	0.0217	5.8900e- 003	3.7000e- 004	6.2600e- 003	0.0000	48.2104	48.2104	2.6900e- 003	0.0000	48.2776

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4500e- 003	0.1515	0.0376	3.9000e- 004	9.8700e- 003	3.0000e- 004	0.0102	2.8500e- 003	2.9000e- 004	3.1400e- 003	0.0000	38.2333	38.2333	2.4200e- 003	0.0000	38.2938
Worker	4.3500e- 003	3.2200e- 003	0.0364	1.1000e- 004	0.0115	9.0000e- 005	0.0115	3.0400e- 003	8.0000e- 005	3.1200e- 003	0.0000	9.9771	9.9771	2.7000e- 004	0.0000	9.9838
Total	8.8000e- 003	0.1547	0.0740	5.0000e- 004	0.0213	3.9000e- 004	0.0217	5.8900e- 003	3.7000e- 004	6.2600e- 003	0.0000	48.2104	48.2104	2.6900e- 003	0.0000	48.2776

# 3.5 Site Rehabilitation - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1600e- 003	0.1431	0.0354	3.9000e- 004	9.8300e- 003	2.6000e- 004	0.0101	2.8400e- 003	2.5000e- 004	3.0900e- 003	0.0000	37.7515	37.7515	2.3200e- 003	0.0000	37.8095
Worker	4.0700e- 003	2.8900e- 003	0.0335	1.1000e- 004	0.0114	8.0000e- 005	0.0115	3.0300e- 003	8.0000e- 005	3.1100e- 003	0.0000	9.5825	9.5825	2.4000e- 004	0.0000	9.5886
Total	8.2300e- 003	0.1460	0.0688	5.0000e- 004	0.0212	3.4000e- 004	0.0216	5.8700e- 003	3.3000e- 004	6.2000e- 003	0.0000	47.3341	47.3341	2.5600e- 003	0.0000	47.3980

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1600e- 003	0.1431	0.0354	3.9000e- 004	9.8300e- 003	2.6000e- 004	0.0101	2.8400e- 003	2.5000e- 004	3.0900e- 003	0.0000	37.7515	37.7515	2.3200e- 003	0.0000	37.8095
Worker	4.0700e- 003	2.8900e- 003	0.0335	1.1000e- 004	0.0114	8.0000e- 005	0.0115	3.0300e- 003	8.0000e- 005	3.1100e- 003	0.0000	9.5825	9.5825	2.4000e- 004	0.0000	9.5886
Total	8.2300e- 003	0.1460	0.0688	5.0000e- 004	0.0212	3.4000e- 004	0.0216	5.8700e- 003	3.3000e- 004	6.2000e- 003	0.0000	47.3341	47.3341	2.5600e- 003	0.0000	47.3980

#### 3.5 Site Rehabilitation - 2023

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8600e- 003	0.0990	0.0291	3.5000e- 004	9.0400e- 003	1.1000e- 004	9.1500e- 003	2.6100e- 003	1.1000e- 004	2.7200e- 003	0.0000	33.6563	33.6563	1.8500e- 003	0.0000	33.7027
Worker	3.5200e- 003	2.4100e- 003	0.0284	9.0000e- 005	0.0105	7.0000e- 005	0.0106	2.7900e- 003	7.0000e- 005	2.8500e- 003	0.0000	8.4801	8.4801	2.0000e- 004	0.0000	8.4850
Total	6.3800e- 003	0.1014	0.0574	4.4000e- 004	0.0195	1.8000e- 004	0.0197	5.4000e- 003	1.8000e- 004	5.5700e- 003	0.0000	42.1364	42.1364	2.0500e- 003	0.0000	42.1877

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	-	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8600e- 003	0.0990	0.0291	3.5000e- 004	9.0400e- 003	1.1000e- 004	9.1500e- 003	2.6100e- 003	1.1000e- 004	2.7200e- 003	0.0000	33.6563	33.6563	1.8500e- 003	0.0000	33.7027
Worker	3.5200e- 003	2.4100e- 003	0.0284	9.0000e- 005	0.0105	7.0000e- 005	0.0106	2.7900e- 003	7.0000e- 005	2.8500e- 003	0.0000	8.4801	8.4801	2.0000e- 004	0.0000	8.4850
Total	6.3800e- 003	0.1014	0.0574	4.4000e- 004	0.0195	1.8000e- 004	0.0197	5.4000e- 003	1.8000e- 004	5.5700e- 003	0.0000	42.1364	42.1364	2.0500e- 003	0.0000	42.1877

# 3.6 Transmission Structure Installation & Conductor Stringing - <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.1080	1.3217	0.7029	1.6300e- 003		0.0518	0.0518		0.0477	0.0477	0.0000	143.3249	143.3249	0.0464	0.0000	144.4838
Total	0.1080	1.3217	0.7029	1.6300e- 003		0.0518	0.0518		0.0477	0.0477	0.0000	143.3249	143.3249	0.0464	0.0000	144.4838

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	3.0000e- 005	1.2600e- 003	2.5000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	7.0000e- 005	0.0000	0.3376	0.3376	2.0000e- 005	0.0000	0.3382
Vendor	0.0205	0.6544	0.1621	1.5600e- 003	0.0387	3.2100e- 003	0.0419	0.0112	3.0700e- 003	0.0142	0.0000	150.8177	150.8177	9.9000e- 003	0.0000	151.0652
Worker	0.0117	9.0000e- 003	0.0995	2.9000e- 004	0.0288	2.2000e- 004	0.0291	7.6600e- 003	2.1000e- 004	7.8600e- 003	0.0000	25.9559	25.9559	7.4000e- 004	0.0000	25.9745
Total	0.0323	0.6646	0.2619	1.8500e- 003	0.0678	3.4300e- 003	0.0712	0.0189	3.2800e- 003	0.0222	0.0000	177.1112	177.1112	0.0107	0.0000	177.3779

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.0401	0.8070	0.9519	1.6300e- 003		0.0373	0.0373		0.0373	0.0373	0.0000	143.3248	143.3248	0.0464	0.0000	144.4836
Total	0.0401	0.8070	0.9519	1.6300e- 003		0.0373	0.0373		0.0373	0.0373	0.0000	143.3248	143.3248	0.0464	0.0000	144.4836

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	3.0000e- 005	1.2600e- 003	2.5000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	7.0000e- 005	0.0000	0.3376	0.3376	2.0000e- 005	0.0000	0.3382
Vendor	0.0205	0.6544	0.1621	1.5600e- 003	0.0387	3.2100e- 003	0.0419	0.0112	3.0700e- 003	0.0142	0.0000	150.8177	150.8177	9.9000e- 003	0.0000	151.0652
Worker	0.0117	9.0000e- 003	0.0995	2.9000e- 004	0.0288	2.2000e- 004	0.0291	7.6600e- 003	2.1000e- 004	7.8600e- 003	0.0000	25.9559	25.9559	7.4000e- 004	0.0000	25.9745
Total	0.0323	0.6646	0.2619	1.8500e- 003	0.0678	3.4300e- 003	0.0712	0.0189	3.2800e- 003	0.0222	0.0000	177.1112	177.1112	0.0107	0.0000	177.3779

# 3.6 Transmission Structure Installation & Conductor Stringing - <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.1176	1.4224	0.8031	1.9400e- 003		0.0544	0.0544		0.0500	0.0500	0.0000	170.7998	170.7998	0.0552	0.0000	172.1809

Total	0.1176	1.4224	0.8031	1.9400e-	0.0544	0.0544	0.0500	0.0500	0.0000	170.7998	170.7998	0.0552	0.0000	172.1809
				003										

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	4.0000e- 005	1.3900e- 003	2.9000e- 004	0.0000	2.8000e- 004	0.0000	2.9000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.3981	0.3981	3.0000e- 005	0.0000	0.3988
Vendor	0.0208	0.7071	0.1753	1.8400e- 003	0.0461	1.4200e- 003	0.0475	0.0133	1.3600e- 003	0.0147	0.0000	178.4223	178.4223	0.0113	0.0000	178.7044
Worker	0.0131	9.6500e- 003	0.1091	3.3000e- 004	0.0344	2.6000e- 004	0.0346	9.1300e- 003	2.4000e- 004	9.3600e- 003	0.0000	29.9313	29.9313	8.0000e- 004	0.0000	29.9513
Total	0.0339	0.7182	0.2848	2.1700e- 003	0.0807	1.6800e- 003	0.0824	0.0225	1.6000e- 003	0.0241	0.0000	208.7517	208.7517	0.0121	0.0000	209.0545

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.0478	0.9618	1.1344	1.9400e- 003		0.0444	0.0444		0.0444	0.0444	0.0000	170.7996	170.7996	0.0552	0.0000	172.1806
Total	0.0478	0.9618	1.1344	1.9400e- 003		0.0444	0.0444		0.0444	0.0444	0.0000	170.7996	170.7996	0.0552	0.0000	172.1806

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	4.0000e- 005	1.3900e- 003	2.9000e- 004	0.0000	2.8000e- 004	0.0000	2.9000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.3981	0.3981	3.0000e- 005	0.0000	0.3988
Vendor	0.0208	0.7071	0.1753	1.8400e- 003	0.0461	1.4200e- 003	0.0475	0.0133	1.3600e- 003	0.0147	0.0000	178.4223	178.4223	0.0113	0.0000	178.7044
Worker	0.0131	9.6500e- 003	0.1091	3.3000e- 004	0.0344	2.6000e- 004	0.0346	9.1300e- 003	2.4000e- 004	9.3600e- 003	0.0000	29.9313	29.9313	8.0000e- 004	0.0000	29.9513
Total	0.0339	0.7182	0.2848	2.1700e- 003	0.0807	1.6800e- 003	0.0824	0.0225	1.6000e- 003	0.0241	0.0000	208.7517	208.7517	0.0121	0.0000	209.0545

# 3.6 Transmission Structure Installation & Conductor Stringing - <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.1064	1.2336	0.7764	1.9400e- 003		0.0479	0.0479		0.0440	0.0440	0.0000	170.1670	170.1670	0.0550	0.0000	171.5429
Total	0.1064	1.2336	0.7764	1.9400e- 003		0.0479	0.0479		0.0440	0.0440	0.0000	170.1670	170.1670	0.0550	0.0000	171.5429

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	/yr		

Hauling	4.0000e- 005	1.2800e- 003	2.9000e- 004	0.0000	2.8000e- 004	0.0000	2.9000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.3919	0.3919	3.0000e- 005	0.0000	0.3926
Vendor	0.0194	0.6679	0.1651	1.8200e- 003	0.0459	1.2300e- 003	0.0471	0.0132	1.1700e- 003	0.0144	0.0000	176.1738	176.1738	0.0108	0.0000	176.4442
Worker	0.0122	8.6800e- 003	0.1004	3.2000e- 004	0.0342	2.5000e- 004	0.0345	9.0900e- 003	2.3000e- 004	9.3200e- 003	0.0000	28.7476	28.7476	7.2000e- 004	0.0000	28.7656
Total	0.0317	0.6779	0.2657	2.1400e- 003	0.0804	1.4800e- 003	0.0819	0.0224	1.4000e- 003	0.0238	0.0000	205.3133	205.3133	0.0116	0.0000	205.6024

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.0476	0.9581	1.1301	1.9400e- 003		0.0442	0.0442		0.0442	0.0442	0.0000	170.1668	170.1668	0.0550	0.0000	171.5427
Total	0.0476	0.9581	1.1301	1.9400e- 003		0.0442	0.0442		0.0442	0.0442	0.0000	170.1668	170.1668	0.0550	0.0000	171.5427

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	4.0000e- 005	1.2800e- 003	2.9000e- 004	0.0000	2.8000e- 004	0.0000	2.9000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.3919	0.3919	3.0000e- 005	0.0000	0.3926
Vendor	0.0194	0.6679	0.1651	1.8200e- 003	0.0459	1.2300e- 003	0.0471	0.0132	1.1700e- 003	0.0144	0.0000	176.1738	176.1738	0.0108	0.0000	176.4442
Worker	0.0122	8.6800e- 003	0.1004	3.2000e- 004	0.0342	2.5000e- 004	0.0345	9.0900e- 003	2.3000e- 004	9.3200e- 003	0.0000	28.7476	28.7476	7.2000e- 004	0.0000	28.7656
Total	0.0317	0.6779	0.2657	2.1400e- 003	0.0804	1.4800e- 003	0.0819	0.0224	1.4000e- 003	0.0238	0.0000	205.3133	205.3133	0.0116	0.0000	205.6024

# 3.6 Transmission Structure Installation & Conductor Stringing - <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Off-Road	0.0923	1.0394	0.6994	1.7800e- 003		0.0403	0.0403		0.0371	0.0371	0.0000	156.4204	156.4204	0.0506	0.0000	157.6851
Total	0.0923	1.0394	0.6994	1.7800e- 003		0.0403	0.0403		0.0371	0.0371	0.0000	156.4204	156.4204	0.0506	0.0000	157.6851

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	2.0000e- 005	7.5000e- 004	2.4000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	7.0000e- 005	0.0000	0.3460	0.3460	2.0000e- 005	0.0000	0.3466
Vendor	0.0133	0.4620	0.1357	1.6200e- 003	0.0422	5.3000e- 004	0.0427	0.0122	5.0000e- 004	0.0127	0.0000	157.0629	157.0629	8.6400e- 003	0.0000	157.2790
Worker	0.0106	7.2200e- 003	0.0851	2.8000e- 004	0.0315	2.2000e- 004	0.0317	8.3600e- 003	2.1000e- 004	8.5600e- 003	0.0000	25.4401	25.4401	6.0000e- 004	0.0000	25.4551
Total	0.0239	0.4700	0.2210	1.9000e- 003	0.0739	7.5000e- 004	0.0747	0.0206	7.1000e- 004	0.0213	0.0000	182.8491	182.8491	9.2600e- 003	0.0000	183.0807

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Off-Road	0.0438	0.8807	1.0388	1.7800e- 003		0.0407	0.0407		0.0407	0.0407	0.0000	156.4202	156.4202	0.0506	0.0000	157.6849
Total	0.0438	0.8807	1.0388	1.7800e- 003		0.0407	0.0407		0.0407	0.0407	0.0000	156.4202	156.4202	0.0506	0.0000	157.6849

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Hauling	2.0000e- 005	7.5000e- 004	2.4000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	7.0000e- 005	0.0000	0.3460	0.3460	2.0000e- 005	0.0000	0.3466
Vendor	0.0133	0.4620	0.1357	1.6200e- 003	0.0422	5.3000e- 004	0.0427	0.0122	5.0000e- 004	0.0127	0.0000	157.0629	157.0629	8.6400e- 003	0.0000	157.2790
Worker	0.0106	7.2200e- 003	0.0851	2.8000e- 004	0.0315	2.2000e- 004	0.0317	8.3600e- 003	2.1000e- 004	8.5600e- 003	0.0000	25.4401	25.4401	6.0000e- 004	0.0000	25.4551
Total	0.0239	0.4700	0.2210	1.9000e- 003	0.0739	7.5000e- 004	0.0747	0.0206	7.1000e- 004	0.0213	0.0000	182.8491	182.8491	9.2600e- 003	0.0000	183.0807

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

Category					tons	s/yr							MT	/yr		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

## **4.2 Trip Summary Information**

	Avera	age Daily Trip I	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

## **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

_																
	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
					PM10	PM10	Total	PM2.5	PM2.5	Total						

Category					tons	s/yr						МТ	/yr		
Electricity Mitigated						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

# **5.2 Energy by Land Use - NaturalGas**

#### **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	-/yr		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

# 5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Г/уг	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

# **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Г/уг	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

## 6.0 Area Detail

## **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Mitigated	7.4400e- 003	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005
Unmitigated	7.4400e- 003	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005

# 6.2 Area by SubCategory Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory											MT	/yr				
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.4300e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005
Total	7.4300e- 003	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005

#### **Mitigated**

PM10 PM10 Total PM2.5 PM2.5 Total		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
-----------------------------------	--	-----	-----	----	-----	------------------	-----------------	---------------	-------------------	------------------	----------------	----------	-----------	-----------	-----	-----	------

SubCategory		tons/yr								MT/yr						
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.4300e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005
Total	7.4300e- 003	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e- 005	7.0000e- 005	0.0000	0.0000	7.0000e- 005

## 7.0 Water Detail

# 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	T/yr	
Other Asphalt Surfaces	0/0		0.0000	0.0000	0.0000

7.4.1	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000

## **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		M	Г/уг	
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

#### 8.0 Waste Detail

# 8.1 Mitigation Measures Waste

# Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

# 8.2 Waste by Land Use

#### **Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		M	Γ/yr	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		M	Г/уг	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

# 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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# **10.0 Stationary Equipment**

#### **Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Boilers						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						

# 11.0 Vegetation

Equipment Type

Number

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Date: 11/26/2018 12:57 PM

PP1&2 Transmission Line - South Coast AQMD Air District, Winter

# PP1&2 Transmission Line South Coast AQMD Air District, Winter

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.64	Acre	2.64	114,998.40	0

#### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31		
Climate Zone	9			Operational Year	2024		
Utility Company	Los Angeles Department of Water & Power						
CO2 Intensity (lb/MWhr)	1227.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006		

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational year 2024.

Land Use - Total construction area graded in a day based on grading eqipment available would total approximately 2.64 acres.

Construction Phase - Construction phasing information provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Trips and VMT - Construction trip information was provided by LADWP.

Grading - Grading estiamtes provided by LADWP.

Construction Off-road Equipment Mitigation - Tier 3 eqipment and dust suppresson mitigation to comply with SCAQMD rule.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_Parking	6900	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	979.00
tblConstructionPhase	NumDays	20.00	979.00
tblConstructionPhase	NumDays	3.00	1,109.00
tblConstructionPhase	NumDays	3.00	979.00
tblConsumerProducts	ROG_EF	1.98E-05	2.14E-05
tblFleetMix	HHD	0.04	0.00

LDA LDT1 LDT2	0.55 0.04	0.00
	0.04	0.00
LDT2		
	0.20	0.00
LHD1	0.01	0.00
LHD2	5.8060e-003	0.00
MCY	4.8910e-003	0.00
MDV	0.12	0.00
MH	8.4500e-004	0.00
MHD	0.02	0.00
OBUS	2.1340e-003	0.00
SBUS	7.1200e-004	0.00
UBUS	1.7360e-003	0.00
AcresOfGrading	0.00	1,663.50
HorsePower	187.00	174.00
HorsePower	97.00	0.00
OffRoadEquipmentUnitAmount	1.00	2.00
OffRoadEquipmentUnitAmount	1.00	2.00
OffRoadEquipmentUnitAmount	2.00	0.00
OffRoadEquipmentUnitAmount	1.00	0.00
OffRoadEquipmentUnitAmount	1.00	0.00
OffRoadEquipmentUnitAmount	1.00	2.00
OffRoadEquipmentUnitAmount	1.00	0.00
OffRoadEquipmentUnitAmount	1.00	0.00
OffRoadEquipmentUnitAmount	1.00	2.00
OffRoadEquipmentUnitAmount	3.00	2.00
OffRoadEquipmentUnitAmount	1.00	0.00
OffRoadEquipmentUnitAmount	1.00	2.00
OffRoadEquipmentUnitAmount	1.00	2.00
OffRoadEquipmentUnitAmount	3.00	0.00
OffRoadEquipmentUnitAmount	0.00	2.00
	LHD2  MCY  MDV  MH  MHD  OBUS  SBUS  UBUS  AcresOfGrading  HorsePower  HorsePower  OffRoadEquipmentUnitAmount  OffRoadEquipmentUnitAmount	LHD2         5.8060e-003           MCY         4.8910e-003           MDV         0.12           MH         8.4500e-004           MHD         0.02           OBUS         2.1340e-003           SBUS         7.1200e-004           UBUS         1.7360e-003           AcresOfGrading         0.00           HorsePower         187.00           HorsePower         97.00           OffRoadEquipmentUnitAmount         1.00           OffRoadEquipmentUnitAmount         1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Switching Station Tie-ins and
tblOffRoadEquipment	PhaseName		Switching Station Tie-ins and Upgrades
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	300.00
tblTripsAndVMT	HaulingTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	19.00	56.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	23.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	48.00	24.00

# 2.0 Emissions Summary

# 2.1 Overall Construction (Maximum Daily Emission) <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year					lb/d	ay					lb/day						
2019	2.0040	21.9385	14.7951	0.0358	2.4662	0.8846	3.3509	0.4086	0.8148	1.2234	0.0000	3,611.377 6	3,611.3776	0.7448	0.0000	3,629.997 6	
2020	10.8508	120.2689	69.3006	0.1685	17.2356	5.0300	22.2657	7.5987	4.6618	12.2606	0.0000	16,660.89 23	16,660.892 3	3.7270	0.0000	16,754.06 82	
2021	10.0982	111.4756	67.1871	0.1677	17.2323	4.5131	21.7455	7.5979	4.1807	11.7786	0.0000	16,581.21 80	16,581.218 0	3.7055	0.0000	16,673.85 49	
2022	8.8453	96.5068	64.4199	0.1669	17.2324	3.7657	20.9981	7.5979	3.4893	11.0872	0.0000	16,495.13 58	16,495.135 8	3.6888	0.0000	16,587.35 68	
2023	7.9060	83.5123	61.7758	0.1653	17.2339	3.1864	20.4204	7.5983	2.9524	10.5507	0.0000	16,338.18 62	16,338.186 2	3.6497	0.0000	16,429.42 91	
Maximum	10.8508	120.2689	69.3006	0.1685	17.2356	5.0300	22.2657	7.5987	4.6618	12.2606	0.0000	16,660.89 23	16,660.892 3	3.7270	0.0000	16,754.06 82	

## **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	day		
2019	0.9670	14.7267	16.7950	0.0358	1.4959	0.6131	2.1090	0.3038	0.6117	0.9155	0.0000	3,611.377 6	3,611.3776	0.7448	0.0000	3,629.997 6
2020	4.0784	73.5908	81.6199	0.1685	8.2714	3.1350	11.4064	3.3856	3.1310	6.5166	0.0000	16,660.89 23	16,660.892 3	3.7270	0.0000	16,754.06 82
2021	3.9638	72.2850	80.8464	0.1677	8.2681	3.0924	11.3605	3.3848	3.0903	6.4751	0.0000	16,581.21 80	16,581.218 0	3.7055	0.0000	16,673.85 49
2022	3.8987	71.6065	80.2736	0.1669	8.2682	3.0886	11.3568	3.3848	3.0867	6.4715	0.0000	16,495.13 58	16,495.135 8	3.6888	0.0000	16,587.35 68
2023	3.7712	68.7006	79.5447	0.1653	8.2697	3.0765	11.3462	3.3852	3.0751	6.4603	0.0000	16,338.18 62	16,338.186 2	3.6497	0.0000	16,429.42 91
Maximum	4.0784	73.5908	81.6199	0.1685	8.2714	3.1350	11.4064	3.3856	3.1310	6.5166	0.0000	16,660.89 23	16,660.892 3	3.7270	0.0000	16,754.06 82
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	57.99	30.62	-22.20	0.00	51.58	25.17	46.41	55.05	19.28	42.77	0.00	0.00	0.00	0.00	0.00	0.00

## 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Area	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0408	0.0000	2.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000	0.0000	6.2000e- 004

## **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Area	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0408	0.0000	2.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000	0.0000	6.2000e- 004

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Switching Station Tie-ins and	Site Preparation	9/2/2019	11/30/2023	5	1109	
2	Demolition (Removal of 115kV	Demolition	3/2/2020	11/30/2023	5	979	
3	Site Preparation	Site Preparation	3/2/2020	11/30/2023	5	979	
4	Site Rehabilitation	Trenching	3/2/2020	11/30/2023	5	979	
5	Transmission Structure		3/2/2020	11/30/2023	5	979	

Acres of Grading (Site Preparation Phase): 979

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.64

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

## OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Switching Station Tie-ins and Upgrades	Aerial Lifts	2	8.00	63	0.31
Switching Station Tie-ins and Upgrades	Cranes	2	8.00	231	0.29
Switching Station Tie-ins and Upgrades	Graders	0	0.00	174	0.41
Switching Station Tie-ins and Upgrades	Scrapers	0	0.00	367	0.48
Switching Station Tie-ins and Upgrades	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Switching Station Tie-ins and Upgrades	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Transmission Structure Installation & Conductor Stringing	Aerial Lifts	2	8.00	63	0.31
	Cranes	2	8.00	231	0.29
Transmission Structure Installation &	Forklifts	0	7.00	89	0.20
	Generator Sets	0	8.00	84	0.74
Conductor Stringing Transmission Structure Installation &	Tractors/Loaders/Backhoes	2	8.00	0	0.37
Conductor Stringing Transmission Structure Installation & Conductor Stringing	Welders	0	0.00	46	0.45

Site Rehabilitation	Air Compressors	0		78	0.48
Site Preparation	Cranes	0	0.00	231	0.29
Site Preparation	Graders	2	8.00	187	0.41
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Scrapers	0	0.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition (Removal of 115kV line)	Aerial Lifts	2	8.00	63	0.31
Demolition (Removal of 115kV line)	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition (Removal of 115kV line)	Cranes	2	8.00	231	0.29
Demolition (Removal of 115kV line)	Rubber Tired Dozers	1	8.00	247	0.40
Demolition (Removal of 115kV line)	Tractors/Loaders/Backhoes	2	8.00	97	0.37

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Switching Station Tie- ins and Ungrades	6	60.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Transmission Structure Installation &	6	24.00	56.00	40.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Rehabilitation	0	8.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	8	40.00			14.70	6.90	20.00		_	HHDT
Demolition (Removal	9	20.00	20.00	300.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads

## 3.2 Switching Station Tie-ins and Upgrades - 2019 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5551	18.0504	11.3770	0.0211		0.8548	0.8548		0.7864	0.7864		1	2,089.9721			2,106.503 3
Total	1.5551	18.0504	11.3770	0.0211	1.5908	0.8548	2.4455	0.1718	0.7864	0.9582		2,089.972 1	2,089.9721	0.6612		2,106.503 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1289	3.6642	0.9858	8.0600e- 003	0.2048	0.0246	0.2294	0.0590	0.0236	0.0825		858.6121	858.6121	0.0629		860.1832
Worker	0.3199	0.2240	2.4323	6.6600e- 003	0.6707	5.2200e- 003	0.6759	0.1779	4.8100e- 003	0.1827		662.7935	662.7935	0.0207		663.3111
Total	0.4488	3.8881	3.4181	0.0147	0.8755	0.0299	0.9053	0.2368	0.0284	0.2652		1,521.405 5	1,521.4055	0.0836		1,523.494 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000		0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,089.972 1	2,089.9721	0.6612	2,106.503 3
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,089.972 1	2,089.9721	0.6612	2,106.503 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1289	3.6642	0.9858	8.0600e- 003	0.2048	0.0246	0.2294	0.0590	0.0236	0.0825		858.6121	858.6121	0.0629		860.1832
Worker	0.3199	0.2240	2.4323	6.6600e- 003	0.6707	5.2200e- 003	0.6759	0.1779	4.8100e- 003	0.1827		662.7935	662.7935	0.0207		663.3111
Total	0.4488	3.8881	3.4181	0.0147	0.8755	0.0299	0.9053	0.2368	0.0284	0.2652		1,521.405 5	1,521.4055	0.0836		1,523.494 4

## 3.2 Switching Station Tie-ins and Upgrades - 2020 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.4050	16.2806	10.9786	0.0211		0.7394	0.7394		0.6803	0.6803		2,044.356 0	2,044.3560	0.6612		2,060.885 6
Total	1.4050	16.2806	10.9786	0.0211	1.5908	0.7394	2.3302	0.1718	0.6803	0.8520		2,044.356 0	2,044.3560	0.6612		2,060.885 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1101	3.3545	0.8915	8.0000e- 003	0.2048	0.0169	0.2217	0.0590	0.0162	0.0751		852.8410	852.8410	0.0592		854.3215
Worker	0.2961	0.1998	2.2085	6.4500e- 003	0.6707	5.0900e- 003	0.6758	0.1779	4.6900e- 003	0.1826		642.2190	642.2190	0.0184		642.6794
Total	0.4062	3.5543	3.1000	0.0145	0.8755	0.0220	0.8974	0.2368	0.0208	0.2577		1,495.060 0	1,495.0600	0.0776		1,497.000 9

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,044.356 0	2,044.3560	0.6612		2,060.885 6
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,044.356	2,044.3560	0.6612		2,060.885 6

## **Mitigated Construction Off-Site**

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category					lb/c	lay						lb/d	lay	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1101	3.3545	0.8915	8.0000e- 003	0.2048	0.0169	0.2217	0.0590	0.0162	0.0751	852.8410	852.8410	0.0592	854.3215
Worker	0.2961	0.1998	2.2085	6.4500e- 003	0.6707	5.0900e- 003	0.6758	0.1779	4.6900e- 003	0.1826	642.2190	642.2190	0.0184	642.6794
Total	0.4062	3.5543	3.1000	0.0145	0.8755	0.0220	0.8974	0.2368	0.0208	0.2577	1,495.060 0	1,495.0600	0.0776	1,497.000 9

## 3.2 Switching Station Tie-ins and Upgrades - 2021 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.2753	14.6915	10.6743	0.0211		0.6402	0.6402		0.5890	0.5890		2,044.517 4	2,044.5174	0.6612		2,061.048 3
Total	1.2753	14.6915	10.6743	0.0211	1.5908	0.6402	2.2310	0.1718	0.5890	0.7608		2,044.517 4	2,044.5174	0.6612		2,061.048 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0937	3.0424	0.8105	7.9300e- 003	0.2048	6.3400e- 003	0.2112	0.0590	6.0700e- 003	0.0650		846.5606	846.5606	0.0566		847.9767
Worker	0.2767	0.1798	2.0312	6.2400e- 003	0.6707	4.9400e- 003	0.6756	0.1779	4.5500e- 003	0.1824		621.4007	621.4007	0.0167		621.8171

Total	0.3704	3.2222	2.8417	0.0142	0.8755	0.0113	0.8868	0.2368	0.0106	0.2474	1,467.961	1,467.9613	0.0733	1,469.793
											3			7

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,044.517 4	2,044.5174	0.6612		2,061.048 3
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,044.517 4	2,044.5174	0.6612		2,061.048 3

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0937	3.0424	0.8105	7.9300e- 003	0.2048	6.3400e- 003	0.2112	0.0590	6.0700e- 003	0.0650		846.5606	846.5606	0.0566		847.9767
Worker	0.2767	0.1798	2.0312	6.2400e- 003	0.6707	4.9400e- 003	0.6756	0.1779	4.5500e- 003	0.1824		621.4007	621.4007	0.0167		621.8171
Total	0.3704	3.2222	2.8417	0.0142	0.8755	0.0113	0.8868	0.2368	0.0106	0.2474		1,467.961 3	1,467.9613	0.0733		1,469.793 7

## 3.2 Switching Station Tie-ins and Upgrades - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.1475	12.8404	10.4485	0.0211		0.5485	0.5485		0.5046	0.5046		2,045.378 3	2,045.3783	0.6615		2,061.916 2
Total	1.1475	12.8404	10.4485	0.0211	1.5908	0.5485	2.1393	0.1718	0.5046	0.6764		2,045.378 3	2,045.3783	0.6615		2,061.916 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0879	2.8855	0.7664	7.8600e- 003	0.2048	5.5000e- 003	0.2103	0.0590	5.2600e- 003	0.0642		839.0215	839.0215	0.0545		840.3838
Worker	0.2602	0.1624	1.8748	6.0100e- 003	0.6707	4.8000e- 003	0.6755	0.1779	4.4200e- 003	0.1823		599.1219	599.1219	0.0150		599.4979
Total	0.3482	3.0479	2.6412	0.0139	0.8755	0.0103	0.8858	0.2368	9.6800e- 003	0.2465		1,438.143 4	1,438.1434	0.0695		1,439.881 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000		0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,045.378	2,045.3783	0.6615	2,061.916
												3			2
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,045.378	2,045.3783	0.6615	2,061.916
												3			2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0879	2.8855	0.7664	7.8600e- 003	0.2048	5.5000e- 003	0.2103	0.0590	5.2600e- 003	0.0642		839.0215	839.0215	0.0545		840.3838
Worker	0.2602	0.1624	1.8748	6.0100e- 003	0.6707	4.8000e- 003	0.6755	0.1779	4.4200e- 003	0.1823		599.1219	599.1219	0.0150		599.4979
Total	0.3482	3.0479	2.6412	0.0139	0.8755	0.0103	0.8858	0.2368	9.6800e- 003	0.2465		1,438.143 4	1,438.1434	0.0695		1,439.881 7

## 3.2 Switching Station Tie-ins and Upgrades - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.0748	11.7689	10.3155	0.0211		0.4887	0.4887		0.4496	0.4496		2,046.031 2	2,046.0312	0.6617		2,062.574 4
Total	1.0748	11.7689	10.3155	0.0211	1.5908	0.4887	2.0795	0.1718	0.4496	0.6214		2,046.031 2	2,046.0312	0.6617		2,062.574 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0656	2.1762	0.6777	7.6100e- 003	0.2048	2.5800e- 003	0.2074	0.0590	2.4700e- 003	0.0614		813.9573	813.9573	0.0472		815.1367
Worker	0.2454	0.1469	1.7280	5.7800e- 003	0.6707	4.6700e- 003	0.6753	0.1779	4.3000e- 003	0.1822		576.7779	576.7779	0.0136		577.1166
Total	0.3111	2.3230	2.4056	0.0134	0.8755	7.2500e- 003	0.8827	0.2368	6.7700e- 003	0.2436		1,390.735 2	1,390.7352	0.0607		1,392.253 3

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,046.031 2	2,046.0312	0.6617		2,062.574 4
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,046.031	2,046.0312	0.6617		2,062.574 4

## **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category					lb/c	lay						lb/d	lay	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0656	2.1762	0.6777	7.6100e- 003	0.2048	2.5800e- 003	0.2074	0.0590	2.4700e- 003	0.0614	813.9573	813.9573	0.0472	815.1367
Worker	0.2454	0.1469	1.7280	5.7800e- 003	0.6707	4.6700e- 003	0.6753	0.1779	4.3000e- 003	0.1822	576.7779	576.7779	0.0136	577.1166
Total	0.3111	2.3230	2.4056	0.0134	0.8755	7.2500e- 003	0.8827	0.2368	6.7700e- 003	0.2436	1,390.735 2	1,390.7352	0.0607	1,392.253 3

## 3.3 Demolition (Removal of 115kV line) - 2020

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	3.3209	34.2101	22.4834	0.0422		1.6907	1.6907		1.5871	1.5871		4,057.027 8	4,057.0278	1.0039		4,082.124 1
Total	3.3209	34.2101	22.4834	0.0422		1.6907	1.6907		1.5871	1.5871		4,057.027 8	4,057.0278	1.0039		4,082.124 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	2.3900e- 003	0.0845	0.0179	2.3000e- 004	0.0194	2.7000e- 004	0.0197	4.9200e- 003	2.6000e- 004	5.1800e- 003		25.2165	25.2165	1.8000e- 003		25.2615
Vendor	0.0688	2.0965	0.5572	5.0000e- 003	0.1280	0.0106	0.1386	0.0369	0.0101	0.0470		533.0256	533.0256	0.0370		533.9509
Worker	0.0987	0.0666	0.7362	2.1500e- 003	0.2236	1.7000e- 003	0.2253	0.0593	1.5600e- 003	0.0609		214.0730	214.0730	6.1400e- 003		214.2265

Total	0.1699	2.2476	1.3112	7.3800e-	0.3710	0.0125	0.3835	0.1011	0.0119	0.1130	772.3151	772.3151	0.0450	773.4389
				003										

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,057.027 8	4,057.0278	1.0039		4,082.124 1
Total	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,057.027 8	4,057.0278	1.0039		4,082.124 1

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	2.3900e- 003	0.0845	0.0179	2.3000e- 004	0.0194	2.7000e- 004	0.0197	4.9200e- 003	2.6000e- 004	5.1800e- 003		25.2165	25.2165	1.8000e- 003		25.2615
Vendor	0.0688	2.0965	0.5572	5.0000e- 003	0.1280	0.0106	0.1386	0.0369	0.0101	0.0470		533.0256	533.0256	0.0370		533.9509
Worker	0.0987	0.0666	0.7362	2.1500e- 003	0.2236	1.7000e- 003	0.2253	0.0593	1.5600e- 003	0.0609		214.0730	214.0730	6.1400e- 003		214.2265
Total	0.1699	2.2476	1.3112	7.3800e- 003	0.3710	0.0125	0.3835	0.1011	0.0119	0.1130		772.3151	772.3151	0.0450		773.4389

## 3.3 Demolition (Removal of 115kV line) - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	3.0913	31.7386	22.0602	0.0422		1.5189	1.5189		1.4251	1.4251		4,057.198 9	4,057.1989	0.9977		4,082.140 1
Total	3.0913	31.7386	22.0602	0.0422		1.5189	1.5189		1.4251	1.4251		4,057.198 9	4,057.1989	0.9977		4,082.140 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	2.2900e- 003	0.0785	0.0176	2.3000e- 004	0.0165	2.4000e- 004	0.0167	4.2000e- 003	2.3000e- 004	4.4400e- 003		24.9498	24.9498	1.7700e- 003		24.9940
Vendor	0.0586	1.9015	0.5065	4.9600e- 003	0.1280	3.9600e- 003	0.1320	0.0369	3.7900e- 003	0.0406		529.1004	529.1004	0.0354		529.9854
Worker	0.0922	0.0599	0.6771	2.0800e- 003	0.2236	1.6500e- 003	0.2252	0.0593	1.5200e- 003	0.0608		207.1336	207.1336	5.5500e- 003		207.2724
Total	0.1531	2.0399	1.2012	7.2700e- 003	0.3681	5.8500e- 003	0.3739	0.1003	5.5400e- 003	0.1059		761.1838	761.1838	0.0427		762.2518

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		

Off-Road	0.9775	20.5962	25.6247	0.0422	1.1371	1.1371	1.1371	1.1371	0.0000	4,057.198	4,057.1989	0.9977	4,082.140
										9			1
Total	0.9775	20.5962	25.6247	0.0422	1.1371	1.1371	1.1371	1.1371	0.0000	4,057.198	4,057.1989	0.9977	4,082.140
										9			1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	2.2900e- 003	0.0785	0.0176	2.3000e- 004	0.0165	2.4000e- 004	0.0167	4.2000e- 003	2.3000e- 004	4.4400e- 003		24.9498	24.9498	1.7700e- 003		24.9940
Vendor	0.0586	1.9015	0.5065	4.9600e- 003	0.1280	3.9600e- 003	0.1320	0.0369	3.7900e- 003	0.0406		529.1004	529.1004	0.0354		529.9854
Worker	0.0922	0.0599	0.6771	2.0800e- 003	0.2236	1.6500e- 003	0.2252	0.0593	1.5200e- 003	0.0608		207.1336	207.1336	5.5500e- 003		207.2724
Total	0.1531	2.0399	1.2012	7.2700e- 003	0.3681	5.8500e- 003	0.3739	0.1003	5.5400e- 003	0.1059		761.1838	761.1838	0.0427		762.2518

## 3.3 Demolition (Removal of 115kV line) - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	2.7000	27.2364	21.3599	0.0422		1.2662	1.2662		1.1889	1.1889		4,057.742 9	4,057.7429	0.9937		4,082.584 3
Total	2.7000	27.2364	21.3599	0.0422		1.2662	1.2662		1.1889	1.1889		4,057.742 9	4,057.7429	0.9937		4,082.584 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	2.1700e- 003	0.0724	0.0174	2.3000e- 004	0.0166	2.1000e- 004	0.0168	4.2200e- 003	2.0000e- 004	4.4200e- 003		24.6516	24.6516	1.7300e- 003		24.6949
Vendor	0.0550	1.8034	0.4790	4.9100e- 003	0.1280	3.4400e- 003	0.1314	0.0369	3.2900e- 003	0.0401		524.3885	524.3885	0.0341		525.2399
Worker	0.0868	0.0541	0.6250	2.0000e- 003	0.2236	1.6000e- 003	0.2252	0.0593	1.4700e- 003	0.0608		199.7073	199.7073	5.0100e- 003		199.8326
Total	0.1439	1.9300	1.1213	7.1400e- 003	0.3681	5.2500e- 003	0.3734	0.1004	4.9600e- 003	0.1053		748.7473	748.7473	0.0408		749.7674

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,057.742 9	4,057.7429	0.9937		4,082.584 3
Total	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,057.742 9	4,057.7429	0.9937		4,082.584 3

## **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
					PM10	PM10	Total	PM2.5	PM2.5	Total						

Category					lb/d	lay						lb/c	day		
Hauling	2.1700e- 003	0.0724	0.0174	2.3000e- 004	0.0166	2.1000e- 004	0.0168	4.2200e- 003	2.0000e- 004	4.4200e- 003	24.6516	24.6516	1.7300e- 003	24	24.6949
Vendor	0.0550	1.8034	0.4790	4.9100e- 003	0.1280	3.4400e- 003	0.1314	0.0369	3.2900e- 003	0.0401	524.3885	524.3885	0.0341	52	25.2399
Worker	0.0868	0.0541	0.6250	2.0000e- 003	0.2236	1.6000e- 003	0.2252	0.0593	1.4700e- 003	0.0608	199.7073	199.7073	5.0100e- 003	19	99.8326
Total	0.1439	1.9300	1.1213	7.1400e- 003	0.3681	5.2500e- 003	0.3734	0.1004	4.9600e- 003	0.1053	748.7473	748.7473	0.0408	74	49.7674

## 3.3 Demolition (Removal of 115kV line) - 2023

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Off-Road	2.4269	24.0645	20.7366	0.0422		1.0662	1.0662		1.0014	1.0014		4,058.363 3	4,058.3633	0.9876		4,083.053 2
Total	2.4269	24.0645	20.7366	0.0422		1.0662	1.0662		1.0014	1.0014		4,058.363 3	4,058.3633	0.9876		4,083.053 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Hauling	1.4400e- 003	0.0466	0.0156	2.2000e- 004	0.0179	9.0000e- 005	0.0180	4.5500e- 003	8.0000e- 005	4.6300e- 003		23.6769	23.6769	1.5900e- 003		23.7165
Vendor	0.0410	1.3601	0.4235	4.7600e- 003	0.1280	1.6100e- 003	0.1296	0.0369	1.5400e- 003	0.0384		508.7233	508.7233	0.0295		509.4604
Worker	0.0818	0.0490	0.5760	1.9300e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		192.2593	192.2593	4.5200e- 003		192.3722

Total	0.1243	1.4556	1.0151	6.9100e-	0.3695	3.2600e-	0.3727	0.1007	3.0500e-	0.1037	724.6595	724.6595	0.0356	725.5492
				003		003			003					

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,058.363 2	4,058.3632	0.9876		4,083.053 2
Total	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,058.363	4,058.3632	0.9876		4,083.053 2

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	1.4400e- 003	0.0466	0.0156	2.2000e- 004	0.0179	9.0000e- 005	0.0180	4.5500e- 003	8.0000e- 005	4.6300e- 003		23.6769	23.6769	1.5900e- 003		23.7165
Vendor	0.0410	1.3601	0.4235	4.7600e- 003	0.1280	1.6100e- 003	0.1296	0.0369	1.5400e- 003	0.0384		508.7233	508.7233	0.0295		509.4604
Worker	0.0818	0.0490	0.5760	1.9300e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		192.2593	192.2593	4.5200e- 003		192.3722
Total	0.1243	1.4556	1.0151	6.9100e- 003	0.3695	3.2600e- 003	0.3727	0.1007	3.0500e- 003	0.1037		724.6595	724.6595	0.0356		725.5492

## 3.4 Site Preparation - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000
Off-Road	3.9459	43.6882	20.2383	0.0418		2.0460	2.0460		1.8823	1.8823		4,049.792 3	4,049.7923	1.3098		4,082.536 9
Total	3.9459	43.6882	20.2383	0.0418	13.1047	2.0460	15.1507	6.7350	1.8823	8.6173		4,049.792 3	4,049.7923	1.3098		4,082.536 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.8386	0.2229	2.0000e- 003	0.0512	4.2200e- 003	0.0554	0.0147	4.0400e- 003	0.0188		213.2103	213.2103	0.0148		213.5804
Worker	0.1974	0.1332	1.4724	4.3000e- 003	0.4471	3.3900e- 003	0.4505	0.1186	3.1200e- 003	0.1217		428.1460	428.1460	0.0123		428.4530
Total	0.2249	0.9718	1.6952	6.3000e- 003	0.4983	7.6100e- 003	0.5059	0.1333	7.1600e- 003	0.1405		641.3562	641.3562	0.0271		642.0333

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Fugitive Dust					4.1108	0.0000	4.1108	2.6266	0.0000	2.6266			0.0000		0.0000
Off-Road	1.0233	20.7667	24.7445	0.0418		0.9936	0.9936		0.9936	0.9936	0.0000	4,049.792 2	4,049.7922	1.3098	4,082.536 9
Total	1.0233	20.7667	24.7445	0.0418	4.1108	0.9936	5.1045	2.6266	0.9936	3.6203	0.0000	4,049.792 2	4,049.7922	1.3098	4,082.536 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0275	0.8386	0.2229	2.0000e- 003	0.0512	4.2200e- 003	0.0554	0.0147	4.0400e- 003	0.0188		213.2103	213.2103	0.0148		213.5804
Worker	0.1974	0.1332	1.4724	4.3000e- 003	0.4471	3.3900e- 003	0.4505	0.1186	3.1200e- 003	0.1217		428.1460	428.1460	0.0123		428.4530
Total	0.2249	0.9718	1.6952	6.3000e- 003	0.4983	7.6100e- 003	0.5059	0.1333	7.1600e- 003	0.1405		641.3562	641.3562	0.0271		642.0333

## 3.4 Site Preparation - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000
Off-Road	3.7522	41.4318	19.8913	0.0418		1.8991	1.8991		1.7472	1.7472		4,048.050 5	4,048.0505	1.3092		4,080.781 1
Total	3.7522	41.4318	19.8913	0.0418	13.1047	1.8991	15.0038	6.7350	1.7472	8.4822		4,048.050 5	4,048.0505	1.3092		4,080.781 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0234	0.7606	0.2026	1.9800e- 003	0.0512	1.5900e- 003	0.0528	0.0147	1.5200e- 003	0.0163		211.6402	211.6402	0.0142		211.9942
Worker	0.1845	0.1199	1.3542	4.1600e- 003	0.4471	3.2900e- 003	0.4504	0.1186	3.0300e- 003	0.1216		414.2672	414.2672	0.0111		414.5447
Total	0.2079	0.8805	1.5568	6.1400e- 003	0.4983	4.8800e- 003	0.5032	0.1333	4.5500e- 003	0.1379		625.9073	625.9073	0.0253		626.5389

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Fugitive Dust					4.1108	0.0000	4.1108	2.6266	0.0000	2.6266			0.0000			0.0000
Off-Road	1.0233	20.7667	24.7445	0.0418		0.9936	0.9936		0.9936	0.9936	0.0000	4,048.050 5	4,048.0505	1.3092		4,080.781 1
Total	1.0233	20.7667	24.7445	0.0418	4.1108	0.9936	5.1045	2.6266	0.9936	3.6203	0.0000	4,048.050 5	4,048.0505	1.3092		4,080.781 1

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category					lb/c	lay						lb/d	lay	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0234	0.7606	0.2026	1.9800e- 003	0.0512	1.5900e- 003	0.0528	0.0147	1.5200e- 003	0.0163	211.6402	211.6402	0.0142	211.9942
Worker	0.1845	0.1199	1.3542	4.1600e- 003	0.4471	3.2900e- 003	0.4504	0.1186	3.0300e- 003	0.1216	414.2672	414.2672	0.0111	414.5447
Total	0.2079	0.8805	1.5568	6.1400e- 003	0.4983	4.8800e- 003	0.5032	0.1333	4.5500e- 003	0.1379	625.9073	625.9073	0.0253	626.5389

# 3.4 Site Preparation - 2022

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000
Off-Road	3.1662	34.9056	18.8041	0.0418		1.5483	1.5483		1.4245	1.4245		4,047.314 1	4,047.3141	1.3090		4,080.038 7
Total	3.1662	34.9056	18.8041	0.0418	13.1047	1.5483	14.6530	6.7350	1.4245	8.1594		4,047.314 1	4,047.3141	1.3090		4,080.038 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0220	0.7214	0.1916	1.9600e- 003	0.0512	1.3800e- 003	0.0526	0.0147	1.3200e- 003	0.0161		209.7554	209.7554	0.0136		210.0959
Worker	0.1735	0.1083	1.2499	4.0100e- 003	0.4471	3.2000e- 003	0.4503	0.1186	2.9400e- 003	0.1215		399.4146	399.4146	0.0100		399.6653

Total	0.1955	0.8296	1.4415	5.9700e-	0.4983	4.5800e-	0.5029	0.1333	4.2600e-	0.1376	609.1700	609.1700	0.0237	609.7612
				003		003			003					

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Fugitive Dust					4.1108	0.0000	4.1108	2.6266	0.0000	2.6266			0.0000			0.0000
Off-Road	1.0233	20.7667	24.7445	0.0418		0.9936	0.9936		0.9936	0.9936	0.0000	4,047.314 1	4,047.3141	1.3090		4,080.038 7
Total	1.0233	20.7667	24.7445	0.0418	4.1108	0.9936	5.1045	2.6266	0.9936	3.6203	0.0000	4,047.314 1	4,047.3141	1.3090		4,080.038 7

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0220	0.7214	0.1916	1.9600e- 003	0.0512	1.3800e- 003	0.0526	0.0147	1.3200e- 003	0.0161		209.7554	209.7554	0.0136		210.0959
Worker	0.1735	0.1083	1.2499	4.0100e- 003	0.4471	3.2000e- 003	0.4503	0.1186	2.9400e- 003	0.1215		399.4146	399.4146	0.0100		399.6653
Total	0.1955	0.8296	1.4415	5.9700e- 003	0.4983	4.5800e- 003	0.5029	0.1333	4.2600e- 003	0.1376		609.1700	609.1700	0.0237		609.7612

## 3.4 Site Preparation - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000
Off-Road	2.7464	29.8520	17.7651	0.0418		1.2722	1.2722		1.1704	1.1704		4,047.080 1	4,047.0801	1.3089		4,079.802 8
Total	2.7464	29.8520	17.7651	0.0418	13.1047	1.2722	14.3768	6.7350	1.1704	7.9053		4,047.080 1	4,047.0801	1.3089		4,079.802 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0164	0.5440	0.1694	1.9000e- 003	0.0512	6.5000e- 004	0.0519	0.0147	6.2000e- 004	0.0154		203.4893	203.4893	0.0118		203.7842
Worker	0.1636	0.0979	1.1520	3.8600e- 003	0.4471	3.1100e- 003	0.4502	0.1186	2.8700e- 003	0.1214		384.5186	384.5186	9.0300e- 003		384.7444
Total	0.1800	0.6420	1.3214	5.7600e- 003	0.4983	3.7600e- 003	0.5021	0.1333	3.4900e- 003	0.1368		588.0079	588.0079	0.0208		588.5286

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Fugitive Dust					4.1108	0.0000	4.1108	2.6266	0.0000	2.6266			0.0000		0.0000
Off-Road	1.0233	20.7667	24.7445	0.0418		0.9936	0.9936		0.9936	0.9936	0.0000	4,047.080	4,047.0801	1.3089	4,079.802
												1			8
Total	1.0233	20.7667	24.7445	0.0418	5.1108	0.9936	5.1045	2.6266	0.9936	3.6203	0.0000	4,047.080	4,047.0801	1.3089	4,079.802
												1			8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0164	0.5440	0.1694	1.9000e- 003	0.0512	6.5000e- 004	0.0519	0.0147	6.2000e- 004	0.0154		203.4893	203.4893	0.0118		203.7842
Worker	0.1636	0.0979	1.1520	3.8600e- 003	0.4471	3.1100e- 003	0.4502	0.1186	2.8700e- 003	0.1214		384.5186	384.5186	9.0300e- 003		384.7444
Total	0.1800	0.6420	1.3214	5.7600e- 003	0.4983	3.7600e- 003	0.5021	0.1333	3.4900e- 003	0.1368		588.0079	588.0079	0.0208		588.5286

## 3.5 Site Rehabilitation - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0413	1.2579	0.3343	3.0000e- 003	0.0768	6.3300e- 003	0.0831	0.0221	6.0600e- 003	0.0282		319.8154	319.8154	0.0222		320.3706
Worker	0.0395	0.0266	0.2945	8.6000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.2000e- 004	0.0243		85.6292	85.6292	2.4600e- 003		85.6906
Total	0.0808	1.2846	0.6288	3.8600e- 003	0.1662	7.0100e- 003	0.1732	0.0458	6.6800e- 003	0.0525		405.4446	405.4446	0.0247		406.0611

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

## **Mitigated Construction Off-Site**

ROG NOX CO SO2 Fugitive Exhaust PM10 Fugitive Exhaust PM2.5 Bio- CO2 NBio- CO2 Total CO2 CH4 N PM10 PM10 Total PM2.5 PM2.5 Total	N2O CO2e
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Category					lb/c	lay						lb/	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000		0.0000
Vendor	0.0413	1.2579	0.3343	3.0000e- 003	0.0768	6.3300e- 003	0.0831	0.0221	6.0600e- 003	0.0282	319.81	319.8154	0.0222		320.3706
Worker	0.0395	0.0266	0.2945	8.6000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.2000e- 004	0.0243	85.62	2 85.6292	2.4600e- 003	<u>Φ</u>	85.6906
Total	0.0808	1.2846	0.6288	3.8600e- 003	0.1662	7.0100e- 003	0.1732	0.0458	6.6800e- 003	0.0525	405.44	405.4446	0.0247		406.0611

#### 3.5 Site Rehabilitation - 2021

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0352	1.1409	0.3039	2.9700e- 003	0.0768	2.3800e- 003	0.0792	0.0221	2.2700e- 003	0.0244		317.4602	317.4602	0.0212		317.9912
Worker	0.0369	0.0240	0.2708	8.3000e- 004	0.0894	6.6000e- 004	0.0901	0.0237	6.1000e- 004	0.0243		82.8534	82.8534	2.2200e- 003		82.9089

Total	0.0720	1.1649	0.5748	3.8000e-	0.1662	3.0400e-	0.1693	0.0458	2.8800e-	0.0487	400.3137	400.3137	0.0235	400.9002
				003		003			003					

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0352	1.1409	0.3039	2.9700e- 003	0.0768	2.3800e- 003	0.0792	0.0221	2.2700e- 003	0.0244		317.4602	317.4602	0.0212		317.9912
Worker	0.0369	0.0240	0.2708	8.3000e- 004	0.0894	6.6000e- 004	0.0901	0.0237	6.1000e- 004	0.0243		82.8534	82.8534	2.2200e- 003		82.9089
Total	0.0720	1.1649	0.5748	3.8000e- 003	0.1662	3.0400e- 003	0.1693	0.0458	2.8800e- 003	0.0487		400.3137	400.3137	0.0235		400.9002

# 3.5 Site Rehabilitation - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	-	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0330	1.0821	0.2874	2.9500e- 003	0.0768	2.0600e- 003	0.0789	0.0221	1.9700e- 003	0.0241		314.6331	314.6331	0.0204		315.1439
Worker	0.0347	0.0217	0.2500	8.0000e- 004	0.0894	6.4000e- 004	0.0901	0.0237	5.9000e- 004	0.0243		79.8829	79.8829	2.0100e- 003		79.9331
Total	0.0677	1.1037	0.5374	3.7500e- 003	0.1662	2.7000e- 003	0.1689	0.0458	2.5600e- 003	0.0484		394.5160	394.5160	0.0224		395.0770

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0330	1.0821	0.2874	2.9500e- 003	0.0768	2.0600e- 003	0.0789	0.0221	1.9700e- 003	0.0241		314.6331	314.6331	0.0204		315.1439
Worker	0.0347	0.0217	0.2500	8.0000e- 004	0.0894	6.4000e- 004	0.0901	0.0237	5.9000e- 004	0.0243		79.8829	79.8829	2.0100e- 003		79.9331
Total	0.0677	1.1037	0.5374	3.7500e- 003	0.1662	2.7000e- 003	0.1689	0.0458	2.5600e- 003	0.0484		394.5160	394.5160	0.0224		395.0770

## 3.5 Site Rehabilitation - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0246	0.8161	0.2541	2.8500e- 003	0.0768	9.7000e- 004	0.0778	0.0221	9.3000e- 004	0.0230		305.2340	305.2340	0.0177		305.6763
Worker	0.0327	0.0196	0.2304	7.7000e- 004	0.0894	6.2000e- 004	0.0900	0.0237	5.7000e- 004	0.0243		76.9037	76.9037	1.8100e- 003		76.9489
Total	0.0573	0.8356	0.4845	3.6200e- 003	0.1662	1.5900e- 003	0.1678	0.0458	1.5000e- 003	0.0473		382.1377	382.1377	0.0195		382.6251

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

## **Mitigated Construction Off-Site**

ROG NOX CO SO2 Fugitive Exhaust PM10 Fugitive Exhaust PM2.5 Bio- CO2 NBio- CO2 Total CO2 CH4 N PM10 PM10 Total PM2.5 PM2.5 Total	N2O CO2e
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Category			lb/day												
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0246	0.8161	0.2541	2.8500e- 003	0.0768	9.7000e- 004	0.0778	0.0221	9.3000e- 004	0.0230	305.2340	305.2340	0.0177		305.6763
Worker	0.0327	0.0196	0.2304	7.7000e- 004	0.0894	6.2000e- 004	0.0900	0.0237	5.7000e- 004	0.0243	76.9037	76.9037	1.8100e- 003		76.9489
Total	0.0573	0.8356	0.4845	3.6200e- 003	0.1662	1.5900e- 003	0.1678	0.0458	1.5000e- 003	0.0473	382.1377	382.1377	0.0195		382.6251

# 3.6 Transmission Structure Installation & Conductor Stringing -

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	0.9860	12.0703	6.4192	0.0149		0.4732	0.4732		0.4353	0.4353		1,442.819 0	1,442.8190	0.4666		1,454.484 9
Total	0.9860	12.0703	6.4192	0.0149		0.4732	0.4732		0.4353	0.4353		1,442.819 0	1,442.8190	0.4666		1,454.484 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	3.2000e- 004	0.0113	2.3800e- 003	3.0000e- 005	2.5900e- 003	4.0000e- 005	2.6200e- 003	6.6000e- 004	3.0000e- 005	6.9000e- 004		3.3622	3.3622	2.4000e- 004		3.3682	
Vendor	0.1926	5.8703	1.5601	0.0140	0.3584	0.0296	0.3880	0.1032	0.0283	0.1315		1,492.471 7	1,492.4717	0.1036		1,495.062 6	
Worker	0.1184	0.0799	0.8834	2.5800e- 003	0.2683	2.0300e- 003	0.2703	0.0711	1.8700e- 003	0.0730		256.8876	256.8876	7.3700e- 003		257.0718	

Total	0.3114	5.9615	2.4459	0.0166	0.6293	0.0316	0.6609	0.1750	0.0302	0.2052	1,752.721	1,752.7215	0.1112	1,755.502
											5			5

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.819 0	1,442.8190	0.4666		1,454.484 9
Total	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.819 0	1,442.8190	0.4666		1,454.484 9

# **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	3.2000e- 004	0.0113	2.3800e- 003	3.0000e- 005	2.5900e- 003	4.0000e- 005	2.6200e- 003	6.6000e- 004	3.0000e- 005	6.9000e- 004		3.3622	3.3622	2.4000e- 004		3.3682
Vendor	0.1926	5.8703	1.5601	0.0140	0.3584	0.0296	0.3880	0.1032	0.0283	0.1315		1,492.471 7	1,492.4717	0.1036		1,495.062 6
Worker	0.1184	0.0799	0.8834	2.5800e- 003	0.2683	2.0300e- 003	0.2703	0.0711	1.8700e- 003	0.0730		256.8876	256.8876	7.3700e- 003		257.0718
Total	0.3114	5.9615	2.4459	0.0166	0.6293	0.0316	0.6609	0.1750	0.0302	0.2052		1,752.721 5	1,752.7215	0.1112		1,755.502 5

3.6 Transmission Structure Installation & Conductor Stringing - <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.9008	10.8999	6.1538	0.0149		0.4167	0.4167		0.3833	0.3833		1,442.717 2	1,442.7172	0.4666		1,454.382 3
Total	0.9008	10.8999	6.1538	0.0149		0.4167	0.4167		0.3833	0.3833		1,442.717 2	1,442.7172	0.4666		1,454.382 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	3.0000e- 004	0.0105	2.3500e- 003	3.0000e- 005	2.2000e- 003	3.0000e- 005	2.2300e- 003	5.6000e- 004	3.0000e- 005	5.9000e- 004		3.3266	3.3266	2.4000e- 004		3.3325
Vendor	0.1640	5.3241	1.4183	0.0139	0.3584	0.0111	0.3695	0.1032	0.0106	0.1138		1,481.481 1	1,481.4811	0.0991		1,483.959 1
Worker	0.1107	0.0719	0.8125	2.4900e- 003	0.2683	1.9700e- 003	0.2702	0.0711	1.8200e- 003	0.0730		248.5603	248.5603	6.6600e- 003		248.7268
Total	0.2750	5.4065	2.2331	0.0164	0.6289	0.0131	0.6420	0.1749	0.0125	0.1874		1,733.368 0	1,733.3680	0.1060		1,736.018 5

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

	Off-Road	0.3662	7.3698	8.6927	0.0149	0.3402	0.3402	0.3402	0.3402	0.0000	1,442.717 2	1,442.7172	0.4666		1,454.382 3
ľ	Total	0.3662	7.3698	8.6927	0.0149	0.3402	0.3402	0.3402	0.3402	0.0000	1,442.717 2	1,442.7172	0.4666	=	1,454.382 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	3.0000e- 004	0.0105	2.3500e- 003	3.0000e- 005	2.2000e- 003	3.0000e- 005	2.2300e- 003	5.6000e- 004	3.0000e- 005	5.9000e- 004		3.3266	3.3266	2.4000e- 004		3.3325
Vendor	0.1640	5.3241	1.4183	0.0139	0.3584	0.0111	0.3695	0.1032	0.0106	0.1138		1,481.481 1	1,481.4811	0.0991		1,483.959 1
Worker	0.1107	0.0719	0.8125	2.4900e- 003	0.2683	1.9700e- 003	0.2702	0.0711	1.8200e- 003	0.0730		248.5603	248.5603	6.6600e- 003		248.7268
Total	0.2750	5.4065	2.2331	0.0164	0.6289	0.0131	0.6420	0.1749	0.0125	0.1874		1,733.368 0	1,733.3680	0.1060		1,736.018 5

# 3.6 Transmission Structure Installation & Conductor Stringing - <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.8181	9.4891	5.9726	0.0149		0.3683	0.3683		0.3388	0.3388		1,442.900 4	1,442.9004	0.4667		1,454.567 0
Total	0.8181	9.4891	5.9726	0.0149		0.3683	0.3683		0.3388	0.3388		1,442.900 4	1,442.9004	0.4667		1,454.567 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	2.9000e- 004	9.6500e- 003	2.3200e- 003	3.0000e- 005	2.2100e- 003	3.0000e- 005	2.2400e- 003	5.6000e- 004	3.0000e- 005	5.9000e- 004		3.2869	3.2869	2.3000e- 004		3.2927
Vendor	0.1539	5.0496	1.3412	0.0138	0.3584	9.6300e- 003	0.3680	0.1032	9.2100e- 003	0.1124		1,468.287 7	1,468.2877	0.0954		1,470.671 6
Worker	0.1041	0.0650	0.7499	2.4000e- 003	0.2683	1.9200e- 003	0.2702	0.0711	1.7700e- 003	0.0729		239.6488	239.6488	6.0200e- 003		239.7992
Total	0.2583	5.1242	2.0934	0.0162	0.6289	0.0116	0.6405	0.1749	0.0110	0.1859		1,711.223 3	1,711.2233	0.1016		1,713.763 4

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.900 4	1,442.9004	0.4667		1,454.567 0
Total	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.900 4	1,442.9004	0.4667		1,454.567 0

# **Mitigated Construction Off-Site**

ROG NOX CO SO2 Fugitive Exhaust PM10 Fugitive Exhaust PM2.5 Bio- CO2 NBio- CO2 Total CO2 CH4 N PM10 PM10 Total PM2.5 PM2.5 Total	N2O CO2e
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Category					lb/d	lay						lb/d	lay	
Hauling	2.9000e- 004	9.6500e- 003	2.3200e- 003	3.0000e- 005	2.2100e- 003	3.0000e- 005	2.2400e- 003	5.6000e- 004	3.0000e- 005	5.9000e- 004	3.2869	3.2869	2.3000e- 004	3.2927
Vendor	0.1539	5.0496	1.3412	0.0138	0.3584	9.6300e- 003	0.3680	0.1032	9.2100e- 003	0.1124	1,468.287 7	1,468.2877	0.0954	 1,470.671 6
Worker	0.1041	0.0650	0.7499	2.4000e- 003	0.2683	1.9200e- 003	0.2702	0.0711	1.7700e- 003	0.0729	239.6488	239.6488	6.0200e- 003	239.7992
Total	0.2583	5.1242	2.0934	0.0162	0.6289	0.0116	0.6405	0.1749	0.0110	0.1859	1,711.223 3	1,711.2233	0.1016	1,713.763 4

# ${\bf 3.6\ Transmission\ Structure\ Installation\ \&\ Conductor\ Stringing\ -}$

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	0.7721	8.6975	5.8529	0.0149		0.3371	0.3371		0.3101	0.3101		1,442.878 2	1,442.8782	0.4667		1,454.544 6
Total	0.7721	8.6975	5.8529	0.0149		0.3371	0.3371		0.3101	0.3101		1,442.878 2	1,442.8782	0.4667		1,454.544 6

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	1.9000e- 004	6.2100e- 003	2.0700e- 003	3.0000e- 005	2.3900e- 003	1.0000e- 005	2.4000e- 003	6.1000e- 004	1.0000e- 005	6.2000e- 004		3.1569	3.1569	2.1000e- 004		3.1622
Vendor	0.1149	3.8083	1.1859	0.0133	0.3584	4.5200e- 003	0.3629	0.1032	4.3200e- 003	0.1075		1,424.425 3	1,424.4253	0.0826		1,426.489 2
Worker	0.0982	0.0588	0.6912	2.3100e- 003	0.2683	1.8700e- 003	0.2701	0.0711	1.7200e- 003	0.0729		230.7111	230.7111	5.4200e- 003		230.8466

I	Total	0.2132	3.8732	1.8792	0.0157	0.6291	6.4000e-	0.6355	0.1749	6.0500e-	0.1810	1,658.293	1,658.2933	0.0882	1,660.498
							003			003		3			1

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.878 2	1,442.8782	0.4667		1,454.544 6
Total	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.878 2	1,442.8782	0.4667		1,454.544 6

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	day		
Hauling	1.9000e- 004	6.2100e- 003	2.0700e- 003	3.0000e- 005	2.3900e- 003	1.0000e- 005	2.4000e- 003	6.1000e- 004	1.0000e- 005	6.2000e- 004		3.1569	3.1569	2.1000e- 004		3.1622
Vendor	0.1149	3.8083	1.1859	0.0133	0.3584	4.5200e- 003	0.3629	0.1032	4.3200e- 003	0.1075		1,424.425 3	1,424.4253	0.0826		1,426.489 2
Worker	0.0982	0.0588	0.6912	2.3100e- 003	0.2683	1.8700e- 003	0.2701	0.0711	1.7200e- 003	0.0729		230.7111	230.7111	5.4200e- 003		230.8466
Total	0.2132	3.8732	1.8792	0.0157	0.6291	6.4000e- 003	0.6355	0.1749	6.0500e- 003	0.1810		1,658.293 3	1,658.2933	0.0882		1,660.498 1

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

# **4.2 Trip Summary Information**

	Avera	age Daily Trip I	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

# **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

# **5.2 Energy by Land Use - NaturalGas**

# **Unmitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

#### **Mitigated**

NaturalGa ROG NOx CO SO2 Fugitive Exhaust PM10 Fugitive Exhaust PM2.5 Bio-CO2	NBio- CO2 Total CO2	CH4	N2O	CO2e
s Use PM10 PM10 Total PM2.5 PM2.5 Total				

Land Use	kBTU/yr		lb/day							lb/day						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000	0.000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

# 6.0 Area Detail

# **6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Mitigated	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004
Unmitigated	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004

# 6.2 Area by SubCategory Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	ay							lb/d	ay		
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	0.0407				0.0000	0.0000	0.0000	0.0000		0.0000		0.0000
Landscaping	2.0000e- 005	0.0000	2.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	5.8000e- 004	5.8000e- 004	0.0000	6.2000e- 004
Total	0.0408	0.0000	2.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	5.8000e- 004	5.8000e- 004	0.0000	6.2000e- 004

#### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	ay							lb/d	ay		
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e- 005	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004
Total	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

#### 8.0 Waste Detail

# 8.1 Mitigation Measures Waste

# 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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# 10.0 Stationary Equipment

# Fire Pumps and Emergency Generators

Equipment Type Number Hours/Day Hours/Year Horse	Power Load Factor Fuel Type
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# **Boilers**

Equipment Type	Number	Heat Input/Dav	Heat Input/Year	Boiler Rating	Fuel Type
_qa.p				200	

# **User Defined Equipment**

Equipment Type	Number
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# 11.0 Vegetation

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Date: 11/26/2018 12:54 PM

PP1&2 Transmission Line - South Coast AQMD Air District, Summer

# PP1&2 Transmission Line South Coast AQMD Air District, Summer

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.64	Acre	2.64	114,998.40	0

#### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2024
Utility Company	Los Angeles Depa	artment of Water & Power			
CO2 Intensity (lb/MWhr)	1227.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational year 2024.

Land Use - Total construction area graded in a day based on grading eqipment available would total approximately 2.64 acres.

Construction Phase - Construction phasing information provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Off-road Equipment - Construction equipment information was provided by LADWP.

Trips and VMT - Construction trip information was provided by LADWP.

Grading - Grading estiamtes provided by LADWP.

Construction Off-road Equipment Mitigation - Tier 3 eqipment and dust suppresson mitigation to comply with SCAQMD rule.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_Parking	6900	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	979.00
tblConstructionPhase	NumDays	20.00	979.00
tblConstructionPhase	NumDays	3.00	1,109.00
tblConstructionPhase	NumDays	3.00	979.00
tblConsumerProducts	ROG_EF	1.98E-05	2.14E-05
tblFleetMix	HHD	0.04	0.00

tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.8060e-003	0.00
tblFleetMix	MCY	4.8910e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	8.4500e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.1340e-003	0.00
tblFleetMix	SBUS	7.1200e-004	0.00
tblFleetMix	UBUS	1.7360e-003	0.00
tblGrading	AcresOfGrading	0.00	1,663.50
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	HorsePower	97.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Switching Station Tie-ins and
tblOffRoadEquipment	PhaseName		Switching Station Tie-ins and Upgrades
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	300.00
tblTripsAndVMT	HaulingTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	19.00	56.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	23.00	20.00
tblTripsAndVMT	WorkerTripNumber	20.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	48.00	24.00

# 2.0 Emissions Summary

# 2.1 Overall Construction (Maximum Daily Emission) <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year		lb/day									lb/day						
2019	1.9724	21.9164	14.9582	0.0365	2.4662	0.8843	3.3505	0.4086	0.8144	1.2230	0.0000	3,682.468 6	3,682.4686	0.7419	0.0000	3,701.015 9	
2020	10.7684	120.2377	69.5507	0.1706	17.2356	5.0290	22.2647	7.5987	4.6609	12.2596	0.0000	16,875.56 43	16,875.564 3	3.7140	0.0000	16,968.41 40	
2021	10.0200	111.4739	67.4213	0.1698	17.2323	4.5123	21.7447	7.5979	4.1799	11.7778	0.0000	16,791.75 87	16,791.758 7	3.6929	0.0000	16,884.07 99	
2022	8.7701	96.5167	64.6363	0.1689	17.2324	3.7650	20.9974	7.5979	3.4886	11.0865	0.0000	16,701.50 24	16,701.502 4	3.6767	0.0000	16,793.41 97	
2023	7.8368	83.5363	62.0433	0.1673	17.2339	3.1860	20.4199	7.5983	2.9520	10.5503	0.0000	16,536.05 35	16,536.053 5	3.6406	0.0000	16,627.06 85	
Maximum	10.7684	120.2377	69.5507	0.1706	17.2356	5.0290	22.2647	7.5987	4.6609	12.2596	0.0000	16,875.56 43	16,875.564 3	3.7140	0.0000	16,968.41 40	

# **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/c	day							lb/d	lay		
2019	0.9354	14.7046	16.9580	0.0365	1.4959	0.6128	2.1086	0.3038	0.6113	0.9151	0.0000	3,682.468 6	3,682.4686	0.7419	0.0000	3,701.015 9
2020	3.9960	73.5596	81.8701	0.1706	8.2714	3.1340	11.4054	3.3856	3.1300	6.5157	0.0000	16,875.56 43	16,875.564 3	3.7140	0.0000	16,968.41 39
2021	3.8856	72.2832	81.0807	0.1698	8.2681	3.0916	11.3597	3.3848	3.0895	6.4743	0.0000	16,791.75 87	16,791.758 7	3.6929	0.0000	16,884.07 99
2022	3.8235	71.6164	80.4901	0.1689	8.2682	3.0879	11.3561	3.3848	3.0860	6.4708	0.0000	16,701.50 24	16,701.502 4	3.6767	0.0000	16,793.41 97
2023	3.7019	68.7245	79.8122	0.1673	8.2697	3.0760	11.3457	3.3852	3.0746	6.4598	0.0000	16,536.05 35	16,536.053 5	3.6406	0.0000	16,627.06 85
Maximum	3.9960	73.5596	81.8701	0.1706	8.2714	3.1340	11.4054	3.3856	3.1300	6.5157	0.0000	16,875.56 43	16,875.564 3	3.7140	0.0000	16,968.41 39
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	58.49	30.62	-22.11	0.00	51.58	25.17	46.41	55.05	19.29	42.78	0.00	0.00	0.00	0.00	0.00	0.00

# 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Area	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0408	0.0000	2.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000	0.0000	6.2000e- 004

# **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Area	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0408	0.0000	2.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000	0.0000	6.2000e- 004

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Switching Station Tie-ins and	Site Preparation	9/2/2019	11/30/2023	5	1109	
2	Demolition (Removal of 115kV	Demolition	3/2/2020	11/30/2023	5	979	
3	Site Preparation	Site Preparation	3/2/2020	11/30/2023	5	979	
4	Site Rehabilitation	Trenching	3/2/2020	11/30/2023	5	979	
5	Transmission Structure		3/2/2020	11/30/2023	5	979	

Acres of Grading (Site Preparation Phase): 979

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.64

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

# OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Switching Station Tie-ins and Upgrades	Aerial Lifts	2	8.00	63	0.31
Switching Station Tie-ins and Upgrades	Cranes	2	8.00	231	0.29
Switching Station Tie-ins and Upgrades	Graders	0	0.00	174	0.41
Switching Station Tie-ins and Upgrades	Scrapers	0	0.00	367	0.48
Switching Station Tie-ins and Upgrades	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Switching Station Tie-ins and Upgrades	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Transmission Structure Installation & Conductor Stringing	Aerial Lifts	2	8.00	63	0.31
	Cranes	2	8.00	231	0.29
Transmission Structure Installation &	Forklifts	0	7.00	89	0.20
	Generator Sets	0	8.00	84	0.74
Conductor Stringing Transmission Structure Installation &	Tractors/Loaders/Backhoes	2	8.00	0	0.37
Conductor Stringing Transmission Structure Installation & Conductor Stringing	Welders	0	0.00	46	0.45

Site Rehabilitation	Air Compressors	0		78	0.48
Site Preparation	Cranes	0	0.00	231	0.29
Site Preparation	Graders	2	8.00	187	0.41
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Scrapers	0	0.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition (Removal of 115kV line)	Aerial Lifts	2	8.00	63	0.31
Demolition (Removal of 115kV line)	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition (Removal of 115kV line)	Cranes	2	8.00	231	0.29
Demolition (Removal of 115kV line)	Rubber Tired Dozers	1	8.00	247	0.40
Demolition (Removal of 115kV line)	Tractors/Loaders/Backhoes	2	8.00	97	0.37

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Switching Station Tie- ins and Ungrades	6	60.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Transmission Structure Installation &	6	24.00	56.00	40.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Rehabilitation	0	8.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	8	40.00			14.70	6.90	20.00		_	HHDT
Demolition (Removal	9	20.00	20.00	300.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads

# 3.2 Switching Station Tie-ins and Upgrades - 2019 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5551	18.0504	11.3770	0.0211		0.8548	0.8548		0.7864	0.7864		2,089.972 1	2,089.9721	0.6612		2,106.503 3
Total	1.5551	18.0504	11.3770	0.0211	1.5908	0.8548	2.4455	0.1718	0.7864	0.9582		2,089.972 1	2,089.9721	0.6612		2,106.503 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1234	3.6616	0.8852	8.2900e- 003	0.2048	0.0243	0.2291	0.0590	0.0232	0.0822		883.9031	883.9031	0.0585		885.3652
Worker	0.2939	0.2045	2.6960	7.1200e- 003	0.6707	5.2200e- 003	0.6759	0.1779	4.8100e- 003	0.1827		708.5934	708.5934	0.0222		709.1475
Total	0.4172	3.8660	3.5812	0.0154	0.8755	0.0295	0.9049	0.2368	0.0280	0.2648		1,592.496 5	1,592.4965	0.0806		1,594.512 6

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000		0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,089.972	2,089.9721	0.6612	2,106.503
												1			3
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,089.972	2,089.9721	0.6612	2,106.503
												1			3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1234	3.6616	0.8852	8.2900e- 003	0.2048	0.0243	0.2291	0.0590	0.0232	0.0822		883.9031	883.9031	0.0585		885.3652
Worker	0.2939	0.2045	2.6960	7.1200e- 003	0.6707	5.2200e- 003	0.6759	0.1779	4.8100e- 003	0.1827		708.5934	708.5934	0.0222		709.1475
Total	0.4172	3.8660	3.5812	0.0154	0.8755	0.0295	0.9049	0.2368	0.0280	0.2648		1,592.496 5	1,592.4965	0.0806		1,594.512 6

# 3.2 Switching Station Tie-ins and Upgrades - 2020 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.4050	16.2806	10.9786	0.0211		0.7394	0.7394		0.6803	0.6803		2,044.356 0	2,044.3560	0.6612		2,060.885 6
Total	1.4050	16.2806	10.9786	0.0211	1.5908	0.7394	2.3302	0.1718	0.6803	0.8520		2,044.356 0	2,044.3560	0.6612		2,060.885 6

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1051	3.3579	0.7996	8.2300e- 003	0.2048	0.0166	0.2214	0.0590	0.0159	0.0749		878.2351	878.2351	0.0551		879.6136
Worker	0.2715	0.1825	2.4529	6.8900e- 003	0.6707	5.0900e- 003	0.6758	0.1779	4.6900e- 003	0.1826		686.6505	686.6505	0.0197		687.1440
Total	0.3766	3.5404	3.2525	0.0151	0.8755	0.0217	0.8972	0.2368	0.0206	0.2574		1,564.885 5	1,564.8855	0.0749		1,566.757 6

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,044.356 0	2,044.3560	0.6612		2,060.885 6
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,044.356	2,044.3560	0.6612		2,060.885 6

# **Mitigated Construction Off-Site**

ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
				PM10	PM10	Total	PM2.5	PM2.5	Total						

Category					lb/c	lay						lb/d	day	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000
Vendor	0.1051	3.3579	0.7996	8.2300e- 003	0.2048	0.0166	0.2214	0.0590	0.0159	0.0749	878.23	1 878.2351	0.0551	879.6136
Worker	0.2715	0.1825	2.4529	6.8900e- 003	0.6707	5.0900e- 003	0.6758	0.1779	4.6900e- 003	0.1826	686.65	5 686.6505	0.0197	687.1440
Total	0.3766	3.5404	3.2525	0.0151	0.8755	0.0217	0.8972	0.2368	0.0206	0.2574	1,564.8 5	35 1,564.8855	0.0749	1,566.757 6

# 3.2 Switching Station Tie-ins and Upgrades - 2021 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.2753	14.6915	10.6743	0.0211		0.6402	0.6402		0.5890	0.5890		2,044.517 4	2,044.5174	0.6612		2,061.048 3
Total	1.2753	14.6915	10.6743	0.0211	1.5908	0.6402	2.2310	0.1718	0.5890	0.7608		2,044.517 4	2,044.5174	0.6612		2,061.048 3

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0890	3.0520	0.7243	8.1700e- 003	0.2048	6.1500e- 003	0.2110	0.0590	5.8800e- 003	0.0648		871.8031	871.8031	0.0527		873.1215
Worker	0.2533	0.1643	2.2604	6.6700e- 003	0.6707	4.9400e- 003	0.6756	0.1779	4.5500e- 003	0.1824		664.4420	664.4420	0.0179		664.8887

Total	0.3423	3.2163	2.9846	0.0148	0.8755	0.0111	0.8866	0.2368	0.0104	0.2473	1,536.245	1,536.2451	0.0706	1,538.010
											1			2

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,044.517 4	2,044.5174	0.6612		2,061.048 3
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,044.517 4	2,044.5174	0.6612		2,061.048 3

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0890	3.0520	0.7243	8.1700e- 003	0.2048	6.1500e- 003	0.2110	0.0590	5.8800e- 003	0.0648		871.8031	871.8031	0.0527		873.1215
Worker	0.2533	0.1643	2.2604	6.6700e- 003	0.6707	4.9400e- 003	0.6756	0.1779	4.5500e- 003	0.1824		664.4420	664.4420	0.0179		664.8887
Total	0.3423	3.2163	2.9846	0.0148	0.8755	0.0111	0.8866	0.2368	0.0104	0.2473		1,536.245 1	1,536.2451	0.0706		1,538.010 2

# 3.2 Switching Station Tie-ins and Upgrades - 2022

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.1475	12.8404	10.4485	0.0211		0.5485	0.5485		0.5046	0.5046		2,045.378 3	2,045.3783	0.6615		2,061.916 2
Total	1.1475	12.8404	10.4485	0.0211	1.5908	0.5485	2.1393	0.1718	0.5046	0.6764		2,045.378 3	2,045.3783	0.6615		2,061.916 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0835	2.8971	0.6845	8.0900e- 003	0.2048	5.3300e- 003	0.2101	0.0590	5.0900e- 003	0.0641		864.1892	864.1892	0.0508		865.4584
Worker	0.2376	0.1484	2.0901	6.4300e- 003	0.6707	4.8000e- 003	0.6755	0.1779	4.4200e- 003	0.1823		640.6344	640.6344	0.0162		641.0381
Total	0.3211	3.0454	2.7746	0.0145	0.8755	0.0101	0.8856	0.2368	9.5100e- 003	0.2463		1,504.823 6	1,504.8236	0.0669		1,506.496 5

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000		0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,045.378 3	2,045.3783	0.6615	2,061.916 2
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,045.378 3	2,045.3783	0.6615	2,061.916 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0835	2.8971	0.6845	8.0900e- 003	0.2048	5.3300e- 003	0.2101	0.0590	5.0900e- 003	0.0641		864.1892	864.1892	0.0508		865.4584
Worker	0.2376	0.1484	2.0901	6.4300e- 003	0.6707	4.8000e- 003	0.6755	0.1779	4.4200e- 003	0.1823		640.6344	640.6344	0.0162		641.0381
Total	0.3211	3.0454	2.7746	0.0145	0.8755	0.0101	0.8856	0.2368	9.5100e- 003	0.2463		1,504.823 6	1,504.8236	0.0669		1,506.496 5

# 3.2 Switching Station Tie-ins and Upgrades - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.0748	11.7689	10.3155	0.0211		0.4887	0.4887		0.4496	0.4496		2,046.031 2	2,046.0312	0.6617		2,062.574 4
Total	1.0748	11.7689	10.3155	0.0211	1.5908	0.4887	2.0795	0.1718	0.4496	0.6214		2,046.031 2	2,046.0312	0.6617		2,062.574 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0623	2.1902	0.6167	7.8300e- 003	0.2048	2.4600e- 003	0.2073	0.0590	2.3500e- 003	0.0613		837.9767	837.9767	0.0443		839.0834
Worker	0.2234	0.1343	1.9302	6.1900e- 003	0.6707	4.6700e- 003	0.6753	0.1779	4.3000e- 003	0.1822		616.7581	616.7581	0.0146		617.1222
Total	0.2857	2.3245	2.5469	0.0140	0.8755	7.1300e- 003	0.8826	0.2368	6.6500e- 003	0.2435		1,454.734 8	1,454.7348	0.0588		1,456.205 6

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.5182	10.8386	13.3769	0.0211		0.5833	0.5833		0.5833	0.5833	0.0000	2,046.031 2	2,046.0312	0.6617		2,062.574 4
Total	0.5182	10.8386	13.3769	0.0211	0.6204	0.5833	1.2037	0.0670	0.5833	0.6503	0.0000	2,046.031	2,046.0312	0.6617		2,062.574 4

# **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category					lb/c	lay							lb/d	lay	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
Vendor	0.0623	2.1902	0.6167	7.8300e- 003	0.2048	2.4600e- 003	0.2073	0.0590	2.3500e- 003	0.0613		837.9767	837.9767	0.0443	839.0834
Worker	0.2234	0.1343	1.9302	6.1900e- 003	0.6707	4.6700e- 003	0.6753	0.1779	4.3000e- 003	0.1822	(	616.7581	616.7581	0.0146	617.1222
Total	0.2857	2.3245	2.5469	0.0140	0.8755	7.1300e- 003	0.8826	0.2368	6.6500e- 003	0.2435	1	1,454.734 8	1,454.7348	0.0588	1,456.205 6

# 3.3 Demolition (Removal of 115kV line) - 2020

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	3.3209	34.2101	22.4834	0.0422		1.6907	1.6907		1.5871	1.5871		4,057.027 8	4,057.0278	1.0039		4,082.124 1
Total	3.3209	34.2101	22.4834	0.0422		1.6907	1.6907		1.5871	1.5871		4,057.027 8	4,057.0278	1.0039		4,082.124 1

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	2.3300e- 003	0.0834	0.0166	2.4000e- 004	0.0194	2.7000e- 004	0.0197	4.9200e- 003	2.6000e- 004	5.1800e- 003		25.6894	25.6894	1.7200e- 003		25.7325
Vendor	0.0657	2.0987	0.4998	5.1500e- 003	0.1280	0.0104	0.1384	0.0369	9.9500e- 003	0.0468		548.8969	548.8969	0.0345		549.7585
Worker	0.0905	0.0608	0.8176	2.3000e- 003	0.2236	1.7000e- 003	0.2253	0.0593	1.5600e- 003	0.0609		228.8835	228.8835	6.5800e- 003		229.0480

Total	0.1585	2.2429	1.3340	7.6900e-	0.3710	0.0124	0.3833	0.1011	0.0118	0.1128	803.4698	803.4698	0.0428	804.5389
				003										

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,057.027 8	4,057.0278	1.0039		4,082.124 1
Total	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,057.027 8	4,057.0278	1.0039		4,082.124 1

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	2.3300e- 003	0.0834	0.0166	2.4000e- 004	0.0194	2.7000e- 004	0.0197	4.9200e- 003	2.6000e- 004	5.1800e- 003		25.6894	25.6894	1.7200e- 003		25.7325
Vendor	0.0657	2.0987	0.4998	5.1500e- 003	0.1280	0.0104	0.1384	0.0369	9.9500e- 003	0.0468		548.8969	548.8969	0.0345		549.7585
Worker	0.0905	0.0608	0.8176	2.3000e- 003	0.2236	1.7000e- 003	0.2253	0.0593	1.5600e- 003	0.0609		228.8835	228.8835	6.5800e- 003		229.0480
Total	0.1585	2.2429	1.3340	7.6900e- 003	0.3710	0.0124	0.3833	0.1011	0.0118	0.1128		803.4698	803.4698	0.0428		804.5389

# 3.3 Demolition (Removal of 115kV line) - 2021

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	3.0913	31.7386	22.0602	0.0422		1.5189	1.5189		1.4251	1.4251		4,057.198 9	4,057.1989	0.9977		4,082.140 1
Total	3.0913	31.7386	22.0602	0.0422		1.5189	1.5189		1.4251	1.4251		4,057.198 9	4,057.1989	0.9977		4,082.140 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	2.2200e- 003	0.0775	0.0164	2.3000e- 004	0.0165	2.4000e- 004	0.0167	4.2000e- 003	2.3000e- 004	4.4300e- 003		25.4200	25.4200	1.7000e- 003		25.4624
Vendor	0.0557	1.9075	0.4527	5.1000e- 003	0.1280	3.8400e- 003	0.1318	0.0369	3.6700e- 003	0.0405		544.8769	544.8769	0.0330		545.7009
Worker	0.0844	0.0548	0.7535	2.2200e- 003	0.2236	1.6500e- 003	0.2252	0.0593	1.5200e- 003	0.0608		221.4807	221.4807	5.9600e- 003		221.6296
Total	0.1423	2.0398	1.2225	7.5500e- 003	0.3681	5.7300e- 003	0.3738	0.1003	5.4200e- 003	0.1058		791.7776	791.7776	0.0406		792.7929

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Off-Road	0.9775	20.5962	25.6247	0.0422	1.1371	1.1371	1.1371	1.1371	0.0000	4,057.198	4,057.1989	0.9977	4,082.140
										9			1
Total	0.9775	20.5962	25.6247	0.0422	1.1371	1.1371	1.1371	1.1371	0.0000	4,057.198	4,057.1989	0.9977	4,082.140
										9			1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	2.2200e- 003	0.0775	0.0164	2.3000e- 004	0.0165	2.4000e- 004	0.0167	4.2000e- 003	2.3000e- 004	4.4300e- 003		25.4200	25.4200	1.7000e- 003		25.4624
Vendor	0.0557	1.9075	0.4527	5.1000e- 003	0.1280	3.8400e- 003	0.1318	0.0369	3.6700e- 003	0.0405		544.8769	544.8769	0.0330		545.7009
Worker	0.0844	0.0548	0.7535	2.2200e- 003	0.2236	1.6500e- 003	0.2252	0.0593	1.5200e- 003	0.0608		221.4807	221.4807	5.9600e- 003		221.6296
Total	0.1423	2.0398	1.2225	7.5500e- 003	0.3681	5.7300e- 003	0.3738	0.1003	5.4200e- 003	0.1058		791.7776	791.7776	0.0406		792.7929

# 3.3 Demolition (Removal of 115kV line) - 2022

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	2.7000	27.2364	21.3599	0.0422		1.2662	1.2662		1.1889	1.1889		4,057.742 9	4,057.7429	0.9937		4,082.584 3
Total	2.7000	27.2364	21.3599	0.0422		1.2662	1.2662		1.1889	1.1889		4,057.742 9	4,057.7429	0.9937		4,082.584 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	2.1100e- 003	0.0716	0.0162	2.3000e- 004	0.0166	2.1000e- 004	0.0168	4.2200e- 003	2.0000e- 004	4.4200e- 003		25.1202	25.1202	1.6700e- 003		25.1618
Vendor	0.0522	1.8107	0.4278	5.0600e- 003	0.1280	3.3300e- 003	0.1313	0.0369	3.1800e- 003	0.0400		540.1183	540.1183	0.0317		540.9115
Worker	0.0792	0.0495	0.6967	2.1400e- 003	0.2236	1.6000e- 003	0.2252	0.0593	1.4700e- 003	0.0608		213.5448	213.5448	5.3800e- 003		213.6794
Total	0.1335	1.9318	1.1407	7.4300e- 003	0.3681	5.1400e- 003	0.3732	0.1004	4.8500e- 003	0.1052		778.7832	778.7832	0.0388		779.7527

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,057.742 9	4,057.7429	0.9937		4,082.584 3
Total	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,057.742 9	4,057.7429	0.9937		4,082.584 3

# **Mitigated Construction Off-Site**

ROG NOX CO SO2 Fugitive Exhaust PM10 Fugitive Exhaust PM2.5 Bio- CO2 NBio- CO2 Total CO2 CH4 N PM10 PM10 Total PM2.5 PM2.5 Total	N2O CO2e
--	----------

Category					lb/d	day						lb/c	lay		
Hauling	2.1100e- 003	0.0716	0.0162	2.3000e- 004	0.0166	2.1000e- 004	0.0168	4.2200e- 003	2.0000e- 004	4.4200e- 003	25.1202	25.1202	1.6700e- 003		25.1618
Vendor	0.0522	1.8107	0.4278	5.0600e- 003	0.1280	3.3300e- 003	0.1313	0.0369	3.1800e- 003	0.0400	540.1183	540.1183	0.0317	5	540.9115
Worker	0.0792	0.0495	0.6967	2.1400e- 003	0.2236	1.6000e- 003	0.2252	0.0593	1.4700e- 003	0.0608	213.5448	213.5448	5.3800e- 003	2	213.6794
Total	0.1335	1.9318	1.1407	7.4300e- 003	0.3681	5.1400e- 003	0.3732	0.1004	4.8500e- 003	0.1052	778.7832	778.7832	0.0388	7	779.7527

# 3.3 Demolition (Removal of 115kV line) - 2023

# **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	2.4269	24.0645	20.7366	0.0422		1.0662	1.0662		1.0014	1.0014		4,058.363 3	4,058.3633	0.9876		4,083.053 2
Total	2.4269	24.0645	20.7366	0.0422		1.0662	1.0662		1.0014	1.0014		4,058.363	4,058.3633	0.9876		4,083.053 2

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Hauling	1.4000e- 003	0.0463	0.0148	2.2000e- 004	0.0179	9.0000e- 005	0.0180	4.5500e- 003	8.0000e- 005	4.6300e- 003		24.1237	24.1237	1.5300e- 003		24.1620
Vendor	0.0389	1.3689	0.3854	4.9000e- 003	0.1280	1.5400e- 003	0.1295	0.0369	1.4700e- 003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.0745	0.0448	0.6434	2.0600e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		205.5860	205.5860	4.8500e- 003		205.7074

Total	0.1148	1.4600	1.0436	7.1800e-	0.3695	3.1900e-	0.3726	0.1007	2.9800e-	0.1037	753.4452	753.4452	0.0341	754.2966
				003		003			003					

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,058.363 2	4,058.3632	0.9876		4,083.053 2
Total	0.9775	20.5962	25.6247	0.0422		1.1371	1.1371		1.1371	1.1371	0.0000	4,058.363	4,058.3632	0.9876		4,083.053 2

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	1.4000e- 003	0.0463	0.0148	2.2000e- 004	0.0179	9.0000e- 005	0.0180	4.5500e- 003	8.0000e- 005	4.6300e- 003		24.1237	24.1237	1.5300e- 003		24.1620
Vendor	0.0389	1.3689	0.3854	4.9000e- 003	0.1280	1.5400e- 003	0.1295	0.0369	1.4700e- 003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.0745	0.0448	0.6434	2.0600e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		205.5860	205.5860	4.8500e- 003		205.7074
Total	0.1148	1.4600	1.0436	7.1800e- 003	0.3695	3.1900e- 003	0.3726	0.1007	2.9800e- 003	0.1037		753.4452	753.4452	0.0341		754.2966

# 3.4 Site Preparation - 2020

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000
Off-Road	3.9459	43.6882	20.2383	0.0418		2.0460	2.0460		1.8823	1.8823		4,049.792 3	4,049.7923	1.3098		4,082.536 9
Total	3.9459	43.6882	20.2383	0.0418	13.1047	2.0460	15.1507	6.7350	1.8823	8.6173		4,049.792 3	4,049.7923	1.3098		4,082.536 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0263	0.8395	0.1999	2.0600e- 003	0.0512	4.1600e- 003	0.0554	0.0147	3.9800e- 003	0.0187		219.5588	219.5588	0.0138		219.9034
Worker	0.1810	0.1217	1.6353	4.6000e- 003	0.4471	3.3900e- 003	0.4505	0.1186	3.1200e- 003	0.1217		457.7670	457.7670	0.0132		458.0960
Total	0.2073	0.9611	1.8352	6.6600e- 003	0.4983	7.5500e- 003	0.5059	0.1333	7.1000e- 003	0.1404		677.3257	677.3257	0.0269		677.9994

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Fugitive Dust					4.1108	0.0000	4.1108	2.6266	0.0000	2.6266			0.0000		0.0000
Off-Road	1.0233	20.7667	24.7445	0.0418		0.9936	0.9936		0.9936	0.9936	0.0000	4,049.792 2	4,049.7922	1.3098	4,082.536 9
Total	1.0233	20.7667	24.7445	0.0418	4.1108	0.9936	5.1045	2.6266	0.9936	3.6203	0.0000	4,049.792 2	4,049.7922	1.3098	4,082.536 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0263	0.8395	0.1999	2.0600e- 003	0.0512	4.1600e- 003	0.0554	0.0147	3.9800e- 003	0.0187		219.5588	219.5588	0.0138		219.9034	
Worker	0.1810	0.1217	1.6353	4.6000e- 003	0.4471	3.3900e- 003	0.4505	0.1186	3.1200e- 003	0.1217		457.7670	457.7670	0.0132		458.0960	
Total	0.2073	0.9611	1.8352	6.6600e- 003	0.4983	7.5500e- 003	0.5059	0.1333	7.1000e- 003	0.1404		677.3257	677.3257	0.0269		677.9994	

# 3.4 Site Preparation - 2021

# **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000	
Off-Road	3.7522	41.4318	19.8913	0.0418		1.8991	1.8991		1.7472	1.7472		4,048.050 5	4,048.0505	1.3092		4,080.781 1	
Total	3.7522	41.4318	19.8913	0.0418	13.1047	1.8991	15.0038	6.7350	1.7472	8.4822		4,048.050 5	4,048.0505	1.3092		4,080.781 1	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0223	0.7630	0.1811	2.0400e- 003	0.0512	1.5400e- 003	0.0527	0.0147	1.4700e- 003	0.0162		217.9508	217.9508	0.0132		218.2804
Worker	0.1689	0.1095	1.5069	4.4500e- 003	0.4471	3.2900e- 003	0.4504	0.1186	3.0300e- 003	0.1216		442.9613	442.9613	0.0119		443.2591
Total	0.1911	0.8725	1.6880	6.4900e- 003	0.4983	4.8300e- 003	0.5031	0.1333	4.5000e- 003	0.1378		660.9121	660.9121	0.0251		661.5395

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Fugitive Dust					4.1108	0.0000	4.1108	2.6266	0.0000	2.6266			0.0000			0.0000
Off-Road	1.0233	20.7667	24.7445	0.0418		0.9936	0.9936		0.9936	0.9936	0.0000	4,048.050 5	4,048.0505	1.3092		4,080.781 1
Total	1.0233	20.7667	24.7445	0.0418	4.1108	0.9936	5.1045	2.6266	0.9936	3.6203	0.0000	4,048.050 5	4,048.0505	1.3092		4,080.781

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category					lb/c	lay						lb/e	day	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000
Vendor	0.0223	0.7630	0.1811	2.0400e- 003	0.0512	1.5400e- 003	0.0527	0.0147	1.4700e- 003	0.0162	217.95	08 217.9508	0.0132	218.2804
Worker	0.1689	0.1095	1.5069	4.4500e- 003	0.4471	3.2900e- 003	0.4504	0.1186	3.0300e- 003	0.1216	442.96	13 442.9613	0.0119	443.2591
Total	0.1911	0.8725	1.6880	6.4900e- 003	0.4983	4.8300e- 003	0.5031	0.1333	4.5000e- 003	0.1378	660.9	21 660.9121	0.0251	661.5395

## 3.4 Site Preparation - 2022

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000
Off-Road	3.1662	34.9056	18.8041	0.0418		1.5483	1.5483		1.4245	1.4245		4,047.314 1	4,047.3141	1.3090		4,080.038 7
Total	3.1662	34.9056	18.8041	0.0418	13.1047	1.5483	14.6530	6.7350	1.4245	8.1594		4,047.314 1	4,047.3141	1.3090		4,080.038 7

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0209	0.7243	0.1711	2.0200e- 003	0.0512	1.3300e- 003	0.0525	0.0147	1.2700e- 003	0.0160		216.0473	216.0473	0.0127		216.3646
Worker	0.1584	0.0989	1.3934	4.2900e- 003	0.4471	3.2000e- 003	0.4503	0.1186	2.9400e- 003	0.1215		427.0896	427.0896	0.0108		427.3587

Total	0.1793	0.8232	1.5645	6.3100e-	0.4983	4.5300e-	0.5028	0.1333	4.2100e-	0.1375	643.1369	643.1369	0.0235	643.7233
				003		003			003					

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					4.1108	0.0000	4.1108	2.6266	0.0000	2.6266			0.0000			0.0000
Off-Road	1.0233	20.7667	24.7445	0.0418		0.9936	0.9936		0.9936	0.9936	0.0000	4,047.314 1	4,047.3141	1.3090		4,080.038 7
Total	1.0233	20.7667	24.7445	0.0418	4.1108	0.9936	5.1045	2.6266	0.9936	3.6203	0.0000	4,047.314 1	4,047.3141	1.3090		4,080.038 7

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0209	0.7243	0.1711	2.0200e- 003	0.0512	1.3300e- 003	0.0525	0.0147	1.2700e- 003	0.0160		216.0473	216.0473	0.0127		216.3646
Worker	0.1584	0.0989	1.3934	4.2900e- 003	0.4471	3.2000e- 003	0.4503	0.1186	2.9400e- 003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	0.1793	0.8232	1.5645	6.3100e- 003	0.4983	4.5300e- 003	0.5028	0.1333	4.2100e- 003	0.1375		643.1369	643.1369	0.0235		643.7233

#### 3.4 Site Preparation - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					13.1047	0.0000	13.1047	6.7350	0.0000	6.7350			0.0000			0.0000
Off-Road	2.7464	29.8520	17.7651	0.0418		1.2722	1.2722		1.1704	1.1704		4,047.080 1	4,047.0801	1.3089		4,079.802 8
Total	2.7464	29.8520	17.7651	0.0418	13.1047	1.2722	14.3768	6.7350	1.1704	7.9053		4,047.080 1	4,047.0801	1.3089		4,079.802 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0156	0.5476	0.1542	1.9600e- 003	0.0512	6.2000e- 004	0.0518	0.0147	5.9000e- 004	0.0153		209.4942	209.4942	0.0111		209.7709
Worker	0.1489	0.0895	1.2868	4.1200e- 003	0.4471	3.1100e- 003	0.4502	0.1186	2.8700e- 003	0.1214		411.1721	411.1721	9.7100e- 003		411.4148
Total	0.1645	0.6371	1.4410	6.0800e- 003	0.4983	3.7300e- 003	0.5020	0.1333	3.4600e- 003	0.1368		620.6662	620.6662	0.0208		621.1857

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Fugitive Dust					4.1108	0.0000	4.1108	2.6266	0.0000	2.6266			0.0000		0.0000
Off-Road	1.0233	20.7667	24.7445	0.0418		0.9936	0.9936		0.9936	0.9936	0.0000	4,047.080 1	4,047.0801	1.3089	4,079.802 8
Total	1.0233	20.7667	24.7445	0.0418	4.1108	0.9936	5.1045	2.6266	0.9936	3.6203	0.0000	4,047.080 1	4,047.0801	1.3089	4,079.802 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0156	0.5476	0.1542	1.9600e- 003	0.0512	6.2000e- 004	0.0518	0.0147	5.9000e- 004	0.0153		209.4942	209.4942	0.0111		209.7709
Worker	0.1489	0.0895	1.2868	4.1200e- 003	0.4471	3.1100e- 003	0.4502	0.1186	2.8700e- 003	0.1214		411.1721	411.1721	9.7100e- 003		411.4148
Total	0.1645	0.6371	1.4410	6.0800e- 003	0.4983	3.7300e- 003	0.5020	0.1333	3.4600e- 003	0.1368		620.6662	620.6662	0.0208		621.1857

#### 3.5 Site Rehabilitation - 2020

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0394	1.2592	0.2999	3.0900e- 003	0.0768	6.2400e- 003	0.0830	0.0221	5.9700e- 003	0.0281		329.3382	329.3382	0.0207		329.8551
Worker	0.0362	0.0243	0.3271	9.2000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.2000e- 004	0.0243		91.5534	91.5534	2.6300e- 003		91.6192
Total	0.0756	1.2836	0.6269	4.0100e- 003	0.1662	6.9200e- 003	0.1731	0.0458	6.5900e- 003	0.0524		420.8916	420.8916	0.0233		421.4743

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

#### **Mitigated Construction Off-Site**

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category					lb/c	lay							lb/d	ay	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0	000	0.0000	0.0000	0.0000
Vendor	0.0394	1.2592	0.2999	3.0900e- 003	0.0768	6.2400e- 003	0.0830	0.0221	5.9700e- 003	0.0281	329.	3382	329.3382	0.0207	329.8551
Worker	0.0362	0.0243	0.3271	9.2000e- 004	0.0894	6.8000e- 004	0.0901	0.0237	6.2000e- 004	0.0243	91.5	534	91.5534	2.6300e- 003	91.6192
Total	0.0756	1.2836	0.6269	4.0100e- 003	0.1662	6.9200e- 003	0.1731	0.0458	6.5900e- 003	0.0524	420.	3916	420.8916	0.0233	421.4743

#### 3.5 Site Rehabilitation - 2021

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0334	1.1445	0.2716	3.0600e- 003	0.0768	2.3000e- 003	0.0791	0.0221	2.2000e- 003	0.0243		326.9262	326.9262	0.0198		327.4206
Worker	0.0338	0.0219	0.3014	8.9000e- 004	0.0894	6.6000e- 004	0.0901	0.0237	6.1000e- 004	0.0243		88.5923	88.5923	2.3800e- 003		88.6518

Total	0.0672	1.1664	0.5730	3.9500e-	0.1662	2.9600e-	0.1692	0.0458	2.8100e-	0.0486	415.5184	415.5184	0.0222	416.0724
				003		003			003					

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0334	1.1445	0.2716	3.0600e- 003	0.0768	2.3000e- 003	0.0791	0.0221	2.2000e- 003	0.0243		326.9262	326.9262	0.0198		327.4206
Worker	0.0338	0.0219	0.3014	8.9000e- 004	0.0894	6.6000e- 004	0.0901	0.0237	6.1000e- 004	0.0243		88.5923	88.5923	2.3800e- 003		88.6518
Total	0.0672	1.1664	0.5730	3.9500e- 003	0.1662	2.9600e- 003	0.1692	0.0458	2.8100e- 003	0.0486		415.5184	415.5184	0.0222		416.0724

## 3.5 Site Rehabilitation - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	-	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0313	1.0864	0.2567	3.0300e- 003	0.0768	2.0000e- 003	0.0788	0.0221	1.9100e- 003	0.0240		324.0710	324.0710	0.0190		324.5469
Worker	0.0317	0.0198	0.2787	8.6000e- 004	0.0894	6.4000e- 004	0.0901	0.0237	5.9000e- 004	0.0243		85.4179	85.4179	2.1500e- 003		85.4717
Total	0.0630	1.1062	0.5354	3.8900e- 003	0.1662	2.6400e- 003	0.1689	0.0458	2.5000e- 003	0.0483		409.4889	409.4889	0.0212		410.0187

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0313	1.0864	0.2567	3.0300e- 003	0.0768	2.0000e- 003	0.0788	0.0221	1.9100e- 003	0.0240		324.0710	324.0710	0.0190		324.5469
Worker	0.0317	0.0198	0.2787	8.6000e- 004	0.0894	6.4000e- 004	0.0901	0.0237	5.9000e- 004	0.0243		85.4179	85.4179	2.1500e- 003		85.4717
Total	0.0630	1.1062	0.5354	3.8900e- 003	0.1662	2.6400e- 003	0.1689	0.0458	2.5000e- 003	0.0483		409.4889	409.4889	0.0212		410.0187

#### 3.5 Site Rehabilitation - 2023

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0234	0.8213	0.2313	2.9400e- 003	0.0768	9.2000e- 004	0.0777	0.0221	8.8000e- 004	0.0230		314.2413	314.2413	0.0166		314.6563
Worker	0.0298	0.0179	0.2574	8.2000e- 004	0.0894	6.2000e- 004	0.0900	0.0237	5.7000e- 004	0.0243		82.2344	82.2344	1.9400e- 003		82.2830
Total	0.0531	0.8392	0.4886	3.7600e- 003	0.1662	1.5400e- 003	0.1678	0.0458	1.4500e- 003	0.0473		396.4757	396.4757	0.0185		396.9393

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

#### **Mitigated Construction Off-Site**

ROG NOX CO SO2 Fugitive Exhaust PM10 Fugitive Exhaust PM2.5 Bio- CO2 NBio- CO2 Total CO2 CH4 N PM10 PM10 Total PM2.5 PM2.5 Total	N2O CO2e
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Category					lb/c	lay						lb/c	lay	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0234	0.8213	0.2313	2.9400e- 003	0.0768	9.2000e- 004	0.0777	0.0221	8.8000e- 004	0.0230	314.2413	314.2413	0.0166	314.6563
Worker	0.0298	0.0179	0.2574	8.2000e- 004	0.0894	6.2000e- 004	0.0900	0.0237	5.7000e- 004	0.0243	82.2344	82.2344	1.9400e- 003	82.2830
Total	0.0531	0.8392	0.4886	3.7600e- 003	0.1662	1.5400e- 003	0.1678	0.0458	1.4500e- 003	0.0473	396.4757	396.4757	0.0185	396.9393

## 3.6 Transmission Structure Installation & Conductor Stringing -

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	0.9860	12.0703	6.4192	0.0149		0.4732	0.4732		0.4353	0.4353		1,442.819 0	1,442.8190	0.4666		1,454.484 9
Total	0.9860	12.0703	6.4192	0.0149		0.4732	0.4732		0.4353	0.4353		1,442.819 0	1,442.8190	0.4666		1,454.484 9

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	3.1000e- 004	0.0111	2.2100e- 003	3.0000e- 005	2.5900e- 003	4.0000e- 005	2.6200e- 003	6.6000e- 004	3.0000e- 005	6.9000e- 004		3.4253	3.4253	2.3000e- 004		3.4310
Vendor	0.1839	5.8764	1.3993	0.0144	0.3584	0.0291	0.3875	0.1032	0.0279	0.1310		1,536.911 4	1,536.9114	0.0965		1,539.323 7
Worker	0.1086	0.0730	0.9812	2.7600e- 003	0.2683	2.0300e- 003	0.2703	0.0711	1.8700e- 003	0.0730		274.6602	274.6602	7.9000e- 003		274.8576

Total	0.2928	5.9605	2.3827	0.0172	0.6293	0.0312	0.6604	0.1750	0.0298	0.2047	1,814.996	1,814.9968	0.1046	1,817.612
											8			3

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.819 0	1,442.8190	0.4666		1,454.484 9
Total	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.819 0	1,442.8190	0.4666		1,454.484 9

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	3.1000e- 004	0.0111	2.2100e- 003	3.0000e- 005	2.5900e- 003	4.0000e- 005	2.6200e- 003	6.6000e- 004	3.0000e- 005	6.9000e- 004		3.4253	3.4253	2.3000e- 004		3.4310
Vendor	0.1839	5.8764	1.3993	0.0144	0.3584	0.0291	0.3875	0.1032	0.0279	0.1310		1,536.911 4	1,536.9114	0.0965		1,539.323 7
Worker	0.1086	0.0730	0.9812	2.7600e- 003	0.2683	2.0300e- 003	0.2703	0.0711	1.8700e- 003	0.0730		274.6602	274.6602	7.9000e- 003		274.8576
Total	0.2928	5.9605	2.3827	0.0172	0.6293	0.0312	0.6604	0.1750	0.0298	0.2047		1,814.996 8	1,814.9968	0.1046		1,817.612 3

3.6 Transmission Structure Installation & Conductor Stringing - <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.9008	10.8999	6.1538	0.0149		0.4167	0.4167		0.3833	0.3833		1,442.717 2	1,442.7172	0.4666		1,454.382 3
Total	0.9008	10.8999	6.1538	0.0149		0.4167	0.4167		0.3833	0.3833		1,442.717 2	1,442.7172	0.4666		1,454.382 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	3.0000e- 004	0.0103	2.1900e- 003	3.0000e- 005	2.2000e- 003	3.0000e- 005	2.2300e- 003	5.6000e- 004	3.0000e- 005	5.9000e- 004		3.3893	3.3893	2.3000e- 004		3.3950
Vendor	0.1558	5.3410	1.2674	0.0143	0.3584	0.0108	0.3692	0.1032	0.0103	0.1135		1,525.655 4	1,525.6554	0.0923		1,527.962 6
Worker	0.1013	0.0657	0.9041	2.6700e- 003	0.2683	1.9700e- 003	0.2702	0.0711	1.8200e- 003	0.0730		265.7768	265.7768	7.1500e- 003		265.9555
Total	0.2574	5.4171	2.1738	0.0170	0.6289	0.0128	0.6416	0.1749	0.0121	0.1870		1,794.821 6	1,794.8216	0.0997		1,797.313 1

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Off-Road	0.3662	7.3698	8.6927	0.0149	0.3402	0.3402	0.3402	0.3402	0.0000	1,442.717 2	1,442.7172	0.4666	1,454.382 3
Total	0.3662	7.3698	8.6927	0.0149	0.3402	0.3402	0.3402	0.3402	0.0000	1,442.717 2	1,442.7172	0.4666	1,454.382 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	3.0000e- 004	0.0103	2.1900e- 003	3.0000e- 005	2.2000e- 003	3.0000e- 005	2.2300e- 003	5.6000e- 004	3.0000e- 005	5.9000e- 004		3.3893	3.3893	2.3000e- 004		3.3950
Vendor	0.1558	5.3410	1.2674	0.0143	0.3584	0.0108	0.3692	0.1032	0.0103	0.1135		1,525.655 4	1,525.6554	0.0923		1,527.962 6
Worker	0.1013	0.0657	0.9041	2.6700e- 003	0.2683	1.9700e- 003	0.2702	0.0711	1.8200e- 003	0.0730		265.7768	265.7768	7.1500e- 003		265.9555
Total	0.2574	5.4171	2.1738	0.0170	0.6289	0.0128	0.6416	0.1749	0.0121	0.1870		1,794.821 6	1,794.8216	0.0997		1,797.313 1

# 3.6 Transmission Structure Installation & Conductor Stringing - <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Off-Road	0.8181	9.4891	5.9726	0.0149		0.3683	0.3683		0.3388	0.3388		1,442.900 4	1,442.9004	0.4667		1,454.567 0
Total	0.8181	9.4891	5.9726	0.0149		0.3683	0.3683		0.3388	0.3388		1,442.900 4	1,442.9004	0.4667		1,454.567 0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	2.8000e- 004	9.5500e- 003	2.1600e- 003	3.0000e- 005	2.2100e- 003	3.0000e- 005	2.2400e- 003	5.6000e- 004	3.0000e- 005	5.9000e- 004		3.3494	3.3494	2.2000e- 004		3.3549
Vendor	0.1461	5.0699	1.1978	0.0142	0.3584	9.3200e- 003	0.3677	0.1032	8.9100e- 003	0.1121		1,512.331 1	1,512.3311	0.0889		1,514.552 2
Worker	0.0950	0.0594	0.8361	2.5700e- 003	0.2683	1.9200e- 003	0.2702	0.0711	1.7700e- 003	0.0729		256.2537	256.2537	6.4600e- 003		256.4152
Total	0.2414	5.1388	2.0360	0.0168	0.6289	0.0113	0.6401	0.1749	0.0107	0.1856		1,771.934 2	1,771.9342	0.0955		1,774.322 4

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.900 4	1,442.9004	0.4667		1,454.567 0
Total	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.900 4	1,442.9004	0.4667		1,454.567 0

#### **Mitigated Construction Off-Site**

ROG NOX CO SO2 Fugitive Exhaust PM10 Fugitive Exhaust PM2.5 Bio- CO2 NBio- CO2 Total CO2 CH4 N PM10 PM10 Total PM2.5 PM2.5 Total	N2O CO2e
--	----------

Category					lb/d	lay						lb/	day	
Hauling	2.8000e- 004	9.5500e- 003	2.1600e- 003	3.0000e- 005	2.2100e- 003	3.0000e- 005	2.2400e- 003	5.6000e- 004	3.0000e- 005	5.9000e- 004	3.3494	3.3494	2.2000e- 004	3.3549
Vendor	0.1461	5.0699	1.1978	0.0142	0.3584	9.3200e- 003	0.3677	0.1032	8.9100e- 003	0.1121	1,512.3 1	31 1,512.3311	0.0889	1,514.552 2
Worker	0.0950	0.0594	0.8361	2.5700e- 003	0.2683	1.9200e- 003	0.2702	0.0711	1.7700e- 003	0.0729	256.25	7 256.2537	6.4600e- 003	256.4152
Total	0.2414	5.1388	2.0360	0.0168	0.6289	0.0113	0.6401	0.1749	0.0107	0.1856	1,771.9 2	34 1,771.9342	0.0955	1,774.322 4

## ${\bf 3.6\ Transmission\ Structure\ Installation\ \&\ Conductor\ Stringing\ -}$

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	0.7721	8.6975	5.8529	0.0149		0.3371	0.3371		0.3101	0.3101		1,442.878 2	1,442.8782	0.4667		1,454.544 6
Total	0.7721	8.6975	5.8529	0.0149		0.3371	0.3371		0.3101	0.3101		1,442.878 2	1,442.8782	0.4667		1,454.544 6

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	1.9000e- 004	6.1800e- 003	1.9700e- 003	3.0000e- 005	2.3900e- 003	1.0000e- 005	2.4000e- 003	6.1000e- 004	1.0000e- 005	6.2000e- 004		3.2165	3.2165	2.0000e- 004		3.2216
Vendor	0.1090	3.8328	1.0792	0.0137	0.3584	4.3100e- 003	0.3627	0.1032	4.1200e- 003	0.1073		1,466.459 2	1,466.4592	0.0775		1,468.396 0
Worker	0.0894	0.0537	0.7721	2.4700e- 003	0.2683	1.8700e- 003	0.2701	0.0711	1.7200e- 003	0.0729		246.7032	246.7032	5.8300e- 003		246.8489

Total	0.1986	3.8927	1.8533	0.0162	0.6291	6.1900e-	0.6352	0.1749	5.8500e-	0.1808	1,716.379	1,716.3790	0.0835	1,718.466
						003			003		0			5

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Off-Road	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.878 2	1,442.8782	0.4667		1,454.544 6
Total	0.3662	7.3698	8.6927	0.0149		0.3402	0.3402		0.3402	0.3402	0.0000	1,442.878 2	1,442.8782	0.4667		1,454.544 6

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	1.9000e- 004	6.1800e- 003	1.9700e- 003	3.0000e- 005	2.3900e- 003	1.0000e- 005	2.4000e- 003	6.1000e- 004	1.0000e- 005	6.2000e- 004		3.2165	3.2165	2.0000e- 004		3.2216
Vendor	0.1090	3.8328	1.0792	0.0137	0.3584	4.3100e- 003	0.3627	0.1032	4.1200e- 003	0.1073		1,466.459 2	1,466.4592	0.0775		1,468.396 0
Worker	0.0894	0.0537	0.7721	2.4700e- 003	0.2683	1.8700e- 003	0.2701	0.0711	1.7200e- 003	0.0729		246.7032	246.7032	5.8300e- 003		246.8489
Total	0.1986	3.8927	1.8533	0.0162	0.6291	6.1900e- 003	0.6352	0.1749	5.8500e- 003	0.1808		1,716.379 0	1,716.3790	0.0835		1,718.466 5

## 4.0 Operational Detail - Mobile

#### **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

#### **4.2 Trip Summary Information**

	Avera	age Daily Trip F	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

## **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

## 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

## **5.2 Energy by Land Use - NaturalGas**

#### **Unmitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

#### **Mitigated**

NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
s Use					PM10	PM10	Total	PM2.5	PM2.5	Total						

Land Use	kBTU/yr					lb/day					lb/d	day		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
Mitigated	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004
Unmitigated	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004

## 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	ay							lb/d	ay		
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	0.0407				0.0000	0.0000	0.0000	0.0000		0.0000		0.0000
Landscaping	2.0000e- 005	0.0000	2.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	5.8000e- 004	5.8000e- 004	0.0000	6.2000e- 004
Total	0.0408	0.0000	2.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	5.8000e- 004	5.8000e- 004	0.0000	6.2000e- 004

#### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	ay							lb/d	ay		
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0407					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e- 005	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004
Total	0.0408	0.0000	2.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		5.8000e- 004	5.8000e- 004	0.0000		6.2000e- 004

#### 7.0 Water Detail

## 7.1 Mitigation Measures Water

#### 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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#### 10.0 Stationary Equipment

## Fire Pumps and Emergency Generators

Equipment Type Number Hours/Day Hours/Year Horse Power Load Factor Fuel T	pe
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#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
=90.0				200	

#### **User Defined Equipment**

Equipment Type	Number
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## 11.0 Vegetation

#### **Air Quality Helicopter Emissions**

							<b>Emission F</b>	actors (	lb/hr)	*		Emissions	(lbs/day)			<b>Emissions</b>	(tons/year)	, '
Helicopter	Mode	Averege #LTO/Hr	Days/week	Hours/Day	<b>Duration (weeks)</b>	Horsepower	ROC	NOx	СО	PM10	ROC	NOx	СО	PM10	ROC	NOx	со	PM10
Bell 407	LTO	0.6	5	1.04	8	650	0.64	0.26	0.82	0.01	0.67	0.27	0.85	0.01	0.01	0.01	0.02	0.00
Bell 407	Operation	N/A	5	6.96	8	650	1.47	2.42	1.80	0.07	10.20	16.87	12.54	0.49	0.20	0.34	0.25	0.00
Bell 407	Total	N/A									10.87	17.14	13.39	0.50	0.22	0.34	0.27	0.00
		-	-				<b>Emission F</b>	actors (	lb/hr)	*		Emissions	(lbs/day)			Emissions	(tons/year)	,
Helicopter	Mode	Averege #LTO/Hr	Days/week	Hours/Day	<b>Duration (weeks)</b>	Horsepower	ROC	NOx	СО	PM10	ROC	NOx	СО	PM10	ROC	NOx	со	PM10
MD 500N	LTO	0.6	5	1.04	8	450	0.79	0.19	0.35	0.01	0.82	0.20	0.36	0.01	0.02	0.00	0.01	0.00
MD 500N	Operation	N/A	5	6.96	8	450	1.70	1.54	2.12	0.05	11.86	10.69	14.74	0.33	0.24	0.21	0.29	0.00
MD 500N	Total	N/A									12.68	10.89	15.10	0.34	0.25	0.22	0.30	0.00
							<b>Emission F</b>	actors (	lb/hr)	*		Emissions	(lbs/day)			Emissions	(tons/year)	,
Helicopter	Mode	Averege #LTO/Hr	Days/week	Hours/Day	<b>Duration (weeks)</b>	Horsepower	ROC	NOx	СО	PM10	ROC	NOx	со	PM10	ROC	NOx	со	PM10
SIKORSKY CH-53G (S-65)	LTO	0.6	5	1.04	4.2	7,850	0.77	3.73	0.95	0.09	0.80	3.87	0.99	0.09	0.01	0.04	0.01	0.00
SIKORSKY CH-53G (S-65)	Operation	N/A	5	6.96	4.2	7,850	1.81	38.08	2.13	0.86	12.60	265.03	14.80	5.96	0.13	2.78	0.16	0.01
SIKORSKY CH-53G (S-65)	Total	N/A		•							13.41	268.91	15.79	6.05	0.14	2.82	0.17	0.01

<sup>\*</sup>Federal Office of Civil Aviation (FOCA). n.d. Guidance on Determination of Helicopter Emissions.

#### Notes

Jet Fuel Density 840 Kg/m3 8 hours of helicpoter use

#### **GHG Helicopter Emissions**

Helicopter	Mode	Averege #LTO/Hr	Days/week	Hours/Day	<b>Duration (weeks)</b>	Horsepower	Fuel/hour (kg)	Fuel Per day	Gallons Per day	CO2 MT	CH4 MT	N20	CO2E
Bell 407	LTO	0.6	5	1.04	8	650	23.7	24.648	278.0219615	109.5406528	0.00	0.00	109.64
Bell 407	Operation	N/A	5	6.96	8	650	149	1037.04					
Bell 407	Total	N/A						1061.688	]				

Helicopter	Mode	Averege #LTO/Hr	Days/week	Hours/Day	Duration (weeks)	Horsepower	Fuel (kg)	Fuel Per day	Gallons Per day	CO2 MT	CH4 MT	N20	CO2E
MD 500N	LTO	0.6	5	1.04	8	450	19.2	19.968	218.4732108	86.07844506	0.00	0.00	86.15
MD 500N	Operation	N/A	5	6.96	8	450	117	814.32					
MD 500N	Total	N/A						834.288					

Helicopter	Mode	Averege #LTO/Hr	Days/week	Hours/Day	<b>Duration (weeks)</b>	Horsepower	Fuel (kg)	Fuel Per day	Gallons Per day	CO2 MT	CH4 MT	N20	CO2E
SIKORSKY CH-53G (S-65)	LTO	0.6	5	1.04	4.2	7,850	125.4	130.416	1814.832238	375.3980483	0.02	0.00	376.67
SIKORSKY CH-53G (S-65)	Operation	N/A	5	6.96	4.2	7,850	977	6799.92				•	
SIKORSKY CH-53G (S-65)	Total	N/A						6930.336					

<sup>\*</sup>Federal Office of Civil Aviation (FOCA). n.d. Guidance on Determination of Helicopter Emissions.

#### Notes

Jet Fuel Density 840 Kg/m3 8 hours of helicpoter use