DOCKETED	
Docket Number:	26-OPT-02
Project Title:	Seahawk Battery Energy Storage System
TN #:	270250
Document Title:	Application for Opt-In Certification Part 1
Description:	N/A
Filer:	Erin Phillips
Organization:	Dudek
Submitter Role:	Applicant Consultant
Submission Date:	5/27/2026 11:10:50 AM
Docketed Date:	5/27/2026

Application for Opt-In Certification

Seahawk Battery Energy Storage System Project

MAY 2026

Prepared for:

CALIFORNIA ENERGY COMMISSION
715 P Street
Sacramento, California 95814

Prepared by:

Project Applicant:

SEQUOIA ENERGY 1 LLC

Project Applicant Consultant:

DUDEK

687 S. Coast Highway 101, Suite 110
Encinitas, California 92024

Table of Contents

SECTION **PAGE NO.**

Acronyms and abbreviations ACR-1

1 Summary 1-1

2 Introduction 2-1

3 Environmental Analysis 3-1

- 3.1 Air Quality and GHG 3.1-1
- 3.2 Biological Resources 3.2-1
- 3.3 Cultural Resources (Confidential) 3.3-1
- 3.4 Geological Hazards and Resources 3.4-1
- 3.5 Hazardous Materials Handling 3.5-1
- 3.6 Land Use 3.6-1
- 3.7 Noise 3.7-1
- 3.8 Paleontological Resources 3.8-1
- 3.9 Public Health 3.9-1
- 3.10 Socioeconomics 3.10-1
- 3.11 Soils 3.11-1
- 3.12 Traffic and Transportation 3.12-1
- 3.13 Visual Resources 3.13-1
- 3.14 Waste Management 3.14-1
- 3.15 Water Resources 3.15-1
- 3.16 Wildfire 3.16-1
- 3.17 Worker Health & Safety 3.17-1

4 Alternatives 4-1

5 Persons Who Prepared 5-1

APPENDICES

1A Property Owner Information (Confidential)

1B Attestation Letter

1C Labor Certification

1D Community Benefits Plan

2A Site Plan Package

2B Landscape Plan

2C Civil Plans

2D Lighting Plan

2E CAISO Studies (Confidential)
2F Electric & Magnetic Fields Study
2G Decommissioning Plan
3.2A Special-Status Species Potential to Occur Tables
3.2B Sensitive Species Database Searches
3.2C Observed Plant and Wildlife Species Compendium
3.2D Lake and Streambed Alteration Agreement Application
3.2E Resumes of Applicant's Biologists
3.4A Geotechnical Engineering Report
3.4B Geologic Fault Investigation
3.5A Phase I Environmental Site Assessment
3.5B Hazardous Materials Business Plan Template
3.5C Spill Prevention, Control, and Countermeasure Plan Template
3.5D Phase II Environmental Site Assessment
3.5E Contaminated Soil Mitigation Study
3.6A Land Use Inventory
3.6B Site Documentation Control
3.7A Baseline Sound Measurement Field Data
3.7B Construction Noise Model Inputs and Outputs
3.7C Traffic Noise Modeling Worksheets
3.7D Stationary Operations Source Inputs and Results
3.7E Construction Vibration Calculations
3.8A Paleontological Resources Records Search Letter (Confidential)
3.8B Paleontological Resources Memorandum
3.10 Additional Socioeconomics Information
3.12A Transportation Study Calculations
3.12B Federal Aviation Administration Pre-Screening
3.13 Scenic Resources within 5 mi
3.15A Downstream Impact Report
3.15B Storm Water Control Operation and Maintenance Paln
3.15C Storm Water Control Plan
3.15D Water Supply Assessment
3.16A UL 9540A Test Results (confidential)
3.16B Hazard Mitigation Analysis
3.16C Emergency Response Plan

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ADT	average daily trips
AFY	acre-feet per year
AIA	Airport Influence Area
APN	Assessor's Parcel Number
BESS	battery energy storage system
bgs	below ground surface
BMP	best management practice
C&D	construction and demolition
CadnaA	Computer Aided Noise Abatement
CAISO	California Independent System Operator
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Division of Occupational Safety and Health
CALGreen	California Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CBC	California Building Code
CCED	California Conservation Easement Database
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CGS	California Geological Survey
CHP	California Highway Patrol
CIWMA	California Integrated Waste Management Act
CNEL	Community Noise Equivalent Level
County	County of Santa Cruz
County Code	Santa Cruz County Code
CPAD	California Protected Area Database
CPT	cone penetration test
CPUC	California Public Utilities Commission
CVC	California Vehicle Code
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel

Acronym/Abbreviation	Definition
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EMF	electromagnetic field
EPA	U.S. Environmental Protection Agency
ERP	Emergency Response Plan
ESA	Environmental Site Assessment
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FICON	Federal Interagency Committee on Noise
FP	Fully Protected
FRAP	Fire and Resource Assessment Program
FTA	Federal Transit Administration
gen-tie	generation interconnect
GHG	greenhouse gas
GO	General Order
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFTD	High Fire-Threat District
HMA	Hazard Mitigation Analysis
HMBP	hazardous materials business plan
in/sec	inches per second
KOP	key observation point
kV	kilovolt
L_{dn}	day-night average sound level
L_{eq}	equivalent sound level
LHMP	Local Hazard Mitigation Plan
LID	low-impact development
L_{max}	maximum sound level
L_{min}	minimum sound level
LO/TO	lock-out/tag-out
LORS	laws, ordinances, regulations, and standards
LORS	laws, ordinances, regulations, and standards
LOS	level of service
LRA	Local Responsibility Area
L_{xx}	percentile-exceeded sound level
MBTA	Migratory Bird Treaty Act
mg/L	milligrams per liter
MM	Mitigation Measure

Acronym/Abbreviation	Definition
mph	miles per hour
MPT	main power transformer
MRZ	mineral resource zone
MS4	municipal separate storm sewer system
MW	megawatt
MWh	megawatt-hour
NCCP	Natural Community Conservation Plan
NFPA	National Fire Protection Association
NFPA	National Fire Protection Association
NHD	National Hydrography Dataset
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NWW	non-wetland water
O&M	operations and maintenance
OBL	obligate wetland
OHWM	ordinary high -water mark
OPR	Governor's Office of Planning and Research
OW	other waters
PAD-US	Protected Areas Database of the United States
PCE	passenger car equivalent
PCS	Power Conversion System
PDF	Project Design Feature
PG&E	Pacific Gas and Electric Company
POCO	Point of Change of Ownership
POI	Point of Interconnection
Porter–Cologne Act	Porter–Cologne Water Quality Control Act
PPE	personal protective equipment
PPV	peak particle velocity
PRC	California Public Resources Code
project	Seahawk Battery Energy Storage System Project
PV Water	Pajaro Valley Water Management Agency
PVFPD	Pajaro Valley Fire Protection District
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCADA	supervisory control and data acquisition
SCCC	Santa Cruz County Code

Acronym/Abbreviation	Definition
SCCFD	Santa Cruz County Fire Department
SGMA	Sustainable Groundwater Management Act
SLM	sound level meter
SMP	soil management plan
SP	sampling point
SPCC	spill prevention, control, and countermeasure
SR	State Route
SRA	State Responsibility Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDS	total dissolved solids
TOB	top of bank
UL	Underwriters Laboratories
UPL	upland
USACE	U.S. Army Corps of Engineers
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
WDR	Waste Discharge Requirement
WET	wetland
WOTUS	waters of the United States
WUI	wildland/urban interface

1 Executive Summary

Sequoia Energy 1 LLC (applicant), a subsidiary of New Leaf Energy Inc., proposes to construct, operate, and maintain a 200-megawatt (MW) battery energy storage system (BESS) facility and associated interconnection facilities (collector substation and transmission line). The proposed Seahawk BESS Project (project) is located on an approximately 16-acre site on a 47.4-acre property in unincorporated Santa Cruz County. The primary components of the project include a BESS facility utilizing lithium iron phosphate batteries, or similar technology; inverters and transformers; an on-site collector substation (project substation); a generation interconnect (gen-tie) line; an operations and maintenance (O&M) building; a fire protection system; access improvements; stormwater management; a noise mitigation wall; a supervisory control and data acquisition (SCADA) system; and temporary construction laydown areas. The project would interconnect from the project substation to the adjacent Pacific Gas and Electric Company (PG&E) Green Valley Substation via a 115-kilovolt (kV) gen-tie transmission line. The line would be installed underground from the project substation to the Point of Change of Ownership (POCO) at an overhead riser pole on the PG&E parcel, and an overhead gen-tie line would connect to the Point of Interconnection (POI) at the PG&E Green Valley Substation. The location and main elements of the project are discussed in the following subsections. Figure 1-1, Regional Map, depicts the regional location and project vicinity. Figure 1-2, Project Site Map, depicts the project site.

The proposed facility would provide a service to the regional electric grid by receiving energy (charging) from the PG&E electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the POI. The project would provide economic benefits to the County of Santa Cruz (County) and additional capacity and reliability to the electrical grid. This project accommodates the integration of additional intermittent renewable energy sources and reduces the need to operate natural gas power plants. The project would also assist the County in meeting its climate resiliency and clean energy goals by providing electrical energy storage.

The project would be remotely operated and monitored year-round as well as supported by weekly maintenance visits by up to eight workers. The project would be available to receive or deliver energy 24 hours a day, 365 days a year. During the operational life of the project, qualified technicians would inspect the project facilities annually and conduct necessary maintenance to ensure reliable and safe operations.

The project's principle basic objectives, detailed in Chapter 2, Project Description, of this application, include (1) construct and operate a 200 MW, 800-megawatt-hour BESS facility in Santa Cruz County using economically feasible, commercially available, and proven technology capable of operating at utility scale, with an interconnection using available system capacity adjacent to the existing PG&E Green Valley Substation; (2) provide economic benefits to the County, create prevailing wage jobs, and facilitate local community benefits; (3) provide a service to the regional electric grid by receiving energy (charging) from the PG&E electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the POI; (4) add reliability to the California electric grid and help meet the California Public Utilities Commission's June 2021 decision requiring 11,500 MW of new capacity additions to the California Independent System Operator (CAISO) system; (5) provide additional capacity to the electrical grid to assist with serving load during periods of peak demand by charging when demand is low and discharging when demand is high; (6) accommodate the integration of additional intermittent renewable energy sources, such as wind and solar, and reduce the need to operate natural gas power plants; (7) serve as an additional local capacity resource that would enhance grid reliability; (8) assist the County in meeting its climate resiliency and clean energy goals by providing electrical energy storage; (9) provide energy storage capacity and dispatch for the electrical grid; (10) include all required off-site improvements, including a secondary emergency access route and

upgrades necessary to provide water service as required to meet California Fire Code and local emergency response requirements; (11) help ensure electrical transmission system reliability and that clean renewable energy sources can meet peak demand and help prevent outages and blackouts in Santa Cruz County in the face of climate change; (12) assist the County in meeting its net-zero greenhouse gas (GHG) emissions and the state's 100% zero-carbon electricality goals by 2045 by contributing energy storage in Santa Cruz County; and (13) ensure public safety by complying with applicable California Fire Code and National Fire Protection Association (NFPA) standards, providing emergency access and internal fire roads, ensuring 100-foot setbacks from public roads and adjacent parcels (excepting the substation), and excluding BESS modules within 1,000 feet of a parcel containing an existing hospital, school, commercial day care center, or residential care facility for older adults.

1.1 Project Location

A project at the Green Valley Substation would help California achieve its GHG reduction goals, help the County meet its climate resiliency and clean energy goals, and support the California Public Utilities Commission's June 2021 decision to add 11,500 MW of new capacity to the CAISO system. This project would accommodate the integration of additional intermittent renewable energy sources, such as wind and solar, which reduces the need to operate natural gas power plants, and would serve as an additional local capacity resource that would enhance grid reliability. The project has been awarded deliverability by CAISO with interconnection to the Green Valley Substation due to its electrical characteristics (i.e., sufficient capacity to interconnect transmission-level generation) and viable land that is adjacent, open, and flat with sufficient area to accommodate the project, including proposed emergency access and setback area.

Land uses in the immediate vicinity of the project include agricultural; utilities, including multiple high-voltage transmission lines and an electrical substation; residential; and paved and rural roads. The property is currently used for agricultural production, consisting of orchards. The property is bound by Minto Road to the north and northwest, the Green Valley Substation to the northwest, the Transportation Office of Pajaro Valley Unified School District to the south, and agricultural uses to the east and south. The nearest incorporated municipality to the project site is the City of Watsonville, which is approximately 1 mile to the south.

Table 1-1, Project Parcels, provides the Section, Township, Range, and Assessor's Parcel Number (APN) for all parcels located on the project site. A map of the APNs within 1,000 feet of the project facilities and 500 feet of the gen-tie line routes are provided in Confidential Appendix 1A, Property Owner Information.

Table 1-1. Project Parcels

Project Component	Assessor's Parcel Number	Section, Township, Range
BESS Facility Site	051-101-77	Section 28, Township 11S, Range 2E
	051-101-78	Section 28, Township 11S, Range 2E
Gen-Tie Route	051-101-77	Section 28, Township 11S, Range 2E
Gen-Tie Route (continued) and Existing PG&E Green Valley Substation	051-091-03	Section 28, Township 11S, Range 2E
Secondary Access Road Options 1 and 2	051-101-59	Section 28, Township 11S, Range 2E
Secondary Access Road Option 3	051-101-53	Section 28, Township 11S, Range 2E

Note: BESS = battery energy storage system; gen-tie = generation interconnect; PG&E = Pacific Gas and Electric Company.

1.2 Project Elements

The project includes construction, O&M, and eventual decommissioning of an approximately 200 MW BESS. A 115 kV gen-tie, connecting the project substation to the POI at the existing Green Valley Substation, would be used to charge from and discharge to the electrical grid. Figure 1-3, Site Layout, shows the project site layout. Figure 1-4, Visual Appearance of the Site Prior to Construction, and Figures 1-5a through Figure 1-5c, Visual Appearance of the Site After Construction, include a rendering of the site and all project components before and after construction.

The project includes the following components:

- **Battery Energy Storage System:** Lithium iron phosphate cells, or similar technology, form the core of the BESS. The cells are the basic functional electrochemical unit, containing an assembly of electrodes, an electrolyte, separators, containers, and terminals. Cells store electrical energy through direct conversion of chemical energy. The cells would be installed in battery modules on racks and enclosed in prefabricated, non-habitable enclosures. The BESS enclosures would also have a thermal management system for optimal performance and safety in accordance with Underwriters Laboratories (UL) 9540. Power for the heating, ventilation, and air conditioning system, lighting, and other electrical systems would be provided through separate auxiliary power connection to the on-site project substation with connection lines installed above and/or belowground. The CATL model EnerC+ 306 has been selected for this project application as a representative BESS enclosure. CATL model EnerC+ 306 design and operation information is used in this application to set maximum potential impact envelopes, for site design and modeling analysis, and to set baseline safety standards. A final manufacturer for the BESS enclosures would be selected during the detailed design process post-certification.
- **Inverters and Transformers:** Power inverters to convert between alternating current and direct current would be included, along with transformers that would step up the voltage.
- **Project Substation:** The project substation would include two main power transformers. When the BESS facility is charging, power from the regional electric transmission grid would be stepped down from 115 kV to 34.5 kV and sent from the project substation through the medium voltage collection system and Power Conversion System units into the battery packs in the BESS enclosures. When the BESS facility is discharging, power from the battery packs in the BESS enclosures would be sent to the Power Conversion System units, stepped up to 34.5 kV, and transported to the project substation through the medium voltage collection system before being stepped up to 115 kV at the main power transformers and delivered back to the regional electric transmission grid. A control building would be installed adjacent to the project substation area and contain an energy management system, metering, and telecommunication equipment for communication with PG&E/CAISO facilities and to support remote project operations monitoring.
- **115 kV Gen-Tie Line, Including Transmission Structures and Conductors:** The project would be interconnected to the regional electrical transmission grid via a new 0.21-mile single circuit 115 kV gen-tie line. The gen-tie line would originate at the project substation on the BESS facility site and extend west, crossing Minto Road, and then continue parallel to the existing Minto Road right-of-way. The gen-tie line would then route northwest and continue parallel to the boundary of the Green Valley Substation until turning east to reach the POI at the Green Valley Substation. Following this route, trenched underground gen-tie wires would be installed from the project substation to the POCO at the overhead riser pole on the PG&E property, after which the gen-tie line would be overhead. Interconnection via overhead methods to the Green Valley Substation would require off-site 115 kV

transmission poles for the overhead gen-tie line wires. The gen-tie route would be sited on APN 051-101-77 on the project site and on APN 051-091-03 on the adjacent Green Valley Substation parcel (see Figure 1-3). The applicant would construct and own the portion of the gen-tie line between the project substation to the POCO, and PG&E would construct and own the remaining portion of the gen-tie from the POCO to the Green Valley Substation POI. Two fiber optic cables, separated by at least 10 feet, are anticipated to be installed. One of the two fiber optic lines would be installed underground from the project site to the Green Valley Substation. PG&E would install the other fiber optic line on a portion of the gen-tie line; the fiber optic line would split off from the gen-tie line within the PG&E property and connect to a separate POI.

- **Access Improvements:** The project's roadway system would use existing roads wherever available and feasible. Access to the gen-tie line is expected to be via the existing 90 Minto Road right-of-way. Access to the project site would be via Minto Road. A 20-foot-wide gravel access road would be constructed around and through the BESS facility and to the collector substation. A secondary emergency access road would be provided to the site via a 20-foot-wide gravel, all-weather access road. Three options are being considered for the secondary emergency access road, which would extend the on-site access to the south, along the project's southern/southeastern boundaries. Options 1 and 2 would go through a County-owned property (APN 051-101-59) to the south along two different alignments as shown in Figure 1-3, to connect to Grimmer Road. Option 1 would extend through undeveloped land and a parking area to connect to Grimmer Road. Option 2 would extend from the project property through an existing parking area on the County's parcel to connect to Grimmer Road. Option 3 would extend southwest across APN 051-101-78, cross into the southern-adjoining parcel (APN 051-101-53), continue southeast before turning west, continue southeast, and terminate where the Grimmer Road public right-of-way starts. All internal roadways and private driveways would be constructed to meet access requirements for construction, O&M, and emergency response.
- **Supervisory Control and Data Acquisition:** One control enclosure for the SCADA system would be located on site to allow off-site monitoring.
- **Temporary Construction Laydown Areas:** The project would include up to two temporary construction laydown areas for equipment and material staging and storage during construction. These areas would also be used for worker parking during construction. The laydown areas would be located in the western portion of the project site as shown in Figure 1-3. The laydown areas are anticipated to be bladed, compacted, and surfaced with aggregate or other soil-stabilizing materials. Landscape fabric may also be installed under the surface of all laydown areas to prevent vegetation growth, if required to comply with fire prevention standards.
- **Stormwater Management:** Stormwater management practices for the project site would include a gravel base and concrete drainage channels along the northern and southern sides of the BESS facility, connecting to bio-filtration ponds. Stormwater generated on site would flow to three on-site stormwater detention basins in the eastern portion of the project site (Figure 1-3). The proposed drainage route is designed to release at the same location as pre-development conditions, mimicking the existing flow direction. Stormwater treatment and storage sizing would be designed to hold the anticipated runoff from a 25-year storm event, releasing at a 5-year pre-development rate.
- **Site Security:** The project BESS facility site would be enclosed with a noise mitigation wall. The noise mitigation wall would be 14 feet tall along the northern side of the facility and 12 feet high on the southeastern and southern sides of the facility. Each entrance to the BESS facility site would include a 22-foot-wide vehicular gate with knox box key access for authorized personnel.

The project would include minimal lighting for safety at night, consisting of motion-activated lighting. Controlled security lighting, up to 20 feet in height, would be installed at the project substation and around the BESS facility site, in accordance with applicable laws, ordinances, regulations, and standards. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties, compliant with applicable codes and regulations. The BESS facility site would be remotely monitored 24/7.

- **Operations and Maintenance Building:** An existing residential structure located near the northwestern side of the project site along Minto Road would be used as an office space for the BESS. No additional O&M buildings are proposed for construction on site. Additional structures adjacent to the proposed O&M building would remain available for agricultural operations use.
- **Fire Protection System:** Fire protection systems would be incorporated within each individual BESS enclosure and would include remote monitoring. The project's fire protection system would comply with all applicable standards, including the International Fire Code, the California Fire Code, the NFPA Standard for the Installation of Stationary Energy Storage Systems (NFPA 550 and NFPA 855), UL 9540A, UL 1973, UL 1741, UL 9540, and the Institute of Electrical and Electronics Engineers (IEEE) C2. BESS enclosures would be UL listed, tested, and certified to the most rigorous international safety standards. UL independently tests equipment for compliance with the latest fire safety code requirements, and the methods were developed to minimize fire risk and safety concerns about battery storage equipment raised by fire departments and building officials in the United States. The project would meet state and local fire code requirements for new facilities and energy storage systems, including providing access and adequate water supply throughout the facility.

1.3 Project Schedule

The project is anticipated to be built over an approximately 12- to 18-month period from the onset of site preparation activities through energization. Initial mobilization and site preparation is anticipated to begin in 2027, and testing and commissioning are anticipated to conclude no later than June 2029. Decommissioning is expected to begin in June 2064. The construction schedule presented herein is preliminary and intended to illustrate the anticipated sequence and phasing of project development. Actual start time of construction may occur later than the representative start date based on final design, permitting, and other factors. It is anticipated that construction crews would work up to 10 hours per day, with work occurring Monday through Friday, excluding federal holidays. Overtime, night work, and weekend work would be used only as necessary to meet the project schedule or complete time-sensitive or safety critical work. All work schedules would comply with applicable laws, ordinances, regulations, and standards.

1.4 Project Ownership

Sequoia Energy Storage 1 LLC c/o New Leaf Energy Inc. (applicant) would oversee project construction, operation, and maintenance. PG&E would be owner and operator of the gen-tie from the POCO to the POI at Green Valley Substation. The applicant, or its affiliates, would have site control of the BESS facility site. The applicant plans to enter into an agreement with the property owner for the secondary access road.

1.5 Structure of This Application

This application is organized as follows:

- **Chapter 1: Executive Summary**. This chapter provides a discussion of the project components and background, describes the project benefits, summarizes the anticipated schedule, includes a list of APNs near the proposed project, and summarizes the contents of the application.
- **Chapter 2: Project Description**. This chapter provides a detailed description of the project and its various components; identifies the project's location; explains the project's purpose and objectives; and provides details regarding the project's construction, operations, and decommissioning; and explains the intended uses of the application and authorizing actions.
- **Chapter 3: Environmental Analysis**. This chapter includes a description of the environmental setting, regulatory setting, cumulative setting, and impact analysis for each environmental factor (resource area). The resource areas addressed in Sections 3.1 through 3.17 include all resource areas identified in the most recently adopted version of the California Energy Commission (CEC) Appendix B checklist and all additional relevant resource areas and impact questions that are defined in the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.). Each section addresses the baseline conditions, applicable regulations, impact questions, analysis methodology, environmental impacts, and mitigation measures to reduce or avoid significant effects. A determination is provided in each section to summarize the level of impact (i.e., no impact, less-than-significant impact, less-than-significant impact with mitigation incorporated, and potentially significant impact) to each resource area, according to CEQA and other applicable significance criteria. The following resource areas are included in Chapter 3:
  - ***Section 3.1:*** Air Quality
  - ***Section 3.2:*** Biological Resources
  - ***Section 3.3:*** Cultural and Tribal Resources
  - ***Section 3.4:*** Geological Hazards and Resources
  - ***Section 3.5:*** Hazardous Materials Handling
  - ***Section 3.6:*** Land Use
  - ***Section 3.7:*** Noise
  - ***Section 3.8:*** Paleontological Resources
  - ***Section 3.9:*** Public Health
  - ***Section 3.10:*** Socioeconomics
  - ***Section 3.11:*** Soils
  - ***Section 3.12:*** Traffic and Transportation
  - ***Section 3.13:*** Visual Resources
  - ***Section 3.14:*** Waste Management
  - ***Section 3.15:*** Water Resources
  - ***Section 3.16:*** Wildfire
  - ***Section 3.17:*** Worker Health and Safety

- **Chapter 4: Alternatives.** This chapter identifies alternatives to the project in accordance with CEQA Guidelines Section 15126.6, including a thorough description of the No Project Alternative and all alternatives considered and rejected and the reasons why the applicant chose the proposed site in accordance with Public Resources Code (PRC) Section 25540.6(b).
- **Chapter 5: Persons Who Prepared the Application.** This chapter identifies all persons responsible for preparation of the application.

1.6 Mandatory Opt-In Requirements

This application was prepared pursuant to the requirements of PRC Sections 25520 and 25545.2 and CEC's siting regulations relating to non-fossil-fueled powerplants, energy storage facilities, and related facilities (20 CCR 1875 et seq.). In accordance with Section 1876.5 of the CEC's regulations, the applicant met with CEC staff on April 10, 2026, more than 30 days prior to filing this opt-in application.

1.6.1 Authority and Verification

A letter was signed and dated by the applicant attesting under penalty of perjury to the truth and accuracy of this application (see Appendix 1B, Attestation Letter). The attestation meets the requirements of California Code of Regulations (CCR) Title 20, Sections 1208, 1707, and 1876.

1.6.2 Facility Definition

Consistent with Section 1877(b) of the CEC's regulations, this section provides information stating how the project meets the definition of "facility" set forth in PRC Section 25545(b)(2). Section 25545(b)(2) defines a "facility" as follows:

> An energy storage system as defined in Section 2835 of the Public Utilities Code that is capable of storing 200 megawatt hours (MWh) or more of electrical energy.

Public Utilities Code Section 2835 provides, in pertinent part, that an energy storage system is "commercially available technology that is capable of absorbing energy, storing it for a period of time, and thereafter dispatching the energy" and may have any of the following characteristics:

> A. Be either centralized or distributed
> B. Be either owned by a load-serving entity or local publicly owned electric utility, a customer of a load-serving entity or local publicly owned electric utility, or a third party, or is jointly owned by two or more of the above.

An energy storage system must be "cost effective and either reduce emissions of greenhouse gases, reduce demand for peak electrical generation, defer or substitute for an investment in generation, transmission, or distribution assets, or improve the reliable operation of the electrical transmission or distribution grid" (Public Utilities Section 2835[a][3]). Public Utilities Code Section 2835(a)(4) also provides that an energy storage system must do one or more of the following:

> A. Use mechanical, chemical, or thermal processes to store energy that was generated at one time for use at a later time.

B. Store thermal energy for direct use for heating or cooling at a later time in a manner that avoids the need to use electricity at that later time.

C. Use mechanical, chemical, or thermal processes to store energy generated from renewable resources for use at a later time.

D. Use mechanical, chemical, or thermal processes to store energy generated from mechanical processes that would otherwise be wasted for delivery at a later time.

This application seeks certification of the project as an energy storage system capable of storing 200 megawatt-hours or more of electrical energy, as defined in PRC Section 25545(b)(2) and Public Utilities Code Section 2835. As described throughout this application and in greater detail in Chapter 2, the project would use commercially available technology to store up to 200 MW (or 800 megawatt-hours) of electricity for later dispatch to the grid. The project may allow for the deferral or avoidance of regional transmission facilities and would improve the reliable operation of the electrical transmission grid.

1.6.3 Project Labor Code Requirements

Consistent with Section 1877(c) of the CEC's regulations, this opt-in application contains all certifications required by PRC Sections 25545.3.3 and 25545.3.5.

Sections 25545.3.3 and 25545.3.5 require this application to include a certification relating to specific commitments concerning labor used to construct the facility. The applicant "certifies" that it would meet the requirements of a covered project and that a skilled and trained workforce would be used to perform all construction work on the project. The applicant certifies that the construction of the covered project is not in its entirety a public work for purposes of Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 of the Labor Code. The applicant further certifies that the project would be constructed pursuant to a project labor agreement and that the terms of the project labor agreement would comply with Section 25545.3.3(b)(6) and Section 25545.3.5(e) and therefore would meet the requirements of all the applicable provisions of Section 25545.3. These certifications are provided in Appendix 1C.

1.6.4 Permit Application Submission History

Consistent with Section 1877(d) of the CEC's regulations, this section identifies and discusses whether the applicant has submitted any local, state, or federal permit applications. This section also discusses the plan to obtain any required permit that has not yet been submitted to the relevant state agency. The applicant previously submitted a Conditional Use Permit application to the County in December 2024. The applicant has not submitted any state or federal permit applications. Below is a list and brief description of federal, state, and local permits and approvals that may be required to implement the proposed project.

Federal

The project may require a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers. A request for an Approved Jurisdictional Delineation has been submitted to the U.S. Army Corps of Engineers to determine whether the aquatic features on the project site are federally jurisdictional. Secondary Access Road Option 3 is the only expected project component that has potential to impact potential federal jurisdictional aquatic features. The applicant will provide the Approved Jurisdictional Delineation and any future correspondence and permitting material to CEC staff when available.

State

The following state applications may be required:

- **California Public Utilities Commission:** Since the project interconnection facilities (e.g., gen-tie line) are required to be owned in part by PG&E, the California Public Utilities Commission would have jurisdiction over the approval of those portions of the project, pursuant to General Order 131-E, and may rely on the this application and the CEC's analysis to fulfill its CEQA review obligations of any substation or interconnection facility improvements under its jurisdiction that are necessary to serve the project. PG&E would be responsible for this submittal and coordination with the California Public Utilities Commission after the CEC issues its decision on the application.
- **Regional Water Quality Control Board:** Pursuant to provisions of the Porter–Cologne Water Quality Control Act (Porter–Cologne Act), the Regional Water Quality Control Boards regulate discharging waste, or proposing to discharge waste, in any region that could affect a water of the state (California Water Code Section 13260[a]). The State Water Resources Control Board defines a water of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]). All waters of the United States are waters of the state. Wetlands, such as isolated seasonal wetlands, that are not generally considered waters of the United States are considered waters of the state if, "under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation" (SWRCB 2021). If a Clean Water Act Section 404 permit is not required for a project, the Regional Water Quality Control Board may still require a permit (waste discharge requirements) for impacts to waters of the state under the Porter–Cologne Act. The project is expected to require a Waste Discharge Requirements permit from the Regional Water Quality Control Board for Secondary Access Road Option 3.
- **California State Water Resources Control Board:** The 1972 amendments to the Clean Water Act provide that it is unlawful to discharge pollutants to waters of the United States from any point source, unless the discharge complies with a National Pollution Discharge Elimination System Permit, and establish a framework to regulate municipal and industrial stormwater discharges under the National Pollution Discharge Elimination System Program. The State Water Resources Control Board has elected to adopt one statewide general permit, the 2022 Construction General Permit, that would apply to most stormwater discharges associated with construction and land disturbance activities (SWRCB 2022). Per the State Water Resources Control Board, "Construction activity resulting in a land disturbance of one acre or more, or less than one acre but part of a larger common plan of development or sale that in total disturbs one or more acres, must obtain coverage under the CGP [Construction General Permit]" (SWRCB 2025). The project is expected to require coverage under the National Pollution Discharge Elimination System 2022 Construction General Permit.
- **California Department of Fish and Wildlife:** California Fish and Game Code Section 1602 "requires any person, state or local governmental agency, or public utility to notify the California Department of Fish and Wildlife (CDFW) prior to beginning any activity that may do one or more of the following: [d]ivert or obstruct the natural flow of any river, stream, or lake; [c]hange the bed, channel, or bank of any river, stream, or lake; [u]se material from any river, stream, or lake; or [d]eposit or dispose of material into any river, stream, or lake.... A Lake and Streambed Alteration (LSA) Agreement is required when a project activity may substantially adversely affect fish and wildlife resources" (CDFW 2026) The project is expected to require a Lake and Streambed Alteration Agreement from the California Department of

Fish and Wildlife under Section 1600 et seq. of the California Fish and Game Code for Secondary Access Road Option 3.

- **California Department of Transportation:** The California Department of Transportation "has discretionary authority with respect to highways under its jurisdiction and may, upon application and if good cause appears, issue a special permit to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. The Caltrans [California Department of Transportation] Office of Commercial Vehicle Operations is responsible for the issuance of these special transportation permits for oversize/overweight vehicles on the State Highway System" (Caltrans 2026a). The California Department of Transportation also issues single trip permits for hauling non-reducible loads (Caltrans 2026b). The project may require transportation and haul permits from the California Department of Transportation for construction traffic.
- **California Highway Patrol:** "Section 32000.5 of the California Vehicle Code requires a person who transports hazardous materials in certain quantities to obtain a Hazardous Materials Transportation License from the California Highway Patrol… A Hazardous Materials Transportation License is required to be obtained in either of the following circumstances: The shipment of HM requires the display of hazard warning placards; The shipment of HM exceeds 500 pounds, is being transported for a fee (for-hire), and the material would normally require placards if shipped in a greater quantity" (CHP n.d.). The project may require a Hazardous Materials Transportation License through the California Highway Patrol for the transport of hazardous materials. **California Occupational Safety and Health Administration:** CCR Title 8, Sections 341 and 341.1 require employers to obtain Project Permits and Annual Permits from the California Division of Occupational Safety and Health (Cal/OSHA) before conducting specific construction activities. A Project Permit is required to from Cal/OSHA to build or erect a structure intended to be more than 36 feet in height when completed. Either a Project Permit or an Annual Permit is required to construct a trench or an excavation 5 feet or deeper into which any person is required to descend (DIR 2026). The project may require the above permits and other Cal/OSHA permits such as confined spaces for planned construction activities.

Local

The following local applications may be required. No discretionary local permits would be required to implement the proposed project as the CEC's certificate would be in lieu of any local permit or local law or ordinance.

The County issues transportation permits for oversized or overweight loads in unincorporated areas (County of Santa Cruz 2026a) and encroachment permits for the performance of work on County roads right-of-way (County of Santa Cruz 2026b). The project may require transportation and/or encroachment permits from the County for construction work and traffic.

1.6.5 Public Resources Code Sections 25526 and 25527

Consistent with Section 1877(e) of the CEC's regulations, this section of the opt-in application discusses whether the project is located on an area identified in PRC Section 25527, on a site designated by the California Coastal Commission under PRC Section 30413(b), or on a site designated by the San Francisco Bay Conservation and Development Commission under Government Code Section 66645(b). The project is located on private parcels and is not located on an area identified in PRC Section 25527, a site designated by the California Coastal Commission

under PRC Section 30413(b), or a site designated by the San Francisco Bay Conservation and Development Commission under Government Code Section 66645(b).

See Section 3.6 for additional information regarding the project site characteristics and designations.

1.6.6 Legally Binding Enforceable Agreement(s) for Community Benefits of the Project

Consistent with Section 1877(g) of the CEC's regulations, this opt-in application includes the applicant's plan or strategy, including a timeline for execution, to obtain legally binding and enforceable agreement(s) with, or that benefit, a coalition of one or more community-based organizations prior to project certification, consistent with PRC Section 25545.10.

As part of the project, the applicant plans on making significant investments over the next 5 to 10 years with community-based initiatives and programs in the Santa Cruz County area. The applicant has been meeting with multiple County-based community organizations and will be meeting with additional County-based organizations to better understand their immediate and long-term needs and how their missions directly support the residents of the surrounding communities. A brief description of several of the opportunities currently under consideration and a timeline for the execution of one or more legally binding and enforceable community benefits agreements is provided in the preliminary Community Benefits Plan in Appendix 1D.

1.6.7 Environmental Leadership Development Project Requirements

The project meets the requirements of PRC Sections 21183 and 21183.6 for the following reasons:

- The project qualifies as a leadership project because it would comply with PRC Section 21183(a)(1) as it would result in a minimum investment of $100 million ($100,000,000) in California upon completion of construction. See Section 3.10 of this application for a description of the project's capital investment.
- The project would be constructed in accordance with a project labor agreement that would comply with Section 21183(b).
- The project would comply with Section 21183(c) and Section 21183.6 because GHG emission impacts from the project would be less than significant, as demonstrated in Section 3.1 of this application. A discussion of existing conditions of GHGs is included in Section 2, Existing Conditions, in the Greenhouse Gas Assessment for the Seahawk Battery Energy Storage System Project (GHG Assessment) included in Section 3.1, and a discussion of GHGs emitted by the project is included in Section 5, Project Impacts, of the GHG Assessment. GHG emissions emitted by the project would include emissions from direct and indirect sources resulting from the construction and operation of the project. Direct project-related GHG emissions include emissions from construction activities, area sources, mobile sources, and refrigerants, while indirect sources include emissions from energy consumption, water demand, and solid waste generation. As PG&E, the energy provider for the project, moves toward meeting the state's Renewable Portfolio Standard goals of 100% renewable energy by 2045 as established in Senate Bill 100, GHG emissions from the project would be reduced. Additionally, the project would assist PG&E and the state in meeting Renewable Portfolio Standard

goals by supporting the use of intermittent renewable energy sources, such as solar and wind. Therefore, the project's emissions associated with electricity would become net-zero over time as PG&E's electricity generation sources shift toward renewables, and the project would assist the state and local utility in meeting its renewable energy goals outlined in Senate Bill 100.

- The project would generate very little solid and no organic waste, and therefore it would not be required to comply with the waste-related laws referenced in Section 21183(d).
- By filing this opt-in application with the CEC, the applicant agrees to be legally bound by the terms and conditions of the CEC license, thereby satisfying Section 21183(e).
- The applicant also agrees to pay the court and record preparation costs identified in Section 21183(f) and (g).
- With respect to Section 21183(h), the applicant acknowledges its understanding that, at the time the draft environmental impact report is released, all then-available materials to be included in the record of proceedings must be publicly available and downloadable from an internet website maintained by CEC. The applicant further acknowledges its understanding that materials prepared or received after the release of the draft environmental impact report must be promptly posted from the same website within the time limits prescribed by PRC Section 21186.

1.7 References

CHP (California Highway Patrol). n.d. *Vehicles Transporting Hazardous Materials CHP 800C (Rev. 9-15) OPI 062.* Accessed May 15, 2026. https://www.chp.ca.gov/siteassets/forms/chp800c.pdf.

Caltrans (California Department of Transportation). 2026a. "Transportation Permits (Oversize/Overweight Vehicles)." Accessed May 15, 2026. https://dot.ca.gov/programs/traffic-operations/transportation-permits.

Caltrans. 2026b. "Single Trip Permit." Accessed May 15, 2026. https://dot.ca.gov/programs/traffic-operations/transportation-permits/single-trip.

CDFW (California Department of Fish and Wildlife). 2026. "Lake and Streambed Alteration Program." Accessed May 15, 2026. https://wildlife.ca.gov/Conservation/Environmental-Review/LSA.

County of Santa Cruz. 2026a. "Transportation Permits." Santa Cruz County Community Development and Infrastructure. Accessed May 15, 2026. https://cdi.santacruzcountyca.gov/UPC/PWPermits/TransportationPermits-OversizeOverweightVehicles.aspx.

County of Santa Cruz. 2026b. "Encroachment Permits." Santa Cruz County Community Development and Infrastructure. Accessed May 15, 2026. https://cdi.santacruzcountyca.gov/UPC/PWPermits/EncroachmentPermits.aspx.

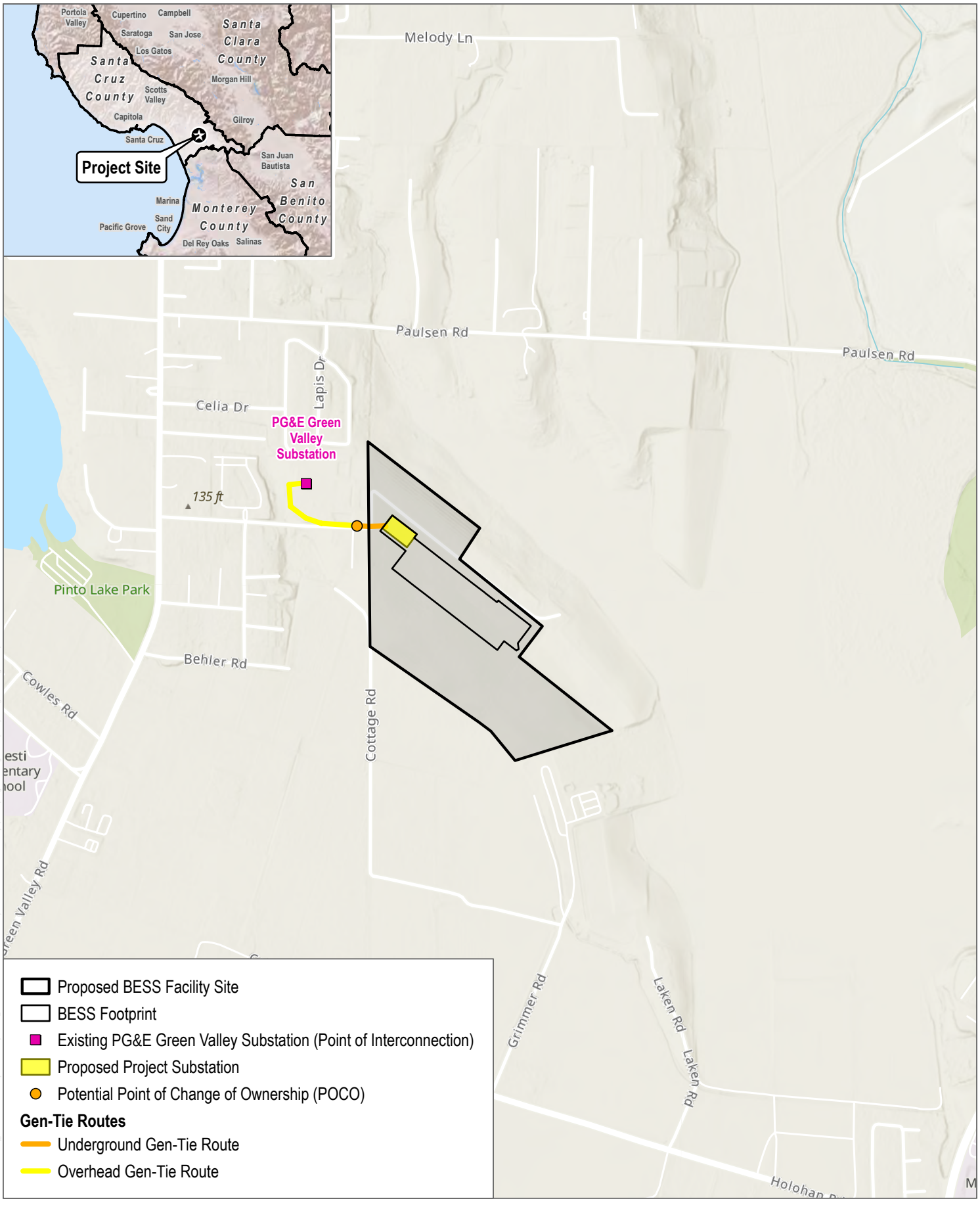
DIR. (State of California Department of Industrial Relations). 2026. "Permit Requirements for Construction Activities." Accessed May 15, 2026. https://www.dir.ca.gov/dosh/enforcement-faq.html#q4.

SWRCB (State Water Resources Control Board). 2021. *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. Adopted April 2, 2019, and revised April 6, 2021. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf.

SWRCB. 2022. *Fact Sheet: National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit).* Accessed December 2, 2025. https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/docs/2022-0057-dwq-with-attachments/cgp2022_factsheet.pdf.

SWRCB. 2025. "2022 Construction Stormwater General Permit - Frequently Asked Questions." Accessed December 2, 2025. https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/cgp-faq.html#a1.

INTENTIONALLY LEFT BLANK



SOURCE: Esri 2025; World Topographic Map

DUDEK

0 500 1,000 Feet

FIGURE 1-1

Regional Map

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: New Leaf Energy 2025; Vantor 2024; Open Street Map 2023

DUDEK

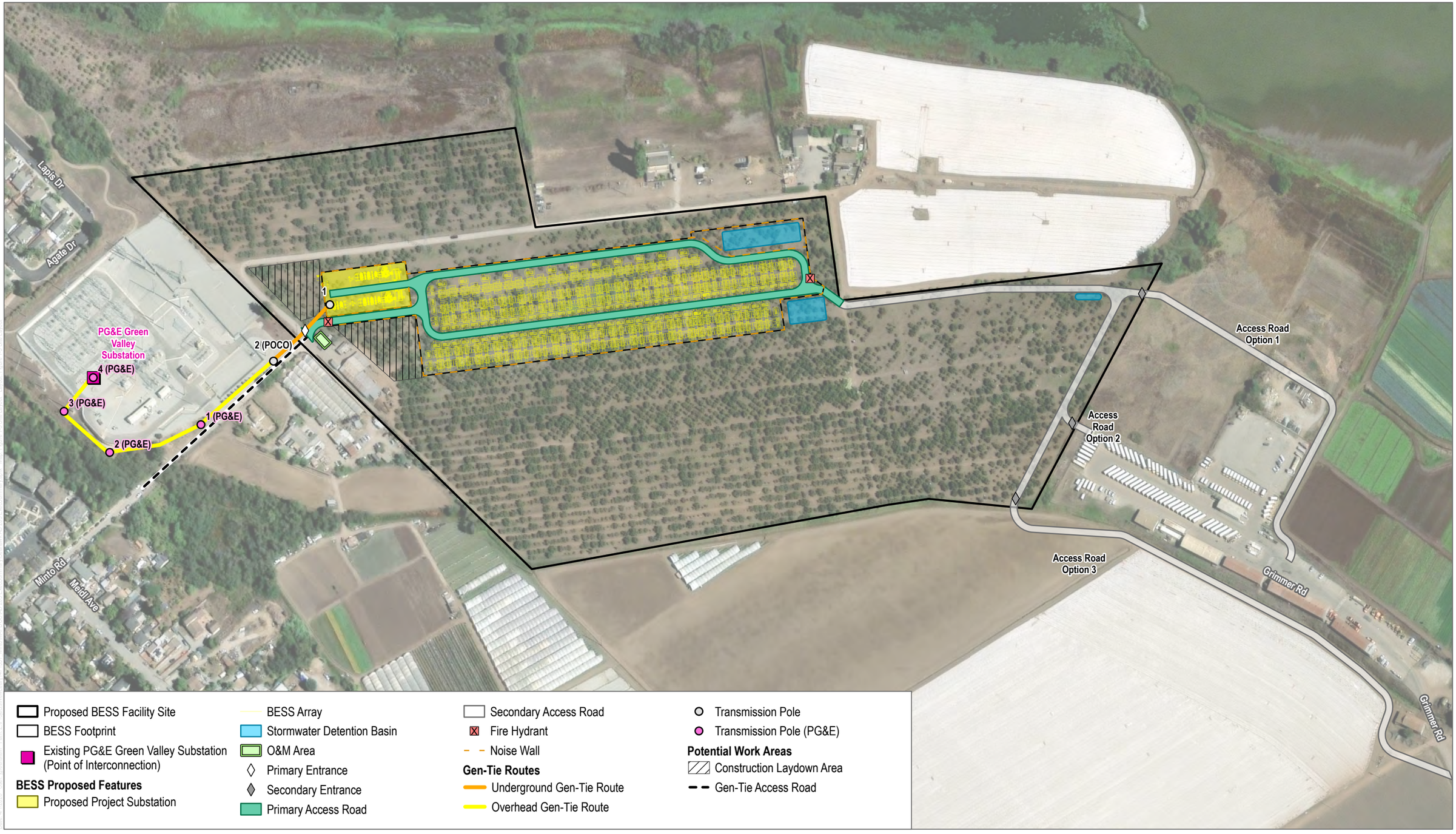
0 200 400 Feet

FIGURE 1-2

Project Site Map

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: New Leaf Energy 2025; Vantor 2024; Open Street Map 2023

DUDEK

0 200 400 Feet

FIGURE 1-3

Site Layout

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



FIGURE 1-4

Visual Appearance of the Site Prior to Construction

Seahawk Battery Energy Storage System Project

DUDEK

INTENTIONALLY LEFT BLANK



FIGURE 1-5a

Visual Appearance of the Site After Construction (Secondary Access Road 1)

Seahawk Battery Energy Storage System Project

DUDEK

INTENTIONALLY LEFT BLANK



FIGURE 1-5b

Visual Appearance of the Site After Construction (Secondary Access Road 2)

Seahawk Battery Energy Storage System Project

DUDEK

INTENTIONALLY LEFT BLANK



FIGURE 1-5c

Visual Appearance of the Site After Construction (Secondary Access Road 3)

Seahawk Battery Energy Storage System Project

DUDEK

INTENTIONALLY LEFT BLANK

2 Project Description

Sequoia Energy Storage 1 LLC (applicant), a subsidiary of New Leaf Energy Inc., proposes to construct, operate, and maintain a 200-megawatt (MW) battery energy storage system (BESS) facility and associated interconnection facilities (collector substation and transmission line). The proposed Seahawk BESS Project (project) is located on an approximately 16-acre site on a 47.4-acre property in unincorporated Santa Cruz County. The primary components of the project include a BESS facility using lithium-iron phosphate batteries, or similar technology; inverters and transformers, an on-site collector substation (project substation); a generation interconnect (gen-tie) line; an operations and maintenance (O&M) building; a fire protection system; access improvements; stormwater management; a noise mitigation wall; a supervisory control and data acquisition (SCADA) system; and temporary construction laydown areas. The project would interconnect from the project substation to the adjacent Pacific Gas and Electric Company (PG&E) Green Valley Substation via a 115-kilovolt (kV) gen-tie transmission line. The gen-tie line would be installed underground from the project substation to the Point of Change of Ownership (POCO) at an overhead riser pole on the PG&E parcel, and an overhead gen-tie line would connect to the Point of Interconnection (POI) at the PG&E Green Valley Substation.

The proposed facility would provide a service to the regional electric grid by receiving energy (charging) from the PG&E electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the POI. The project would provide economic benefits to the County of Santa Cruz (County) and additional capacity and reliability to the electrical grid. The project accommodates the integration of additional intermittent renewable energy sources and reduces the need to operate natural gas power plants. The project would also assist the County in meeting its climate resiliency and clean energy goals by providing electrical energy storage.

The project would be operated unstaffed and monitored remotely through the SCADA system year-round. Upon completion, the facility would operate continuously for approximately 30 to 35 years. During the operational stage of the project, qualified technicians would inspect the project facilities and conduct necessary maintenance to ensure reliable and safe operational readiness. Routine maintenance and scheduled operation of the fully developed project is expected to require up to eight workers on a weekly basis. Typically, one major maintenance inspection would occur annually, requiring up to 20 workers for approximately 1 week. In addition, up to six workers would visit the site every 2 to 3 years to add or connect additional batteries to the facility using a crane and a forklift, within the proposed facility boundary.

2.1 Project Location

The project would be in unincorporated Santa Cruz County, California, approximately 1 mile north of the City of Watsonville and east of the intersection of Minto Road and Green Valley Road. The project site is within the Santa Cruz County Pajaro Valley planning area. The project is within the U.S. Geological Survey 7.5-minute Watsonville West quadrangle, Township 11S, Range 2E, Section 28. The BESS site is composed of Assessor's Parcel Numbers (APNs) 051-101-77 and 051-101-78. The property is currently used for agricultural production, consisting of orchards. The property is bound by Minto Road to the north and northwest, PG&E's Green Valley Substation (herein referred to as Green Valley Substation) to the northwest, the Transportation Office of Pajaro Valley Unified School District to the south, and agricultural uses to the east and south. The nearest incorporated municipality to the project site is the City of Watsonville, which is approximately 1 mile to the south, and the nearest residences are immediately northwest of the project site. The land uses immediately adjacent to the Green Valley Substation

include residential to the north and southwest, urban open space to the west, and agricultural to the east and south. The larger project area also consists of agricultural and residential land uses.

The project would interconnect to the existing Green Valley Substation from the proposed collector substation, via a proposed approximately 0.21-mile, 115 kV gen-tie line. The gen-tie line would cross Minto Road, then continue west, parallel to the existing Minto Road right-of-way (ROW). The gen-tie line would then route northwest and continue parallel to the boundaries of the Green Valley Substation until turning east to reach the POI at the Green Valley Substation. Following this route, trenched underground gen-tie wires would be installed from the project substation to the POCO at the overhead riser pole on the PG&E property. Interconnection via overhead methods to the Green Valley Substation would require off-site 115 kV transmission poles for the overhead gen-tie line wires. The gen-tie route would be sited on APN 051-101-77 on the project site and on APN 051-091-03 on the adjacent Green Valley Substation parcel. The project is also anticipated to require two fiber optic telecommunication lines to connect to the Green Valley Substation from the project substation.

2.2 Project Objectives

The project's principle basic objectives include the following:

1. Construct and operate a 200 MW, 800-megawatt-hour BESS facility in Santa Cruz County using economically feasible, commercially available, and proven technology capable of operating at utility scale, with an interconnection using available system capacity adjacent to the existing PG&E Green Valley Substation.
2. Provide economic benefits to the County, create prevailing wage jobs, and facilitate local community benefits.
3. Provide a service to the regional electric grid by receiving energy (charging) from the PG&E electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the POI.
4. Add reliability to the California electric grid and help meet the June 2021 California Public Utilities Commission's decision requiring 11,500 MW of new capacity additions to the California Independent System Operator (CAISO) system.
5. Provide additional capacity to the electrical grid to assist with serving load during periods of peak demand by charging when demand is low and discharging when demand is high.
6. Accommodate the integration of additional intermittent renewable energy sources, such as wind and solar, and reduce the need to operate natural gas power plants.
7. Serve as an additional local capacity resource that would enhance grid reliability.
8. Assist the County in meeting its climate resiliency and clean energy goals by providing electrical energy storage.
9. Provide energy storage capacity and dispatch for the electrical grid.
10. Include all required off-site improvements, including a secondary emergency access route and upgrades necessary to provide water service as required to meet California Fire Code and local emergency response requirements.
11. Help ensure electrical transmission system reliability and that clean renewable energy sources can meet peak demand and help prevent outages and blackouts in Santa Cruz County in the face of climate change.
12. Assist the County in meeting its net-zero greenhouse gas emissions and the state's 100% zero-carbon electricality goals by 2045 by contributing energy storage in Santa Cruz County.
13. Ensure public safety by complying with applicable California Fire Code and National Fire Protection Association (NFPA) standards, providing emergency access and internal fire roads, ensuring 100-foot

setbacks from public roads and adjacent parcels (excepting the substation), and excluding BESS modules within 1,000 feet of a parcel containing an existing hospital, school, commercial day care center, or residential care facility for the elderly.

2.3 Project Components

The project would include construction, O&M, and eventual decommissioning of an up to 200 MW BESS. A 115 kV gen-tie line connecting the project substation to the POI within the existing PG&E-owned Green Valley Substation would facilitate charging and discharging to the electrical grid.

2.3.1 General Facility Description, Design, and Operation

The BESS facility would include the following primary components (refer to Section 2.3.2, Transmission and Interconnection Description, Design, and Operation, for a detailed description of the gen-tie line and interconnection components of the project):

- BESS containers
- Inverters and transformers
- Project substation
- Gen-tie line
- Access improvements
- SCADA system
- Temporary construction laydown areas
- Stormwater management
- Noise mitigation wall
- O&M building
- Fire protection system

Project components are described in the following subsections. Figure 2-1, Project Site Plan, shows the project layout. The project's site plan package is provided in Appendix 2A, and the project's conceptual landscape plan is included as Appendix 2B. Table 2-1 summarizes the preliminary dimensions of major BESS facility components.

Table 2-1. Preliminary Dimensions of Major BESS Facility Components

Component	Quantity	Approximate Dimensions
BESS enclosures	266[a]	160 square feet; 20 feet × 8 feet × 10 feet (L × W × H)
Inverters	84	9.2 feet × 5.2 feet × 7.6 feet (L × W × H)
Transformers	8	20 feet × 8 feet × 9.5 feet (L × W × H)
Gen-tie line	1	Buried underground from the project substation to the POCO (2.5-foot-wide trench) and aboveground to the POI on adjacent PG&E parcel (52-inch diameter-holes at pole locations)[b]
Project substation area	1	246 feet × 130 feet × 50 feet (L × W × H)
Access roads	N/A	20 feet W

Table 2-1. Preliminary Dimensions of Major BESS Facility Components

Component	Quantity	Approximate Dimensions
Temporary construction laydown areas	2	Variable
Stormwater detention facilities	3	Variable
Noise mitigation wall	N/A	12 feet to 14 feet H depending on location
Operations and maintenance building	1	Existing structure to remain

Notes: BESS = battery energy storage system; L = length; W = width; H = height; POCO = Point of Change of Ownership; POI = Point of Interconnection; PG&E = Pacific Gas and Electric Company; N/A = not applicable.

[a] 266 total battery enclosures, of which 21 would be future augmentation enclosures that would be installed during operations.

[b] A 30-foot-wide trench corridor was examined in the Land Use and Biological Resources sections of this application to allow citing flexibility.

2.3.1.1 Battery Energy Storage System

The BESS facility would use a modular and containerized BESS, with 245 battery enclosures plus 21 enclosures for future augmentation for a total of 266 battery enclosures. There are several battery cell technologies commercially available, with one of the most common presently being lithium iron phosphate cells, or similar. Lithium iron phosphate technology is considered one of the safest, most efficient, and most commercially financeable energy storage technologies available on the market. The initial project concept has been developed assuming a lithium iron phosphate technology. By the time the project reaches the procurement stage, it is possible for other battery cell technology with proven safety and performance records to be suitable for the project. Although the number and dimensions of the BESS enclosures may change (as it does between lithium iron phosphate technology providers), the technology ultimately procured would result in potential environmental impacts substantially similar to, or less than, those analyzed based on this Project Description. The CATL model EnerC+ 306 has been selected for this project application as a representative BESS enclosure. CATL model EnerC+ 306 design and operation information is used in this application to set maximum potential impact envelopes, for site design and modeling analysis, and to set baseline safety standards. A final manufacturer for the BESS enclosures would be selected during the detailed design process post-certification. The project would provide defensible space by setting back all BESS enclosures at least 100 feet from the property boundary.

The BESS enclosures would be prefabricated off site and arrive at the project site ready to be installed and commissioned. Each modular BESS enclosure would include battery packs on racks, a battery management system, fire detection systems, thermal management systems (either liquid or air cooled depending final selected technology), and ancillary power electronics within a specialized steel-framed, non-occupiable enclosure. The BESS enclosure would not exceed 15 feet in height.

Over the life of the project, the storage capacity of the battery cells would naturally degrade. The project would implement an augmentation strategy to maintain the contractually required capacity of the system. Augmentation would entail adding/replacing individual battery modules in the existing BESS yard. The project is designed to accommodate up to 21 additional battery blocks, which would be installed during operations. Equipment type/specifications, capacity agreements, and tax incentives can all change how and when augmentation is completed. During project operations, the project analysis assumes that one crane and one forklift would operate in support of augmentation once every 2 to 3 years.

2.3.1.2 Inverters and Transformers

Power inverters to convert between alternating current and direct current would be included, along with transformers that would step up the voltage.

2.3.1.3 Project Substation

The project substation would include two main power transformers (MPTs). When the BESS facility is charging, power from the regional electric transmission grid would be stepped down from 115 kV to 34.5 kV and sent from the project substation through the medium voltage collection system and Power Conversion System (PCS) units into the battery packs in the BESS enclosures. When the BESS facility is discharging, power from the battery packs within the BESS enclosures would be sent to the PCS units, stepped up to 34.5 kV, and transported to the project substation through the medium voltage collection system before being stepped up to 115 kV at the MPTs and delivered back to the regional electric transmission grid. A control building would be installed adjacent to the project substation area and would contain an energy management system, metering, and telecommunication equipment for communication with PG&E/CAISO facilities and to support remote project operations monitoring.

2.3.1.4 Generation Interconnect Line

The project would interconnect from the project substation to the adjacent Green Valley Substation via a 115 kV gen-tie line. The gen-tie line would be installed underground from the project substation to the POCO at the riser pole on PG&E property (see Figure 2-1), at which point an overhead line would connect to four steel poles along the gen-tie route and to the Green Valley Substation at the POI.

2.3.1.5 Access Improvements

The project's roadway system would use existing roads wherever available and feasible. Access to the project site would be via Minto Road. A 20-foot-wide gravel access road would be constructed around and through the BESS facility and to the collector substation. A secondary emergency access road would be provided to the site via a 20-foot-wide gravel, all-weather access road. Three options are being considered for the secondary emergency access road, which would extend the on-site access to the south, along the project's southern/southeastern boundaries. Options 1 and 2 would go through a County-owned property (APN 051-101-59) to the south along two different alignments as shown in Figure 2-1, to connect to Grimmer Road. Option 1 would extend through undeveloped land and a parking area to connect to Grimmer Road. Option 2 would extend from the project property through an existing parking area on the County's parcel to connect to Grimmer Road. Option 3 would extend southwest across APN 051-101-78, cross into the southern adjoining parcel (APN 051-101-53), continue southeast before turning west, continue southeast and terminate where the Grimmer Road public ROW starts (Figure 2-1). All internal roadways and private driveways would be constructed to meet access requirements for construction, O&M, and emergency response.

2.3.1.6 Supervisory Control and Data Acquisition

One control enclosure for the SCADA system would be located on site to allow off-site monitoring of the BESS facility.

2.3.1.7 Temporary Construction Laydown Areas

The project would include up to two temporary construction laydown areas for equipment and material staging and storage during construction. The temporary construction laydown areas would be located in the western portion of the project site as shown in Figure 2-1. These areas would also be used for worker parking during construction. The laydown areas are anticipated to be bladed, compacted, and surfaced with aggregate or other soil stabilizing materials. Landscape fabric may also be installed under the surface of all laydown areas to prevent vegetation growth, if required to comply with fire prevention standards.

2.3.1.8 Stormwater Management

Stormwater management practices for the project site would include a gravel base and concrete drainage channels along the northern and southern sides of the BESS facility, connecting to bio-filtration ponds. Stormwater generated on site would flow to three on-site bio-filtration ponds in the eastern portion of the project site (labeled as stormwater detention basins in Figure 2-1). The proposed drainage route is designed to release at the same location as pre-development conditions, mimicking the existing flow direction. Stormwater treatment and storage sizing would be designed to hold the anticipated runoff from a 25-year storm event, releasing at a 5-year pre-development rate. A drainage channel would include a landscaped perimeter consisting of a mix of trees and primarily native shrubs. Drawings of the proposed stormwater best management practices (BMPs) are included in Appendix 2C, Civil Plans.

2.3.1.9 Site Security

The project BESS facility site would be enclosed within a noise mitigation wall, which would double as a security wall to prevent unauthorized access. The noise mitigation wall would be 14 feet tall along the northern and northeastern sides of the facility and 12 feet high on the southeastern and southern sides of the facility (Figure 2-1; Appendix 2B). Each entrance to the BESS facility site would include a 22-foot-wide vehicular gate with knox box key access for authorized personnel. The BESS facility would be remotely monitored 24/7.

The project would include minimal lighting for safety at night, consisting of motion-activated lighting. Controlled security lighting, up to 20 feet in height, would be installed at the project substation and around the BESS facility site, in accordance with applicable laws, ordinances, regulations, and standards. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties, compliant with applicable codes and regulations. The lighting plan prepared for the project is included in Appendix 2D, Lighting Plan.

2.3.1.10 Operations and Maintenance Building

An existing residential structure located near the northwestern side of the project site along Minto Road would be used as an office space for the BESS. No additional O&M buildings are proposed for construction on site. Additional structures adjacent to the proposed O&M building would remain in use for agricultural operations.

2.3.1.11 Fire Protection System

Fire protection systems would be incorporated within each individual BESS enclosure and would include remote monitoring. The project's fire protection system would comply with all applicable standards, including the International Fire Code, the California Fire Code, the NFPA Standard for the Installation of Stationary Energy Storage

Systems (NFPA 550 and NFPA 855), Underwriters Laboratories (UL) 9540A, UL 1973, UL 1741, UL 9540, and the Institute of Electrical and Electronics Engineers (IEEE) C2. BESS enclosures would be UL listed, tested, and certified to the most rigorous international safety standards. UL independently tests equipment for compliance with the latest fire safety code requirements, and the methods were developed to minimize fire risk and safety concerns about battery storage equipment raised by fire departments and building officials in the United States.

Faults, mechanical damage, or manufacturing defects in lithium-ion-based batteries can cause thermal runaway, which can lead to fires or other hazards. Should a thermal runaway event occur, the BESS enclosures are designed and constructed in such a way that fire would not propagate from one enclosure to a neighboring enclosure. The project's BESS enclosures, as part of the testing and listing process, would be subjected to destructive testing, including fire testing. The project's BESS enclosures would include the following UL certifications:

- UL 1973 – Standard for Batteries for Use in Stationary Applications (module level certification)
- UL 9540 – Standard for Energy Storage Systems and Equipment (system level certification)
- UL 9540A – Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems

The County's Operational Area Emergency Plan does not have an adopted emergency evacuation plan. However, the project would meet state and local fire code requirements for new facilities and energy storage systems, including providing access and adequate water supply throughout the facility.

Primary and secondary entrances would be included in the BESS facility design to comply with these requirements. The primary entrance to the BESS facility would be via Minto Road and would consist of a 20-foot-wide gravel road with an access gate to ensure the security of the site. Three options have been proposed for the secondary emergency access road (see 2.3.1.5 above). The project is within the Parajo Valley Fire Protection district, which has requested the installation of two fire hydrants. Water supply for fire defense would be provided via updated connections to the municipal water system that would serve the two on-site fire hydrants, each with a 1,000-gallon-per-minute flow rate. One fire hydrant would be located in the western portion of the BESS facility along the road near the primary access point. The second fire hydrant would be located along the access road in the eastern portion of the BESS facility (Figure 2-1). The applicant commissioned a fire water supply assessment that concluded that no on-site water storage would be required (see Appendix 3.15D).

2.3.2 Transmission and Interconnection Description, Design, and Operation

The project would connect to the existing PG&E Green Valley Substation from the proposed project substation, via a proposed approximately 0.21-mile, 115 kV gen-tie, along the Minto Road ROW, between the project substation and the Green Valley Substation. The applicant would construct and own the portion of the gen-tie line between the project substation (underneath the Minto Road ROW) to the POCO within the PG&E property, and PG&E would construct and own the remaining portion of the gen-tie from the POCO to the Green Valley Substation (see Figure 2-1). The project's transmission and interconnection facilities would include the following components:

- 115 kV gen-tie line, including transmission structures and conductors
- Fiber optic telecommunications utility poles and fiber optic lines
- Access paths

- Temporary work areas
- Interconnection facilities within existing PG&E Green Valley Substation footprint (PG&E constructed and owned)

The proposed gen-tie route was selected to minimize the number of existing utility crossings, cross existing utilities at the optimum locations, minimize the total gen-tie line length and number of transmission structures required, minimize the number of turning structures required, and enter the Green Valley Substation as close as possible to the POI. The proposed transmission structures were sited to avoid potential impacts to environmental resources. Project components associated with transmission and interconnection facilities are described in the following subsections. Figure 2-2, Transmission Line Route, shows the proposed gen-tie route, settled areas, parks, recreational areas, scenic areas, and existing transmission lines within 1 mile of the proposed gen-tie route. Table 2-2 summarizes the preliminary dimensions of major transmission components. Section 3.13, Visual Resources, includes photographic simulations of representative aboveground project components prior to construction and after construction.

Table 2-2. Preliminary Dimensions of Major Transmission Components

Component	Quantity	Approximate Dimensions
115 kV gen-tie line	1	Applicant-owned: 231 feet long
		PG&E-owned: 880 feet long[a]
Substation bay dead-end transmission structure	2	Applicant-owned: 50 feet tall
		PG&E-owned: 60 feet tall
Angled monopole transmission structure	2	Applicant-owned: 60 feet tall
		PG&E-owned: 60 feet tall
Tangent monopole transmission structure	2	Applicant-owned: 60 feet tall
		PG&E-owned: 60 feet tall
Conductors	3	Applicant-owned: 3 × 145 feet
		PG&E-owned: 3 × 1,150 feet
Overhead shield wire	1	Applicant-owned: 145 feet
		PG&E-owned: 1,150 feet
Fiber optic cables on gen-tie line	1	Applicant-owned: 144 feet
		PG&E-owned: 1,150 feet
Fiber optic cables underground	1	Applicant-owned: 145 feet
		PG&E-owned: 500 feet

Notes: kV = kilovolt; gen-tie = generation interconnect; PG&E = Pacific Gas & Electric Company.

[a] The length of the PG&E-owned portion of the gen-tie line may change based on ongoing coordination and final design with PG&E.

2.3.2.1 115-Kilovolt Generation Interconnect Line

The 115 kV gen-tie line would originate at the project substation within the BESS facility site and extend west, crossing Minto Road, and then would continue parallel to the existing Minto Road ROW. The gen-tie line would then route northwest and continue parallel to the boundary of the Green Valley Substation until turning east to reach the POI at Green Valley Substation.

The interconnecting 115 kV transmission single-circuit configuration would be underground within the project parcel (APN 051-101-77) and within the PG&E parcel (APN 051-091-03) until the POCO. From the POCO, the gen-tie line would be aboveground within the PG&E parcel to the POI. The gen-tie line would be constructed with monopole

tubular steel poles. Gen-tie structures would be 50 to 60 feet tall, and there would be a total of approximately four monopoles. The total number of gen-tie structures would be determined by the final design of the gen-tie line. The aboveground project transmission facilities would be designed consistent with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) where feasible. Transmission facilities would also be evaluated for potential collision reduction devices in accordance with Reducing Avian Collisions with Power Lines: The State of Art in 2012 (APLIC 2012).

The POCO would be located on APN 051-091-03 (Figure 2-1). The POCO is the point where the conductors of the gen-tie line are attached to the last applicant-owned structure (Last Structure). The POCO would be connected on the side of the Last Structure facing the Green Valley Substation. The applicant shall own and maintain the Last Structure and the conductors, insulators, and jumper loops from the Last Structure to the Interconnection Customer's Large Generating Facility. PG&E would own and maintain the Green Valley Substation and all towers, transmission lines, circuit breakers, disconnects, relay facilities, and metering within the Green Valley Substation, together with the line drop, in their entirety, from the Last Structure to Green Valley Substation. PG&E would own the insulators that are used to attach the applicant-owned conductors to the Last Structure.

Table 2-2 includes the approximate number and dimensions of the different types of transmission structures that would be used.

2.3.2.2 Transmission Structure Access Path

The transmission structure access path would use existing access roads (i.e., Minto Road), to minimize new ground disturbance; therefore, a new transmission structure access path is not anticipated.

2.3.2.3 Telecommunication Facilities

The facility would be designed with a comprehensive SCADA system to allow remote monitoring of facility operation and/or remote control of critical components. The fiber optic or other cabling required for the monitoring system are anticipated to be installed in buried conduit within trenching, along a portion of the gen-tie route, leading to a SCADA system cabinet at the project substation. External telecommunication connections to the SCADA system cabinets could be provided through wireless or hard-wired connections to locally available commercial service providers.

The project's SCADA system would interconnect to an external fiber optic network or fixed wireless service at the project substation and would require installation of buried fiber optic cables underground or fixed wireless antennas. External telecommunication connections to the SCADA system cabinets could be provided through wireless or hard-wired connections to locally available commercial service providers, so no additional disturbance associated with telecommunications is anticipated. As such, the project would not require any substantial construction efforts regarding telecommunication facilities and structures. No relocation of existing telecommunication structures would occur.

Telecommunications equipment would be installed between the control building at the project substation and the Green Valley Substation to facilitate communication with PG&E/CAISO facilities. To achieve communication requirements with the Green Valley Substation, the applicant and PG&E would install two fiber optic cables separated by at least 10 feet. One of the two fiber optic lines would be installed underground from the project site to the Green Valley Substation. PG&E would install the other fiber optic line on a portion of the gen-tie line; the fiber optic line would split off from the gen-tie line within the PG&E property to connect to a separate POI. Trenching for the underground portion of the gen-tie line is anticipated to be up to up to 5.5 feet deep.

2.3.2.4 Interconnection Facilities Within Existing Pacific Gas and Electric Company Green Valley Substation Footprint

To facilitate interconnection of the BESS facility to the electric transmission grid, PG&E would install the following related to the new gen-tie line: three single phase line CCVTs for the new gen-tie line protection, one line dead-end structure, one 115 kV disconnect switch, civil foundations and ground connections, and a line current differential relay scheme on the Green Valley Substation — Seahawk Storage 115 kV line in new panel 14. Fiber termination would also need to be installed at the Green Valley Substation. Additional Reliability Network Upgrades would be required at both the Green Valley and Moss Landing Substations and would be wholly located within the existing disturbed footprints of those substations.

2.3.2.5 Transmission System Impact Studies

The project would interconnect to PG&E's transmission system within the CAISO planning area.

The applicant filed an interconnection request with CAISO on April 1, 2021. CAISO, in cooperation with PG&E, prepared the Phase I Interconnection Study (September 15, 2022) and Phase II Interconnection Study (January 31, 2024). The applicant entered into a Large Generator Interconnection Agreement with CAISO and PG&E on November 25, 2024. The project's Large Generator Interconnection Agreement and other interconnection studies are included in Confidential Appendix 2E, CAISO Studies.

2.3.2.6 California Public Utilities Commission General Orders

Because PG&E is an investor-owned electric utility, the PG&E improvements described above are regulated by the California Public Utilities Commission. California Public Utilities Commission General Orders cover regulatory requirements for investor-owned electrical utilities.

The project would comply with applicable General Orders, including General Order 128 (Rules for Construction of Underground Electric Supply and Communications Systems).

2.3.2.7 Transmission System Design

A drawing of the project substation is included in Appendix 2A. The drawing includes all equipment locations, heights, and voltages that would be required for the project interconnection at the project site.

A one-line diagram for the project's interconnection at the Green Valley Substation is included in Appendix 2E, specifically within Appendix C of the Large Generator Interconnection Agreement (Page 109 of 127).

Table 2-3 below, Transmission System Design/Safey and Nuisance Regulations, identifies transmission system design laws, regulations, ordinances, and standards; adopted local, regional, state, and federal land use plans; and leases and permits applicable to the project.

Table 2-3. Transmission System Design/Safety and Nuisance Regulations

Item	Title/Description
CPUC GO-95	Rules for Overhead Electric Line Construction

Table 2-3. Transmission System Design/Safety and Nuisance Regulations

Item	Title/Description
NESC	National Electrical Safety Code (NESC)
CPUC GO-128	Rules for Construction of Underground Electric Supply and Communication Systems
CPUC GO-131-E	Rules for Planning and Construction of Electric Generation Line and Substation Facilities in California
CPUC Decision 93-11-013	California Public Utilities Commission (CPUC) EMF Decision
CPUC GO-52	Construction and Operation of Power and Communication Lines for the Prevention or Mitigation of Inductive Interference
ASCE 48-19	Design of Steel Transmission Structures
ASCE 74	Guidelines for Electrical Transmission Line Structural Loading
ASCE 113	Substation Structure Design Guide
FAA 70/7460	Proposed Construction and/or Alteration of Objects that May Affect the Navigation Space
IEEE 81	Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Grounding System
IEEE 525	Guide for the Design and Installation of Cable Systems in Substations
IEEE 605	Guide for Bus Design in Air Insulated Substation
IEEE 691	Guide for Transmission Structure Foundation Design and Testing
IEEE 738	Standard for Calculating the Current-Temperature Relationship of Bare Overhead Conductors
IEEE 1127	Guide for the Design, Construction, and Operation of Electric Power Substations for Community Acceptance and Environmental Compatibility
IEEE 1427	Guide for Recommended Electrical Clearances and Insulation Levels in Air Insulated Electrical Power Substations
IEEE 1863	Guide for Overhead AC Transmission Line Design
47 CFR 15.250	Operation of Wideband Systems Within the Band 5925-7250 MHz; prohibits operations of any device emitting incidental radiation that causes interference to communications; the regulation also requires mitigation for any device that causes interference
14 CFR 77.1 et seq.	Safe, Efficient Use, and Preservation of the Navigable Airspace; describes the criteria used to determine whether a "Notice of Proposed Construction or Alteration" (FAA Form 7460-1) is required for potential obstruction hazards
FAA Advisory Circular No. 70/7460-1M	Obstruction Marking and Lighting; describes the FAA standards for marking and lighting of obstructions as identified by FAA Regulations Part 77

Notes: CPUC = California Public Utilities Commission; NESC = National Electrical Safety Code; EMF = electromagnetic field; ASCE = American Society of Civil Engineers; FAA = U.S. Federal Aviation Administration; IEEE = Institute of Electrical and Electronics Engineers Inc.; CFR = Code of Federal Regulations.

2.3.2.8 Transmission Line Safety and Nuisance

The electrical effects of high-voltage transmission lines fall into two broad categories: corona effects and field effects. Corona is a luminous discharge due to ionization of the air surrounding a conductor around the surface of an energized conductor and associate hardware when the voltage gradient exceeds a certain critical value during certain conditions. Corona may result in radio and television reception interference, audible noise, light, and

production of ozone. Corona is a function of the voltage of the line, the diameter of the conductor, and the condition of the conductor and hardware surface. Corona performance is predicted using empirical equations from high-voltage line measurements. The methodology has been validated for predicting corona-induced noise and interference. The electric field gradient is the rate at which the electric field changes and is directly related to the line voltage and the geometric configuration of the line. Field effects are the voltages and currents that may be induced in nearby conducting objects. A transmission line's inherent electric and magnetic fields cause these effects. Operating power lines produce electric and magnetic fields commonly referred to as an electromagnetic field (EMF). The EMF produced by the AC electrical power system in the United States has a frequency of 60 hertz, meaning that the intensity and orientation of the field changes 60 times per second. The electric field is expressed in volts per meter or kV per meter (kV/m), and magnitudes are often given in root-mean-square units. Magnetic field is generated by electrical currents. Transmission lines create time-varying magnetic fields measured in Gauss or milligauss. Electric fields are calculated using an imaging method, while magnetic fields are obtained by summing fields from currents in all conductors, assuming balanced three-phase currents.

Corona from a transmission line may result in the production of audible noise, radio influence voltage, and television interference.

The electric field gradient is greatest at the surface of the conductor. Large-diameter conductors have lower electric field gradients at the conductor surface and, hence, lower corona than smaller conductors, everything else being equal. Also, irregularities (such as nicks and scrapes on the conductor surface) or sharp edges on conductor and insulator hardware concentrate the electric field at these locations and, thus, increase corona at these spots. Similarly, contamination on the conductor surface, such as dust or insects, can cause irregularities that are a source for corona. Raindrops, snow, fog, and condensation are also sources of irregularities.

2.3.2.8.1 Audible Noise and Electromagnetic Field Model Results

An EMF study was completed for the project, in which calculations were made under maximum operating voltage based on the proposed 200 MW project size and assuming a 115 kV overhead transmission circuit with a 954 ACSR Cardinal transmission line design. However, current project designs assume the line would be buried from the project substation to the POCO.

The magnetic field is proportional to line loading (amperes), which varies with changes in generation from the generating facility via the system operators in response to electrical power demand. The maximum magnetic field from an overhead circuit is expected to be 83.31 milliGauss and 28.96 milliGauss at the edge of the gen-tie ROW. The maximum electric field from an overhead circuit is expected to be 0.83 kV/m and 0.17 kV/m at the edge of the gen-tie ROW (100 feet). The EMF study is provided in Appendix 2F.

Sound pressure level measurements were conducted near the project site in 2025 to quantify and characterize the existing outdoor background sound levels. Both long- and short-term sound monitoring data were recorded for the project. Noise impacts analyzed were determined to be less than significant. Construction noise modeling was performed to predict worst-case construction noise levels at the closest noise-sensitive uses to the project site. The highest construction noise levels varied between 66 and 75 A-weighted decibels, an increase of 15–30 A-weighted decibels over daytime ambient noise levels at modeled noise-sensitive receivers. Traffic noise modeling predicted no noticeable noise increase in a comparison of project construction traffic noise levels to existing noise levels at Holohan Road near Laken Drive, Green Valley Road near Amesti Street, and Minto Road east of Green Valley Road. Operation noise modeling determined that predicted operations noise levels (varying from 42 to 45 A-weighted decibels at noise-sensitive receivers) would comply with County Municipal Code standards. For transmission line

noise levels, it was determined that during periods of fair weather, sound from the transmission line would be well below the County Municipal Code daytime and nighttime limits and below measured ambient sound levels. Groundborne vibration/noise levels were also determined to have a less-than-significant impact. Noise effects of the project are discussed in detail in Section 3.7, Noise.

Overall, construction and operation of the project, including the interconnection of the facility with PG&E's transmission system, are not expected to result in increases in EMF levels or audible noise beyond federal, state, or local laws, ordinances, regulations, and standards. Project impacts related to noise are expected to have a less-than-significant impact and not anticipated to require mitigation. The project would adhere to the California Public Service Commission Standards and Recommendations, which state that, where practical, EMF reduction techniques would be followed.

2.4 Construction

The following sections detail the approximate construction schedule and workforce, construction activities, estimated water use, and materials handling proposed by the project applicant.

2.4.1 Schedule and Workforce

The project is anticipated to be built over approximately 12 to 18 months from the onset of site preparation activities through energization. Initial mobilization and site preparation is anticipated to begin in 2027, and testing and commissioning is anticipated to conclude no later than June 2029. The commercial operation date is expected shortly following the completion of testing and commissioning in June 2029. It is anticipated that construction crews would work up to 10 hours per day, with work occurring Monday through Friday, excluding federal holidays. Overtime, night work, and weekend work would be used only as necessary to meet the project schedule or complete time-sensitive or safety critical work. All work schedules would comply with applicable California labor laws and County regulations. Estimated durations of construction activities are presented in Table 2-4.

Table 2-4. Estimated Construction Activity Duration

Construction Activity	Estimated Duration	Estimated Timeframe[3]
Site preparation	1 months	6/1/2027–7/1/2027
Substation site preparation	2 weeks	7/2/2027–7/16/2027
Civil work and grading	1 month	7/2/2027–7/30/2027
Substation civil work and grading	2 weeks	7/31/2027–8/14/2027
Battery enclosure/PCS installation	16 months	7/31/2027–11/30/2028
Project substation installation	8 months	8/15/2027–4/15/2028
Gen-tie foundations and structure erection[a]	2 months	4/16/2028–6/16/2028
Gen-tie line stringing and pulling[a]	1 month	6/16/2028–7/17/2028
Testing and commissioning	6 months	12/1/2028–6/1/2029
Decommissioning	7 months	5/31/2064–12/31/2064

Note: PCS = Power Conversion System; gen-tie = generation interconnect; PG&E = Pacific Gas and Electric Company.
The construction schedule presented herein is preliminary and intended to illustrate the anticipated sequence and phasing of project development. Actual start time of construction may occur later than the representative start date based on final design, permitting, and other factors.

[a] PG&E interconnection facility upgrades would occur as part of the foundation and structure erection and gen-tie stringing and pulling phases.

2.4.2 Sequencing

During construction activities, multiple crews would be working on the site with various equipment and vehicles. The daily number of construction workers (consisting of laborers, craftsmen, supervisory personnel, support personnel, and construction management personnel) would range from approximately 8 to 160 workers, depending on the phase of construction. It is estimated that construction would require the vehicle trips and equipment listed in Table 2-5, BESS Project – Construction Equipment and Usage Assumptions.

Table 2-5. BESS Project – Construction Equipment and Usage Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Average Daily Haul Truck Trips[a]	Equipment Type	Quantity	Usage Hours
Site preparation	40	4	0	Tractors/Loaders/ Backhoes	2	8
				Excavator	2	8
				Rubber-Tired Dozer	2	8
Substation site preparation	40	4	0	Tractors/Loaders/ Backhoes	1	8
				Excavator	1	8
				Rubber-Tired Dozer	1	8
Civil work and grading	40	4	0	Graders	2	8
				Tractors/Loaders/ Backhoes	2	8
				Rollers	2	8
Substation civil work and grading	40	4	0	Graders	1	8
				Tractors/Loaders/ Backhoes	1	8
				Rollers	1	8
Battery enclosures/ PCS installation	40	20	2	Air Compressors	1	8
				Cranes	1	8
				Forklift	1	8
				Tractors/Loaders/ Backhoes	1	8
Substation installation	40	20	0	Aerial Lifts	1	8
				Air Compressors	1	8
				Bore/Drill Rigs	1	8
				Forklift	1	8
				Trenchers	1	8
Gen-tie foundation and structure erection[b]	10	4	0	Air Compressors	1	8
				Cranes	1	8
				Forklifts	1	8
				Pumps	1	8

Table 2-5. BESS Project – Construction Equipment and Usage Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Average Daily Haul Truck Trips[a]	Equipment Type	Quantity	Usage Hours
				Welders	1	8
Gen-tie stringing and pulling[b]	8	4	0	Aerial Lift	1	8
				Tractors/Loaders/ Backhoes	1	8
Testing and commissioning	160	0	0	Generator Sets	2	2
Decommissioning	40	4	2	Concrete/Industrial Saws	2	8
				Cranes	2	8
				Rubber-Tired Dozers	2	8
				Tractors/Loaders/ Backhoes	2	8

Notes: PCS = Power Conversion System; gen-tie = generation interconnect; PG&E = Pacific Gas and Electric Company; BESS = battery energy storage system.
The project layout depicted in Figure 2-1, Project Site Plan, shows the "end of life" configuration of the BESS, meaning it shows the equipment layout after all augmentation units are implemented. The numbers in this table conservatively assume that foundations and BESS equipment installation related to augmentation occurs during initial construction of the facility. Construction of foundations and BESS equipment installation for augmentation may occur during operations and maintenance periodically within the BESS facility footprint.

[a] The average daily haul truck trips for each phase consider phase durations from Table 2-4.

[b] PG&E interconnection facility upgrades would occur as part of the foundation and structure erection and gen-tie stringing and pulling phases.

2.4.3 Site Preparation

Environmental clearance surveys would be performed at the project site prior to commencement of construction activities. The limits of construction disturbance areas delineated in the final approved engineering design packages would be surveyed and staked. Initial ground-disturbing activities in preparation for construction would include installation of erosion and sediment control measures prior to start of major earthwork activities. Rough grading and removal of orchard trees and other vegetation removal would be performed where required to accommodate site drainage and allow construction equipment to access the site. Stormwater features would be created for hydrologic control. The construction contractor would be required to incorporate applicable BMPs, including the guidelines provided in the California Stormwater Quality Association's Construction BMP Handbook (CASQA 2025), as well as a soil erosion and sedimentation control plan to reduce potential impacts related to construction of the proposed project. Stabilized construction entrances and exits would be installed at driveways to reduce tracking of sediment onto adjacent public roadways.

Site preparation would be consistent with applicable BMPs and the Monterey Bay Air Resources District's applicable rules. Site preparation would involve the removal and proper disposal of existing debris that would unduly interfere with project construction or the health and safety of on-site personnel. Dust-minimizing techniques would be employed, such as the application of water and limiting vehicle speeds on unpaved roads. All applicable governmental requirements and BMPs would be incorporated into the construction activities for the project site.

Vegetation on the site would be removed where necessary to ensure the BESS facility is free from combustible vegetation to allow for fire protection and defensible space. Where feasible, in compliance with fire protection requirements, vegetation root mass within appropriate portions of the BESS facility lease area on the outside of the perimeter and substation access roads would be left in place for soil stabilization. However, the environmental analyses in subsequent sections conservatively assume that all areas within the maximum anticipated grading limits of the BESS facility would be permanently disturbed.

2.4.4 Site Grading and Civil Work

Following site preparation activities, grading and civil work would commence. Construction activities during this phase would include excavation and grading of the project site. Preliminary designs conservatively assume that grading would include up to approximately 12,020 cubic yards of cut and up to approximately 27,731 cubic yards of fill, resulting in a net of 15,711 cubic yards of fill. Blasting is not expected but may be required if large boulders are encountered during excavation and grading. Fill material requirements would be satisfied by off-site borrow pits or quarries.

Conventional grading would be performed throughout the project site but minimized to the maximum extent feasible to reduce unnecessary soil movement. Land-leveling equipment, such as a smooth steel drum roller, would be used to even the ground surface and compact the upper layer of soil to a value recommended by a geotechnical engineer for structural support. Following major civil work within the BESS facility site, site access roads and driveways, the perimeter and substation access roads, and interior roadways to access the laydown areas and BESS yards would be graded, compacted, and surfaced with gravel. Once the roadways have been constructed, the project perimeter wall and access gates would be constructed.

2.4.5 Foundations and Underground Equipment Installation

Following completion of major site grading and civil work, equipment foundations and below grade equipment would be installed. A grounding grid and underground conduit would be installed below grade beneath the project substation area and BESS components. Typical ground grids consist of direct-buried copper conductors with copper-clad ground rods arranged in a grid pattern. After installation of the grounding grid, the area would be backfilled, compacted, and leveled followed by application of an aggregate rock base. A containment area within the MPT foundations would be sized to hold the full volume of oil within the MPTs. The MPT foundations within the substation area are anticipated to be concrete slab foundations poured into excavations up to 7 feet deep. Foundations for the control building, static masts, other aboveground substation equipment, BESS enclosures, PCS units, DC/DC converters, and BESS auxiliary transformers and panels are anticipated to be slab on grade or pile foundations embedded up to 24 feet below ground level. Depending on soil conditions, the piles may be drilled or driven and set with a slurry. However, some of these project components may be installed on concrete slab foundations depending on the geotechnical conditions at the final locations.

Additional underground work would include trenching for the placement of underground electrical and communications lines, including the medium voltage collection system, AC and DC cables, and fire alarm cable. The wires would either be installed in conduit, cable-trays, or direct-buried, depending upon final design and application.

2.4.6 Battery Energy Storage System and Project Substation Equipment Installation

Where possible, major equipment would be delivered directly to its permanent location and offloaded directly into place with a crane or heavy equipment. Where staging or sequencing does not allow, equipment would be stored at one of the laydown areas near its permanent location and installed at a later date. Major aboveground equipment include the MPTs and other project substation components, control building, BESS enclosures, PCS units, DC/DC converters, and BESS auxiliary transformers and panels.

Electrical work would include installing cables, terminations, and splices. Electrical wiring would be installed underground, at-grade, and aboveground, depending on the application and location. The wires would either be installed in conduit, cable-trays, or direct-buried, depending upon final design and application.

2.4.7 Generation Interconnect Structure Erection

Environmental clearance surveys would be performed within the gen-tie corridor prior to commencement of construction activities. The gen-tie corridor boundaries, gen-tie centerline, telecommunications route centerlines, and transmission structure access path would be surveyed and flagged. Initial activities would include the installation of erosion and sediment control measures and materials and preparation of the transmission structure and fiber optic utility pole work areas. Vegetation at the transmission and fiber optic utility pole work areas would be trimmed, mowed, or removed.

Cast-in-place concrete foundations would be installed by placing reinforcing steel and a structure stub or anchor bolt cage into the foundation hole, positioning the stub, and encasing it in concrete. Each transmission structure foundation would be set on anchor bolts on top of the foundation with cranes. Holes would be excavated using a truck-mounted drill rig or standalone auger rig. Poles would be delivered on a flat-bed trailer and hoisted into place with a crane. The annular space between the poles and holes would be backfilled with concrete or soil. Excavated spoil material not used for backfilling would be spread around the structure work areas.

2.4.8 Pacific Gas and Electric Company–Owned Generation Interconnect Segment and Interconnection Facilities

PG&E would construct the segment of the gen-tie between the POCO and the POI within the PG&E Green Valley Substation parcel, as well as the fiber optic routes between the POCO and the PG&E control building within the Green Valley Substation footprint. The applicant would bring the fiber optic cables to underground pull boxes on the PG&E parcel, and PG&E would install the segment of the fiber optic cables between the pull box and control building in conduit placed in underground trenches. Two fiber optic cables would be required, and routes would need to be at least 10 feet apart to meet PG&E's diverse path requirements.

PG&E would also construct the interconnection upgrades within the Green Valley Substation footprint at the POI. These upgrades are described in Section 2.3.2.4 above.

2.4.9 Construction Water Use

Water supply for construction is anticipated to be purchased from a local water purveyor and trucked to the site. During construction, an estimated 4.1 million gallons (approximately 12.6 acre-feet) of untreated water would be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and grading. Dust-control water may be used during ingress and egress of on-site construction vehicle/equipment traffic and during the construction of the project.

According to the water supply assessment prepared for the project, project operation is estimated to require 4.2 acre-feet per year of water for landscape irrigation and fire suppression system testing (Appendix 3.15D). On-site water would connect to the City of Watsonville's water system for fire suppression purposes to accommodate a 2,000-gallon-per-minute flow rate. The site would include two on-site fire hydrants that would connect to a new water line installed from the project site within Minto Road for a distance of approximately 1,000 feet (Figure 2-1). The new line would connect to the City of Watsonville's water system at the intersection of Minto Road and Meidl Avenue. The new water line would be installed within the Minto Road pavement and/or ROW. A sanitary water supply line would not be required during construction because restroom facilities would be portable units, serviced by licensed providers, and water and sewage from the restroom facilities would be stored in on-site tanks and serviced by trucks. An existing building on site, which would remain, includes an operational bathroom that may be used in the event of an emergency. Drinking water would be provided via portable water coolers. No on-site water storage would be required for this project.

2.4.10 Solid and Non-Hazardous Waste

The project would produce a small amount of solid waste from construction activities. This may include packing material (e.g., paper, wood, plastics), wood pallets, scrap metal, concrete, and soil and rock from excavation/grading. This waste would be segregated, where practical, for recycling. Non-recyclable waste would be placed in covered commercial trash dumpsters, located in temporary construction laydown areas, and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III (non-hazardous waste) landfill. Waste is discussed further in Section 3.14, Waste Management.

2.4.11 Hazardous Materials

Due to its historical use for agriculture, soil impacted by herbicides/pesticides may be encountered during construction. The hazardous materials used during construction would be typical of most construction projects of this type. Materials may include empty containers, spent welding materials, waste oil and oil filters, oil sorbent, solvents, detergents, glycols, refrigerants, paints, adhesives, electrical fuses, and spent lead-acid and alkaline batteries. A hazardous materials business plan would be prepared prior to commencement of construction activities. The hazardous materials business plan would contain an inventory of hazardous materials on site, procedures and contacts for communicating an immediate response to a reportable release or threatened release of a hazardous material, and employee training in project safety procedures and emergency response plans and procedures in the event of a reportable release or threatened release. This information would be recorded to maintain safety and prevent possible environmental contamination or worker exposure. During project construction, material safety data sheets for all applicable materials present at the site would be made readily available to on-site personnel.

2.4.12 Hazardous Waste

Small quantities of hazardous waste would most likely be generated over the course of construction (see Section 2.4.11, Hazardous Materials). Workers would be trained to properly identify and handle all hazardous materials. Appropriate spill containment and cleanup kits would be maintained during construction and decommissioning activities. Hazardous waste would be either recycled or disposed of at a permitted and licensed treatment, recycling, or disposal facility in accordance with law. All hazardous waste shipped off site would be transported by a licensed hazardous waste hauler no later than 90 days following its generation date. Hazardous waste is discussed further in Section 3.14.

2.4.13 Commissioning

As part of project construction activities, and after installation, equipment would be tested and commissioned. Commissioning work would be completed by qualified personnel, and in accordance with various codes, standards and specifications including the Institute of Electrical and Electronics Engineers, the National Electrical Code (NFPA 70), the International Electrical Testing Association, specific provisions of NFPA, and the relevant original equipment manufacturers installation and commissioning manuals. Documentation necessary for commissioning would include (but is not limited to) complete sets of electrical plans, itemized equipment descriptions, control narratives, and other procedural requirements, such as persons or entities to notify when equipment has become available for acceptance tests.

Commissioning would include testing mechanical, electrical, fire protection, and other systems at substantial completion. Systems to be commissioned and tested include (but are not limited to) BESS enclosures, PCS units, auxiliar service transformers, medium voltage collection system, DC cables, SCADA systems, power backup systems, and fire protection systems. Performance testing would also be completed to ensure the charge and discharge performance of the systems are as designed and in accordance with the utility requirements.

2.5 Operations and Maintenance

Once constructed, the project would be available to operate 7 days per week, 365 days per year. The facility would be remotely monitored and operated by an owner-contracted O&M provider, by means of a remote operations center compliant with the Critical Infrastructure Protection standards of the North American Electric Reliability Corporation. Project operations would be monitored remotely through the SCADA system. It is expected that routine maintenance and scheduled operation of the BESS would require up to eight workers in a light utility truck to visit the facility on a weekly basis.

On-site maintenance would be required, which would include replacement of inverter power modules, filters, and miscellaneous electrical repairs on an as-needed basis. During operation of the project substation, O&M staff would visit the substation periodically for switching and other operation activities. Light-duty maintenance would be used to perform routine maintenance, including, but not limited to, equipment testing, monitoring, repair, routine procedures to ensure service continuity, and standard preventive maintenance. Typically, one major maintenance inspection would occur annually, requiring up to 20 workers for approximately 1 week. In addition, up to six workers would visit the site every 2 to 3 years to add or connect additional batteries to the facility using a crane and a forklift within the proposed facility boundary.

As batteries slowly lose their capacity to store energy, extra batteries and related equipment would be installed at intervals throughout the life of the project, which is referred to as augmentation. Augmentation is expected to occur approximately once every 5 to 7 years to maintain an annual capacity of 200 MW (800 megawatt-hour) over an approximate 35-year life. The project's final augmentation strategy would be determined by market-based contracting requirements. Augmentation may include constructing new foundations, installing BESS equipment on the foundations, and completing electrical work within the existing project footprint. The preliminary site layout depicted on Figure 2-1 shows an "end of life" configuration, meaning it shows the equipment layout after all augmentation units are implemented. The construction sequencing and equipment usage assumptions in Tables 2-4 and 2-5 above and environmental analyses in subsequent sections conservatively assume that all initial BESS equipment and augmentation BESS equipment are constructed at the same time.

2.5.1 Solid and Non-Hazardous Waste

The project would produce a small amount of waste associated with maintenance activities, which could include scrap metal; spent, defective or malfunctioning electrical materials; empty containers; and other miscellaneous solid waste, including typical refuse generated by workers. Most of these materials would be collected and delivered back to the manufacturer or, when practical, recycled. Non-recyclable waste would be placed in covered commercial trash dumpsters, located near the O&M building, and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III (non-hazardous waste) landfill. Waste is discussed further in Section 3.14.

2.5.2 Hazardous Materials

Limited amounts of hazardous materials would be stored or used on the site during operations, including waste oil, oil sorbents, waste oil filters, empty containers, spent welding materials, battery coolant, spent batteries (lithium-ion, lead-acid, and alkaline), and controlled waste streams. Appropriate spill containment and cleanup kits would be maintained during operation of the project. A spill prevention control and countermeasures plan would be developed for site operations, which includes requirements for routine inspection, annual reporting, labeling, storage, secondary containment, spill prevention and response measures, employee training, and safety and security measures.

2.5.3 Hazardous Waste

Hazardous waste generated during project operation would be managed, classified, transported, and disposed of in accordance with federal, state, and local laws, ordinances, regulations, and standards. Liquid waste generated during operations would be subject to the spill prevention control and countermeasures plan, as applicable. Disposal of hazardous waste during operations would be at a permitted treatment, storage, and disposal facility. Hazardous waste generated at the facility would not be stored on site for more than 90 days following its generation date and would be transported by a permitted hazardous waste transporter. Hazardous waste is discussed further in Section 3.14.

2.6 Decommissioning

In general, the BESS would be recycled at the expiration of the project's life (estimated to be 35 years). Following decommissioning, the use of the land would return to agricultural use, which is consistent with the County of Santa Cruz General Plan and Zoning Ordinance. Transmission interconnection facilities would remain in place for

the life of the facility. If the transmission interconnection and distribution lines and communications lines would not be further used by a public or private utility or power generator, the gen-tie line would be decommissioned. The aboveground portion of the gen-tie line would entail removal of the overhead conductors, wiring, and poles. The belowground communications lines would entail removal of the underground lines and conduit, where possible. All underground cables would be excavated and removed or abandoned in place 3 feet below grade for all underground conductors. Inverters and BESS enclosures would be removed from concrete foundations or piling, and the foundations would be removed or abandoned in place 3 feet below grade. All wiring, cables, heating, cooling, and ventilation equipment would be disconnected from the BESS enclosures and batteries. All facility components would be recycled to the maximum extent possible. Lithium batteries would be recycled at a specialized recycling plant, and the remaining BESS components would be recycled or disposed of in accordance with the procurement documents provided by the battery manufacturer. See Appendix 2G, Decommissioning Plan, for additional information.

2.7 Project Site Selection

The project site was considered based on CAISO's identification of points of deliverability and characteristics in the County. In Santa Cruz County, energy storage systems can only be viable if there is sufficient capacity for interconnection and there is open, flat land adjacent to the existing substation locations and a sufficient distance from residential and commercial development areas (County of Santa Cruz 2024). Pursuant to its Federal Energy Regulatory Commission–approved tariff, CAISO is responsible for evaluating the feasibility of locating transmission-scale energy storage within the existing electrical grid. In regard to interconnection, CAISO has identified points of deliverability in Santa Cruz County. Currently, the project is the only BESS in unincorporated Santa Cruz County that has been awarded deliverability by CAISO with interconnection to the Green Valley Substation due to its electrical characteristics (i.e., sufficient capacity to interconnect transmission-level generation) and viable land that is adjacent, open, and flat with sufficient area to accommodate the project, including proposed emergency access and setback area (15 acres).

The proposed facility would provide a service to the regional electric grid by receiving energy (charging) from the PG&E electric transmission system, storing energy on site, and then later delivering energy (discharging) back to the POI. The project would add reliability to the California electric grid and help meet the California Public Utilities Commission's June 2021 decision requiring 11,500 MW of new capacity additions to the CAISO system. The project would provide additional capacity to the electrical grid to assist with serving load during periods of peak demand by charging when demand is low and discharging when demand is high. This accommodates the integration of additional intermittent renewable energy sources, such as wind and solar, and reduces the need to operate natural gas power plants. The project would also serve as an additional local capacity resource that would enhance grid reliability.

The project site was selected in furtherance of the project objectives detailed in Section 2.2 above. The site selection criteria are discussed in detail in Chapter 4, Alternatives.

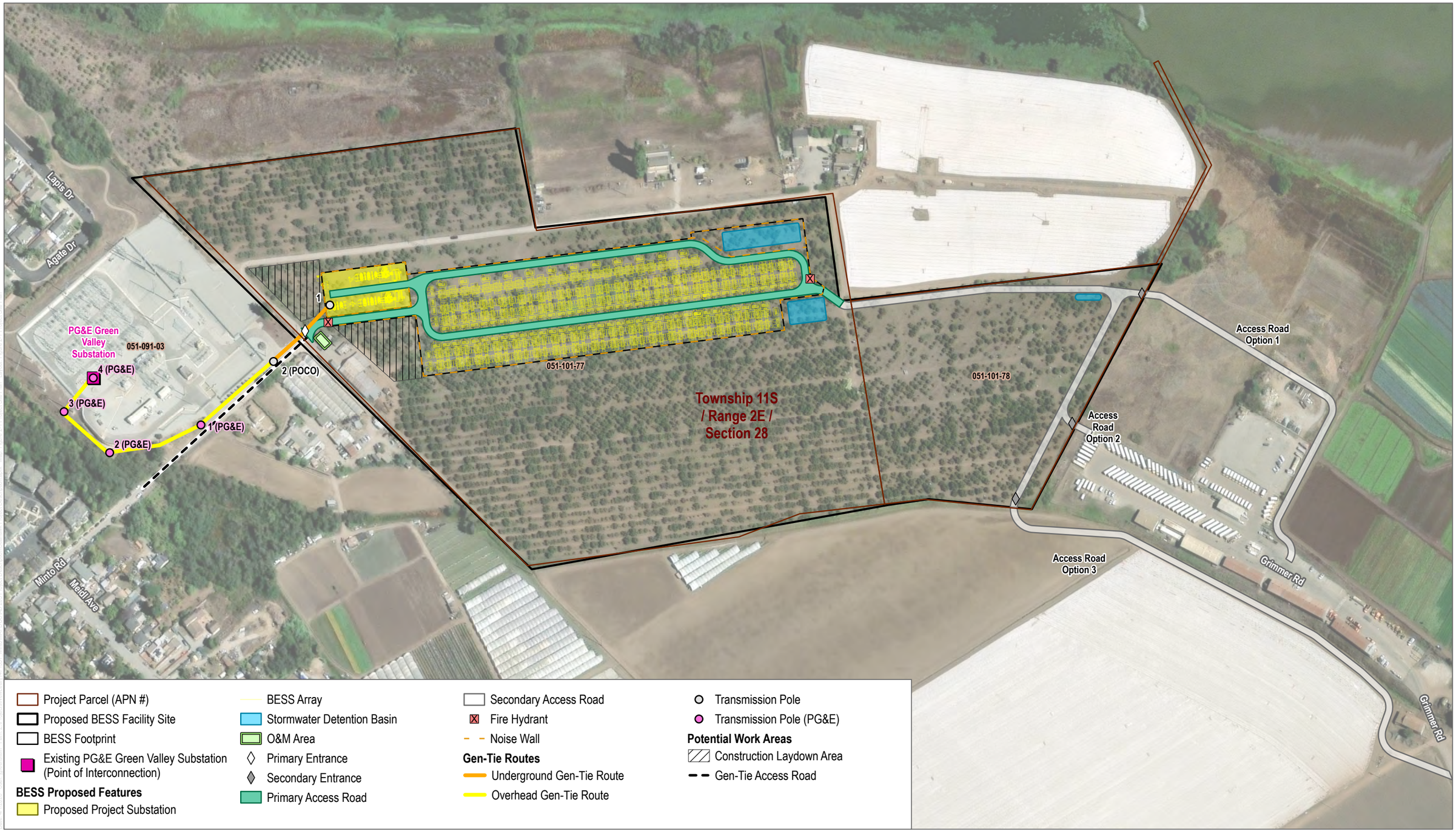
2.8 References

APLIC (Avian Power Line Interaction Committee). 2006. *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*. Washington, D.C. and Sacramento, California: Edison Electric Institute, APLIC, and the California Energy Commission. https://www.nrc.gov/docs/ml1224/ml12243a391.pdf.

APLIC. 2012. *Reducing Avian Collisions with Power Lines: The State of the Art in 2012*. Washington, D.C.: Edison Electric Institute and APLIC. October 2012. https://www.aplic.org/uploads/files/11218/Reducing_Avian_Collisions_2012watermarkLR.pdf.

CASQA (California Stormwater Quality Association). 2025. *Construction BMP Handbook*. Accessed February 11, 2026. https://www.casqa.org/resources/bmp-handbooks/construction-bmp.

County of Santa Cruz. 2024. "Climate-Critical Energy Storage." County of Santa Cruz Board of Supervisors, Agenda Item DOC-2024-636. August 13, 2024. https://www.santacruzcountyca.gov/Government/BoardofSupervisors/SantaCruzCountyMeetingMaterials.aspx.



SOURCE: New Leaf Energy 2025; Vantor 2024; Open Street Map 2023

DUDEK

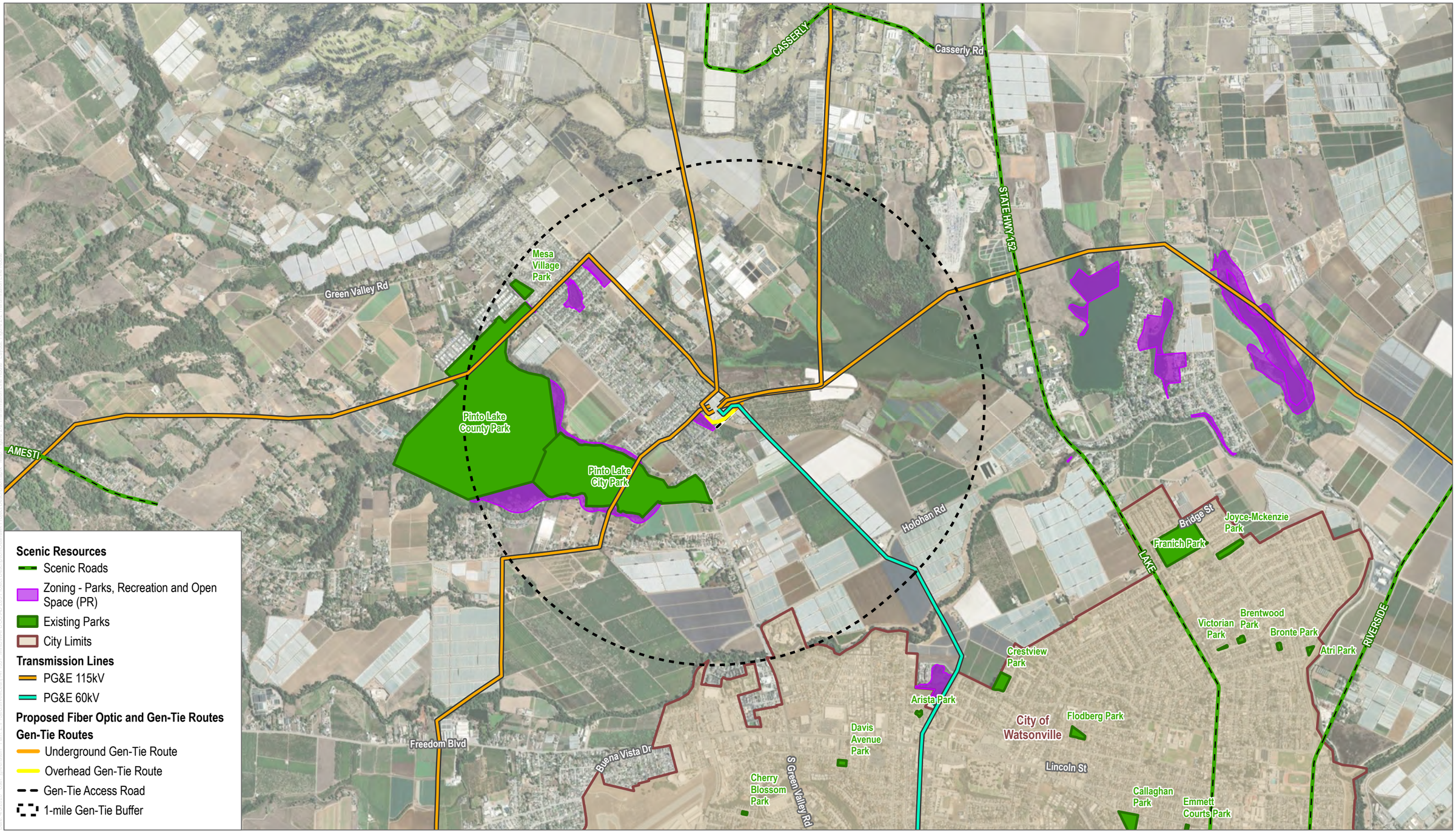
0 200 400 Feet

FIGURE 2-1

Project Site Plan

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: New Leaf Energy 2025; County of Santa Cruz 2025; Vantor 2024; Open Street Map 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 2-2

Transmission Line Route

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK

3 Environmental Analysis

Document Organization

This chapter contains 17 individual sections. The sections represent the standard environmental, public health and safety, and local impact assessment disciplines for which the California Energy Commission Energy Facilities Siting Regulations (20 CCR 1704, Appendix B) require information in both a traditional Application for Certification and an Assembly Bill 205 Opt-In Application. All sections use a standardized format containing the following headings and associated content (except for Air Quality, Cultural and Tribal Resources, Public Health, and Socioeconomics as explained therein):

- **Affected Environment** includes relevant background information about the environmental, social, and regulatory settings of the Seahawk Battery Energy Storage System (BESS) Project (project).
- **Impact Analysis** addresses the potential environmental consequences of the construction and operation of the project. The sections begin with a list of the criteria used to determine whether environmental effects of the project may qualify as potentially significant environmental impacts. Terms used to describe the project throughout the document are defined below:
  - **Project Site:** Land where components of the project would be located, including the BESS facility and generation interconnect (gen-tie) and linear facilities corridors.
  - ***BESS Site:*** The approximately 16-acre portion of the BESS facility site where the BESS containers would be sited.
  - ***Gen-tie Area:*** The portion of the project containing components and activities described in Section 2.3.2, Transmission and Interconnection Description, Design, and Operation.
  - ***Study Area:*** The project site plus additional area as required by regulation, protocol, or standard practice. The study area is specific to resource topics and is described in more detail within the section of each discipline.
  - **Project Area:** The project site and the immediately surrounding areas.
- **Cumulative Effects** discusses potential effects of the project that are not themselves significant, but that may be cumulatively considerable when viewed in connection with the effects of past projects, other current projects, and reasonably foreseeable future projects.
- **Mitigation Measures** describes any mitigation measures recommended to avoid or minimize potentially significant effects to a level of less than significant.
- **Laws, Ordinances, Regulations, and Standards** lists those laws, ordinances, regulations, and standards applicable to the project for a given discipline and includes a demonstration that the project, as designed, would comply with all applicable laws, ordinances, regulations, and standards.
- **Agencies and Agency Contacts** is a list of federal agencies with permitting authority over the project, and, except those not expressly preempted by Assembly Bill 205, the state and local regulatory agencies that would have such permitting authority, but for the exclusive purview of the California Energy Commission to license battery energy storage projects with a capacity of 200 megawatt-hours or more and transmission lines associated with battery energy storage projects pursuant to Assembly Bill 205. This section also contains a list of regulatory agency staff and their locations.
- **Permits and Permit Schedules** identifies applicable permits and their schedules.

Cumulative Projects

Cumulative impacts are defined in the California Environmental Quality Act (CEQA) Guidelines (Section 15355) as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." A cumulative impact from several projects occurs from a "change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time." Consistent with CEQA Guidelines Section 15130(a), the discussion in this environmental impact report focuses on the identification of any significant cumulative impacts and, where present, the extent to which the proposed project would constitute a considerable contribution to the cumulative impact. CEQA Guidelines Section 15130(b) states, in pertinent part, the following:

> The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

Information pertaining to past, present, and reasonably foreseeable future projects were retrieved from publicly available information and websites, which are summarized in Table 3-1, Cumulative Projects Summary. An initial review of the websites was completed between January 2026 and March 2026. A follow-up secondary review of the websites was completed in April 2026 to verify the information obtained in January 2026 remained valid and incorporated additional cumulative projects that have become known between January 2026 and April 2026.

Table 3-1. Cumulative Projects Summary

Agency/Interested Party	Webpage(s)	Date Accessed
Santa Cruz County Planning Department	https://www.santacruzca.gov/Government/City-Departments/Community-Development/Current-Planning/Environmental-ReviewCEQA https://cdi.santacruzcountyca.gov/UPC/GetInvolved.aspx https://sccgis.maps.arcgis.com/apps/instant/nearby/index.html?appid=fc602b7f6458486eb1e2f5955b4789d8&sliderDistance=5#find=120-298%20Minto%20Rd%2C%20Watsonville%2C%20California%2C%2095076	1/17/2026; 2/27/2026; 4/22/2026
Santa Cruz County Public Works Department	https://cdi.santacruzcountyca.gov/PublicWorks/Projects/CurrentProjects.aspx	1/17/2026; 2/27/2026; 4/22/2026
City of Watsonville Planning Division	https://www.watsonville.gov/DocumentCenter/Index/157	1/17/2026; 2/27/2026; 4/22/2026
City of Watsonville Public Works and Utilities	https://www.watsonville.gov/1861/View-Current-Projects https://gis.cityofwatsonville.org/portal/apps/dashboards/b1b09340b4424c0da35d4240a4874994	1/17/2026; 2/27/2026; 4/22/2026
California Department of Transportation District 5	https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects	1/17/2026; 2/27/2026; 4/22/2026

Table 3-1. Cumulative Projects Summary

Agency/Interested Party	Webpage(s)	Date Accessed
Monterey Bay Air Resources District	https://www.mbard.org/ceqa https://www.mbard.org/permit-search	1/17/2026; 2/27/2026; 4/22/2026

To identify the projects to be analyzed in the evaluation of cumulative impacts, CEQA Guidelines Section 15130(b) requires that an environmental impact report employ either of the following approaches:

- The List Approach entails listing "past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside of the control of the agency"
- The Projection Approach uses a summary of projections contained in an adopted general plan or related planning document or in a prior environmental document that has been adopted or certified that described or evaluated regional or area-wide conditions contributing to the cumulative impact

The approach and geographic scope of the cumulative impact evaluation vary depending on the environmental topic area being analyzed. The individual cumulative impacts discussion in the section addressing each environmental topic presents impacts and mitigation measures for the proposed project. Each impact begins with a summary of the approach and the geographic area relevant to that environmental topic area. For most environmental topic areas, the list approach is used. The list of potentially relevant projects, a detailed methodology, and relevant planning documents are considered in each cumulative impact discussion.

Past projects include those land uses that have been previously developed and compose the existing environment. Present projects include those projects recently approved or under construction. Probable future projects are those that are reasonably foreseeable, such as those for which an application is on file and in process with a local planning department. The cumulative projects listed in Table 3-2, Cumulative Projects, were compiled by reviewing the available public sources shown in Table 3-1 and determining which projects were within 6 miles of the project site. A total of 6 miles was selected to identify a boundary that is large enough to provide the context necessary for understanding cumulative impacts and compact enough to present a proper perspective. These projects are considered in the cumulative impact analysis as appropriate. Refer to Figure 3-1, Cumulative Projects, for the location of each project considered.

Table 3-2. Cumulative Projects

Project No.	Project Name	Project Location	Project Type	Project Status
Santa Cruz County Planning Department				
261063	12-foot vertical extension to an existing 77-foot-tall Pacific Gas and Electric Company transmission line lattice tower to install new wireless communication antennas and associated equipment.	Western side of State Route (SR) 152 (no situs address)	Utility	In progress
251336	Pajaro Estuary Pipeline Project: Proposal to implement the Watsonville Slough System Managed	Harkins Slough, Watsonville Slough, San Andreas Road	Water, Public Utility	Under review

Table 3-2. Cumulative Projects

Project No.	Project Name	Project Location	Project Type	Project Status
	Aquifer Recharge and Recovery Project, which includes upgrades to the existing Harkins Slough filter plant (at Assessor's Parcel Number [APN] 052-211-29), trenching for water distribution lines, development of Struve Slough as a new water source, development of a new recharge basin with recovery and monitoring wells (187 San Andreas Road, APNs 052-181-18 and 052-181-20), and development of seasonal pond and wetland and riparian forest habitat at Watsonville Slough.			
231548	Proposal to recognize the development of a commercial horse boarding facility, including the construction of two 5,300-square-foot stables with paddocks and recognizing grading and improvements related to four gravel and sand covered riding arenas ranging in size from 20,000 to 40,000 square feet. Proposal also includes the construction of a new 2,000-square-foot barn and a manure bunker.	141 Pioneer Road	Commercial	In progress
251269	Proposal to recognize the construction of a 900-square-foot non-habitable accessory structure, located 5 feet from the property line.	637 Lakeview Road	Residential	In progress
251002	Proposal to develop a 2,500-square-foot, two-bedroom house with a 469-square-foot, one-bedroom Junior Accessory Dwelling Unit (JADU) and a 1,200-square-foot detached garage on a vacant Commercial Agricultural (CA) zoned parcel. The project includes an agricultural setback reduction from 200 feet to 35 feet to the southwest property line and a reduction to 44 feet to the northeast property line.	Northern side of Lakeview Road, approximately 450 feet west of the intersection of Lakeview Road and Carlton Road	Residential	In progress
181186	Proposal to recognize the construction of a 1,800-square-foot steel building (gym), a 577-square-foot habitable and non-habitable	262 Gaffey Road	Commercial	In progress

Table 3-2. Cumulative Projects

Project No.	Project Name	Project Location	Project Type	Project Status
	accessory structure with two half bathrooms (restrooms, office, and laundry/storage), and other structures on the parcel that have been constructed or remodeled without permits, and also to recognize the change of use from a training facility for psychotherapists (Western Institute) to a drug and alcohol rehabilitation facility (Elevate Addiction Services).			
251466	Proposal for upgrades to an existing agricultural research and development facility, including the installation of two modular storage buildings (960 square feet in total) and construction of a 3,375-square-foot addition to an existing lab building.	242 Corralitos Road	Commercial	In progress
131323	Proposal to recognize 9,000 cubic yards of fill.	160 Lakeview Road	Commercial	In progress
261033	Proposal to reduce the required 20-foot setback to approximately 3.5 feet for an existing 2,400-square-foot detached garage and 1,200-square-foot Accessory Dwelling Unit (ADU).	471 Hawk Ridge Lane	Residential	In progress
231455	Proposal to construct an approximately 2,500-square-foot single-family dwelling with a 500-square-foot JADU, a 1,125-square-foot attached garage and storage, and an 857-square-foot detached garage.	29 Rancho Road	Residential	In progress
251030	Remodel and reconfigure an existing children's play area to include the addition of new play structures.	113 Tierra Alta Drive	Commercial	Abandonment letter sent 1/13/2026
251135	Wastewater treatment improvement project to replace pipe and lift stations, rehabilitate ponds, provide electrical and controls system, replace gutter, install internal pond piping and inlet/outlet structures, and conduct miscellaneous related improvements. Work will be conducted in or near known environmentally sensitive lands with	103 Alta Tierra Road	Public Works	In progress

Table 3-2. Cumulative Projects

Project No.	Project Name	Project Location	Project Type	Project Status
	known/possible endangered species habitat upstream of slough.			
241400	Proposal to connect the Renaissance High School to water service from the Soquel Creek Water District.	11 Spring Valley Road	Public Works	In progress
City of Watsonville Public Works Departments – Waterworks Districts Projects				
N/A	Water Main Replacement Project*	Riverside Drive, East Beach Street, Unio Street, Lincoln Street, Silver Leaf Drive, Green Meadow Drive, South Green Valley Road	Infrastructure	Current construction
N/A	Water Main Replacement Project*	White Street, Dawson Street, Lincoln Street, Loughhead Street, Coolidge Avenue, Rogge Street, Carolyn Court, McKenzie Avenue, McKenzie Court, Center Street, Lincoln Street, Winchester Drive	Infrastructure	Completed
N/A	Roache Well and Pump Station*	Roache Road	Infrastructure	Completed
N/A	Freedom/Green Valley Water and Sewer Improvements*	Green Valley Road	Infrastructure	Completed
N/A	Hames Reservoir Interior Coating and Connection Modification*	Hames Road	Infrastructure	Completed
N/A	Sydney and Jehl Avenue Sewer, Storm, and Water Improvements*	Sydney Avenue	Infrastructure	Completed
California Department of Transportation District 5				
N/A	Downtown Watsonville Safety Project*	On SR-152 in Santa Cruz County, from approximately 250 feet northwest of Freedom Boulevard near Memorial Park to Beck Street	Roads	Under review
05-1P530	Clean California Watsonville*	On SR-152 from Holm Road to Freedom Boulevard; on SR-129 from Locust Street to Main Street	Roads	Construction
05-1J830	Route 129 Pavement Project*	On SR-129 from SR-1 Junction to just east of Blackburn Street; on SR-152 from Main	Roads	Construction

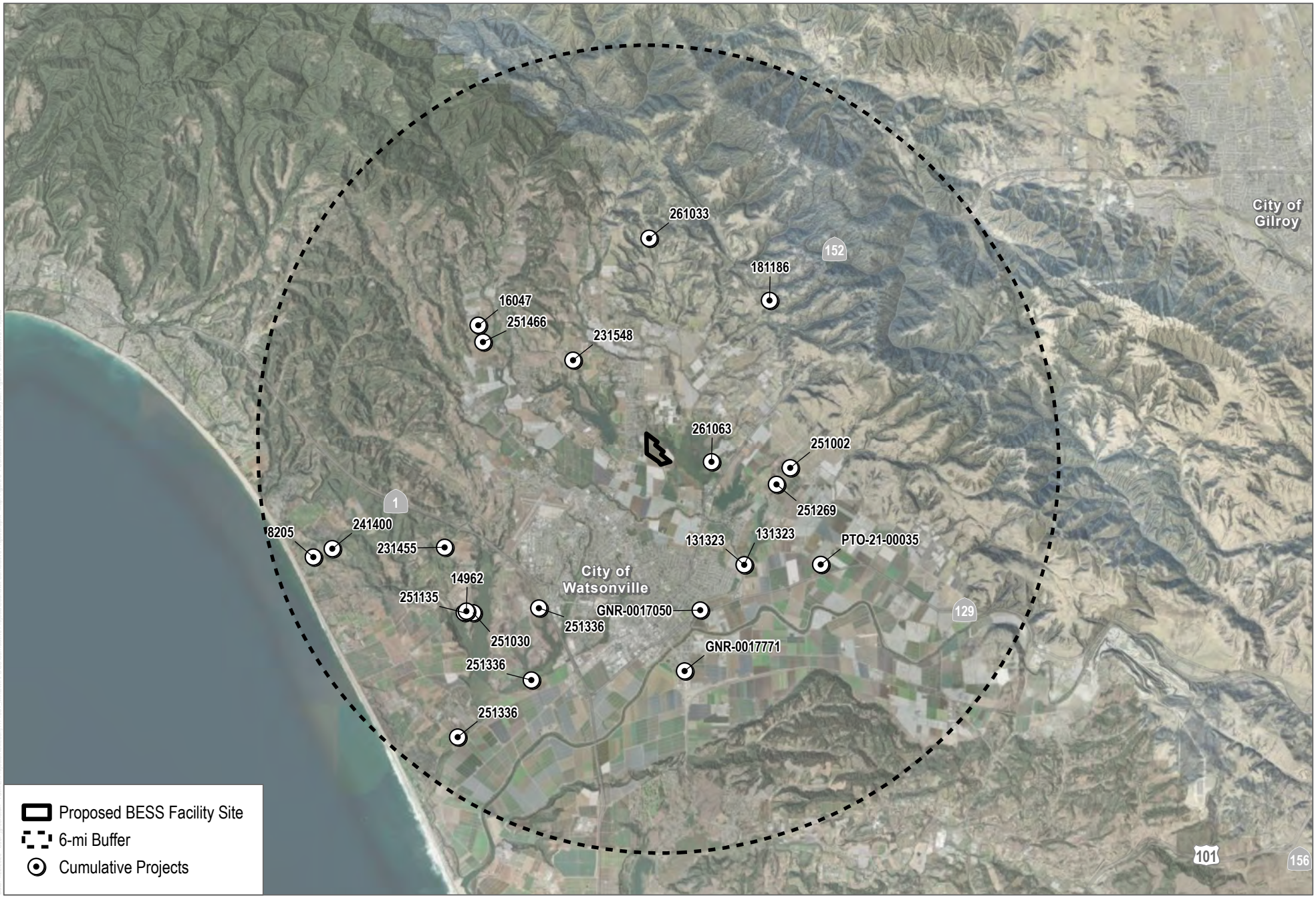
Table 3-2. Cumulative Projects

Project No.	Project Name	Project Location	Project Type	Project Status
		Street to Martinelli Street		
05-1P110	Route 152 Pavement and Complete Streets Project*	On SR-152 from the SR-1 Junction to 0.5 miles east of Carlton Road	Roads	In progress
05-1Q150	Downtown Watsonville Pedestrian Safety Project*	On SR-152 from Freedom Boulevard to Beck Street	Roads	In progress
05-0T770	Holohan Road Intersection Improvements*	On SR-152 at the intersection of Holohan/College Roads	Roads	Complete
Monterey Bay Air Resources District				
16047	City of Watsonville, Water Operation Division	50 Skylark	Public Works	Unknown
8205	County of Santa Cruz, Public Works	0 Sand Dollar Drive	Public Works	Unknown
14962	Stanislaus Regional Housing Authority	113 Tierra Alta Drive	Commercial	Unknown
GNR-0017050	San Benito Supply	33 Riverside Road	Commercial	Unknown
PTO-21-00035	Nutrien Ag Solutions	105 Thompson Road	Commercial	Unknown
GNR-0017771	Kristch-Montery Pipe Company	225 Salinas Road #B	Commercial	Unknown

Notes: N/A = not applicable.

* Projects not shown on figure due to geographic extent or infrastructure projects spanning multiple areas within the 6-mile buffer for the project.

INTENTIONALLY LEFT BLANK



SOURCE: Vantor 2025

DUDEK

FIGURE 3-1

Cumulative Projects

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK

3.1 Air Quality and GHG

INTENTIONALLY LEFT BLANK

3850 Vine Street #110 | Riverside, CA 92507
805.692.6921 OFFICE
mnsengineers.com

January 23, 2025

New Leaf Energy
Attention: William Peregoy
55 Technology Drive, Suite 102
Lowell, MA 01851

Via email: wperegoy@newleafenergy.com

SUBJECT: Air Quality Assessment for the Seahawk Battery Energy Storage System Project

MNS Engineers, Inc. has prepared this report to evaluate short-term and long-term air quality impacts of the Seahawk Battery Energy Storage System (BESS) Project (project). This analysis is supported by emissions modeling found in **Appendix A**, *Air Emissions Data*, prepared by Dudek in September 2024, and the *Construction Health Risk Assessment for the Seahawk BESS Project*, prepared by Dudek in December 2024. This report is in compliance with California Environmental Quality Act (CEQA) Guidelines and the requirements of California Energy Commission's (CEC) Opt-In Certification Program under the Assembly Bill (AB) 205.

1 Introduction

1.1 Project Location

The project is located in unincorporated area of the County of Santa Cruz (County), California. The project site is generally south of Paulsen Road, north of Grimmer Road, and east of Minto Road; refer to **Figure 1**, *Project Site Location*. Local access to the site is provided from Green Valley Road to Minto Road.

1.2 Project Description

The project would construct a 200 megawatts (MW) BESS that would deliver and receive power from the existing Pacific Gas and Electric Company (PG&E) Green Valley Substation to the northwest of the project site. The project site plan is shown as **Figure 2**, *Site Plan*.

The BESS would consist of battery modules housed in purpose-built metal enclosures, with integrated power conversion equipment and fire suppression systems, in compliance with all applicable standards. In addition, the BESS would have on-site interconnection equipment including transformers and would be completely enclosed within a 7-foot-high perimeter fence. Where appropriate, sound walls would be provided in certain locations in place of the 7-foot-high perimeter fence. Interconnection to the PG&E substation would also require on- and off-site 115 kilovolts (kV) transmission poles for the overhead generation transmission line ("gen-tie") wires. The total project area including the gen-tie is estimated to be no more than 16 acres.

Once constructed, the project would operate 7 days per week, 365 days per year. Typical operation of the system would include charging from the grid during the day and discharging during peak electric demand

at night. The system would have minimal lighting for safety at night. Project operations would be monitored remotely through the supervisory control and data acquisition (SCADA) system. The project would include one single story control enclosure for the SCADA system near the project substation.

Regular operations and maintenance would be conducted using maintenance trucks, including but not limited to equipment testing, monitoring, repair, routine procedures to ensure service continuity, and standard preventative maintenance.

During construction and operations, access to the site would be via a proposed 20-foot-wide gravel access road onto the property from Minto Road. There would be adequate area on the property for vehicle parking and equipment staging during both the construction and operational phases. No supplies are required to be stored on site.

2 Existing Conditions

2.1 Climate and Meteorology

The project is located in the North Central Coast Air Basin (Basin). The Basin, which encompasses Santa Cruz, San Benito, and Monterey counties and covers 5,159 square miles, has a climate largely dictated by the semi-permanent high-pressure cell in the eastern Pacific.[1]

During the summer, this high-pressure system dominates, creating persistent west and northwest winds along the California coast. It forms a stable temperature inversion, with a layer of hot air sitting over a cooler coastal layer. This phenomenon, along with onshore air currents that pass over cool ocean waters, brings fog and cool air into the coastal valleys. The warm air aloft acts as a lid, trapping pollutants by inhibiting upward air mixing. The Basin's mountainous ridges, which run from northwest to southeast, further channel these onshore winds. Inland heating in the Salinas and San Benito valleys creates a weak low pressure, strengthening the afternoon and evening onshore airflow.

The arrival of fall sees a weakening of surface winds and a shallower marine layer, occasionally leading to stagnant air. This allows pollutants to accumulate, particularly when the airflow reverses into a weak offshore movement held in place by the high-pressure cell. Sometimes, north or east winds develop, bringing pollutants from the San Francisco Bay area or the Central Valley into the Basin.

Winter and early spring see a shift as the Pacific High moves south, reducing its influence. While northwest winds remain dominant, southeasterly winds frequently flow out of the Salinas and San Benito valleys, especially at night and in the morning. However, good air quality is generally maintained during these seasons due to fewer deep, persistent inversions and the cleansing effect of occasional storm systems.

Climate, including wind patterns, and local topography heavily influence air quality. Inversions, where warm air traps cooler, polluted air, are a major factor. Additionally, northern winds often transport

[1] Monterey Bay Air Resources District (MBARD). *Air Quality Management Plan*. 2008. http://mbuapcd.org/wp content/uploads/2015/01/2008-AQMP-Combined.pdf. Accessed November 2025.

pollutants from the San Francisco Bay Area into the Basin. This transport, particularly through the Santa Clara and San Benito valleys, can cause air quality standards to be exceeded in San Benito County.[2]

Within the Basin, air pollution is generated by a mix of stationary and mobile sources, as well as natural causes. Stationary sources include both specific point sources like exhaust stacks and more dispersed area sources like residential appliances and agricultural activities. Mobile sources consist of both on-road vehicles and off-road equipment such as aircraft and trains. Natural sources can include wind-suspended dust particles.

2.2 Air Pollution

Federal and State Clean Air Acts regulate airborne pollutants from mobile and stationary sources. The United States Environmental Protection Agency (USEPA) administers regulations at the federal level, while the California Air Resources Board (CARB) does so at the state level. Ambient air quality standards are set by these agencies to protect public health. CARB oversees mobile sources, while local air pollution control districts manage stationary sources and enforce rules. The project falls under the jurisdiction of the Monterey Bay Air Resources District (MBARD).

Federal and State standards have been established for six criteria pollutants, including ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$), and lead. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The local air quality management agency is required to monitor air pollutant levels to assure that air quality standards are met and, in the event they are not, to develop strategies to meet these standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in "attainment" or "nonattainment." The general characteristics of the six criteria pollutants regulated by the Federal Clean Air Act (FCAA) and California Clean Air Act (CCAA) are described below.

Ozone

Ozone (O_3) is an unstable gas and a key component of smog, formed when sunlight triggers a chemical reaction between nitrogen oxides (NO_x) and reactive organic gases (ROG). ROG is often used interchangeably with volatile organic compounds (VOC). NO_x and ROG are released from sources such as fuel combustion and the evaporation of organic solvents. Ozone is a regional pollutant that typically reaches unhealthy levels from April to October when there is abundant sunlight.

Because ozone is highly reactive, its concentration declines rapidly once its precursors are depleted. Exposure can cause coughing, a sore throat, chest pain, and breathing difficulty. It can also damage airways, increase the risk of lung infections, and worsen conditions like asthma, emphysema, and chronic bronchitis. Children, the elderly, those with respiratory illnesses, and people exercising outdoors are most vulnerable.

[2] Monterey Bay Air Resources District (MBARD). *Triennial Plan Revision 2009-2011*. Adopted April 17, 2013. http://mbard.org/pdf/Final_Triennial_Plan_Revision_041913.pdf. Accessed November 2025.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless, and poisonous gas that poses a localized threat, with high concentrations typically found near its sources.[3] The main source is the incomplete combustion of fuels from vehicles, which is why concentrations are highest in areas with heavy traffic. Other sources include power plants, wood stoves, and fireplaces.

Elevated CO levels can be particularly dangerous for individuals with heart disease, as their hearts already have a reduced ability to receive oxygenated blood. For these individuals, short-term exposure can cause chest pain, or angina, especially during exercise or stress.

Nitrogen Dioxide

Nitrogen Dioxide (NO_2) is a respiratory irritant and by-product of fuel combustion from sources like vehicles, industrial boilers, and furnaces. It is a reactive, oxidizing gas that can damage respiratory tract cell linings. NO_2 causes a reddish-brown atmospheric haze, reducing visibility. It also contributes to the formation of ozone and acid rain.

High concentrations of NO_2 can irritate airways and aggravate respiratory diseases, potentially leading to increased hospital visits. Long-term exposure may contribute to the development of asthma and increase susceptibility to respiratory infections. Children, the elderly, and those with asthma are most at risk.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a highly reactive gas that belongs to a group known as "oxides of sulfur". The largest sources of SO_2 emissions are the combustion of fossil fuels in power plants (accounting for 73 percent of emissions) and other industrial facilities (20 percent). Other, smaller sources include industrial processes like metal extraction and the burning of high-sulfur fuels in equipment such as locomotives, large ships, and off-road vehicles. Exposure to SO_2 for even a short period can harm the human respiratory system and make breathing difficult. These effects are a particular concern for people with asthma, and children are especially vulnerable.

Asbestos

Asbestos is a potentially hazardous insulating material found in many buildings constructed before 1979. When its microscopic particles become airborne, they can be inhaled and pose a health risk.

To protect the public, the EPA regulates work practices for demolition and renovation involving asbestos under the Clean Air Act. The Occupational Safety and Health Administration (OSHA) requires that only trained and certified personnel perform asbestos removal. Removed asbestos must be properly manifested and disposed of by a certified transport company at a licensed receiving facility. Disposal is also regulated by local authorities, such as the County Fire Department.

[3] Unites States Environmental Protection Agency (USEPA). *NAAQS Table*. 2022. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed November 2025.

Lead

Lead (Pb) is a naturally occurring metal whose atmospheric levels have dropped by 98 percent between 1980 and 2005 due to federal regulations, most notably the phasing out of leaded gasoline. Today, the main source of airborne lead is metal processing, with the highest concentrations found near lead smelters. Other sources include waste incinerators, utilities, and battery manufacturers.

Lead exposure can harm multiple body systems, including the nervous and cardiovascular systems, and it reduces the blood's ability to carry oxygen. Infants and young children are particularly vulnerable to neurological effects, which can lead to behavioral problems, learning deficits, and lower IQs.

Suspended Particulate Matter

Particulate matter, which includes PM_{10} (particles up to 10 microns in diameter) and $PM_{2.5}$ (particles up to 2.5 microns), consists of small solids and liquids like dust, soot, and aerosols. Both are formed from fuel combustion, wind erosion, and atmospheric chemical reactions.

PM_{10} is primarily dust from wind and vehicles, causing respiratory disease, lung damage, cancer, and reduced visibility. $PM_{2.5}$ comes mainly from combustion and chemical reactions and is more dangerous due to its smaller size. Short-term exposure to $PM_{2.5}$ is linked to premature death, heart and lung hospitalizations, asthma attacks, and other respiratory symptoms. Sensitive groups, including infants, children, and the elderly with heart or lung disease, are most vulnerable to these health effects.

2.3 Local Ambient Air Quality

Local air districts and the California Air Resources Board (CARB) work together to monitor ambient air quality against established standards. If an area fails to meet these standards, they develop a plan to improve air quality. Based on monitoring station data, an area is classified as either "attainment" (meeting standards) or "non-attainment" (exceeding standards). Areas that lack monitoring data are deemed "unclassified" and are treated as if they are in attainment.

Ambient air quality is monitored at seven monitoring stations throughout the Basin: Scotts Valley, Santa Cruz, Hollister, Salinas, Carmel Valley, Pinnacles National Monument, and King City.

Table 1, *Ambient Air Quality Data* summarizes the representative annual air quality data for the project vicinity over the years 2022 to 2024, which is the most recent available data. The nearest monitoring station to the project area is the Santa Cruz-2544 Soquel Avenue Monitoring Station. As indicated in **Table 1**, there was one exceedance of $PM_{2.5}$ in 2023 during this time period.

Table 1: Ambient Air Quality Data

Pollutant	2022	2023	2024
Ozone (ppm), Worst 1-Hour	0.060	0.070	0.062
Number of days of State Exceedances (>0.09 ppm)	0	0	0
Ozone (ppm), 8-Hour Average	0.050	0.054	0.055
Number of days of State exceedances (>0.07 ppm)	0	0	0
Number of days of Federal exceedances (>0.075 ppm)	0	0	0
Carbon Monoxide (CO) (ppm), Highest 8-Hour Average	*	*	*
Number of days of above State or Federal standard (>9.0 ppm)	*	*	*
Particulate Matter <10 microns, µg/m^3, Worst 24 Hours	*	*	*
Number of days above State standard (>50 µg/m^3)	*	*	*
Number of days above Federal standard (>150 µg/m^3)	*	*	*
Particulate Matter <2.5 microns, µg/m^3, Worst 24 Hours	14.7	47.4	13.7
Number of days above Federal standard (>35 µg/m^3)	0	1	0

Source: California Air Resources Board (CARB). *iADAM: Air Quality Data Statistics*. https://www.arb.ca.gov/adam. Accessed November 2025.
Notes: * There was insufficient (or no) data available to determine the value. ppm = parts per million; µg/m^3 = micrograms per cubic meter

2.4 Sensitive Receptors

Some populations are more vulnerable to air pollution, including children, the elderly, and those with cardio-respiratory conditions. These "sensitive receptors" are of particular concern when located near sources of pollutants like particulate matter, air toxics, and carbon monoxide. According to the *MBARD CEQA Air Quality Guidelines*, sensitive receptors include residences, education resources, daycare centers, and health care facilities.[4] The nearest sensitive receptors to the project site are rural residential homes located to the north and east, the closest of which would be approximately 285 feet north of the project boundary.[5]

3 Laws, Ordinances, Regulations, and Standards

Federal, State, and regional regulations pertaining to air quality standards are discussed below. This section also discusses each of the agencies' roles in air quality standards.

3.1 Federal

Federal Clean Air Act

The USEPA is responsible for administering the nation's air quality programs, drawing its authority primarily from the Federal Clean Air Act. Originally enacted by Congress in 1963, this law has been amended several times to address evolving air quality concerns. Major amendments in 1970 established the foundation for modern air quality regulation and authorized the USEPA to set National Ambient Air Quality Standards (NAAQS). Subsequent amendments in 1977 introduced non-attainment requirements for areas failing to meet NAAQS and created the Prevention of Significant Deterioration program. The

[4] Monterey Bay Air Resources District (MBARD). *CEQA Air Quality Guidelines*. Last revised February 2008. https://www.mbard.org/ceqa. Accessed November 2025.
[5] There is also an on-site residence on the western edge of the project site that will be vacated and no longer used for residential purposes. The residence will remain vacant for the duration of the operational period of the project.

1990 amendments were the latest major effort to update federal regulation, addressing issues such as acid rain and air toxics. Importantly, while establishing a federal floor for air quality, the Clean Air Act also permits states to adopt more stringent standards or regulate additional pollutants.

3.2 State

California Clean Air Act

The 1988 California Clean Air Act requires the state to achieve and maintain its ambient air quality standards as soon as possible. CARB, a part of California Environmental Protection Agency (CalEPA), is the state agency responsible for overseeing and implementing these requirements. CARB provides local air quality management through regional or county-level districts across 14 statewide air basins. CARB is responsible for mobile sources and setting standards, while local districts enforce standards and regulate stationary sources. CARB monitors air quality, sets mobile and off-road vehicle emission standards, and approves local air quality plans. It also ensures local districts comply with State and federal laws and submits the State Implementation Plan to the USEPA.

California Air Resources Board Air Quality and Land Use Handbook

In April 2005, CARB released its *Air Quality and Land Use Handbook*. This guidance document encourages local land-use agencies to consider air pollution risks from nearby sources—such as major roads, commercial centers, and industrial facilities—when approving the siting of sensitive land uses like residences. The handbook provides advisory recommendations, including setback distances. However, unlike regulations for stationary sources, these are non-binding guidelines and do not require air quality permits or approval from air districts for new sensitive land uses.

California Ambient Air Quality Standards

The CCAA requires CARB to establish California Ambient Air Quality Standards (CAAQS). Similar to the NAAQS, CAAQS have been established for the following pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, lead, vinyl chloride, hydrogen sulfide, sulfates, and visibility-reducing particulates. In most cases, the CAAQS are more stringent than the NAAQS. The CCAA requires that all local air districts in the State endeavor to achieve and maintain the CAAQS by the earliest practical date. The CCAA specifies that local air districts should focus particular attention on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources. **Table 2**, *Attainment Status of the North Central Coast Air Basin* summarizes the State and federal attainment status for criteria pollutants in the Basin. **Table 3**, *State and Federal Ambient Air Quality Standards* displays the State and federal ambient air quality standards.

Table 2: Attainment Status of the North Central Coast Air Basin

Pollutant	State Standard (CAAQS)	Federal Standard (NAAQS)
Ozone	Attainment	Unclassified/Attainment
Inhalable Particulates (PM_{10})	**Non-attainment**	Unclassified
Fine Particulates ($PM_{2.5}$)	Attainment	Unclassified/Attainment
Carbon Monoxide (CO)	Unclassified (Santa Cruz County)	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_X)	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment

Source: California Air Resources Board (CARB). *Area Designations Map/State and National*. 2022. Available at https://www.arb.ca.gov/desig/adm/adm.htm. Accessed November 2025.
Notes: CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard
Non-attainment pollutants are highlighted in **Bold**.

Table 3: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standards[1]		Federal Standards[2]	
		Concentration	Attainment Status	Concentration[3]	Attainment Status
Ozone (O_3)	8 Hour	0.070 ppm (137 µg/m^3)	N[9]	0.070 ppm	N[4]
	1 Hour	0.09 ppm (180 µg/m^3)	N	NA	N/A[5]
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	A	9 ppm (10 mg/m^3)	A[6]
	1 Hour	20 ppm (23 mg/m^3)	A	35 ppm (40 mg/m^3)	A
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	A	0.10 ppm[11]	U
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	-	0.053 ppm (100 µg/m^3)	A
Sulfur Dioxide[12] (SO_2)	24 Hour	0.04 ppm (105 µg/m^3)	A	0.14 ppm (365 µg/m^3)	A
	1 Hour	0.25 ppm (655 µg/m^3)	A	0.075 ppm (196 µg/m^3)	A
	Annual Arithmetic Mean	NA	-	0.03 ppm (80 µg/m^3)	A
Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	N	150 µg/m^3	U
	Annual Arithmetic Mean	20 µg/m^3	N[7]	NA	-
Fine Particulate Matter ($PM_{2.5}$)[15]	24-Hour	NA	-	35 µg/m^3	U/A
	Annual Arithmetic Mean	12 µg/m^3	N[7]	12 µg/m^3	N
Sulfates (SO_4^{-2})	24 Hour	25 µg/m^3	A	NA	-
Lead (Pb)[13, 14]	30-Day Average	1.5 µg/m^3	-	NA	A
	Calendar Quarter	NA	-	1.5 µg/m^3	A
	Rolling 3-Month Average	NA	-	0.15 µg/m^3	-
Hydrogen Sulfide (H_2S)	1 Hour	0.03 ppm (42 µg/m^3)	U	NA	-
Vinyl Chloride (C_2H_3Cl)	24 Hour	0.01 ppm (26 µg/m^3)	-	NA	-
Visibility Reducing Particles[8]	8 Hour (10:00 to 18:00 PST)	-	U	-	-

Source: California Air Resources Board (CARB), *Table of Ambient Air Quality Standards*. July 16, 2024. https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed November 2025.
A = attainment; N = nonattainment; U = unclassified; N/A = not applicable or no applicable standard; ppm = parts per million; µg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; – = not indicated or no information available.

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM_{10}, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM_{10} annual standard), then some measurements may be excluded. In particular, measurements are

excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.

2. National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.070 ppm (70 ppb) or less. The 24-hour PM_{10} standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 $\mu g/m^3$. The 24-hour $PM_{2.5}$ standard is attained when the 3-year average of 98th percentiles is less than 35 $\mu g/m^3$.
3. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the 3-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.
4. National air quality standards are set by the EPA at levels determined to be protective of public health with an adequate margin of safety.
5. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area would meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA would make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas would have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.
6. The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.
7. In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.
8. In June 2002, CARB established new annual standards for $PM_{2.5}$ and PM_{10}.
9. Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.
10. The 8-hour CA ozone standard was approved by the Air Resources Board on April 28, 2005, and became effective on May 17, 2006.
11. On January 9, 2013, EPA issued a final rule to determine that the Bay Area attains the 24-hour $PM_{2.5}$ national standard. This EPA rule suspends key SIP requirements as long as monitoring data continues to show that the Bay Area attains the standard. Despite this EPA action, the Bay Area would continue to be designated as “nonattainment” for the national 24-hour $PM_{2.5}$ standard until such time as the Air District submits a “redesignation request” and a “maintenance plan” to EPA, and EPA approves the proposed redesignation.
12. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010). The US Environmental Protection Agency (EPA) expects to make a designation for the Bay Area by the end of 2017.
13. On June 2, 2010, the U.S. EPA established a new 1-hour SO_2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO_2 NAAQS however must continue to be used until one year following U.S. EPA initial designations of the new 1-hour SO_2 NAAQS.
14. CARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure below which there are no adverse health effects determined.
15. National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.
16. In December 2012, EPA strengthened the annual $PM_{2.5}$ NAAQS from 15.0 to 12.0 micrograms per cubic meter ($\mu g/m^3$). In December 2014, EPA issued final area designations for the 2012 primary annual $PM_{2.5}$ NAAQS. Areas designated “unclassifiable/attainment” must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.

3.3 Regional

Monterey Bay Air Resources District (MBARD)

In accordance with the CCAA, the MBARD developed the 2008 Air Quality Management Plan (AQMP) for the Monterey Bay Region. This initial plan marked a transitional phase, shifting MBARD's focus from achieving the 1-hour to the 8-hour ozone component of the CAAQS. It incorporated a comprehensive air quality trends analysis, covering both the 1- and 8-hour standards, along with an updated emission inventory for stationary, area, and mobile sources.

Subsequent revisions further updated this framework. The 2012 Triennial Plan Revision, adopted in April 2013, reassessed and updated components of the 2008 AQMP, specifically focusing on the State ozone standard. Similarly, the 2012-2015 AQMP, adopted in March 2017, documented MBARD’s progress toward meeting the state ozone standard. For the national standards, the USEPA designated the Basin as in attainment of the national 8-hour ozone standard in 2012, and the area has remained in attainment even after the standard was revised to be more stringent in 2015.

To limit air pollutants from construction and operation, projects must adhere to several MBARD rules. These include:

- Rule 400 (Visible Emissions): Provides limits for the visible emissions from sources within MBARD.
- Rule 402 (Nuisances): Prohibits the discharge of contaminants that cause a public nuisance or endanger public health and safety.
- Rule 403 (Particulate Matter): Provides particulate matter emission limits for sources operating within the MBARD.
- Rule 426 (Architectural Coating): Limits the emissions of VOC from the use of architectural coatings.

4 Thresholds of Significance

4.1 CEQA Thresholds of Significance

Section VIII of Appendix G to the CEQA Guidelines addresses typical adverse effects relative to air quality and includes the following threshold questions to evaluate the project's impacts related to air quality. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

c) Expose sensitive receptors to substantial pollutant concentrations?

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

4.2 Monterey Bay Air Resources District Thresholds of Significance

MBARD has established thresholds of significance for criteria pollutants during project construction and operations. A proposed project would not have a significant air quality effect on the environment, if the following criteria are met. These emission thresholds are presented in **Table 4**, *Monterey Bay Air Resources District Thresholds of Significance*, and are based on the offset requirements in MBARD Rule 207 (Review of New or Modified Sources).

Table 4: Monterey Bay Air Resources District Thresholds of Significance

Phase	Maximum Daily Emissions (pounds per day)				
	ROG	NOx	CO	PM_{10}	$PM_{2.5}$
Construction	137	137	550	82	55
Operation	137	137	550	82	55

Source: Monterey Bay Air Resources District (MBARD). *Guidelines for Implementing the California Environmental Quality Act*. Adopted April 1996, revised February 2016. https://www.mbard.org/ceqa. Accessed November 2025.
Notes: ROG = Reactive Organic Compounds; NO_X = oxides of nitrogen; CO = carbon monoxide; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; PM_{10} = particulate matter less than 10 micrometers in diameter.

5 Project Impacts

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Impact AQ-1	**Would the project conflict with or obstruct implementation of the applicable air quality plan?**

***Less Than Significant Impact*.** The current air quality plan for the MBARD is the 2008 AQMP. According to the *MBARD CEQA Air Quality Guidelines*, conformance with the air quality plans is determined by demonstrating compliance with the Association of Monterey Bay Area Governments' (AMBAG) regional growth forecasts and generating ROG and NO_X emissions below the MBARD's thresholds of significance.

As an energy storage facility, project operations would be monitored remotely through the supervisory control and data acquisition system and would only require occasional on-site maintenance and inspection. These activities would be performed by existing employees providing similar services to nearby facilities. As such, the project would not introduce new population or employment to the project area and therefore would not conflict with the AMBAG's regional growth forecasts.

In addition, as discussed in Impact AQ-2 below, project emissions during construction and operation would not cause exceedance of MBARD thresholds of significance for any pollutant. Therefore, the project would be consistent with the 2008 AQMP, and impacts would be less than significant.

Mitigation Measures: None.

Impact AQ-2:	**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?**

Less Than Significant Impact.

Construction Impacts

Construction associated with the project would generate short-term construction-related emissions of criteria air pollutants. Construction emissions are temporary and include emissions of criteria pollutants from construction activities. Emissions were estimated using California Emissions Estimator Model (CalEEMod) Version 2022.1. The project would be constructed over approximately 24 months, including site preparation, substation site preparation, grading, substation site grading, battery and container installation, substation installation, gen-tie foundation and tower erection, gen-tie stringing and pulling, commissioning, and decommissioning. It should be noted that at the time of the preparation of the modeling, construction activities were assumed to start in June 2025. Although it is outdated, it represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. The project was assumed to be operational for 30 years and then be decommissioned and removed at the end of its lifetime. Because CalEEMod only has emission factors out to 2050, 2050 was used as the surrogate year for decommissioning, which is projected for 2057. The majority of the construction phases would

occur concurrently and would not occur sequentially in isolation. Construction duration and equipment list was provided by the Project Applicant based on past experiences constructing similar projects of similar scale, while vehicle trips were based on CalEEMod default values generated from construction equipment list. **Table 5**, *Construction Schedule*, **Table 6**, *Construction Vehicle Trips*, and **Table 7**, *Construction Equipment List* summarize construction modeling assumptions.

Table 5: Construction Schedule

Phase	Start Date	End Date	Days Per Week	Work Days Per Phase
Site Preparation	6/1/2025	7/1/2025	5	22
Substation Site Preparation	7/2/2025	7/16/2025	5	11
Grading	7/2/2025	7/30/2025	5	21
Substation Site Grading	7/31/2025	8/14/2025	5	11
Battery/Container Installation	7/31/2025	11/30/2026	5	348
Substation Installation	8/15/2025	4/15/2026	5	174
Gen-Tie Foundation and Tower Erection	4/16/2025	6/16/2026	5	44
Gen-Tie Stringing and Pulling	6/17/2025	7/17/2026	5	23
Commissioning	12/1/2026	6/1/2027	5	131
Decommissioning	5/31/2050	12/31/2050	5	154

Source: Provided by Project Applicant.

Table 6: Construction Vehicle Trips

Phase	Average One-Way Vehicle Trips		
	Worker	Vendor	Hauling
Site Preparation	40	4	0
Substation Site Preparation	40	4	0
Grading	40	4	0
Substation Site Grading	40	4	0
Battery/Container Installation	40	20	2
Substation Installation	40	20	0
Gen-Tie Foundation and Tower Erection	10	4	0
Gen-Tie Stringing and Pulling	8	4	0
Commissioning	160	0	0
Decommissioning	40	4	2

Source: Based on CalEEMod default.

Table 7: Construction Equipment List

Phase	Equipment	Number per Day	Hours per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/ Backhoes	2	8	84	0.37
	Excavators	2	8	36	0.38
	Rubber Tired Dozers	2	8	367	0.40
Substation Site Preparation	Tractors/Loaders/ Backhoes	1	8	84	0.37
	Excavators	1	8	36	0.38
	Rubber Tired Dozers	1	8	367	0.40
Grading	Graders	2	8	148	0.41
	Tractors/Loaders/ Backhoes	2	8	84	0.37
	Rollers	2	8	36	0.38
Substation Site Grading	Graders	1	8	148	0.41
	Tractors/Loaders/ Backhoes	1	8	84	0.37
	Rollers	1	8	36	0.38
Battery/Container Installation	Air Compressors	1	8	37	0.48
	Cranes	1	8	367	0.29
	Forklifts	1	8	82	0.20
	Tractors/Loaders/ Backhoes	1	8	84	0.37
Substation Installation	Aerial Lifts	1	8	46	0.31
	Air Compressors	1	8	37	0.48
	Bore/Drill Rigs	1	8	83	0.50
	Forklifts	1	8	82	0.20
	Trenchers	1	8	40	0.50
Gen-Tie Foundation and Tower Erection	Air Compressors	1	8	37	0.48
	Cranes	1	8	367	0.29
	Forklifts	1	8	82	0.20
	Pumps	1	8	11	0.74
	Welders	1	8	46	0.45
Gen-Tie Stringing and Pulling	Aerial Lifts	1	8	46	0.31
	Tractors/Loaders/ Backhoes	1	8	84	0.37
Commissioning	Generator Sets	2	8	4,828	0.74
Decommissioning	Concrete/Industrial Saws	2	8	33	0.73
	Cranes	2	8	367	0.29
	Rubber Tired Dozers	2	8	367	0.40
	Tractors/Loaders/ Backhoes	2	8	84	0.37

Source: Equipment list provided by Project Applicant. Horsepower and load factor based on CalEEMod default.

Table 8, *Construction Emissions Summary* presents the project's construction emissions and comparison with the MBARD regional thresholds. As shown in **Table 8**, emissions resulting from construction of the project would not exceed criteria pollutant thresholds established by the MBARD for emissions of any criteria pollutant. It should be noted that the project would implement project design features PDF-AQ-1 and PDF-AQ-2, which requires using CARB-certified Tier 4 Final engines for diesel generators during commissioning phase of construction, watering site twice per day, and limiting vehicle speeds to 25 mph on unpaved roads. These project design features would reduce criteria air pollutants emissions and have been incorporated in the modeling and reflected in **Table 8**. PDF-AQ-1 and PDF-AQ-2 would be required as County-imposed Conditions of Approval to ensure they are implemented during construction of the project.

MBARD established significance thresholds for regional emissions to ensure that project emissions would not delay attainment of federal and State ambient air quality standards or significantly contribute to the violation of the standards. As such, projects generating emissions below the significance thresholds are considered not causing exceedance of federal or state ambient air quality standards. Therefore, as the project emissions would be well below and not exceed MBARD established thresholds, construction activities associated with the project would not 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 and the project's construction-related impacts would be less than significant.

Table 8: Construction Emissions Summary

Year	Maximum Daily Emissions (pounds per day)[1]				
	ROG	NOx	CO	PM_{10}	$PM_{2.5}$
Summer					
2025 (Construction)	3.03	23.26	28.80	46.62	7.59
2026 (Construction)	6.49	33.22	103.00	42.75	5.47
2027 (Construction)	5.55	16.63	90.21	54.54	6.22
2050 (Decommissioning)	1.95	11.42	18.38	15.84	1.88
Winter					
2025 (Construction)	2.04	18.01	21.79	42.11	4.82
2026 (Construction)	6.54	32.85	103.87	55.28	6.71
2027 (Construction)	5.54	16.79	90.57	54.54	6.22
2050 (Decommissioning)	1.95	11.45	18.41	15.84	1.88
Maximum Daily Emissions	**6.54**	**33.22**	**103.87**	**55.28**	**7.59**
MBARD Threshold	*137*	*137*	*550*	*82*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**

Source: Refer to CalEEMod output included in **Attachment A**.
Notes: ROG = Reactive Organic Compounds; NO_X = oxides of nitrogen; CO = carbon monoxide; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; PM_{10} = particulate matter less than 10 micrometers in diameter.
1. Modeling incorporated project design features PDF-AQ-1 (using CARB-certified Tier 4 Final engines for diesel generators during commissioning phase of construction) and PDF-AQ-2 (watering site twice per day and limiting vehicle speeds to 25 mph on unpaved roads). Emissions from diesel generators were estimated in a spreadsheet model and added to CalEEMod output results.

Operational Impacts

Operation of the project would generate long-term operational emissions of criteria air pollutants from area sources, energy sources, mobile sources, and stationary sources. During operation, the project would require routine maintenance and inspection on a weekly basis and one major maintenance/inspection each year. In addition, the batteries would need to be swapped every two to three years. **Table 9**, *Operational Emissions Summary* presents the project's operational emissions and comparison with the MBARD regional thresholds.

Table 9: Operational Emissions Summary

Emission Source	Maximum Daily Emissions (pounds per day)[1]				
	ROG	NOx	CO	PM_{10}	$PM_{2.5}$
Summer					
Mobile	0.44	0.52	5.02	21.20	2.27
Area	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00
Stationary	0.43	3.90	4.09	0.16	0.15
Total	**0.88**	**4.42**	**9.11**	**21.37**	**2.41**
Winter					
Mobile	0.45	0.60	4.92	21.20	2.27
Area	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00
Stationary	0.43	3.90	4.09	0.16	0.15
Total	**0.88**	**4.50**	**9.01**	**21.37**	**2.41**
Maximum Daily Emissions	**0.88**	**4.50**	**9.11**	**21.37**	**2.41**
MBARD Threshold	*137*	*137*	*550*	*82*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**

Source: Refer to CalEEMod output included in **Attachment A**.
Notes: ROG = Reactive Organic Compounds; NO_X = oxides of nitrogen; CO = carbon monoxide; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; PM_{10} = particulate matter less than 10 micrometers in diameter.

Mobile Source

The project would generate mobile source emissions from maintenance and inspection employees traveling to and from the site. Based on information provided by the Project Applicant, it is anticipated that routine operations would require eight workers in a light utility truck to visit the facility on a weekly basis, and one major annual maintenance and inspection would require 20 workers visiting the facility for one week. In addition, there would be six workers visiting the facility to swap the batteries every two to three years. In total, these activities would generate up to 68 trips per day and up to 1,044 trips per year. Assuming 20 miles per one-way trip, the project would generate up to 1,360 miles per day and up to 20,880 miles per year. The number of trips and vehicle miles traveled (VMT) were input into CalEEMod to calculate mobile source emissions. As shown in **Table 9**, mobile source emissions during project operation would not exceed MBARD thresholds.

Area Source

Project operations could generate area source emissions from consumer products, architectural coating, and landscape equipment. However, the project would not involve buildings occupied by employees or landscape on-site. Therefore, the project would not generate area source emissions.

Energy Source

Energy source emissions would be generated from electricity and natural gas usage of the project. It should be noted that criteria pollutants emissions from electricity generation are not quantified by CalEEMod as electricity generation typically takes place off-site at power plants. As the project does not involve occupied buildings, natural gas would not be consumed during operation. As criteria pollutants

emissions are not quantified for electricity consumption, the project would not generate energy source emissions.

Stationary Source

The project would generate stationary source emissions associated with off-road equipment. The batteries would need to be swapped every two to three years during operation, which would require one diesel crane and one diesel forklift, assumed to operate for eight hours for one day. Emissions generated from off-road equipment were modeled in CalEEMod. As shown in **Table 9**, stationary source emissions during project operation would not exceed MBARD thresholds. It should be noted that the project would not include diesel generators during operation.

Total Operational Emissions

As shown in **Table 9**, emissions resulting from operation of the project would be nominal and not exceed criteria pollutant thresholds established by the MBARD for emissions of any criteria pollutant. MBARD established significance thresholds for regional emissions to ensure that project emissions would not delay attainment of federal and State ambient air quality standards or significantly contribute to the violation of the standards. As such, projects generating emissions below the significance thresholds are considered not causing exceedance of federal or state ambient air quality standards. Therefore, due to the lack of major stationary sources (e.g. diesel generators) and nominal operational phase emissions, operational activities associated with the project would not 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 and the project's operational impacts would be less than significant.

Conditions of Approval

During construction, the project would implement the following project design features intended to reduce emissions of criteria air pollutants.

- **PDF-AQ-1**: Prior to the commencement of construction, the Project Applicant or its designee shall demonstrate in the construction contract the requirement of using California Air Resources Board (CARB)-certified Tier 4 Final engines for any diesel generators to be used during the commissioning phase of construction. In addition, any diesel generators during construction shall be located a minimum of 500 feet from off-site residences.

- **PDF-AQ-2**: Prior to the commencement of construction, the Project Applicant or its designee shall demonstrate in the construction contract the requirement of implementing standard construction practices that would be employed to reduce fugitive dust emissions, including watering of the active sites two times per day, depending on weather conditions, as well as limiting vehicle speeds on unpaved roads to 25 miles per hour.

Mitigation Measures: None.

Impact AQ-3: Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. According to MBARD, certain community members who are more susceptible to poor air quality are referred to as sensitive receptors, which typically include residences, education resources, daycare centers, and health care facilities. The nearest sensitive receptors to the project site are rural residential homes located to the north and east, the closest of which would be approximately 285 feet north of the project boundary.

Construction Impacts

The project's construction activities would involve the operation of diesel-powered equipment, which would emit diesel particulate matter (DPM), which is identified as a toxic air contaminant (TAC) by CARB. In order to assess the potential health impacts to existing sensitive receptors near the project site that would be exposed to TAC emissions from project construction, a health risk assessment (HRA) was prepared for the project.[6] The HRA finds that with the implementation of project design feature PDF-AQ-1, exposure to DPM from project construction would result in a potential cancer risk at the maximally exposed individual resident (MEIR) of 9.21 in 1 million, which is less than the MBARD 10 in 1 million threshold. The potential chronic health risk to the MEIR is estimated to be 0.011, which would not exceed the MBARD significance threshold of 1.0. Thus, the proximate sensitive receptors around the project site would have potential cancer and chronic health risk impacts as a result of project construction that are less than the applicable health risk thresholds.

Project construction would also generate PM_{10} emissions from vehicles traveling on unpaved roads, which could cause localized impacts as indicated by MBARD. The project would involve vehicles traveling on unpaved road of approximately 0.4 miles of Minto Road. As discussed in Impact AQ-2, PM_{10} emissions generated from project construction, including on-site off-road equipment and trucks and off-site vehicle emissions, would be well below the MBARD threshold, and the project would implement project design feature PDF-AQ-2 to reduce fugitive dust emissions on unpaved roads. Therefore, PM_{10} emissions would not cause significant impact to nearby sensitive receptors. Impacts would be less than significant.

Operational Impacts

As discussed in Impact AQ-2, emissions resulting from operation of the project would be nominal and mostly from mobile sources, which would be off-site. The on-site diesel off-road equipment would only be used for one day every two to three years and the project would not involve emergency generators or other stationary sources on-site that would generate substantial criteria pollutants or TAC emissions. Due to the nominal number of trips generated during operation, the project would not generate substantial PM_{10} emissions from vehicles traveling on unpaved roads, or localized CO hotspots due to congested intersections and roadway segments near the project site. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations during operation, and impacts would be less than significant.

[6] Dudek. *Construction Health Risk Assessment for the Seahawk BESS Project*. December 2024.

Valley Fever

In certain regions of California, construction activities that disturb soil may generate fugitive dust capable of suspending Coccidioides immitis fungal spores, which can be inhaled and cause Valley Fever. In 2019, Assembly Bill 203 added Section 6709 to the California Labor Code, requiring employers to provide effective Valley Fever awareness and prevention training to construction workers at risk of prolonged dust exposure. This training is required annually and prior to the start of work that is reasonably anticipated to create substantial dust disturbance in Fresno, Kern, Kings, Madera, Tulare, Merced, Monterey, San Benito, San Joaquin, San Luis Obispo, Santa Barbara, Stanislaus, and Ventura Counties.

Currently, there are no established thresholds of significance for Valley Fever impacts. Construction activities such as site preparation and grading have the potential to release Coccidioides immitis spores into the air. The California Department of Public Health recommends that employers in areas where Coccidioides is endemic implement infection prevention measures to protect workers, including the use of dust-control measures and appropriate personal protective equipment to reduce exposure risk.

The project is not anticipated to result in significant Valley Fever impacts because the project site is located in Santa Cruz County, which is not identified as an endemic area with high rates of Valley Fever. In addition, best management practices for fugitive dust control, including twice-daily watering of exposed and disturbed surfaces, would be implemented to minimize dust generation and reduce potential exposure to workers and nearby receptors. Valley Fever infection rates in Santa Cruz County are relatively low compared to other California counties; therefore, a Valley Fever prevention plan is not required for construction activities in Santa Cruz County. Impacts would be less than significant.

Mitigation Measures: None.

Impact AQ-4:	**Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

***Less Than Significant Impact*.** Land uses associated with odor complaints typically include landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries.

Construction Impacts

Potential temporary and intermittent odors may result from construction equipment exhaust. Temporary and intermittent construction-source emissions are controlled through existing requirements and industry Best Management Practices (BMPs), including CCR Title 13 Sections 2449(d)(3) and 2485, which require the project to minimize idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. Therefore, any impacts to existing adjacent land uses would be short-term and are less than significant.

Operational Impacts

The operation of the proposed project does not include any uses typically identified as being associated with odors. The use of off-road equipment for battery swaps may generate odors from exhaust. However,

the usage would be approximately one day every two to three years, which is infrequent and would generate minimal levels of odors. Therefore, impacts would be less than significant.

Mitigation Measures: None.

6 Cumulative Impacts

Air pollution is largely a cumulative issue, as air pollutants from individual projects contribute to the cumulative sum of total air pollutants in the Basin. MBARD does not provide separate thresholds of significance to be used to assess cumulative construction impacts. In regard to cumulative operational impacts, according to the *MBARD CEQA Air Quality Guidelines*, projects which are not consistent with the AQMP and have not been accommodated in the AQMP will have a significant cumulative impact on regional air quality unless emissions are totally offset. As discussed in Impact AQ-1, the project would be consistent with MBARD 2008 AQMP as the project would not introduce new population or employment to the project area. In addition, as discussed in Impact AQ-2 and Impact AQ-3, the project would not generate emissions exceeding MBARD thresholds during construction and operation, and regional and localized impacts would be less than significant. In addition, based on CARB's Pollution Mapping Tool, the nearest tracked stationary source facility is the Ameresco Santa Cruz Energy Buena Vista Landfill approximately 3.8 miles southwest of the project site, and there are no other tracked facilities within six miles of the project site.[7] According to CARB, criteria pollutants emissions generated from the Ameresco Santa Cruz Energy Buena Vista Landfill are below the EPA de minimis thresholds.[8] As such, the project would not have a cumulatively considerable air quality impact, and cumulative impacts would be less than significant.

7 Agencies and Agency Contacts

No agencies were contacted directly to specifically discuss air quality impacts related to the proposed project.

8 Permits and Permit Schedules

Pursuant to Assembly Bill 205 subsection 25545.1(b)(1), the CEC retains exclusive authority over permitting and supersedes any applicable statute, ordinance, or regulation of a local air quality management district. The Project Applicant and CEC would collaborate with the MBARD on review of this report to ensure compliance with MBARD rules and regulations. No further permits related to air quality are required.

[7] California Air Resources Board. *Pollution Mapping Tool v2.6*. https://ww2.arb.ca.gov/resources/carb-pollution-mapping-tool. Accessed November 2025.

[8] California Air Resources Board. *Facility Details, Ameresco Santa Cruz Energy, Llc - Buena Vista Landfill*. https://www.arb.ca.gov/app/emsinv/iframe/facinfo/facdet.php?co_=44&ab_=NCC&facid_=489&dis_=MBU&dbyr=2022&dd=. Accessed December 2025.

9 References

California Air Resources Board (CARB). *Area Designations Map/State and National*. 2022. https://www.arb.ca.gov/desig/adm/adm.htm. Accessed November 2025.

California Air Resources Board (CARB), *Table of Ambient Air Quality Standards*. July 16, 2024. https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed November 2025.

California Air Resources Board (CARB). *iADAM: Air Quality Data Statistics*. https://www.arb.ca.gov/adam. Accessed November 2025.

California Air Resources Board (CARB). *Top Four Summary*. 2023. https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed November 2025.

California Air Resources Board. *Pollution Mapping Tool v2.6*. https://ww2.arb.ca.gov/resources/carb-pollution-mapping-tool. Accessed November 2025.

California Air Resources Board. *Facility Details, Ameresco Santa Cruz Energy, Llc - Buena Vista Landfill*. https://www.arb.ca.gov/app/emsinv/iframe/facinfo/facdet.php?co_=44&ab_=NCC&facid_=489&dis_=MBU&dbyr=2022&dd=. Accessed December 2025.

Dudek. *Construction Health Risk Assessment for the Seahawk BESS Project*. December 5, 2024.

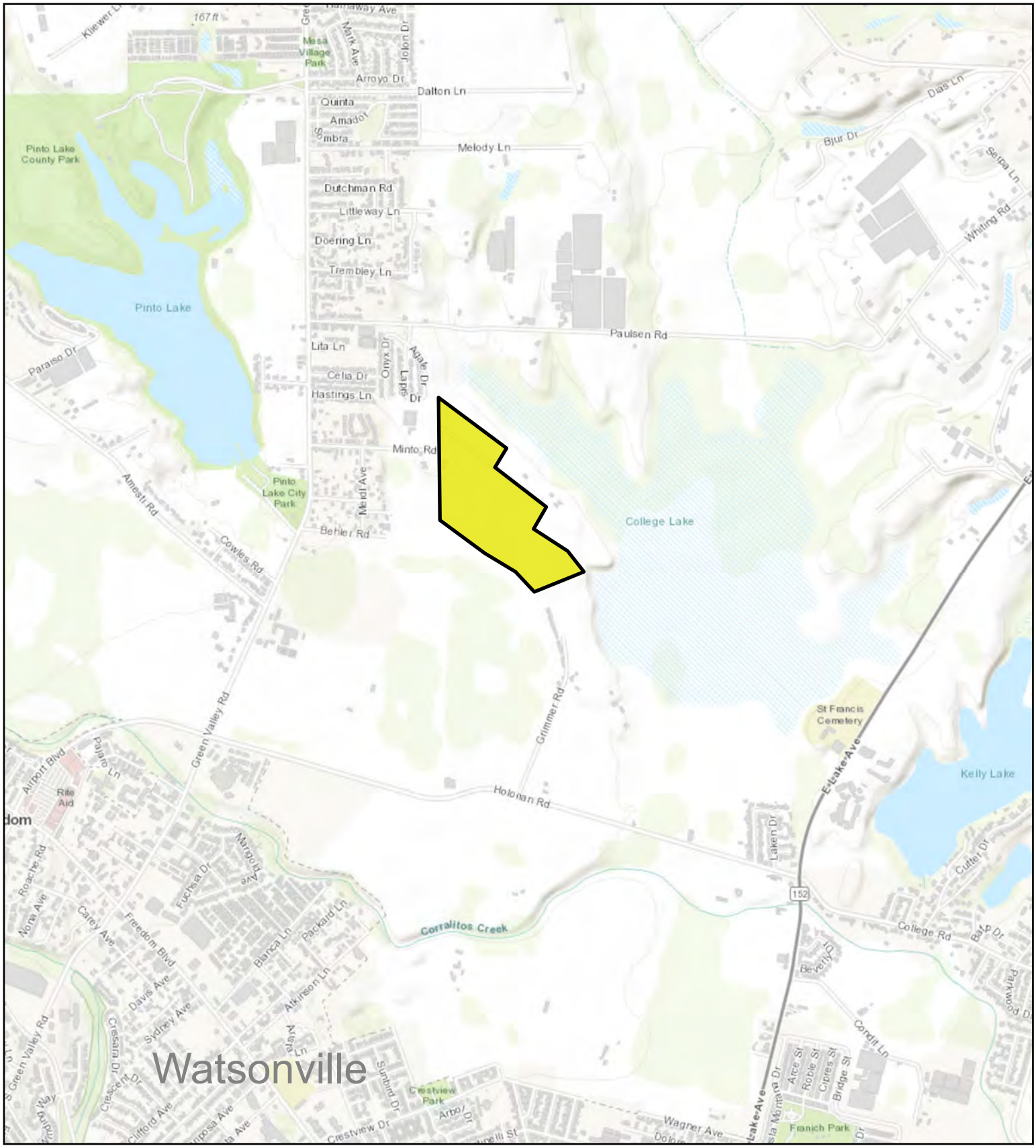
Monterey Bay Air Resources District (MBARD). *Air Quality Management Plan*. 2008. http://mbuapcd.org/wp content/uploads/2015/01/2008-AQMP-Combined.pdf. Accessed November 2025.

Monterey Bay Air Resources District (MBARD). *CEQA Air Quality Guidelines*. Last revised February 2008. https://www.mbard.org/ceqa. Accessed November 2025.

Monterey Bay Air Resources District (MBARD). *Guidelines for Implementing the California Environmental Quality Act*. Adopted April 1996, revised February 2016. https://www.mbard.org/ceqa. Accessed November 2025.

Monterey Bay Air Resources District (MBARD). *Triennial Plan Revision 2009-2011*. Adopted April 17, 2013. http://mbard.org/pdf/Final_Triennial_Plan_Revision_041913.pdf. Accessed November 2025.

Unites States Environmental Protection Agency (USEPA). *NAAQS Table*. 2022. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed November 2025.



SEAHAWK BATTERY ENERGY STORAGE SYSTEM PROJECT

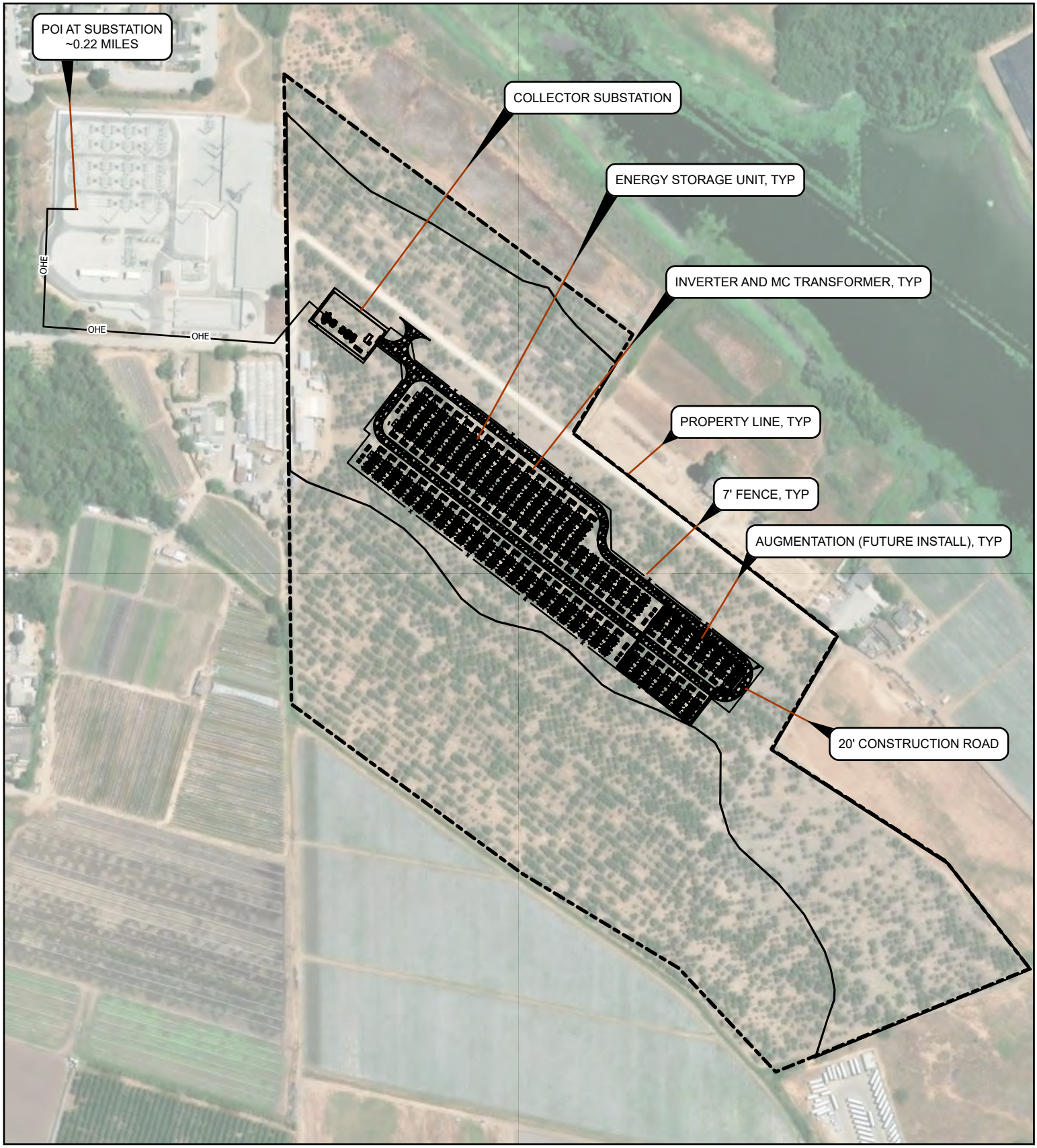
FIGURE 1: PROJECT SITE LOCATION

0 2,000 4,000 Feet

0 0.5 1 Miles

PROJECT SITE LOCATION

This page is intentionally blank.



SEAHAWK BATTERY ENERGY STORAGE SYSTEM PROJECT

FIGURE 2 : SITE PLAN

0 250 500 Feet

0 0.05 0.1 Miles

SITE PLAN OUTLINE

PROJECT SITE LOCATION

This page is intentionally blank.

Attachment A:
Air Emissions Data

This page is intentionally blank.

Seahawk BESS - Construction HRA Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

3.3. Substation Site Preparation (2025) - Unmitigated

3.5. Grading (2025) - Unmitigated

3.7. Substation Site Grading (2025) - Unmitigated

3.9. Battery/Container Installation (2025) - Unmitigated

3.11. Battery/Container Installation (2026) - Unmitigated

3.13. Substation Installation (2025) - Unmitigated

3.15. Substation Installation (2026) - Unmitigated

3.17. Gen-Tie Foundation and Tower Erection (2026) - Unmitigated

3.19. Gen-Tie Stringing and Pulling (2026) - Unmitigated

3.21. Commissioning (2026) - Unmitigated

3.23. Commissioning (2027) - Unmitigated

3.25. Decommissioning (2050) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Seahawk BESS - Construction HRA
Construction Start Date	6/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	37.2
Location	90 Minto Rd, Watsonville, CA 95076, USA
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3126
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	14.0	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.19	2.72	22.1	24.5	0.06	0.97	5.12	6.05	0.89	2.63	3.49	—	5,825	5,825	0.24	0.05	0.15	5,846
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.24	1.89	12.5	17.6	0.06	0.44	0.03	0.47	0.41	0.01	0.41	—	5,825	5,825	0.24	0.05	< 0.005	5,846
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.02	0.87	6.40	8.23	0.02	0.24	0.42	0.66	0.22	0.20	0.42	—	2,458	2,458	0.10	0.02	0.03	2,466
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.16	1.17	1.50	< 0.005	0.04	0.08	0.12	0.04	0.04	0.08	—	407	407	0.02	< 0.005	0.01	408

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.19	2.72	22.1	24.5	0.04	0.97	5.12	6.05	0.89	2.63	3.49	—	3,855	3,855	0.18	0.04	0.15	3,872

2026	2.09	1.77	13.8	15.9	0.03	0.50	0.02	0.52	0.46	0.01	0.47	—	3,287	3,287	0.15	0.04	0.14	3,302
2027	0.64	0.63	0.13	1.63	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	57.1	57.1	0.03	0.01	0.11	62.5
2050	2.24	1.88	11.1	17.5	0.06	0.29	0.01	0.30	0.27	< 0.005	0.27	—	5,825	5,825	0.24	0.05	< 0.005	5,846
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.96	1.67	12.5	16.4	0.03	0.44	0.02	0.47	0.41	0.01	0.41	—	2,787	2,787	0.15	0.04	< 0.005	2,802
2026	1.86	1.59	11.9	16.2	0.03	0.39	0.03	0.41	0.36	0.01	0.36	—	2,786	2,786	0.15	0.04	< 0.005	2,802
2027	0.65	0.62	0.16	2.39	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	57.3	57.3	0.04	0.01	< 0.005	62.8
2050	2.24	1.89	11.1	17.6	0.06	0.29	0.01	0.30	0.27	< 0.005	0.27	—	5,825	5,825	0.24	0.05	< 0.005	5,846
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.91	0.77	6.01	7.28	0.01	0.24	0.42	0.66	0.22	0.20	0.42	—	1,229	1,229	0.06	0.02	0.02	1,235
2026	1.02	0.87	6.40	8.23	0.01	0.22	0.01	0.23	0.20	< 0.005	0.21	—	1,546	1,546	0.08	0.02	0.03	1,555
2027	0.19	0.18	0.05	0.61	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	16.9	16.9	0.01	< 0.005	0.01	18.5
2050	0.94	0.80	4.70	7.42	0.02	0.12	< 0.005	0.13	0.11	< 0.005	0.11	—	2,458	2,458	0.10	0.02	< 0.005	2,466
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.17	0.14	1.10	1.33	< 0.005	0.04	0.08	0.12	0.04	0.04	0.08	—	203	203	0.01	< 0.005	< 0.005	204
2026	0.19	0.16	1.17	1.50	< 0.005	0.04	< 0.005	0.04	0.04	< 0.005	0.04	—	256	256	0.01	< 0.005	0.01	257
2027	0.03	0.03	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.79	2.79	< 0.005	< 0.005	< 0.005	3.06
2050	0.17	0.15	0.86	1.35	< 0.005	0.02	< 0.005	0.02	0.02	< 0.005	0.02	—	407	407	0.02	< 0.005	< 0.005	408

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.77	2.33	22.0	20.9	0.03	0.93	—	0.93	0.86	—	0.86	—	3,620	3,620	0.15	0.03	—	3,632
Dust From Material Movement	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.33	1.26	< 0.005	0.06	—	0.06	0.05	—	0.05	—	218	218	0.01	< 0.005	—	219
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	36.1	36.1	< 0.005	< 0.005	—	36.2
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.63
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.97
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Hauling	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	0.00

3.3. Substation Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.39	1.16	11.0	10.4	0.02	0.47	—	0.47	0.43	—	0.43	—	1,810	1,810	0.07	0.01	—	1,816
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.33	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.5	54.5	< 0.005	< 0.005	—	54.7
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.03	9.03	< 0.005	< 0.005	—	9.06
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.63
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Hauling	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	0.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	10.1	13.1	0.02	0.51	—	0.51	0.47	—	0.47	—	2,001	2,001	0.08	0.02	—	2,008

Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.58	0.75	< 0.005	0.03	—	0.03	0.03	—	0.03	—	115	115	< 0.005	< 0.005	—	116
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.14	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	19.1	19.1	< 0.005	< 0.005	—	19.1
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2

Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.63
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.93
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Hauling	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	0.00

3.7. Substation Site Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.61	5.05	6.56	0.01	0.25	—	0.25	0.23	—	0.23	—	1,001	1,001	0.04	0.01	—	1,004
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.2	30.2	< 0.005	< 0.005	—	30.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.99	4.99	< 0.005	< 0.005	—	5.01
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.63
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Hauling	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	0.00

3.9. Battery/Container Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.73	6.68	7.59	0.02	0.27	—	0.27	0.25	—	0.25	—	1,611	1,611	0.07	0.01	—	1,617
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.73	6.68	7.59	0.02	0.27	—	0.27	0.25	—	0.25	—	1,611	1,611	0.07	0.01	—	1,617
Onsite truck	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.01	2.29	< 0.005	0.08	—	0.08	0.07	—	0.07	—	486	486	0.02	< 0.005	—	487
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.37	0.42	< 0.005	0.01	—	0.01	0.01	—	0.01	—	80.4	80.4	< 0.005	< 0.005	—	80.7
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	0.02	0.01	0.24	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.3	36.3	0.01	0.01	0.04	38.1
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	< 0.005	5.31
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.04	0.67	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	0.01	< 0.005	< 0.005	16.3
Vendor	0.02	0.01	0.24	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.2	36.2	0.01	0.01	< 0.005	38.1
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.02	5.02	< 0.005	< 0.005	< 0.005	5.30
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.43	4.43	< 0.005	< 0.005	< 0.005	4.86
Vendor	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.5
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.80
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.90
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26

3.11. Battery/Container Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	6.30	7.53	0.02	0.24	—	0.24	0.22	—	0.22	—	1,611	1,611	0.07	0.01	—	1,616
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	6.30	7.53	0.02	0.24	—	0.24	0.22	—	0.22	—	1,611	1,611	0.07	0.01	—	1,616
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.12	4.92	0.01	0.16	—	0.16	0.14	—	0.14	—	1,053	1,053	0.04	0.01	—	1,057
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.75	0.90	< 0.005	0.03	—	0.03	0.03	—	0.03	—	174	174	0.01	< 0.005	—	175
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.04	0.43	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.5	14.5	0.01	< 0.005	0.03	15.9
Vendor	0.02	0.01	0.23	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	0.04	37.6
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.04	0.63	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.6	14.6	0.01	< 0.005	< 0.005	16.0
Vendor	0.01	0.01	0.24	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.8	35.8	0.01	0.01	< 0.005	37.6
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.03	0.35	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	9.44	9.44	0.01	< 0.005	0.01	10.3
Vendor	0.01	0.01	0.15	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.4	23.4	< 0.005	< 0.005	0.01	24.6
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.24	3.24	< 0.005	< 0.005	< 0.005	3.42
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.56	1.56	< 0.005	< 0.005	< 0.005	1.71
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.87	3.87	< 0.005	< 0.005	< 0.005	4.07
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.57

3.13. Substation Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	5.20	7.16	0.01	0.18	—	0.18	0.16	—	0.16	—	1,068	1,068	0.04	0.01	—	1,072
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	5.20	7.16	0.01	0.18	—	0.18	0.16	—	0.16	—	1,068	1,068	0.04	0.01	—	1,072
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.41	1.95	< 0.005	0.05	—	0.05	0.04	—	0.04	—	291	291	0.01	< 0.005	—	292
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.1	48.1	< 0.005	< 0.005	—	48.3
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	0.02	0.01	0.24	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.3	36.3	0.01	0.01	0.04	38.1
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.04	0.67	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	0.01	< 0.005	< 0.005	16.3
Vendor	0.02	0.01	0.24	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.2	36.2	0.01	0.01	< 0.005	38.1
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.01	0.16	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.00	4.00	< 0.005	< 0.005	< 0.005	4.38
Vendor	< 0.005	< 0.005	0.06	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.86	9.86	< 0.005	< 0.005	0.01	10.4
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.73
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.63	1.63	< 0.005	< 0.005	< 0.005	1.72
Hauling	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	0.00

3.15. Substation Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.65	0.54	4.99	7.13	0.01	0.15	—	0.15	0.14	—	0.14	—	1,070	1,070	0.04	0.01	—	1,074
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.99	7.13	0.01	0.15	—	0.15	0.14	—	0.14	—	1,070	1,070	0.04	0.01	—	1,074
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	1.46	< 0.005	0.03	—	0.03	0.03	—	0.03	—	220	220	0.01	< 0.005	—	221
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.19	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	36.4	36.4	< 0.005	< 0.005	—	36.5
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.04	0.43	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.5	14.5	0.01	< 0.005	0.03	15.9
Vendor	0.02	0.01	0.23	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	0.04	37.6
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.04	0.63	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.6	14.6	0.01	< 0.005	< 0.005	16.0
Vendor	0.01	0.01	0.24	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.8	35.8	0.01	0.01	< 0.005	37.6
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.97	2.97	< 0.005	< 0.005	< 0.005	3.25
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.35	7.35	< 0.005	< 0.005	< 0.005	7.72
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	< 0.005	1.28
Hauling	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	0.00

3.17. Gen-Tie Foundation and Tower Erection (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.85	7.19	7.69	0.02	0.26	—	0.26	0.24	—	0.24	—	1,610	1,610	0.07	0.01	—	1,615
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.87	0.93	< 0.005	0.03	—	0.03	0.03	—	0.03	—	194	194	0.01	< 0.005	—	195
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	0.01	3.97
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.15	7.15	< 0.005	< 0.005	0.01	7.52
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.91
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Hauling	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	0.00

3.19. Gen-Tie Stringing and Pulling (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.76	2.68	< 0.005	0.04	—	0.04	0.04	—	0.04	—	438	438	0.02	< 0.005	—	439
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.6	27.6	< 0.005	< 0.005	—	27.7
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.57	4.57	< 0.005	< 0.005	—	4.58
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.01	0.09	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	0.01	3.18
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.15	7.15	< 0.005	< 0.005	0.01	7.52
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.20
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Hauling	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	0.00

3.21. Commissioning (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.17	2.53	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	58.4	58.4	0.05	0.01	< 0.005	64.0
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.01	0.13	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.50	3.50	< 0.005	< 0.005	< 0.005	3.84
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.64
Vendor	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	0.00
Hauling	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	0.00

3.23. Commissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.64	0.63	0.13	1.63	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	57.1	57.1	0.03	0.01	0.11	62.5
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.62	0.16	2.39	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	57.3	57.3	0.04	0.01	< 0.005	62.8
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.05	0.61	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	16.9	16.9	0.01	< 0.005	0.01	18.5
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.79	2.79	< 0.005	< 0.005	< 0.005	3.06
Vendor	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	0.00
Hauling	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	0.00

3.25. Decommissioning (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	1.82	11.1	17.4	0.06	0.29	—	0.29	0.27	—	0.27	—	5,805	5,805	0.24	0.05	—	5,825
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	1.82	11.1	17.4	0.06	0.29	—	0.29	0.27	—	0.27	—	5,805	5,805	0.24	0.05	—	5,825
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	4.67	7.33	0.02	0.12	—	0.12	0.11	—	0.11	—	2,449	2,449	0.10	0.02	—	2,458
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.85	1.34	< 0.005	0.02	—	0.02	0.02	—	0.02	—	405	405	0.02	< 0.005	—	407
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.01	0.14	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	< 0.005	12.0
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.04	5.04	< 0.005	< 0.005	< 0.005	5.28
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.75	3.75	< 0.005	< 0.005	< 0.005	3.94
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.02	0.20	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	< 0.005	11.9
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	< 0.005	5.38
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.82	3.82	< 0.005	< 0.005	< 0.005	4.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.61	4.61	< 0.005	< 0.005	< 0.005	4.98
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.25
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.59	1.59	< 0.005	< 0.005	< 0.005	1.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.83
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.28

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2025	7/1/2025	5.00	22.0	—
Substation Site Preparation	Site Preparation	7/2/2025	7/16/2025	5.00	11.0	—
Grading	Grading	7/2/2025	7/30/2025	5.00	21.0	—
Substation Site Grading	Grading	7/31/2025	8/14/2025	5.00	11.0	—
Battery/Container Installation	Building Construction	7/31/2025	11/30/2026	5.00	348	—
Substation Installation	Building Construction	8/15/2025	4/15/2026	5.00	174	—
Gen-Tie Foundation and Tower Erection	Building Construction	4/16/2026	6/16/2026	5.00	44.0	—
Gen-Tie Stringing and Pulling	Building Construction	6/17/2026	7/17/2026	5.00	23.0	—
Commissioning	Building Construction	12/1/2026	6/1/2027	5.00	131	—
Decommissioning	Building Construction	5/31/2050	12/31/2050	5.00	154	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Site Preparation	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Substation Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Substation Site Preparation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Substation Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Graders	Diesel	Average	2.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Substation Site Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Substation Site Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Substation Site Grading	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Battery/Container Installation	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Battery/Container Installation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Battery/Container Installation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Battery/Container Installation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Substation Installation	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Substation Installation	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Substation Installation	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Substation Installation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20

Substation Installation	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Gen-Tie Foundation and Tower Erection	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Gen-Tie Foundation and Tower Erection	Cranes	Diesel	Average	1.00	8.00	367	0.29
Gen-Tie Foundation and Tower Erection	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Gen-Tie Foundation and Tower Erection	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Gen-Tie Foundation and Tower Erection	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Gen-Tie Stringing and Pulling	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Gen-Tie Stringing and Pulling	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Decommissioning	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Decommissioning	Cranes	Diesel	Average	2.00	8.00	367	0.29
Decommissioning	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Decommissioning	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	40.0	0.25	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	0.25	HHDT,MHDT
Site Preparation	Hauling	0.00	0.25	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	40.0	0.25	LDA,LDT1,LDT2
Grading	Vendor	4.00	0.25	HHDT,MHDT
Grading	Hauling	0.00	0.25	HHDT
Grading	Onsite truck	—	—	HHDT
Battery/Container Installation	—	—	—	—
Battery/Container Installation	Worker	40.0	0.25	LDA,LDT1,LDT2
Battery/Container Installation	Vendor	20.0	0.25	HHDT,MHDT
Battery/Container Installation	Hauling	2.00	0.25	HHDT
Battery/Container Installation	Onsite truck	—	—	HHDT
Substation Site Preparation	—	—	—	—
Substation Site Preparation	Worker	40.0	0.25	LDA,LDT1,LDT2
Substation Site Preparation	Vendor	4.00	0.25	HHDT,MHDT
Substation Site Preparation	Hauling	0.00	0.25	HHDT
Substation Site Preparation	Onsite truck	—	—	HHDT
Substation Site Grading	—	—	—	—
Substation Site Grading	Worker	40.0	0.25	LDA,LDT1,LDT2
Substation Site Grading	Vendor	4.00	0.25	HHDT,MHDT
Substation Site Grading	Hauling	0.00	0.25	HHDT
Substation Site Grading	Onsite truck	—	—	HHDT
Substation Installation	—	—	—	—
Substation Installation	Worker	40.0	0.25	LDA,LDT1,LDT2
Substation Installation	Vendor	20.0	0.25	HHDT,MHDT
Substation Installation	Hauling	0.00	0.25	HHDT
Substation Installation	Onsite truck	—	—	HHDT
Gen-Tie Foundation and Tower Erection	—	—	—	—
Gen-Tie Foundation and Tower Erection	Worker	10.0	0.25	LDA,LDT1,LDT2

Gen-Tie Foundation and Tower Erection	Vendor	4.00	0.25	HHDT,MHDT
Gen-Tie Foundation and Tower Erection	Hauling	0.00	0.25	HHDT
Gen-Tie Foundation and Tower Erection	Onsite truck	—	—	HHDT
Gen-Tie Stringing and Pulling	—	—	—	—
Gen-Tie Stringing and Pulling	Worker	8.00	0.25	LDA,LDT1,LDT2
Gen-Tie Stringing and Pulling	Vendor	4.00	0.25	HHDT,MHDT
Gen-Tie Stringing and Pulling	Hauling	0.00	0.25	HHDT
Gen-Tie Stringing and Pulling	Onsite truck	—	—	HHDT
Commissioning	—	—	—	—
Commissioning	Worker	160	0.25	LDA,LDT1,LDT2
Commissioning	Vendor	0.00	0.25	HHDT,MHDT
Commissioning	Hauling	0.00	0.25	HHDT
Commissioning	Onsite truck	—	—	HHDT
Decommissioning	—	—	—	—
Decommissioning	Worker	40.0	0.25	LDA,LDT1,LDT2
Decommissioning	Vendor	4.00	0.25	HHDT,MHDT
Decommissioning	Hauling	2.00	0.25	HHDT
Decommissioning	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	22.0	0.00	—
Substation Site Preparation	—	—	5.50	0.00	—
Grading	—	—	21.0	0.00	—
Substation Site Grading	—	—	5.50	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2050	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.75	annual days of extreme heat
Extreme Precipitation	8.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	15.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	17.6
AQ-PM	3.36
AQ-DPM	22.8
Drinking Water	60.1
Lead Risk Housing	58.8
Pesticides	98.4
Toxic Releases	7.49
Traffic	18.1
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	32.4
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	93.4
Solid Waste	63.7

Sensitive Population	—
Asthma	54.5
Cardio-vascular	32.5
Low Birth Weights	16.8
Socioeconomic Factor Indicators	—
Education	87.0
Housing	83.3
Linguistic	81.9
Poverty	70.4
Unemployment	52.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	48.60772488
Employed	61.79905043
Median HI	48.13293982
Education	—
Bachelor's or higher	21.73745669
High school enrollment	100
Preschool enrollment	4.670858463
Transportation	—
Auto Access	50.77633774
Active commuting	54.69010651
Social	—
2-parent households	45.07891698
Voting	44.23200308

Neighborhood	—
Alcohol availability	81.05992557
Park access	26.06185038
Retail density	16.04003593
Supermarket access	19.90247658
Tree canopy	65.55883485
Housing	—
Homeownership	64.54510458
Housing habitability	37.1872193
Low-inc homeowner severe housing cost burden	37.20005133
Low-inc renter severe housing cost burden	24.20120621
Uncrowded housing	15.89888361
Health Outcomes	—
Insured adults	24.93263185
Arthritis	0.0
Asthma ER Admissions	32.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	23.6
Cognitively Disabled	36.6
Physically Disabled	52.4
Heart Attack ER Admissions	63.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	84.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	57.3
English Speaking	47.7
Foreign-born	77.0
Outdoor Workers	7.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	81.3
Traffic Density	30.0
Traffic Access	0.0
Other Indices	—
Hardship	73.4
Other Decision Support	—
2016 Voting	45.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	53.0

Healthy Places Index Score for Project Location (b)	41.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Seahawk BESS: assumed building to account for routine maintenance workers. Total acreage of 14 acres disturbed with no landscaping anticipated per applicant.
Construction: Construction Phases	Adjusted default construction schedule based on information provided by the applicant.
Construction: Off-Road Equipment	Default equipment revised based on information provided by the applicant.
Construction: Off-Road Equipment EF	—
Construction: Trips and VMT	Default on-road vehicle assumptions revised based on applicant input. 0.25 miles assumed per trip to account for localized travel only.
Construction: On-Road Fugitive Dust	Unpaved portion of Minto Road modeled separately for construction.
Operations: Road Dust	% paved based on assumption of 20-mile trip length on average with 0.4 miles unpaved on Minto Road
Operations: Consumer Products	Facility will be unmanned. No consumer products assumed.
Operations: Architectural Coatings	No architectural coatings anticipated.
Operations: Energy Use	Conservatively assumed 10% of capacity would be needed for any lighting and container cooling.

Operations: Water and Waste Water	Facility would be unmanned. No water/wastewater assumed.
Operations: Solid Waste	Facility would be unmanned. No solid waste assumed.
Operations: Off-Road Equipment	1 crane and 1 forklift assumed to operate for 8 hours for 1 day every 2 or 3 years for battery swaps.
Operations: Landscape Equipment	No landscaping anticipated.
Operations: Refrigerants	Conservatively assumed 600 pounds of SF6 for the project substation equipment.

Seahawk BESS - Construction Unpaved Road Travel Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation - worker (2025) - Unmitigated

3.3. Substation Site Preparation - worker (2025) - Unmitigated

3.5. Site Preparation - trucks (2025) - Unmitigated

3.7. Substation Site Preparation - trucks (2025) - Unmitigated

3.9. Grading - worker (2025) - Unmitigated

3.11. Substation Site Grading - worker (2025) - Unmitigated

3.13. Grading - trucks (2025) - Unmitigated

3.15. Substation Site Grading - trucks (2025) - Unmitigated

3.17. Battery/Container Installation - worker (2025) - Unmitigated

3.19. Battery/Container Installation - worker (2026) - Unmitigated

3.21. Substation Installation - worker (2025) - Unmitigated

3.23. Substation Installation - worker (2026) - Unmitigated

3.25. Gen-Tie Foundation and Tower Erection - worker (2026) - Unmitigated

3.27. Gen-Tie Stringing and Pulling - worker (2026) - Unmitigated

3.29. Commissioning - worker (2026) - Unmitigated

3.31. Commissioning - worker (2027) - Unmitigated

3.33. Decommissioning - worker (2050) - Unmitigated

3.35. Battery/Container Installation - trucks (2025) - Unmitigated

3.37. Battery/Container Installation - trucks (2026) - Unmitigated

3.39. Substation Installation - trucks (2025) - Unmitigated

3.41. Substation Installation - trucks (2026) - Unmitigated

3.43. Gen-Tie Foundation and Tower Erection - trucks (2026) - Unmitigated

3.45. Gen-Tie Stringing and Pulling - trucks (2026) - Unmitigated

3.47. Commissioning - trucks (2026) - Unmitigated

3.49. Commissioning - trucks (2027) - Unmitigated

3.51. Decommissioning - trucks (2050) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Seahawk BESS - Construction Unpaved Road Travel
Construction Start Date	6/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	37.2
Location	90 Minto Rd, Watsonville, CA 95076, USA
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3126
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	14.0	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	0.41	0.72	1.32	< 0.005	< 0.005	52.8	52.8	< 0.005	5.27	5.27	—	155	155	0.03	0.03	0.26	163
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	0.43	0.75	1.84	< 0.005	< 0.005	52.8	52.8	< 0.005	5.27	5.27	—	154	154	0.04	0.03	0.01	163
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.13	0.35	0.60	< 0.005	< 0.005	19.2	19.2	< 0.005	1.92	1.92	—	76.0	76.0	0.02	0.01	0.05	80.2
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.02	0.06	0.11	< 0.005	< 0.005	3.51	3.51	< 0.005	0.35	0.35	—	12.6	12.6	< 0.005	< 0.005	0.01	13.3

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.27	0.24	0.72	1.00	< 0.005	< 0.005	40.2	40.2	< 0.005	4.02	4.02	—	155	155	0.03	0.03	0.26	163

2026	0.26	0.23	0.70	0.96	< 0.005	< 0.005	40.2	40.2	< 0.005	4.02	4.02	—	153	153	0.03	0.02	0.24	161
2027	0.43	0.41	0.37	1.32	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	112	112	0.03	0.02	0.19	119
2050	0.06	0.06	0.12	0.26	< 0.005	< 0.005	15.2	15.2	< 0.005	1.51	1.51	—	34.9	34.9	0.01	0.01	< 0.005	36.6
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.27	0.24	0.75	1.27	< 0.005	< 0.005	40.2	40.2	< 0.005	4.02	4.02	—	154	154	0.03	0.03	0.01	163
2026	0.46	0.43	0.73	1.84	< 0.005	< 0.005	52.8	52.8	< 0.005	5.27	5.27	—	152	152	0.04	0.02	0.01	160
2027	0.44	0.41	0.40	1.76	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	112	112	0.04	0.02	< 0.005	119
2050	0.06	0.06	0.14	0.31	< 0.005	< 0.005	15.2	15.2	< 0.005	1.51	1.51	—	35.2	35.2	0.01	0.01	< 0.005	37.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.10	0.09	0.24	0.41	< 0.005	< 0.005	12.7	12.7	< 0.005	1.27	1.27	—	50.9	50.9	0.01	0.01	0.04	53.7
2026	0.14	0.13	0.35	0.60	< 0.005	< 0.005	19.2	19.2	< 0.005	1.92	1.92	—	76.0	76.0	0.02	0.01	0.05	80.2
2027	0.13	0.12	0.12	0.46	0.00	0.00	14.1	14.1	0.00	1.41	1.41	—	33.1	33.1	0.01	0.01	0.02	35.1
2050	0.03	0.02	0.05	0.12	< 0.005	< 0.005	5.75	5.75	< 0.005	0.57	0.57	—	14.7	14.7	< 0.005	< 0.005	< 0.005	15.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.02	0.02	0.04	0.07	< 0.005	< 0.005	2.32	2.32	< 0.005	0.23	0.23	—	8.43	8.43	< 0.005	< 0.005	0.01	8.89
2026	0.03	0.02	0.06	0.11	< 0.005	< 0.005	3.51	3.51	< 0.005	0.35	0.35	—	12.6	12.6	< 0.005	< 0.005	0.01	13.3
2027	0.02	0.02	0.02	0.08	0.00	0.00	2.57	2.57	0.00	0.26	0.26	—	5.48	5.48	< 0.005	< 0.005	< 0.005	5.80
2050	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	1.05	1.05	< 0.005	0.10	0.10	—	2.43	2.43	< 0.005	< 0.005	< 0.005	2.55

3. Construction Emissions Details

3.1. Site Preparation - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.03	0.00	0.00	0.71	0.71	0.00	0.07	0.07	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.82
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.13	0.13	0.00	0.01	0.01	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.3. Substation Site Preparation - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.36	0.36	0.00	0.04	0.04	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.07	0.07	0.00	0.01	0.01	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.5. Site Preparation - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.25	9.25	< 0.005	< 0.005	0.01	9.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.56	0.56	< 0.005	< 0.005	< 0.005	0.59
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.7. Substation Site Preparation - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.25	9.25	< 0.005	< 0.005	0.01	9.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.9. Grading - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.02	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	1.63	1.63	< 0.005	< 0.005	< 0.005	1.74
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.12	0.12	0.00	0.01	0.01	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.29
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.11. Substation Site Grading - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.36	0.36	0.00	0.04	0.04	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.07	0.07	0.00	0.01	0.01	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.13. Grading - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.25	9.25	< 0.005	< 0.005	0.01	9.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.15. Substation Site Grading - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.25	9.25	< 0.005	< 0.005	0.01	9.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.17. Battery/Container Installation - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.11	0.48	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.5	28.5	0.01	0.01	< 0.005	30.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.03	0.13	0.00	0.00	3.57	3.57	0.00	0.36	0.36	—	8.56	8.56	< 0.005	< 0.005	0.01	9.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.02	0.00	0.00	0.65	0.65	0.00	0.07	0.07	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.51
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00

Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.19. Battery/Container Installation - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.11	0.11	0.10	0.34	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.4	28.4	0.01	< 0.005	0.05	30.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.11	0.11	0.10	0.46	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.2	28.2	0.01	0.01	< 0.005	30.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.07	0.07	0.07	0.27	0.00	0.00	7.74	7.74	0.00	0.77	0.77	—	18.4	18.4	0.01	< 0.005	0.01	19.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.05	0.00	0.00	1.41	1.41	0.00	0.14	0.14	—	3.04	3.04	< 0.005	< 0.005	< 0.005	3.23

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.21. Substation Installation - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.11	0.48	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.5	28.5	0.01	0.01	< 0.005	30.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.03	0.12	0.00	0.00	3.22	3.22	0.00	0.32	0.32	—	7.72	7.72	< 0.005	< 0.005	0.01	8.21
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.02	0.00	0.00	0.59	0.59	0.00	0.06	0.06	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.36
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.23. Substation Installation - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.11	0.11	0.10	0.34	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.4	28.4	0.01	< 0.005	0.05	30.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.11	0.11	0.10	0.46	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.2	28.2	0.01	0.01	< 0.005	30.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.02	0.08	0.00	0.00	2.43	2.43	0.00	0.24	0.24	—	5.78	5.78	< 0.005	< 0.005	< 0.005	6.14
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.44	0.44	0.00	0.04	0.04	—	0.96	0.96	< 0.005	< 0.005	< 0.005	1.02
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.25. Gen-Tie Foundation and Tower Erection - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.02	0.09	0.00	0.00	3.30	3.30	0.00	0.33	0.33	—	7.11	7.11	< 0.005	< 0.005	0.01	7.52
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.36	0.36	0.00	0.04	0.04	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.90

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.07	0.07	0.00	0.01	0.01	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.27. Gen-Tie Stringing and Pulling - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.02	0.02	0.02	0.07	0.00	0.00	2.64	2.64	0.00	0.26	0.26	—	5.68	5.68	< 0.005	< 0.005	0.01	6.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.15	0.15	0.00	0.01	0.01	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.03	0.03	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.29. Commissioning - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.46	0.43	0.41	1.84	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	113	113	0.04	0.02	0.01	120
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.02	0.10	0.00	0.00	2.87	2.87	0.00	0.29	0.29	—	6.82	6.82	< 0.005	< 0.005	0.01	7.25
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.52	0.52	0.00	0.05	0.05	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.20
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.31. Commissioning - worker (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.43	0.41	0.37	1.32	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	112	112	0.03	0.02	0.19	119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.44	0.41	0.40	1.76	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	112	112	0.04	0.02	< 0.005	119
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.13	0.12	0.12	0.46	0.00	0.00	14.1	14.1	0.00	1.41	1.41	—	33.1	33.1	0.01	0.01	0.02	35.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.02	0.08	0.00	0.00	2.57	2.57	0.00	0.26	0.26	—	5.48	5.48	< 0.005	< 0.005	< 0.005	5.80
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00

Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.33. Decommissioning - worker (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.06	0.06	0.08	0.22	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	25.9	25.9	< 0.005	< 0.005	< 0.005	27.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.06	0.06	0.09	0.28	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	26.0	26.0	0.01	< 0.005	< 0.005	27.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.03	0.11	0.00	0.00	5.00	5.00	0.00	0.50	0.50	—	10.9	10.9	< 0.005	< 0.005	< 0.005	11.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.02	0.00	0.00	0.91	0.91	0.00	0.09	0.09	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.89
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.35. Battery/Container Installation - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.27	0.15	< 0.005	< 0.005	7.25	7.26	< 0.005	0.72	0.72	—	50.9	50.9	0.01	0.01	0.08	53.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.28	0.16	< 0.005	< 0.005	7.25	7.26	< 0.005	0.72	0.73	—	50.8	50.8	0.01	0.01	< 0.005	53.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.08	0.05	< 0.005	< 0.005	1.96	1.96	< 0.005	0.20	0.20	—	15.3	15.3	< 0.005	< 0.005	0.01	16.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.36	0.36	< 0.005	0.04	0.04	—	2.54	2.54	< 0.005	< 0.005	< 0.005	2.67
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00

Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.37. Battery/Container Installation - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.27	0.14	< 0.005	< 0.005	7.25	7.26	< 0.005	0.72	0.72	—	50.1	50.1	0.01	0.01	0.07	52.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.27	0.16	< 0.005	< 0.005	7.25	7.26	< 0.005	0.72	0.72	—	50.2	50.2	0.01	0.01	< 0.005	52.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.18	0.10	< 0.005	< 0.005	4.26	4.26	< 0.005	0.43	0.43	—	32.8	32.8	< 0.005	0.01	0.02	34.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.78	0.78	< 0.005	0.08	0.08	—	5.43	5.43	< 0.005	< 0.005	< 0.005	5.70

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.39. Substation Installation - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.02	0.01	0.25	0.13	< 0.005	< 0.005	6.60	6.60	< 0.005	0.66	0.66	—	46.2	46.2	0.01	0.01	0.07	48.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.25	0.14	< 0.005	< 0.005	6.60	6.60	< 0.005	0.66	0.66	—	46.2	46.2	0.01	0.01	< 0.005	48.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	1.61	1.61	< 0.005	0.16	0.16	—	12.6	12.6	< 0.005	< 0.005	0.01	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.29	0.29	< 0.005	0.03	0.03	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.19
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.41. Substation Installation - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.24	0.13	< 0.005	< 0.005	6.60	6.60	< 0.005	0.66	0.66	—	45.6	45.6	0.01	0.01	0.06	47.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.25	0.14	< 0.005	< 0.005	6.60	6.60	< 0.005	0.66	0.66	—	45.6	45.6	0.01	0.01	< 0.005	47.9
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.22	1.22	< 0.005	0.12	0.12	—	9.37	9.37	< 0.005	< 0.005	0.01	9.83
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.22	0.22	< 0.005	0.02	0.02	—	1.55	1.55	< 0.005	< 0.005	< 0.005	1.63
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.43. Gen-Tie Foundation and Tower Erection - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.12	9.12	< 0.005	< 0.005	0.01	9.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.15

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.45. Gen-Tie Stringing and Pulling - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.12	9.12	< 0.005	< 0.005	0.01	9.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.47. Commissioning - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.49. Commissioning - trucks (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00

Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.51. Decommissioning - trucks (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	1.98	1.98	< 0.005	0.20	0.20	—	9.02	9.02	< 0.005	< 0.005	< 0.005	9.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.05	0.04	< 0.005	< 0.005	1.98	1.98	< 0.005	0.20	0.20	—	9.16	9.16	< 0.005	< 0.005	< 0.005	9.59
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.75	0.75	< 0.005	0.07	0.07	—	3.83	3.83	< 0.005	< 0.005	< 0.005	4.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.66
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation - worker	Site Preparation	6/1/2025	7/1/2025	5.00	22.0	—
Substation Site Preparation - worker	Site Preparation	7/2/2025	7/16/2025	5.00	11.0	—
Site Preparation - trucks	Site Preparation	6/1/2025	7/1/2025	5.00	22.0	—
Substation Site Preparation - trucks	Site Preparation	7/2/2025	7/16/2025	5.00	11.0	—
Grading - worker	Grading	7/2/2025	7/30/2025	5.00	21.0	—
Substation Site Grading - worker	Grading	7/31/2025	8/14/2025	5.00	11.0	—
Grading - trucks	Grading	7/2/2025	7/30/2025	5.00	21.0	—
Substation Site Grading - trucks	Grading	7/31/2025	8/14/2025	5.00	11.0	—
Battery/Container Installation - worker	Building Construction	7/31/2025	11/30/2026	5.00	348	—
Substation Installation - worker	Building Construction	8/15/2025	4/15/2026	5.00	174	—
Gen-Tie Foundation and Tower Erection - worker	Building Construction	4/16/2026	6/16/2026	5.00	44.0	—

Gen-Tie Stringing and Pulling - worker	Building Construction	6/17/2026	7/17/2026	5.00	23.0	—
Commissioning - worker	Building Construction	12/1/2026	6/1/2027	5.00	131	—
Decommissioning - worker	Building Construction	5/31/2050	12/31/2050	5.00	154	—
Battery/Container Installation - trucks	Building Construction	7/31/2025	11/30/2026	5.00	348	—
Substation Installation - trucks	Building Construction	8/15/2025	4/15/2026	5.00	174	—
Gen-Tie Foundation and Tower Erection - trucks	Building Construction	4/16/2026	6/16/2026	5.00	44.0	—
Gen-Tie Stringing and Pulling - trucks	Building Construction	6/17/2026	7/17/2026	5.00	23.0	—
Commissioning - trucks	Building Construction	12/1/2026	6/1/2027	5.00	131	—
Decommissioning - trucks	Building Construction	5/31/2050	12/30/2050	5.00	154	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation - worker	—	—	—	—
Site Preparation - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Site Preparation - worker	Vendor	0.00	20.0	HHDT,MHDT
Site Preparation - worker	Hauling	0.00	20.0	HHDT
Site Preparation - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix

Grading - worker	—	—	—	—
Grading - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Grading - worker	Vendor	0.00	20.0	HHDT,MHDT
Grading - worker	Hauling	0.00	20.0	HHDT
Grading - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Battery/Container Installation - worker	—	—	—	—
Battery/Container Installation - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Battery/Container Installation - worker	Vendor	0.00	20.0	HHDT,MHDT
Battery/Container Installation - worker	Hauling	0.00	86.0	HHDT
Battery/Container Installation - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Substation Site Preparation - worker	—	—	—	—
Substation Site Preparation - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Site Preparation - worker	Vendor	0.00	20.0	HHDT,MHDT
Substation Site Preparation - worker	Hauling	0.00	20.0	HHDT
Substation Site Preparation - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Substation Site Grading - worker	—	—	—	—
Substation Site Grading - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Site Grading - worker	Vendor	0.00	20.0	HHDT,MHDT
Substation Site Grading - worker	Hauling	0.00	20.0	HHDT
Substation Site Grading - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Substation Installation - worker	—	—	—	—
Substation Installation - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Installation - worker	Vendor	0.00	20.0	HHDT,MHDT
Substation Installation - worker	Hauling	0.00	20.0	HHDT
Substation Installation - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix

Gen-Tie Foundation and Tower Erection - worker	—	—	—	—
Gen-Tie Foundation and Tower Erection - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Gen-Tie Foundation and Tower Erection - worker	Vendor	0.00	20.0	HHDT,MHDT
Gen-Tie Foundation and Tower Erection - worker	Hauling	0.00	20.0	HHDT
Gen-Tie Foundation and Tower Erection - worker	Onsite truck	10.0	0.40	EMFAC Fleet Mix
Gen-Tie Stringing and Pulling - worker	—	—	—	—
Gen-Tie Stringing and Pulling - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Gen-Tie Stringing and Pulling - worker	Vendor	0.00	20.0	HHDT,MHDT
Gen-Tie Stringing and Pulling - worker	Hauling	0.00	20.0	HHDT
Gen-Tie Stringing and Pulling - worker	Onsite truck	8.00	0.40	EMFAC Fleet Mix
Commissioning - worker	—	—	—	—
Commissioning - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Commissioning - worker	Vendor	0.00	6.06	HHDT,MHDT
Commissioning - worker	Hauling	0.00	20.0	HHDT
Commissioning - worker	Onsite truck	160	0.40	EMFAC Fleet Mix
Decommissioning - worker	—	—	—	—
Decommissioning - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Decommissioning - worker	Vendor	0.00	20.0	HHDT,MHDT
Decommissioning - worker	Hauling	0.00	20.0	HHDT
Decommissioning - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Site Preparation - trucks	—	—	—	—
Site Preparation - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2

Site Preparation - trucks	Vendor	—	6.06	HHDT,MHDT
Site Preparation - trucks	Hauling	0.00	20.0	HHDT
Site Preparation - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Substation Site Preparation - trucks	—	—	—	—
Substation Site Preparation - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Site Preparation - trucks	Vendor	—	6.06	HHDT,MHDT
Substation Site Preparation - trucks	Hauling	0.00	20.0	HHDT
Substation Site Preparation - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Grading - trucks	—	—	—	—
Grading - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Grading - trucks	Vendor	—	6.06	HHDT,MHDT
Grading - trucks	Hauling	0.00	20.0	HHDT
Grading - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Substation Site Grading - trucks	—	—	—	—
Substation Site Grading - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Site Grading - trucks	Vendor	—	6.06	HHDT,MHDT
Substation Site Grading - trucks	Hauling	0.00	20.0	HHDT
Substation Site Grading - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Battery/Container Installation - trucks	—	—	—	—
Battery/Container Installation - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Battery/Container Installation - trucks	Vendor	0.00	6.06	HHDT,MHDT
Battery/Container Installation - trucks	Hauling	0.00	20.0	HHDT
Battery/Container Installation - trucks	Onsite truck	22.0	0.40	HHDT,MHDT
Substation Installation - trucks	—	—	—	—
Substation Installation - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Installation - trucks	Vendor	0.00	6.06	HHDT,MHDT
Substation Installation - trucks	Hauling	0.00	20.0	HHDT
Substation Installation - trucks	Onsite truck	20.0	0.40	HHDT,MHDT

Gen-Tie Foundation and Tower Erection - trucks	—	—	—	—
Gen-Tie Foundation and Tower Erection - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Gen-Tie Foundation and Tower Erection - trucks	Vendor	0.00	6.06	HHDT,MHDT
Gen-Tie Foundation and Tower Erection - trucks	Hauling	0.00	20.0	HHDT
Gen-Tie Foundation and Tower Erection - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Gen-Tie Stringing and Pulling - trucks	—	—	—	—
Gen-Tie Stringing and Pulling - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Gen-Tie Stringing and Pulling - trucks	Vendor	0.00	6.06	HHDT,MHDT
Gen-Tie Stringing and Pulling - trucks	Hauling	0.00	20.0	HHDT
Gen-Tie Stringing and Pulling - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Commissioning - trucks	—	—	—	—
Commissioning - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Commissioning - trucks	Vendor	0.00	6.06	HHDT,MHDT
Commissioning - trucks	Hauling	0.00	20.0	HHDT
Commissioning - trucks	Onsite truck	0.00	—	HHDT
Decommissioning - trucks	—	—	—	—
Decommissioning - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Decommissioning - trucks	Vendor	0.00	6.06	HHDT,MHDT
Decommissioning - trucks	Hauling	0.00	20.0	HHDT
Decommissioning - trucks	Onsite truck	6.00	0.40	HHDT,MHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation - worker	—	—	0.00	0.00	—
Substation Site Preparation - worker	—	—	0.00	0.00	—
Site Preparation - trucks	—	—	0.00	0.00	—
Substation Site Preparation - trucks	—	—	0.00	0.00	—
Grading - worker	—	—	0.00	0.00	—
Substation Site Grading - worker	—	—	0.00	0.00	—
Grading - trucks	—	—	0.00	0.00	—
Substation Site Grading - trucks	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2050	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.75	annual days of extreme heat
Extreme Precipitation	8.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	15.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	17.6

AQ-PM	3.36
AQ-DPM	22.8
Drinking Water	60.1
Lead Risk Housing	58.8
Pesticides	98.4
Toxic Releases	7.49
Traffic	18.1
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	32.4
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	93.4
Solid Waste	63.7
Sensitive Population	—
Asthma	54.5
Cardio-vascular	32.5
Low Birth Weights	16.8
Socioeconomic Factor Indicators	—
Education	87.0
Housing	83.3
Linguistic	81.9
Poverty	70.4
Unemployment	52.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	48.60772488
Employed	61.79905043
Median HI	48.13293982
Education	—
Bachelor's or higher	21.73745669
High school enrollment	100
Preschool enrollment	4.670858463
Transportation	—
Auto Access	50.77633774
Active commuting	54.69010651
Social	—
2-parent households	45.07891698
Voting	44.23200308
Neighborhood	—
Alcohol availability	81.05992557
Park access	26.06185038
Retail density	16.04003593
Supermarket access	19.90247658
Tree canopy	65.55883485
Housing	—
Homeownership	64.54510458
Housing habitability	37.1872193
Low-inc homeowner severe housing cost burden	37.20005133
Low-inc renter severe housing cost burden	24.20120621
Uncrowded housing	15.89888361
Health Outcomes	—
Insured adults	24.93263185
Arthritis	0.0

Asthma ER Admissions	32.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	23.6
Cognitively Disabled	36.6
Physically Disabled	52.4
Heart Attack ER Admissions	63.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	84.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	57.3
English Speaking	47.7
Foreign-born	77.0

Outdoor Workers	7.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	81.3
Traffic Density	30.0
Traffic Access	0.0
Other Indices	—
Hardship	73.4
Other Decision Support	—
2016 Voting	45.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	53.0
Healthy Places Index Score for Project Location (b)	41.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Seahawk BESS: assumed building to account for routine maintenance workers. Total acreage of 14 acres disturbed with no landscaping anticipated per applicant.
Construction: Construction Phases	Adjusted default construction schedule based on information provided by the applicant. Separated phases by worker and trucks in order to model on-road fugitive dust.
Construction: Off-Road Equipment	Modeling on-road emissions on unpaved portion of Minto Rd only.
Construction: Off-Road Equipment EF	No equipment modeled.
Construction: Trips and VMT	Unpaved road travel estimated for workers and trucks on approximately 0.4 miles of Minto Road.
Construction: On-Road Fugitive Dust	Modeled unpaved roads only.
Operations: Road Dust	% paved based on assumption of 20-mile trip length on average with 0.4 miles unpaved on Minto Road
Operations: Consumer Products	Facility will be unmanned. No consumer products assumed.
Operations: Architectural Coatings	No architectural coatings anticipated.
Operations: Energy Use	Conservatively assumed 10% of capacity would be needed for any lighting and container cooling.
Operations: Water and Waste Water	Facility would be unmanned. No water/wastewater assumed.
Operations: Solid Waste	Facility would be unmanned. No solid waste assumed.
Operations: Off-Road Equipment	1 crane and 1 forklift assumed to operate for 8 hours for 1 day every 2 or 3 years for battery swaps.

Seahawk Energy Storage Facility Project

Generator Sets

							Emission Factors[2]									Emission Rates									
		Rating		Operating Parameters/unit[1]			ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
Equipment Description	Quantity	kW	HP	Load Factor	hr/day	hr/yr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	MT/yr	MT/yr	MT/yr	MT/yr
Diesel Generators - 2026	2	3,600	4,828	0.74	2	46	0.14	0.50	2.6	0.0049	0.022	0.022	521.64	0.020944	0.004087	4.41	15.75	81.91	0.15	0.69	0.69	171.46	0.01	0.00	172.03
Diesel Generators - 2027	2	3,600	4,828	0.74	2	216	0.14	0.50	2.6	0.0049	0.022	0.022	521.64	0.020944	0.004087	4.41	15.75	81.91	0.15	0.69	0.69	805.11	0.03	0.01	807.79

Generator sets to be used during commissioning.

Source:

1. Operational information based on applicant input. Current CARB and EPA engine standards for Tier 4 equipment.

Conversions:

1 lb =	453.6	g
1 MT =	2204.623	lb
1 MT =	1000000	g

Seahawk BESS Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

3.3. Substation Site Preparation (2025) - Unmitigated

3.5. Grading (2025) - Unmitigated

3.7. Substation Site Grading (2025) - Unmitigated

3.9. Battery/Container Installation (2025) - Unmitigated

3.11. Battery/Container Installation (2026) - Unmitigated

3.13. Substation Installation (2025) - Unmitigated

3.15. Substation Installation (2026) - Unmitigated

3.17. Gen-Tie Foundation and Tower Erection (2026) - Unmitigated

3.19. Gen-Tie Stringing and Pulling (2026) - Unmitigated

3.21. Commissioning (2026) - Unmitigated

3.23. Commissioning (2027) - Unmitigated

3.25. Decommissioning (2050) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.1. Construction Phases

8.4.2. Off-Road Equipment

8.4.3. Off-Road Equipment EF

8.4.6. Trips and VMT

8.4.7. On-Road Fugitive Dust

8.5. Operations

8.5.1. Mobile Sources

8.5.1.4. Road Dust

8.5.2. Area Sources

8.5.2.2. Consumer Products

8.5.2.3. Architectural Coatings

8.5.2.4. Landscape Equipment

8.5.3. Energy Usage

8.5.4. Water and Waste Water

8.5.5. Solid Waste

8.5.7. Off-Road Equipment

8.5.7.1. Off-Road Equipment

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Seahawk BESS
Construction Start Date	6/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	37.2000
Location	90 Minto Rd, Watsonville, CA 95076, USA
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3126
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.37

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	1.000000	1000sqft	14.0000	1,000.000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.18630	5.13794	22.5462	88.8878	0.15438	0.97959	5.45411	6.39138	0.90179	2.70950	3.57207	—	17,576.6	17,576.6	0.72587	0.56819	10.6452	17,651.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.21452	5.15911	17.2631	89.2464	0.15438	0.69313	1.39697	1.88637	0.69313	0.35770	0.95043	—	17,547.2	17,547.2	0.73998	0.56819	0.27637	17,618.6
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.53850	1.52307	9.55502	26.3054	0.04592	0.28645	0.86915	1.11840	0.26628	0.31661	0.54591	—	5,213.88	5,213.88	0.22981	0.28252	2.15840	5,235.60
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28078	0.27796	1.74379	4.80074	0.00838	0.05228	0.15862	0.20411	0.04860	0.05778	0.09963	—	863.217	863.217	0.03805	0.04678	0.35735	866.813

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.31520	2.78717	22.5462	27.8028	0.05132	0.97959	5.45411	6.39138	0.90179	2.70950	3.57207	—	6,668.16	6,668.16	0.37537	0.56819	10.6452	6,857.51

2026	2.33217	1.84526	16.7673	20.1269	0.05134	0.53658	1.39697	1.83035	0.49246	0.35770	0.75635	—	6,604.70	6,604.70	0.35511	0.55057	9.93441	6,787.58
2027	5.18630	5.13794	16.2532	88.8878	0.15438	0.69313	1.09768	1.79081	0.69313	0.25729	0.95043	—	17,576.6	17,576.6	0.72587	0.17712	4.42770	17,651.9
2050	2.25278	1.88748	11.2993	18.1203	0.05811	0.29628	0.37772	0.67400	0.27197	0.09302	0.36499	—	6,255.74	6,255.74	0.24261	0.08334	0.08066	6,286.72
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.34227	1.80220	17.2631	20.5223	0.05132	0.48940	1.39697	1.88637	0.45027	0.35770	0.80796	—	6,642.93	6,642.93	0.37978	0.56819	0.27637	6,822.02
2026	5.21452	5.15911	16.4255	89.2464	0.15438	0.69313	1.39697	1.83127	0.69313	0.35770	0.95043	—	17,547.2	17,547.2	0.73998	0.55057	0.25753	17,618.6
2027	5.18983	5.13441	16.3842	88.8111	0.15438	0.69313	1.09768	1.79081	0.69313	0.25729	0.95043	—	17,528.1	17,528.1	0.73645	0.17712	0.11461	17,599.4
2050	2.24651	1.88881	11.3136	18.0987	0.05811	0.29628	0.37772	0.67400	0.27197	0.09302	0.36499	—	6,246.21	6,246.21	0.24349	0.08334	0.00209	6,277.13
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.02903	0.81616	7.45703	8.71247	0.01907	0.24925	0.86915	1.11840	0.22930	0.31661	0.54591	—	2,439.22	2,439.22	0.13325	0.17746	1.47602	2,496.91
2026	1.46336	1.19839	9.55502	15.3036	0.03684	0.28645	0.71131	0.99775	0.26628	0.18133	0.44761	—	4,447.60	4,447.60	0.22981	0.28252	2.15840	4,539.69
2027	1.53850	1.52307	4.85005	26.3054	0.04592	0.20618	0.31871	0.52489	0.20618	0.07458	0.28076	—	5,213.88	5,213.88	0.21801	0.05268	0.56819	5,235.60
2050	0.95079	0.79631	4.77103	7.62066	0.02452	0.12500	0.15575	0.28075	0.11475	0.03834	0.15309	—	2,635.39	2,635.39	0.10273	0.03516	0.01470	2,648.45
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.18780	0.14895	1.36091	1.59003	0.00348	0.04549	0.15862	0.20411	0.04185	0.05778	0.09963	—	403.841	403.841	0.02206	0.02938	0.24437	413.393
2026	0.26706	0.21871	1.74379	2.79290	0.00672	0.05228	0.12981	0.18209	0.04860	0.03309	0.08169	—	736.350	736.350	0.03805	0.04678	0.35735	751.598
2027	0.28078	0.27796	0.88513	4.80074	0.00838	0.03763	0.05816	0.09579	0.03763	0.01361	0.05124	—	863.217	863.217	0.03609	0.00872	0.09407	866.813
2050	0.17352	0.14533	0.87071	1.39077	0.00447	0.02281	0.02842	0.05124	0.02094	0.00700	0.02794	—	436.319	436.319	0.01701	0.00582	0.00243	438.482

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.01821	0.87600	4.42128	9.10982	0.02117	0.17024	21.1959	21.3661	0.15678	2.25797	2.41475	0.00000	34,990.4	34,990.4	5.39595	0.69616	3.94846	35,336.7

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.02431	0.88033	4.50267	9.00998	0.02082	0.17024	21.1959	21.3661	0.15678	2.25797	2.41475	0.00000	34,954.6	34,954.6	5.39949	0.70038	0.10238	35,298.4
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02250	0.01971	0.03467	0.21026	0.00046	0.00081	0.80382	0.80463	0.00075	0.08610	0.08685	0.00000	32,813.0	32,813.0	5.30305	0.64452	0.07171	33,137.7
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00411	0.00360	0.00633	0.03837	0.00008	0.00015	0.14670	0.14685	0.00014	0.01571	0.01585	0.00000	5,432.56	5,432.56	0.87798	0.10671	0.01187	5,486.32

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.50475	0.44455	0.51805	5.02101	0.01062	0.00875	21.1959	21.2046	0.00821	2.25797	2.26618	—	1,082.03	1,082.03	0.04881	0.04437	3.94846	1,100.42
Area	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Off-Road	0.51346	0.43145	3.90323	4.08882	0.01055	0.16149	—	0.16149	0.14857	—	0.14857	—	1,142.54	1,142.54	0.04635	0.00927	—	1,146.46
Total	1.01821	0.87600	4.42128	9.10982	0.02117	0.17024	21.1959	21.3661	0.15678	2.25797	2.41475	0.00000	34,990.4	34,990.4	5.39595	0.69616	3.94846	35,336.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.51085	0.44888	0.59944	4.92116	0.01026	0.00875	21.1959	21.2046	0.00821	2.25797	2.26619	—	1,046.25	1,046.25	0.05235	0.04859	0.10238	1,062.14
Area	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8

Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Off-Road	0.51346	0.43145	3.90323	4.08882	0.01055	0.16149	—	0.16149	0.14857	—	0.14857	—	1,142.54	1,142.54	0.04635	0.00927	—	1,146.46
Total	1.02431	0.88033	4.50267	9.00998	0.02082	0.17024	21.1959	21.3661	0.15678	2.25797	2.41475	0.00000	34,954.6	34,954.6	5.39949	0.70038	0.10238	35,298.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02110	0.01853	0.02397	0.19906	0.00043	0.00037	0.80382	0.80419	0.00035	0.08610	0.08644	—	44.0194	44.0194	0.00213	0.00198	0.07171	44.7337
Area	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Off-Road	0.00141	0.00118	0.01069	0.01120	0.00003	0.00044	—	0.00044	0.00041	—	0.00041	—	3.13025	3.13025	0.00013	0.00003	—	3.14099
Total	0.02250	0.01971	0.03467	0.21026	0.00046	0.00081	0.80382	0.80463	0.00075	0.08610	0.08685	0.00000	32,813.0	32,813.0	5.30305	0.64452	0.07171	33,137.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00385	0.00338	0.00438	0.03633	0.00008	0.00007	0.14670	0.14676	0.00006	0.01571	0.01578	—	7.28791	7.28791	0.00035	0.00033	0.01187	7.40618
Area	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	5,424.75	5,424.75	0.87761	0.10638	—	5,478.40
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Off-Road	0.00026	0.00022	0.00195	0.00204	0.00001	0.00008	—	0.00008	0.00007	—	0.00007	—	0.51825	0.51825	0.00002	< 0.000005	—	0.52003
Total	0.00411	0.00360	0.00633	0.03837	0.00008	0.00015	0.14670	0.14685	0.00014	0.01571	0.01585	0.00000	5,432.56	5,432.56	0.87798	0.10671	0.01187	5,486.32

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.77196	2.32922	22.0225	20.8767	0.03341	0.93374	—	0.93374	0.85904	—	0.85904	—	3,619.92	3,619.92	0.14684	0.02937	—	3,632.34
Dust From Material Movement	—	—	—	—	—	—	5.11082	5.11082	—	2.62664	2.62664	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16708	0.14039	1.32739	1.25832	0.00201	0.05628	—	0.05628	0.05178	—	0.05178	—	218.187	218.187	0.00885	0.00177	—	218.936
Dust From Material Movement	—	—	—	—	—	—	0.30805	0.30805	—	0.15832	0.15832	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03049	0.02562	0.24225	0.22964	0.00037	0.01027	—	0.01027	0.00945	—	0.00945	—	36.1233	36.1233	0.00147	0.00029	—	36.2473

Dust From Material Movement	—	—	—	—	—	—	0.05622	0.05622	—	0.02889	0.02889	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.02593	0.00873	0.37796	0.14771	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	270.342	270.342	0.01702	0.04118	0.68349	283.724
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01279	0.01143	0.01008	0.11098	0.00000	0.00000	0.01615	0.01615	0.00000	0.00378	0.00378	—	17.0567	17.0567	0.00115	0.00073	0.03321	17.3359
Vendor	0.00156	0.00053	0.02355	0.00886	0.00011	0.00021	0.00407	0.00428	0.00021	0.00110	0.00131	—	16.2944	16.2944	0.00103	0.00248	0.01779	17.0775
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00233	0.00209	0.00184	0.02025	0.00000	0.00000	0.00295	0.00295	0.00000	0.00069	0.00069	—	2.82393	2.82393	0.00019	0.00012	0.00550	2.87016
Vendor	0.00029	0.00010	0.00430	0.00162	0.00002	0.00004	0.00074	0.00078	0.00004	0.00020	0.00024	—	2.69773	2.69773	0.00017	0.00041	0.00294	2.82738
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Substation Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38598	1.16461	11.0113	10.4383	0.01671	0.46687	—	0.46687	0.42952	—	0.42952	—	1,809.96	1,809.96	0.07342	0.01468	—	1,816.17
Dust From Material Movement	—	—	—	—	—	—	2.55541	2.55541	—	1.31332	1.31332	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04177	0.03510	0.33185	0.31458	0.00050	0.01407	—	0.01407	0.01294	—	0.01294	—	54.5467	54.5467	0.00221	0.00044	—	54.7339
Dust From Material Movement	—	—	—	—	—	—	0.07701	0.07701	—	0.03958	0.03958	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00762	0.00641	0.06056	0.05741	0.00009	0.00257	—	0.00257	0.00236	—	0.00236	—	9.03083	9.03083	0.00037	0.00007	—	9.06183
Dust From Material Movement	—	—	—	—	—	—	0.01405	0.01405	—	0.00722	0.00722	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.02593	0.00873	0.37796	0.14771	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	270.342	270.342	0.01702	0.04118	0.68349	283.724
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00639	0.00572	0.00504	0.05549	0.00000	0.00000	0.00807	0.00807	0.00000	0.00189	0.00189	—	8.52836	8.52836	0.00058	0.00036	0.01661	8.66797
Vendor	0.00078	0.00027	0.01178	0.00443	0.00005	0.00011	0.00203	0.00214	0.00011	0.00055	0.00065	—	8.14721	8.14721	0.00051	0.00124	0.00889	8.53877
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00117	0.00104	0.00092	0.01013	0.00000	0.00000	0.00147	0.00147	0.00000	0.00034	0.00034	—	1.41197	1.41197	0.00010	0.00006	0.00275	1.43508
Vendor	0.00014	0.00005	0.00215	0.00081	0.00001	0.00002	0.00037	0.00039	0.00002	0.00010	0.00012	—	1.34886	1.34886	0.00008	0.00021	0.00147	1.41369
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.44606	1.21509	10.0966	13.1197	0.01847	0.50566	—	0.50566	0.46521	—	0.46521	—	2,001.09	2,001.09	0.08117	0.01623	—	2,007.95
Dust From Material Movement	—	—	—	—	—	—	0.41360	0.41360	—	0.04466	0.04466	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08320	0.06991	0.58090	0.75483	0.00106	0.02909	—	0.02909	0.02677	—	0.02677	—	115.131	115.131	0.00467	0.00093	—	115.526
Dust From Material Movement	—	—	—	—	—	—	0.02380	0.02380	—	0.00257	0.00257	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01518	0.01276	0.10601	0.13776	0.00019	0.00531	—	0.00531	0.00488	—	0.00488	—	19.0612	19.0612	0.00077	0.00015	—	19.1267
Dust From Material Movement	—	—	—	—	—	—	0.00434	0.00434	—	0.00047	0.00047	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.02593	0.00873	0.37796	0.14771	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	270.342	270.342	0.01702	0.04118	0.68349	283.724
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01220	0.01091	0.00962	0.10593	0.00000	0.00000	0.01541	0.01541	0.00000	0.00361	0.00361	—	16.2814	16.2814	0.00110	0.00070	0.03170	16.5479
Vendor	0.00149	0.00051	0.02248	0.00846	0.00010	0.00020	0.00388	0.00409	0.00020	0.00105	0.00125	—	15.5538	15.5538	0.00098	0.00237	0.01698	16.3013
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00223	0.00199	0.00176	0.01933	0.00000	0.00000	0.00281	0.00281	0.00000	0.00066	0.00066	—	2.69557	2.69557	0.00018	0.00012	0.00525	2.73970
Vendor	0.00027	0.00009	0.00410	0.00154	0.00002	0.00004	0.00071	0.00075	0.00004	0.00019	0.00023	—	2.57510	2.57510	0.00016	0.00039	0.00281	2.69887
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Substation Site Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72303	0.60755	5.04831	6.55987	0.00924	0.25283	—	0.25283	0.23261	—	0.23261	—	1,000.54	1,000.54	0.04059	0.00812	—	1,003.98

Dust From Material Movement	—	—	—	—	—	—	0.20680	0.20680	—	0.02233	0.02233	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02179	0.01831	0.15214	0.19769	0.00028	0.00762	—	0.00762	0.00701	—	0.00701	—	30.1533	30.1533	0.00122	0.00024	—	30.2568
Dust From Material Movement	—	—	—	—	—	—	0.00623	0.00623	—	0.00067	0.00067	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00398	0.00334	0.02777	0.03608	0.00005	0.00139	—	0.00139	0.00128	—	0.00128	—	4.99223	4.99223	0.00020	0.00004	—	5.00936
Dust From Material Movement	—	—	—	—	—	—	0.00114	0.00114	—	0.00012	0.00012	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854

Vendor	0.02593	0.00873	0.37796	0.14771	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	270.342	270.342	0.01702	0.04118	0.68349	283.724
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00639	0.00572	0.00504	0.05549	0.00000	0.00000	0.00807	0.00807	0.00000	0.00189	0.00189	—	8.52836	8.52836	0.00058	0.00036	0.01661	8.66797
Vendor	0.00078	0.00027	0.01178	0.00443	0.00005	0.00011	0.00203	0.00214	0.00011	0.00055	0.00065	—	8.14721	8.14721	0.00051	0.00124	0.00889	8.53877
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00117	0.00104	0.00092	0.01013	0.00000	0.00000	0.00147	0.00147	0.00000	0.00034	0.00034	—	1.41197	1.41197	0.00010	0.00006	0.00275	1.43508
Vendor	0.00014	0.00005	0.00215	0.00081	0.00001	0.00002	0.00037	0.00039	0.00002	0.00010	0.00012	—	1.34886	1.34886	0.00008	0.00021	0.00147	1.41369
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Battery/Container Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87635	0.73352	6.67569	7.59062	0.01554	0.26649	—	0.26649	0.24517	—	0.24517	—	1,611.27	1,611.27	0.06536	0.01307	—	1,616.80
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.87635	0.73352	6.67569	7.59062	0.01554	0.26649	—	0.26649	0.24517	—	0.24517	—	1,611.27	1,611.27	0.06536	0.01307	—	1,616.80
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26410	0.22106	2.01185	2.28759	0.00468	0.08031	—	0.08031	0.07389	—	0.07389	—	485.589	485.589	0.01970	0.00394	—	487.256
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04820	0.04034	0.36716	0.41748	0.00085	0.01466	—	0.01466	0.01348	—	0.01348	—	80.3948	80.3948	0.00326	0.00065	—	80.6707
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.12963	0.04365	1.88980	0.73855	0.00882	0.01764	0.34434	0.36198	0.01764	0.09270	0.11034	—	1,351.71	1,351.71	0.08510	0.20591	3.41743	1,418.62
Hauling	0.07813	0.01252	1.03234	0.39604	0.00763	0.01142	0.15944	0.17086	0.00763	0.04365	0.05128	—	694.399	694.399	0.06173	0.11045	1.26344	730.120
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21742	0.19412	0.17845	1.94503	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	282.968	282.968	0.02003	0.01209	0.03306	287.104
Vendor	0.12875	0.04321	1.97358	0.74031	0.00882	0.01808	0.34434	0.36242	0.01808	0.09270	0.11078	—	1,351.68	1,351.68	0.08466	0.20591	0.08878	1,415.24
Hauling	0.07800	0.01239	1.08225	0.39692	0.00763	0.01142	0.15944	0.17086	0.00763	0.04365	0.05128	—	694.386	694.386	0.06173	0.11045	0.03270	728.876
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06393	0.05717	0.05040	0.55489	0.00000	0.00000	0.08073	0.08073	0.00000	0.01889	0.01889	—	85.2836	85.2836	0.00577	0.00364	0.16606	86.6797
Vendor	0.03907	0.01329	0.58880	0.22151	0.00266	0.00532	0.10174	0.10706	0.00532	0.02743	0.03274	—	407.360	407.360	0.02565	0.06206	0.44465	426.939
Hauling	0.02353	0.00376	0.32262	0.11947	0.00230	0.00344	0.04718	0.05062	0.00230	0.01294	0.01524	—	209.269	209.269	0.01860	0.03329	0.16342	219.817
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01167	0.01043	0.00920	0.10127	0.00000	0.00000	0.01473	0.01473	0.00000	0.00345	0.00345	—	14.1197	14.1197	0.00096	0.00060	0.02749	14.3508
Vendor	0.00713	0.00243	0.10746	0.04043	0.00049	0.00097	0.01857	0.01954	0.00097	0.00501	0.00598	—	67.4431	67.4431	0.00425	0.01027	0.07362	70.6846
Hauling	0.00429	0.00069	0.05888	0.02180	0.00042	0.00063	0.00861	0.00924	0.00042	0.00236	0.00278	—	34.6468	34.6468	0.00308	0.00551	0.02706	36.3931

3.11. Battery/Container Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84021	0.70332	6.29978	7.52687	0.01554	0.23929	—	0.23929	0.22014	—	0.22014	—	1,610.93	1,610.93	0.06535	0.01307	—	1,616.46
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84021	0.70332	6.29978	7.52687	0.01554	0.23929	—	0.23929	0.22014	—	0.22014	—	1,610.93	1,610.93	0.06535	0.01307	—	1,616.46
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.54918	0.45971	4.11766	4.91971	0.01015	0.15640	—	0.15640	0.14389	—	0.14389	—	1,052.94	1,052.94	0.04271	0.00854	—	1,056.55
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10022	0.08390	0.75147	0.89785	0.00185	0.02854	—	0.02854	0.02626	—	0.02626	—	174.325	174.325	0.00707	0.00141	—	174.924
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19916	0.18707	0.12682	1.84897	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	290.424	290.424	0.01650	0.01209	1.19019	295.630
Vendor	0.12037	0.03483	1.78134	0.69313	0.00882	0.01764	0.34434	0.36198	0.01764	0.09270	0.11034	—	1,330.13	1,330.13	0.07584	0.19709	3.17783	1,393.93
Hauling	0.07430	0.01252	0.98264	0.38859	0.00763	0.01138	0.15944	0.17082	0.00758	0.04365	0.05124	—	682.828	682.828	0.06169	0.11045	1.19837	718.483
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20092	0.18707	0.16812	1.83269	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	278.099	278.099	0.02003	0.01209	0.03086	282.233
Vendor	0.11949	0.03395	1.85629	0.70327	0.00882	0.01808	0.34434	0.36242	0.01764	0.09270	0.11034	—	1,330.15	1,330.15	0.07584	0.19709	0.08235	1,390.86
Hauling	0.07416	0.01239	1.02881	0.38559	0.00763	0.01142	0.15944	0.17086	0.00763	0.04365	0.05128	—	682.821	682.821	0.06169	0.11045	0.03113	717.309
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12787	0.11939	0.09697	1.12790	0.00000	0.00000	0.17508	0.17508	0.00000	0.04097	0.04097	—	181.790	181.790	0.01194	0.00790	0.33614	184.780
Vendor	0.07810	0.02248	1.20005	0.45593	0.00576	0.01153	0.22066	0.23219	0.01153	0.05949	0.07102	—	869.400	869.400	0.04957	0.12882	0.89843	909.927
Hauling	0.04853	0.00816	0.66476	0.25422	0.00499	0.00746	0.10232	0.10978	0.00499	0.02806	0.03304	—	446.307	446.307	0.04032	0.07219	0.33848	469.167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02334	0.02179	0.01770	0.20584	0.00000	0.00000	0.03195	0.03195	0.00000	0.00748	0.00748	—	30.0975	30.0975	0.00198	0.00131	0.05565	30.5924
Vendor	0.01425	0.00410	0.21901	0.08321	0.00105	0.00210	0.04027	0.04237	0.00210	0.01086	0.01296	—	143.939	143.939	0.00821	0.02133	0.14874	150.649

Hauling	0.00886	0.00149	0.12132	0.04639	0.00091	0.00136	0.01867	0.02004	0.00091	0.00512	0.00603	—	73.8912	73.8912	0.00668	0.01195	0.05604	77.6760

3.13. Substation Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69558	0.58162	5.20107	7.16402	0.01052	0.17533	—	0.17533	0.16131	—	0.16131	—	1,067.98	1,067.98	0.04332	0.00866	—	1,071.64
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69558	0.58162	5.20107	7.16402	0.01052	0.17533	—	0.17533	0.16131	—	0.16131	—	1,067.98	1,067.98	0.04332	0.00866	—	1,071.64
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18921	0.15821	1.41477	1.94873	0.00286	0.04769	—	0.04769	0.04388	—	0.04388	—	290.507	290.507	0.01178	0.00236	—	291.504
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.03453	0.02887	0.25820	0.35564	0.00052	0.00870	—	0.00870	0.00801	—	0.00801	—	48.0967	48.0967	0.00195	0.00039	—	48.2618
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.12963	0.04365	1.88980	0.73855	0.00882	0.01764	0.34434	0.36198	0.01764	0.09270	0.11034	—	1,351.71	1,351.71	0.08510	0.20591	3.41743	1,418.62
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21742	0.19412	0.17845	1.94503	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	282.968	282.968	0.02003	0.01209	0.03306	287.104
Vendor	0.12875	0.04321	1.97358	0.74031	0.00882	0.01808	0.34434	0.36242	0.01808	0.09270	0.11078	—	1,351.68	1,351.68	0.08466	0.20591	0.08878	1,415.24
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05770	0.05160	0.04549	0.50084	0.00000	0.00000	0.07286	0.07286	0.00000	0.01705	0.01705	—	76.9767	76.9767	0.00521	0.00329	0.14988	78.2368
Vendor	0.03526	0.01199	0.53145	0.19994	0.00240	0.00480	0.09183	0.09663	0.00480	0.02476	0.02955	—	367.682	367.682	0.02315	0.05601	0.40134	385.354
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01053	0.00942	0.00830	0.09140	0.00000	0.00000	0.01330	0.01330	0.00000	0.00311	0.00311	—	12.7444	12.7444	0.00086	0.00054	0.02482	12.9530
Vendor	0.00644	0.00219	0.09699	0.03649	0.00044	0.00088	0.01676	0.01763	0.00088	0.00452	0.00539	—	60.8740	60.8740	0.00383	0.00927	0.06645	63.7997
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.15. Substation Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64831	0.54207	4.98930	7.12727	0.01054	0.14744	—	0.14744	0.13564	—	0.13564	—	1,069.84	1,069.84	0.04340	0.00868	—	1,073.52
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64831	0.54207	4.98930	7.12727	0.01054	0.14744	—	0.14744	0.13564	—	0.13564	—	1,069.84	1,069.84	0.04340	0.00868	—	1,073.52
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13321	0.11138	1.02520	1.46451	0.00217	0.03030	—	0.03030	0.02787	—	0.02787	—	219.831	219.831	0.00892	0.00178	—	220.585
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02431	0.02033	0.18710	0.26727	0.00040	0.00553	—	0.00553	0.00509	—	0.00509	—	36.3955	36.3955	0.00148	0.00030	—	36.5204
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19916	0.18707	0.12682	1.84897	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	290.424	290.424	0.01650	0.01209	1.19019	295.630
Vendor	0.12037	0.03483	1.78134	0.69313	0.00882	0.01764	0.34434	0.36198	0.01764	0.09270	0.11034	—	1,330.13	1,330.13	0.07584	0.19709	3.17783	1,393.93
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20092	0.18707	0.16812	1.83269	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	278.099	278.099	0.02003	0.01209	0.03086	282.233
Vendor	0.11949	0.03395	1.85629	0.70327	0.00882	0.01808	0.34434	0.36242	0.01764	0.09270	0.11034	—	1,330.15	1,330.15	0.07584	0.19709	0.08235	1,390.86
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04020	0.03753	0.03048	0.35458	0.00000	0.00000	0.05504	0.05504	0.00000	0.01288	0.01288	—	57.1497	57.1497	0.00375	0.00248	0.10567	58.0895
Vendor	0.02455	0.00707	0.37726	0.14333	0.00181	0.00362	0.06937	0.07299	0.00362	0.01870	0.02233	—	273.314	273.314	0.01558	0.04050	0.28244	286.055
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00734	0.00685	0.00556	0.06471	0.00000	0.00000	0.01004	0.01004	0.00000	0.00235	0.00235	—	9.46178	9.46178	0.00062	0.00041	0.01750	9.61738
Vendor	0.00448	0.00129	0.06885	0.02616	0.00033	0.00066	0.01266	0.01332	0.00066	0.00341	0.00407	—	45.2503	45.2503	0.00258	0.00671	0.04676	47.3597
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.17. Gen-Tie Foundation and Tower Erection (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.02427	0.85378	7.18871	7.68872	0.01670	0.26475	—	0.26475	0.24357	—	0.24357	—	1,609.63	1,609.63	0.06529	0.01306	—	1,615.15
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12347	0.10292	0.86658	0.92686	0.00201	0.03191	—	0.03191	0.02936	—	0.02936	—	194.038	194.038	0.00787	0.00157	—	194.703
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02253	0.01878	0.15815	0.16915	0.00037	0.00582	—	0.00582	0.00536	—	0.00536	—	32.1251	32.1251	0.00130	0.00026	—	32.2354
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04979	0.04677	0.03170	0.46224	0.00000	0.00000	0.06860	0.06860	0.00000	0.01608	0.01608	—	72.6061	72.6061	0.00412	0.00302	0.29755	73.9075
Vendor	0.02407	0.00697	0.35627	0.13863	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	266.025	266.025	0.01517	0.03942	0.63557	278.787
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00590	0.00550	0.00447	0.05200	0.00000	0.00000	0.00807	0.00807	0.00000	0.00189	0.00189	—	8.38195	8.38195	0.00055	0.00036	0.01550	8.51979
Vendor	0.00288	0.00083	0.04427	0.01682	0.00021	0.00043	0.00814	0.00856	0.00043	0.00219	0.00262	—	32.0689	32.0689	0.00183	0.00475	0.03314	33.5638
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00108	0.00100	0.00082	0.00949	0.00000	0.00000	0.00147	0.00147	0.00000	0.00034	0.00034	—	1.38773	1.38773	0.00009	0.00006	0.00257	1.41055
Vendor	0.00053	0.00015	0.00808	0.00307	0.00004	0.00008	0.00149	0.00156	0.00008	0.00040	0.00048	—	5.30937	5.30937	0.00030	0.00079	0.00549	5.55687
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.19. Gen-Tie Stringing and Pulling (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16571	0.13924	1.75591	2.68162	0.00405	0.04000	—	0.04000	0.03680	—	0.03680	—	437.970	437.970	0.01777	0.00355	—	439.473
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01044	0.00877	0.11065	0.16898	0.00025	0.00252	—	0.00252	0.00232	—	0.00232	—	27.5981	27.5981	0.00112	0.00022	—	27.6928
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.00191	0.00160	0.02019	0.03084	0.00005	0.00046	—	0.00046	0.00042	—	0.00042	—	4.56918	4.56918	0.00019	0.00004	—	4.58486
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03983	0.03741	0.02536	0.36979	0.00000	0.00000	0.05488	0.05488	0.00000	0.01286	0.01286	—	58.0849	58.0849	0.00330	0.00242	0.23804	59.1260
Vendor	0.02407	0.00697	0.35627	0.13863	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	266.025	266.025	0.01517	0.03942	0.63557	278.787
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00247	0.00230	0.00187	0.02175	0.00000	0.00000	0.00338	0.00338	0.00000	0.00079	0.00079	—	3.50518	3.50518	0.00023	0.00015	0.00648	3.56282
Vendor	0.00151	0.00043	0.02314	0.00879	0.00011	0.00022	0.00425	0.00448	0.00022	0.00115	0.00137	—	16.7633	16.7633	0.00096	0.00248	0.01732	17.5447
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00045	0.00042	0.00034	0.00397	0.00000	0.00000	0.00062	0.00062	0.00000	0.00014	0.00014	—	0.58032	0.58032	0.00004	0.00003	0.00107	0.58987
Vendor	0.00027	0.00008	0.00422	0.00160	0.00002	0.00004	0.00078	0.00082	0.00004	0.00021	0.00025	—	2.77535	2.77535	0.00016	0.00041	0.00287	2.90473
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.21. Commissioning (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.41084	4.41084	15.7530	81.9156	0.15438	0.69313	—	0.69313	0.69313	—	0.69313	—	16,434.8	16,434.8	0.65987	0.12876	—	16,489.7
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26759	0.26759	0.95566	4.96944	0.00937	0.04205	—	0.04205	0.04205	—	0.04205	—	997.022	997.022	0.04003	0.00781	—	1,000.35
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04883	0.04883	0.17441	0.90692	0.00171	0.00767	—	0.00767	0.00767	—	0.00767	—	165.068	165.068	0.00663	0.00129	—	165.619
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80368	0.74827	0.67250	7.33078	0.00000	0.00000	1.09768	1.09768	0.00000	0.25729	0.25729	—	1,112.40	1,112.40	0.08011	0.04836	0.12343	1,128.93
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04747	0.04432	0.03600	0.41874	0.00000	0.00000	0.06500	0.06500	0.00000	0.01521	0.01521	—	67.4911	67.4911	0.00443	0.00293	0.12480	68.6009
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00866	0.00809	0.00657	0.07642	0.00000	0.00000	0.01186	0.01186	0.00000	0.00278	0.00278	—	11.1739	11.1739	0.00073	0.00049	0.02066	11.3577
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.23. Commissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.41084	4.41084	15.7530	81.9156	0.15438	0.69313	—	0.69313	0.69313	—	0.69313	—	16,434.8	16,434.8	0.65987	0.12876	—	16,489.7
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.41084	4.41084	15.7530	81.9156	0.15438	0.69313	—	0.69313	0.69313	—	0.69313	—	16,434.8	16,434.8	0.65987	0.12876	—	16,489.7
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.31203	1.31203	4.68582	24.3663	0.04592	0.20618	—	0.20618	0.20618	—	0.20618	—	4,888.63	4,888.63	0.19628	0.03830	—	4,904.95
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23945	0.23945	0.85516	4.44685	0.00838	0.03763	—	0.03763	0.03763	—	0.03763	—	809.368	809.368	0.03250	0.00634	—	812.070
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77546	0.72710	0.50022	6.97225	0.00000	0.00000	1.09768	1.09768	0.00000	0.25729	0.25729	—	1,141.76	1,141.76	0.06600	0.04836	4.42770	1,162.25
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77899	0.72357	0.63119	6.89553	0.00000	0.00000	1.09768	1.09768	0.00000	0.25729	0.25729	—	1,093.33	1,093.33	0.07658	0.04836	0.11461	1,109.77
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22647	0.21103	0.16423	1.93915	0.00000	0.00000	0.31871	0.31871	0.00000	0.07458	0.07458	—	325.254	325.254	0.02173	0.01439	0.56819	330.652
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04133	0.03851	0.02997	0.35390	0.00000	0.00000	0.05816	0.05816	0.00000	0.01361	0.01361	—	53.8495	53.8495	0.00360	0.00238	0.09407	54.7433
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.25. Decommissioning (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17067	1.81954	11.0621	17.3636	0.05542	0.29275	—	0.29275	0.26933	—	0.26933	—	5,804.83	5,804.83	0.23547	0.04709	—	5,824.75
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17067	1.81954	11.0621	17.3636	0.05542	0.29275	—	0.29275	0.26933	—	0.26933	—	5,804.83	5,804.83	0.23547	0.04709	—	5,824.75
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91585	0.76770	4.66731	7.32601	0.02338	0.12352	—	0.12352	0.11363	—	0.11363	—	2,449.16	2,449.16	0.09935	0.01987	—	2,457.57
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.16714	0.14010	0.85178	1.33700	0.00427	0.02254	—	0.02254	0.02074	—	0.02074	—	405.487	405.487	0.01645	0.00329	—	406.878
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07206	0.06261	0.03124	0.65964	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	229.429	229.429	0.00265	0.00265	0.06147	230.345
Vendor	0.00556	0.00317	0.11270	0.05168	0.00176	0.00176	0.06711	0.06887	0.00176	0.01854	0.02030	—	133.056	133.056	0.00229	0.01993	0.00368	139.056
Hauling	0.00450	0.00216	0.09326	0.04537	0.00093	0.00176	0.03620	0.03796	0.00088	0.01015	0.01103	—	88.4277	88.4277	0.00220	0.01367	0.01551	92.5716
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06614	0.06437	0.03476	0.63662	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	219.729	219.729	0.00353	0.00265	0.00159	220.607
Vendor	0.00538	0.00291	0.11834	0.05256	0.00176	0.00176	0.06711	0.06887	0.00176	0.01854	0.02030	—	133.150	133.150	0.00229	0.01993	0.00010	139.147
Hauling	0.00432	0.00198	0.09841	0.04594	0.00093	0.00176	0.03620	0.03796	0.00088	0.01015	0.01103	—	88.4969	88.4969	0.00220	0.01367	0.00040	92.6257
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03077	0.02642	0.01429	0.25346	0.00000	0.00000	0.11302	0.11302	0.00000	0.02645	0.02645	—	92.7553	92.7553	0.00149	0.00112	0.01121	93.1364
Vendor	0.00231	0.00130	0.04867	0.02195	0.00074	0.00074	0.02774	0.02849	0.00074	0.00768	0.00842	—	56.1553	56.1553	0.00097	0.00841	0.00067	58.6860
Hauling	0.00186	0.00089	0.04076	0.01924	0.00039	0.00074	0.01499	0.01573	0.00037	0.00421	0.00458	—	37.3215	37.3215	0.00093	0.00577	0.00282	39.0661
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00562	0.00482	0.00261	0.04626	0.00000	0.00000	0.02063	0.02063	0.00000	0.00483	0.00483	—	15.3567	15.3567	0.00025	0.00018	0.00186	15.4198
Vendor	0.00042	0.00024	0.00888	0.00401	0.00014	0.00014	0.00506	0.00520	0.00014	0.00140	0.00154	—	9.29715	9.29715	0.00016	0.00139	0.00011	9.71613
Hauling	0.00034	0.00016	0.00744	0.00351	0.00007	0.00014	0.00274	0.00287	0.00007	0.00077	0.00084	—	6.17900	6.17900	0.00015	0.00095	0.00047	6.46784

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	5,424.75	5,424.75	0.87761	0.10638	—	5,478.40
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,424.75	5,424.75	0.87761	0.10638	—	5,478.40

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.43480	0.36536	3.28069	3.05690	0.00914	0.13476	—	0.13476	0.12398	—	0.12398	—	990.088	990.088	0.04016	0.00803	—	993.485
Forklifts	0.07865	0.06609	0.62254	1.03192	0.00141	0.02673	—	0.02673	0.02459	—	0.02459	—	152.453	152.453	0.00618	0.00124	—	152.976
Total	0.51346	0.43145	3.90323	4.08882	0.01055	0.16149	—	0.16149	0.14857	—	0.14857	—	1,142.54	1,142.54	0.04635	0.00927	—	1,146.46
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.43480	0.36536	3.28069	3.05690	0.00914	0.13476	—	0.13476	0.12398	—	0.12398	—	990.088	990.088	0.04016	0.00803	—	993.485
Forklifts	0.07865	0.06609	0.62254	1.03192	0.00141	0.02673	—	0.02673	0.02459	—	0.02459	—	152.453	152.453	0.00618	0.00124	—	152.976
Total	0.51346	0.43145	3.90323	4.08882	0.01055	0.16149	—	0.16149	0.14857	—	0.14857	—	1,142.54	1,142.54	0.04635	0.00927	—	1,146.46

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.00022	0.00018	0.00164	0.00153	< 0.000005	0.00007	—	0.00007	0.00006	—	0.00006	—	0.44910	0.44910	0.00002	< 0.000005	—	0.45064
Forklifts	0.00004	0.00003	0.00031	0.00052	< 0.000005	0.00001	—	0.00001	0.00001	—	0.00001	—	0.06915	0.06915	< 0.000005	< 0.000005	—	0.06939
Total	0.00026	0.00022	0.00195	0.00204	0.00001	0.00008	—	0.00008	0.00007	—	0.00007	—	0.51825	0.51825	0.00002	< 0.000005	—	0.52003

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2025	7/1/2025	5.00000	22.0000	—
Substation Site Preparation	Site Preparation	7/2/2025	7/16/2025	5.00000	11.0000	—
Grading	Grading	7/2/2025	7/30/2025	5.00000	21.0000	—
Substation Site Grading	Grading	7/31/2025	8/14/2025	5.00000	11.0000	—
Battery/Container Installation	Building Construction	7/31/2025	11/30/2026	5.00000	348.000	—
Substation Installation	Building Construction	8/15/2025	4/15/2026	5.00000	174.000	—

Gen-Tie Foundation and Tower Erection	Building Construction	4/16/2026	6/16/2026	5.00000	44.0000	—
Gen-Tie Stringing and Pulling	Building Construction	6/17/2026	7/17/2026	5.00000	23.0000	—
Commissioning	Building Construction	12/1/2026	6/1/2027	5.00000	131.000	—
Decommissioning	Building Construction	5/31/2050	12/31/2050	5.00000	154.000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Site Preparation	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000
Substation Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Substation Site Preparation	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Substation Site Preparation	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Graders	Diesel	Average	2.00000	8.00000	148.000	0.41000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Grading	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Substation Site Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Substation Site Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Substation Site Grading	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000

Battery/Container Installation	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000
Battery/Container Installation	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Battery/Container Installation	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Battery/Container Installation	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Substation Installation	Aerial Lifts	Diesel	Average	1.000000	8.00000	46.0000	0.31000
Substation Installation	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000
Substation Installation	Bore/Drill Rigs	Diesel	Average	1.000000	8.00000	83.0000	0.50000
Substation Installation	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Substation Installation	Trenchers	Diesel	Average	1.000000	8.00000	40.0000	0.50000
Gen-Tie Foundation and Tower Erection	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000
Gen-Tie Foundation and Tower Erection	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Gen-Tie Foundation and Tower Erection	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Gen-Tie Foundation and Tower Erection	Pumps	Diesel	Average	1.000000	8.00000	11.0000	0.74000
Gen-Tie Foundation and Tower Erection	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Gen-Tie Stringing and Pulling	Aerial Lifts	Diesel	Average	1.000000	8.00000	46.0000	0.31000
Gen-Tie Stringing and Pulling	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Commissioning	Generator Sets	Diesel	Tier 4 Final	2.00000	2.00000	4,828.00	0.74000
Decommissioning	Concrete/Industrial Saws	Diesel	Average	2.00000	8.00000	33.0000	0.73000
Decommissioning	Cranes	Diesel	Average	2.00000	8.00000	367.000	0.29000
Decommissioning	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000

Decommissioning	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00000	20.0000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Substation Site Preparation	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Substation Site Preparation	Vendor	4.00000	20.0000	HHDT,MHDT
Substation Site Preparation	Hauling	0.00000	20.0000	HHDT
Substation Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Grading	Vendor	4.00000	20.0000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Substation Site Grading	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Substation Site Grading	Vendor	4.00000	20.0000	HHDT,MHDT
Substation Site Grading	Hauling	0.00000	20.0000	HHDT
Substation Site Grading	Onsite truck	—	—	HHDT
Battery/Container Installation	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Battery/Container Installation	Vendor	20.0000	20.0000	HHDT,MHDT
Battery/Container Installation	Hauling	2.00000	86.0000	HHDT
Battery/Container Installation	Onsite truck	—	—	HHDT
Substation Installation	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Substation Installation	Vendor	20.0000	20.0000	HHDT,MHDT

Substation Installation	Hauling	0.00000	20.0000	HHDT
Substation Installation	Onsite truck	—	—	HHDT
Gen-Tie Foundation and Tower Erection	Worker	10.00000	9.71000	LDA,LDT1,LDT2
Gen-Tie Foundation and Tower Erection	Vendor	4.00000	20.0000	HHDT,MHDT
Gen-Tie Foundation and Tower Erection	Hauling	0.00000	20.0000	HHDT
Gen-Tie Foundation and Tower Erection	Onsite truck	—	—	HHDT
Gen-Tie Stringing and Pulling	Worker	8.00000	9.71000	LDA,LDT1,LDT2
Gen-Tie Stringing and Pulling	Vendor	4.00000	20.0000	HHDT,MHDT
Gen-Tie Stringing and Pulling	Hauling	0.00000	20.0000	HHDT
Gen-Tie Stringing and Pulling	Onsite truck	—	—	HHDT
Commissioning	Worker	160.000	9.71000	LDA,LDT1,LDT2
Commissioning	Vendor	0.00000	6.06000	HHDT,MHDT
Commissioning	Hauling	0.00000	20.0000	HHDT
Commissioning	Onsite truck	—	—	HHDT
Decommissioning	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Decommissioning	Vendor	4.00000	20.0000	HHDT,MHDT
Decommissioning	Hauling	2.00000	20.0000	HHDT
Decommissioning	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	22.0000	0.00000	0.00000
Substation Site Preparation	—	—	5.50000	0.00000	0.00000
Grading	—	—	21.0000	0.00000	0.00000
Substation Site Grading	—	—	5.50000	0.00000	0.00000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00000	203.983	0.03300	0.00400
2026	0.00000	203.983	0.03300	0.00400
2027	0.00000	203.983	0.03300	0.00400
2050	0.00000	203.983	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	68.0000	68.0000	68.0000	1,044.00	1,360.00	1,360.00	1,360.00	20,880.0

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	0.00000	0.00000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	0.00000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	58,630,000	203.983	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.75000	annual days of extreme heat

Extreme Precipitation	8.90000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	15.1100	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	17.6478
AQ-PM	3.36030
AQ-DPM	22.7505
Drinking Water	60.1224
Lead Risk Housing	58.8280
Pesticides	98.3793
Toxic Releases	7.48937
Traffic	18.1125

Effect Indicators	—
CleanUp Sites	0.00000
Groundwater	32.3759
Haz Waste Facilities/Generators	35.6188
Impaired Water Bodies	93.3641
Solid Waste	63.6655
Sensitive Population	—
Asthma	54.5239
Cardio-vascular	32.4900
Low Birth Weights	16.7693
Socioeconomic Factor Indicators	—
Education	86.9527
Housing	83.2953
Linguistic	81.8920
Poverty	70.4397
Unemployment	52.5247

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	48.60772488
Employed	61.79905043
Median HI	48.13293982
Education	—
Bachelor's or higher	21.73745669
High school enrollment	100
Preschool enrollment	4.670858463

Transportation	—
Auto Access	50.77633774
Active commuting	54.69010651
Social	—
2-parent households	45.07891698
Voting	44.23200308
Neighborhood	—
Alcohol availability	81.05992557
Park access	26.06185038
Retail density	16.04003593
Supermarket access	19.90247658
Tree canopy	65.55883485
Housing	—
Homeownership	64.54510458
Housing habitability	37.1872193
Low-inc homeowner severe housing cost burden	37.20005133
Low-inc renter severe housing cost burden	24.20120621
Uncrowded housing	15.89888361
Health Outcomes	—
Insured adults	24.93263185
Arthritis	0.0
Asthma ER Admissions	32.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	23.6
Cognitively Disabled	36.6
Physically Disabled	52.4
Heart Attack ER Admissions	63.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	84.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	57.3
English Speaking	47.7
Foreign-born	77.0
Outdoor Workers	7.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	81.3
Traffic Density	30.0
Traffic Access	0.0
Other Indices	—
Hardship	73.4

Other Decision Support	—
2016 Voting	45.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	53.0000
Healthy Places Index Score for Project Location (b)	41.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Seahawk BESS: assumed building to account for routine maintenance workers. Total acreage of 14 acres disturbed with no landscaping anticipated per applicant.
Construction: Construction Phases	Adjusted default construction schedule based on information provided by the applicant.
Construction: Off-Road Equipment	Default equipment revised based on information provided by the applicant.

Construction: Off-Road Equipment EF	Emission factors for the diesel generators during commissioning based on Tier 4 engines, per applicant input. All others based on default horsepower and engine tier.
Construction: Trips and VMT	Default on-road vehicle assumptions revised based on applicant input. Battery container truck trip length based on one-way distance to Port of Oakland.
Construction: On-Road Fugitive Dust	Unpaved portion of Minto Road modeled separately for construction.
Operations: Road Dust	% paved based on assumption of 20-mile trip length on average with 0.4 miles unpaved on Minto Road
Operations: Consumer Products	Facility will be unmanned. No consumer products assumed.
Operations: Architectural Coatings	No architectural coatings anticipated.
Operations: Landscape Equipment	No landscaping anticipated.
Operations: Energy Use	Total of auxiliary loads, energy degradation, and energy loss
Operations: Water and Waste Water	Facility would be unmanned. No water/wastewater assumed.
Operations: Solid Waste	Facility would be unmanned. No solid waste assumed.
Operations: Off-Road Equipment	1 crane and 1 forklift assumed to operate for 8 hours for 1 day every 2 or 3 years for battery swaps.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.02296	14.0000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Site Preparation	Site Preparation	Start Date	6/30/2025	6/1/2025
Site Preparation	Site Preparation	End Date	7/14/2025	7/1/2025
Site Preparation	Site Preparation	Work Days per Phase	10.00000	22.0000
Grading	Grading	Start Date	7/15/2025	7/2/2025

Grading	Grading	End Date	8/26/2025	7/30/2025
Grading	Grading	Work Days per Phase	30.0000	21.0000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Commissioning	Generator Sets	Engine Tier	Average	Tier 4 Final
Commissioning	Generator Sets	Horsepower	4,800.00	4,828.00

8.4.3. Off-Road Equipment EF

Phase Name	Equipment Type	Year	Model Parameter	Units	Default Value	New Value
Commissioning	Generator Sets	2,026.00	TOG	g/bhp-hr	0.05000	0.14000
Commissioning	Generator Sets	2,026.00	ROG	g/bhp-hr	0.05000	0.14000
Commissioning	Generator Sets	2,026.00	NOx	g/bhp-hr	2.24000	0.50000
Commissioning	Generator Sets	2,026.00	CO	g/bhp-hr	2.60000	2.60000
Commissioning	Generator Sets	2,026.00	SO,	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,026.00	PM10E	g/bhp-hr	0.02000	0.02200
Commissioning	Generator Sets	2,026.00	PM2.5E	g/bhp-hr	0.02000	0.02200
Commissioning	Generator Sets	2,026.00	CO,	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,026.00	CH„	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,026.00	N,O	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,027.00	SO,	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,027.00	CO,	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,027.00	CH„	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,027.00	N,O	g/bhp-hr	—	1.000000

8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value

Site Preparation	Worker	One-Way Trips per Day	15.0000	40.0000
Site Preparation	Vendor	One-Way Trips per Day	—	4.00000
Site Preparation	Vendor	Miles per Trip	6.06000	20.0000
Substation Site Preparation	Worker	One-Way Trips per Day	7.50000	40.0000
Substation Site Preparation	Vendor	One-Way Trips per Day	—	4.00000
Substation Site Preparation	Vendor	Miles per Trip	6.06000	20.0000
Grading	Worker	One-Way Trips per Day	15.0000	40.0000
Grading	Vendor	One-Way Trips per Day	—	4.00000
Grading	Vendor	Miles per Trip	6.06000	20.0000
Substation Site Grading	Worker	One-Way Trips per Day	7.50000	40.0000
Substation Site Grading	Vendor	One-Way Trips per Day	—	4.00000
Substation Site Grading	Vendor	Miles per Trip	6.06000	20.0000
Battery/Container Installation	Worker	One-Way Trips per Day	0.42000	40.0000
Battery/Container Installation	Vendor	One-Way Trips per Day	0.16390	20.0000
Battery/Container Installation	Vendor	Miles per Trip	6.06000	20.0000
Battery/Container Installation	Hauling	One-Way Trips per Day	0.00000	2.00000
Battery/Container Installation	Hauling	Miles per Trip	20.0000	86.0000
Substation Installation	Worker	One-Way Trips per Day	0.42000	40.0000
Substation Installation	Vendor	One-Way Trips per Day	0.16390	20.0000
Substation Installation	Vendor	Miles per Trip	6.06000	20.0000
Gen-Tie Foundation and Tower Erection	Worker	One-Way Trips per Day	0.42000	10.00000
Gen-Tie Foundation and Tower Erection	Vendor	One-Way Trips per Day	0.16390	4.00000
Gen-Tie Foundation and Tower Erection	Vendor	Miles per Trip	6.06000	20.0000
Gen-Tie Stringing and Pulling	Worker	One-Way Trips per Day	0.42000	8.00000
Gen-Tie Stringing and Pulling	Vendor	One-Way Trips per Day	0.16390	4.00000
Gen-Tie Stringing and Pulling	Vendor	Miles per Trip	6.06000	20.0000

Commissioning	Worker	One-Way Trips per Day	0.42000	160.000
Commissioning	Vendor	One-Way Trips per Day	0.16390	0.00000
Decommissioning	Worker	One-Way Trips per Day	0.42000	40.0000
Decommissioning	Vendor	One-Way Trips per Day	0.16390	4.00000
Decommissioning	Vendor	Miles per Trip	6.06000	20.0000
Decommissioning	Hauling	One-Way Trips per Day	0.00000	2.00000

8.4.7. On-Road Fugitive Dust

Phase Name	Model Parameter	Units	Default Value	New Value
Site Preparation	Worker Trip Paved	%	52.0000	100.0000
Site Preparation	Vendor Trip Paved	%	52.0000	100.0000
Site Preparation	Hauling Trip Paved	%	52.0000	100.0000
Substation Site Preparation	Worker Trip Paved	%	52.0000	100.0000
Substation Site Preparation	Vendor Trip Paved	%	52.0000	100.0000
Substation Site Preparation	Hauling Trip Paved	%	52.0000	100.0000
Grading	Worker Trip Paved	%	52.0000	100.0000
Grading	Vendor Trip Paved	%	52.0000	100.0000
Grading	Hauling Trip Paved	%	52.0000	100.0000
Substation Site Grading	Worker Trip Paved	%	52.0000	100.0000
Substation Site Grading	Vendor Trip Paved	%	52.0000	100.0000
Substation Site Grading	Hauling Trip Paved	%	52.0000	100.0000
Battery/Container Installation	Worker Trip Paved	%	52.0000	100.0000
Battery/Container Installation	Vendor Trip Paved	%	52.0000	100.0000
Battery/Container Installation	Hauling Trip Paved	%	52.0000	100.0000
Substation Installation	Worker Trip Paved	%	52.0000	100.0000
Substation Installation	Vendor Trip Paved	%	52.0000	100.0000
Substation Installation	Hauling Trip Paved	%	52.0000	100.0000

Gen-Tie Foundation and Tower Erection	Worker Trip Paved	%	52.0000	100.0000
Gen-Tie Foundation and Tower Erection	Vendor Trip Paved	%	52.0000	100.0000
Gen-Tie Foundation and Tower Erection	Hauling Trip Paved	%	52.0000	100.0000
Gen-Tie Stringing and Pulling	Worker Trip Paved	%	52.0000	100.0000
Gen-Tie Stringing and Pulling	Vendor Trip Paved	%	52.0000	100.0000
Gen-Tie Stringing and Pulling	Hauling Trip Paved	%	52.0000	100.0000
Commissioning	Worker Trip Paved	%	52.0000	100.0000
Commissioning	Vendor Trip Paved	%	52.0000	100.0000
Commissioning	Hauling Trip Paved	%	52.0000	100.0000
Decommissioning	Worker Trip Paved	%	52.0000	100.0000
Decommissioning	Vendor Trip Paved	%	52.0000	100.0000
Decommissioning	Hauling Trip Paved	%	52.0000	100.0000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.4. Road Dust

Model Parameter	Units	Default Value	New Value
% Paved	%	52.0000	98.0000

8.5.2. Area Sources

8.5.2.2. Consumer Products

Model Parameter	Units	Default Value	New Value
General Category	lb/sqft/day	0.00002	0.00000
City Park/Golf Course Pesticides/Fertilizers	lb/sqft/day	< 0.000005	0.00000

Parking Degreaser	lb/sqft/day	< 0.000005	0.00000

8.5.2.3. Architectural Coatings

Model Parameter	Units	Default Value	New Value
Non-Residential Interior Area	sq ft	1,500.00	0.00000
Non-Residential Exterior Area	sq ft	500.000	0.00000

8.5.2.4. Landscape Equipment

Model Parameter	Units	Default Value	New Value
Summer Days	day/yr	250.000	0.00000

8.5.3. Energy Usage

Land Use	Model Parameter	Units	Default Value	New Value
Unrefrigerated Warehouse-No Rail	Electricity	kWh/yr	10,596.1	58,630,000
Unrefrigerated Warehouse-No Rail	Electricity (Subject to Title 24)	kWh/yr	3,833.51	0.00000
Unrefrigerated Warehouse-No Rail	Electricity (Not Subject to Title 24)	kWh/yr	6,762.54	58,630,000
Unrefrigerated Warehouse-No Rail	Natural Gas	kBTU/yr	5,943.12	0.00000
Unrefrigerated Warehouse-No Rail	Natural Gas (Subject to Title 24)	kBTU/yr	5,093.96	0.00000
Unrefrigerated Warehouse-No Rail	Natural Gas (Not Subject to Title 24)	kBTU/yr	849.158	0.00000

8.5.4. Water and Waste Water

Land Use	Model Parameter	Units	Default Value	New Value
Unrefrigerated Warehouse-No Rail	Indoor Water	gal/year	231,250	0.00000

8.5.5. Solid Waste

Land Use	Model Parameter	Units	Default Value	New Value

Unrefrigerated Warehouse-No Rail	Solid Waste Generation Rate	ton/1000sqft/yr	0.94000	0.00000

8.5.7. Off-Road Equipment

8.5.7.1. Off-Road Equipment

Equipment Type	Model Parameter	Default Value	New Value
Cranes	Days/Year	260.000	1.000000
Forklifts	Days/Year	260.000	1.000000

850 Vine Street #110 | Riverside, CA 92507
805.692.6921 OFFICE
mnsengineers.com

January 23, 2025

New Leaf Energy
Attention: William Peregoy
55 Technology Drive, Suite 102
Lowell, MA 01851

Via email: wperegoy@newleafenergy.com

SUBJECT: Greenhouse Gas Assessment for the Seahawk Battery Energy Storage System Project

MNS Engineers, Inc. has prepared this report to evaluate short-term and long-term greenhouse gas (GHG) emissions impacts of the Seahawk Battery Energy Storage System (BESS) Project (project). This analysis is supported by emissions modeling found in **Appendix A**, *Greenhouse Gas Emissions Data*, prepared by Dudek in September 2024. This report is in compliance with California Environmental Quality Act (CEQA) Guidelines and the requirements of California Energy Commission's (CEC) Opt-In Certification Program under the Assembly Bill (AB) 205.

1 Introduction

1.1 Project Location

The project is located in unincorporated area of the County of Santa Cruz (County), California. The project site is generally south of Paulsen Road, north of Grimmer Road, and east of Minto Road; refer to **Figure 1**, *Project Site Location*. Local access to the site is provided from Green Valley Road to Minto Road.

1.2 Project Description

The project would construct a 200 megawatts (MW) BESS that would deliver and receive power from the existing Pacific Gas and Electric Company (PG&E) Green Valley Substation to the northwest of the project site. The project site plan is shown as **Figure 2**, *Site Plan*.

The BESS would consist of battery modules housed in purpose-built metal enclosures, with integrated power conversion equipment and fire suppression systems, in compliance with all applicable standards. In addition, the BESS would have on-site interconnection equipment including transformers and would be completely enclosed within a 7-foot-high perimeter fence. Where appropriate, sound walls would be provided in certain locations in place of the 7-foot-high perimeter fence. Interconnection to the PG&E substation would also require on- and off-site 115 kilovolts (kV) transmission poles for the overhead generation transmission line ("gen-tie") wires. The total project area including the gen-tie is estimated to be no more than 16 acres.

Once constructed, the project would operate 7 days per week, 365 days per year. Typical operation of the system would include charging from the grid during the day and discharging during peak electric demand at night. The system would have minimal lighting for safety at night. Project operations would be

monitored remotely through the supervisory control and data acquisition (SCADA) system. The project would include one single story control enclosure for the SCADA system near the project substation.

Regular operations and maintenance would be conducted using maintenance trucks, including but not limited to equipment testing, monitoring, repair, routine procedures to ensure service continuity, and standard preventative maintenance.

During construction and operations, access to the site would be via a proposed 20-foot-wide gravel access road onto the property from Minto Road. There would be adequate area on the property for vehicle parking and equipment staging during both the construction and operational phases. No supplies are required to be stored on site.

2 Existing Conditions

2.1 Introduction to Global Climate Change

Climate change refers to long-term shifts in climate indicators like temperature, rainfall, and wind patterns that persist for decades or longer. Earth's temperature is governed by the balance between incoming energy from the sun and outgoing energy radiated back into space. This energy balance can be altered by both natural and human factors, including fluctuations in solar radiation, changes in how Earth's surface and atmosphere reflect energy, and variations in the greenhouse effect, which influences how much heat remains trapped in the atmosphere.

The greenhouse effect is a natural phenomenon that warms the lower atmosphere (troposphere) and makes Earth habitable. It works through a three-step process: the Sun emits short-wave radiation that is absorbed by Earth's surface; Earth then re-emits some of this energy as long-wave infrared radiation; and GHGs in the atmosphere absorb and re-radiate this energy, sending it both outward into space and back toward Earth. While this process is essential for maintaining a stable climate, human activities, especially the release of additional GHGs, intensify the effect, trapping more heat and raising global temperatures.

Historical climate records show that Earth's climate has always varied naturally due to factors like solar cycles, volcanic activity, and natural GHG fluctuations. However, the rapid warming observed over the past century cannot be accounted for by natural causes alone. Scientific evidence strongly indicates that human actions—particularly since the mid-20th century—are the primary drivers of recent climate change. This is supported by rising GHG levels, increased radiative forcing, observed temperature trends, and improved climate modeling.

Today, atmospheric concentrations of GHGs have reached levels not seen in the past 800,000 years, mainly due to fossil fuel combustion and changes in land use. If emissions continue unchecked, further warming and widespread changes across the climate system are inevitable.

2.2 Greenhouse Gases and Health Effects

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the State's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also 14 California Code of Regulations [CCR]

Section 15364.5). Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are the predominant GHGs emitted from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.

Carbon Dioxide

CO_2 is a naturally occurring gas and a by-product of human activities; it is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out gassing; and decomposition of dead organic matter. Human activities that generate CO_2 include the combustion of fuels such as coal, oil, natural gas, and wood, and changes in land use.

Methane

CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. CH_4 is produced through anaerobic (i.e., without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide

N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

Fluorinated Gases

Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone (O_3)-depleting substances (e.g., chlorofluorocarbons [CFCs], hydrochlorofluorocarbons [HCFCs], and halons). The most prevalent fluorinated gases include the following:

- Hydrofluorocarbons: HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to O_3-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.

- Perfluorocarbons: PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced, along with HFCs, as alternatives to the O_3-depleting substances. The two main sources of PFCs are primarily aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the

chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.

- Sulfur Hexafluoride: SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.

- Nitrogen Trifluoride: NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Chlorofluorocarbons

CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere), and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons

HCFCs are a large group of compounds whose structure is very close to that of CFCs, containing fluorine, chlorine, and carbon atoms, but also including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Water Vapor

The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone

Tropospheric O_3, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen, plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, which occurs due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols

Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

2.3 Global Warming Potential

Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous

release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas. The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent ($MTCO_2e$).

The current version of the California Emissions Estimator Model (CalEEMod), Version 2022.1, assumes that the GWP for CH_4 is 25 (emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC's Fourth Assessment Report.[1]

3 Laws, Ordinances, Regulations, and Standards

Federal, State, regional, and local county regulations pertaining to GHG emissions are discussed below. This section also discusses each of the agencies' roles in regulating GHG emissions.

3.1 Federal

As of this date, no national standards have been adopted for nationwide GHG reduction targets. Furthermore, no regulations or legislation specifically mandate GHG emissions reductions at the project level. However, several federal programs have been established to promote energy efficiency and improve fuel economy in an effort to address climate change and its related effects.

Clean Air Act

In 2007, the U.S. Supreme Court case *Massachusetts v. EPA* established a critical precedent regarding the U.S. Environmental Protection Agency's (USEPA) authority to regulate GHG emissions. The Court directed the USEPA Administrator to determine if GHGs from new motor vehicles contributed to air pollution that could reasonably be anticipated to endanger public health or welfare, pursuant to Section 202(a) of the Clean Air Act (CAA).

Following this directive, in December 2009, the USEPA issued two distinct findings under the CAA that provided the foundation for regulating GHGs as air pollutants:

- This determination concluded that elevated concentrations of six specific GHGs in the atmosphere, CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6, threaten the public health and welfare of present and future generations.
- The finding stated that the combined GHG emissions from new motor vehicles and engines contribute to the air pollution that USEPA had identified as endangering public health and welfare.
- These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under CAA.

3.2 State

The statewide GHG emissions regulatory framework is summarized in this subsection by category: State climate change targets, building energy, renewable energy and energy procurement, mobile sources,

[1] Intergovernmental Panel on Climate Change (IPCC). IPCC Global Warming Potential Values. August 7, 2024. https://ghgprotocol.org/sites/default/files/2024-08/Global-Warming-Potential-Values%20%28August%202024%29.pdf. Accessed November 2025.

water, solid waste, and other State actions. The following text describes Assembly Bills (ABs), Senate Bills (SBs), and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

Assembly Bill 32

Enacted in 2006, Assembly Bill 32 (AB 32), the Global Warming Solutions Act, created a comprehensive program to reduce California's GHG emissions. The law originally mandated that the State's emissions be reduced to 1990 levels by 2020 and designated the California Air Resources Board (CARB) as the lead agency for its implementation. To achieve these goals, CARB developed the AB 32 Scoping Plan, an evolving roadmap of regulations, market mechanisms, and incentives across sectors like transportation, energy, and waste. While the 2020 target was met ahead of schedule, AB 32's ongoing framework, along with subsequent legislation like Senate Bill (SB) 32, continues to set the context for climate action in California. This legislation is a foundational element, establishing the statewide policy context against which a project's potential GHG impacts and consistency with California's long-term climate goals must be evaluated.

Senate Bill 32

Expanding upon AB 32, SB 32 was passed in 2016 to establish a more ambitious, medium-term GHG reduction target for California. SB 32 requires the state to reduce GHG emissions to at least 40 percent below 1990 levels by 2030, which the CARB has been tasked with achieving. The legislation builds upon the programs and mandates set forth in AB 32, further guiding the State's ongoing climate efforts. SB 32 establishes a more aggressive and legally binding emissions target that must be considered. Projects are assessed against the metrics and strategies outlined in CARB's AB 32 Scoping Plan and its subsequent updates to determine their consistency with the State's 2030 climate goals.

Senate Bill 100

Senate Bill 100, the 100 Percent Clean Energy Act of 2018, establishes ambitious goals for California's electricity supply, mandating that eligible renewable and zero-carbon resources provide 100 percent of retail electricity sales by 2045. This legislation also includes an accelerated interim target of 60 percent renewable energy by 2030, which expands upon the State's Renewables Portfolio Standard. SB 100 is a critical consideration for assessing a project's long-term consistency with State climate policy. While a project is not required to meet the 100 percent target individually, it must evaluate how a project aligns with the statewide shift towards a decarbonized grid, particularly regarding its energy demand and the potential to utilize clean energy sources. This includes considering a project's reliance on the electricity grid, and any on-site renewable energy generation or battery storage, in light of the State's rapidly evolving energy infrastructure.

Title 24

As an integral part of California's strategy to reduce GHG emissions, the Building Energy Efficiency Standards in Title 24, Part 6 of the California Code of Regulations establish requirements for energy conservation in newly constructed and altered buildings statewide. By mandating features such as improved insulation, high-efficiency lighting, advanced HVAC systems, and the installation of solar photovoltaic systems on new construction, Title 24 aims to reduce electricity and natural gas consumption, thereby lowering GHG emissions associated with energy generation. Adherence to the latest standards,

which are updated every three years by the California Energy Commission, ensures that projects contribute to the State's broader climate goals by improving building performance and efficiency. Compliance with Title 24 is a key mechanism for a project to demonstrate that it is incorporating all feasible energy efficiency measures to mitigate operational GHG impacts from building energy use.

California Air Resources Board's Climate Change Scoping Plan

Adopted by CARB on December 15, 2022, the 2022 Scoping Plan for Achieving Carbon Neutrality provides a comprehensive strategy for California to reach carbon neutrality by 2045 and reduce anthropogenic GHG emissions to 85 percent below 1990 levels, as mandated by AB 1279. The plan outlines a multi-sectoral approach that leverages clean technologies and fuels, including zero-emission transportation, building electrification, renewable energy, and carbon capture and storage. The Scoping Plan particularly emphasizes the aggressive transition toward zero-emission transportation, which is California's largest source of GHG emissions, and guides the development of new and strengthened regulations for vehicle manufacturers. While CARB retains control over statewide vehicle emissions standards, the Scoping Plan's Appendix D offers non-regulatory guidance and recommendations for local jurisdictions to incorporate into climate action plans and CEQA analyses, specifically focusing on residential and mixed-use development to determine consistency with State climate goals. This allows for a project-level evaluation of alignment with the State's broader climate objectives.

3.3 Regional

Monterey Bay Air Resources District

California has 35 local air quality management districts that are actively addressing climate change by establishing significance thresholds, performance standards, and mitigation strategies. The Monterey Bay Air Resources District (MBARD) serves as the regional authority responsible for implementing and enforcing federal, State, and local air quality regulations within the North Central Coast Air Basin, where the project is located. Under CEQA, MBARD provides guidance for how GHG emissions should be considered in project review in its *Guidelines for Implementing the California Environmental Quality Act*.

Association of Monterey Bay Area Governments

The Association of Monterey Bay Area Governments (AMBAG) region includes Monterey, San Benito, and Santa Cruz County. AMBAG serves as both a federally designated Metropolitan Planning Organization (MPO) and a Council of Governments (COG). AMBAG performs metropolitan level transportation planning on behalf of the region. Among its many duties, AMBAG manages the region's transportation demand model and prepares regional housing, population and employment forecast that are utilized in a variety of regional plans. In June 2022, AMBAG adopted the *Monterey Bay 2045 Moving Forward – 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy* (2045 MTP/SCS).[2] The AMBAG 2045 MTP/SCS is anticipated to achieve 3 percent and 6 percent reduction in per-capita GHG emissions from passenger vehicles/light trucks compared to 2005 levels by 2020 and 2035, respectively. The 2045 MTP/SCS centers on six main goals: improving access and mobility, supporting economic vitality, protecting the environment, fostering healthy communities, advancing social equity, and maintaining a safe, efficient transportation system. Its policies aim to reduce vehicle dependence by integrating land-use and

[2] Association of Monterey Bay Area Governments (AMBAG). *Monterey Bay 2045 Moving Forward – 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy*. June 2022. https://www.ambag.org/index.php/plans/2045-metropolitan-transportation-plan-sustainable-communities-strategy. Accessed November 2025.

transportation planning, expanding transit and active transportation options, promoting compact and mixed-use development near job centers and transit, and ensuring equitable investment across communities. Overall, the plan seeks to accommodate regional growth while reducing GHG emissions and improving quality of life through coordinated, sustainable transportation and land-use strategies.

3.4 Local

County of Santa Cruz Climate Action and Adaptation Plan (CAAP)

The County adopted the *2022 Climate Action and Adaptation Plan* (CAAP) in December 2022.[3] The 2022 CAAP includes the most current data on climate impacts for unincorporated Santa Cruz County. The 2022 CAAP is comprised of actionable steps towards reducing the causes of global warming, adapting communities to climate hazards, and ensuring the safety and well-being of those most vulnerable to climate change. The 2022 CAAP builds on the County's previous work to address climate change through its 2013 Climate Action Strategy (CAS). The 2022 CAAP sets forth mitigation and adaptation strategies that address climate change through government operations and local policy. The 29 strategies are organized into seven primary sectors, including energy, transportation, water, waste, natural and working lands, wildfire prevention, and government operations, that influence climate change either through mitigating the causes or adapting to climate hazards.

4 Thresholds of Significance

4.1 CEQA Thresholds of Significance

Section VIII of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects relative to GHG emissions and includes the following threshold questions to evaluate the project's impacts related to GHG emissions. Would the project:

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

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

4.2 Monterey Bay Air Resources District Thresholds of Significance

MBARD has established thresholds of significance for GHG emissions of stationary source projects.[4] Stationary source projects include equipment, processes, and operations that require an air district permit to operate. If annual emissions of GHGs exceed the significance level of 10,000 $MTCO_2e$ per year or conflicts with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions, the proposed project would result in a cumulatively considerable contribution of GHG emissions and must implement mitigation measures.

[3] County of Santa Cruz. *2022 Climate Action and Adaptation Plan*. December 2022. https://www.santacruzcountyca.gov/Portals/0/County/OR3/CAAP/2022%20Climate%20Action%20and%20Adaptation%20Plan%20%28CAAP%29.pdf. Accessed November 2025.

[4] Monterey Bay Air Resources District (MBARD). *Guidelines for Implementing the California Environmental Quality Act*. Adopted April 1996, revised February 2016. https://www.mbard.org/ceqa. Accessed November 2025.

The MBARD has not adopted thresholds of significance for land use projects. CEQA Guidelines Section 15064.4 does not establish a threshold of significance. CEQA Guidelines Section 15064.6 provides lead agencies the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies or suggested by other experts, if any threshold chosen is supported by substantial evidence. The County has not adopted a numerical significance threshold. Impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources, and therefore, numerical significance threshold for individual development projects is speculative. Throughout the State, air districts are moving from numerical significance threshold to qualitative significance threshold that focuses on project features to reduce GHG emissions or consistency with GHG reduction plans. Therefore, the significance of the project's potential impacts regarding GHG emissions and climate change will be assessed solely on its consistency with plans and policies adopted for the purposes of reducing GHG emissions and mitigating the effects of climate change and the project's ability to incorporate sustainable features and strategies in its design to reduce GHG emissions. The analysis has also quantified the project's GHG emissions for informational purposes in compliance with CEQA Guidelines Section 15064.4.

5 Project Impacts

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Impact GHG-1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

***Less Than Significant Impact*.** Project-related GHG emissions would include emissions from direct and indirect sources resulting from the construction and operation of the project. Direct project-related GHG emissions include emissions from construction activities, area sources, mobile sources, and refrigerants, while indirect sources include emissions from energy consumption, water demand, and solid waste generation. Emissions were estimated using CalEEMod Version 2022.1.

Construction Emissions

Construction associated with the project would generate GHG emissions. **Table 1**, *Construction Emissions Summary* presents the project's annual GHG emissions from construction and total construction emissions amortized over the lifetime of the project, assumed to be 30 years.

Table 1: Construction Emissions Summary

Year	Annual Emissions (metric tons per year)[1]				
	CO_2	CH_4	N_2O	Refrigerants	CO_2e
2025 (Construction)	412.27	0.02	0.03	0.25	422.29
2026 (Construction)	755.32	0.04	0.05	0.37	771.29
2027 (Construction)	864.44	0.04	0.01	0.10	868.34
2050 (Decommissioning)	438.75	0.02	0.01	0.00	441.03
Total Emissions	**2,470.78**	**0.12**	**0.10**	**0.72**	**2,502.95**
Amortized Emissions					**83.43**

Source: Refer to CalEEMod output included in **Attachment A**.
Notes: 1. Emissions from diesel generators were estimated in a spreadsheet model and added to CalEEMod output results.

The project would be constructed over approximately 24 months, including site preparation, substation site preparation, grading, substation site grading, battery and container installation, substation installation, gen-tie foundation and tower erection, gen-tie stringing and pulling, commissioning, and decommissioning. It should be noted that at the time of the preparation of the modeling, construction activities were assumed to start in June 2025. Although it is outdated, it represents the worst-case scenario for GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. The project was assumed to be operational for 30 years and then be decommissioned and removed at the end of its lifetime. Because CalEEMod only has emission factors out to 2050, 2050 was used as the surrogate year for decommissioning, which is projected for 2057. The majority of the construction phases would occur concurrently and would not occur sequentially in isolation. Construction duration and equipment list was provided by the Project Applicant based on past experiences constructing similar projects of similar scale, while vehicle trips were based on CalEEMod default values generated from construction equipment list; refer to **Attachment A** for detailed construction schedule, equipment list, and vehicle trips. As shown in **Table 1**, the project would generate a total of 2,502.95 $MTCO_2e$ GHG emissions during construction, which is equivalent to 83.43 $MTCO_2e$ per year amortized over 30 years.

Operational Emissions

Operations associated with the project would generate GHG emissions. **Table 2**, *Operational Emissions Summary* presents the project's annual operational GHG emissions, as well as total emissions with amortized construction emissions.

Table 2: Operational Emissions Summary

Emission Source	Annual Emissions (metric tons per year)				
	CO_2	**CH_4**	**N_2O**	**Refrigerants**	**CO_2e**
Mobile	7.29	<0.01	<0.01	0.01	7.41
Area	0.00	0.00	0.00	0.00	0.00
Energy	5,424.75	0.88	0.11	0.00	5,478.40
Water	0.00	0.00	0.00	0.00	0.00
Waste	0.00	0.00	0.00	0.00	0.00
Refrigerants	0.00	0.00	0.00	0.00	0.00
Stationary	0.52	<0.01	<0.01	0.00	0.52
Total Emissions	**5,432.56**	**0.88**	**0.11**	**0.01**	**5,486.32**
Amortized Construction Emissions					83.43
Total with Amortized Construction Emissions					**5,570.75**

Source: Refer to CalEEMod output included in **Attachment A**.

Mobile Source

The project would generate mobile source emissions from maintenance and inspection employees traveling to and from the site. Based on information provided by the Project Applicant, it is anticipated that routine operations would require eight workers in a light utility truck to visit the facility on a weekly basis, and one major annual maintenance and inspection would require 20 workers visiting the facility for one week. In addition, there would be six workers visiting the facility to swap the batteries every two to three years. In total, these activities would generate up to 1,044 trips per year. Assuming 20 miles per

one-way trip, the project would generate up to 20,880 miles per year. The number of trips and vehicle miles traveled (VMT) were input into CalEEMod to calculate mobile source emissions. As shown in **Table 2**, mobile source emissions during project operation would be approximately 7.41 $MTCO_2e$ per year.

Area Source

Project operations could generate area source emissions from landscape equipment. However, the project would not involve landscape on-site. Therefore, the project would not generate area source emissions.

Energy Source

Energy source emissions would be generated from electricity and natural gas usage of the project. As the project does not involve occupied buildings, natural gas would not be consumed during operation. However, the project would indirectly generate GHG emissions due to auxiliary loads, energy degradation over time, and energy losses during transmission and battery charging cycles. According to the information provided by the Project Applicant, the project would consume approximately 14,817 MWh of electricity per year for auxiliary loads under the most conservative assumption. The energy capacity of the batteries is estimated to degrade by approximately 1.6 percent per year, resulting in approximately 12.8 MWh energy degradation per year. Assuming 365 full charging cycles per year and 15 percent energy losses during transmission and battery charging cycles, the project would result in approximately 43,800 MWh of energy loss per year. In total, the project would result in approximately 58,630 MWh of electricity consumption from auxiliary loads, degradation, or loss per year, which was input in CalEEMod to calculate energy source emissions. As shown in **Table 2**, energy source emissions during project operation would be approximately 5,478.40 $MTCO_2e$ per year.

Water

Water used and wastewater generated results in indirect GHG emissions from the energy used to supply, distribute, and treat the water and wastewater. The wastewater treatment process can also directly emit both CH_4 and N_2O. However, as the project does not involve occupied buildings, the project would not generate emissions from water use or wastewater generation.

Waste

Indirect GHG emissions would be generated from waste that is disposed of at a landfill. However, as the project does not involve occupied buildings, the project would not generate emissions from waste generation.

Refrigerants

Refrigerants are substances used in equipment for air conditioning and refrigeration. The project would not involve occupied buildings and therefore would not include air conditioning or refrigeration units. According to the information provided by the Project Applicant, in compliance with CARB's SF_6 phase-out regulations, the project would use vacuum or air-insulated switchgear and would not use SF_6 for the substation equipment. It should be noted that in compliance with the *Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary Air-conditioning, and Other End-Uses*

regulation (CCR Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4) adopted by CARB on December 29, 2021, the project would not use refrigerants with GWPs higher than 750 for the cooling system, and periodic leak detection, monitoring, and prompt leak repair and recordkeeping would ensure refrigerants emissions due to leakage would be negligible. As such, the project would not generate emissions from refrigerants.

Stationary Source

The project would generate stationary source emissions associated with off-road equipment. The batteries would need to be swapped every two to three years during operation, which would require one diesel crane and one diesel forklift, assumed to operate for eight hours for one day. As a conservative analysis, battery swap was assumed to occur annually. Emissions generated from off-road equipment were modeled in CalEEMod. As shown in **Table 2**, stationary source emissions during project operation would be approximately 0.52 $MTCO_2e$ per year.

Total GHG Emissions

As shown in **Table 2**, emissions resulting from operation of the project would total approximately 5,486.32 $MTCO_2e$ per year. It should be noted that emissions would mostly be generated indirectly from auxiliary loads, energy degradation, and energy loss of the BESS system. With amortized construction emissions included, total project emissions would be approximately 5,570.75 $MTCO_2e$ per year. As discussed under Impact GHG-2 below, the project would not conflict with applicable GHG plans. Therefore, the project's GHG emissions impacts would be less than significant.

Impact GHG-2:	**Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

***Less Than Significant Impact*.** The applicable plans adopted for the purpose of reducing the emissions of GHGs include the CARB's 2022 Scoping Plan, the AMBAG's 2045 MTP/SCS, and the County's 2022 CAAP. These plans focus GHG emissions reductions on building energy, transportation, water, waste, natural and working lands, wildfire prevention, and government operations. As discussed under Impact GHG-1, the project would generate nominal vehicle trips due to intermittent and infrequent maintenance and inspection activities. In addition, the project would not involve occupied buildings and therefore would not consume natural gas and water or generate solid waste. The project site is not located within an agricultural land or natural habitat. As such, most of the strategies included in the CARB's 2022 Scoping Plan, the AMBAG's 2045 MTP/SCS, and the County's 2022 CAAP are not applicable to the project. The following lists strategies that are indirectly applicable to the project:

CARB 2022 Scoping Plan:

- Create a jurisdiction-specific zero emission vehicle (ZEV) ecosystem to support deployment of ZEVs statewide
- Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses

County of Santa Cruz 2022 CAAP:

- By 2030, achieve 100% clean energy provided by Central Coast Community Energy (CCCE)
- Eliminate fossil fuel use from passenger and commercial vehicles

It should be noted that it is infeasible for workers to take transit or use alternative modes of transportation to the project site due to the location of the project site; however, worker vehicles would comply with the latest fuel efficiency regulations. Furthermore, as a BESS project, the project would provide additional power storage capacity and promote renewable energy generation. As such, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and impacts would be less than significant.

6 Cumulative Impacts

According to MBARD, global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution of GHG emissions combined with the cumulative increase of all other sources of GHGs. GHG emissions generated by the project are not limited to a specific air basin but instead disperse globally. Because no single project can produce a measurable change in worldwide GHG concentrations, the effects discussed under Impacts GHG-1 and GHG-2 represent the project's incremental contribution to a broader, cumulative impact on climate change. Impact GHG-2 determines that the project aligns with the relevant strategies outlined in CARB's 2022 Scoping Plan, AMBAG's 2045 MTP/SCS, and the County's 2022 CAAP. Therefore, the project's contribution to cumulative GHG emissions would not be considered significant, and overall impacts in this regard would be less than significant.

7 Agencies and Agency Contacts

No agencies were contacted directly to specifically discuss greenhouse gas emissions impacts related to the proposed project.

8 Permits and Permit Schedules

Pursuant to Assembly Bill 205 subsection 25545.1(b)(1), the CEC retains exclusive authority over permitting and supersedes any applicable statute, ordinance, or regulation of a local air quality management district. The Project Applicant and CEC would collaborate with the MBARD on review of this report to ensure compliance with MBARD rules and regulations. No further permits related to greenhouse gas emissions are required.

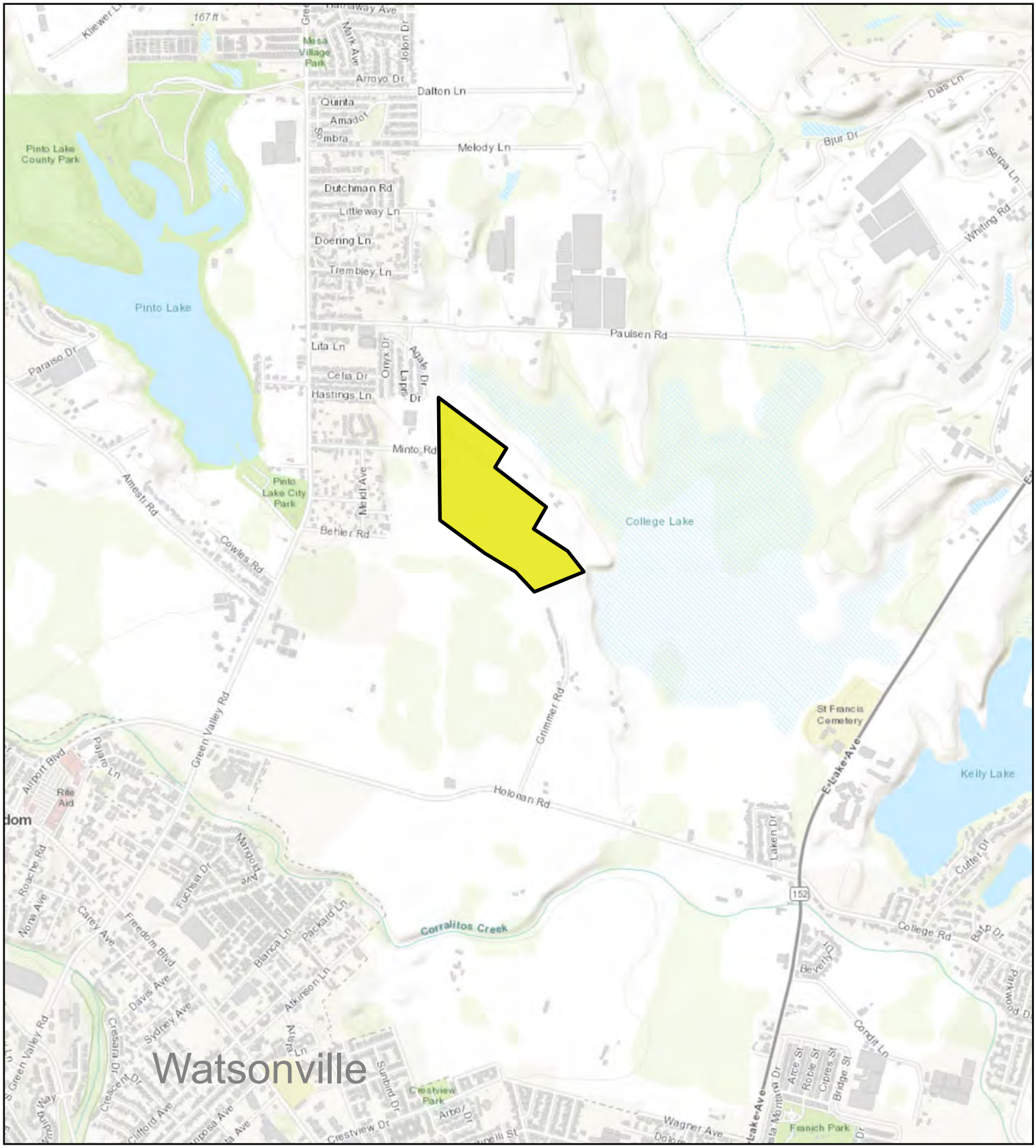
9 References

Association of Monterey Bay Area Governments (AMBAG). *Monterey Bay 2045 Moving Forward – 2045 Metropolitan Transportation Plan/Sustainable Communities Strategy*. June 2022. https://www.ambag.org/index.php/plans/2045-metropolitan-transportation-plan-sustainable-communities-strategy. Accessed November 2025.

County of Santa Cruz. *2022 Climate Action and Adaptation Plan*. December 2022. https://www.santacruzcountyca.gov/Portals/0/County/OR3/CAAP/2022%20Climate%20Action%20and%20Adaptation%20Plan%20%28CAAP%29.pdf. Accessed November 2025.

Intergovernmental Panel on Climate Change (IPCC). IPCC Global Warming Potential Values. August 7, 2024. https://ghgprotocol.org/sites/default/files/2024-08/Global-Warming-Potential-Values%20%28August%202024%29.pdf. Accessed November 2025.

Monterey Bay Air Resources District (MBARD). *Guidelines for Implementing the California Environmental Quality Act*. Adopted April 1996, revised February 2016. https://www.mbard.org/ceqa. Accessed November 2025.



SEAHAWK BATTERY ENERGY STORAGE SYSTEM PROJECT

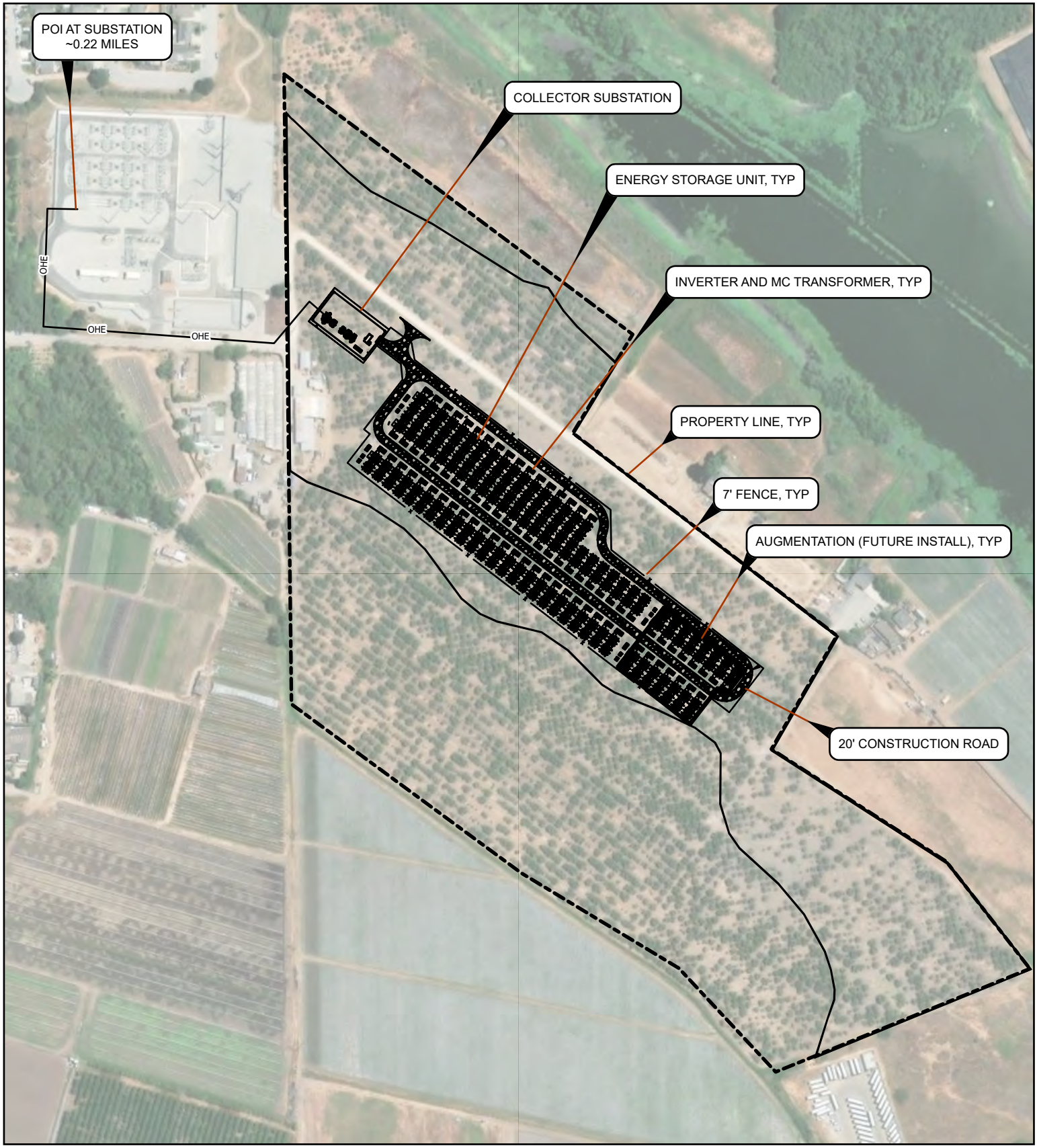
FIGURE 1: PROJECT SITE LOCATION

0 2,000 4,000 Feet

0 0.5 1 Miles

PROJECT SITE LOCATION

This page is intentionally blank.



SEAHAWK BATTERY ENERGY STORAGE SYSTEM PROJECT

FIGURE 2 : SITE PLAN

0 250 500 Feet

0 0.05 0.1 Miles

SITE PLAN OUTLINE

PROJECT SITE LOCATION

This page is intentionally blank.

Attachment A:

Greenhouse Gas Emissions Data

This page is intentionally blank.

Seahawk BESS - Construction HRA Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

3.3. Substation Site Preparation (2025) - Unmitigated

3.5. Grading (2025) - Unmitigated

3.7. Substation Site Grading (2025) - Unmitigated

3.9. Battery/Container Installation (2025) - Unmitigated

3.11. Battery/Container Installation (2026) - Unmitigated

3.13. Substation Installation (2025) - Unmitigated

3.15. Substation Installation (2026) - Unmitigated

3.17. Gen-Tie Foundation and Tower Erection (2026) - Unmitigated

3.19. Gen-Tie Stringing and Pulling (2026) - Unmitigated

3.21. Commissioning (2026) - Unmitigated

3.23. Commissioning (2027) - Unmitigated

3.25. Decommissioning (2050) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Seahawk BESS - Construction HRA
Construction Start Date	6/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	37.2
Location	90 Minto Rd, Watsonville, CA 95076, USA
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3126
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	14.0	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.19	2.72	22.1	24.5	0.06	0.97	5.12	6.05	0.89	2.63	3.49	—	5,825	5,825	0.24	0.05	0.15	5,846
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.24	1.89	12.5	17.6	0.06	0.44	0.03	0.47	0.41	0.01	0.41	—	5,825	5,825	0.24	0.05	< 0.005	5,846
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.02	0.87	6.40	8.23	0.02	0.24	0.42	0.66	0.22	0.20	0.42	—	2,458	2,458	0.10	0.02	0.03	2,466
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.16	1.17	1.50	< 0.005	0.04	0.08	0.12	0.04	0.04	0.08	—	407	407	0.02	< 0.005	0.01	408

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.19	2.72	22.1	24.5	0.04	0.97	5.12	6.05	0.89	2.63	3.49	—	3,855	3,855	0.18	0.04	0.15	3,872

2026	2.09	1.77	13.8	15.9	0.03	0.50	0.02	0.52	0.46	0.01	0.47	—	3,287	3,287	0.15	0.04	0.14	3,302
2027	0.64	0.63	0.13	1.63	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	57.1	57.1	0.03	0.01	0.11	62.5
2050	2.24	1.88	11.1	17.5	0.06	0.29	0.01	0.30	0.27	< 0.005	0.27	—	5,825	5,825	0.24	0.05	< 0.005	5,846
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.96	1.67	12.5	16.4	0.03	0.44	0.02	0.47	0.41	0.01	0.41	—	2,787	2,787	0.15	0.04	< 0.005	2,802
2026	1.86	1.59	11.9	16.2	0.03	0.39	0.03	0.41	0.36	0.01	0.36	—	2,786	2,786	0.15	0.04	< 0.005	2,802
2027	0.65	0.62	0.16	2.39	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	57.3	57.3	0.04	0.01	< 0.005	62.8
2050	2.24	1.89	11.1	17.6	0.06	0.29	0.01	0.30	0.27	< 0.005	0.27	—	5,825	5,825	0.24	0.05	< 0.005	5,846
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.91	0.77	6.01	7.28	0.01	0.24	0.42	0.66	0.22	0.20	0.42	—	1,229	1,229	0.06	0.02	0.02	1,235
2026	1.02	0.87	6.40	8.23	0.01	0.22	0.01	0.23	0.20	< 0.005	0.21	—	1,546	1,546	0.08	0.02	0.03	1,555
2027	0.19	0.18	0.05	0.61	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	16.9	16.9	0.01	< 0.005	0.01	18.5
2050	0.94	0.80	4.70	7.42	0.02	0.12	< 0.005	0.13	0.11	< 0.005	0.11	—	2,458	2,458	0.10	0.02	< 0.005	2,466
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.17	0.14	1.10	1.33	< 0.005	0.04	0.08	0.12	0.04	0.04	0.08	—	203	203	0.01	< 0.005	< 0.005	204
2026	0.19	0.16	1.17	1.50	< 0.005	0.04	< 0.005	0.04	0.04	< 0.005	0.04	—	256	256	0.01	< 0.005	0.01	257
2027	0.03	0.03	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.79	2.79	< 0.005	< 0.005	< 0.005	3.06
2050	0.17	0.15	0.86	1.35	< 0.005	0.02	< 0.005	0.02	0.02	< 0.005	0.02	—	407	407	0.02	< 0.005	< 0.005	408

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.77	2.33	22.0	20.9	0.03	0.93	—	0.93	0.86	—	0.86	—	3,620	3,620	0.15	0.03	—	3,632
Dust From Material Movement	—	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.33	1.26	< 0.005	0.06	—	0.06	0.05	—	0.05	—	218	218	0.01	< 0.005	—	219
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	36.1	36.1	< 0.005	< 0.005	—	36.2
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.63
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.97
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Hauling	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	0.00

3.3. Substation Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.39	1.16	11.0	10.4	0.02	0.47	—	0.47	0.43	—	0.43	—	1,810	1,810	0.07	0.01	—	1,816
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.33	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.5	54.5	< 0.005	< 0.005	—	54.7
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.03	9.03	< 0.005	< 0.005	—	9.06
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.63
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Hauling	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	0.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	10.1	13.1	0.02	0.51	—	0.51	0.47	—	0.47	—	2,001	2,001	0.08	0.02	—	2,008

Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.58	0.75	< 0.005	0.03	—	0.03	0.03	—	0.03	—	115	115	< 0.005	< 0.005	—	116
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.14	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	19.1	19.1	< 0.005	< 0.005	—	19.1
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2

Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.63
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.93
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Hauling	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	0.00

3.7. Substation Site Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.61	5.05	6.56	0.01	0.25	—	0.25	0.23	—	0.23	—	1,001	1,001	0.04	0.01	—	1,004
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.2	30.2	< 0.005	< 0.005	—	30.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.99	4.99	< 0.005	< 0.005	—	5.01
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.63
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.23
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Hauling	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	0.00

3.9. Battery/Container Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.73	6.68	7.59	0.02	0.27	—	0.27	0.25	—	0.25	—	1,611	1,611	0.07	0.01	—	1,617
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.73	6.68	7.59	0.02	0.27	—	0.27	0.25	—	0.25	—	1,611	1,611	0.07	0.01	—	1,617
Onsite truck	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.01	2.29	< 0.005	0.08	—	0.08	0.07	—	0.07	—	486	486	0.02	< 0.005	—	487
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.37	0.42	< 0.005	0.01	—	0.01	0.01	—	0.01	—	80.4	80.4	< 0.005	< 0.005	—	80.7
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	0.02	0.01	0.24	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.3	36.3	0.01	0.01	0.04	38.1
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	< 0.005	5.31
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.04	0.67	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	0.01	< 0.005	< 0.005	16.3
Vendor	0.02	0.01	0.24	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.2	36.2	0.01	0.01	< 0.005	38.1
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.02	5.02	< 0.005	< 0.005	< 0.005	5.30
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.43	4.43	< 0.005	< 0.005	< 0.005	4.86
Vendor	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.5
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.80
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.90
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26

3.11. Battery/Container Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	6.30	7.53	0.02	0.24	—	0.24	0.22	—	0.22	—	1,611	1,611	0.07	0.01	—	1,616
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	6.30	7.53	0.02	0.24	—	0.24	0.22	—	0.22	—	1,611	1,611	0.07	0.01	—	1,616
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.12	4.92	0.01	0.16	—	0.16	0.14	—	0.14	—	1,053	1,053	0.04	0.01	—	1,057
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.75	0.90	< 0.005	0.03	—	0.03	0.03	—	0.03	—	174	174	0.01	< 0.005	—	175
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.04	0.43	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.5	14.5	0.01	< 0.005	0.03	15.9
Vendor	0.02	0.01	0.23	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	0.04	37.6
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.04	0.63	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.6	14.6	0.01	< 0.005	< 0.005	16.0
Vendor	0.01	0.01	0.24	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.8	35.8	0.01	0.01	< 0.005	37.6
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.23
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.03	0.35	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	9.44	9.44	0.01	< 0.005	0.01	10.3
Vendor	0.01	0.01	0.15	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.4	23.4	< 0.005	< 0.005	0.01	24.6
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.24	3.24	< 0.005	< 0.005	< 0.005	3.42
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.56	1.56	< 0.005	< 0.005	< 0.005	1.71
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.87	3.87	< 0.005	< 0.005	< 0.005	4.07
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.57

3.13. Substation Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	5.20	7.16	0.01	0.18	—	0.18	0.16	—	0.16	—	1,068	1,068	0.04	0.01	—	1,072
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	5.20	7.16	0.01	0.18	—	0.18	0.16	—	0.16	—	1,068	1,068	0.04	0.01	—	1,072
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.41	1.95	< 0.005	0.05	—	0.05	0.04	—	0.04	—	291	291	0.01	< 0.005	—	292
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.1	48.1	< 0.005	< 0.005	—	48.3
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.04	0.46	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.8	14.8	0.01	< 0.005	0.03	16.2
Vendor	0.02	0.01	0.24	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.3	36.3	0.01	0.01	0.04	38.1
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.04	0.67	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	0.01	< 0.005	< 0.005	16.3
Vendor	0.02	0.01	0.24	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.2	36.2	0.01	0.01	< 0.005	38.1
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.01	0.16	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.00	4.00	< 0.005	< 0.005	< 0.005	4.38
Vendor	< 0.005	< 0.005	0.06	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.86	9.86	< 0.005	< 0.005	0.01	10.4
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.73
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.63	1.63	< 0.005	< 0.005	< 0.005	1.72
Hauling	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	0.00

3.15. Substation Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.65	0.54	4.99	7.13	0.01	0.15	—	0.15	0.14	—	0.14	—	1,070	1,070	0.04	0.01	—	1,074
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	4.99	7.13	0.01	0.15	—	0.15	0.14	—	0.14	—	1,070	1,070	0.04	0.01	—	1,074
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	1.46	< 0.005	0.03	—	0.03	0.03	—	0.03	—	220	220	0.01	< 0.005	—	221
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.19	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	36.4	36.4	< 0.005	< 0.005	—	36.5
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.04	0.43	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.5	14.5	0.01	< 0.005	0.03	15.9
Vendor	0.02	0.01	0.23	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	0.04	37.6
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.04	0.63	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.6	14.6	0.01	< 0.005	< 0.005	16.0
Vendor	0.01	0.01	0.24	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.8	35.8	0.01	0.01	< 0.005	37.6
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.97	2.97	< 0.005	< 0.005	< 0.005	3.25
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.35	7.35	< 0.005	< 0.005	< 0.005	7.72
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	< 0.005	1.28
Hauling	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	0.00

3.17. Gen-Tie Foundation and Tower Erection (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.85	7.19	7.69	0.02	0.26	—	0.26	0.24	—	0.24	—	1,610	1,610	0.07	0.01	—	1,615
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.87	0.93	< 0.005	0.03	—	0.03	0.03	—	0.03	—	194	194	0.01	< 0.005	—	195
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	0.01	3.97
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.15	7.15	< 0.005	< 0.005	0.01	7.52
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.91
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Hauling	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	0.00

3.19. Gen-Tie Stringing and Pulling (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.76	2.68	< 0.005	0.04	—	0.04	0.04	—	0.04	—	438	438	0.02	< 0.005	—	439
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.6	27.6	< 0.005	< 0.005	—	27.7
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.57	4.57	< 0.005	< 0.005	—	4.58
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.01	0.09	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	0.01	3.18
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.15	7.15	< 0.005	< 0.005	0.01	7.52
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.20
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.08
Hauling	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	0.00

3.21. Commissioning (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.17	2.53	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	58.4	58.4	0.05	0.01	< 0.005	64.0
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.01	0.13	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.50	3.50	< 0.005	< 0.005	< 0.005	3.84
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.64
Vendor	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	0.00
Hauling	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	0.00

3.23. Commissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.64	0.63	0.13	1.63	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	57.1	57.1	0.03	0.01	0.11	62.5
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.62	0.16	2.39	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	57.3	57.3	0.04	0.01	< 0.005	62.8
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.05	0.61	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	16.9	16.9	0.01	< 0.005	0.01	18.5
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.79	2.79	< 0.005	< 0.005	< 0.005	3.06
Vendor	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	0.00
Hauling	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	0.00

3.25. Decommissioning (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	1.82	11.1	17.4	0.06	0.29	—	0.29	0.27	—	0.27	—	5,805	5,805	0.24	0.05	—	5,825
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	1.82	11.1	17.4	0.06	0.29	—	0.29	0.27	—	0.27	—	5,805	5,805	0.24	0.05	—	5,825
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	4.67	7.33	0.02	0.12	—	0.12	0.11	—	0.11	—	2,449	2,449	0.10	0.02	—	2,458
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.85	1.34	< 0.005	0.02	—	0.02	0.02	—	0.02	—	405	405	0.02	< 0.005	—	407
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.01	0.14	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	< 0.005	12.0
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.04	5.04	< 0.005	< 0.005	< 0.005	5.28
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.75	3.75	< 0.005	< 0.005	< 0.005	3.94
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.02	0.20	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	< 0.005	11.9
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	< 0.005	5.38
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.82	3.82	< 0.005	< 0.005	< 0.005	4.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.61	4.61	< 0.005	< 0.005	< 0.005	4.98
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.25
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.59	1.59	< 0.005	< 0.005	< 0.005	1.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.83
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.28

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2025	7/1/2025	5.00	22.0	—
Substation Site Preparation	Site Preparation	7/2/2025	7/16/2025	5.00	11.0	—
Grading	Grading	7/2/2025	7/30/2025	5.00	21.0	—
Substation Site Grading	Grading	7/31/2025	8/14/2025	5.00	11.0	—
Battery/Container Installation	Building Construction	7/31/2025	11/30/2026	5.00	348	—
Substation Installation	Building Construction	8/15/2025	4/15/2026	5.00	174	—
Gen-Tie Foundation and Tower Erection	Building Construction	4/16/2026	6/16/2026	5.00	44.0	—
Gen-Tie Stringing and Pulling	Building Construction	6/17/2026	7/17/2026	5.00	23.0	—
Commissioning	Building Construction	12/1/2026	6/1/2027	5.00	131	—
Decommissioning	Building Construction	5/31/2050	12/31/2050	5.00	154	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Site Preparation	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Substation Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Substation Site Preparation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Substation Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Graders	Diesel	Average	2.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Substation Site Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Substation Site Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Substation Site Grading	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Battery/Container Installation	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Battery/Container Installation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Battery/Container Installation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Battery/Container Installation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Substation Installation	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Substation Installation	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Substation Installation	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Substation Installation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20

Substation Installation	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Gen-Tie Foundation and Tower Erection	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Gen-Tie Foundation and Tower Erection	Cranes	Diesel	Average	1.00	8.00	367	0.29
Gen-Tie Foundation and Tower Erection	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Gen-Tie Foundation and Tower Erection	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Gen-Tie Foundation and Tower Erection	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Gen-Tie Stringing and Pulling	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Gen-Tie Stringing and Pulling	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Decommissioning	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Decommissioning	Cranes	Diesel	Average	2.00	8.00	367	0.29
Decommissioning	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Decommissioning	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	40.0	0.25	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	0.25	HHDT,MHDT
Site Preparation	Hauling	0.00	0.25	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	40.0	0.25	LDA,LDT1,LDT2
Grading	Vendor	4.00	0.25	HHDT,MHDT
Grading	Hauling	0.00	0.25	HHDT
Grading	Onsite truck	—	—	HHDT
Battery/Container Installation	—	—	—	—
Battery/Container Installation	Worker	40.0	0.25	LDA,LDT1,LDT2
Battery/Container Installation	Vendor	20.0	0.25	HHDT,MHDT
Battery/Container Installation	Hauling	2.00	0.25	HHDT
Battery/Container Installation	Onsite truck	—	—	HHDT
Substation Site Preparation	—	—	—	—
Substation Site Preparation	Worker	40.0	0.25	LDA,LDT1,LDT2
Substation Site Preparation	Vendor	4.00	0.25	HHDT,MHDT
Substation Site Preparation	Hauling	0.00	0.25	HHDT
Substation Site Preparation	Onsite truck	—	—	HHDT
Substation Site Grading	—	—	—	—
Substation Site Grading	Worker	40.0	0.25	LDA,LDT1,LDT2
Substation Site Grading	Vendor	4.00	0.25	HHDT,MHDT
Substation Site Grading	Hauling	0.00	0.25	HHDT
Substation Site Grading	Onsite truck	—	—	HHDT
Substation Installation	—	—	—	—
Substation Installation	Worker	40.0	0.25	LDA,LDT1,LDT2
Substation Installation	Vendor	20.0	0.25	HHDT,MHDT
Substation Installation	Hauling	0.00	0.25	HHDT
Substation Installation	Onsite truck	—	—	HHDT
Gen-Tie Foundation and Tower Erection	—	—	—	—
Gen-Tie Foundation and Tower Erection	Worker	10.0	0.25	LDA,LDT1,LDT2

Gen-Tie Foundation and Tower Erection	Vendor	4.00	0.25	HHDT,MHDT
Gen-Tie Foundation and Tower Erection	Hauling	0.00	0.25	HHDT
Gen-Tie Foundation and Tower Erection	Onsite truck	—	—	HHDT
Gen-Tie Stringing and Pulling	—	—	—	—
Gen-Tie Stringing and Pulling	Worker	8.00	0.25	LDA,LDT1,LDT2
Gen-Tie Stringing and Pulling	Vendor	4.00	0.25	HHDT,MHDT
Gen-Tie Stringing and Pulling	Hauling	0.00	0.25	HHDT
Gen-Tie Stringing and Pulling	Onsite truck	—	—	HHDT
Commissioning	—	—	—	—
Commissioning	Worker	160	0.25	LDA,LDT1,LDT2
Commissioning	Vendor	0.00	0.25	HHDT,MHDT
Commissioning	Hauling	0.00	0.25	HHDT
Commissioning	Onsite truck	—	—	HHDT
Decommissioning	—	—	—	—
Decommissioning	Worker	40.0	0.25	LDA,LDT1,LDT2
Decommissioning	Vendor	4.00	0.25	HHDT,MHDT
Decommissioning	Hauling	2.00	0.25	HHDT
Decommissioning	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	22.0	0.00	—
Substation Site Preparation	—	—	5.50	0.00	—
Grading	—	—	21.0	0.00	—
Substation Site Grading	—	—	5.50	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2050	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.75	annual days of extreme heat
Extreme Precipitation	8.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	15.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	17.6
AQ-PM	3.36
AQ-DPM	22.8
Drinking Water	60.1
Lead Risk Housing	58.8
Pesticides	98.4
Toxic Releases	7.49
Traffic	18.1
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	32.4
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	93.4
Solid Waste	63.7

Sensitive Population	—
Asthma	54.5
Cardio-vascular	32.5
Low Birth Weights	16.8
Socioeconomic Factor Indicators	—
Education	87.0
Housing	83.3
Linguistic	81.9
Poverty	70.4
Unemployment	52.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	48.60772488
Employed	61.79905043
Median HI	48.13293982
Education	—
Bachelor's or higher	21.73745669
High school enrollment	100
Preschool enrollment	4.670858463
Transportation	—
Auto Access	50.77633774
Active commuting	54.69010651
Social	—
2-parent households	45.07891698
Voting	44.23200308

Neighborhood	—
Alcohol availability	81.05992557
Park access	26.06185038
Retail density	16.04003593
Supermarket access	19.90247658
Tree canopy	65.55883485
Housing	—
Homeownership	64.54510458
Housing habitability	37.1872193
Low-inc homeowner severe housing cost burden	37.20005133
Low-inc renter severe housing cost burden	24.20120621
Uncrowded housing	15.89888361
Health Outcomes	—
Insured adults	24.93263185
Arthritis	0.0
Asthma ER Admissions	32.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	23.6
Cognitively Disabled	36.6
Physically Disabled	52.4
Heart Attack ER Admissions	63.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	84.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	57.3
English Speaking	47.7
Foreign-born	77.0
Outdoor Workers	7.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	81.3
Traffic Density	30.0
Traffic Access	0.0
Other Indices	—
Hardship	73.4
Other Decision Support	—
2016 Voting	45.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	53.0

Healthy Places Index Score for Project Location (b)	41.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Seahawk BESS: assumed building to account for routine maintenance workers. Total acreage of 14 acres disturbed with no landscaping anticipated per applicant.
Construction: Construction Phases	Adjusted default construction schedule based on information provided by the applicant.
Construction: Off-Road Equipment	Default equipment revised based on information provided by the applicant.
Construction: Off-Road Equipment EF	—
Construction: Trips and VMT	Default on-road vehicle assumptions revised based on applicant input. 0.25 miles assumed per trip to account for localized travel only.
Construction: On-Road Fugitive Dust	Unpaved portion of Minto Road modeled separately for construction.
Operations: Road Dust	% paved based on assumption of 20-mile trip length on average with 0.4 miles unpaved on Minto Road
Operations: Consumer Products	Facility will be unmanned. No consumer products assumed.
Operations: Architectural Coatings	No architectural coatings anticipated.
Operations: Energy Use	Conservatively assumed 10% of capacity would be needed for any lighting and container cooling.

Operations: Water and Waste Water	Facility would be unmanned. No water/wastewater assumed.
Operations: Solid Waste	Facility would be unmanned. No solid waste assumed.
Operations: Off-Road Equipment	1 crane and 1 forklift assumed to operate for 8 hours for 1 day every 2 or 3 years for battery swaps.
Operations: Landscape Equipment	No landscaping anticipated.
Operations: Refrigerants	Conservatively assumed 600 pounds of SF6 for the project substation equipment.

Seahawk BESS - Construction Unpaved Road Travel Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation - worker (2025) - Unmitigated

3.3. Substation Site Preparation - worker (2025) - Unmitigated

3.5. Site Preparation - trucks (2025) - Unmitigated

3.7. Substation Site Preparation - trucks (2025) - Unmitigated

3.9. Grading - worker (2025) - Unmitigated

3.11. Substation Site Grading - worker (2025) - Unmitigated

3.13. Grading - trucks (2025) - Unmitigated

3.15. Substation Site Grading - trucks (2025) - Unmitigated

3.17. Battery/Container Installation - worker (2025) - Unmitigated

3.19. Battery/Container Installation - worker (2026) - Unmitigated

3.21. Substation Installation - worker (2025) - Unmitigated

3.23. Substation Installation - worker (2026) - Unmitigated

3.25. Gen-Tie Foundation and Tower Erection - worker (2026) - Unmitigated

3.27. Gen-Tie Stringing and Pulling - worker (2026) - Unmitigated

3.29. Commissioning - worker (2026) - Unmitigated

3.31. Commissioning - worker (2027) - Unmitigated

3.33. Decommissioning - worker (2050) - Unmitigated

3.35. Battery/Container Installation - trucks (2025) - Unmitigated

3.37. Battery/Container Installation - trucks (2026) - Unmitigated

3.39. Substation Installation - trucks (2025) - Unmitigated

3.41. Substation Installation - trucks (2026) - Unmitigated

3.43. Gen-Tie Foundation and Tower Erection - trucks (2026) - Unmitigated

3.45. Gen-Tie Stringing and Pulling - trucks (2026) - Unmitigated

3.47. Commissioning - trucks (2026) - Unmitigated

3.49. Commissioning - trucks (2027) - Unmitigated

3.51. Decommissioning - trucks (2050) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Seahawk BESS - Construction Unpaved Road Travel
Construction Start Date	6/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	37.2
Location	90 Minto Rd, Watsonville, CA 95076, USA
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3126
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	1.00	1000sqft	14.0	1,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	0.41	0.72	1.32	< 0.005	< 0.005	52.8	52.8	< 0.005	5.27	5.27	—	155	155	0.03	0.03	0.26	163
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	0.43	0.75	1.84	< 0.005	< 0.005	52.8	52.8	< 0.005	5.27	5.27	—	154	154	0.04	0.03	0.01	163
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.13	0.35	0.60	< 0.005	< 0.005	19.2	19.2	< 0.005	1.92	1.92	—	76.0	76.0	0.02	0.01	0.05	80.2
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.02	0.06	0.11	< 0.005	< 0.005	3.51	3.51	< 0.005	0.35	0.35	—	12.6	12.6	< 0.005	< 0.005	0.01	13.3

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.27	0.24	0.72	1.00	< 0.005	< 0.005	40.2	40.2	< 0.005	4.02	4.02	—	155	155	0.03	0.03	0.26	163

2026	0.26	0.23	0.70	0.96	< 0.005	< 0.005	40.2	40.2	< 0.005	4.02	4.02	—	153	153	0.03	0.02	0.24	161
2027	0.43	0.41	0.37	1.32	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	112	112	0.03	0.02	0.19	119
2050	0.06	0.06	0.12	0.26	< 0.005	< 0.005	15.2	15.2	< 0.005	1.51	1.51	—	34.9	34.9	0.01	0.01	< 0.005	36.6
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.27	0.24	0.75	1.27	< 0.005	< 0.005	40.2	40.2	< 0.005	4.02	4.02	—	154	154	0.03	0.03	0.01	163
2026	0.46	0.43	0.73	1.84	< 0.005	< 0.005	52.8	52.8	< 0.005	5.27	5.27	—	152	152	0.04	0.02	0.01	160
2027	0.44	0.41	0.40	1.76	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	112	112	0.04	0.02	< 0.005	119
2050	0.06	0.06	0.14	0.31	< 0.005	< 0.005	15.2	15.2	< 0.005	1.51	1.51	—	35.2	35.2	0.01	0.01	< 0.005	37.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.10	0.09	0.24	0.41	< 0.005	< 0.005	12.7	12.7	< 0.005	1.27	1.27	—	50.9	50.9	0.01	0.01	0.04	53.7
2026	0.14	0.13	0.35	0.60	< 0.005	< 0.005	19.2	19.2	< 0.005	1.92	1.92	—	76.0	76.0	0.02	0.01	0.05	80.2
2027	0.13	0.12	0.12	0.46	0.00	0.00	14.1	14.1	0.00	1.41	1.41	—	33.1	33.1	0.01	0.01	0.02	35.1
2050	0.03	0.02	0.05	0.12	< 0.005	< 0.005	5.75	5.75	< 0.005	0.57	0.57	—	14.7	14.7	< 0.005	< 0.005	< 0.005	15.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.02	0.02	0.04	0.07	< 0.005	< 0.005	2.32	2.32	< 0.005	0.23	0.23	—	8.43	8.43	< 0.005	< 0.005	0.01	8.89
2026	0.03	0.02	0.06	0.11	< 0.005	< 0.005	3.51	3.51	< 0.005	0.35	0.35	—	12.6	12.6	< 0.005	< 0.005	0.01	13.3
2027	0.02	0.02	0.02	0.08	0.00	0.00	2.57	2.57	0.00	0.26	0.26	—	5.48	5.48	< 0.005	< 0.005	< 0.005	5.80
2050	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	1.05	1.05	< 0.005	0.10	0.10	—	2.43	2.43	< 0.005	< 0.005	< 0.005	2.55

3. Construction Emissions Details

3.1. Site Preparation - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.03	0.00	0.00	0.71	0.71	0.00	0.07	0.07	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.82
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.13	0.13	0.00	0.01	0.01	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.3. Substation Site Preparation - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.36	0.36	0.00	0.04	0.04	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.07	0.07	0.00	0.01	0.01	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.5. Site Preparation - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.25	9.25	< 0.005	< 0.005	0.01	9.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.56	0.56	< 0.005	< 0.005	< 0.005	0.59
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.7. Substation Site Preparation - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.25	9.25	< 0.005	< 0.005	0.01	9.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.9. Grading - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.02	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	1.63	1.63	< 0.005	< 0.005	< 0.005	1.74
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.12	0.12	0.00	0.01	0.01	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.29
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.11. Substation Site Grading - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.36	0.36	0.00	0.04	0.04	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.07	0.07	0.00	0.01	0.01	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.13. Grading - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.25	9.25	< 0.005	< 0.005	0.01	9.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.56
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.15. Substation Site Grading - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.25	9.25	< 0.005	< 0.005	0.01	9.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.17. Battery/Container Installation - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.11	0.48	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.5	28.5	0.01	0.01	< 0.005	30.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.03	0.13	0.00	0.00	3.57	3.57	0.00	0.36	0.36	—	8.56	8.56	< 0.005	< 0.005	0.01	9.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.02	0.00	0.00	0.65	0.65	0.00	0.07	0.07	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.51
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00

Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.19. Battery/Container Installation - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.11	0.11	0.10	0.34	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.4	28.4	0.01	< 0.005	0.05	30.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.11	0.11	0.10	0.46	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.2	28.2	0.01	0.01	< 0.005	30.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.07	0.07	0.07	0.27	0.00	0.00	7.74	7.74	0.00	0.77	0.77	—	18.4	18.4	0.01	< 0.005	0.01	19.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.05	0.00	0.00	1.41	1.41	0.00	0.14	0.14	—	3.04	3.04	< 0.005	< 0.005	< 0.005	3.23

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.21. Substation Installation - worker (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.12	0.11	0.10	0.36	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.7	28.7	0.01	0.01	0.06	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.11	0.48	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.5	28.5	0.01	0.01	< 0.005	30.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.03	0.12	0.00	0.00	3.22	3.22	0.00	0.32	0.32	—	7.72	7.72	< 0.005	< 0.005	0.01	8.21
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.01	0.02	0.00	0.00	0.59	0.59	0.00	0.06	0.06	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.36
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.23. Substation Installation - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.11	0.11	0.10	0.34	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.4	28.4	0.01	< 0.005	0.05	30.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.11	0.11	0.10	0.46	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	28.2	28.2	0.01	0.01	< 0.005	30.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.02	0.08	0.00	0.00	2.43	2.43	0.00	0.24	0.24	—	5.78	5.78	< 0.005	< 0.005	< 0.005	6.14
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.44	0.44	0.00	0.04	0.04	—	0.96	0.96	< 0.005	< 0.005	< 0.005	1.02
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.25. Gen-Tie Foundation and Tower Erection - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.02	0.09	0.00	0.00	3.30	3.30	0.00	0.33	0.33	—	7.11	7.11	< 0.005	< 0.005	0.01	7.52
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.36	0.36	0.00	0.04	0.04	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.90

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.07	0.07	0.00	0.01	0.01	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.27. Gen-Tie Stringing and Pulling - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.02	0.02	0.02	0.07	0.00	0.00	2.64	2.64	0.00	0.26	0.26	—	5.68	5.68	< 0.005	< 0.005	0.01	6.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.15	0.15	0.00	0.01	0.01	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.03	0.03	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.29. Commissioning - worker (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.46	0.43	0.41	1.84	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	113	113	0.04	0.02	0.01	120
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.02	0.10	0.00	0.00	2.87	2.87	0.00	0.29	0.29	—	6.82	6.82	< 0.005	< 0.005	0.01	7.25
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.52	0.52	0.00	0.05	0.05	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.20
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.31. Commissioning - worker (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.43	0.41	0.37	1.32	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	112	112	0.03	0.02	0.19	119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.44	0.41	0.40	1.76	0.00	0.00	52.8	52.8	0.00	5.27	5.27	—	112	112	0.04	0.02	< 0.005	119
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.13	0.12	0.12	0.46	0.00	0.00	14.1	14.1	0.00	1.41	1.41	—	33.1	33.1	0.01	0.01	0.02	35.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.02	0.08	0.00	0.00	2.57	2.57	0.00	0.26	0.26	—	5.48	5.48	< 0.005	< 0.005	< 0.005	5.80
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00

Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.33. Decommissioning - worker (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.06	0.06	0.08	0.22	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	25.9	25.9	< 0.005	< 0.005	< 0.005	27.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.06	0.06	0.09	0.28	0.00	0.00	13.2	13.2	0.00	1.32	1.32	—	26.0	26.0	0.01	< 0.005	< 0.005	27.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.03	0.11	0.00	0.00	5.00	5.00	0.00	0.50	0.50	—	10.9	10.9	< 0.005	< 0.005	< 0.005	11.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.02	0.00	0.00	0.91	0.91	0.00	0.09	0.09	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.89
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.35. Battery/Container Installation - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.27	0.15	< 0.005	< 0.005	7.25	7.26	< 0.005	0.72	0.72	—	50.9	50.9	0.01	0.01	0.08	53.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.28	0.16	< 0.005	< 0.005	7.25	7.26	< 0.005	0.72	0.73	—	50.8	50.8	0.01	0.01	< 0.005	53.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.08	0.05	< 0.005	< 0.005	1.96	1.96	< 0.005	0.20	0.20	—	15.3	15.3	< 0.005	< 0.005	0.01	16.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.36	0.36	< 0.005	0.04	0.04	—	2.54	2.54	< 0.005	< 0.005	< 0.005	2.67
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00

Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.37. Battery/Container Installation - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.27	0.14	< 0.005	< 0.005	7.25	7.26	< 0.005	0.72	0.72	—	50.1	50.1	0.01	0.01	0.07	52.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.27	0.16	< 0.005	< 0.005	7.25	7.26	< 0.005	0.72	0.72	—	50.2	50.2	0.01	0.01	< 0.005	52.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.18	0.10	< 0.005	< 0.005	4.26	4.26	< 0.005	0.43	0.43	—	32.8	32.8	< 0.005	0.01	0.02	34.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.78	0.78	< 0.005	0.08	0.08	—	5.43	5.43	< 0.005	< 0.005	< 0.005	5.70

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.39. Substation Installation - trucks (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.02	0.01	0.25	0.13	< 0.005	< 0.005	6.60	6.60	< 0.005	0.66	0.66	—	46.2	46.2	0.01	0.01	0.07	48.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.25	0.14	< 0.005	< 0.005	6.60	6.60	< 0.005	0.66	0.66	—	46.2	46.2	0.01	0.01	< 0.005	48.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	1.61	1.61	< 0.005	0.16	0.16	—	12.6	12.6	< 0.005	< 0.005	0.01	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.29	0.29	< 0.005	0.03	0.03	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.19
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.41. Substation Installation - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.24	0.13	< 0.005	< 0.005	6.60	6.60	< 0.005	0.66	0.66	—	45.6	45.6	0.01	0.01	0.06	47.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.25	0.14	< 0.005	< 0.005	6.60	6.60	< 0.005	0.66	0.66	—	45.6	45.6	0.01	0.01	< 0.005	47.9
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.22	1.22	< 0.005	0.12	0.12	—	9.37	9.37	< 0.005	< 0.005	0.01	9.83
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.22	0.22	< 0.005	0.02	0.02	—	1.55	1.55	< 0.005	< 0.005	< 0.005	1.63
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.43. Gen-Tie Foundation and Tower Erection - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.12	9.12	< 0.005	< 0.005	0.01	9.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.15

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.45. Gen-Tie Stringing and Pulling - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	1.32	1.32	< 0.005	0.13	0.13	—	9.12	9.12	< 0.005	< 0.005	0.01	9.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.47. Commissioning - trucks (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.49. Commissioning - trucks (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00

Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

3.51. Decommissioning - trucks (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	1.98	1.98	< 0.005	0.20	0.20	—	9.02	9.02	< 0.005	< 0.005	< 0.005	9.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.05	0.04	< 0.005	< 0.005	1.98	1.98	< 0.005	0.20	0.20	—	9.16	9.16	< 0.005	< 0.005	< 0.005	9.59
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.75	0.75	< 0.005	0.07	0.07	—	3.83	3.83	< 0.005	< 0.005	< 0.005	4.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.66
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	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	0.00
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation - worker	Site Preparation	6/1/2025	7/1/2025	5.00	22.0	—
Substation Site Preparation - worker	Site Preparation	7/2/2025	7/16/2025	5.00	11.0	—
Site Preparation - trucks	Site Preparation	6/1/2025	7/1/2025	5.00	22.0	—
Substation Site Preparation - trucks	Site Preparation	7/2/2025	7/16/2025	5.00	11.0	—
Grading - worker	Grading	7/2/2025	7/30/2025	5.00	21.0	—
Substation Site Grading - worker	Grading	7/31/2025	8/14/2025	5.00	11.0	—
Grading - trucks	Grading	7/2/2025	7/30/2025	5.00	21.0	—
Substation Site Grading - trucks	Grading	7/31/2025	8/14/2025	5.00	11.0	—
Battery/Container Installation - worker	Building Construction	7/31/2025	11/30/2026	5.00	348	—
Substation Installation - worker	Building Construction	8/15/2025	4/15/2026	5.00	174	—
Gen-Tie Foundation and Tower Erection - worker	Building Construction	4/16/2026	6/16/2026	5.00	44.0	—

Gen-Tie Stringing and Pulling - worker	Building Construction	6/17/2026	7/17/2026	5.00	23.0	—
Commissioning - worker	Building Construction	12/1/2026	6/1/2027	5.00	131	—
Decommissioning - worker	Building Construction	5/31/2050	12/31/2050	5.00	154	—
Battery/Container Installation - trucks	Building Construction	7/31/2025	11/30/2026	5.00	348	—
Substation Installation - trucks	Building Construction	8/15/2025	4/15/2026	5.00	174	—
Gen-Tie Foundation and Tower Erection - trucks	Building Construction	4/16/2026	6/16/2026	5.00	44.0	—
Gen-Tie Stringing and Pulling - trucks	Building Construction	6/17/2026	7/17/2026	5.00	23.0	—
Commissioning - trucks	Building Construction	12/1/2026	6/1/2027	5.00	131	—
Decommissioning - trucks	Building Construction	5/31/2050	12/30/2050	5.00	154	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation - worker	—	—	—	—
Site Preparation - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Site Preparation - worker	Vendor	0.00	20.0	HHDT,MHDT
Site Preparation - worker	Hauling	0.00	20.0	HHDT
Site Preparation - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix

Grading - worker	—	—	—	—
Grading - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Grading - worker	Vendor	0.00	20.0	HHDT,MHDT
Grading - worker	Hauling	0.00	20.0	HHDT
Grading - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Battery/Container Installation - worker	—	—	—	—
Battery/Container Installation - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Battery/Container Installation - worker	Vendor	0.00	20.0	HHDT,MHDT
Battery/Container Installation - worker	Hauling	0.00	86.0	HHDT
Battery/Container Installation - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Substation Site Preparation - worker	—	—	—	—
Substation Site Preparation - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Site Preparation - worker	Vendor	0.00	20.0	HHDT,MHDT
Substation Site Preparation - worker	Hauling	0.00	20.0	HHDT
Substation Site Preparation - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Substation Site Grading - worker	—	—	—	—
Substation Site Grading - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Site Grading - worker	Vendor	0.00	20.0	HHDT,MHDT
Substation Site Grading - worker	Hauling	0.00	20.0	HHDT
Substation Site Grading - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Substation Installation - worker	—	—	—	—
Substation Installation - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Installation - worker	Vendor	0.00	20.0	HHDT,MHDT
Substation Installation - worker	Hauling	0.00	20.0	HHDT
Substation Installation - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix

Gen-Tie Foundation and Tower Erection - worker	—	—	—	—
Gen-Tie Foundation and Tower Erection - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Gen-Tie Foundation and Tower Erection - worker	Vendor	0.00	20.0	HHDT,MHDT
Gen-Tie Foundation and Tower Erection - worker	Hauling	0.00	20.0	HHDT
Gen-Tie Foundation and Tower Erection - worker	Onsite truck	10.0	0.40	EMFAC Fleet Mix
Gen-Tie Stringing and Pulling - worker	—	—	—	—
Gen-Tie Stringing and Pulling - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Gen-Tie Stringing and Pulling - worker	Vendor	0.00	20.0	HHDT,MHDT
Gen-Tie Stringing and Pulling - worker	Hauling	0.00	20.0	HHDT
Gen-Tie Stringing and Pulling - worker	Onsite truck	8.00	0.40	EMFAC Fleet Mix
Commissioning - worker	—	—	—	—
Commissioning - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Commissioning - worker	Vendor	0.00	6.06	HHDT,MHDT
Commissioning - worker	Hauling	0.00	20.0	HHDT
Commissioning - worker	Onsite truck	160	0.40	EMFAC Fleet Mix
Decommissioning - worker	—	—	—	—
Decommissioning - worker	Worker	0.00	9.71	LDA,LDT1,LDT2
Decommissioning - worker	Vendor	0.00	20.0	HHDT,MHDT
Decommissioning - worker	Hauling	0.00	20.0	HHDT
Decommissioning - worker	Onsite truck	40.0	0.40	EMFAC Fleet Mix
Site Preparation - trucks	—	—	—	—
Site Preparation - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2

Site Preparation - trucks	Vendor	—	6.06	HHDT,MHDT
Site Preparation - trucks	Hauling	0.00	20.0	HHDT
Site Preparation - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Substation Site Preparation - trucks	—	—	—	—
Substation Site Preparation - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Site Preparation - trucks	Vendor	—	6.06	HHDT,MHDT
Substation Site Preparation - trucks	Hauling	0.00	20.0	HHDT
Substation Site Preparation - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Grading - trucks	—	—	—	—
Grading - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Grading - trucks	Vendor	—	6.06	HHDT,MHDT
Grading - trucks	Hauling	0.00	20.0	HHDT
Grading - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Substation Site Grading - trucks	—	—	—	—
Substation Site Grading - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Site Grading - trucks	Vendor	—	6.06	HHDT,MHDT
Substation Site Grading - trucks	Hauling	0.00	20.0	HHDT
Substation Site Grading - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Battery/Container Installation - trucks	—	—	—	—
Battery/Container Installation - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Battery/Container Installation - trucks	Vendor	0.00	6.06	HHDT,MHDT
Battery/Container Installation - trucks	Hauling	0.00	20.0	HHDT
Battery/Container Installation - trucks	Onsite truck	22.0	0.40	HHDT,MHDT
Substation Installation - trucks	—	—	—	—
Substation Installation - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Substation Installation - trucks	Vendor	0.00	6.06	HHDT,MHDT
Substation Installation - trucks	Hauling	0.00	20.0	HHDT
Substation Installation - trucks	Onsite truck	20.0	0.40	HHDT,MHDT

Gen-Tie Foundation and Tower Erection - trucks	—	—	—	—
Gen-Tie Foundation and Tower Erection - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Gen-Tie Foundation and Tower Erection - trucks	Vendor	0.00	6.06	HHDT,MHDT
Gen-Tie Foundation and Tower Erection - trucks	Hauling	0.00	20.0	HHDT
Gen-Tie Foundation and Tower Erection - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Gen-Tie Stringing and Pulling - trucks	—	—	—	—
Gen-Tie Stringing and Pulling - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Gen-Tie Stringing and Pulling - trucks	Vendor	0.00	6.06	HHDT,MHDT
Gen-Tie Stringing and Pulling - trucks	Hauling	0.00	20.0	HHDT
Gen-Tie Stringing and Pulling - trucks	Onsite truck	4.00	0.40	HHDT,MHDT
Commissioning - trucks	—	—	—	—
Commissioning - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Commissioning - trucks	Vendor	0.00	6.06	HHDT,MHDT
Commissioning - trucks	Hauling	0.00	20.0	HHDT
Commissioning - trucks	Onsite truck	0.00	—	HHDT
Decommissioning - trucks	—	—	—	—
Decommissioning - trucks	Worker	0.00	9.71	LDA,LDT1,LDT2
Decommissioning - trucks	Vendor	0.00	6.06	HHDT,MHDT
Decommissioning - trucks	Hauling	0.00	20.0	HHDT
Decommissioning - trucks	Onsite truck	6.00	0.40	HHDT,MHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation - worker	—	—	0.00	0.00	—
Substation Site Preparation - worker	—	—	0.00	0.00	—
Site Preparation - trucks	—	—	0.00	0.00	—
Substation Site Preparation - trucks	—	—	0.00	0.00	—
Grading - worker	—	—	0.00	0.00	—
Substation Site Grading - worker	—	—	0.00	0.00	—
Grading - trucks	—	—	0.00	0.00	—
Substation Site Grading - trucks	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2050	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.75	annual days of extreme heat
Extreme Precipitation	8.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	15.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	17.6

AQ-PM	3.36
AQ-DPM	22.8
Drinking Water	60.1
Lead Risk Housing	58.8
Pesticides	98.4
Toxic Releases	7.49
Traffic	18.1
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	32.4
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	93.4
Solid Waste	63.7
Sensitive Population	—
Asthma	54.5
Cardio-vascular	32.5
Low Birth Weights	16.8
Socioeconomic Factor Indicators	—
Education	87.0
Housing	83.3
Linguistic	81.9
Poverty	70.4
Unemployment	52.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	48.60772488
Employed	61.79905043
Median HI	48.13293982
Education	—
Bachelor's or higher	21.73745669
High school enrollment	100
Preschool enrollment	4.670858463
Transportation	—
Auto Access	50.77633774
Active commuting	54.69010651
Social	—
2-parent households	45.07891698
Voting	44.23200308
Neighborhood	—
Alcohol availability	81.05992557
Park access	26.06185038
Retail density	16.04003593
Supermarket access	19.90247658
Tree canopy	65.55883485
Housing	—
Homeownership	64.54510458
Housing habitability	37.1872193
Low-inc homeowner severe housing cost burden	37.20005133
Low-inc renter severe housing cost burden	24.20120621
Uncrowded housing	15.89888361
Health Outcomes	—
Insured adults	24.93263185
Arthritis	0.0

Asthma ER Admissions	32.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	23.6
Cognitively Disabled	36.6
Physically Disabled	52.4
Heart Attack ER Admissions	63.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	84.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	57.3
English Speaking	47.7
Foreign-born	77.0

Outdoor Workers	7.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	81.3
Traffic Density	30.0
Traffic Access	0.0
Other Indices	—
Hardship	73.4
Other Decision Support	—
2016 Voting	45.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	53.0
Healthy Places Index Score for Project Location (b)	41.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Seahawk BESS: assumed building to account for routine maintenance workers. Total acreage of 14 acres disturbed with no landscaping anticipated per applicant.
Construction: Construction Phases	Adjusted default construction schedule based on information provided by the applicant. Separated phases by worker and trucks in order to model on-road fugitive dust.
Construction: Off-Road Equipment	Modeling on-road emissions on unpaved portion of Minto Rd only.
Construction: Off-Road Equipment EF	No equipment modeled.
Construction: Trips and VMT	Unpaved road travel estimated for workers and trucks on approximately 0.4 miles of Minto Road.
Construction: On-Road Fugitive Dust	Modeled unpaved roads only.
Operations: Road Dust	% paved based on assumption of 20-mile trip length on average with 0.4 miles unpaved on Minto Road
Operations: Consumer Products	Facility will be unmanned. No consumer products assumed.
Operations: Architectural Coatings	No architectural coatings anticipated.
Operations: Energy Use	Conservatively assumed 10% of capacity would be needed for any lighting and container cooling.
Operations: Water and Waste Water	Facility would be unmanned. No water/wastewater assumed.
Operations: Solid Waste	Facility would be unmanned. No solid waste assumed.
Operations: Off-Road Equipment	1 crane and 1 forklift assumed to operate for 8 hours for 1 day every 2 or 3 years for battery swaps.

Seahawk Energy Storage Facility Project

Generator Sets

							Emission Factors[2]									Emission Rates									
		Rating		Operating Parameters/unit[1]			ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
Equipment Description	Quantity	kW	HP	Load Factor	hr/day	hr/yr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	MT/yr	MT/yr	MT/yr	MT/yr
Diesel Generators - 2026	2	3,600	4,828	0.74	2	46	0.14	0.50	2.6	0.0049	0.022	0.022	521.64	0.020944	0.004087	4.41	15.75	81.91	0.15	0.69	0.69	171.46	0.01	0.00	172.03
Diesel Generators - 2027	2	3,600	4,828	0.74	2	216	0.14	0.50	2.6	0.0049	0.022	0.022	521.64	0.020944	0.004087	4.41	15.75	81.91	0.15	0.69	0.69	805.11	0.03	0.01	807.79

Generator sets to be used during commissioning.

Source:

1. Operational information based on applicant input. Current CARB and EPA engine standards for Tier 4 equipment.

Conversions:

1 lb =	453.6	g
1 MT =	2204.623	lb
1 MT =	1000000	g

Seahawk BESS Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

3.3. Substation Site Preparation (2025) - Unmitigated

3.5. Grading (2025) - Unmitigated

3.7. Substation Site Grading (2025) - Unmitigated

3.9. Battery/Container Installation (2025) - Unmitigated

3.11. Battery/Container Installation (2026) - Unmitigated

3.13. Substation Installation (2025) - Unmitigated

3.15. Substation Installation (2026) - Unmitigated

3.17. Gen-Tie Foundation and Tower Erection (2026) - Unmitigated

3.19. Gen-Tie Stringing and Pulling (2026) - Unmitigated

3.21. Commissioning (2026) - Unmitigated

3.23. Commissioning (2027) - Unmitigated

3.25. Decommissioning (2050) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.1. Construction Phases

8.4.2. Off-Road Equipment

8.4.3. Off-Road Equipment EF

8.4.6. Trips and VMT

8.4.7. On-Road Fugitive Dust

8.5. Operations

8.5.1. Mobile Sources

8.5.1.4. Road Dust

8.5.2. Area Sources

8.5.2.2. Consumer Products

8.5.2.3. Architectural Coatings

8.5.2.4. Landscape Equipment

8.5.3. Energy Usage

8.5.4. Water and Waste Water

8.5.5. Solid Waste

8.5.7. Off-Road Equipment

8.5.7.1. Off-Road Equipment

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Seahawk BESS
Construction Start Date	6/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	37.2000
Location	90 Minto Rd, Watsonville, CA 95076, USA
County	Santa Cruz
City	Unincorporated
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3126
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.37

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	1.000000	1000sqft	14.0000	1,000.000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.18630	5.13794	22.5462	88.8878	0.15438	0.97959	5.45411	6.39138	0.90179	2.70950	3.57207	—	17,576.6	17,576.6	0.72587	0.56819	10.6452	17,651.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.21452	5.15911	17.2631	89.2464	0.15438	0.69313	1.39697	1.88637	0.69313	0.35770	0.95043	—	17,547.2	17,547.2	0.73998	0.56819	0.27637	17,618.6
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.53850	1.52307	9.55502	26.3054	0.04592	0.28645	0.86915	1.11840	0.26628	0.31661	0.54591	—	5,213.88	5,213.88	0.22981	0.28252	2.15840	5,235.60
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28078	0.27796	1.74379	4.80074	0.00838	0.05228	0.15862	0.20411	0.04860	0.05778	0.09963	—	863.217	863.217	0.03805	0.04678	0.35735	866.813

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.31520	2.78717	22.5462	27.8028	0.05132	0.97959	5.45411	6.39138	0.90179	2.70950	3.57207	—	6,668.16	6,668.16	0.37537	0.56819	10.6452	6,857.51

2026	2.33217	1.84526	16.7673	20.1269	0.05134	0.53658	1.39697	1.83035	0.49246	0.35770	0.75635	—	6,604.70	6,604.70	0.35511	0.55057	9.93441	6,787.58
2027	5.18630	5.13794	16.2532	88.8878	0.15438	0.69313	1.09768	1.79081	0.69313	0.25729	0.95043	—	17,576.6	17,576.6	0.72587	0.17712	4.42770	17,651.9
2050	2.25278	1.88748	11.2993	18.1203	0.05811	0.29628	0.37772	0.67400	0.27197	0.09302	0.36499	—	6,255.74	6,255.74	0.24261	0.08334	0.08066	6,286.72
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.34227	1.80220	17.2631	20.5223	0.05132	0.48940	1.39697	1.88637	0.45027	0.35770	0.80796	—	6,642.93	6,642.93	0.37978	0.56819	0.27637	6,822.02
2026	5.21452	5.15911	16.4255	89.2464	0.15438	0.69313	1.39697	1.83127	0.69313	0.35770	0.95043	—	17,547.2	17,547.2	0.73998	0.55057	0.25753	17,618.6
2027	5.18983	5.13441	16.3842	88.8111	0.15438	0.69313	1.09768	1.79081	0.69313	0.25729	0.95043	—	17,528.1	17,528.1	0.73645	0.17712	0.11461	17,599.4
2050	2.24651	1.88881	11.3136	18.0987	0.05811	0.29628	0.37772	0.67400	0.27197	0.09302	0.36499	—	6,246.21	6,246.21	0.24349	0.08334	0.00209	6,277.13
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.02903	0.81616	7.45703	8.71247	0.01907	0.24925	0.86915	1.11840	0.22930	0.31661	0.54591	—	2,439.22	2,439.22	0.13325	0.17746	1.47602	2,496.91
2026	1.46336	1.19839	9.55502	15.3036	0.03684	0.28645	0.71131	0.99775	0.26628	0.18133	0.44761	—	4,447.60	4,447.60	0.22981	0.28252	2.15840	4,539.69
2027	1.53850	1.52307	4.85005	26.3054	0.04592	0.20618	0.31871	0.52489	0.20618	0.07458	0.28076	—	5,213.88	5,213.88	0.21801	0.05268	0.56819	5,235.60
2050	0.95079	0.79631	4.77103	7.62066	0.02452	0.12500	0.15575	0.28075	0.11475	0.03834	0.15309	—	2,635.39	2,635.39	0.10273	0.03516	0.01470	2,648.45
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.18780	0.14895	1.36091	1.59003	0.00348	0.04549	0.15862	0.20411	0.04185	0.05778	0.09963	—	403.841	403.841	0.02206	0.02938	0.24437	413.393
2026	0.26706	0.21871	1.74379	2.79290	0.00672	0.05228	0.12981	0.18209	0.04860	0.03309	0.08169	—	736.350	736.350	0.03805	0.04678	0.35735	751.598
2027	0.28078	0.27796	0.88513	4.80074	0.00838	0.03763	0.05816	0.09579	0.03763	0.01361	0.05124	—	863.217	863.217	0.03609	0.00872	0.09407	866.813
2050	0.17352	0.14533	0.87071	1.39077	0.00447	0.02281	0.02842	0.05124	0.02094	0.00700	0.02794	—	436.319	436.319	0.01701	0.00582	0.00243	438.482

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.01821	0.87600	4.42128	9.10982	0.02117	0.17024	21.1959	21.3661	0.15678	2.25797	2.41475	0.00000	34,990.4	34,990.4	5.39595	0.69616	3.94846	35,336.7

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.02431	0.88033	4.50267	9.00998	0.02082	0.17024	21.1959	21.3661	0.15678	2.25797	2.41475	0.00000	34,954.6	34,954.6	5.39949	0.70038	0.10238	35,298.4
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02250	0.01971	0.03467	0.21026	0.00046	0.00081	0.80382	0.80463	0.00075	0.08610	0.08685	0.00000	32,813.0	32,813.0	5.30305	0.64452	0.07171	33,137.7
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00411	0.00360	0.00633	0.03837	0.00008	0.00015	0.14670	0.14685	0.00014	0.01571	0.01585	0.00000	5,432.56	5,432.56	0.87798	0.10671	0.01187	5,486.32

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.50475	0.44455	0.51805	5.02101	0.01062	0.00875	21.1959	21.2046	0.00821	2.25797	2.26618	—	1,082.03	1,082.03	0.04881	0.04437	3.94846	1,100.42
Area	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Off-Road	0.51346	0.43145	3.90323	4.08882	0.01055	0.16149	—	0.16149	0.14857	—	0.14857	—	1,142.54	1,142.54	0.04635	0.00927	—	1,146.46
Total	1.01821	0.87600	4.42128	9.10982	0.02117	0.17024	21.1959	21.3661	0.15678	2.25797	2.41475	0.00000	34,990.4	34,990.4	5.39595	0.69616	3.94846	35,336.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.51085	0.44888	0.59944	4.92116	0.01026	0.00875	21.1959	21.2046	0.00821	2.25797	2.26619	—	1,046.25	1,046.25	0.05235	0.04859	0.10238	1,062.14
Area	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8

Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Off-Road	0.51346	0.43145	3.90323	4.08882	0.01055	0.16149	—	0.16149	0.14857	—	0.14857	—	1,142.54	1,142.54	0.04635	0.00927	—	1,146.46
Total	1.02431	0.88033	4.50267	9.00998	0.02082	0.17024	21.1959	21.3661	0.15678	2.25797	2.41475	0.00000	34,954.6	34,954.6	5.39949	0.70038	0.10238	35,298.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02110	0.01853	0.02397	0.19906	0.00043	0.00037	0.80382	0.80419	0.00035	0.08610	0.08644	—	44.0194	44.0194	0.00213	0.00198	0.07171	44.7337
Area	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Off-Road	0.00141	0.00118	0.01069	0.01120	0.00003	0.00044	—	0.00044	0.00041	—	0.00041	—	3.13025	3.13025	0.00013	0.00003	—	3.14099
Total	0.02250	0.01971	0.03467	0.21026	0.00046	0.00081	0.80382	0.80463	0.00075	0.08610	0.08685	0.00000	32,813.0	32,813.0	5.30305	0.64452	0.07171	33,137.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00385	0.00338	0.00438	0.03633	0.00008	0.00007	0.14670	0.14676	0.00006	0.01571	0.01578	—	7.28791	7.28791	0.00035	0.00033	0.01187	7.40618
Area	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	5,424.75	5,424.75	0.87761	0.10638	—	5,478.40
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Off-Road	0.00026	0.00022	0.00195	0.00204	0.00001	0.00008	—	0.00008	0.00007	—	0.00007	—	0.51825	0.51825	0.00002	< 0.000005	—	0.52003
Total	0.00411	0.00360	0.00633	0.03837	0.00008	0.00015	0.14670	0.14685	0.00014	0.01571	0.01585	0.00000	5,432.56	5,432.56	0.87798	0.10671	0.01187	5,486.32

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.77196	2.32922	22.0225	20.8767	0.03341	0.93374	—	0.93374	0.85904	—	0.85904	—	3,619.92	3,619.92	0.14684	0.02937	—	3,632.34
Dust From Material Movement	—	—	—	—	—	—	5.11082	5.11082	—	2.62664	2.62664	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16708	0.14039	1.32739	1.25832	0.00201	0.05628	—	0.05628	0.05178	—	0.05178	—	218.187	218.187	0.00885	0.00177	—	218.936
Dust From Material Movement	—	—	—	—	—	—	0.30805	0.30805	—	0.15832	0.15832	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03049	0.02562	0.24225	0.22964	0.00037	0.01027	—	0.01027	0.00945	—	0.00945	—	36.1233	36.1233	0.00147	0.00029	—	36.2473

Dust From Material Movement	—	—	—	—	—	—	0.05622	0.05622	—	0.02889	0.02889	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.02593	0.00873	0.37796	0.14771	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	270.342	270.342	0.01702	0.04118	0.68349	283.724
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01279	0.01143	0.01008	0.11098	0.00000	0.00000	0.01615	0.01615	0.00000	0.00378	0.00378	—	17.0567	17.0567	0.00115	0.00073	0.03321	17.3359
Vendor	0.00156	0.00053	0.02355	0.00886	0.00011	0.00021	0.00407	0.00428	0.00021	0.00110	0.00131	—	16.2944	16.2944	0.00103	0.00248	0.01779	17.0775
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00233	0.00209	0.00184	0.02025	0.00000	0.00000	0.00295	0.00295	0.00000	0.00069	0.00069	—	2.82393	2.82393	0.00019	0.00012	0.00550	2.87016
Vendor	0.00029	0.00010	0.00430	0.00162	0.00002	0.00004	0.00074	0.00078	0.00004	0.00020	0.00024	—	2.69773	2.69773	0.00017	0.00041	0.00294	2.82738
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Substation Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38598	1.16461	11.0113	10.4383	0.01671	0.46687	—	0.46687	0.42952	—	0.42952	—	1,809.96	1,809.96	0.07342	0.01468	—	1,816.17
Dust From Material Movement	—	—	—	—	—	—	2.55541	2.55541	—	1.31332	1.31332	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04177	0.03510	0.33185	0.31458	0.00050	0.01407	—	0.01407	0.01294	—	0.01294	—	54.5467	54.5467	0.00221	0.00044	—	54.7339
Dust From Material Movement	—	—	—	—	—	—	0.07701	0.07701	—	0.03958	0.03958	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00762	0.00641	0.06056	0.05741	0.00009	0.00257	—	0.00257	0.00236	—	0.00236	—	9.03083	9.03083	0.00037	0.00007	—	9.06183
Dust From Material Movement	—	—	—	—	—	—	0.01405	0.01405	—	0.00722	0.00722	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.02593	0.00873	0.37796	0.14771	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	270.342	270.342	0.01702	0.04118	0.68349	283.724
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00639	0.00572	0.00504	0.05549	0.00000	0.00000	0.00807	0.00807	0.00000	0.00189	0.00189	—	8.52836	8.52836	0.00058	0.00036	0.01661	8.66797
Vendor	0.00078	0.00027	0.01178	0.00443	0.00005	0.00011	0.00203	0.00214	0.00011	0.00055	0.00065	—	8.14721	8.14721	0.00051	0.00124	0.00889	8.53877
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00117	0.00104	0.00092	0.01013	0.00000	0.00000	0.00147	0.00147	0.00000	0.00034	0.00034	—	1.41197	1.41197	0.00010	0.00006	0.00275	1.43508
Vendor	0.00014	0.00005	0.00215	0.00081	0.00001	0.00002	0.00037	0.00039	0.00002	0.00010	0.00012	—	1.34886	1.34886	0.00008	0.00021	0.00147	1.41369
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.44606	1.21509	10.0966	13.1197	0.01847	0.50566	—	0.50566	0.46521	—	0.46521	—	2,001.09	2,001.09	0.08117	0.01623	—	2,007.95
Dust From Material Movement	—	—	—	—	—	—	0.41360	0.41360	—	0.04466	0.04466	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08320	0.06991	0.58090	0.75483	0.00106	0.02909	—	0.02909	0.02677	—	0.02677	—	115.131	115.131	0.00467	0.00093	—	115.526
Dust From Material Movement	—	—	—	—	—	—	0.02380	0.02380	—	0.00257	0.00257	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01518	0.01276	0.10601	0.13776	0.00019	0.00531	—	0.00531	0.00488	—	0.00488	—	19.0612	19.0612	0.00077	0.00015	—	19.1267
Dust From Material Movement	—	—	—	—	—	—	0.00434	0.00434	—	0.00047	0.00047	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.02593	0.00873	0.37796	0.14771	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	270.342	270.342	0.01702	0.04118	0.68349	283.724
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01220	0.01091	0.00962	0.10593	0.00000	0.00000	0.01541	0.01541	0.00000	0.00361	0.00361	—	16.2814	16.2814	0.00110	0.00070	0.03170	16.5479
Vendor	0.00149	0.00051	0.02248	0.00846	0.00010	0.00020	0.00388	0.00409	0.00020	0.00105	0.00125	—	15.5538	15.5538	0.00098	0.00237	0.01698	16.3013
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00223	0.00199	0.00176	0.01933	0.00000	0.00000	0.00281	0.00281	0.00000	0.00066	0.00066	—	2.69557	2.69557	0.00018	0.00012	0.00525	2.73970
Vendor	0.00027	0.00009	0.00410	0.00154	0.00002	0.00004	0.00071	0.00075	0.00004	0.00019	0.00023	—	2.57510	2.57510	0.00016	0.00039	0.00281	2.69887
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Substation Site Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72303	0.60755	5.04831	6.55987	0.00924	0.25283	—	0.25283	0.23261	—	0.23261	—	1,000.54	1,000.54	0.04059	0.00812	—	1,003.98

Dust From Material Movement	—	—	—	—	—	—	0.20680	0.20680	—	0.02233	0.02233	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02179	0.01831	0.15214	0.19769	0.00028	0.00762	—	0.00762	0.00701	—	0.00701	—	30.1533	30.1533	0.00122	0.00024	—	30.2568
Dust From Material Movement	—	—	—	—	—	—	0.00623	0.00623	—	0.00067	0.00067	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00398	0.00334	0.02777	0.03608	0.00005	0.00139	—	0.00139	0.00128	—	0.00128	—	4.99223	4.99223	0.00020	0.00004	—	5.00936
Dust From Material Movement	—	—	—	—	—	—	0.00114	0.00114	—	0.00012	0.00012	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854

Vendor	0.02593	0.00873	0.37796	0.14771	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	270.342	270.342	0.01702	0.04118	0.68349	283.724
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00639	0.00572	0.00504	0.05549	0.00000	0.00000	0.00807	0.00807	0.00000	0.00189	0.00189	—	8.52836	8.52836	0.00058	0.00036	0.01661	8.66797
Vendor	0.00078	0.00027	0.01178	0.00443	0.00005	0.00011	0.00203	0.00214	0.00011	0.00055	0.00065	—	8.14721	8.14721	0.00051	0.00124	0.00889	8.53877
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00117	0.00104	0.00092	0.01013	0.00000	0.00000	0.00147	0.00147	0.00000	0.00034	0.00034	—	1.41197	1.41197	0.00010	0.00006	0.00275	1.43508
Vendor	0.00014	0.00005	0.00215	0.00081	0.00001	0.00002	0.00037	0.00039	0.00002	0.00010	0.00012	—	1.34886	1.34886	0.00008	0.00021	0.00147	1.41369
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Battery/Container Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87635	0.73352	6.67569	7.59062	0.01554	0.26649	—	0.26649	0.24517	—	0.24517	—	1,611.27	1,611.27	0.06536	0.01307	—	1,616.80
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.87635	0.73352	6.67569	7.59062	0.01554	0.26649	—	0.26649	0.24517	—	0.24517	—	1,611.27	1,611.27	0.06536	0.01307	—	1,616.80
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26410	0.22106	2.01185	2.28759	0.00468	0.08031	—	0.08031	0.07389	—	0.07389	—	485.589	485.589	0.01970	0.00394	—	487.256
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04820	0.04034	0.36716	0.41748	0.00085	0.01466	—	0.01466	0.01348	—	0.01348	—	80.3948	80.3948	0.00326	0.00065	—	80.6707
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.12963	0.04365	1.88980	0.73855	0.00882	0.01764	0.34434	0.36198	0.01764	0.09270	0.11034	—	1,351.71	1,351.71	0.08510	0.20591	3.41743	1,418.62
Hauling	0.07813	0.01252	1.03234	0.39604	0.00763	0.01142	0.15944	0.17086	0.00763	0.04365	0.05128	—	694.399	694.399	0.06173	0.11045	1.26344	730.120
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21742	0.19412	0.17845	1.94503	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	282.968	282.968	0.02003	0.01209	0.03306	287.104
Vendor	0.12875	0.04321	1.97358	0.74031	0.00882	0.01808	0.34434	0.36242	0.01808	0.09270	0.11078	—	1,351.68	1,351.68	0.08466	0.20591	0.08878	1,415.24
Hauling	0.07800	0.01239	1.08225	0.39692	0.00763	0.01142	0.15944	0.17086	0.00763	0.04365	0.05128	—	694.386	694.386	0.06173	0.11045	0.03270	728.876
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06393	0.05717	0.05040	0.55489	0.00000	0.00000	0.08073	0.08073	0.00000	0.01889	0.01889	—	85.2836	85.2836	0.00577	0.00364	0.16606	86.6797
Vendor	0.03907	0.01329	0.58880	0.22151	0.00266	0.00532	0.10174	0.10706	0.00532	0.02743	0.03274	—	407.360	407.360	0.02565	0.06206	0.44465	426.939
Hauling	0.02353	0.00376	0.32262	0.11947	0.00230	0.00344	0.04718	0.05062	0.00230	0.01294	0.01524	—	209.269	209.269	0.01860	0.03329	0.16342	219.817
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01167	0.01043	0.00920	0.10127	0.00000	0.00000	0.01473	0.01473	0.00000	0.00345	0.00345	—	14.1197	14.1197	0.00096	0.00060	0.02749	14.3508
Vendor	0.00713	0.00243	0.10746	0.04043	0.00049	0.00097	0.01857	0.01954	0.00097	0.00501	0.00598	—	67.4431	67.4431	0.00425	0.01027	0.07362	70.6846
Hauling	0.00429	0.00069	0.05888	0.02180	0.00042	0.00063	0.00861	0.00924	0.00042	0.00236	0.00278	—	34.6468	34.6468	0.00308	0.00551	0.02706	36.3931

3.11. Battery/Container Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84021	0.70332	6.29978	7.52687	0.01554	0.23929	—	0.23929	0.22014	—	0.22014	—	1,610.93	1,610.93	0.06535	0.01307	—	1,616.46
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84021	0.70332	6.29978	7.52687	0.01554	0.23929	—	0.23929	0.22014	—	0.22014	—	1,610.93	1,610.93	0.06535	0.01307	—	1,616.46
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.54918	0.45971	4.11766	4.91971	0.01015	0.15640	—	0.15640	0.14389	—	0.14389	—	1,052.94	1,052.94	0.04271	0.00854	—	1,056.55
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10022	0.08390	0.75147	0.89785	0.00185	0.02854	—	0.02854	0.02626	—	0.02626	—	174.325	174.325	0.00707	0.00141	—	174.924
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19916	0.18707	0.12682	1.84897	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	290.424	290.424	0.01650	0.01209	1.19019	295.630
Vendor	0.12037	0.03483	1.78134	0.69313	0.00882	0.01764	0.34434	0.36198	0.01764	0.09270	0.11034	—	1,330.13	1,330.13	0.07584	0.19709	3.17783	1,393.93
Hauling	0.07430	0.01252	0.98264	0.38859	0.00763	0.01138	0.15944	0.17082	0.00758	0.04365	0.05124	—	682.828	682.828	0.06169	0.11045	1.19837	718.483
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20092	0.18707	0.16812	1.83269	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	278.099	278.099	0.02003	0.01209	0.03086	282.233
Vendor	0.11949	0.03395	1.85629	0.70327	0.00882	0.01808	0.34434	0.36242	0.01764	0.09270	0.11034	—	1,330.15	1,330.15	0.07584	0.19709	0.08235	1,390.86
Hauling	0.07416	0.01239	1.02881	0.38559	0.00763	0.01142	0.15944	0.17086	0.00763	0.04365	0.05128	—	682.821	682.821	0.06169	0.11045	0.03113	717.309
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12787	0.11939	0.09697	1.12790	0.00000	0.00000	0.17508	0.17508	0.00000	0.04097	0.04097	—	181.790	181.790	0.01194	0.00790	0.33614	184.780
Vendor	0.07810	0.02248	1.20005	0.45593	0.00576	0.01153	0.22066	0.23219	0.01153	0.05949	0.07102	—	869.400	869.400	0.04957	0.12882	0.89843	909.927
Hauling	0.04853	0.00816	0.66476	0.25422	0.00499	0.00746	0.10232	0.10978	0.00499	0.02806	0.03304	—	446.307	446.307	0.04032	0.07219	0.33848	469.167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02334	0.02179	0.01770	0.20584	0.00000	0.00000	0.03195	0.03195	0.00000	0.00748	0.00748	—	30.0975	30.0975	0.00198	0.00131	0.05565	30.5924
Vendor	0.01425	0.00410	0.21901	0.08321	0.00105	0.00210	0.04027	0.04237	0.00210	0.01086	0.01296	—	143.939	143.939	0.00821	0.02133	0.14874	150.649

Hauling	0.00886	0.00149	0.12132	0.04639	0.00091	0.00136	0.01867	0.02004	0.00091	0.00512	0.00603	—	73.8912	73.8912	0.00668	0.01195	0.05604	77.6760

3.13. Substation Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69558	0.58162	5.20107	7.16402	0.01052	0.17533	—	0.17533	0.16131	—	0.16131	—	1,067.98	1,067.98	0.04332	0.00866	—	1,071.64
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69558	0.58162	5.20107	7.16402	0.01052	0.17533	—	0.17533	0.16131	—	0.16131	—	1,067.98	1,067.98	0.04332	0.00866	—	1,071.64
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18921	0.15821	1.41477	1.94873	0.00286	0.04769	—	0.04769	0.04388	—	0.04388	—	290.507	290.507	0.01178	0.00236	—	291.504
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.03453	0.02887	0.25820	0.35564	0.00052	0.00870	—	0.00870	0.00801	—	0.00801	—	48.0967	48.0967	0.00195	0.00039	—	48.2618
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21566	0.19500	0.14571	1.97465	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	295.543	295.543	0.01738	0.01209	1.27345	300.854
Vendor	0.12963	0.04365	1.88980	0.73855	0.00882	0.01764	0.34434	0.36198	0.01764	0.09270	0.11034	—	1,351.71	1,351.71	0.08510	0.20591	3.41743	1,418.62
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21742	0.19412	0.17845	1.94503	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	282.968	282.968	0.02003	0.01209	0.03306	287.104
Vendor	0.12875	0.04321	1.97358	0.74031	0.00882	0.01808	0.34434	0.36242	0.01808	0.09270	0.11078	—	1,351.68	1,351.68	0.08466	0.20591	0.08878	1,415.24
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05770	0.05160	0.04549	0.50084	0.00000	0.00000	0.07286	0.07286	0.00000	0.01705	0.01705	—	76.9767	76.9767	0.00521	0.00329	0.14988	78.2368
Vendor	0.03526	0.01199	0.53145	0.19994	0.00240	0.00480	0.09183	0.09663	0.00480	0.02476	0.02955	—	367.682	367.682	0.02315	0.05601	0.40134	385.354
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01053	0.00942	0.00830	0.09140	0.00000	0.00000	0.01330	0.01330	0.00000	0.00311	0.00311	—	12.7444	12.7444	0.00086	0.00054	0.02482	12.9530
Vendor	0.00644	0.00219	0.09699	0.03649	0.00044	0.00088	0.01676	0.01763	0.00088	0.00452	0.00539	—	60.8740	60.8740	0.00383	0.00927	0.06645	63.7997
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.15. Substation Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64831	0.54207	4.98930	7.12727	0.01054	0.14744	—	0.14744	0.13564	—	0.13564	—	1,069.84	1,069.84	0.04340	0.00868	—	1,073.52
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64831	0.54207	4.98930	7.12727	0.01054	0.14744	—	0.14744	0.13564	—	0.13564	—	1,069.84	1,069.84	0.04340	0.00868	—	1,073.52
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13321	0.11138	1.02520	1.46451	0.00217	0.03030	—	0.03030	0.02787	—	0.02787	—	219.831	219.831	0.00892	0.00178	—	220.585
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02431	0.02033	0.18710	0.26727	0.00040	0.00553	—	0.00553	0.00509	—	0.00509	—	36.3955	36.3955	0.00148	0.00030	—	36.5204
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19916	0.18707	0.12682	1.84897	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	290.424	290.424	0.01650	0.01209	1.19019	295.630
Vendor	0.12037	0.03483	1.78134	0.69313	0.00882	0.01764	0.34434	0.36198	0.01764	0.09270	0.11034	—	1,330.13	1,330.13	0.07584	0.19709	3.17783	1,393.93
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20092	0.18707	0.16812	1.83269	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	278.099	278.099	0.02003	0.01209	0.03086	282.233
Vendor	0.11949	0.03395	1.85629	0.70327	0.00882	0.01808	0.34434	0.36242	0.01764	0.09270	0.11034	—	1,330.15	1,330.15	0.07584	0.19709	0.08235	1,390.86
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04020	0.03753	0.03048	0.35458	0.00000	0.00000	0.05504	0.05504	0.00000	0.01288	0.01288	—	57.1497	57.1497	0.00375	0.00248	0.10567	58.0895
Vendor	0.02455	0.00707	0.37726	0.14333	0.00181	0.00362	0.06937	0.07299	0.00362	0.01870	0.02233	—	273.314	273.314	0.01558	0.04050	0.28244	286.055
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00734	0.00685	0.00556	0.06471	0.00000	0.00000	0.01004	0.01004	0.00000	0.00235	0.00235	—	9.46178	9.46178	0.00062	0.00041	0.01750	9.61738
Vendor	0.00448	0.00129	0.06885	0.02616	0.00033	0.00066	0.01266	0.01332	0.00066	0.00341	0.00407	—	45.2503	45.2503	0.00258	0.00671	0.04676	47.3597
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.17. Gen-Tie Foundation and Tower Erection (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.02427	0.85378	7.18871	7.68872	0.01670	0.26475	—	0.26475	0.24357	—	0.24357	—	1,609.63	1,609.63	0.06529	0.01306	—	1,615.15
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12347	0.10292	0.86658	0.92686	0.00201	0.03191	—	0.03191	0.02936	—	0.02936	—	194.038	194.038	0.00787	0.00157	—	194.703
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02253	0.01878	0.15815	0.16915	0.00037	0.00582	—	0.00582	0.00536	—	0.00536	—	32.1251	32.1251	0.00130	0.00026	—	32.2354
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04979	0.04677	0.03170	0.46224	0.00000	0.00000	0.06860	0.06860	0.00000	0.01608	0.01608	—	72.6061	72.6061	0.00412	0.00302	0.29755	73.9075
Vendor	0.02407	0.00697	0.35627	0.13863	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	266.025	266.025	0.01517	0.03942	0.63557	278.787
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00590	0.00550	0.00447	0.05200	0.00000	0.00000	0.00807	0.00807	0.00000	0.00189	0.00189	—	8.38195	8.38195	0.00055	0.00036	0.01550	8.51979
Vendor	0.00288	0.00083	0.04427	0.01682	0.00021	0.00043	0.00814	0.00856	0.00043	0.00219	0.00262	—	32.0689	32.0689	0.00183	0.00475	0.03314	33.5638
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00108	0.00100	0.00082	0.00949	0.00000	0.00000	0.00147	0.00147	0.00000	0.00034	0.00034	—	1.38773	1.38773	0.00009	0.00006	0.00257	1.41055
Vendor	0.00053	0.00015	0.00808	0.00307	0.00004	0.00008	0.00149	0.00156	0.00008	0.00040	0.00048	—	5.30937	5.30937	0.00030	0.00079	0.00549	5.55687
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.19. Gen-Tie Stringing and Pulling (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16571	0.13924	1.75591	2.68162	0.00405	0.04000	—	0.04000	0.03680	—	0.03680	—	437.970	437.970	0.01777	0.00355	—	439.473
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01044	0.00877	0.11065	0.16898	0.00025	0.00252	—	0.00252	0.00232	—	0.00232	—	27.5981	27.5981	0.00112	0.00022	—	27.6928
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.00191	0.00160	0.02019	0.03084	0.00005	0.00046	—	0.00046	0.00042	—	0.00042	—	4.56918	4.56918	0.00019	0.00004	—	4.58486
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03983	0.03741	0.02536	0.36979	0.00000	0.00000	0.05488	0.05488	0.00000	0.01286	0.01286	—	58.0849	58.0849	0.00330	0.00242	0.23804	59.1260
Vendor	0.02407	0.00697	0.35627	0.13863	0.00176	0.00353	0.06887	0.07240	0.00353	0.01854	0.02207	—	266.025	266.025	0.01517	0.03942	0.63557	278.787
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00247	0.00230	0.00187	0.02175	0.00000	0.00000	0.00338	0.00338	0.00000	0.00079	0.00079	—	3.50518	3.50518	0.00023	0.00015	0.00648	3.56282
Vendor	0.00151	0.00043	0.02314	0.00879	0.00011	0.00022	0.00425	0.00448	0.00022	0.00115	0.00137	—	16.7633	16.7633	0.00096	0.00248	0.01732	17.5447
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00045	0.00042	0.00034	0.00397	0.00000	0.00000	0.00062	0.00062	0.00000	0.00014	0.00014	—	0.58032	0.58032	0.00004	0.00003	0.00107	0.58987
Vendor	0.00027	0.00008	0.00422	0.00160	0.00002	0.00004	0.00078	0.00082	0.00004	0.00021	0.00025	—	2.77535	2.77535	0.00016	0.00041	0.00287	2.90473
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.21. Commissioning (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.41084	4.41084	15.7530	81.9156	0.15438	0.69313	—	0.69313	0.69313	—	0.69313	—	16,434.8	16,434.8	0.65987	0.12876	—	16,489.7
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26759	0.26759	0.95566	4.96944	0.00937	0.04205	—	0.04205	0.04205	—	0.04205	—	997.022	997.022	0.04003	0.00781	—	1,000.35
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04883	0.04883	0.17441	0.90692	0.00171	0.00767	—	0.00767	0.00767	—	0.00767	—	165.068	165.068	0.00663	0.00129	—	165.619
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80368	0.74827	0.67250	7.33078	0.00000	0.00000	1.09768	1.09768	0.00000	0.25729	0.25729	—	1,112.40	1,112.40	0.08011	0.04836	0.12343	1,128.93
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04747	0.04432	0.03600	0.41874	0.00000	0.00000	0.06500	0.06500	0.00000	0.01521	0.01521	—	67.4911	67.4911	0.00443	0.00293	0.12480	68.6009
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00866	0.00809	0.00657	0.07642	0.00000	0.00000	0.01186	0.01186	0.00000	0.00278	0.00278	—	11.1739	11.1739	0.00073	0.00049	0.02066	11.3577
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.23. Commissioning (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.41084	4.41084	15.7530	81.9156	0.15438	0.69313	—	0.69313	0.69313	—	0.69313	—	16,434.8	16,434.8	0.65987	0.12876	—	16,489.7
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.41084	4.41084	15.7530	81.9156	0.15438	0.69313	—	0.69313	0.69313	—	0.69313	—	16,434.8	16,434.8	0.65987	0.12876	—	16,489.7
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.31203	1.31203	4.68582	24.3663	0.04592	0.20618	—	0.20618	0.20618	—	0.20618	—	4,888.63	4,888.63	0.19628	0.03830	—	4,904.95
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23945	0.23945	0.85516	4.44685	0.00838	0.03763	—	0.03763	0.03763	—	0.03763	—	809.368	809.368	0.03250	0.00634	—	812.070
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77546	0.72710	0.50022	6.97225	0.00000	0.00000	1.09768	1.09768	0.00000	0.25729	0.25729	—	1,141.76	1,141.76	0.06600	0.04836	4.42770	1,162.25
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77899	0.72357	0.63119	6.89553	0.00000	0.00000	1.09768	1.09768	0.00000	0.25729	0.25729	—	1,093.33	1,093.33	0.07658	0.04836	0.11461	1,109.77
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22647	0.21103	0.16423	1.93915	0.00000	0.00000	0.31871	0.31871	0.00000	0.07458	0.07458	—	325.254	325.254	0.02173	0.01439	0.56819	330.652
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04133	0.03851	0.02997	0.35390	0.00000	0.00000	0.05816	0.05816	0.00000	0.01361	0.01361	—	53.8495	53.8495	0.00360	0.00238	0.09407	54.7433
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.25. Decommissioning (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17067	1.81954	11.0621	17.3636	0.05542	0.29275	—	0.29275	0.26933	—	0.26933	—	5,804.83	5,804.83	0.23547	0.04709	—	5,824.75
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17067	1.81954	11.0621	17.3636	0.05542	0.29275	—	0.29275	0.26933	—	0.26933	—	5,804.83	5,804.83	0.23547	0.04709	—	5,824.75
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91585	0.76770	4.66731	7.32601	0.02338	0.12352	—	0.12352	0.11363	—	0.11363	—	2,449.16	2,449.16	0.09935	0.01987	—	2,457.57
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.16714	0.14010	0.85178	1.33700	0.00427	0.02254	—	0.02254	0.02074	—	0.02074	—	405.487	405.487	0.01645	0.00329	—	406.878
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07206	0.06261	0.03124	0.65964	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	229.429	229.429	0.00265	0.00265	0.06147	230.345
Vendor	0.00556	0.00317	0.11270	0.05168	0.00176	0.00176	0.06711	0.06887	0.00176	0.01854	0.02030	—	133.056	133.056	0.00229	0.01993	0.00368	139.056
Hauling	0.00450	0.00216	0.09326	0.04537	0.00093	0.00176	0.03620	0.03796	0.00088	0.01015	0.01103	—	88.4277	88.4277	0.00220	0.01367	0.01551	92.5716
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06614	0.06437	0.03476	0.63662	0.00000	0.00000	0.27442	0.27442	0.00000	0.06432	0.06432	—	219.729	219.729	0.00353	0.00265	0.00159	220.607
Vendor	0.00538	0.00291	0.11834	0.05256	0.00176	0.00176	0.06711	0.06887	0.00176	0.01854	0.02030	—	133.150	133.150	0.00229	0.01993	0.00010	139.147
Hauling	0.00432	0.00198	0.09841	0.04594	0.00093	0.00176	0.03620	0.03796	0.00088	0.01015	0.01103	—	88.4969	88.4969	0.00220	0.01367	0.00040	92.6257
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03077	0.02642	0.01429	0.25346	0.00000	0.00000	0.11302	0.11302	0.00000	0.02645	0.02645	—	92.7553	92.7553	0.00149	0.00112	0.01121	93.1364
Vendor	0.00231	0.00130	0.04867	0.02195	0.00074	0.00074	0.02774	0.02849	0.00074	0.00768	0.00842	—	56.1553	56.1553	0.00097	0.00841	0.00067	58.6860
Hauling	0.00186	0.00089	0.04076	0.01924	0.00039	0.00074	0.01499	0.01573	0.00037	0.00421	0.00458	—	37.3215	37.3215	0.00093	0.00577	0.00282	39.0661
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00562	0.00482	0.00261	0.04626	0.00000	0.00000	0.02063	0.02063	0.00000	0.00483	0.00483	—	15.3567	15.3567	0.00025	0.00018	0.00186	15.4198
Vendor	0.00042	0.00024	0.00888	0.00401	0.00014	0.00014	0.00506	0.00520	0.00014	0.00140	0.00154	—	9.29715	9.29715	0.00016	0.00139	0.00011	9.71613
Hauling	0.00034	0.00016	0.00744	0.00351	0.00007	0.00014	0.00274	0.00287	0.00007	0.00077	0.00084	—	6.17900	6.17900	0.00015	0.00095	0.00047	6.46784

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	32,765.8	32,765.8	5.30079	0.64252	—	33,089.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	5,424.75	5,424.75	0.87761	0.10638	—	5,478.40
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,424.75	5,424.75	0.87761	0.10638	—	5,478.40

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.43480	0.36536	3.28069	3.05690	0.00914	0.13476	—	0.13476	0.12398	—	0.12398	—	990.088	990.088	0.04016	0.00803	—	993.485
Forklifts	0.07865	0.06609	0.62254	1.03192	0.00141	0.02673	—	0.02673	0.02459	—	0.02459	—	152.453	152.453	0.00618	0.00124	—	152.976
Total	0.51346	0.43145	3.90323	4.08882	0.01055	0.16149	—	0.16149	0.14857	—	0.14857	—	1,142.54	1,142.54	0.04635	0.00927	—	1,146.46
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.43480	0.36536	3.28069	3.05690	0.00914	0.13476	—	0.13476	0.12398	—	0.12398	—	990.088	990.088	0.04016	0.00803	—	993.485
Forklifts	0.07865	0.06609	0.62254	1.03192	0.00141	0.02673	—	0.02673	0.02459	—	0.02459	—	152.453	152.453	0.00618	0.00124	—	152.976
Total	0.51346	0.43145	3.90323	4.08882	0.01055	0.16149	—	0.16149	0.14857	—	0.14857	—	1,142.54	1,142.54	0.04635	0.00927	—	1,146.46

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.00022	0.00018	0.00164	0.00153	< 0.000005	0.00007	—	0.00007	0.00006	—	0.00006	—	0.44910	0.44910	0.00002	< 0.000005	—	0.45064
Forklifts	0.00004	0.00003	0.00031	0.00052	< 0.000005	0.00001	—	0.00001	0.00001	—	0.00001	—	0.06915	0.06915	< 0.000005	< 0.000005	—	0.06939
Total	0.00026	0.00022	0.00195	0.00204	0.00001	0.00008	—	0.00008	0.00007	—	0.00007	—	0.51825	0.51825	0.00002	< 0.000005	—	0.52003

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2025	7/1/2025	5.00000	22.0000	—
Substation Site Preparation	Site Preparation	7/2/2025	7/16/2025	5.00000	11.0000	—
Grading	Grading	7/2/2025	7/30/2025	5.00000	21.0000	—
Substation Site Grading	Grading	7/31/2025	8/14/2025	5.00000	11.0000	—
Battery/Container Installation	Building Construction	7/31/2025	11/30/2026	5.00000	348.000	—
Substation Installation	Building Construction	8/15/2025	4/15/2026	5.00000	174.000	—

Gen-Tie Foundation and Tower Erection	Building Construction	4/16/2026	6/16/2026	5.00000	44.0000	—
Gen-Tie Stringing and Pulling	Building Construction	6/17/2026	7/17/2026	5.00000	23.0000	—
Commissioning	Building Construction	12/1/2026	6/1/2027	5.00000	131.000	—
Decommissioning	Building Construction	5/31/2050	12/31/2050	5.00000	154.000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Site Preparation	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000
Substation Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Substation Site Preparation	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Substation Site Preparation	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Graders	Diesel	Average	2.00000	8.00000	148.000	0.41000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Grading	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Substation Site Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Substation Site Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Substation Site Grading	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000

Battery/Container Installation	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000
Battery/Container Installation	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Battery/Container Installation	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Battery/Container Installation	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Substation Installation	Aerial Lifts	Diesel	Average	1.000000	8.00000	46.0000	0.31000
Substation Installation	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000
Substation Installation	Bore/Drill Rigs	Diesel	Average	1.000000	8.00000	83.0000	0.50000
Substation Installation	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Substation Installation	Trenchers	Diesel	Average	1.000000	8.00000	40.0000	0.50000
Gen-Tie Foundation and Tower Erection	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000
Gen-Tie Foundation and Tower Erection	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Gen-Tie Foundation and Tower Erection	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Gen-Tie Foundation and Tower Erection	Pumps	Diesel	Average	1.000000	8.00000	11.0000	0.74000
Gen-Tie Foundation and Tower Erection	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Gen-Tie Stringing and Pulling	Aerial Lifts	Diesel	Average	1.000000	8.00000	46.0000	0.31000
Gen-Tie Stringing and Pulling	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Commissioning	Generator Sets	Diesel	Tier 4 Final	2.00000	2.00000	4,828.00	0.74000
Decommissioning	Concrete/Industrial Saws	Diesel	Average	2.00000	8.00000	33.0000	0.73000
Decommissioning	Cranes	Diesel	Average	2.00000	8.00000	367.000	0.29000
Decommissioning	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000

Decommissioning	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00000	20.0000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Substation Site Preparation	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Substation Site Preparation	Vendor	4.00000	20.0000	HHDT,MHDT
Substation Site Preparation	Hauling	0.00000	20.0000	HHDT
Substation Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Grading	Vendor	4.00000	20.0000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Substation Site Grading	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Substation Site Grading	Vendor	4.00000	20.0000	HHDT,MHDT
Substation Site Grading	Hauling	0.00000	20.0000	HHDT
Substation Site Grading	Onsite truck	—	—	HHDT
Battery/Container Installation	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Battery/Container Installation	Vendor	20.0000	20.0000	HHDT,MHDT
Battery/Container Installation	Hauling	2.00000	86.0000	HHDT
Battery/Container Installation	Onsite truck	—	—	HHDT
Substation Installation	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Substation Installation	Vendor	20.0000	20.0000	HHDT,MHDT

Substation Installation	Hauling	0.00000	20.0000	HHDT
Substation Installation	Onsite truck	—	—	HHDT
Gen-Tie Foundation and Tower Erection	Worker	10.00000	9.71000	LDA,LDT1,LDT2
Gen-Tie Foundation and Tower Erection	Vendor	4.00000	20.0000	HHDT,MHDT
Gen-Tie Foundation and Tower Erection	Hauling	0.00000	20.0000	HHDT
Gen-Tie Foundation and Tower Erection	Onsite truck	—	—	HHDT
Gen-Tie Stringing and Pulling	Worker	8.00000	9.71000	LDA,LDT1,LDT2
Gen-Tie Stringing and Pulling	Vendor	4.00000	20.0000	HHDT,MHDT
Gen-Tie Stringing and Pulling	Hauling	0.00000	20.0000	HHDT
Gen-Tie Stringing and Pulling	Onsite truck	—	—	HHDT
Commissioning	Worker	160.000	9.71000	LDA,LDT1,LDT2
Commissioning	Vendor	0.00000	6.06000	HHDT,MHDT
Commissioning	Hauling	0.00000	20.0000	HHDT
Commissioning	Onsite truck	—	—	HHDT
Decommissioning	Worker	40.0000	9.71000	LDA,LDT1,LDT2
Decommissioning	Vendor	4.00000	20.0000	HHDT,MHDT
Decommissioning	Hauling	2.00000	20.0000	HHDT
Decommissioning	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	22.0000	0.00000	0.00000
Substation Site Preparation	—	—	5.50000	0.00000	0.00000
Grading	—	—	21.0000	0.00000	0.00000
Substation Site Grading	—	—	5.50000	0.00000	0.00000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00000	203.983	0.03300	0.00400
2026	0.00000	203.983	0.03300	0.00400
2027	0.00000	203.983	0.03300	0.00400
2050	0.00000	203.983	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	68.0000	68.0000	68.0000	1,044.00	1,360.00	1,360.00	1,360.00	20,880.0

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	0.00000	0.00000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	0.00000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	58,630,000	203.983	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.75000	annual days of extreme heat

Extreme Precipitation	8.90000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	15.1100	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	17.6478
AQ-PM	3.36030
AQ-DPM	22.7505
Drinking Water	60.1224
Lead Risk Housing	58.8280
Pesticides	98.3793
Toxic Releases	7.48937
Traffic	18.1125

Effect Indicators	—
CleanUp Sites	0.00000
Groundwater	32.3759
Haz Waste Facilities/Generators	35.6188
Impaired Water Bodies	93.3641
Solid Waste	63.6655
Sensitive Population	—
Asthma	54.5239
Cardio-vascular	32.4900
Low Birth Weights	16.7693
Socioeconomic Factor Indicators	—
Education	86.9527
Housing	83.2953
Linguistic	81.8920
Poverty	70.4397
Unemployment	52.5247

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	48.60772488
Employed	61.79905043
Median HI	48.13293982
Education	—
Bachelor's or higher	21.73745669
High school enrollment	100
Preschool enrollment	4.670858463

Transportation	—
Auto Access	50.77633774
Active commuting	54.69010651
Social	—
2-parent households	45.07891698
Voting	44.23200308
Neighborhood	—
Alcohol availability	81.05992557
Park access	26.06185038
Retail density	16.04003593
Supermarket access	19.90247658
Tree canopy	65.55883485
Housing	—
Homeownership	64.54510458
Housing habitability	37.1872193
Low-inc homeowner severe housing cost burden	37.20005133
Low-inc renter severe housing cost burden	24.20120621
Uncrowded housing	15.89888361
Health Outcomes	—
Insured adults	24.93263185
Arthritis	0.0
Asthma ER Admissions	32.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	23.6
Cognitively Disabled	36.6
Physically Disabled	52.4
Heart Attack ER Admissions	63.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	84.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	57.3
English Speaking	47.7
Foreign-born	77.0
Outdoor Workers	7.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	81.3
Traffic Density	30.0
Traffic Access	0.0
Other Indices	—
Hardship	73.4

Other Decision Support	—
2016 Voting	45.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	53.0000
Healthy Places Index Score for Project Location (b)	41.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Seahawk BESS: assumed building to account for routine maintenance workers. Total acreage of 14 acres disturbed with no landscaping anticipated per applicant.
Construction: Construction Phases	Adjusted default construction schedule based on information provided by the applicant.
Construction: Off-Road Equipment	Default equipment revised based on information provided by the applicant.

Construction: Off-Road Equipment EF	Emission factors for the diesel generators during commissioning based on Tier 4 engines, per applicant input. All others based on default horsepower and engine tier.
Construction: Trips and VMT	Default on-road vehicle assumptions revised based on applicant input. Battery container truck trip length based on one-way distance to Port of Oakland.
Construction: On-Road Fugitive Dust	Unpaved portion of Minto Road modeled separately for construction.
Operations: Road Dust	% paved based on assumption of 20-mile trip length on average with 0.4 miles unpaved on Minto Road
Operations: Consumer Products	Facility will be unmanned. No consumer products assumed.
Operations: Architectural Coatings	No architectural coatings anticipated.
Operations: Landscape Equipment	No landscaping anticipated.
Operations: Energy Use	Total of auxiliary loads, energy degradation, and energy loss
Operations: Water and Waste Water	Facility would be unmanned. No water/wastewater assumed.
Operations: Solid Waste	Facility would be unmanned. No solid waste assumed.
Operations: Off-Road Equipment	1 crane and 1 forklift assumed to operate for 8 hours for 1 day every 2 or 3 years for battery swaps.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.02296	14.0000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Site Preparation	Site Preparation	Start Date	6/30/2025	6/1/2025
Site Preparation	Site Preparation	End Date	7/14/2025	7/1/2025
Site Preparation	Site Preparation	Work Days per Phase	10.00000	22.0000
Grading	Grading	Start Date	7/15/2025	7/2/2025

Grading	Grading	End Date	8/26/2025	7/30/2025
Grading	Grading	Work Days per Phase	30.0000	21.0000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Commissioning	Generator Sets	Engine Tier	Average	Tier 4 Final
Commissioning	Generator Sets	Horsepower	4,800.00	4,828.00

8.4.3. Off-Road Equipment EF

Phase Name	Equipment Type	Year	Model Parameter	Units	Default Value	New Value
Commissioning	Generator Sets	2,026.00	TOG	g/bhp-hr	0.05000	0.14000
Commissioning	Generator Sets	2,026.00	ROG	g/bhp-hr	0.05000	0.14000
Commissioning	Generator Sets	2,026.00	NOx	g/bhp-hr	2.24000	0.50000
Commissioning	Generator Sets	2,026.00	CO	g/bhp-hr	2.60000	2.60000
Commissioning	Generator Sets	2,026.00	SO,	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,026.00	PM10E	g/bhp-hr	0.02000	0.02200
Commissioning	Generator Sets	2,026.00	PM2.5E	g/bhp-hr	0.02000	0.02200
Commissioning	Generator Sets	2,026.00	CO,	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,026.00	CH„	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,026.00	N,O	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,027.00	SO,	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,027.00	CO,	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,027.00	CH„	g/bhp-hr	—	1.000000
Commissioning	Generator Sets	2,027.00	N,O	g/bhp-hr	—	1.000000

8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value

Site Preparation	Worker	One-Way Trips per Day	15.0000	40.0000
Site Preparation	Vendor	One-Way Trips per Day	—	4.00000
Site Preparation	Vendor	Miles per Trip	6.06000	20.0000
Substation Site Preparation	Worker	One-Way Trips per Day	7.50000	40.0000
Substation Site Preparation	Vendor	One-Way Trips per Day	—	4.00000
Substation Site Preparation	Vendor	Miles per Trip	6.06000	20.0000
Grading	Worker	One-Way Trips per Day	15.0000	40.0000
Grading	Vendor	One-Way Trips per Day	—	4.00000
Grading	Vendor	Miles per Trip	6.06000	20.0000
Substation Site Grading	Worker	One-Way Trips per Day	7.50000	40.0000
Substation Site Grading	Vendor	One-Way Trips per Day	—	4.00000
Substation Site Grading	Vendor	Miles per Trip	6.06000	20.0000
Battery/Container Installation	Worker	One-Way Trips per Day	0.42000	40.0000
Battery/Container Installation	Vendor	One-Way Trips per Day	0.16390	20.0000
Battery/Container Installation	Vendor	Miles per Trip	6.06000	20.0000
Battery/Container Installation	Hauling	One-Way Trips per Day	0.00000	2.00000
Battery/Container Installation	Hauling	Miles per Trip	20.0000	86.0000
Substation Installation	Worker	One-Way Trips per Day	0.42000	40.0000
Substation Installation	Vendor	One-Way Trips per Day	0.16390	20.0000
Substation Installation	Vendor	Miles per Trip	6.06000	20.0000
Gen-Tie Foundation and Tower Erection	Worker	One-Way Trips per Day	0.42000	10.00000
Gen-Tie Foundation and Tower Erection	Vendor	One-Way Trips per Day	0.16390	4.00000
Gen-Tie Foundation and Tower Erection	Vendor	Miles per Trip	6.06000	20.0000
Gen-Tie Stringing and Pulling	Worker	One-Way Trips per Day	0.42000	8.00000
Gen-Tie Stringing and Pulling	Vendor	One-Way Trips per Day	0.16390	4.00000
Gen-Tie Stringing and Pulling	Vendor	Miles per Trip	6.06000	20.0000

Commissioning	Worker	One-Way Trips per Day	0.42000	160.000
Commissioning	Vendor	One-Way Trips per Day	0.16390	0.00000
Decommissioning	Worker	One-Way Trips per Day	0.42000	40.0000
Decommissioning	Vendor	One-Way Trips per Day	0.16390	4.00000
Decommissioning	Vendor	Miles per Trip	6.06000	20.0000
Decommissioning	Hauling	One-Way Trips per Day	0.00000	2.00000

8.4.7. On-Road Fugitive Dust

Phase Name	Model Parameter	Units	Default Value	New Value
Site Preparation	Worker Trip Paved	%	52.0000	100.0000
Site Preparation	Vendor Trip Paved	%	52.0000	100.0000
Site Preparation	Hauling Trip Paved	%	52.0000	100.0000
Substation Site Preparation	Worker Trip Paved	%	52.0000	100.0000
Substation Site Preparation	Vendor Trip Paved	%	52.0000	100.0000
Substation Site Preparation	Hauling Trip Paved	%	52.0000	100.0000
Grading	Worker Trip Paved	%	52.0000	100.0000
Grading	Vendor Trip Paved	%	52.0000	100.0000
Grading	Hauling Trip Paved	%	52.0000	100.0000
Substation Site Grading	Worker Trip Paved	%	52.0000	100.0000
Substation Site Grading	Vendor Trip Paved	%	52.0000	100.0000
Substation Site Grading	Hauling Trip Paved	%	52.0000	100.0000
Battery/Container Installation	Worker Trip Paved	%	52.0000	100.0000
Battery/Container Installation	Vendor Trip Paved	%	52.0000	100.0000
Battery/Container Installation	Hauling Trip Paved	%	52.0000	100.0000
Substation Installation	Worker Trip Paved	%	52.0000	100.0000
Substation Installation	Vendor Trip Paved	%	52.0000	100.0000
Substation Installation	Hauling Trip Paved	%	52.0000	100.0000

Gen-Tie Foundation and Tower Erection	Worker Trip Paved	%	52.0000	100.0000
Gen-Tie Foundation and Tower Erection	Vendor Trip Paved	%	52.0000	100.0000
Gen-Tie Foundation and Tower Erection	Hauling Trip Paved	%	52.0000	100.0000
Gen-Tie Stringing and Pulling	Worker Trip Paved	%	52.0000	100.0000
Gen-Tie Stringing and Pulling	Vendor Trip Paved	%	52.0000	100.0000
Gen-Tie Stringing and Pulling	Hauling Trip Paved	%	52.0000	100.0000
Commissioning	Worker Trip Paved	%	52.0000	100.0000
Commissioning	Vendor Trip Paved	%	52.0000	100.0000
Commissioning	Hauling Trip Paved	%	52.0000	100.0000
Decommissioning	Worker Trip Paved	%	52.0000	100.0000
Decommissioning	Vendor Trip Paved	%	52.0000	100.0000
Decommissioning	Hauling Trip Paved	%	52.0000	100.0000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.4. Road Dust

Model Parameter	Units	Default Value	New Value
% Paved	%	52.0000	98.0000

8.5.2. Area Sources

8.5.2.2. Consumer Products

Model Parameter	Units	Default Value	New Value
General Category	lb/sqft/day	0.00002	0.00000
City Park/Golf Course Pesticides/Fertilizers	lb/sqft/day	< 0.000005	0.00000

Parking Degreaser	lb/sqft/day	< 0.000005	0.00000

8.5.2.3. Architectural Coatings

Model Parameter	Units	Default Value	New Value
Non-Residential Interior Area	sq ft	1,500.00	0.00000
Non-Residential Exterior Area	sq ft	500.000	0.00000

8.5.2.4. Landscape Equipment

Model Parameter	Units	Default Value	New Value
Summer Days	day/yr	250.000	0.00000

8.5.3. Energy Usage

Land Use	Model Parameter	Units	Default Value	New Value
Unrefrigerated Warehouse-No Rail	Electricity	kWh/yr	10,596.1	58,630,000
Unrefrigerated Warehouse-No Rail	Electricity (Subject to Title 24)	kWh/yr	3,833.51	0.00000
Unrefrigerated Warehouse-No Rail	Electricity (Not Subject to Title 24)	kWh/yr	6,762.54	58,630,000
Unrefrigerated Warehouse-No Rail	Natural Gas	kBTU/yr	5,943.12	0.00000
Unrefrigerated Warehouse-No Rail	Natural Gas (Subject to Title 24)	kBTU/yr	5,093.96	0.00000
Unrefrigerated Warehouse-No Rail	Natural Gas (Not Subject to Title 24)	kBTU/yr	849.158	0.00000

8.5.4. Water and Waste Water

Land Use	Model Parameter	Units	Default Value	New Value
Unrefrigerated Warehouse-No Rail	Indoor Water	gal/year	231,250	0.00000

8.5.5. Solid Waste

Land Use	Model Parameter	Units	Default Value	New Value

Unrefrigerated Warehouse-No Rail	Solid Waste Generation Rate	ton/1000sqft/yr	0.94000	0.00000

8.5.7. Off-Road Equipment

8.5.7.1. Off-Road Equipment

Equipment Type	Model Parameter	Default Value	New Value
Cranes	Days/Year	260.000	1.000000
Forklifts	Days/Year	260.000	1.000000

3.2 Biological Resources

This section describes the potential effects the construction, operation, maintenance, and decommissioning activities associated with the Seahawk Battery Energy Storage System (BESS) Project (project) may have on biological resources at and in the vicinity of the Study Area (i.e., the proposed BESS facility site and the proposed generation interconnection [gen-tie] area). Note, the Study Area incorporates a surrounding 100-foot buffer for the BESS facility site when considering aquatic resources. Vicinity refers to the broader landscape surrounding the Study Area, including nearby aquatic features such as College Lake, Pinto Lake, and Corralitos Creek. The proposed project would consist of a 200-megawatt BESS facility using lithium-ion based batteries installed in racks inside of prefabricated energy storage containers. The project would include components such as an operations and maintenance building, an on-site collector substation (project substation), a fire protection system, a noise mitigation wall, and supervisory control and data acquisition (SCADA). The project would interconnect from the project substation to the adjacent Pacific Gas and Electric Company (PG&E) Green Valley Substation via a 115-kilovolt gen-tie transmission line. The line would be installed underground from the project substation to the Point of Change of Ownership at an overhead riser pole on the PG&E parcel, and an overhead line would connect to the Point of Interconnection at the PG&E Green Valley Substation. The underground portion of the gen-tie is anticipated to have a 2.5-foot-wide trench, the aboveground portion of the gen-tie is expected to have 52-inch diameter holes at pole locations. Note, a 30-foot-wide trench corridor was examined to allow citing flexibility.

The biological resources described in this section have been compiled from a literature and database review of databases, maps, general plans, biological reconnaissance, as well as focused species/resource surveys. The evaluation of biological resources includes the following elements:

- Section 3.2.1 describes the existing environment that could be affected, including a regional overview, wetlands, habitats, species, vegetation, and biological survey results.
- Section 3.2.2 identifies potential environmental impacts that may result from project construction, operation, maintenance, and decommissioning.
- Section 3.2.3 discusses the potential for cumulative effects.
- Section 3.2.4 describes project design and mitigation measures that would be implemented to avoid or minimize potentially significant impacts.
- Section 3.2.5 presents laws, ordinances, regulations, and standards (LORS) applicable to biological resources.
- Section 3.2.6 describes permits required for the project related to biological resources.
- Section 3.2.7 identifies regulatory agency contacts.
- Section 3.2.8 provides references used to develop this section.

Biologist's credentials, as well as occurrence record data used for the preparation of this section is located in the following appendices:

- Appendix 3.2A – Special-Status Species Potential to Occur Tables
- Appendix 3.2B – Sensitive Species Database Searches
- Appendix 3.2C – Observed Plant and Wildlife Species Compendium
- Appendix 3.2D – Lake and Streambed Alteration Agreement Application
- Appendix 3.2E – Resumes of Applicant's Biologists

- **Appendix 3.2F** – Biological Datasheets

A summary of the biological resources evaluation is provided in the table below.

		Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:					
1	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as endangered, threatened, candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by CDFW or USFWS?	☐	☒	☐	☐
2	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS?	☐	☐	☒	☐
3	Have a substantial adverse effect on federal or state protected WOTUS [waters of the United States] (including wetlands) as defined by Sections 404 and 401 of the 1972 Amendments to the Federal Water Pollution Control Act, commonly known as the Clean Water Act, or the Porter-Cologne Act, either through direct removal, filling, hydrological alteration, or other means?	☐	☒	☐	☐
4	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory native wildlife corridors or impede the use of wildlife nursery sites?	☐	☐	☒	☐
5	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
6	Conflict with the provisions of an adopted Habitat Conservation Plan, NCCP [natural community conservation plan], or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Notes: CDFW = California Department of Fish and Wildlife; USFWS = U.S. Fish and Wildlife Service.

3.2.1 Affected Environment

The project comprises approximately 49 acres in unincorporated Santa Cruz County, California, approximately 1 mile north of the City of Watsonville, California. The project occurs southwest of College Lake and the PG&E Green Valley Substation. The proposed BESS facility site primarily consists of orchards and the proposed gen-tie area primarily consists of urban/developed land with a mix of vegetation communities (Figure 3.2.1A and B, Vegetation Communities and Land Covers).

The BESS facility site comprises Assessor's Parcel Numbers 051-101-77 and 051-101-78, and the proposed gen-tie area is on Assessor's Parcel Number 051-091-03. The project site (approximately 47 acres) and proposed gen-tie area (approximately 1.5 acres) refers to the area that would be physically affected by construction activities associated with the project, including the location of permanent structures (including gen-tie transmission line) as well as staging and other temporary disturbance areas described in Section 2, Project Description. For the purposes of the biological surveys, the Study Area (approximately 49 acres) encompasses the project site parcels, a 100-foot buffer when considering aquatic resources, and the proposed gen-tie area. The Study Area for focused species surveys was expanded per protocol and where necessary to capture nearby resources. Focused survey methods are described below in Section 3.2.1.5, Biological Surveys.

3.2.1.1 Regional Overview

The Study Area is located on an alluvial plain downslope of Mount Madonna to the northeast, in the Northern Coastline Ranges Geomorphic Province (CGS 2002). The Northern Coastline Ranges occur along the California coastline, which is a dynamic boundary zone, of varying width, where geologic forces collide (CGS 2002). The northern section runs north-by-northwest from Point Conception north to Oregon. Elevations range from approximately 79 to 127 feet above sea level (Google Earth 2025).

The Study Area is located within unincorporated areas of Santa Cruz County that has a Mediterranean climate with low humidity, summers that are long, moderate, arid, and mostly clear, and the winters are short, cold, wet, and partly cloudy, with temperatures typically varying from 42°F to 75°F (Weather Spark 2025). September is the average warmest month with an average high of 75°F, and January is the coolest month on average with a low of 42°F. Rainfall occurs primarily between September and June, with the maximum average precipitation occurring in December. The mean annual rainfall for the area is approximately 21 inches of rain per year (WRCC 2025).

3.2.1.2 Regional Wetlands and Protected Areas

The National Wetlands Inventory (NWI) and National Hydrography Dataset (NHD) were reviewed to identify wetland or hydrologic features in the Study Area (USFWS 2025a; USGS 2025). Figure 3.2-2, Hydrologic Resources, depicts the mapped wetland and hydrologic features in the Study Area. These resources are further described below.

Protected areas within 10 miles of the Study Area were determined through a review of the California Protected Area Database (CPAD) and California Conservation Easement Database (CCED) mapping tools (GreenInfo Network 2025). These resources are further described below.

3.2.1.2.1 Hydrologic Features

The Study Area occurs within the southern portion of the Salsipuedes Creek Subwatershed (Hydrologic Unit Code 12-180600020803) of the Pajaro River Watershed (Hydrologic Unit Code 10-1806000208) (Dudek 2026). Based on a review of NHD (USGS 2025 and NWI (USFWS 2025a, a riverine feature was mapped along the western and southern border of the Study Area (Figure 3.2-2). The Federal Emergency Management Agency's online National Flood Hazard Layer Viewer was used to evaluate flood risk. The Study Area was not found to be within a 100-year flood zone (FEMA 2025.

Dudek conducted an aquatic resources jurisdictional delineation in August 2024 and February 2026 and found approximately 1.23 acres of aquatic resources, including 0.32 acres of wetlands, 0.02 acres of non-wetland waters,

0.004 acres of an upland swale, 0.67 acres of four other waters, and 0.22 acres of riparian vegetation within the Study Area (Figures 3.2-3A and B, Preliminary Aquatic Resources Delineation).

3.2.1.2.2 Protected Areas

The CPAD is a database that includes land owned and protected for open space purposes by over 1,000 different public agencies or non-profit organizations. CPAD includes national, state, or regional parks, forests, preserves and wildlife areas. It also includes large and small urban parks, land trust preserves and special district open space lands (GreenInfo Network 2025). The CCED is a geographic information system database defining easements and deed-based restrictions on private land. These restrictions limit land uses to those compatible with maintaining it as open space. Lands under easement may be actively farmed, grazed, forested, or held as nature reserves. Easements are typically held on private lands with no public access (GreenInfo Network 2025).

A review of the CPAD and CCED confirmed that there are several protected areas or conservation easements within a 10-mile radius of the Study Area (Figure 3.2-4, Protected Areas). No protected areas or conservation easements overlap the Study Area and project activities would not generate any potential ground impacts to these areas. The nearest protected area is Pinto Lake City Park located approximately 0.3 miles to the east (Figure 3.2-4). This protected area consists of 78 acres within the park boundaries that are owned and managed by the City of Watsonville. The nearest conservation easement is also located approximately 0.7 miles to the east and consists of 18.3 acres owned by the County of Santa Cruz. A list of the CPAD and CCED identified areas that occur within the 10-mile buffer of the project is provided below.

California Protected Areas Database

No portions of the project would encroach into any protected areas (Figure 3.2-4, Protected Areas). The following are the lands that are owned and protected for open space within 10 miles of the Study Area (GreenInfo Network 2025).

- County of Santa Cruz
  - Pinto Lake County Park
  - Valle del Pajaro County Park
  - Freedom Lake Park
  - Watsonville Slough Farms
  - Rocks Ranch
  - Redwood Ridge
  - Star Creek Ranch
  - Rocks Ranch
- Pajaro Valley Public Cemetery District
  - Pajaro Valley Water Management Agency
- City of Watsonville
  - Pinto Lake City Park
  - Buena Vista Park
  - Franich Park
  - Harkins Slough

  - Struve Slough
  - Hope Drive Park
  - E.A. Hall School Park
  - Neary Lagoon Park
  - Ramsay Park
  - Pajaro River
  - Seaview Park
  - Gallighan Slough
- County of Santa Clara
  - Mount Madonna County Park
  - Uvas Reservoir
  - Uvas Canyon County Park
  - Upper Uvas Creek OSP
- California Department of Fish and Wildlife
  - Watsonville Slough ER
  - Elkhorn Slough ER
- United States Fish and Wildlife Service
  - Santa Cruz Long-Toed Salamander ER
  - Ellicott Slough NWR
- California State Coastal Conservancy
  - Struve Slough
- California Department of Parks and Recreation
  - Sunset State Beach
  - Seacliff State Beach
  - Manresa State Beach
  - New Brighton State Beach
  - The Forest of Nisene Marks SP
- Elkhorn Slough Foundation
  - Elkhorn Slough/Elkorn Highlands
- Santa Clara Valley Habitat Agency
  - Mount Madonna North

California Conservation Easement Database

The CCED is a database that defines boundaries of easements and deed-base restrictions on private lands. These lands may be actively farmed, grazed, forested, or held as nature preserves and typically have no public access (GreenInfo Network 2025). There are several lands with easements and deed-base restrictions found within 10 miles of the Study Area; however, none occur within the Study Area. Restricted lands within 1 mile of the Study Area include Amnesti, held by the Land Trust of Santa Cruz County, and an easement held by the County of Santa Cruz (GreenInfo Network 2025).

3.2.1.3 Sensitive Habitat Types and Critical Habitat

Sensitive habitat types within a 10-mile radius of the Study Area are shown on Figure 3.2-5, Sensitive Habitat Types and critical habitat on Figure 3.2-6, Critical Habitat. Descriptions of the sensitive and critical habitat identified are described below.

3.2.1.3.1 Sensitive Habitat Types

The California Department of Fish and Wildlife (CDFW) defines sensitive habitats as plant communities that have limited distributions, high wildlife value, sensitive species, or are particularly vulnerable to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFW 2018) and keeps records of their occurrences in the California Natural Diversity Database (CDFW 2026). Currently, CDFW publishes the California Sensitive Natural Communities List online (CDFW 2025a). Vegetation rarity ranking is based on a rank calculation developed by NatureServe (2025). Vegetation maps were taken from the CDFW Vegetation Classification Reports and Maps (CDFW 2025b). CDFW's Vegetation Program considers vegetation alliances with state (S) ranks of S1 through S3 as sensitive vegetative habitats. CDFW considers species or natural communities with one of the following NatureServe rankings as sensitive: Global (G)/State (S); Presumed Extinct (X); Possibly Extinct (G/S H); Critically Imperiled (G/S 1); Imperiled (G/S 2); Vulnerable (G/S 3). The California Environmental Quality Act (CEQA) requires that potential impacts to sensitive natural communities be evaluated. The following four sensitive natural communities occur within 10 miles of the Study Area (Figure 3.2-5): Central Dune Scrub, Central Maritime Chaparral, Northern Coastal Salt Marsh, and Coastal and Valley Freshwater Marsh. None of these identified sensitive natural communities occur within the Study Area.

3.2.1.3.2 Critical Habitat

Critical habitat are designated areas occupied by the species at the time it was listed that contain the physical or biological features that are essential to the conservation of endangered and threatened species. In designated critical habitat, U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration consider the following requirements of the species:

"Space for individual and population growth, and for normal behavior; nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing offspring; and, generally, any habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of this species" (USFWS 2025b).

No designated critical habitat occurs within the Study Area but several areas within 10 miles of the Study Area are mapped as critical habitat including: Santa Cruz tarplant (*Holocarpha macradenia*), California red-legged frog (*Rana draytonii*), robust spineflower (*Chorizanthe robusta* var. *robusta*), California tiger salamander (*Ambystoma californiense*), tidewater goby (*Eucyclogobius newberryi*), western snowy plover (*Charadrius nivosus nivosus*), and Yadon's pipera (*Platanthera yadonii*) (USFWS 2025c; Figure 3.2-6). Limited suitable habitat is present for Santa Cruz tarplant, California red-legged frog and California tiger salamander. No suitable habitat for the remainder of the above species occurs in the Study Area because the freshwater shrub wetland, intermittent stream, and orchard areas do not provide the combination of physical, hydrologic, and vegetation characteristics necessary to support their life-history requirements.

3.2.1.4 Regional Sensitive or Special-Status Species

Endangered, rare, or threatened species, as defined in CEQA Guideline 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status species" in this report and include one endangered, threatened, and candidate species recognized in the context of the California Endangered Species Act (CESA) and the federal Endangered Species Act (FESA) (CDFW 2025c); (2) plant species with a California Rare Plant Rank (CNPS 2026a) (lists 1 through 4; see Appendix 3.2A for rank definitions); (3) California Species of Special Concern and Watch List species, as designated by CDFW (CDFW 2025d); (4) mammals and birds that are Fully Protected (FP) species, as described in California Fish and Game Code (CFGC) Sections 4700 and 3511; and (5) Birds of Conservation Concern as designated by USFWS (2021).

Appendix 3.2B, Sensitive Species Database Searches, provides a list of special-status species with records within the U.S. Geological Survey 7.5-minute topographic quadrangle where the project occurs (Watsonville West, California) and the seven quadrangles surrounding the Study Area during the literature and database review (CDFW 2026; CNPS 2026a; and USFWS 2026). Note, one quadrangle southwest of the project site occurs entirely within the Pacific Ocean, therefore eight quadrangles were considered. This appendix includes the status designation for each species, habitat types that may support these species in the eight-quadrangle review area, a determination of potential for these species to occur within the Study Area, and a rationale for the occurrence determination. Figure 3.2-7, Biological Resources, depicts the special-status plant and wildlife species known to occur within a 10-mile radius of the Study Area. The CDFW Biogeographic Information and Observation System online viewer was used to determine the distance of recorded locations of sensitive species in relation to the project site (CDFW 2025e).

3.2.1.4.1 Sensitive and Special-Status Species Assessment

Dudek biologists evaluated the regional special-status plant and wildlife species against observed conditions at the Study Area to determine the potential for each species to occur. Appendix 3.2A, Special-Status Species Potential to Occur Tables, includes habitat requirements, occurrence determinations, and rationale for occurrence determination within the Study Area (referred to as project Study Area, or PSA, in Appendix 3.2A). The potential for each special-status species to occur was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on-site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site are unsuitable. The species has a moderate probability of being found on the site.
- **High.** All the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on-site.
- **Present.** Species was observed on site or within the Study Area.

3.2.1.5 Biological Surveys

Surveys to document the biological resources within the Study Area were conducted in 2024 and 2026. Dudek biologist Emily Scricca conducted a biological reconnaissance-level field survey of the Study Area on March 19, 2024. The survey was conducted from 9:30 a.m. to 1:30 p.m., under weather conditions of 50°F to 66°F, with wind speeds of approximately 0 to 3 miles per hour, and cloud cover ranging from 0% to 100%. The purpose of the biological reconnaissance field survey was to determine baseline site status by ground-truthing and/or mapping existing vegetation communities and land covers, identify special-status plant or wildlife species, determine the likelihood of special-status plant or wildlife species to occur on the Study Area based on present habitat and condition/suitability of the habitat, and identify commonly occurring plant or wildlife species within the Study Area.

Dudek also performed a formal aquatic resources jurisdictional delineation to identify and map existing aquatic resources potentially subject to the regulatory jurisdiction of U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA) (33 USC 1344), waters of the state potentially subject to the regulatory jurisdiction of the Central Coast Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter–Cologne Act), and stream and riparian habitats potentially subject to the jurisdiction of CDFW pursuant to Section 1602 of the CFGC (collectively defined as jurisdictional aquatic resources).

The jurisdictional delineation for the BESS facility site was conducted by Dudek biologist Natalie Yorba on August 16, 2024. The delineation for the proposed gen-tie area was conducted by Dudek biologists Gwyn Fritz and Kelsey Higney on February 25 and 27, 2026. Field surveys on February 25, 2026, were conducted from approximately 8:45 a.m. to 2:00 p.m. under weather conditions of approximately 59°F to 68°F, with mean wind speeds of approximately 2 miles per hour, and cloud cover ranging from 30% to 100%. Surveys on February 27, 2026, were conducted from approximately 8:30 a.m. to 11:00 a.m. under weather conditions of approximately 63°F to 73°F, with mean wind speeds of approximately 2.5 miles per hour, and cloud cover ranging from 20% to 50%. The results of the jurisdictional delineation for both the BESS facility area and gen-tie area are in the Aquatic Resources Delineation Report (Dudek 2026).

On May 6, 2026, Dudek biologist Emily Scricca conducted a formal habitat assessment for California red-legged frog and northwestern pond turtle (*Actinemys marmorata*) to evaluate the suitability of aquatic, riparian, and adjacent upland habitats in the vicinity of the Study Area for these species. The assessment consisted of a visual evaluation of habitat features that could support breeding, refugia, basking, nesting, and dispersal. The survey was conducted from 8:00 a.m. to 2:00 p.m. under weather conditions of 59°F to 72°F, with light to moderate winds (10 to 13 miles per hour), and 0% cloud cover. Aquatic features evaluated within approximately 1 mile of the proposed project site included College Lake, Pinto Lake, and Corralitos Creek; Kelly Lake was inaccessible due to private property. Results of the habitat assessment (see Section 3.2.1.9 for additional information) were used to inform special-status wildlife occurrence determinations, impact analysis, and the need for avoidance and minimization measures described.

Vegetation Community and Land Cover Mapping

Vegetation communities and land uses within the Study Area were mapped in the field using the Environmental Systems Research Institute (Esri) Collector, a mobile data collection application, on a digital aerial-based background (Esri 2025). Following completion of the fieldwork, all vegetation linework was finalized using Esri ArcGIS software, and geographic information system coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover type within the Study Area was determined. Vegetation communities within

the Study Area were mapped using CDFW's List of Vegetation Alliances and Associations (or California Natural Community List) (CDFW 2025f), which is based on A Manual of California Vegetation, Second Edition (Sawyer et al. 2009) and A Manual of California Vegetation, Online Edition (CNPS 2026b), where feasible, with modifications made to accommodate the lack of conformity of the observed communities (e.g., developed/disturbed land cover types) using Oberbauer et al. (2008) and Jones and Stokes (1993). Vegetation communities were classified based on site factors, descriptions, distribution, and characteristic species present within an area. Each natural community was mapped to the association level, where feasible. Special-status vegetation communities are those communities identified as high priority for inventory in the California Natural Communities List (CDFW 2025f).

Protected Tree Census

The BESS portion of the Study Area contains an active orchard comprising apple trees (*Malus* sp.). The gen-tie portion of the Study Area includes riparian trees and other woody vegetation associated with riparian habitat along the drainage corridor. Project construction has been designed to avoid tree removal. However, limited trimming of riparian trees may be required during installation of the gen-tie and conductor stringing activities. Any such trimming would be conducted in accordance with applicable local requirements and would be limited to the minimum necessary to accommodate construction while avoiding removal of protected trees. To the extent applicable, trimming activities would also be consistent with the goals and objectives of the City of Watsonville Urban Forest and Management Plan (City of Watsonville 2024), which supports protection and long-term management of tree canopy resources. Therefore, the Study Area does not contain protected trees proposed for removal, although limited trimming of riparian vegetation may occur in the gen-tie area.

3.2.1.6 Vegetation Communities and Land Cover Types

All plant species encountered during the field reconnaissance and jurisdictional delineation surveys were identified and recorded. Latin and common names for plant species with a California Rare Plant Rank (formerly California Native Plant Society List) follow the California Native Plant Society On-Line Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2026a). For plant species without a California Rare Plant Rank, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2025), and common names follow the California Natural Communities list (CDFW 2025f) or the U.S. Department of Agriculture Natural Resources Conservation Service Plants Database (NRCS 2025). A list of plant species observed in the Study Area during initial surveys is presented in Appendix 3.2C.

The BESS portion of the Study Area is primarily characterized by agricultural land consisting of maintained apple orchard, along with ancillary features and infrastructure associated with orchard cultivation. Vegetation communities and land cover types mapped within this portion of the Study Area contain predominantly of orchard land, with limited areas of urban/developed land occurring along the western margin (Figure 3.2-1). In addition to cultivated apple trees, a significant amount of non-agricultural vegetation, including field-marigold (*Calendula arvensis*), common borage (*Borago officinalis*), field mustard (*Brassica rapa*), wild radish (*Raphanus sativus*), burclover (*Medicago polymorpha*), fava bean (*Vicia faba*), Bermuda buttercup (*Oxalis pes-caprae*), California blackberry (*Rubus ursinus*), and wall barley (*Hordeum murinum*)is present within orchard understory areas and along the periphery of the Study Area.

The gen-tie portion of the Study Area comprises a mix of urban/developed and disturbed habitat along the northern and eastern boundaries, and a mosaic of naturalized and native vegetation communities along the western boundary. These include arroyo willow (*Salix lasiolepis*) thickets, *Baccharis pilularis – Toxicodendron diversilobum*

Association, ornamental plantings, *Phalaris aquatica* Association, and wild oats (*Avena fatua*) and annual brome grasslands Semi-Natural Alliance (Figure 3.2-1).

Table 2. Vegetation Communities and Land Cover Types in the Study Area

CDFW Alliance Code	Vegetation Community or Land Cover Type	Rarity Rank		Acreage
		Global	State	
Vegetation Communities				
42.027.00	Wild Oats and Annual Brome Grasslands Semi-Natural Alliance	GNA	SNA	0.19
32.060.00	*Baccharis pilularis – Toxicodendron diversilobum* Association	G5	S5	0.21
61.204.00	Willow riparian/Arroyo willow thickets	G4	S4	0.27
–	Disturbed Habitat	—	—	0.56
	Phalaris aquatica Association	GNA	SNA	0.03
Other Land Cover Types				
–	Orchard	GNA	SNA	47.38
–	Urban/developed	—	—	1.40
–	Ornamental plantings	GNA	SNA	0.05
			Total[a]	**50.09[b]**

Notes: CDFW = California Department of Fish and Wildlife.
GNA/SNA = Global/State rank not applicable.
Global ranks: G5 = secure; G=4 apparently secure; G3 = vulnerable.
State ranks: S5 = Secure; S4= Apparently secure in state; S3 = vulnerable. State ranks of S1–S3 are considered highly imperiled by CDFW.
[a] Total may not sum precisely due to rounding.
[b] Total acreage includes secondary access road options.

Native Vegetation Communities

Willow Riparian/Arroyo Willow Thickets Alliance (0.27 acres)

The willow riparian vegetation community within the Study Area occurs along drainage features associated with the proposed gen-tie alignment and represents a more diverse assemblage of vegetation compared to the adjacent orchard areas. This community is associated with riparian and wetland features along the southwestern portion of the Study Area, including Intermittent Stream NWW-1 and Freshwater Shrub Wetland WET-1.

Vegetation within and adjacent to these features is dominated by hydrophytic and riparian species typical of seasonally inundated freshwater shrub wetlands and riparian corridors. Dominant species include arroyo willow facultative wetland (FACW), California blackberry (*Rubus ursinus*; facultative [FAC]), dotted smartweed (*Persicaria punctata*; obligate wetland [OBL]), tall flatsedge (*Cyperus eragrostis*; FACW), and *Juncus patens* (FACW). These species form a patchy shrub canopy with a variable herbaceous understory influenced by seasonal hydrology.

This vegetation community is not considered sensitive (CNPS2026b).

Baccharis pilularis – Toxicodendron diversilobum Association (0.21 acres)

The *Baccharis pilularis – Toxicodendron diversilobum* Association occurs within the gen-tie portion of the Study Area and is primarily distributed along upland margins adjacent to riparian and wetland features. This association

represents a transitional upland scrub community that occurs between hydrophytic riparian vegetation and surrounding disturbed or developed land cover types.

Vegetation of this association within the Study Area is dominated by coyote brush (*Baccharis pilularis*) in the shrub layer, with poison oak (*Toxicodendron diversilobum*) present as a co-dominant shrub or vine. The understory within the Study Area is variable and consists mostly of bare ground interspersed with non-native annual grasses and ruderal species such as slender oat (*Avena barbata*), common oat (*Avena sativa*), perennial rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), Bermudagrass (*Cynodon dactylon*) and other facultative upland or upland species. Vegetation structure ranges from open to moderately dense shrub cover with patchy herbaceous ground cover.

This community is typically associated with well-drained soils, occurs outside of areas subject to persistent inundation, and lacks the hydrophytic indicators necessary for wetland classification. Within the Study Area, the *Baccharis pilularis – Toxicodendron diversilobum* Association functions as an ecotonal community that marks the transition from riparian and wetland features to upland habitats and disturbed areas.

This vegetation association is not considered a sensitive natural community (CNPS2026b).

Naturalized (Non-native) Vegetation Communities

Wild Oats and Annual Brome Grasslands Semi-Natural Alliance (Annual Grasslands; 0.19 acres)

The annual grassland vegetation community within the Study Area occurs in the gen-tie portion of the Study Area and is characterized by non-native annual grass species dominating the herbaceous layer. This community occurs along the western portion of the gen-tie alignment, where it borders the ornamental plantings to the east and the *Baccharis pilularis – Toxicodendron diversilobum* Association to the northwest (Figure 3.2-1B).

The herbaceous layer is composed primarily of non-native grasses, including slender oat, wild oat, purple false brome (*Brachypodium distachyon*), big quakinggrass (*Briza maxima*), ripgut brome (*Bromus diandrus*), mouse barley (*Hordeum murinum*), and soft brome (*Bromus hordeaceus*). Vegetation height is generally less than 4 feet, with cover ranging from open to continuous depending on seasonal conditions.

Phalaris aquatica Association (0.03 acres)

The *Phalaris aquatica* Association occurs within the gen-tie portion of the Study Area and is located primarily along the northern boundary of the annual grassland vegetation community, where it borders the Wild Oats and Annual Brome Grasslands Semi-Natural Alliance to the north (Figure 3.2-1B).

This association is dominated by Harding grass (*Phalaris aquatica*), which forms a dense to moderately dense herbaceous canopy. Associated species may include other non-native annual grasses and ruderal herbaceous species typical of disturbed upland settings. Vegetation structure within this area is relatively uniform and lacks a shrub or tree canopy.

Other Land Cover Types

Urban/Developed (1.40 acres)

Although not recognized by the Manual of California Vegetation (CNPS2026b) or the Natural Communities List (CDFW 2025f), areas characterized as urban or developed land are commonly described in biological resource assessments based on applicable local planning frameworks and existing site conditions. Developed land is identified based on General Plan land use designations and the presence of the built environment including areas dominated by buildings, paved surfaces, roads, and other human-made structures. Vegetation within these areas, if present, is typically limited to ornamental landscaping or ruderal species associated with developed uses and does not represent natural plant communities. Urban/developed land within the Study Area includes paved areas adjacent to the PG&E substation, existing buildings along the west side of the BESS portion of the Study Area, the Pajaro Valley Unified School District transportation office to the southeast, and roads.

Orchards (47.38 acres)

Although not recognized by the Manual of California Vegetation (CNPS 202b) or the Natural Communities List (CDFW 2025f), orchards usually comprise artificially irrigated habitat dominated by one (or sometimes several) tree or shrub species. The trees are typically low and bushy with an open understory. Understory growth of orchard crops often includes short grasses and other herbaceous plants between rows. Orchards can be found on flat alluvial soils in the valley floors, in rolling foothill areas, or on relatively steep slopes. The orchards in the Study Area are dominated by apple trees and have an understory consisting of non-native annual forbs (e.g., field mustard, wild radish, and burclover), with minor representation of non-native annual grasses (e.g., wall barley) and occasional native shrub species (e.g., California blackberry), characteristic of disturbed cultivated fields. Approximately 46.28 acres of the Study Area is categorized as Orchards.

Ornamental Plantings (0.05 acres)

The ornamental plantings community occurs within the gen-tie portion of the Study Area along the northwestern boundary. This land cover type consists of planted ornamental tree species, including coast redwood (*Sequoia sempervirens*) and Alaska cedar (*Callitropsis nootkatensis*), arranged in rows or clusters associated with past landscaping activities.

The understory within this area is characterized by disturbed ruderal vegetation dominated by non-native annual grasses and herbaceous species typical of regularly disturbed or managed landscapes. Understory vegetation is sparse to moderately dense and lacks the structural complexity and species composition of native woodland or scrub communities.

Disturbed Habitat (0.56 acres)

Disturbed habitat within the Study Area occurs in the gen-tie portion of the Study Area along the eastern boundary, adjacent to the existing substation. This land cover type consists of areas that have been previously altered by construction, grading, utility infrastructure, and ongoing maintenance activities, resulting in minimal vegetative cover and a lack of consistent vegetation structure.

Vegetation within disturbed habitat areas is sparse to patchy and is dominated by ruderal, non-native herbaceous species typical of repeatedly disturbed environments. Plant species composition is variable and incomplete, with exposed or compacted soils common throughout the area.

3.2.1.7 Potential Jurisdictional Aquatic Resources

Aquatic resources are considered a sensitive community/habitat. The results of the U.S. Geological Survey NHD and USFWS NWI database searches identified two riverine features within the Study Area that were confirmed during surveys. The Study Area delineation efforts, conducted in August 2024 and February 2026, found four drainage features, an upland swale, an intermittent stream, a freshwater shrub wetland and a potential wetland within the Study Area (Figure 3.2-3). These resources include Potential Wetland PW-01, Freshwater Shrub Wetland WET-1, Intermittent Stream NWW-1, Other Waters OW-01 through OW-04, Upland Swale USW-1, and Riparian Vegetation RIP-1. The aquatic resources delineation mapped and documented the extent of potential regulatory agency jurisdiction within the Study Area. Table 3.2-1 provides a summary of aquatic resources in the Study Area.

Table 3.2-1. Summary of Aquatic Resources in the Study Area

Feature ID	Feature Name	Cowardin Code	Total Acreage	Total Linear Feet
Wetlands				
PW-01	Potential Wetland	PEM	0.21	N/A
WET-1	Freshwater Shrub Wetland	R4	0.11	N/A
		Wetlands Total	**0.32**	**N/A**
Non-wetland Waters				
NWW-1	Intermittent Stream	R4	0.02	181.31
		Non-wetland Waters Total	**0.02**	**181.31**
Other Waters				
OW-01	Other Water	N/A	0.09	1,274.02
OW-02	Other Water	N/A	0.01	373.38
OW-03	Other water	N/A	0.53	1,946.32
OW-04	Other Water	N/A	0.04	389.19
USW-1	Upland Swale	U	0.004	84.01
		Other Waters Total	**0.674**	**4,066.92**
Riparian Vegetation				
RIP-1	Riparian Vegetation	N/A	0.22	N/A
		Riparian Vegetation Total	**0.22**	**N/A**
		Grand Total	**1.234**	**4,248.24**

Note: N/A = not applicable.

3.2.1.7.1 Wetlands

The aquatic resources delineation identified one potential wetland (PW-01) comprising 0.21 acres and one freshwater shrub wetland (WET-1) comprising 0.11 acres within the Study Area. PW-01 is located within the eastern corner of the Study Area and was not previously recorded in NWI or NHD databases. In general, these wetlands occur in landscape

depressions and are inundated only seasonally. WET-1 is in the southwestern area of the gen-tie portion of the Study Area and is adjacent to an intermittent stream channel (NWW-1).

Potential Wetland 01 (PW-01)

PW-01 is within a depressional area where it appears that upland runoff settles. A representative sampling point (WSP-02 in Appendix D) was recorded at PW-01 to delineate the extent of the resource (Appendix D). PW-01 was delineated by the mild change in slope and change in vegetation type and cover. Dominant vegetation at wetland sampling point 02 (WSP-02) included watercress (*Nasturtium officinale*; OBL), arroyo willow (FACW), and Italian rye grass (*Festuca perennis;* upland [UPL]). Surface water, a wetland hydrology primary indicator, was observed at WSP-02 with the sampling point (SP) also located within Watsonville loam, 2% to 15% slopes, which is classified as a hydric soil by USDA.

Freshwater Shrub Wetland (WET-1)

Freshwater shrub wetland (WET-1) is located within the southwestern portion of the gen-tie Study Area, where it occurs adjacent to and hydrologically associated with intermittent stream NWW-1. The wetland occupies a low-lying, concave depressional area that receives surface and subsurface runoff from surrounding uplands and appears to function as a seasonally inundated transitional zone between uplands and the adjacent stream channel. WET-1 is characterized by a freshwater shrub wetland community dominated by hydrophytic woody and herbaceous species. Dominant vegetation documented at sampling points SP-1 and SP-2, which are representative of interior wetland conditions, included arroyo willow forming a patchy to moderately dense shrub/tree canopy cover, California blackberry (FAC) in the shrub stratum, dotted smartweed (OBL) and tall flatsedge (FACW) in the herbaceous layer, and spreading rush (FAC) occurring intermittently. Hydrophytic vegetation criteria were met at SP-1 and SP-2, with all dominant species classified as OBL, FACW, or FAC. Hydric soils were identified at SP-1 and SP-2 and are characterized by low-chroma matrices, redox features, and thin surface muck layers, indicating prolonged seasonal saturation. Wetland hydrology indicators, including surface saturation and a shallow water table, were also present at these sampling points. In contrast, sampling points SP-3, SP-4, and SP-5 did not meet wetland criteria and represent transitional or upland areas used to define the lateral extent of the wetland boundary. Based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology, WET-1 qualifies as a three-parameter freshwater shrub wetland under the USACE Wetlands Delineation Manual and the Arid West Regional Supplement and is hydrologically connected to downstream waters via non wetland water (NWW)-1.

3.2.1.7.2 Non-wetland Waters

Intermittent Stream (NWW-1)

The aquatic resources delineation identified one intermittent stream (NWW-1) located within the southwestern portion of the gen-tie Study Area that is hydrologically connected to the freshwater shrub wetland WET-1 (Figure 3.2-3B). NWW-1 comprises a total of 0.02 acres (181.31 linear feet) and is a natural drainage feature that conveys seasonal surface flow through the site before exiting the Study Area via a culvert beneath Minto Road (Appendix B). The channel ultimately connects downstream to Salsipuedes Creek, the Pajaro River, and the Pacific Ocean through a network of tributaries.

NWW-1 consists of a multi-threaded, braided channel system with a clearly defined primary channel and several secondary channels that occur within a shrub scrub wetland matrix. Field observations documented a mean bankfull channel width of approximately 3.5 meters, with bed materials consisting of sand, gravel, and localized

boulders. Evidence of riffle–pool sequences, channel bars, and bedforms was observed, although these features were moderately developed.

An ordinary high water mark (OHWM) was identified along NWW-1 based on multiple geomorphic, sedimentary, and vegetation indicators, including breaks in slope, shelving, changes in soil and particle size distribution, sediment deposition, water staining, and pronounced transitions in vegetation type and density. Vegetation below the OHWM is dominated by OBL and FACW species such as watercress (OBL), dotted smartweed (FACW), spreading rush (FACW), and arroyo willow (FACW), while areas above the OHWM transition abruptly to facultative upland (FACU) and upland scrub species, including coyote brush (FACU*)* and poison oak (FACU*)*.

Results of the Arid West Streamflow Duration Assessment Method indicate that NWW-1 supports continuous surface flow during the wet season, with 100% of the assessed reach exhibiting surface flow at the time of sampling. Hydrophytic vegetation was abundant throughout the channel and banks, rooted upland plants were largely absent from the streambed, and algal cover was present, particularly within secondary channels. Based on Streamflow Duration Assessment Method indicators and field observations, NWW-1 was classified as an intermittent stream.

3.2.1.7.3 Other Waters

The aquatic resources delineation identified four other waters (OW) and one upland swale (USW-1) (Figure 3.2-3). OW-01, OW-02, OW-03, and OW-04 are human-made earthen features intended for conveying runoff from stormwater or irrigation for the surrounding agricultural operations. The highest elevation within the Study Area appears to be centrally located, with surface runoff flowing downslope in all directions. Evidence of an OHWM was observed within the other waters, including but not limited to natural line impressed on the bank; changes in the character of soil; presence of litter and debris; destruction of terrestrial vegetation; vegetation matted down, bent, or absent; bed and banks; standing water; and change in plant community and/or cover.

Other Waters 01 (OW-01)

OW-01 is within the northern section of the Study Area and comprises 0.09 acres (1,274.02 linear feet). It appears this feature obtains water from the adjacent uplands from the south and west in the form of upland run off. This feature continues west until it reaches a culvert and is diverted northeast on downhill gradient. Plant species identified within OW-01 include annual willowherb (*Epilobium brachycarpum*; FAC), slender oat (UPL), bermudagrass (*Cynodon dactylon*; FACU), bull thistle (*Cirsium vulgare*; FACU), Himalayan blackberry (*Rubus armeniacus*; FAC), black mustard (*Brassica nigra*; UPL), and poison hemlock (*Conium maculatum*; FACW).

Other Waters 02 (OW-02)

OW-02 is within the eastern section of the Study Area and comprises 0.01 acres (373.38 linear feet). It appears this feature obtains water from the adjacent uplands from the northwest in the form of upland runoff from agricultural irrigation and precipitation events. The feature flows northeast to southeast out of the Study Area then back into the Study Area towards the potential wetland. Plant species identified within OW-02 include tall bristly oxtongue (*Helminthotheca echioides*; FAC), tall flatsedge (FACW), bermudagrass (FACU), Italian rye grass (UPL), and burclover (*Medicago polymorpha*; FACU).

Other Waters 03 (OW-03)

OW-03 is located on the southern boundary of the Study Area and comprises 0.53 acres (1,946.32 linear feet). It appears this feature obtains water from upland runoff from the northwest. This feature continues along the western border of the Study Area where riparian vegetation was observed briefly and was denoted as top of bank (TOB) (Figure 5). Plants within the top bank included Himalayan blackberry (FAC), arroyo willow (FACW), and floating primrose willow (*Ludwigia peploides*; OBL). Additional plant species identified within OW-03 include slender oat (UPL), tall flatsedge (FACW), rescuegrass (*Bromus catharticus*; UPL), cultivated radish (*Raphanus sativus*; UPL), and calamus (*Acorus calamus*; OBL). During the field delineation, OW-03 had standing water. Additionally, OW-3 was mapped in NHD and NWI and appears to be connected to the Pacific Ocean through tributaries such as the Salsipuedes Creek and Pajaro River.

Other Waters 04 (OW-04)

OW-04 is within the northern section of the Study Area and comprised 0.04 acres (389.19 linear feet). It appears this feature obtains water from the adjacent uplands from the south in the form of upland run off. This feature continues to flow north on a downhill gradient. Plant species identified within OW-04 include Himalayan blackberry (FAC), slender oat (UPL), Bermuda grass (FACU), and coyote brush (UPL).

Upland Swale 1 (USW-1)

In addition to the other waters described above, the aquatic resources delineation identified one upland swale (USW-1) within the Study Area (Figure 3.2-3), which comprises 0.004 acres (84.01 linear feet). USW-1 is a shallow, linear landscape feature that conveys diffuse surface runoff from adjacent uplands during precipitation events. Unlike the other waters mapped within the Study Area, USW-1 does not exhibit a defined bed and bank or an OHWM. Field observations indicated that the swale functions as an upland drainage feature, with flow occurring only during or immediately following storm events. Vegetation within USW-1 is dominated by upland and facultative upland species, and soils lacked hydric indicators such as low-chroma matrices, redox features, or surface muck. No indicators of sustained or seasonal saturation were observed.

3.2.1.7.4 Waters of the State (RWQCB and CDFW)

The Dudek biologists delineated aquatic resources potentially subject to RWQCB and CDFW jurisdiction pursuant to the CWA Section 401, Porter–Cologne Act, and CFGC Section 1600, respectfully. An additional 0.22 acres of riparian vegetation was delineated that may be subject to CDFW jurisdiction pursuant to CFGC Section 1600. Findings regarding state jurisdiction are preliminary until verified by the appropriate agencies.

Riparian Vegetation (RIP-1)

Riparian vegetation was identified and delineated within the southwestern portion of the gen-tie alignment Study Area comprising a total of 0.22 acres, where it is associated with the intermittent stream feature (NWW-1) and adjacent freshwater shrub wetland (WET-1) (Figure 3.2-3). The riparian area was mapped based on observable shifts in vegetation composition, structure, and density relative to surrounding upland plant communities, consistent with CDFW guidance and CFGC Section 1600 et seq.

The riparian vegetation community occurs primarily along the banks and adjacent flood-prone areas of NWW-1 and within portions of the adjacent drainage corridor where hydrophytic and facultative species dominate. This area

supports a distinct assemblage of woody and herbaceous vegetation adapted to periodic inundation and elevated soil moisture conditions. Dominant riparian species include arroyo willow (FACW), California blackberry (FAC), and Himalayan blackberry (FAC), with an understory of hydrophytic and facultative species such as dotted smartweed (OBL), tall flatsedge (FACW), spreading rush (FAC), and watercress (OBL). These species form a patchy to moderately dense riparian corridor that contrasts with adjacent upland scrub vegetation dominated by facultative upland and upland species.

The extent of riparian vegetation was delineated in the field using changes in dominant species composition, canopy cover, and groundcover density, as well as observed transitions from hydrophytic and facultative species to upland vegetation types. Areas dominated by upland species such as coyote brush, poison oak, slender oat, and other FACU or upland indicators were excluded from the riparian boundary. The riparian boundary generally coincides with, but extends beyond, the ordinary high-water mark of NWW-1 in select locations where riparian vegetation persists on adjacent banks and floodplain surfaces.

Riparian vegetation was mapped as a separate resource and is **not combined** with wetland, NWW, or OW acreages. While riparian areas do not constitute waters of the United States (WOTUS) under the CWA (33 CFR Part 328; 40 CFR 120.2), it may be considered a sensitive biological and or aquatic resource and may be subject to CDFW jurisdiction pursuant to CFGC Section 1602 when associated with streams, rivers, or lakes.

3.2.1.8 Sensitive and Special-Status Plant Species

The biological reconnaissance surveys of the Study Area included an assessment to determine if the Study Area contains suitable habitat to support special-status plants identified in the literature and database review. The literature and database review identified a total of 47 special-status and rare plant species with known occurrence records in the eight-quadrangle review area, which were included in the assessment (CDFW 2026, CNPS2026a; USFWS2026). Species included in the literature and database review, and assessment include plant species that are considered endangered, rare, or threatened under CEQA Guideline 15380 (14 CCR 15000 et seq.). A list of all special-status plant species known to occur in the U.S. Geological Survey 7.5-minute quadrangle where the Study Area is located and the surrounding seven quadrangles, including their habitat requirements, potential to occur on-site, and survey observations, is provided in Appendix 3.2A. This appendix provides evaluations for each of the special-status species' occurrence in the Study Area, and their potential to occur based on known range, habitat associations, preferred soil substrate, life form, elevation, and blooming period.

Evaluation of these species was based on known geographic range, elevation, soil conditions, habitat preferences, life-history requirements, blooming periods, and current site conditions, as well as results of field surveys. As summarized in Appendix 3.2A, Special-Status Species Potential to Occur Tables, 45 of the 47 special-status plant species evaluated are not expected to occur within the Study Area due to the absence of suitable habitat, incompatible elevation ranges, lack of appropriate soils, or the highly disturbed nature of the site resulting from long-term agricultural use and development. In many cases, required habitat types, such as intact valley and foothill grassland, coastal prairie, chaparral, coastal scrub, sandy or serpentine soils, marshes, or vernal pools, are absent from the Study Area.

Two special-status plant species—Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) and Santa Cruz tarplant (*Holocarpha macradenia*)—were determined to have a low potential to occur within limited portions of the Study Area (Appendix 3.2A, Special-Status Species Potential to Occur Tables). Congdon's tarplant is a California Rare Plant Rank 1B.1 species associated with valley and foothill grassland, particularly in alkaline settings, and Santa Cruz tarplant is federally listed as threatened, state listed as endangered, and is generally associated with coastal prairie,

coastal scrub, and valley and foothill grassland, often on clay or sandy soils. Neither species was observed during surveys, and the Study Area does not contain the intact native grassland communities typically associated with either species. Instead, site conditions are characterized by extensive disturbance, dominance of nonnative vegetation, fragmentation of grassland habitat, and long-term agricultural use. Existing annual grassland within the gen-tie area is limited in extent, occurs in small fragmented patches along disturbed edges, and is interspersed with orchard, riparian, scrub, and developed land covers, such that it does not provide the quality, continuity, or landscape context generally associated with occupied habitat for these species. Any potential occurrence would therefore be limited to small, localized microsites, such as disturbed grassland edges, orchard margins, or exposed areas with reduced vegetative cover and lower competition from dense nonnative vegetation. While Congdon's tarplant has been documented less than 0.5 miles from the Study Area, and Santa Cruz tarplant has been recorded within approximately 2 miles of the Study Area, the lack of suitable, intact habitat within the project footprint precludes a substantial likelihood of occurrence (Appendix 3.2A, Special-Status Species Potential to Occur Tables).

No special-status plant species were observed during the biological reconnaissance, jurisdictional delineation, and California red-legged frog and northwestern pond turtle habitat assessment surveys. A list of plant species observed in the Study Area during the surveys is presented in Appendix 3.2C. Formal focused rare plant surveys consistent with applicable survey guidelines would be conducted during the appropriate blooming periods in 2026 to further evaluate the potential presence of special-status plant species within areas identified as having low potential. Results of these rare plant surveys would be documented in a subsequent technical memorandum or appendix and would be used to confirm or refine the occurrence determinations presented herein. Findings from the surveys would be incorporated into the final impact analysis, as appropriate. Special-status plant species that are not expected to occur are not further analyzed in this document.

3.2.1.9 Sensitive and Special-Status Wildlife Species

A literature and database review was conducted to identify special-status wildlife species known from the U.S. Geological Survey 7.5-minute topographic quadrangle where the project occurs and surrounding seven quadrangles. This regional records search identified 60 special-status wildlife species for consideration in the assessment (Appendix 3.2A, Special-Status Species Potential to Occur Tables). These records were used to develop the regional species list only; potential to occur determinations were based on habitat conditions within the Study Area, results of the biological reconnaissance and jurisdictional delineation surveys, and species-specific life-history requirements.

The majority of the species evaluated were determined to be not expected to occur within the Study Area due to the absence of suitable habitat, lack of breeding or roosting features, incompatible hydrologic conditions, or the disturbed and fragmented nature of the site resulting from long-term agricultural use and development. Many species require intact native grasslands, coastal or marsh habitats, perennial aquatic systems, woodland or forested habitats, or specialized soil or vegetation conditions that are not present within the Study Area.

. Based on habitat conditions and proximity to documented occurrences, a limited number of species were determined to have low potential to occur including California red-legged frog, California tiger salamander, foothill yellow-legged frog, Santa Cruz black salamander, California giant salamander, tricolored blackbird, white-tailed kite, and pallid bat. One special-status reptile, northwestern pond turtle, has a moderate potential to occur.

California Red-legged Frog and Northwestern Pond Turtle Habitat Assessments

California Red-legged Frog (*Rana draytonii*)

California red-legged frog is listed as threatened under both the federal Endangered Species Act and the California Endangered Species Act. As summarized in Appendix 3.2A, California red-legged frog is associated with lowland streams, wetlands, riparian woodlands, and livestock ponds, typically where deep, still, or slow-moving water and dense shrubby or emergent vegetation provide breeding and refuge habitat; adjacent uplands may also be used for dispersal and seasonal refuge. To evaluate the potential for California red-legged frog to occur within the Study Area, Dudek reviewed regional occurrence records, assessed habitat conditions documented during the biological reconnaissance and jurisdictional delineation surveys, and conducted a habitat assessment on May 6, 2026, focused on aquatic, riparian, and adjacent upland features within the Study Area and nearby aquatic features in the vicinity of the Study Area that could inform the likelihood of dispersal into the Study Area. Features reviewed within the Study Area included the intermittent stream (NWW-1), freshwater shrub wetland (WET-1), PW-01, upland swales, associated riparian vegetation, adjacent annual grassland, and orchard lands. Off-site aquatic features evaluated during the May 6, 2026 habitat assessment included College Lake, Pinto Lake, and Corralitos Creek; Kelly Lake was inaccessible but was reviewed using aerial imagery. No California red-legged frogs were observed during surveys or the habitat assessment. Raw datasheets for the California red-legged frog habitat assessment can be found in Appendix 3.2F, Biological Datasheets.

California red-legged frog occurs in the regional vicinity of the Study Area, but no records are documented within 1 mile of the Study Area. Most California Natural Diversity Database occurrences are located southwest of Freedom Boulevard, with the nearest record observed in 2017 approximately 2.5 miles southwest of the Study Area (Occurrence No. 1,596; CDFW 2026). Within the Study Area, some aquatic and upland features are present that could provide limited refuge or dispersal habitat, including the intermittent stream, freshwater shrub wetland, PW-01, upland swales, riparian vegetation, and adjacent uplands. However, habitat quality within the Study Area is marginal overall. In particular, the intermittent stream would not be considered typical breeding habitat for California red-legged frog because it lacks deep, plunge-like pools suitable for egg deposition and larval development. At the time of the jurisdictional delineation, the feature was mostly dry, and the delineation did not identify riffle-pool sequencing or other indications of persistent surface water or prolonged saturation typically associated with dependable breeding habitat. Because the stream is intermittent, flow is seasonal and dependent on rainfall and site hydrology, which substantially reduces the likelihood of successful breeding. The freshwater shrub wetland, PW-01, and associated low-lying features may provide localized shelter or short-term moisture conditions during wetter periods, but they are limited in extent, isolated within a disturbed agricultural landscape, and do not provide the combination of persistent aquatic conditions and habitat complexity typically associated with higher-quality breeding habitat. Although California red-legged frog can disperse through uplands, the presence of dispersal habitat alone does not indicate a strong likelihood of occupancy. In addition, the nearest documented California red-legged frog occurrence is farther from the site than the nearest northwestern pond turtle record, and intervening agricultural development, roads, and residential land uses likely constrain movement between known occupied areas and the Study Area. Nearby off-site aquatic features, including College Lake, Pinto Lake, Corralitos Creek, and potentially Kelly Lake, provide regional context and may support suitable habitat in the surrounding landscape; however, the potential to occur determination applies only to habitat within the Study Area. Accordingly, California red-legged frog is considered to have a low potential to occur within the PSA because the site provides only marginal refuge and dispersal habitat and does not contain dependable breeding habitat.

Northwestern Pond Turtle (*Actinemys marmorata*)

Northwestern pond turtle is federally proposed for listing as threatened and is designated as a California Species of Special Concern. As summarized in Appendix 3.2A, northwestern pond turtle is associated with slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent or exposed basking sites, and uses adjacent uplands for nesting, overwintering, and overland movement. To evaluate the potential for northwestern pond turtle to occur within the Study Area, Dudek reviewed regional occurrence records, assessed habitat conditions documented during the biological reconnaissance and jurisdictional delineation surveys, and conducted a habitat assessment on May 6, 2026, focused on aquatic, riparian, and adjacent upland features within the Study Area and nearby aquatic features in the vicinity of the Study Area that could inform the likelihood of movement into the Study Area. Features reviewed within the Study Area included the intermittent stream (NWW-1), freshwater shrub wetland (WET-1), PW-01, upland swales, associated riparian vegetation, adjacent annual grassland, and orchard lands. Off-site aquatic features evaluated during the May 6, 2026 habitat assessment included College Lake, Pinto Lake, and Corralitos Creek; Kelly Lake was inaccessible but was reviewed using aerial imagery. No northwestern pond turtles were observed during surveys or the habitat assessment.

Northwestern pond turtle occurs in the regional vicinity of the Study Area and has been documented relatively close to the site. The nearest record is a 1988 occurrence mapped to Pinto Lake, approximately 0.35 miles west of the Study Area (Occurrence No. 491; CDFW 2026), and an additional occurrence is mapped approximately 600 feet south of Corralitos Creek (Occurrence No. 537; CDFW 2026). Within the Study Area, the freshwater shrub wetland, intermittent stream, PW-01, associated riparian vegetation, and adjacent uplands could provide limited foraging, basking, refuge, or dispersal opportunities for northwestern pond turtle. Although these on-site aquatic features are limited in extent, seasonal in nature, and do not represent high-quality permanent aquatic habitat, they may still be used opportunistically by individuals moving through the surrounding landscape. In contrast to California red-legged frog, northwestern pond turtle does not rely on specific breeding hydroperiod conditions within the Study Area to the same degree and is generally more capable of using nearby permanent aquatic habitat in combination with adjacent uplands for movement, nesting, and opportunistic site use. Nearby aquatic features provide important regional context for this determination. College Lake, immediately adjacent to the site, supports suitable aquatic habitat including emergent vegetation, potential basking structure, and adjacent undeveloped uplands that may provide nesting habitat. Pinto Lake, approximately 0.35 miles west of the Study Area, is a perennial waterbody that provides suitable aquatic and adjacent upland habitat and increases the likelihood that pond turtles could move through or use portions of the Study Area. Corralitos Creek also provides suitable aquatic habitat, and Kelly Lake appears to support suitable habitat based on aerial imagery. Although no northwestern pond turtles were observed during the May 6, 2026 habitat assessment, the combination of nearby suitable aquatic habitat, documented occurrences in the surrounding area, and limited but potentially usable aquatic and upland features within the Study Area supports a moderate potential for northwestern pond turtle to occur within the Study Area.

No sensitive or special-status wildlife species were observed during biological reconnaissance, jurisdictional delineation, and California red-legged frog and northwestern pond turtle habitat assessment surveys. Pre-construction surveys, wildlife exclusion fencing, and biological monitoring, as described in Section 3.2.4, would be implemented during project construction to further evaluate conditions and avoid potential impacts to sensitive wildlife species, if present.

3.2.1.10 Wildlife Corridors and Habitat Linkages

Wildlife movement corridors have been recognized by federal and state agencies as important habitats worthy of conservation. Wildlife corridors provide migration channels seasonally (i.e., between winter and summer habitats) and provide non-migrant wildlife with the opportunity to move within their home range for food, cover, reproduction, and refuge. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

The Study Area does not overlap with any California Essential Habitat Connectivity Areas or Natural Landscape Block or Natural Landscape Block (CDFW 2014, 2017). Although the Study Area and its immediate surroundings may allow for some localized wildlife movement, they do not provide a meaningful linkage between larger undeveloped habitat blocks at the local or regional scale. The Study Area is situated within a predominantly altered landscape characterized by active agricultural land uses and existing development. Lands to the south and east of the Study Area appear to be largely agricultural, including orchards, cultivated fields, and associated drainage features, while lands to the north and west appear more developed and include existing infrastructure, substation facilities, roads, residential land uses, and other urbanized or disturbed areas. As a result, the Study Area is not situated between, nor does it connect, large contiguous blocks of intact natural habitat that would be expected to function as a landscape-scale wildlife linkage. Any wildlife movement through the area is therefore expected to be limited to opportunistic, localized movement by species tolerant of disturbed agricultural and semi-developed settings, rather than regular movement through a defined corridor. In addition, the narrow and discontinuous riparian and aquatic features present within the gen-tie area do not provide a continuous connection to larger natural habitat cores and are not of sufficient width, habitat quality, or landscape context to function as an established regional corridor. More substantial movement pathways occur elsewhere in the region, including along the Pajaro River corridor to the south and in other more intact natural drainages and open space areas outside the Study Area. Accordingly, the Study Area is considered to have limited linkage value on a landscape scale, and the Project would not be expected to create a substantial barrier to wildlife movement or interfere with any established regional wildlife corridor.

3.2.2 Impact Analysis

Potential direct, indirect, and cumulative impacts to biological resources were evaluated to determine the potential permanent and temporary effects of construction, operation, maintenance, and decommissioning of the proposed project. Results from the field surveys, habitat evaluations, and literature and database review were evaluated to address these potential impacts for sensitive biological resources within the Study Area.

Section 3.2.2, contained herein, identifies the biological resources that may be affected directly or indirectly and may have temporary or permanent impacts. These impact categories are defined as follows:

Direct. The CEQA defines direct impacts as those that result from activities of the project and occur at the same time and place.. Direct impacts to biological resources may result from Project-related activities such as vegetation removal, grading, trenching, pole installation, and other ground-disturbing activities. For this project, direct impacts would be associated with construction and decommissioning activities within the BESS facility site and the gen-tie area.

Indirect. CEQA defines indirect impacts as impacts that are caused by the project but do not occur at the same time, rather at a different but reasonably foreseeable future time. Indirect impacts associated with the proposed project include effects to biological or aquatic resources from construction-, operation-, maintenance-, or decommissioning-related activities, such as, noise, lighting, dust, human activity, vibration, erosion, or other changes in site conditions that could affect adjacent habitat or wildlife use..

Permanent. All impacts that result in the irreversible removal of biological resources are considered permanent. Permanent impacts for the proposed project are those such as the permanent conversion of undeveloped land associated with the construction of the BESS facility site and associated access facilities.

Temporary. Temporary impacts are considered to have reversible effects on biological resources. Examples of temporary impacts associated with the proposed project include temporary construction laydown areas and temporary access along the gen-tie line.

Direct, permanent impacts refer to the absolute and permanent physical loss of a biological resource due to clearing, grading, and construction of a project. Direct, permanent impacts are analyzed in four ways: (1) permanent loss of vegetation communities, land covers, and general wildlife and their habitat; (2) permanent loss of or harm to individuals of special-status plant and wildlife species; (3) permanent loss of suitable habitat for special-status species; and/or (4) permanent loss of wildlife movement and habitat connectivity.

Direct, temporary impacts refer to a temporal loss of vegetation communities and land covers resulting from vegetation and land cover clearing and grading associated with implementation of a project. The main criterion for direct, temporary impacts is that impacts occur for a short period of time and are reversible.

3.2.2.1 CEQA Appendix G Assessment Criteria

Factors typically used to evaluate the significance of project-related impacts are set forth in Appendix G of the CEQA Guidelines. CEQA Guidelines Appendix G is a screening tool, not a method for setting thresholds of significance. Appendix G is typically used in the Initial Study phase of the CEQA process, asking a series of questions to determine whether a project requires an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration.

As the Governor's Office of Planning and Research stated, "Appendix G of the Guidelines lists a variety of potentially significant effects but does not provide a means of judging whether they are indeed significant in a given set of circumstances." The answers to the CEQA Guidelines Appendix G questions are not determinative of whether an impact is significant or less than significant. Nevertheless, the questions presented in CEQA Guidelines Appendix G are instructive. Potentially significant biological impacts resulting from the project were assessed by the following criteria, which ask whether the project would result in the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as endangered, threatened, candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by CDFW or USFWS?
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS?
- Have a substantial adverse effect on federal or state protected WOTUS (including wetlands) as defined by Sections 404 and 401 of the 1972 Amendments to the Federal Water Pollution Control Act, commonly

known as the CWA, or the Porter–Cologne Act, either through direct removal, filling, hydrological interruptions, or other means?

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory native wildlife corridors or impede the use of wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?

CEQA Section 15380 also provides that a plant or animal species may be treated as "rare or endangered" even if the species is not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future.

The following impact analysis includes project impacts to biological resources as a result of the construction, operation and maintenance, and decommissioning of the project, including the BESS facility, associated infrastructure (e.g., access roads), and gen-tie line. For each of the following impact sections, direct and indirect impacts for biological resources are identified and a significance determination is made for each impact. For each significant impact, mitigation measures that would reduce the impact to less than significant are proposed.

Criterion 3.2-1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as endangered, threatened, candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by CDFW or USFWS?

Direct Impacts

Special-Status Plants

Less than Significant Impact. A total of 47 special-status plant species were evaluated for potential occurrence within the Study Area based on database review, habitat requirements, elevation range, soil conditions, regional distribution, and results of biological reconnaissance and jurisdictional delineation surveys (Appendix 3.2A, Special-Status Species Potential to Occur Tables). Of these species, 45 were determined to be "not expected to occur" due to the absence of suitable habitat, incompatible elevation ranges, lack of appropriate soils, or substantial site disturbance associated with long-term agricultural use and development (Appendix 3.2A, Special-Status Species Potential to Occur Tables).

Two special-status plant species, Congdon's tarplant and Santa Cruz tarplant, were determined to have a low potential to occur within limited portions of the Study Area (Appendix 3.2A, Special-Status Species Potential to Occur Tables). For both species, overall site conditions represent poor habitat quality due to extensive disturbance, dominance of nonnative vegetation, fragmentation of grassland habitat, and historical agricultural activities. Suitable habitat, if present at all, would be limited to small, localized microsites such as disturbed grassland edges, orchard margins, or exposed areas with reduced vegetative cover.

No special-status plant species were observed during biological reconnaissance and habitat assessment surveys conducted in 2024 and 2026, nor during jurisdictional delineation fieldwork within the Study Area. In addition, project construction would primarily affect orchards and urban/developed land cover types, which do not support native or special-status plant communities.

Therefore, even under a conservative assumption that isolated individuals of either low-potential species could occur within marginal habitat areas, project construction, operation, maintenance, and decommissioning is unlikely to result in the direct removal or mortality of special-status plants. As such, direct impacts to special-status plant species would be **less than significant**, and no mitigation measures specific to special-status plants are required.

Special-Status Wildlife

Less than Significant with Mitigation. Construction activities have the potential to result in direct impacts to special-status wildlife species through vegetation removal, ground disturbance, and work within or adjacent to aquatic features. As summarized in Appendix 3.2A, Special-Status Species Potential to Occur Tables, the majority of special-status wildlife species evaluated for the project were determined to be "not expected to occur" due to the absence of suitable habitat within the Study Area. However, based on habitat conditions and proximity to documented occurrences, a limited number of species were determined to have low potential to occur, including California red-legged frog, California tiger salamander, foothill yellow-legged frog, Santa Cruz black salamander, California giant salamander, tricolored blackbird, white-tailed kite, and pallid bat. Only one special-status wildlife species was determined to have a moderate potential to occur: northwestern pond turtle.

Aquatic features within the Study Area, including an intermittent stream, freshwater shrub wetland, upland swales, and associated riparian vegetation, together with adjacent annual grassland and orchard land covers, may provide marginal dispersal, foraging, refuge, or seasonal use habitat for certain amphibian, reptile, and bird species. However, these features are limited in extent, highly modified, and generally do not provide high-quality or sustained breeding habitat. Initial ground-disturbing activities conducted during environmental conditions favorable for amphibian or reptile movement, such as mild temperatures and moist conditions, could result in direct impacts to dispersing or transient individuals of amphibians or reptiles, if present.

Trees and other woody vegetation within the Study Area also provide suitable nesting habitat for resident and migratory bird species, including species protected under the Migratory Bird Treaty Act (MBTA) and applicable sections of the CFGC. Construction activities, including vegetation removal or disturbance during the nesting season, could result in direct impacts to nesting birds through nest disturbance or loss if avoidance measures are not implemented.

With implementation of MM-BIO-1, which requires nesting bird avoidance and protection; MM-BIO-2, which requires wildlife exclusion fencing and pre-construction clearance surveys; MM-BIO-3, which requires biological monitoring during initial vegetation removal, clearing, grading, excavation, and other ground-disturbing activities; MM-BIO-4, which requires environmental awareness training for construction personnel; and MM-BIO-5, which requires construction BMPs to protect sensitive biological resources, the potential for direct impacts to special-status wildlife species would be avoided or minimized. Therefore, direct impacts to special-status wildlife would be **less than significant with mitigation**. See Section 3.2.4 for discussion of proposed mitigation measures.

Indirect Impacts

Indirect impacts are reasonably foreseeable effects caused by a project's implementation on remaining or adjacent biological resources outside of the direct disturbance zone that may occur during grading activities

(i.e., short-term, construction-related, indirect impacts) or later in time as a result of a project (i.e., long-term, or operational, indirect impacts). Short-term, indirect impacts can include dust, human activity, pollutants (including potential erosion), and noise that extend beyond the identified construction area. Long-term, indirect impacts can include changes to hydrology, introduction of invasive species, dust, and noise that are operations related or occur over the long term. In most cases, indirect effects are not quantified, but in some cases, quantification might be included, such as using a noise contour to quantify indirect impacts to nesting birds.

Special-Status Plants

No Impact. Indirect impacts to special-status plant species may include effects to individuals or habitat outside the immediate construction footprint as a result of fugitive dust, edge effects, introduction of invasive species, changes in hydrology, or accidental encroachment into adjacent areas. As documented in Appendix 3.2A, Special-Status Species Potential to Occur Tables, 45 of the 47 special-status plant species evaluated are not expected to occur within the Study Area due to the absence of suitable habitat, incompatible elevation ranges, lack of appropriate soils, or extensive historical disturbance associated with agricultural use.

Project construction activities would not alter surrounding habitats in a manner that would reduce the viability of off-site special-status plant populations. Potential indirect effects such as dust generation, edge disturbance, or spread of invasive species would be minimized through implementation of standard construction BMPs, including dust control, equipment sanitation, and strict adherence to defined work limits. In addition, the project would not result in changes to site hydrology or soil conditions that could indirectly affect special-status plant habitat beyond the construction footprint.

Given the no to low potential for special-status plants to occur, the highly disturbed nature of the Study Area, and the absence of suitable habitat supporting population-level persistence, the project would not indirectly affect special-status plant species. Therefore, indirect impacts to special-status plants would result in **no impact**, and no mitigation is required.

Special-Status Wildlife

Less than Significant with Mitigation. Indirect impacts to special-status wildlife species may occur as a result of project construction and operation activities that extend beyond the immediate footprint of direct disturbance. Such impacts are typically associated with short-term construction-related stressors, including increased human activity, noise, vibration, artificial lighting, fugitive dust, erosion, and the potential introduction of pollutants. These effects can influence wildlife behavior or habitat use in areas adjacent to active construction, even where habitat is not physically altered.

During construction, increased human presence and equipment activity may result in temporary avoidance of otherwise suitable habitat by wildlife species occurring within or adjacent to the Study Area. Construction noise and vibration may disrupt normal activity patterns, including foraging, movement, or breeding behavior, particularly for sensitive bird species during the nesting season. Artificial lighting associated with early morning or evening construction activities could alter nocturnal or crepuscular wildlife behavior, including bat foraging activity. Fugitive dust, erosion, or sediment transport could indirectly affect aquatic and riparian habitats if uncontrolled, potentially reducing habitat quality for species using these features.

The northwestern pond turtle, a special-status reptile with moderate potential to occur within the Study Area, could be indirectly affected if construction-related erosion, sedimentation, or runoff reaches aquatic features or upland habitats used for dispersal or seasonal refuge.

Indirect impacts to special-status birds, including tricolored blackbird and white-tailed kite, as well as other resident and migratory birds protected under the MBTA and CFGC, may occur if construction activities generate noise or disturbance near active nests or suitable nesting habitat. Nest abandonment, reduced reproductive success, or temporary displacement from habitat could occur if construction activities are not properly timed or buffered during the breeding season. Vegetation removal, equipment staging, and ongoing human presence near trees or riparian vegetation may also contribute to indirect disturbance during nesting periods.

With implementation of MM-BIO-1 through MM-BIO-5, potential indirect impacts to special-status wildlife species would be short-term, localized, and reversible, and would not result in a substantial adverse effect on wildlife populations or the habitats on which they depend. Additionally, project transmission facilities would be designed consistent with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) where feasible. Transmission facilities would also be evaluated for potential collision reduction devices in accordance with Reducing Avian Collisions with Power Lines: The State of Art in 2012 (APLIC 2012). Therefore, indirect impacts to special-status wildlife would be **less than significant with mitigation**.

Criterion 3.2-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS?

Direct Impacts

Less than Significant with Mitigation. Direct impacts to riparian habitat and other sensitive natural communities would primarily be associated with construction of project infrastructure, including grading for the BESS facility, installation of the underground gen-tie line, pole installation, wire stringing, and construction of permanent access roads. The project would result in approximately 14.96 acres of permanent impacts and approximately 0.85 acres of temporary impacts to vegetation communities and land cover types within the Study Area (see Table 3.2-2).

The majority of permanent and temporary impacts would occur within orchards and urban/developed land covers, which are not considered sensitive natural communities by CDFW. Temporary impacts would be limited to construction laydown areas within previously disturbed upland areas and would be fully reversible following construction.

Direct impacts to riparian or aquatic-associated features would be limited in extent and confined to a single drainage ditch (OW-03), where construction of a permanent access road would cross the feature. This crossing would result in approximately 0.006 acres of permanent impacts to the OHWM/TOB of the drainage ditch. These impacts represent a localized modification of a highly disturbed, human-made drainage feature and would not result in a substantial loss of riparian habitat continuity or function at the watershed scale.

No impacts are proposed to riparian or other sensitive natural communities and would therefore not result in fragmentation of riparian corridors, degradation of downstream habitat connectivity, or conversion of

native riparian vegetation to non-biological land uses. No permanent impacts to high-quality or regionally significant riparian habitat are proposed.

With implementation of MM-BIO-6 through MM-BIO-9, regulatory permitting and compensatory mitigation, construction buffers, erosion and sediment controls, and restoration of temporarily disturbed areas would collectively avoid, minimize, and offset project impacts such that direct effects on riparian habitat and other sensitive natural communities would be **less than significant with mitigation**.

Table 3.2-2. Potential Impacts to Vegetation Communities and Land Covers in the Study Area

CDFW Alliance	Vegetation Community or Land Cover Type	CDFW Sensitive	Ranking	Potential Temporary Impacts (Gross Acreages)	Potential Permanent Impacts (Gross Acreage)
N/A	Orchard	No	N/A	0.80	14.84
N/A	Urban/Developed	No	N/A	0.05	0.12
32.060.00	*Baccharis pilularis – Toxicodendron diversilobum* Association	No	S5	N/A	0.001
N/A	Unvegetated Wash or Riverchannel	No	N/A	N/A	0.006
			Total[a]	**0.85**	**14.96**

Notes: CDFW = California Department of Fish and Wildlife; N/A = not applicable.
[a] Totals may not sum due to rounding.

Indirect Impacts

Less than Significant. Potential indirect impacts to riparian habitat and other sensitive natural communities could include short-term effects from construction-related dust, human activity, erosion, or the introduction of invasive species. As shown in Table 3.2-2, project-related vegetation impacts are largely confined to orchards and urban/developed land covers, with only a minimal permanent impact to non-sensitive vegetation communities and no temporary impacts to riparian or other sensitive natural communities.

Indirect impacts to aquatic or riparian features could occur if erosion or sedimentation from adjacent construction areas were to reach downstream resources; however, such effects would be minimized through implementation of standard construction BMPs, including erosion and sediment controls required under the project Stormwater Pollution Prevention Plan (SWPPP), clearly defined work limits, and maintenance of construction buffers around aquatic resources.

Because sensitive riparian habitats within the Study Area are limited in extent and largely avoided by project design, and because construction-related indirect effects would be localized, temporary, and effectively managed through applicable BMPs, indirect impacts to riparian habitat and other sensitive natural communities would be **less than significant**.

Criterion 3.2-3 Would the project have a substantial adverse effect on federal or state protected WOTUS (including wetlands) as defined by Sections 404 and 401 of the 1972 Amendments to the Federal Water Pollution Control Act, commonly known as the Clean Water Act, or the Porter-Cologne Act, either through direct removal, filling, hydrological alteration, or other means?

Direct Impacts

Less than Significant with Mitigation**.** Based on the findings of the jurisdictional delineations, the Study Area contains approximately 1.23 acres of aquatic resources, including wetlands, non-wetland waters, other waters, and associated riparian vegetation that may be subject to jurisdiction by the USACE, RWQCB, and CDFW. These resources include Potential Wetland PW-01, Freshwater Shrub Wetland WET-1, Intermittent Stream NWW-1, Other Waters OW-01 through OW-04, Upland Swale USW-1, and Riparian Vegetation RIP-1. Direct impacts to these resources could result from filling, grading, excavation, trenching, or other ground-disturbing activities within or adjacent to jurisdictional features. In addition, excessive dust generated during construction could adversely affect adjacent riparian and wetland vegetation. Excessive dust can decrease the vigor and productivity of vegetation through effects on light penetration, photosynthesis, respiration and transpiration, increased penetration of phytotoxic gaseous pollutants, and increased incidence of pests and diseases.

Project construction would be largely confined to upland areas; however, one permanent impact to a jurisdictional aquatic feature is anticipated. Construction of a secondary access road would result in a permanent impact of approximately 0.006 acres to the OHWM/TOB of Other Water OW-03, a human-made drainage ditch located along the southern boundary of the project site. This impact represents the worst-case design scenario assuming full grading and fill associated with a 30-foot-wide access road crossing the feature.

Because OW-03 exhibits an OHWM and is hydrologically connected to downstream waters ultimately discharging to the Pajaro River and Pacific Ocean, the impacted portion of the feature is anticipated to be subject to RWQCB jurisdiction under Section 401 of the CWA and Porter–Cologne, and CDFW jurisdiction under CFGC Section 1602. An Approved Jurisdictional Determination request has been submitted to the USACE to confirm whether aquatic features within the Study Area are subject to USACE jurisdiction under Section 404 of the CWA. The project Applicant would follow up with USACE and would update this analysis and any required permitting, as appropriate, once the Approved Jurisdictional Determination is received.

No direct impacts are proposed to wetlands (PW-01 or WET-1), the intermittent stream (NWW-1), or the upland swale (USW-1). All aquatic features would otherwise be avoided by project design through the use of setbacks, underground installation of the gen-tie where feasible, and placement of facilities within previously disturbed or agricultural areas.

With implementation of MM-BIO-6 (Jurisdictional Waters Permitting and Compensation), the project Applicant would obtain all required approvals from the RWQCB and CDFW prior to ground disturbance. Compensatory mitigation for permanent impacts to jurisdictional waters would be provided at a minimum 1:1 ratio (or higher, as required by permitting agencies), through the purchase of approved mitigation bank credits or an agency-approved turnkey mitigation project. Upon completion of permitting and mitigation, direct impacts to jurisdictional waters would be reduced to less than significant.

Table 3.2-3. Summary of Potential Impacts to Potential Jurisdictional Waters

Feature ID	Feature Type	RWQCB and CDFW Jurisdiction (OHWM + TOB)	
		Potential Temporary Impact (Gross Acreage)	Potential Permanent Impact (Gross Acreage)
Other Waters			
OW-03	Other Water	0.0	0.006
	RWQCB and CDFW Total	**0.0**	**0.006**

Notes: RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife; OHWM = ordinary high water mark; TOB = top of bank.

Indirect Impacts

Less than Significant. Potential indirect impacts to jurisdictional waters could include short-term effects from construction-related erosion, generation of fugitive dust, sedimentation, or accidental discharge of chemical pollutants (including herbicides). Excessive dust can decrease the vigor and productivity of vegetation through effects on light, penetration, photosynthesis, respiration and transpiration, increased penetration of phytotoxic gaseous pollutants, and increased incidence of pests and diseases. Erosion and chemical pollution (releases of fuel, oil, lubricants, paints, release agents, and other construction materials) may degrade downstream aquatic resources if not properly controlled.

However, during construction, erosion-control measures would be implemented as part of the project SWPPP. The erosion measures would be maintained until all graded areas meet permit completion requirements. Prior to the start of construction activities, the Contractor would be required to file a Permit Registration Document with the State Water Resources Control Board to obtain coverage under the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No. 2009-009-DWQ, National Pollutant Discharge Elimination System No. CAS000002) or the most current version of the general permit. This permit is required for earth-disturbing activities resulting in the disturbance of 1 acre or more of land area.

The required SWPPP would mandate the implementation of BMPs to reduce or eliminate construction-related pollutants in the runoff, including sediment control measures for all exposed soils. BMPs may include, but are not limited to, installation of sediment control devices, stabilization of disturbed soils, proper materials handling, and routine inspection, and maintenance of erosion and sediment controls.

With implementation of these regulatory requirements and BMPs, potential indirect impacts to federal or state-protected waters would be temporary, localized, and effectively minimized, and would not result in a substantial adverse effect on water quality or aquatic resource function. Therefore, indirect impacts to jurisdictional waters would be **less than significant**.

Criterion 3.2-4 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 native wildlife corridors or impede the use of wildlife nursery sites?

Less than Significant. Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise

isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The Study Area does not overlap with any California Essential Habitat Connectivity Areas or Natural Landscape (CDFW 2014, 2017). The Study Area and immediate surroundings provide opportunities for wildlife movement across the landscape, but they do not provide a linkage between larger undeveloped habitat blocks. Additionally, the Study Area is not recognized as an important regional wildlife corridor by any state agency or jurisdiction and is of limited linkage value on a landscape scale. Lastly, it does not function as a wildlife corridor for movement between the Santa Cruz Mountains and the Pacific Ocean, as there are larger more established linkages in the area such as the Pajaro River to the south. Therefore, the project would have no impact on wildlife movement corridors or habitat linkages.

Although limited riparian habitat occurs within the proposed gen-tie area, these features are narrow, disturbed, and discontinuous, and do not function as established wildlife movement corridors or habitat linkages at a local or regional scale.

During construction activities, temporary disturbance to local species may occur but would not substantially degrade the quality or use of the vegetation communities in the vicinity of the project. Some indirect impacts to localized wildlife movement could occur during construction activities due to construction-related noise. However, this impact would be temporary and would not be expected to significantly disrupt wildlife movement during and following construction activities.

During operation of the project, the BESS, substation, and gen-tie are not expected to create a substantial new barrier between open natural lands to the east and west of the Study Area. As mentioned under Criterion 3.2-1, the project transmission facilities would be designed consistent with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) and be evaluated for potential collision reduction devices, so bird migration through the Study Area may continue.

Therefore, direct and indirect impacts on wildlife corridors and migratory routes resulting from the proposed project would be **less than significant**.

Criterion 3.2-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The Santa Cruz County Code (SCCC) ordinances provide protection and conservation for sensitive biological resources such as protected trees, sensitive habitats, and setbacks from riparian corridors. The project would not conflict with any local policies or ordinances protecting biological resources.

The BESS portion of the Study Area is predominantly composed of orchards and urban/developed land covers, which are not considered sensitive habitats under SCCC Chapter 16.32, Sensitive Habitat Protection. Although native riparian vegetation is present within portions of the gen-tie area, the project would avoid direct impacts to riparian habitat and would comply with all applicable riparian setback requirements under SCCC Chapter 16.30. Project design incorporates setbacks from riparian features, and construction activities within the gen-tie area would be confined to areas outside required setback distances.

The proposed access road crossing would occur over a man-made drainage ditch located within the BESS portion of the Study Area, which does not support riparian habitat and is not subject to riparian setback requirements under SCCC Chapter 16.30. Therefore, construction of the access road would not conflict with local riparian protection policies.

In addition, the orchards on the BESS facility site consist of apple trees planted for agricultural production and do not qualify as protected trees under SCCC Chapter 16.34, Significant Trees Protection. No protected trees would be removed or impacted by the project.

Accordingly, the project would comply with all applicable local policies and ordinances protecting biological resources, including riparian protection and tree preservation requirements, and would result in **no impact** under CEQA.

Criterion 3.2-6 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 Study Area is not within any HCP, NCCP, or other approved local, regional, or state HCP (CDFW 2023). The nearest plan area, the Santa Clara Valley Habitat Plan Area, occurs approximately 5 miles east of the Study Area. HCPs and NCCPs within 10 miles of the Study Area are shown in Figure 3.2-8, HCP and NCCP. Therefore, the project would have **no impact** on any HCP, NCCP, or other approved local, regional, or state HCP.

3.2.3 Cumulative Effects

Cumulative effects on biological resources because of past, present, and reasonably foreseeable future actions, in combination with the project, can result from loss of habitat and habitat disturbance and degradation. A cumulative impact refers to a project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the facility (Public Resource Code [PRC] Section 21083; 14 CRR 15064(h), 16065(c), 15130, and 15355). Cumulative impacts from the project are expected to be **less than significant**, particularly with project implementation of Mitigation Measures included in Section 3.2.4 below. With these Mitigation Measures, project-related impacts would not be cumulatively considerable.

3.2.4 Mitigation Measures

The following section describes the measures that are intended to avoid and minimize potential adverse effects of the project to biological resources.

3.2.4.1 Mitigation Measures for Construction, Operation, Maintenance, and Decommissioning

The following section presents avoidance, minimization, and mitigation measures to avoid, minimize, or mitigate potentially significant impacts to all special-status plant and wildlife species and other sensitive biological or aquatic resources during the construction, operation, maintenance and decommissioning phases of the proposed project.

MM-BIO-1 Nesting Bird Avoidance and Protection. Project construction shall be conducted in compliance with the conditions set forth in the MBTA and CFGC consistent with methods approved by CDFW to protect active bird/raptor nests. Vegetation removal shall occur outside the nesting season (generally February 1 through August 31) to the maximum extent feasible.

If initial ground disturbance must occur during the nesting season, a qualified biologist shall conduct a pre-construction survey for nesting birds and/or raptors within three days prior to any work within 300 feet of suitable nesting habitat for passerines and within 500 feet for suitable nesting habitat for raptors. If the biologist does not find any active nests the Project activity shall be allowed to proceed.

If the biologist finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or that breeding activities may be substantially disrupted, the biologist shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped which will be included in the report(s) documenting the survey(s) that will be submitted to the California Energy Commission (CEC) upon completion of the survey. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the biologist: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be up to 300 feet for nesting passerines and up to 500 feet for nesting raptors), unless otherwise determined by the biologist and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the biologist. Encroachment into the buffer area around a known nest shall only be allowed if the biologist determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the biologist has determined that fledglings have left the nest, or the nest has failed.

MM-BIO-2 Wildlife Exclusion Fencing and Pre-Construction Clearance Surveys. Prior to initiation of ground-disturbing activities, temporary wildlife exclusion fencing shall be installed around aquatic features, drainage ditches, freshwater shrub wetlands, and adjacent orchard or upland areas where special-status amphibians and reptiles may disperse. A qualified biologist shall conduct pre-construction clearance surveys within suitable environmental conditions to confirm the absence of northwestern pond turtle within the fenced work areas.

MM-BIO-3 Biological Monitoring During Construction. A qualified biological monitor shall be present during initial clearing, grading, excavation, and other ground-disturbing activities occurring within or adjacent to suitable habitat for special-status wildlife or nesting birds. The biological monitor shall have the authority to halt construction activities if sensitive wildlife is observed or if mitigation measures are not properly implemented.

MM-BIO-4 Environmental Awareness Training. Prior to the start of construction, all construction personnel shall receive environmental awareness training covering identification of sensitive wildlife species, avoidance and minimization procedures, reporting protocols, and applicable regulatory protections. Training shall emphasize the importance of compliance with mitigation measures and legal protections for wildlife.

MM-BIO-5 Construction Best Management Practices (BMPs). The project applicant shall ensure that the following conditions are implemented during project construction to minimize potential impacts to sensitive species:

1. Employees shall strictly limit their activities, vehicles, equipment, and construction materials to the aproved project footprint.
2. To avoid attracting predators of covered species, the project site shall be kept as clean of debris the greatest extent practicableto. All food related trash items shall be enclosed in sealed containers and regularly removed from the site.
3. Pets of project personnel shall not be allowed on the project site.
4. Disposal or temporary placement of excess fill, brush or other debris shall not be allowed in WOTUS or their banks.
5. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas outside of WOTUS within the existing roadways and vehicle access routes.

MM-BIO-6 Jurisdictional Waters Permitting and Compensation. Prior to initiation of ground-disturbing activities that would impact jurisdictional aquatic resources, the Project Applicant shall obtain all required authorizations from the appropriate regulatory agencies. For permanent impacts to approximately 0.006 acres of OHWM/TOB associated with construction of an access road crossing a drainage ditch (OW-03), required approvals shall include, as applicable:

- A Waste Discharge Requirement or Section 401 Water Quality Certification from the Central Coast RWQCB; and
- A Lake and Streambed Alteration Agreement pursuant to Section 1602 of the CFGC.

Compensatory mitigation for permanent impacts to jurisdictional aquatic resources shall be implemented at a minimum 1:1 ratio, or at a higher ratio if required by the permitting agencies. Mitigation may be achieved through the purchase of approved mitigation bank credits or through an agency-approved turnkey or permittee-responsible mitigation project. Final mitigation requirements shall be determined through agency consultation during the permitting process.

MM-BIO-7 Aquatic Resource Protection and Construction Buffers. Prior to construction, the limits of jurisdictional aquatic resources and approved impact areas shall be clearly delineated in the field using environmentally sensitive fencing or flagging. Construction activities, equipment staging, and vehicle access shall be limited to approved work areas, and no encroachment into aquatic resources beyond the permitted impact footprint shall be allowed. A qualified biological monitor shall verify installation of protective fencing prior to construction in areas adjacent to aquatic resources and shall periodically inspect fencing during construction to ensure integrity is maintained.

MM-BIO-8 Erosion, Sediment, and Water Quality Controls. To minimize indirect impacts to aquatic and riparian resources, erosion and sediment control measures shall be implemented in accordance

with the Project SWPPP and applicable construction permits. Measures shall include, but are not limited to:

- Installation of sediment control devices (e.g., silt fencing, fiber rolls) downgradient of disturbed areas;
- Stabilization of exposed soils as soon as practicable following construction; and
- Proper management of construction materials, fuels, and equipment to prevent releases into waters of the state.

Erosion and sediment controls shall be maintained until disturbed areas are stabilized.

MM-BIO-9 Restoration of Temporarily Disturbed Areas. All areas temporarily disturbed during construction, including laydown areas and access routes outside permanent infrastructure footprints, shall be restored to pre-construction conditions or to a condition consistent with surrounding land use following completion of construction. Restoration shall include removal of temporary facilities, regrading, and stabilization of soils to prevent erosion.

3.2.5 Laws, Ordinances, Regulations, and Standards

The following subsections within Section 3.2.5 describe the LORS that apply to potential impacts on biological resources in the project site and list the agencies responsible for enforcing the regulations. A summary of the applicable federal, state, and local LORS is provided in Table 3.2-4.

Table 3.2-4. LORS Applicable to Biological Resources

LORS	Applicability	Conformity	Opt-In Application Reference
Federal			
FESA (16 USC 1531 et seq.)	Designates and protects federally threatened and endangered plants and wildlife and their critical habitat. Applicants for projects that could result in adverse impacts on any federally listed species are required to consult with and mitigate potential impacts in consultation with USFWS.	**Yes.** Federally threatened and endangered species were evaluated for the project. The Study Area is highly disturbed and does not provide suitable habitat for federally listed species; none were observed during reconnaissance or jurisdictional delineation surveys. With implementation of avoidance and minimization measures (e.g., pre-construction surveys where appropriate, established work limits/buffers, seasonal restrictions, and biological monitoring), the project would avoid take and adverse effects; therefore, the project conforms with the FESA.	Section 3.2.1.4 Section 3.2.1.8 Section 3.2.1.9 Section 3.2.1.10 Criterion 3.2-1 Section 3.2.5.1
CWA (Sections 404 and 401)	Protects surface water quality in the U.S.; prevents pollution of rivers, streams, wetlands, lakes, and coastal waters by regulating how pollutants are discharged into those waters.	**Yes.** The project conforms with the CWA by avoiding impacts to wetlands and Section 404 waters to the maximum extent feasible and by identifying the single permanent impact to a jurisdictional drainage feature for permitting. Prior to ground disturbance, the project would obtain RWQCB authorization (e.g., Section 401 Water Quality Certification/WDR, as applicable) and coverage under the NPDES Construction General Permit, and would implement an approved SWPPP with BMPs to minimize erosion, sedimentation, and pollutant discharges. With compliance with permit conditions and any required compensatory mitigation, the project would not violate the CWA.	Section 3.2.1.7 Criterion 3.2-3
MBTA (16 USC 703 to 711)	Protects all migratory birds, including nests and eggs.	**Yes.** The project would comply with the MBTA by implementing MM-BIO-1 and related measures, including seasonal work scheduling to the extent feasible, pre-construction nesting bird surveys, establishment and enforcement of appropriate avoidance buffers around active nests, and biological monitoring during applicable activities. These measures would avoid take of migratory birds and disturbance of active nests.	Section 3.2.1.10 Criterion 3.2-1 Section 3.2.4.1
Bald and Golden Eagle Protection Act (16 USC 668)	Specifically protects bald and golden eagles from harm or trade in parts of these species.	**Yes.** No suitable bald or golden eagle nesting habitat occurs within the Study Area, and no eagle nests were identified during surveys. The project would implement MM-BIO-1 (seasonal work scheduling to the extent feasible, pre-construction nest surveys, and avoidance buffers), which would avoid disturbance to any raptors that may occur in the broader vicinity.	Section 3.2.1.11 Criterion 3.2-1 Section 3.2.5.1
State			
CESA (CFGC Section 2050 et seq.)	Species listed under this act cannot be “taken” or harmed, except under specific permit. Take in the context of CEQA means to hunt, pursue, kill, or capture as well as any other actions that may result in an adverse impact when attempting to take a listed species.	**Yes.** State-listed species and potential habitats were evaluated for the project. No state-listed plant or wildlife species were observed, and suitable habitat is limited and marginal within the disturbed Study Area. The project would implement avoidance and minimization measures (e.g., pre-construction clearance surveys where appropriate, exclusion fencing, work limits/buffers, seasonal restrictions, and biological monitoring) to avoid take.	Section 3.2.1.4 Section 3.2.1.8 Section 3.2.1.9 Criterion 3.2-1 Section 3.2.5.2

Table 3.2-4. LORS Applicable to Biological Resources

LORS	Applicability	Conformity	Opt-In Application Reference
CFGC 3511	Describes bird species, primarily raptors that are FP (Fully Protected). FP birds may not be taken or possessed, except under specific permit requirements.	**Yes.** FP bird species were considered in the analysis. No take of FP birds is anticipated because the project does not remove suitable nesting habitat for FP raptors and would implement pre-construction nest surveys and avoidance buffers consistent with MM-BIO-1.	Section 3.2.1.4 Section 3.2.1.9 Criterion 3.2-1 Section 3.2.3.2
CFGC Section 3503	States that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.	**Yes.** The project would comply with CFGC Section 3503 by avoiding take or destruction of active nests and eggs through seasonal work scheduling to the extent feasible, pre-construction nesting bird surveys, and establishment of buffers around active nests consistent with MM-BIO-1. These measures would prevent take and nest disturbance during construction.	Section 3.2.1.10 Criterion 3.2-1 Section 3.2.5.2
CFGC Section 3503.5	It is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation made pursuant thereto.	**Yes.** The project would comply with CFGC Section 3503.5 by implementing MM-BIO-1, including raptor-focused pre-construction nest surveys (as appropriate), establishment of protective buffers around active raptor nests, and restrictions on work that could disturb nesting birds of prey. These measures would avoid take and nest disturbance.	Section 3.2.1.10 Criterion 3.2-1 Section 3.2.5.2
CFGC Section 3513	It is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.	**Yes.** The project would comply with CFGC Section 3513 by implementing MBTA-consistent nesting bird avoidance measures (MM-BIO-1), including pre-construction surveys and avoidance buffers for active nests. With these measures, take or possession of migratory nongame birds would be avoided.	Section 3.2.1.10 Criterion 3.2-1 Section 3.2.5.2
CFGC Sections 351, 4700, 5050, and 5515	Lists bird, mammal, amphibian, reptile, and fish species that are FP in California.	**Yes.** FP species were considered in the analysis. No take is anticipated because the project footprint is largely within disturbed/agricultural areas, avoids high-quality habitat, and implements pre-construction surveys/clearance, exclusion fencing (where applicable), and biological monitoring to avoid impacts to sensitive wildlife. Therefore, the project conforms with applicable FP species provisions.	Section 3.2.1.4 Section 3.2.1.9 Criterion 3.2-1 Section 3.2.5.2
NPPA CFGC Sections 1900 et seq.	Lists threatened, endangered, and rare plants listed by the State.	**Yes.** State-listed and rare plants were evaluated, and two were determined to have low potential to occur within the project footprint based on habitat conditions and survey results. Where applicable, pre-construction surveys and clearly defined work limits/buffers would further avoid impacts to any unanticipated special-status plants. Therefore, the project conforms with the NPPA.	Section 3.2.1.4 Section 3.2.1.8 Criterion 3.2-1 Section 3.2.5.2
CFGC Sections 1900 et seq.	Lists endangered or rare native plants of the State and establishes criteria for determining rarity or listing status.	**Yes.** Rare and endangered native plants were evaluated for potential occurrence. No listed rare plants were observed during the biological reconnaissance survey or jurisdictional delineation efforts. Only two species were determined to have low potential to occur within the project footprint. Implementation of work limits and avoidance measures would further reduce the potential for inadvertent impacts. Therefore, the project conforms with CFGC Sections 1900 et seq.	Section 3.2.1.8 Criterion 3.2-1 Section 3.2.5.2

Table 3.2-4. LORS Applicable to Biological Resources

LORS	Applicability	Conformity	Opt-In Application Reference
Title 14 CCR, Sections 670.2 and 670.5	Lists animals designated as threatened or endangered in California.	**Yes.** State-listed threatened and endangered wildlife species were evaluated. The project would implement avoidance and minimization measures (e.g., pre-construction surveys/clearance where appropriate, exclusion fencing, buffers, seasonal restrictions, and biological monitoring) to avoid take. If authorization is required under the CEC Opt-In process, it would be obtained prior to ground disturbance. Therefore, the project conforms with Title 14 CCR Sections 670.2 and 670.5.	Section 3.2.1.9 Criterion 3.2-1 Section 3.2.5.2
CFGC Sections 1601-1611	Prohibits alteration of any stream, including intermittent and seasonal channels and many artificial channels without a permit from CDFW.	**Yes.** Aquatic resources potentially subject to CDFW jurisdiction were identified during the delineation (including features associated with OW-03 and NWW-1 and adjacent riparian vegetation). Prior to any work that could affect these resources, the project would obtain the appropriate authorization (e.g., a Lake and Streambed Alteration Agreement or CEC-administered equivalent under AB 205) and would implement required avoidance buffers and compensatory mitigation, as applicable. With these measures, the project is consistent with CFGC Sections 1601–1611.	Section 3.2.1.8 Criterion 3.2-3 Section 3.4.2.1 Section 3.2.5.2
CEQA Public Resources Code (PRC) Sections 2100, et seq. and CEQA Guidelines (14 C.C.R. 15000, et seq.)	CEQA requires that the effects of a project on environmental resources must be analyzed and assessed using criteria determined by the lead agency.	**Yes.** Biological resources were evaluated using applicable CEQA Appendix G criteria and CEC significance determinations, and avoidance, minimization, and mitigation measures were identified where required. Accordingly, the project conforms with CEQA requirements for environmental review and impact disclosure.	Section 3.2.1.7 Section 3.2.2.2 Section 3.2.5.2
Warren–Alquist Act 25000, et seq.	A CEQA-equivalent process implemented by the CEC.	**Yes.** The project's environmental analysis and mitigation measures are being prepared consistent with the CEC's CEQA-equivalent review process under the Warren–Alquist Act. Therefore, the project conforms with the Act's requirements for environmental evaluation and decision-making.	Section 3.2.2.2 Section 3.2.5.2
California Assembly Bill 205	Emergency regulation expanding the CEC's siting authority for renewable energy projects. Allows certification in lieu of CDFW 2081 Incidental Take Permit or CFGC Section 1600 et seq. Lake and Streambed Alteration Agreement.	**Yes.** The project is proceeding under the CEC Opt-In (AB 205) process, which provides for CEC-administered certification in lieu of certain CDFW authorizations (e.g., incidental take authorization and/or CFGC Section 1600 agreements), as applicable. The project would coordinate with the CEC and obtain any required authorizations and implement associated avoidance, minimization, and mitigation measures. Therefore, the project conforms with AB 205.	Throughout the opt-in application

Table 3.2-4. LORS Applicable to Biological Resources

LORS	Applicability	Conformity	Opt-In Application Reference
Porter–Cologne Water Quality Control Act	Regulates discharge of waste to waters of the state (including stormwater, fill, and water quality impacts).	**Yes.** The project is expected to require authorization from the Central Coast RWQCB under the Porter–Cologne Water Quality Control Act, as applicable, for discharges to waters of the State (including stormwater discharges and any discharge associated with work in or near waters). The Applicant (and its construction contractor) would be responsible for securing required RWQCB approvals and implementing any associated avoidance, minimization, monitoring, and mitigation requirements; preparation of permit application materials and plans would be completed by appropriately qualified professionals (e.g., a Qualified SWPPP Developer and/or qualified environmental specialist), as applicable.	Section 3.2.1.7.4 Criterion 3.2-3
Local			
Santa Cruz County General Plan	The Santa Cruz County 2024 General Plan update guides and regulates land use and development in unincorporated Santa Cruz County. Chapter 5 presents a framework for the conservation and sustainable management of agricultural land, natural and cultural resources, and open space in Santa Cruz County for today's residents and future generations.	**Yes.** The project is consistent with applicable General Plan goals and policies related to biological resources and open space because impacts are largely limited to agricultural and developed areas, sensitive resources are avoided to the extent feasible, and required mitigation and permitting (as applicable) would be implemented for the limited impacts to jurisdictional resources.	Section 3.2.5.3.1
SCCC Chapters: 16.30, 16.32, 16.34	Protection of biological resources is included in the County's Code of Ordinances, specifically Chapter 16.30 related to riparian corridor setbacks; Chapter 16.32 which protects sensitive habitats; and Chapter 16.34 which protects significant trees.	**Yes.** The project is consistent with SCCC Chapters 16.30 (riparian setbacks), 16.32 (sensitive habitats), and 16.34 (significant trees) because it avoids sensitive habitats to the extent feasible, complies with applicable riparian setback requirements, and does not impact protected/significant trees. Orchard trees within the project site are agricultural in nature and are not protected under the County's significant tree ordinance. Accordingly, the project conforms with applicable local biological resource ordinances.	Criterion 3.2-5

Notes: FESA = federal Endangered Species Act; USFWS = U.S. Fish and Wildlife Service; CWA = Clean Water Act; RWQCB = Regional Water Quality Control Board; WDR = Waste Discharge Requirement; NPDES = National Pollutant Discharge Elimination System; SWPPP = Stormwater Pollution Prevention Plan; BMP = best management practice; MBTA = Migratory Bird Treaty Act; MM = mitigation measure; CESA = California Endangered Species Act; CFGC = California Fish and Game Code; CEQA = California Environmental Quality Act; FP = Fully Protected; NPPA = Native Plant Protection Act; CCR = California Code of Regulations; CEC = California Energy Commission; CDFW = California Department of Fish and Wildlife; PRC = Public Resources Code; AB = Assembly Bill; SCCC = Santa Cruz County Code.

3.2.5.1 Federal

3.2.5.1.1 Federal Endangered Species Act (16 USC 153 et seq.)

The FESA of 1973 (16 USC 1531 et seq.), as amended, is administered by the USFWS for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and to provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. The FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under the FESA, it is unlawful to "take" any listed species, and "take" is defined as, "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

The FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of HCPs on private property without any other federal agency involvement.

Federally threatened and endangered plants and animals are analyzed herein. No federally-listed plant or wildlife species were observed within the Study Area, and suitable habitat for listed species is limited and marginal. Pre-construction surveys, wildlife exclusion fencing, and biological monitoring would be implemented to avoid take. As designed and mitigated, the project complies with the CESA.

3.2.5.1.2 Migratory Bird Treaty Act (16 USC 703 to 711)

The MBTA (16 USC 703 et seq.), as amended, prohibits the intentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so. In December 2017, Department of the Interior Principal Deputy Solicitor Jorjani issued a memorandum (M-37050) that interprets the MBTA's "take" prohibition to apply only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs. Unintentional or accidental take is not prohibited. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The Executive Order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

Potential impacts to nesting migratory birds would be avoided through seasonal work restrictions, pre-construction nesting bird surveys, establishment of buffers, and biological monitoring. With implementation of MM-BIO-1 and related measures, the project is consistent with federal bird protection statutes.

3.2.5.1.3 Bald and Golden Eagle Protection Act (16 USC 668)

The Bald and Golden Eagle Protection Act (16 USC 668–668c), enacted in 1940, and amended several times since, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, includes their parts, nests, or eggs. The Act provides criminal penalties for person who "take, possess, sell, purchase, bater, offer to sell, transport, export or import, at any time or any manner, any bald eagle… [or any golden

eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, kill, wound, capture, trap, collect, molest or disturb."

In addition to being protected by the Bald and Golden Eagle Protection Act, golden eagles are a FP species in California (FGC 3511).

There are no California Natural Diversity Database records of golden eagle nesting within 10 miles of the Study Area (CDFW 2026). No eagle or other raptor nests were identified within the Study Area during the biological reconnaissance surveys. The Study Area and surrounding area do not contain the habitat characteristics (i.e., cliffs or large trees in open areas) associated with nesting by golden eagle, so nesting by the species is not expected. Additionally, the species would not be expected to nest in areas where a variety of human activity occur because the adults of the species have been documented to flush from nest when those activities happen within 1,000 meters of the nest (Spaul and Heath 2017). The activities within the agricultural lands and residential neighborhoods surrounding the Study Area are expected to deter golden eagle from nesting within sight of these areas. Potential nesting in the Santa Cruz Mountains to the northeast of the site are not expected to be visible from the Study Area, and activities during construction would not affect any potential nesting. The species could forage or migrate through the Study Area but the project transmission facilities' design would be consistent with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) wherever feasible. Transmission facilities would also be evaluated for potential collision reduction devices in accordance with Reducing Avian Collisions with Power Lines: The State of Art in 2012 (APLIC 2012).

No eagle nesting habitat occurs within the Study Area. With implementation of MM-BIO-1 and related measures, the project is consistent with federal eagle protection statutes.

3.2.5.2 State

3.2.5.2.1 California Endangered Species Act

CESA (CFGC Sections 2050–2068) provides protection and prohibits take of plant, fish, and wildlife species listed by the State of California. Unlike the FESA, under the CESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to the FESA and is prohibited for both listed and candidate species. Incidental Take authorization may be obtained by a project applicant from CDFW under CESA Section 2081, which also allows take of a listed species for educational, scientific, or management purposes. In this case, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of implementation, and monitoring of mitigation measures.

State threatened and endangered plants and wildlife are analyzed herein. No state-listed plant or wildlife species were observed within the Study Area, and suitable habitat for listed species is limited and marginal. Pre-construction surveys, wildlife exclusion fencing, and biological monitoring would be implemented to avoid take. As designed and mitigated, the project complies with the CESA.

3.2.5.2.2 California Fish and Game Code

Sections 3500, 3511, and 3513

Section 3503 of the CFGC states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that FP birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA.

Implementation of avoidance and minimization measures, including timing restrictions, pre-construction surveys, avoidance buffers for active nests, and biological monitoring would prevent impacts to nesting migratory and FP birds.

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the CFGC outline protection for FP species of mammals, birds, reptiles, amphibians, and fish. Species that are FP by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the take of any FP species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as a Species of Special Concern, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

FP species were considered in the analysis. No take is anticipated because the project footprint is largely within disturbed/agricultural areas, avoids high-quality habitat, and plans to implement pre-construction surveys/clearance, exclusion fencing (where applicable), and biological monitoring to avoid impacts to sensitive wildlife.

Section 1600–1616

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of a definable bed and banks and existing fish or wildlife resources. CDFW takes jurisdiction to the top of bank of the stream or the limit of the adjacent riparian vegetation, which may include oak woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under CFGC Sections 1600–1616, CDFW has the authority to regulate work that would substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. CDFW also has the authority to regulate work that would deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects. Applications to CDFW must include a complete, certified CEQA document. The CEC Stands in the shoes of CDFW in ensuring compliance with the substantive requirements of the Lake or Streambed Alteration Agreement program.

Aquatic resources potentially subject to CDFW jurisdiction were identified during the delineation (including features associated with OW-03 and NWW-1 and adjacent riparian vegetation). Prior to any work that could affect these resources, the project would obtain the appropriate authorization (e.g., a Lake and Streambed Alteration Agreement or CEC-administered equivalent under Assembly Bill 205), and would implement required avoidance buffers and compensatory mitigation, as applicable.

3.2.5.2.3 California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (see Section 1900 et seq. of the CFGC) directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare," and to protect endangered and rare plants from take. The CESA expanded on the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the CFGC. To align with federal regulations, the CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the CESA as threatened species but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in the CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the project proponent.

State-listed and rare plants were evaluated, and only two were determined to have low potential to occur within the project footprint based on habitat conditions and survey results. Where applicable, pre-construction surveys and clearly defined work limits/buffers would further avoid impacts to any unanticipated special-status plants.

3.2.5.2.4 Porter–Cologne Water Quality Control Act

Pursuant to provisions of the Porter–Cologne Act, the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code Section 13260[a]). The State Water Resources Control Board defines a water of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]). As of April 2019, the State Water Resources Control Board has narrowed its definition of a water of the state to include the following (SWRCB 2021):

1. Natural wetlands
2. Wetlands created by modification of a surface water of the state
3. Artificial wetlands that meet any of the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration.
    b. Specifically identified in a water quality control plan as a wetland or other water of the state.
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape.
    d. Greater than or equal to 1 acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining – even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or

distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

All WOTUS are waters of the state. Wetlands, such as isolated seasonal wetlands, that are not generally considered WOTUS are considered waters of the state if, "under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation" (SWRCB 2021). If a CWA Section 404 permit is not required for the project, the Central Coast RWQCB may still require a permit (Waste Discharge Requirements [WDRs]) for impacts to waters of the state under the Porter–Cologne Act.

The project is expected to be subject to WDRs from the Central Coast RWQCB. Permits. The Applicant and its construction contractor would be responsible for obtaining all required RWQCB approvals prior to ground disturbance and for implementing applicable permit conditions, including monitoring and reporting requirements, as necessary.

As discussed under Criterion 3.15-1 within Section 3.15, Water Resources, the project is unlikely to encounter shallow groundwater, and construction dewatering is not anticipated. However, should groundwater be encountered during construction and dewatering becomes necessary, any discharge to the land surface or to a storm drain or other receiving feature would be conducted in accordance with applicable RWQCB requirements (e.g., of General WDRs or other applicable authorizations) and in a manner that maintains compliance with the Basin Plan. If required, the Applicant and/or its contractor would submit the necessary application materials to the Central Coast RWQCB (e.g., a Notice of Intent to comply with these General WDRs, project description and map, a copy of the CEQA document, the requisite fee, a discharge monitoring plan, and any additional information requested by the Central Coast RWQCB). Please refer to Criterion 3.15-1 for additional details.

Additionally, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. For additional details regarding groundwater, please refer to Criterion 3.15-2 within Section 3.15, Water Resources, for additional details.

3.2.5.2.5 Plants and Animals of California Declared to be Endangered or Threatened (Title 14, CCR, Sections 670.2 and 670.5)

These codes list plants and animals designated as threatened or endangered in California. State Species of Special Concern is a category conferee by CDFW of those species that are indicators of regional habitat change or are considered potential future protected species. These species do not have any species legal status but are intended by CDFW for use as a management tool to take these species into special consideration when decisions are made concerning the future of any land parcel.

State-listed threatened and endangered plant and wildlife species were evaluated. The project would implement avoidance and minimization measures (e.g., pre-construction surveys/clearance where appropriate, exclusion fencing, buffers, seasonal restrictions, and biological monitoring) to avoid take. If authorization is required under the CEC Opt-In process, it would be obtained prior to ground disturbance.

3.2.5.2.6 California Environmental Quality Act (PRC Sections 21000 et seq.)

CEQA requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare animal or plant is defined in Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of "Special Species" as "a general term that refers to all of the taxa the California Natural Diversity Database is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under the FESA, CESA, and other CFGC provisions, and includes lists developed by other organizations, including, for example, the Audubon Watch List Species. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on the CDFW Special Species list. Additionally, CDFW has concluded that plant species listed as California Rare Plant Rank 1 and 2 by the California Native Plant Society, and potentially some California Rare Plant Rank 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines requires an evaluation of impacts to "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 the U.S. Fish and Wildlife Service."

Project environmental resources would be analyzed pursuant to CEQA.

3.2.5.2.7 Warren–Alquist Act (PRC Sections 25000, et seq.)

The application for certification process is a certified regulatory process pursuant to the Warren–Alquist Act and, therefore, fulfills the requirements of CEQA. CEQA is codified in the California PRC, Sections 21000, et seq. Guidelines for implementation of CEQA are codified in Title 14 of the California Code of Regulations, Sections 15000-15387.

Project environmental resources would be analyzed pursuant to CEQA.

3.2.5.2.8 California Energy Commission – Assembly Bill 205

Assembly Bill 205 is an emergency regulation expanding the CEC's siting authority for renewable energy projects constructed on or before June 30, 2029. Assembly Bill 205 was signed into law on June 30, 2022, and allows renewable and energy storage projects to apply for direct state permits through the CEC. CEC certification opt-in statute (specifically 25545.1[b][1]) says "the issuance of a certificate by the commission for a site and related facility pursuant to this chapter shall be in lieu of any permit, certificate, or similar document required by any state,

local, or regional agency [except California Coastal Commission, San Francisco Bay Conservation and Development Commission, and State/Regional Water Quality Control Board] … for the use of the site and related facilities, and shall supersede any applicable statute, ordinance, or regulation of any state, local, or regional agency….”

3.2.5.3 Local

3.2.5.3.1 Santa Cruz County General Plan

The purpose of the Santa Cruz County General Plan/Local Coastal Program is to guide and regulate land use and development in unincorporated Santa Cruz County. Policies for the conservation and sustainable management of natural resources and agricultural land are essential to the conservation of open space, and policies protecting open space also reinforce the protection of natural resources. The following goals and policies are relevant to the Project and applicable to biological resources protection (Santa Cruz County 2024):

Goal ARC-3 Biological Resource Protection: Protect and restore biological resources, including unique, rare, threatened, and endangered plant and animal species and their habitats, that warrant preservation because of their biological and scientific values, contributions to open space, and importance in maintaining a healthy environment and mitigating the effects of climate change.

Objective ARC-3.1 Biological Diversity: To maintain the biological diversity of the County through an integrated program that includes open space acquisition and protection; identification and protection of plant habitat and wildlife corridors and habitats; protection and restoration of habitat for local, state, and federally protected species; careful regulation of low-intensity and resource compatible land uses in sensitive habitats; and mitigation for project impacts and resource extraction.

Policy ARC-3.1.3 Environmentally Sensitive Habitat Areas (ESHA): Evaluate sites proposed for development within the coastal zone for the presence of ESHA, within the categories of habitat areas described in ARC-3.1.2(d) through (j), and other categories that may meet the Coastal Act Section 30107.5 definition of ESHA. Areas confirmed to be ESHA may only be developed for uses dependent on such resources in these habitats within the Coastal Zone, unless the other uses are:

(1) Consistent with sensitive habitat protection policies and serve a specific purpose beneficial to the public;

(2) Determined through environmental review that any adverse impacts on the resource would be completely mitigated and there is no feasible less-damaging alternative; and

(3) Legally necessary to allow a reasonable economic use of the land, and there is no feasible less-damaging alternative.

Policy ARC-3.1.4 (LCP) Sensitive Habitat Protection Ordinance: Implement protection of sensitive habitats and of ESHA through SCCC Chapters 16.32 Sensitive Habitat Protection, 16.30 Riparian Corridor and Wetlands Protection, and 13.20 Coastal Zone Regulations. Any amendments to this ordinance shall require a finding that sensitive habitats shall be afforded equal or greater protection by the amended language.

Policy ARC-3.1.6 (LCP) Development Within Sensitive Habitats: Sensitive habitats shall be protected against any significant disruption of habitat values, and any proposed development within or

adjacent to these areas must maintain or enhance the functional capacity of the habitat. Reduce in scale, redesign, or, if no other alternative exists, deny any project that cannot sufficiently mitigate significant adverse impacts on sensitive habitats unless approval of a project is legally necessary to allow a reasonable use of the land.

Policy ARC-3.1.10 Species Protection: Recognize that habitat protection is only one aspect of maintaining biodiversity and that certain wildlife species, such as migratory birds, may not use specific habitats. Require protection of these rare, endangered, and threatened species and continue to update policies as new information becomes available.

Project impacts would be primarily confined to agricultural (orchard) and urban/developed areas, with no permanent conversion of sensitive natural communities or designated open space lands. The project site is largely characterized by active orchard operations and existing infrastructure, and project design has prioritized siting of facilities, access roads, and utility corridors within these agricultural landscapes to minimize encroachment into biological resources.

Sensitive biological resources, including wetlands, streams, riparian vegetation, and wildlife habitat, have been identified and avoided to the maximum extent feasible through project design refinements, setbacks, and construction methods. Where complete avoidance is not feasible, impacts are limited in extent, localized, and regulated, and would be addressed through applicable permitting and mitigation requirements under state and federal resource protection laws. These measures ensure the protection of biological resource functions, maintenance of habitat connectivity, and avoidance of unnecessary disturbance to native vegetation and wildlife.

The project would not result in fragmentation of regional open space, degradation of wildlife corridors, or substantial loss of biological resource values. Temporary construction-related effects would be minimized through implementation of BMPs, seasonal restrictions, and biological monitoring. Long-term operational conditions would not adversely affect sensitive habitats or open space resources.

With implementation of required avoidance measures, regulatory permits, and mitigation, the project protects biological resources to the extent feasible. Accordingly, the project is consistent with applicable General Plan goals and policies related to biological resource protection, habitat conservation, and open space preservation.

3.2.6 Permit and Permit Schedule

Based on the results of biological surveys, the aquatic resources delineation, and the impact analysis presented in Sections 3.2.1 through 3.2.5, the project is expected to require limited biological resource-related permits associated primarily with impacts to jurisdictional aquatic resources. The majority of project construction would occur within agricultural and developed areas and would not require discretionary biological permits; however, one permanent impact to a jurisdictional drainage feature has been identified.

As described under Criterion 3.2-3, construction of a secondary access road would result in a permanent impact of approximately 0.006 acres to the OHWM/TOB of Other Water OW-03, a human-made drainage ditch located along the southern boundary of the project site. This impact represents the conservative, worst-case design scenario and would trigger the need for regulatory authorization prior to construction.

Based on the current project design and identified impacts, the following permits or approvals are anticipated:

- Lake and Streambed Alteration Agreement pursuant to CFGC Section 1602, or a CEC-administered equivalent authorization under the AB 205 Opt-In process, for work affecting OW-03 and associated riparian resources, if applicable. A Lake and Streambed Alteration Agreement application package is included herein as Appendix 3.2D.
- Section 401 Water Quality Certification and/or WDRs from the Central Coast RWQCB pursuant to the CWA and the Porter–Cologne Water Quality Control Act, for discharges associated with permanent impacts to waters of the state and construction activities.
- Coverage under the National Pollutant Discharge Elimination System Construction General Permit for stormwater discharges associated with land-disturbing activities exceeding one acre, including preparation and implementation of a SWPPP.

An Approved Jurisdictional Determination request has been submitted to the USACE to confirm whether aquatic features within the Study Area are subject to USACE jurisdiction under CWA Section 404. If USACE determines that any proposed work would result in impacts to Section 404 waters, the project Applicant would obtain the appropriate federal authorization prior to ground disturbance and would update the permitting summary accordingly once the Approved Jurisdictional Determination is available.

3.2.7 Agency Contacts

Table 3.2-5 below lists regulatory agency contacts for biological resources for this project.

Table 3.2-5. Summary of the Applicable Federal, State, and Local LORS

Natural Resource	Agency	Contact Information
State-listed Species	CDFW – Region 3, Bay Delta	707.428.2002 Askbdr@wildlife.ca.gov
Federally-listed species	USFWS – Pacific Southwest Region, Ventura Field Office	805.644.1766 Chris dellith@fws.gov

Notes: CDFW = California Department of Fish and Wildlife; USFWS = U.S. Fish and Wildlife Service.

3.2.8 References

APLIC (Avian Power Line Interaction Committee). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington D.C. and Sacramento, California.

APLIC. 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Edison Electric Institute and APLIC. Washington, D.C.

CDFW (California Department of Fish and Wildlife). 2014. "Essential Connectivity Areas – California Essential Habitat Connectivity (CEHC) [ds620]." GIS data viewed on BIOS 6. CDFW Biogeographic Data Branch. Last updated in BIOS on January 13, 2014. Accessed November 2025. https://map.dfg.ca.gov/ metadata/ DS0620.html.

CDFW. 2017. "Natural Landscape Blocks – California Essential Habitat Connectivity (CEHC) [ds621]." GIS data viewed on BIOS 6. Prepared by Conservation Biology Institute for CDFW. Last updated in BIOS on October 4, 2017. Accessed November 2025. https://map.dfg.ca.gov/metadata/DS0621.html.

CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Populations and Sensitive Natural Communities. Accessed November 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959.

CDFW. 2023. California Natural Community Conservation Plans. Accessed November 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline.

CDFW. 2025a. California Sensitive Natural Communities. Accessed November 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline.

CDFW. 2025b. Vegetation Classification Reports and Maps. Accessed November 2025. https://wildlife.ca.gov/Data/VegCAMP/Reports-and-Maps.

CDFW. 2025c. State and Federally Listed Endangered, Threatened, and Rare Plants of California. Accessed November 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline.

CDFW. 2025d. Species of Special Concern. Sacramento, California: CDFW. Accessed November 2025. https://wildlife.ca.gov/Conservation/SSC.

CDFW. 2025e. Biogeographic Information and Observation System (BIOS); online viewer. Accessed November 2025. https://wildlife.ca.gov/Data/BIOS.

CDFW. 2025f. California Natural Community list. Sacramento, California: CDFW. Accessed November 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

CDFW. 2026. California Natural Diversity Database (CNDDB). RareFind 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed April 2026. https://nrmsecure.dfg.ca.gov/cnddb/Default.aspx.

CGS (California Geological Survey). 2002. California Geomorphic Provinces: Note 36. 4 pp. Accessed November 2025. https://koordinates.com/layer/97118-california-geomorphic-provinces/.

City of Watsonville. 2024. Urban Forest and Management Plan. https://www.watsonville.gov/DocumentCenter/View/23433/Item-11a-Urban-Forestry-Management-Plan—Resolution-68-24?bidId=. Accessed November 2024.

CNPS (California Native Plant Society). 2026a. Inventory of Rare and Endangered Plants (online edition, v8-03). Accessed April 2026.https://www.rareplants.cnps.org.

CNPS. 2026b. A Manual of California Vegetation, Online Edition. Accessed November 2025. https://www.cnps.org/vegetation.Dudek. 2024. Aquatic Resources Delineation Report. Seahawk Energy Storage Project. April 2026.

Dudek. 2026. Aquatic Resources Delineation Report Seahawk Battery Energy Storage System Project Santa Cruz *County, California.* Encinitas: California: Dudek. April 22, 2026.

Esri. 2025. "World Imagery" [basemap]. Scale Not Given. "World Topographic Map." Accessed November 2025. http://www.arcgis.com/home/item.html?id=30e5fe3149c34df1ba922e6f5bbf808f.

FEMA (Federal Emergency Management Agency). 2025. FEMA's National Flood Hazard Layer Viewer. [digital KMZ data]. Accessed November 2025. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd.

Google Earth. 2025. "Subject Property." Google Earth (Version 7). Mountain View, California: Google Earth Mapping Service. Accessed November 2025.

GreenInfo Network. 2025. California Protected Areas Database (CPAD) + California Conservation Easement Database (CCED); centered on the Project. Accessed April 2025. Available online at: https://www.mapcollaborator.org/cpad/.

Jepson Flora Project. 2025. Jepson eFlora. Berkeley, California: University of California. Accessed April 2025. http://ucjeps.berkeley.edu/interchange/.

Jones and Stokes (Jones & Stokes Inc). 1993. Methods used to survey the vegetation of Orange County parks and open space areas and The Irvine Company property. February 10, 1993 (JSA 92-032.).

NatureServe. 2025. Conservation Status Assessment, Identifying Threatened Species and Ecosystems. NatureServe. Accessed November 2025. https://www.natureserve.org/conservation-tools/conservation-status-assessment.

NRCS (Natural Resources Conservation Service). 2025. "California." State PLANTS Checklist. Accessed November 2025. http://plants.usda.gov/dl_state.html.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008. Accessed April 2025. https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/O14%202014-12-19_OberbauerTM2008.pdf.

Sawyer, J., T. Keeler-Wolf, and J. Evens. 2009. *A Manual of California Vegetation*, 2nd ed. Sacramento, California: California Native Plant Society.

Santa Cruz County. 2024. County of Santa Cruz General Plan / Local Coastal Program. Chapter 5: Agriculture, Natural Resources, and Conservation. March 2024.

Spaul, R.J. and J.A. Heath. 2017. Spaul, R. J., & Heath, J. A. (2017). Flushing Responses of Golden Eagles (*Aquila chrysaetos*) In Response To Recreation. *The Wilson Journal of Ornithology*, *129*(4), 834–845. https://experts.boisestate.edu/ws/portalfiles/portal/1628572/Flushing%20Responses%20of%20Golden%20Eagles%20(_em_Aquila%20chrysaetos_em_).pdf.

SWRCB (State Water Resources Control Board). 2021. *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. Adopted April 2, 2019; revised April 6, 2021. Accessed November 2025. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf.

USFWS (U.S. Fish and Wildlife Service). 2021. Birds of Conservation Concern 2021. Accessed November 2025. https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf.

USFWS. 2025a. National Wetlands Inventory. Accessed November 2025. https://www.fws.gov/wetlands/.

USFWS. 2025b. Critical Habitat. Accessed November 2025. https://www.fws.gov/project/critical-habitat.

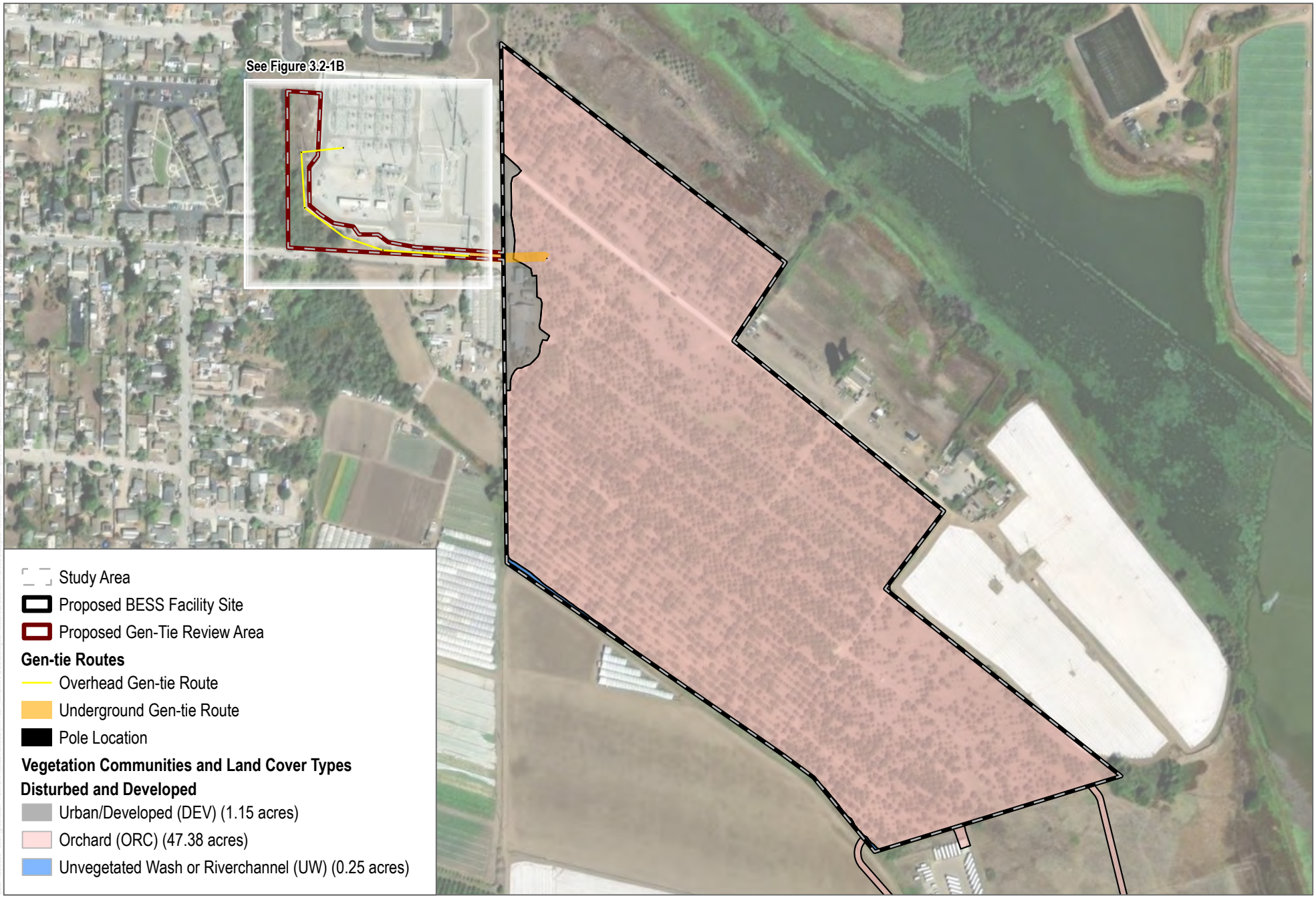
USFWS. 2025c. Critical Habitat and Occurrence Data. Accessed November 2025. http://www.fws.gov/data.

USFWS. 2026. Environmental Conservation Online System Information, Planning, and Conservation System (IPaC). Accessed April 2026. https://ecos.fws.gov/ipac/.

USGS (U.S. Geological Survey). 2025. National Hydrography and Watershed Boundary Dataset. USGS National Hydrography Products. Accessed November 2025. https://www.usgs.gov/national-hydrography.

Weather Spark 2025. Watsonville. https://weatherspark.com/y/1056/Average-Weather-in-Watsonville-California-United-States-Year-Round Accessed November 2025.

WRCC (Western Regional Climate Center). 2025. Watsonville Waterworks, California. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9473 Accessed November 2025.



SOURCE: Maxar 2024; Open Street Map 2023

DUDEK

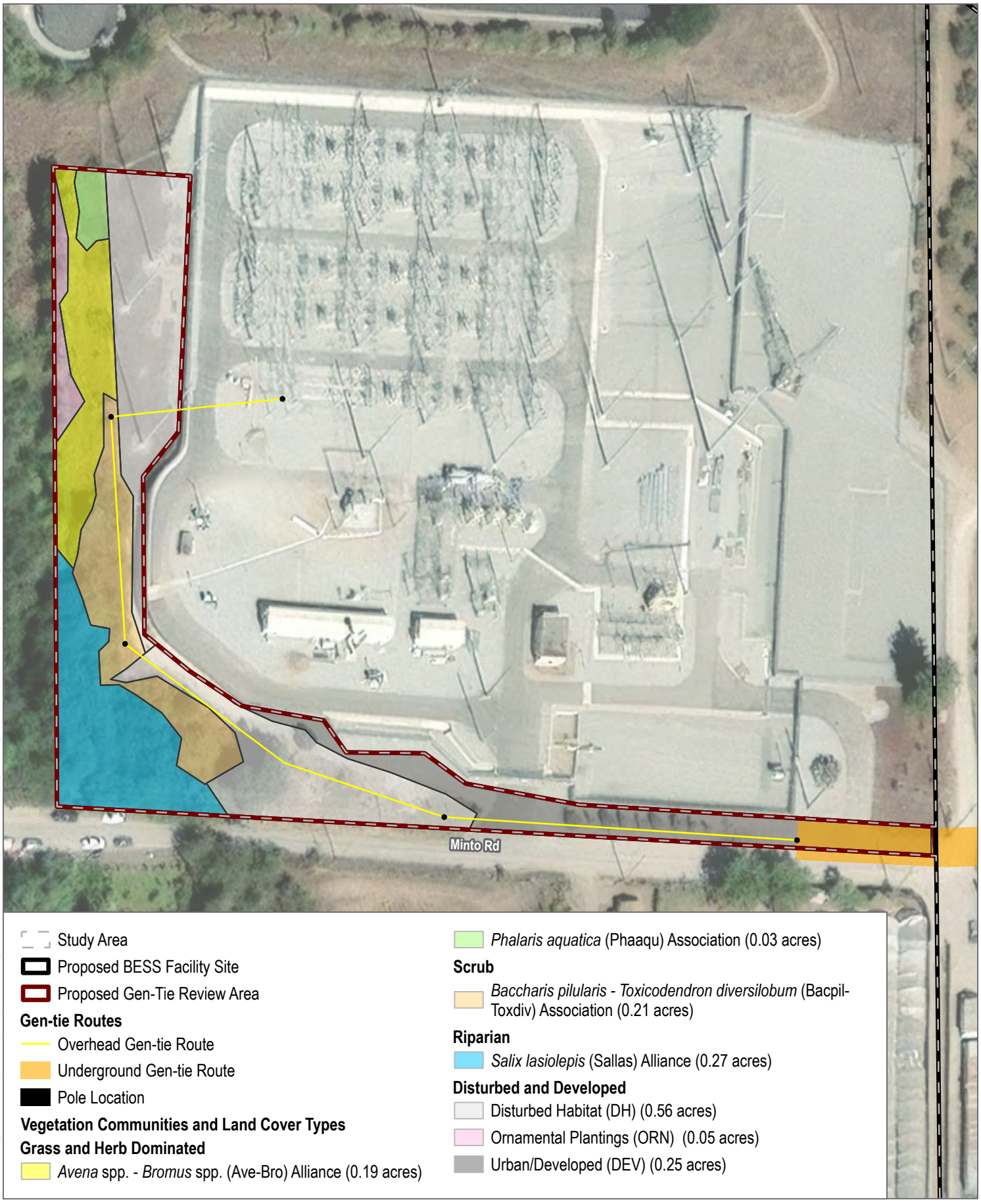
0 200 400 Feet

FIGURE 3.2-1A

Vegetation Communities and Land Covers

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



Study Area
Proposed BESS Facility Site
Proposed Gen-Tie Review Area

Gen-tie Routes

Overhead Gen-tie Route
Underground Gen-tie Route
Pole Location

Vegetation Communities and Land Cover Types

Grass and Herb Dominated

Avena spp. - *Bromus* spp. (Ave-Bro) Alliance (0.19 acres)
Phalaris aquatica (Phaaqu) Association (0.03 acres)

Scrub

Baccharis pilularis - Toxicodendron diversilobum (Bacpil-Toxdiv) Association (0.21 acres)

Riparian

Salix lasiolepis (Sallas) Alliance (0.27 acres)

Disturbed and Developed

Disturbed Habitat (DH) (0.56 acres)
Ornamental Plantings (ORN) (0.05 acres)
Urban/Developed (DEV) (0.25 acres)

SOURCE: Maxar 2024; Open Street Map 2023

DUDEK

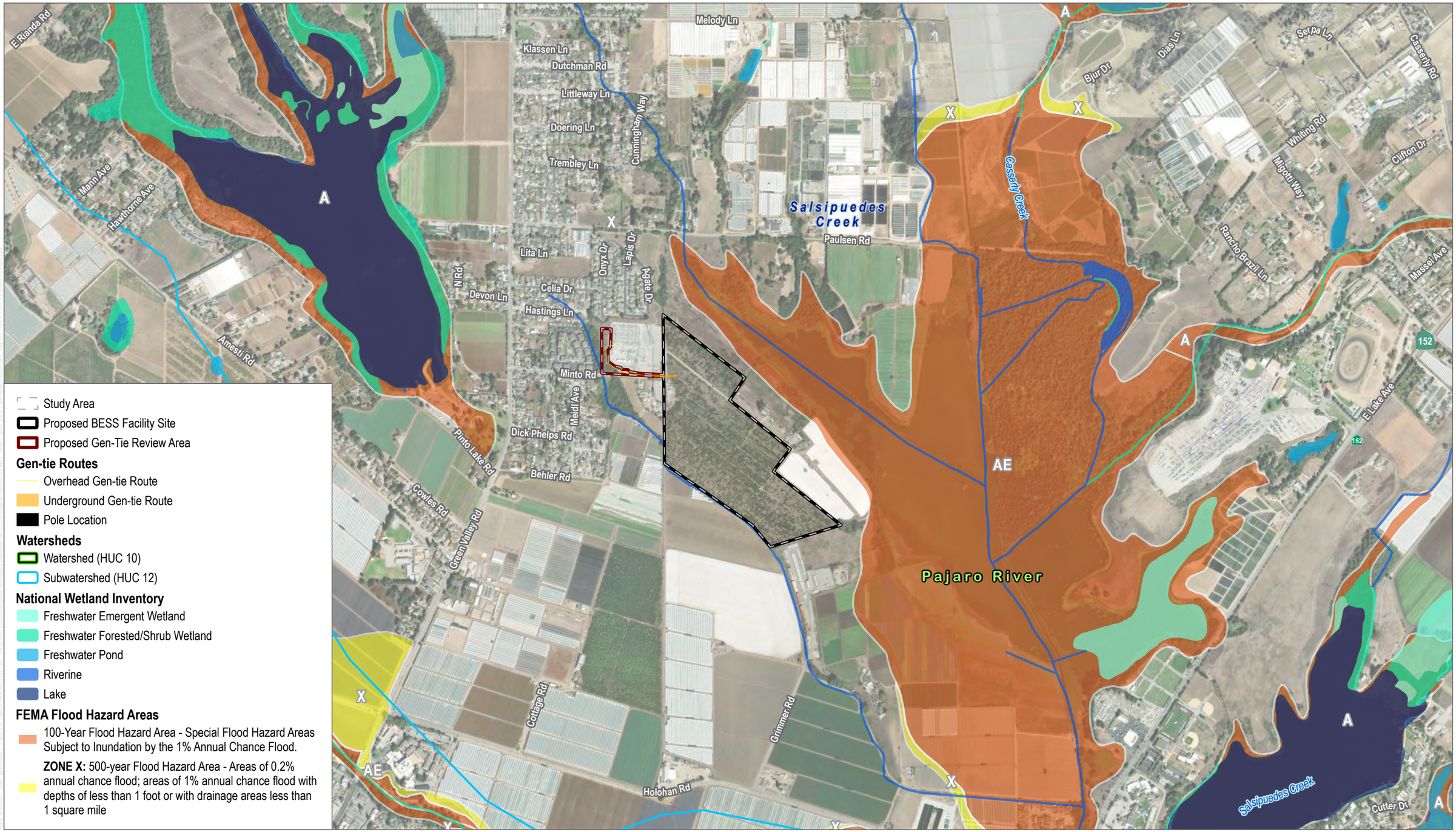
0 50 100 Feet

FIGURE 3.2-1B

Vegetation Communities and Land Covers

Seahawk BESS Biological Resources Assessment

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; USFWS NWI 2025; FEMA 2025; USGS 2025

DUDEK

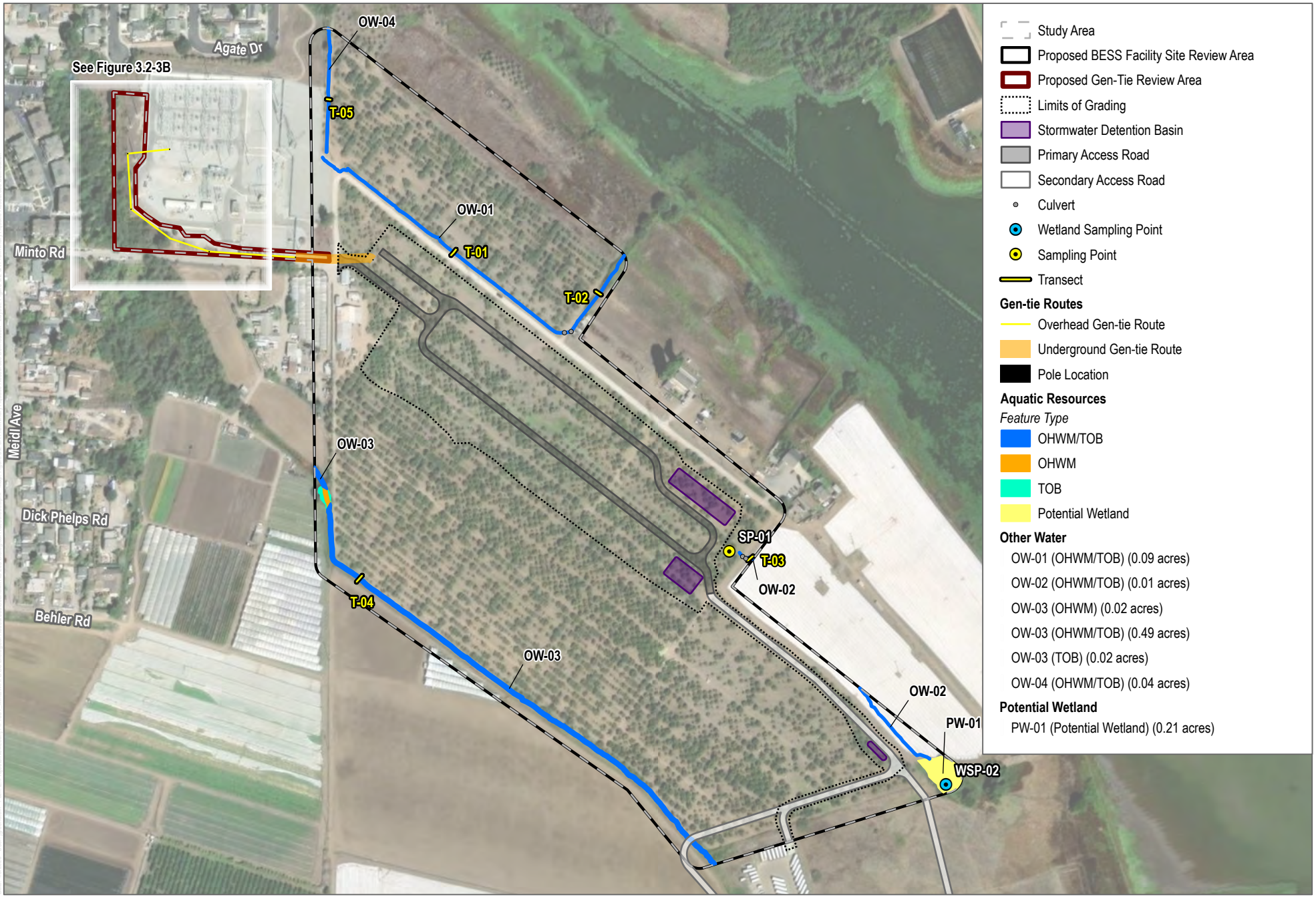
0 475 950 Feet

FIGURE 3.2-2

Hydrologic Resources

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; Open Street Map 2023

DUDEK

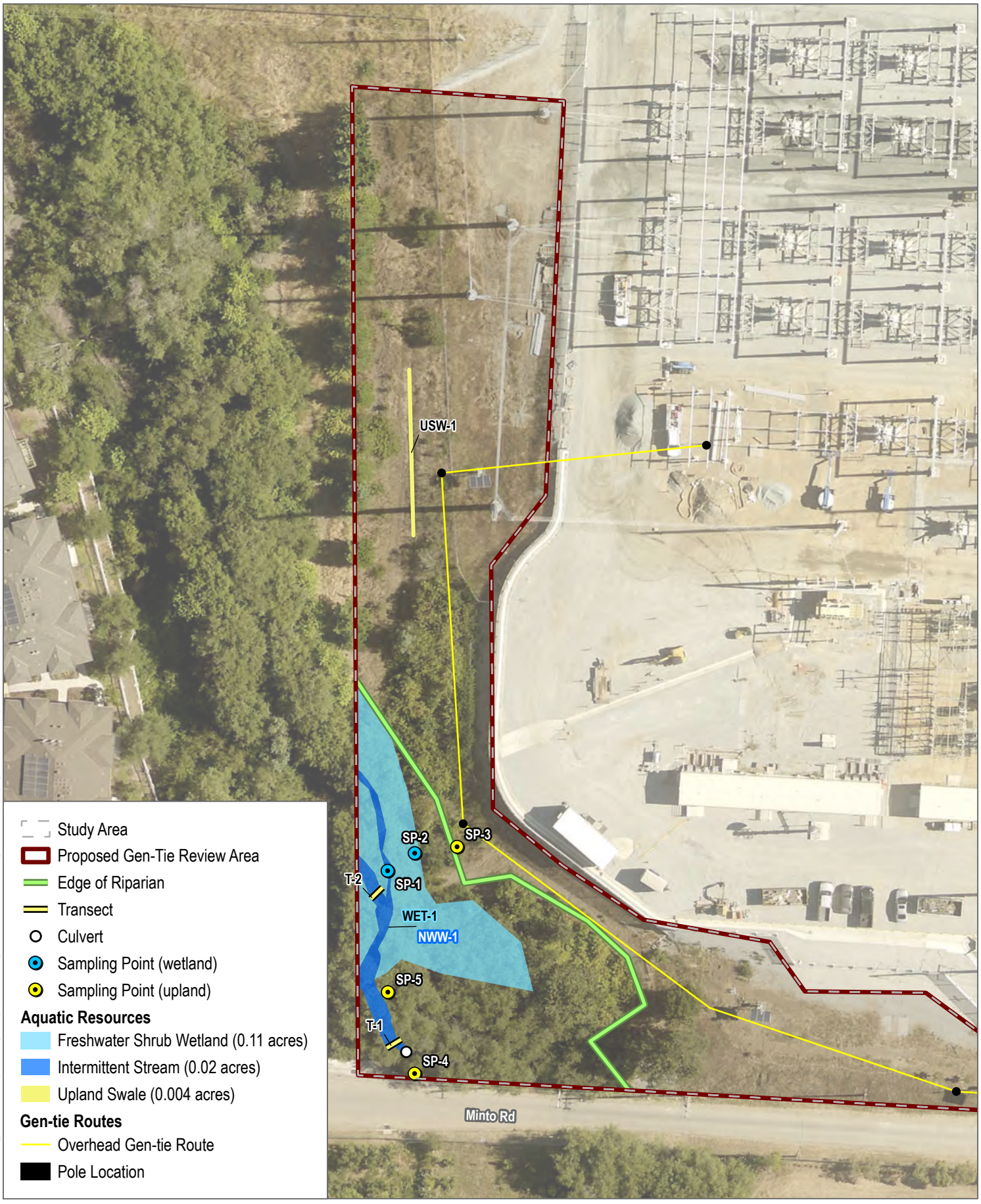
0 200 400 Feet

FIGURE 3.2-3A

Preliminary Aquatic Resources Delineation

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: ESRI Imagery Accessed 2026

DUDEK

0 50 100 Feet

FIGURE 3.2-3B

Preliminary Aquatic Resources Delineation

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; Open Street Map 2023; CPAD 2024

DUDEK

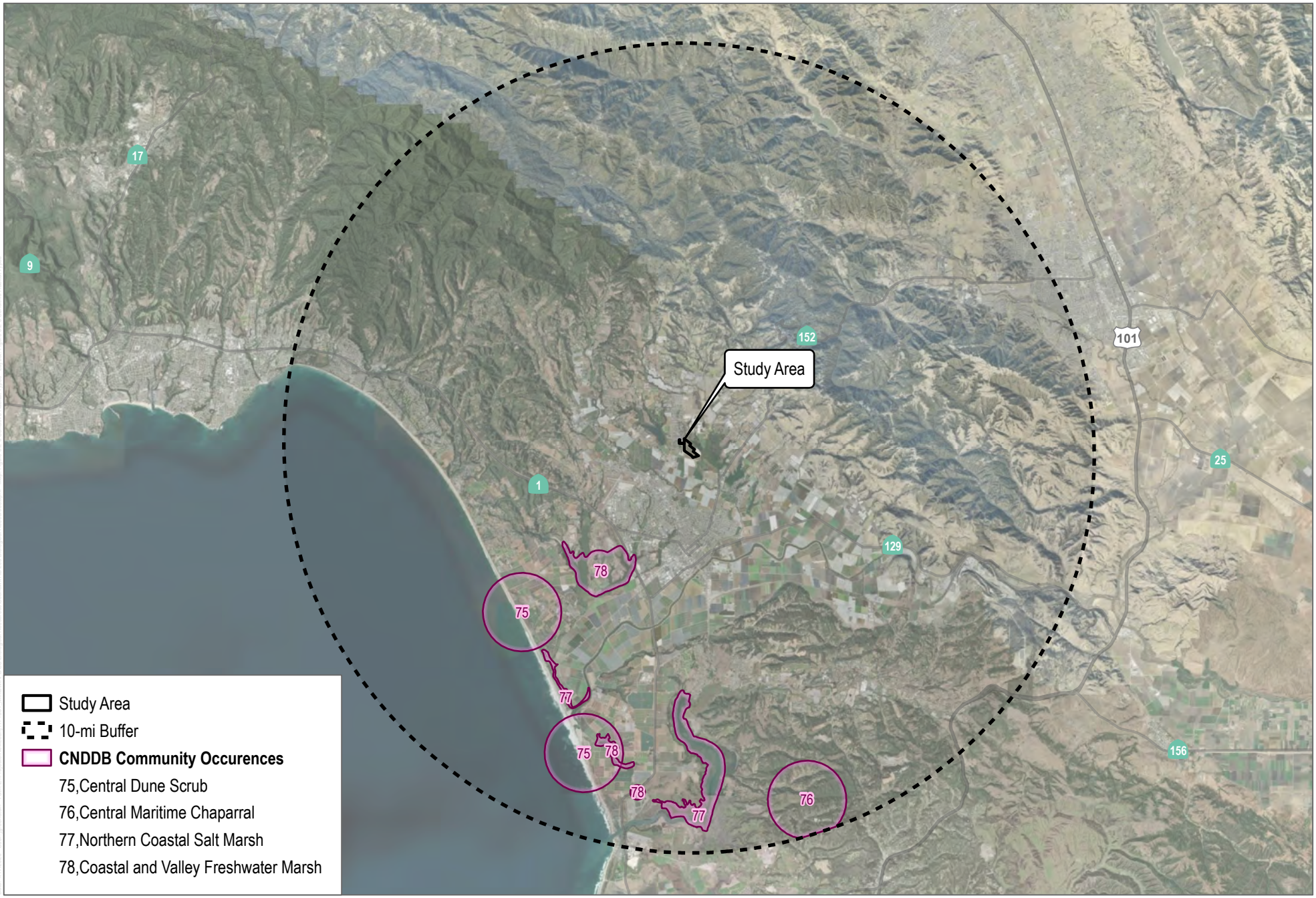
0 1 2 Miles

FIGURE 3.2-4

Protected Areas

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; Open Street Map 2023; CA Dept. of Fish and Wildlife 2023

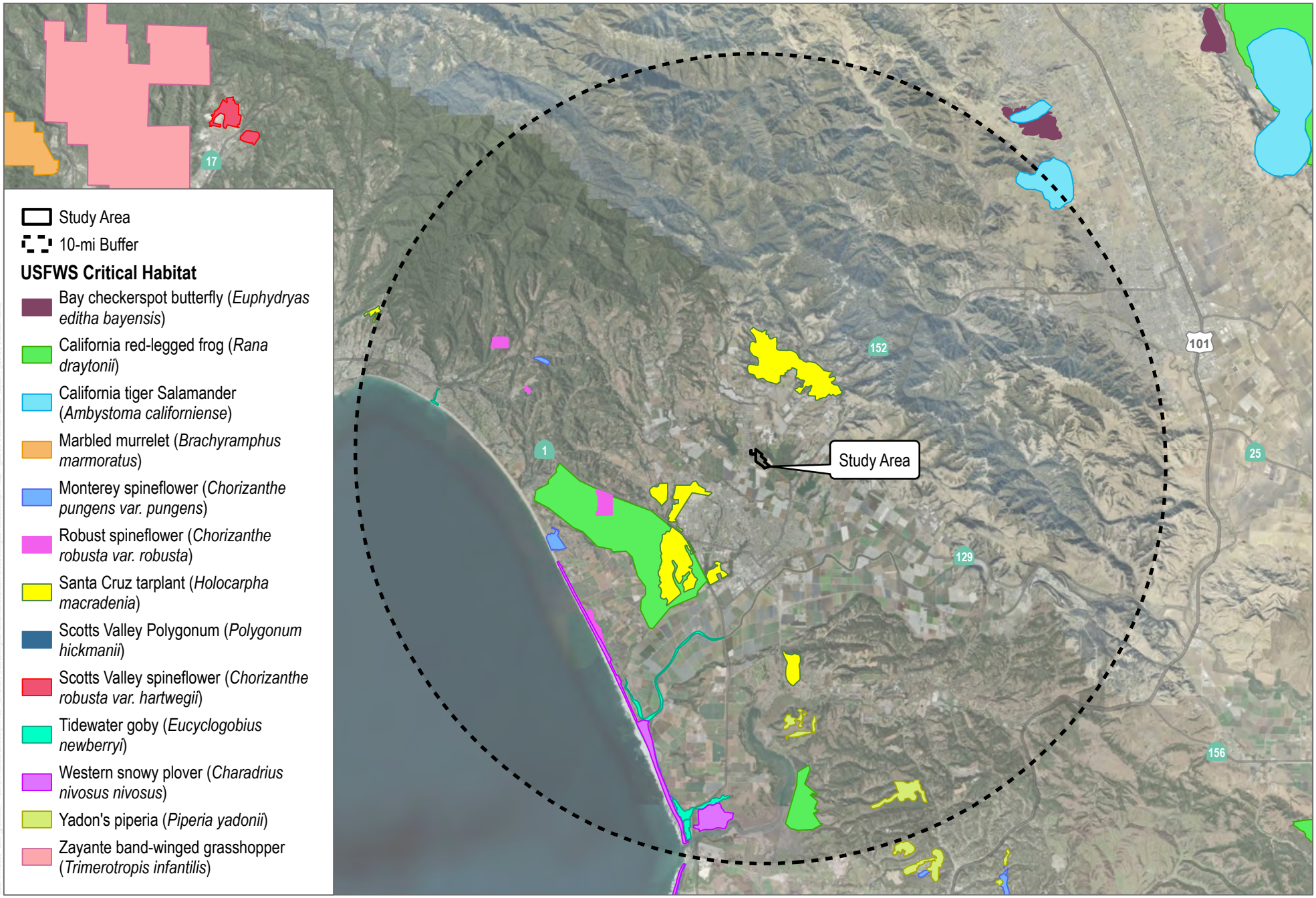
DUDEK

FIGURE 3.2-5

Sensitive Habitat Types

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; Open Street Map 2023; USFWS 2024

DUDEK

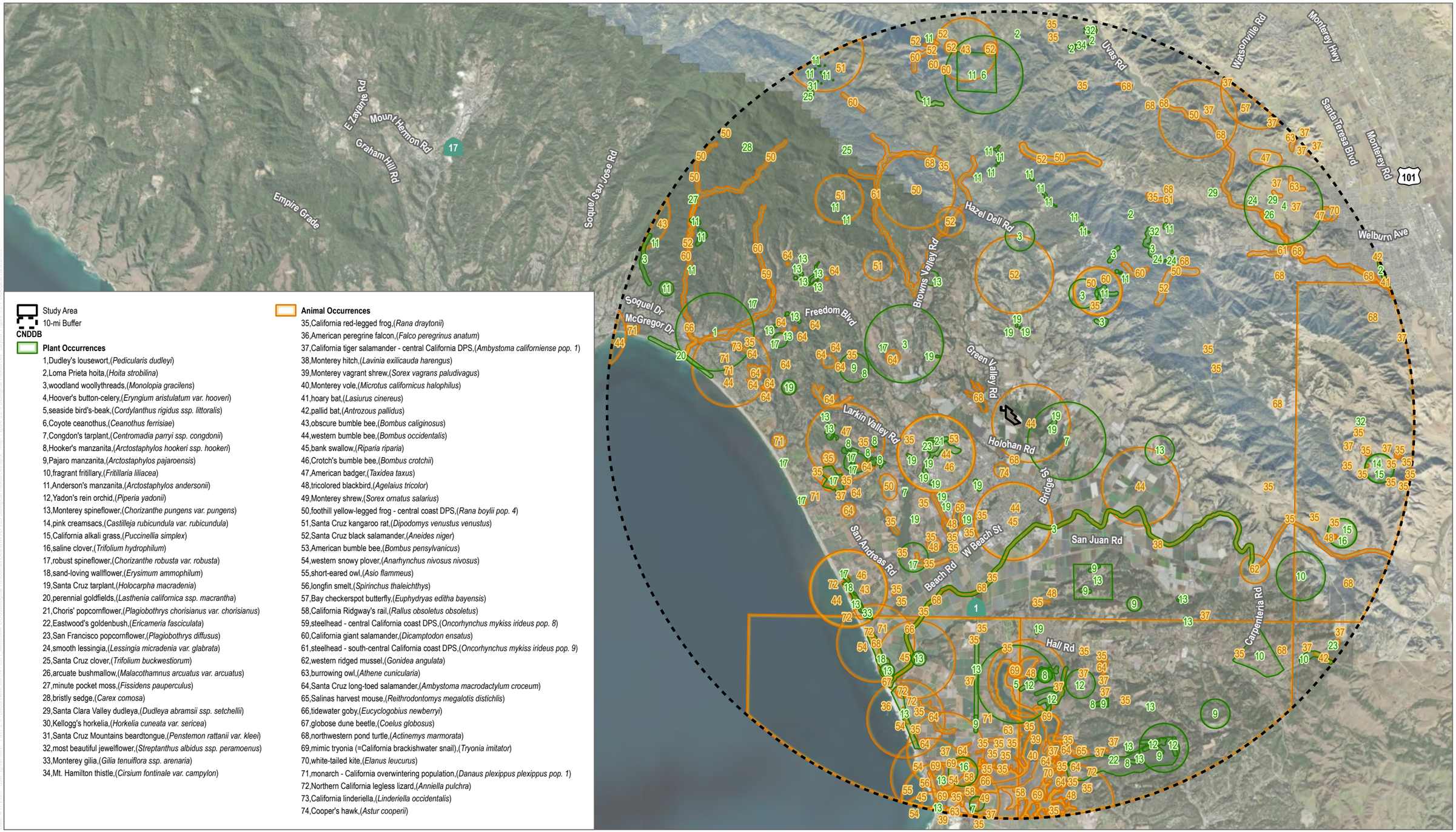
0 1 2 Miles

FIGURE 3.2-6

Critical Habitat

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



Study Area
10-mi Buffer

CNDDB

Plant Occurrences

1,Dudley's lousewort,(*Pedicularis dudleyi*)
2,Loma Prieta hoita,(*Hoita strobilina*)
3,woodland woollythreads,(*Monolopia gracilens*)
4,Hoover's button-celery,(*Eryngium aristulatum var. hooveri*)
5,seaside bird's-beak,(*Cordylanthus rigidus ssp. littoralis*)
6,Coyote ceanothus,(*Ceanothus ferrisiae*)
7,Congdon's tarplant,(*Centromadia parryi ssp. congdonii*)
8,Hooker's manzanita,(*Arctostaphylos hookeri ssp. hookeri*)
9,Pajaro manzanita,(*Arctostaphylos pajaroensis*)
10,fragrant fritillary,(*Fritillaria liliacea*)
11,Anderson's manzanita,(*Arctostaphylos andersonii*)
12,Yadon's rein orchid,(*Piperia yadonii*)
13,Monterey spineflower,(*Chorizanthe pungens var. pungens*)
14,pink creamsacs,(*Castilleja rubicundula var. rubicundula*)
15,California alkali grass,(*Puccinellia simplex*)
16,saline clover,(*Trifolium hydrophilum*)
17,robust spineflower,(*Chorizanthe robusta var. robusta*)
18,sand-loving wallflower,(*Erysimum ammophilum*)
19,Santa Cruz tarplant,(*Holocarpha macradenia*)
20,perennial goldfields,(*Lasthenia californica ssp. macrantha*)
21,Choris' popcornflower,(*Plagiobothrys chorisianus var. chorisianus*)
22,Eastwood's goldenbush,(*Ericameria fasciculata*)
23,San Francisco popcornflower,(*Plagiobothrys diffusus*)
24,smooth lessingia,(*Lessingia micradenia var. glabrata*)
25,Santa Cruz clover,(*Trifolium buckwestiorum*)
26,arcuate bushmallow,(*Malacothamnus arcuatus var. arcuatus*)
27,minute pocket moss,(*Fissidens pauperculus*)
28,bristly sedge,(*Carex comosa*)
29,Santa Clara Valley dudleya,(*Dudleya abramsii ssp. setchellii*)
30,Kellogg's horkelia,(*Horkelia cuneata var. sericea*)
31,Santa Cruz Mountains beardtongue,(*Penstemon rattanii var. kleei*)
32,most beautiful jewelflower,(*Streptanthus albidus ssp. peramoenus*)
33,Monterey gilia,(*Gilia tenuiflora ssp. arenaria*)
34,Mt. Hamilton thistle,(*Cirsium fontinale var. campylon*)

Animal Occurrences

35,California red-legged frog,(*Rana draytonii*)
36,American peregrine falcon,(*Falco peregrinus anatum*)
37,California tiger salamander - central California DPS,(*Ambystoma californiense pop. 1*)
38,Monterey hitch,(*Lavinia exilicauda harengus*)
39,Monterey vagrant shrew,(*Sorex vagrans paludivagus*)
40,Monterey vole,(*Microtus californicus halophilus*)
41,hoary bat,(*Lasiurus cinereus*)
42,pallid bat,(*Antrozous pallidus*)
43,obscure bumble bee,(*Bombus caliginosus*)
44,western bumble bee,(*Bombus occidentalis*)
45,bank swallow,(*Riparia riparia*)
46,Crotch's bumble bee,(*Bombus crotchii*)
47,American badger,(*Taxidea taxus*)
48,tricolored blackbird,(*Agelaius tricolor*)
49,Monterey shrew,(*Sorex ornatus salarius*)
50,foothill yellow-legged frog - central coast DPS,(*Rana boylii pop. 4*)
51,Santa Cruz kangaroo rat,(*Dipodomys venustus venustus*)
52,Santa Cruz black salamander,(*Aneides niger*)
53,American bumble bee,(*Bombus pensylvanicus*)
54,western snowy plover,(*Anarhynchus nivosus nivosus*)
55,short-eared owl,(*Asio flammeus*)
56,longfin smelt,(*Spirinchus thaleichthys*)
57,Bay checkerspot butterfly,(*Euphydryas editha bayensis*)
58,California Ridgway's rail,(*Rallus obsoletus obsoletus*)
59,steelhead - central California coast DPS,(*Oncorhynchus mykiss irideus pop. 8*)
60,California giant salamander,(*Dicamptodon ensatus*)
61,steelhead - south-central California coast DPS,(*Oncorhynchus mykiss irideus pop. 9*)
62,western ridged mussel,(*Gonidea angulata*)
63,burrowing owl,(*Athene cunicularia*)
64,Santa Cruz long-toed salamander,(*Ambystoma macrodactylum croceum*)
65,Salinas harvest mouse,(*Reithrodontomys megalotis distichlis*)
66,tidewater goby,(*Eucyclogobius newberryi*)
67,globose dune beetle,(*Coelus globosus*)
68,northwestern pond turtle,(*Actinemys marmorata*)
69,mimic tryonia (=California brackishwater snail),(*Tryonia imitator*)
70,white-tailed kite,(*Elanus leucurus*)
71,monarch - California overwintering population,(*Danaus plexippus plexippus pop. 1*)
72,Northern California legless lizard,(*Anniella pulchra*)
73,California linderiella,(*Linderiella occidentalis*)
74,Cooper's hawk,(*Astur cooperii*)

SOURCE: Maxar 2024; Open Street Map 2023; CA Dept. of Fish and Wildlife 2023

DUDEK

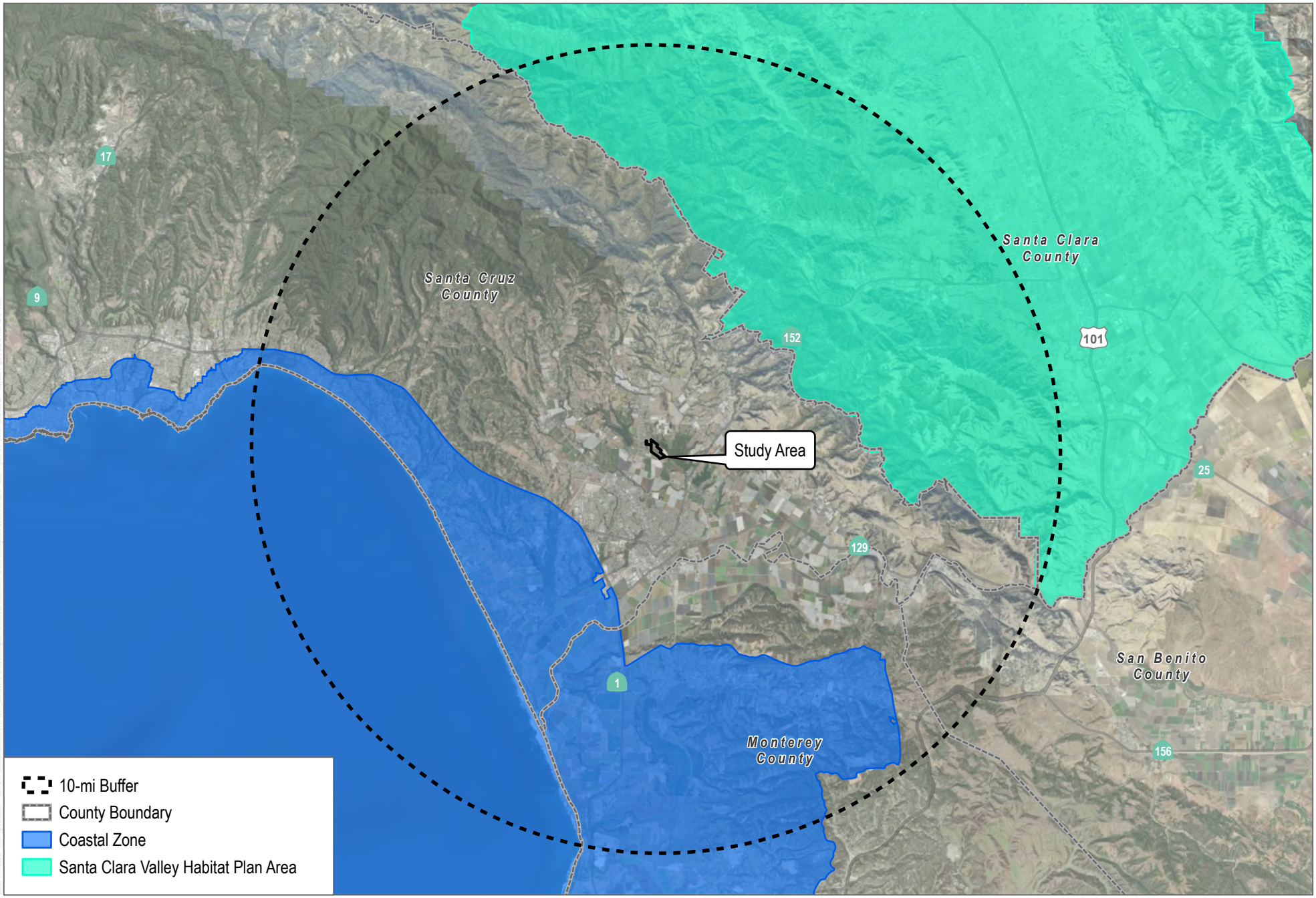
0 1 2 Miles

FIGURE 3.2-7

Biological Resources

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; Open Street Map 2023; California Coastal Commission 2025; County of Santa Clara 2025

DUDEK

0 1 2 Miles

FIGURE 3.2-8

HCP and NCCP

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK

3.3 Cultural Resources (Confidential)

INTENTIONALLY LEFT BLANK

3.4 Geological Hazards and Resources

This section describes the potential effects the construction and operation of the Seahawk Battery Energy Storage System (BESS) Project (project) may have on geological hazards and resources at and in the vicinity of the project site. The project would consist of an up to 200-megawatt containerized BESS facility using lithium-iron phosphate cells, or similar technology, installed in racks inside of prefabricated energy storage containers. The project would include components such as an operations and maintenance building, an on-site collector substation, a fire protection system, a noise mitigation wall, and a supervisory control and data acquisition (SCADA) system. The project would interconnect from the on-site collector substation to the adjacent Pacific Gas and Electric Company (PG&E) Green Valley Substation via a 115-kilovolt generation interconnect transmission line. The line would be installed underground from the project substation to the Point of Change of Ownership at an overhead riser pole on the PG&E parcel, and an overhead generation interconnect transmission line would connect to the Point of Interconnection at the PG&E Green Valley Substation.

This evaluation of geological hazards and resources includes the following elements:

- Section 3.4.1 describes the existing environment that could be affected, including regional and local geologic environment, faulting and seismicity, and geological resources.
- Section 3.4.2 identifies potential environmental impacts that may result from project construction, operation, maintenance, and decommissioning.
- Section 3.4.3 discusses cumulative effects.
- Section 3.4.4 describes project design and mitigation measures that would be implemented to avoid or minimize potentially significant impacts.
- Section 3.4.5 presents laws, ordinances, regulations, and standards applicable to geological resources.
- Section 3.4.6 identifies regulatory agency contacts.
- Section 3.4.7 describes permits required for the project related to geological hazards and resources.
- Section 3.4.8 provides references used to develop this section.

The following environmental setting and impact evaluation is based in part on the following project-specific geotechnical report and engineering plans:

- Appendix 2A – Site Plan Package
- Appendix 3.4A – Geotechnical Engineering Report (Haley & Aldrich Inc., December 2025)
- Appendix 3.4B – Geologic Fault Investigation (Bayside Geology, August 2025)

A summary of the geological hazards and resources evaluation is provided in the table below.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following: A. 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? B. Strong seismic ground shaking? C. Seismic-related ground failure, including liquefaction? D. Landslides?	☐	☐	☒	☐
2) 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, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
3) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.	☐	☐	☒	☐
4) 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?	☐	☐	☐	☒
5) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local plan, specific plan, or other land use plan?	☐	☐	☒	☐

3.4.1 Affected Environment

3.4.1.1 Regional Geology

The project site is located in Pajaro Valley, which is part of the Coast Ranges Geomorphic Province. The Coast Ranges province is characterized by northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level) and valleys that are subparallel to the San Andreas Fault (CGS 2002). The coastline is uplifted, terraced, and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The Coast Ranges are subparallel to the active San Andreas Fault, a fault extending for more than 600 miles, from Point

Arena to the Gulf of California. Pajaro Valley is underlain by a basement of Cretaceous granitic rocks (PVWMA 2014). Overlying these consolidated, poorly permeable rocks are a series of westward-dipping strata of late Tertiary and Quaternary age. These strata include the unconsolidated Mio-Pliocene Purisima Formation, the Pleistocene Aromas Red Sands Formation, Pleistocene terrace deposits, and Holocene alluvium and dune deposits (PVWMA 2014).

3.4.1.2 Local Geology and Stratigraphy

The geology of the project site is mapped by the U.S. Geological Survey as being underlain by Terrace Deposits of Watsonville, Fluvial facies (Pleistocene), and Terrace Deposits of Watsonville, Alluvial fan facies (Appendix 3.4A) (Figure 3.4-1, Geological Units). The Fluvial facies unit is described by the U.S. Geological Survey as deposits of "semi-consolidated, moderately to poorly sorted silt, sand, silty clay, and gravel. May be more than 200 ft thick. Gravel, approximately 50 ft thick, is generally present 50 ft below surface of the deposit and is both a local aquifer and a significant source of gravel. Upper 5 to 15 ft of the unit is moderately indurated owing to clay and iron oxide cementation in a weathered zone" (Appendix 3.4A).

The Alluvial fan facies are described as "semiconsolidated, moderately to poorly sorted, discontinuous layers of silty clay, silt, sand, and gravel. Deposited by streams, sheet flow, and debris flow on alluvial fans adjacent to Santa Cruz Mountains. Thickness variable; locally may be more than 50 ft thick" (Appendix 3.4A). Observations made during the geotechnical investigation conducted at the project site indicated that the subsurface conditions consist of alluvial deposits to a depth of at least 100 feet below ground surface (bgs) (Appendix 3.4A). Near-surface soil conditions were generally noted as consisting of sandy clays disturbed by past agricultural activities. Groundwater was observed to range from approximately 10 to 16 feet bgs.

3.4.1.3 Summary of Geotechnical Investigation

A subsurface geotechnical investigation was completed for the project (Appendix 3.4A). The purpose of the investigation was to provide information and geotechnical engineering recommendations relative to the following:

- Subsurface soil conditions
- Groundwater conditions
- Seismic site classification per the California Building Code (CBC)
- Site preparation and earthwork
- Foundation and pavement design and construction
- Ground improvement recommendations
- Gravel access road design
- Stormwater infiltration
- Corrosion potential

The project's geotechnical investigation included test borings, electrical resistivity testing, laboratory testing, engineering analysis, and preparation of a report (Appendix 3.4A). Specifically, the geotechnical investigation included the following:

- One mud rotary boring and six cone penetration tests (CPTs) were performed to evaluate subsurface conditions across the site. The mud rotary boring (B-1) was drilled to a depth of 51.5 feet bgs. One CPT (CPT-1) was advanced to a depth of approximately 100 feet bgs, and five CPTs (CPT-2 through CPT-6) were

advanced to depths between approximately 30.6 and 34.4 feet bgs. The CPT explorations included tests to interpret the approximate depth to groundwater.

- Shear wave velocity testing was performed to a depth of 100 feet bgs at CPT-1 to inform seismic site classification.
- Disturbed soil samples were collected from near-surface soils.
- Field electrical resistivity measurements were collected.
- One field infiltration test (IT-1) was performed in the western portion of the project site to measure suitability for on-site infiltration feasibilities.
- Samples collected at the project site were submitted to geotechnical laboratory testing, including testing for thermal resistivity, electrical resistivity, and corrosivity properties.

3.4.1.4 Faulting and Seismicity

The project site is located in a geologically complex and seismically active region that is subject to earthquakes and potentially strong ground shaking. Based on criteria established by the California Geological Survey (CGS), faults are classified as either Holocene-active, pre-Holocene, or age-undetermined. Faults are considered active when they have shown evidence of movement within the past 11,700 years (i.e., Holocene epoch). Pre-Holocene faults, also known as potentially active faults, are those that have shown evidence of movement more than 11,700 years ago and generally before 1.6 million years (Quaternary age). Faults whose age of most recent movement is not known or is unconstrained by dating methods or by limitations in stratigraphic resolution are considered age-undetermined and inactive (CGS 2018). These CGS fault classifications are in part used to determine locations of Alquist–Priolo Fault Zones, which are regulatory zones that set exclusionary minimum distances for human occupancy from active faults that have the potential for surface rupture. No structures designed for human occupancy can be placed over the fault or within 50 feet in any direction.

While no Holocene-active fault traces intersect the project site, a northeastern portion of the project site does overlap with the Alquist–Priolo Fault Zone associated with the Zayante-Vergeles Fault (Figure 3.4-2, Faults).

In addition, several other Holocene-active faults are located within the vicinity project site, including the San Andreas, Sargent, and San Gregorio Faults (Table 3.4-1, Regional Active Faults). The closest Holocene-active fault is the Zayante, located approximately 200 feet northeast of the northeastern boundary of the project site (Figure 3.4-2). Historical earthquakes along the San Andreas Fault and its branches have caused significant seismic shaking in the Santa Cruz County area. The two largest historical earthquakes on the San Andreas to affect the area were the moment magnitude (Mw) 7.9 San Francisco earthquake of April 18, 1906 (actually centered near Olema) and the Mw 6.9 Loma Prieta earthquake of October 17, 1989 (Appendix 3.4B). The 1906 earthquake caused severe seismic shaking and structural damage to many buildings in Santa Cruz County. The Loma Prieta earthquake appears to have caused more intense seismic shaking than the 1906 event in localized areas of the Santa Cruz Mountains, even though its regional effects were not as extensive. There were also significant earthquakes in northern California along or near the San Andreas Fault in 1838, 1865, and possibly 1890 (Appendix 3.4B).

The Zayante Fault lies west of the San Andreas Fault and trends about 50 miles northwest from the Watsonville lowlands into the Santa Cruz Mountains. The southern extension of the Zayante Fault, known as the Vergeles Fault, merges with the San Andreas Fault south of San Juan Bautista. The Zayante Fault has a long, well-documented history of vertical movement, probably accompanied by right-lateral, horizontal movement (Appendix 3.4B). Stratigraphic and geomorphic evidence indicates the Zayante Fault has undergone late Pleistocene and Holocene

movement, and some historical seismicity may be related to the Zayante Fault. The Zayante Fault may have undergone sympathetic fault movement during the 1906 earthquake centered on the San Andreas Fault, although the evidence is not definitive (Appendix 3.4B). Seismic records do, however, strongly suggest that a section of the Zayante Fault approximately 3 miles long underwent sympathetic movement in the 1989 earthquake. The Zayante Fault is considered capable of generating a magnitude 7.0 earthquake.

Table 3.4-1. Regional Active Faults

Fault	Approximate Distance and Direction to Project Site
Zayante-Vergeles (Holocene-active)	~200 feet northeast of northeastern boundary of the site
San Andreas (Holocene-active)	2.8 miles to the northeast of the site
Sargent (Holocene-active)	6 miles northeast of the site
San Gregorio (Holocene-active)	16 miles southwest of the site, offshore

Source: CGS 2025.

3.4.1.5 Liquefaction

Liquefaction is a mode of ground failure that results from the generation of high pore water pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose saturated sandy soils are present. CGS has designated certain areas as potential liquefaction hazard zones in accordance with the Seismic Hazards Mapping Act. These are areas considered at a risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table. However, the project site is not located in an area that has been mapped under the Seismic Hazards Mapping Act (see Figure 3.4-3, Liquefaction Potential).

The County of Santa Cruz (County) has prepared liquefaction hazard maps, and the BESS facility site is primarily located within an area designated as “liquefaction hazard D – Low”; however, a 100- to 200-foot-wide strip of the site where no development is proposed is mapped by the County as “liquefaction hazard B – High” (Appendix 3.4A). According to the geotechnical investigation for the project, total liquefaction-induced vertical settlements of as high as 2.75 inches are possible at the site, with up to 1.5 inches of predicted differential settlement over a lateral distance of 50 feet. In addition, lateral spreading, the displacement of large blocks of liquefiable subsurface materials down gentle slopes or toward an exposed slope (e.g., drainage embankment), was determined to have a high potential for occurring at the project site but would be limited to 10 inches or less (Appendix 3.4A).

3.4.1.6 Landslides

The potential for landslides to occur depends on a variety of factors, including, but not limited to, the steepness of the slope, geology, and soil moisture present in the underlying materials. The project site is not located within a landslide hazard zone as designated by the County (County of Santa Cruz 2021). The topography of the site is characterized by relatively gentle slopes with elevations of the site ranging between 94 and 122 feet above mean sea level (Appendix 3.4B). The geotechnical investigation for the site determined that based on existing topography and proposed minimal grading, landslide hazards were not a primary geotechnical issue at the site (Appendix 3.4A; (Figure 3.4-4, Landslide Susceptibility).

3.4.1.7 Subsidence

Subsidence occurs when a substantial portion of land is vertically displaced, usually due to the withdrawal of groundwater, oil, or natural gas, or as a result of decomposition of natural organic materials. Soils that are particularly subject to subsidence include those with high silt or clay content and/or high organic content. The effects of subsidence include damage to buildings and infrastructure, increased flood risk in low-lying areas, and lasting damage to groundwater aquifers and aquatic systems.

The project site is not located in an area of historic or recent subsidence (USGS 2025).

3.4.1.8 Tsunamis and Seiches

Tsunamis are large ocean waves that are seismically induced and often the result of offshore earthquakes or landslides. The project site is not located in a coastal area and would not be susceptible to tsunami runup, and as a result this issue is not discussed further in this document.

Seiches are waves and oscillations within confined or semi-confined bodies of water that are seismically induced by ground shaking. College Lake, a seasonal lake that is typically drained each spring, is located within approximately 500 feet of the project site boundary; however, the elevation of the lake is never higher than 60 feet above mean sea level whereas the project elevation is at least 90 feet above sea level. Considering the distance to the lake, elevation difference, and seasonality of the lake, the risk of seiche hazards adversely affecting the project is considered low. Therefore, the project site would not be subject to seiche hazards, and this issue is not discussed further in this document.

3.4.1.9 Geological Resources of Recreational, Commercial, or Scientific Value

The California Division of Mines and Geology classify the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act of 1975, using a classification system that divides land into four mineral resource zones (MRZs) that have been designated based on quality and significance of mineral resources. The project site is not located within a designated MRZ of known resources (MRZ-2a and MRZ-2b) but is located within MRZ-3 (defined as an area of undetermined mineral resource significance), and no mines or gravel pits are located in the vicinity of the project site (Figure 3.4-5, Mineral Resource Zones) (CGS 2021).

The California Geologic Energy Management Division provides locations of active and abandoned oil and gas wells in California. The project site is not located in a designated California Geologic Energy Management Division oil/gas field, and no oil/gas wells are located in the vicinity of the site (CalGEM 2025). The nearest well to the site is a plugged dry hole located approximately 0.5 miles north of the site (CalGEM 2025).

3.4.2 Impact Analysis

The following sections present the potential effects from the construction and operation of the proposed project on geological hazards and resources.

3.4.2.1 Methodology

Potential direct and indirect project impacts related to geological hazards and resources were evaluated against the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and are discussed below.

3.4.2.2 Impact Evaluation Criteria

CEQA Appendix G is a screening tool, not a method for setting thresholds of significance. Appendix G is typically used in the initial study phase of the CEQA process, asking a series of questions. The purpose of these questions is to determine whether a project requires an environmental impact report, a mitigated negative declaration, or a negative declaration. As the Governor's Office of Planning and Research stated, "Appendix G of the Guidelines lists a variety of potentially significant effects, but does not provide a means of judging whether they are indeed significant in a given set of circumstances" (OPR 1994).

The answers to the Appendix G questions are not determinative of whether an impact is significant or less than significant. Nevertheless, the questions presented in CEQA Appendix G are instructive. With respect to geological hazards and resources, CEQA Appendix G asks, in part, whether the project would:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following:
    a. 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
    b. Strong seismic ground shaking
    c. Seismic-related ground failure, including liquefaction
    d. Landslides
2. 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, subsidence, liquefaction, or collapse.
3. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
4. 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.
5. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local plan, specific plan, or other land use plan.

3.4.2.3 California Environmental Quality Act Appendix G Assessment Criteria

Criterion 3.4-1 Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the following:

a 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?

Less than Significant. According to CGS, Holocene-active faults are considered to be most at risk of experiencing fault rupture in the event of a seismic event and as such are regulated by the Alquist–Priolo Earthquake Fault Zoning Act (CGS 2018). As discussed in Section 3.4.1.4, Faulting and Seismicity, the northeastern boundary of the project site just overlaps with the Alquist–Priolo Fault Zone for the Zayante-Vergeles Fault. As a result, a fault hazard investigation was conducted for the project site even though no structures intended for human occupancy are proposed at the site. To evaluate the potential for fault rupture hazards at the site, exploratory trenches were excavated at the site to determine any evidence of past displacement that would indicate a potential for future rupture hazards. Approximately 1,300 linear feet of exploratory trenches were advanced at the site, and no evidence of past displacement was observed (Appendix 3.4B). As a result, the report concluded that there was a low likelihood that proposed improvements would be damaged by surface ground rupture due to tectonic faulting within the lifetime of the project (Appendix 3.4B). In addition, construction and operation of the project would not increase the potential for earthquakes or fault movement to occur. The proposed project would not directly or indirectly cause potential substantial adverse effects, including rupture of a known earthquake fault. Impacts would be **less than significant.**

b Strong seismic ground shaking?

Less than Significant. There are several Holocene-active faults in the vicinity of the site, including the Zayante-Vergeles, San Andreas, Sargent, and San Gregorio Faults, which are all capable of producing moderate to very strong ground shaking at the project site. The degree of ground shaking would depend on numerous factors, including the magnitude and distance to the epicenter and the duration of shaking. The proposed project would be constructed in accordance with the recommendations of the project-specific geotechnical report (Appendix 3.4A); County Grading Ordinance; current seismic design specifications within the CBC, including County amendments; and other applicable regulatory requirements, which would include seismic design requirements to reduce the potential for risks related to seismic events. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including strong seismic ground shaking. Impacts would be **less than significant**.

c Seismic-related ground failure, including liquefaction?

Less than Significant. Liquefaction is a geotechnical hazard that is generally highest when saturated, cohesionless soils (e.g., sandy soils) within 50 feet of ground surface are subjected to seismic ground shaking. Seismically induced ground shaking could exacerbate soil settlement, including differential settlement, which is variable amounts of settlement over a given distance. Differential settlement can result in cracking and distress of foundations, utilities, and other infrastructure. The project's site-specific geotechnical investigation determined that site conditions, including underlying soil characteristics and the depth to groundwater, indicated a potential for liquefaction with estimated settlement up to 2.75

inches if not addressed appropriately. In addition, lateral spreading was determined to have a high potential of occurring with displacements limited to 10 inches or less (Appendix 3.4A). However, the geotechnical report provided recommendations to provide ground improvements including soil mixing (e.g., mass mixing or deep soil mixing) during site preparations to reduce the estimated settlements due to liquefaction. These ground improvement measures would be incorporated into the proposed construction design and are consistent with current County Building Code requirements. The proposed project would be constructed in accordance with the County Building Code, including current seismic design specifications, current CBC standards, and other regulatory requirements, which would reduce the potential for risks related to seismic ground failure. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects due to seismic-related ground failure including liquefaction, and impacts would be **less than significant**.

d Landslides?

Less than Significant. The project site is not located within a landslide hazard zone as designated by the County (County of Santa Cruz 2021). The project site is characterized by gentle rolling topography. Proposed grading as part of site preparation would include minor cut and fill around the site interior and boundary that, if not designed appropriately, could be subject to slope failure or mass wasting. In addition, temporary excavations created during grading and construction could result in temporary vertical or steep slopes pending completion of final site grading. These temporary excavations would likely include relatively narrow trenches with vertical walls, such as for utility installation, or larger open excavations with temporary steep slopes. Vertical slopes greater than 5 feet in height would require shoring. The created cut and fill slopes around the perimeter would be constructed with slope inclinations up to 2:1 (horizontal to vertical). In the absence of proper shoring and/or slope construction, trench sidewalls and temporary slopes could collapse, resulting in risk to on-site personnel. If fill is placed in areas of the site that would create slopes steeper than 2:1 (horizontal to vertical), the area would be subject to slope stability analysis with the addition of structural retaining walls as required and in accordance with County Building Code requirements. Constructed slopes would be compacted to the code specifications for fill embankments and vegetated to ensure ongoing stability. Temporary excavations would be completed in accordance with the California Division of Occupational Safety and Health (Cal/OSHA), which has responsibility for implementing federal rules relevant to worker safety, including slope protection during construction excavations (see Section 3.4.5, Laws, Ordinances, Regulations, and Standards). Cal/OSHA's requirements are more restrictive and protective than federal OSHA standards. Title 8 of the California Code of Regulations(CCR), Chapter 4, Division of Industrial Safety, covers requirements for excavation and trenching operations, as well as safety standards whenever employment exists in connection with removal or wrecking of any fixed structure or its part. Compliance with Cal/OSHA regulations would prevent caving of temporary trench walls and failure of temporary steep slopes during grading and construction activities. Overall, with implementation of project-specific geotechnical recommendations pertaining to slope stability consistent with current County Building Code requirements, as well as compliance with Cal/OSHA regulations, the proposed project would not directly or indirectly cause potential substantial adverse effects involving landslides, slope stability, or mass wasting. Impacts would be **less than significant**.

Criterion 3.4-2 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, subsidence, liquefaction, or collapse?

Less than Significant. As discussed for Criterion 3.4-1 above, the project site is not located in an area susceptible to landslides or subsidence but is underlain by materials that are liquefiable and susceptible to lateral spreading. Overall, the project's site-specific geotechnical investigation (Appendix 3.4A) determined the proposed construction would not be subjected to a hazard from settlement, collapse, slippage, or landslide, provided the recommendations of the report are incorporated into the proposed construction site preparations and site design, which is consistent with County Building Code requirements. With implementation of project-specific geotechnical recommendations pertaining to slope stability (including mass wasting), soil stability (i.e., collapse), and soil settlement, as well as compliance with the County's Building Code and Cal/OSHA regulations, the proposed project would not result in on- or off-site landslide, subsidence, liquefaction, or collapse. The project would also be required to be designed and constructed to meet the applicable seismic and site soils requirements of the CBC to adequately support all proposed improvements. Impacts would be **less than significant**.

Criterion 3.4-3 Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than Significant. Expansive soils, if present, can adversely affect improvements over time through cyclical volumetric changes that can crack foundations, pathways, and other improvements. However, as part of adherence to current County Building Code requirements, a final design-level geotechnical investigation would be required prior to approval of a building permit for all proposed improvements and would be required to evaluate for the presence of expansive soils. In general, the use of engineered fill materials, which must meet minimum standards for expansion potential, as well as foundation design, such as the use of drilled shaft or driven pile foundations, as recommended in the geotechnical investigation report, would be sufficient to minimize the potential for adverse effects related to expansive soils. Recommendations from the final design-level geotechnical report would include measures to address expansive soils (e.g., use of engineered fill or pile driven foundations), consistent with County Building Code requirements, and would reduce the potential impacts related to expansive soils to **less than significant**.

Criterion 3.4-4 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. The project site is not located within a designated MRZ of known mineral resources, and no mines or gravel pits are in the vicinity of the project site. According to mapping from CGS, there are no MRZ-2 areas within 5 miles of the project site (CDOC 2025) (Figure 3.4-5).

The California Geologic Energy Management Division provides locations of active and abandoned oil and gas wells in California. The project site is not located in a designated California Geologic Energy Management Division oil/gas field, and no oil/gas wells are located in the vicinity of the site (CalGEM 2025).

As a result, the project would not 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** would occur.

Criterion 3.4-5 Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local plan, specific plan, or other land use plan?

Less than Significant**.** As stated for Criterion 3.4-4 above, the project site is not located within a designated MRZ with an identified mineral resource of significance, and no mines or gravel pits are in the vicinity of the project site. As a result, the project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local plan, specific plan, or other land use plan, and the impact would be **less than significant**.

3.4.3 Cumulative Effects

The cumulative projects detailed in Chapter 3, Environmental Analysis, Table 3-2, Cumulative Projects, have the potential to result in cumulative impacts to geological hazards and resources when considered together with the project. Risks related to geological hazards and resources are typically localized in nature because they tend to be site-specific and related to on-site geotechnical constraints. Cumulative projects were chosen based on proximity to the proposed project. These projects include residential, commercial, and industrial development. The majority of the cumulative projects will involve both construction and operational activities. These selection factors are appropriate in the context of geological hazards and resources cumulative impacts because generally there needs to be a direct nexus and similar geologic conditions for a synergistic impact to occur, such as site modifications at nearby projects combining to destabilize soils. Currently, there is not a known existing significant cumulative impact related to geological hazards and resources within this geographic scope.

As discussed above, like much of California, the project site is a seismically active area. All areas of Santa Cruz County are considered seismically active, to a lesser or greater extent depending on their proximity to active regional faults. Impacts of the proposed project would be cumulatively considerable if the project, in combination with related projects, would result in significant impacts. However, the effects of the cumulative projects are not of a nature to cause cumulatively significant effects from geological hazards and resources impacts because such impacts are site-specific and would only have the potential to combine with impacts of the proposed project if they occurred in the same location.

All planned projects in the vicinity of the proposed project are subject to environmental review and will be required to conform to the CBC requirements, including local County amendments. With implementation of geotechnical engineering site preparation and design measures and other grading and building requirements, the proposed project would not contribute to cumulative impacts for geological hazards and resources or related events because the proposed project and other cumulative projects in the area would be required to demonstrate compliance with local, state, and federal building and safety standards. As a result, cumulative impacts related to geological hazards and resources would not be cumulatively considerable.

3.4.4 Mitigation Measures

Because the project design would avoid or minimize potentially significant effects, no mitigation measures beyond the project's design are necessary.

3.4.5 Laws, Ordinances, Regulations, and Standards

Federal, state, and local laws, ordinances, regulations, and standards applicable to geological hazards and resources are discussed below and summarized in Table 3.4-2.

Table 3.4-2. LORS Applicable to Geological Hazards and Resources

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
Federal	International Building Code	Requires state to comply with during design and construction of engineered facilities	**Yes.** Project design and construction would comply with the International Building Code with respect to geological hazards through compliance with the CBC and the recommendations of a project-specific geotechnical report.	Criterion 3.4-1 Criterion 3.4-2 Criterion 3.4-3 Section 3.4.5.1
State	CBC 2025	Defines acceptable design criteria for structures with respect to seismic design and load-bearing capacity	**Yes.** Project design and construction would comply with the CBC with respect to geological hazards through compliance with the recommendations of a project-specific geotechnical report.	Criterion 3.4-1 Criterion 3.4-2 Criterion 3.4-3 Section 3.4.5.2
State	Cal/OSHA, CCR Title 8	Specifies the measures to be used for temporary excavation and trench work where workers could be exposed to unstable soil conditions	**Yes.** Project construction would comply with Cal/OSHA with respect to temporary slopes and excavations.	Criterion 3.4-1 Criterion 3.4-2 Criterion 3.4-3 Section 3.4.5.2
State	Alquist–Priolo Earthquake Fault Zone Act	Identifies areas subject to surface rupture from active faults	**Yes.** Project design and construction would comply with the CBC with respect to geological hazards through compliance with the recommendations of a project-specific geotechnical report.	Criterion 3.4-1Section 3.4.5.2
State	Seismic Hazards Mapping Act	Identifies secondary seismic hazards (liquefaction and seismically induced landslides)	**Yes.** Project design and construction would comply with the CBC with respect to geological hazards through compliance with the recommendations of a project-specific geotechnical report.	Criterion 3.4-1 Section 3.4.5.2
State	Surface Mining and Reclamation Act	Regulates surface mining operations to ensure that adverse environmental impacts are minimized and mined lands are	**Yes.** The project is not located within a designated MRZ, and no mines or gravel pits are in the vicinity of the project site.	Criterion 3.4-4 Criterion 3.4-5

Table 3.4-2. LORS Applicable to Geological Hazards and Resources

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
		reclaimed to a usable condition.		
Local	Santa Cruz County Code Title 12 – Building Regulations	Adopts the 2025 CBC with amendments	**Yes.** Project design and construction would comply with the County's Building Code with respect to geological hazards through compliance with the recommendations of a project-specific geotechnical report.	Criterion 3.4-1 Criterion 3.4-2 Criterion 3.4-3 Section 3.4.5.3
Local	Santa Cruz County Code, Appendix J – Grading	Standards for grading and erosion control, including permit requirements	**Yes.** Project construction would comply with the County's erosion and sediment control ordinances with respect to erosion control during grading and construction through compliance with the CBC and the recommendations of a project-specific geotechnical report.	Criterion 3.4-1 Criterion 3.4-2 Criterion 3-4-3 Section 3.4.5.3
Local	Santa Cruz County General Plan, Public Safety Element (Outside Coastal Zone): Seismic Hazards: Earthquakes, Tsunami, Liquefaction	Objectives and policies to protect against geological hazards	**Yes.** Project design and construction would comply with the County's Safety Element objectives and policies with respect to seismic and geotechnical hazards through compliance with the CBC and the recommendations of a project-specific geotechnical report.	Criterion 3.4-1 Criterion 3.4-2 Criterion 3.4-3 Section 3.4.5.3

Notes: LORS = laws, ordinances, regulations, and standards; CBC = California Building Code; Cal/OSHA = California Division of Occupational Safety and Health; CCR = California Code of Regulations; MRZ = mineral resource zone.

3.4.5.1 Federal

No federal regulations apply to mineral resources on the project site. The following federal regulations are related to geological hazards.

International Building Code

The design and construction of engineered facilities in California must comply with the requirements of the International Building Code as adopted by the State of California (see California Building Code in Section 3.4.5.2, State).

Project design and construction would comply with the International Building Code with respect to geological hazards through compliance with the CBC and the recommendations of a project-specific geotechnical report.

3.4.5.2 State

California Building Code

The project is subject to the applicable sections of Title 24, Part 2 of the 2025 CBC, which is administered by the California Building Standards Commission. Under state law, all building standards must be centralized in Title 24 to be enforceable. The CBC contains necessary California amendments, which are based on American Society of Civil Engineers/Structural Engineering Institute Standards. These standards provide requirements for general structural design and include means for determining earthquake loads, as well as other loads for inclusion into building codes. The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, which are used to determine a seismic design category for a project. Once a project is categorized according to a seismic design category, design specifications can be determined. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure—or any appurtenances connected or attached to such buildings or structures—throughout California.

Building requirements specific to BESS enclosures are included in Chapter 17A of the 2025 CBC. Division of State Architects Interpretation of Regulations (IR) N-3 specifies code requirements relating to BESS enclosures that consist of prefabricated modular structures not on or inside a building for structural safety and fire life safety reviews.

IR N-3 clarifies the design or alternative shake table testing requirements of premanufactured enclosures and the internal components for seismic loading. The design of BESS enclosure connections shall comply with the applicable sections of the CBC, American Institute of Steel Construction Specification for Structural Steel Buildings (AISC 360), American Institute of Steel Construction Seismic Provisions for Structural Steel Buildings (AISC 341), and American Society of Civil Engineers Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE 7).

The BESS enclosures envisioned for this project are not “walk-in” type enclosures, because the battery racks are accessible from outside the enclosure for maintenance purpose, and there is no ability to enter the enclosures. Based on this arrangement, each individual enclosure is considered electrical equipment (Battery Cabinet or Enclosure) and does not constitute a building. Therefore, construction type, fire resistance rated construction, means of egress requirements, and other criteria for buildings do not apply to the enclosures. In addition to the other laws, ordinances, regulations, and standards listed elsewhere in this section, the project site and systems would be designed according to the applicable 2025 California Fire Code, 2023 National Electric Code, and 2023 National Fire Protection Association (NFPA) codes and standards, such as NFPA 72 and NFPA 855. As required by NFPA 855, given the size and type of the BESS, the system would be tested per Underwriters Laboratories (UL) 9540A testing standards (at the cell, module, and unit levels) and listed to the UL 9540 listing.

Project design and construction would comply with the CBC with respect to geological hazards through compliance with the recommendations of a project-specific geotechnical report.

California Division of Occupational Safety and Health

Grading and construction activities are subject to occupational safety standards for excavation and trenching, as specified in Cal/OSHA regulations (Title 8 of the CCR). These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. The proposed project would be required to employ these safety measures during excavation and trenching.

Project construction would comply with Cal/OSHA with respect to temporary slopes and excavations.

Alquist–Priolo Earthquake Fault Zone Act

The Alquist–Priolo Earthquake Fault Zoning Act (14 CCR 3600 et seq.) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the State Geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults and published maps showing these zones. Earthquake fault zones are designated by the CGS and are delineated along traces of faults where mapping demonstrates surface fault rupture has occurred within the past 11,700 years. Construction within these zones cannot be permitted until a geologic investigation has been conducted to prove that a building planned for human occupancy would not be constructed across an active fault. These types of site evaluations address the precise location and recency of rupture along traces of the faults and are typically based on observations made in trenches excavated across fault traces.

Project design and construction would comply with the CBC with respect to geological hazards through compliance with the recommendations of a project-specific geotechnical report.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (14 CCR 3720 et seq.; California Public Resources Code, Section 2690 et seq.) directs the CGS to protect the public from earthquake-induced liquefaction and landslide hazards (these hazards are distinct from fault surface rupture hazard regulated by the Alquist–Priolo Act). This act requires the State Geologist delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones (i.e., zones of required investigation). Before a development permit may be granted for a site within a seismic hazard zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into project design. Evaluation and mitigation of potential risks from seismic hazards within zones of required investigation must be conducted in accordance with the CGS Special Publication 117A, adopted March 13, 1997, and updated in 2008, by the State Mining and Geology Board.

Project design and construction would comply with the CBC with respect to geological hazards through compliance with the recommendations of a project-specific geotechnical report.

Surface Mining and Reclamation Act

CGS provides geologic expertise and information about California's diverse non-fuel mineral resources. As required by the Surface Mining and Reclamation Act of 1975, the State Geologist classifies these resources in an effort to locate economically significant mineral deposits and potential areas of deposits based upon scientific data. Information relating to California's nonfuel resources, naturally occurring mineral hazards, and active and historic mining activities are collected to classify land under the Mineral Resources and Mineral Hazards Mapping Program.

The project is not located within a designated MRZ-2a or MRZ-2b, and no mines or gravel pits are in the vicinity of the project site.

3.4.5.3 Local

Santa Cruz County Code

County Code Title 12, Building Regulations, adopts the 2025 CBC, with amendments and added sections. The purpose of the County Building Code is to provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings, structures, grading, and certain equipment within Santa Cruz County. County Building Code provisions apply to the construction, alteration, moving, demolition, repair, use of any building or structure, and grading within Santa Cruz County. With establishment of the County Building Code, the County exercised its authority to amend the 2025 CBC, as detailed in Title 12, Chapter 12.10.215.

Appendix J of the CBC establishes standards for grading, excavation, and earthwork construction, including fills and embankments, and the control of runoff from graded sites, including erosion sediments and construction-related pollutants, and permit requirements for work on development properties.

Project design and construction would comply with the County's Building Code with respect to geological hazards through compliance with the recommendations of a project-specific geotechnical report. Project construction would also comply with the County's grading ordinances with respect to erosion control during grading and construction through compliance with the CBC and the recommendations of a project-specific geotechnical report.

Santa Cruz County 2024 General Plan

The Santa Cruz 2024 General Plan includes objectives and policies that are intended to address seismic and geotechnical hazards and guide future development in a way that reduces impacts from these hazards. Specifically, Chapter 6, Public Safety Element Outside of Coastal Zone[1] (County of Santa Cruz 2024) address issues related to protecting the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards; flooding; and wildland and urban fires.

> Objective 6.1-1 Seismic Hazards: Earthquakes. To reduce the potential for loss of life, injury, and property damage resulting from earthquakes by: regulating the siting and design of development in seismic hazard areas; encouraging open space, agricultural or low-density land use in the fault zones; and increasing public information and awareness of seismic hazards.

> Objective 6.1-2 Seismic Hazards: Tsunami. To reduce the potential for loss of life, injury, and property damage resulting from tsunamis by: providing signage and warning systems in tsunami hazard areas to increase public awareness of hazard and actions to take in event of tsunami, publicizing evacuation routes, and designing structures as feasible to withstand tsunamis or to minimize damage that may occur due to tsunamis.

> Objective 6.1-3 Seismic Hazards: Liquefaction and Subsidence. To reduce the potential for loss of life, injury, and property damage resulting from location of improvements in areas that contain soils subject to liquefaction and subsidence by:

[1] The project site is located outside of the Coastal Zone as defined in the County General Plan (County of Santa Cruz 2024).

avoiding location of critical and essential facilities in areas subject to these conditions, and adopting building codes that, for areas where development is allowable, requires site-specific analysis and adequate mitigations to be incorporated into project designs.

Policy 6.1.1 Geologic Review for Development in Designated Fault Zones. Require a review of geologic hazards for all discretionary development projects, including the creation of new lots, in designated fault zones. Fault zones designated for review include the Butano, Sargent, Zayante, and Corralitos complexes, as well as the State designated Seismic Review Zones. Required geologic reviews shall examine all potential seismic hazards and may consist of a Geologic Hazards Assessment and/or a more complete geologic investigation report where required by the County. An assessment may be prepared by County staff under supervision of the County Geologist, or registered geologist at the applicant's choice and expense. Any Geologic Hazards Assessment or Geologic Investigation Report must be accepted by the County Geologist in order to use its findings and/or incorporate its mitigations into a proposed development project.

Policy 6.1.2 Geologic Reports for Development in Alquist-Priolo Zones. Require a preliminary geologic report or full engineering geology report for development on parcels within Alquist-Priolo State-designated seismic review zones.

Policy 6.1.3 Engineering Geology Report for Public Facilities in Fault Zones. Require a full engineering geology report by a registered geologist whenever a significant potential hazard is identified by a Geologic Hazards Assessment or Preliminary Geologic Report, and prior to the approval of any new public facility or critical structure within the designated fault zones.

Policy 6.1.4 Site Assessment or Investigation Regarding Liquefaction Hazard. Require site-specific hazards assessment and/or investigation by a registered geologist and/or civil engineer of all development proposals in areas designated as having a moderate, high or very high liquefaction potential, and require mitigations identified by reports to be incorporated into project designs in order to meet building codes.

Policy 6.1.5 Location of New Development Away from Potentially Hazardous Areas. Require the location and/or clustering of development away from potentially hazardous areas where feasible, in order to avoid or minimize exposure to hazards. Review, revise, and/or condition project development permits as warranted, based on the recommendations of the site's Hazard Assessment or other technical reports.

Policy 6.1.6 Siting of New Water Supply Reservoirs and Small Water Retention Facilities. Require a full engineering geologic investigation prior to the construction of new water supply reservoirs, and if an unmitigable hazard exists, deny the proposed reservoir. Require smaller water retention facilities to be sited and engineered in a manner that will avoid or mitigate potential hazards that could arise from failure of the facilities, especially to habitable structures and public and private access roads.

Policy 6.1.7 Dam Safety Act. New dams shall be constructed according to high seismic design standards of the Dam Safety Act and as specified by structural engineering studies. Smaller reservoirs will be reviewed for potential seismic hazards as a part of the environmental review and/or building/grading permit review processes.

Policy 6.1.8 Design Standards for New Public Facilities**.** Require all new public facilities and critical structures to be designed to withstand the expected ground shaking during the design earthquake on the San Andreas Fault, as well as projected hazards due to climate change and sea level rise.

Policy 6.1.9 Recordation of Notice of Geologic Hazards, Acceptance of Risk, Liability Release, and Indemnification. As a condition of development approval and/or prior to the issuance of a building/grading permit for development/development activities and new and substantially improved structures in geologic hazard areas, require the owner of a parcel in an area of potential geologic hazards to record on the property/title deed, with the County Recorder, a Notice of Geologic Hazards, Acceptance of Risk, Liability Release, and Indemnification in a form approved by the County. The Notice shall include information about the nature of the hazard(s) as determined by the geologic and/or geotechnical investigation, provide that the current and all future owners and successors in interest accept the risks to people and property, and includes a release of liability of and waiver of claims against the County of Santa Cruz for any damages or injury in connection with the permitted development.

Policy 6.1.10 Siting, Design and Density Review of Proposed Development for Acceptable Risk Levels. Approve the final density and design of a development or building/grading proposal, and location of proposed development on a site, only as consistent with the recommendations of the technical reports. Deny the location or design of the proposed development if it is found that the hazards on the site cannot be mitigated to within acceptable risk levels for the nature of the development, as established by industry standards and as evidenced by property owner willingness to record on title a Notice of Geologic Hazards, Acceptance of Risk, and Liability Release.

Policy 6.1.11 Setbacks from Faults. Exclude from density calculations for land divisions, land within 50 feet of the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. In addition, all new habitable structures on existing lots of record shall be set back a minimum of fifty (50) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. This setback may be reduced to a minimum of twenty-five (25) feet based upon paleoseismic studies that include observation trenches. Reduction of the setback may only occur when both the consulting registered geologist preparing the study and the County Geologist observe the trench and concur that the reduction is appropriate. Critical structures and facilities shall be set back a minimum of one hundred (100) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault traces.

Policy 6.1.12 Minimum Parcel Size in Fault Zones. Outside the Urban Services Line and Rural Services Line, require a minimum parcel of 20 gross acres for the creation of new parcels within state and County designated seismic review zones if proposed building sites lie within the fault zone. Require a minimum parcel of 10 gross acres for the creation of new parcels within the portions of the County designated seismic review zones that are not part of a State Alquist-Priolo Earthquake Fault Zone, and which lie outside the Urban and Rural Services Lines and Coastal Zone, if 25% or more of the parcel perimeter is bounded by parcels 1-acre or less in size. Inside the Urban Services Line and Rural Services Line, allow density consistent with the General Plan and LCP Land Use designation if all structures are to be set back at least 50 feet from fault traces and meet all other conditions of technical reports and of applicable provisions of the County Code.

Project design and construction would comply with the County's Public Safety Element goals with respect to seismic and geotechnical hazards through compliance with the CBC and the recommendations of a project-specific geotechnical report.

3.4.6 Agencies and Agency Contacts

Applicable permits and agency contacts for geologic hazards and resources are shown in Table 3.4-3. Building and grading permits from the County will be superseded by California Energy Commission approval of the project under the opt-in program.

Table 3.4-3. Permits and Agency Contacts

Permit or Approval	Agency Contact	Applicability
Santa Cruz County Building Permit*	Santa Cruz County Community Development and Infrastructure, Environmental Planning 701 Ocean Street, 4th Floor Santa Cruz California 95060 Matt Machado, Director Planning.BuildingInfo@santacruzcountyca.gov 831.454.2260	Building and grading permits
NPDES Construction General Permit	Central Coast Regional Water Quality Control Board Documents submitted via SMARTS* 895 Aerovista Place, Suite 101 San Luis Obispo, California 93401 Arwen Wyatt-Mair arwen.wyattmair@waterboard.ca.gov 805.542.4695	Grading and erosion control

Notes: NPDES = National Pollutant Discharge Elimination System; SMARTS = Stormwater Multiple Application and Report Tracking System.
* Building and grading permits from the County will be superseded by California Energy Commission approval of the project under the opt-in program.

3.4.7 Permits and Permit Schedule

There are no applicable permits or permit schedule for geological hazards and resources. The National Pollutant Discharge Elimination System permit is evaluated in Section 3.15, Water Resources.

3.4.8 References

CalGEM (California Geologic Energy Management Division). 2025. Well Finder [online database]. Accessed April 9, 2025. https://maps.conservation.ca.gov/doggr/wellfinder/.

CDOC (California Department of Conservation). 2025. Mineral Land Classification [online database]. Accessed November 11, 2025. https://maps.conservation.ca.gov/cgs/minerals/?page=Mineral-Land-Classification.

CGS (California Geological Survey). 2002. "California Geomorphic Provinces." Note 36. Revised December 2002. https://www.conservation.ca.gov/cgs/documents/publications/cgs-notes/CGS-Note-36.pdf.

CGS. 2018. *Earthquake Fault Zones: A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California.* Special Publication 42. Revised 2018. https://www.conservation.ca.gov/cgs/documents/publications/special-publications/SP_042-a11y.pdf.

CGS. 2021. "Mineral Resource Zone Map for Construction Aggregate in the Monterey Bay Production-Consumption Region." Special Report 251, Plate 1. https://www.conservation.ca.gov/cgs/documents/publications/special-reports/SR_251-MLC-MontereyBayPCR-2021-Plate01-MRZs-a11y.pdf.

CGS. 2025. Earthquake Zones of Required Investigation [online database]. Accessed October 16, 2025. https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/#data_s=id%3AdataSource_4-191d8e93088-layer-27%3A33292.

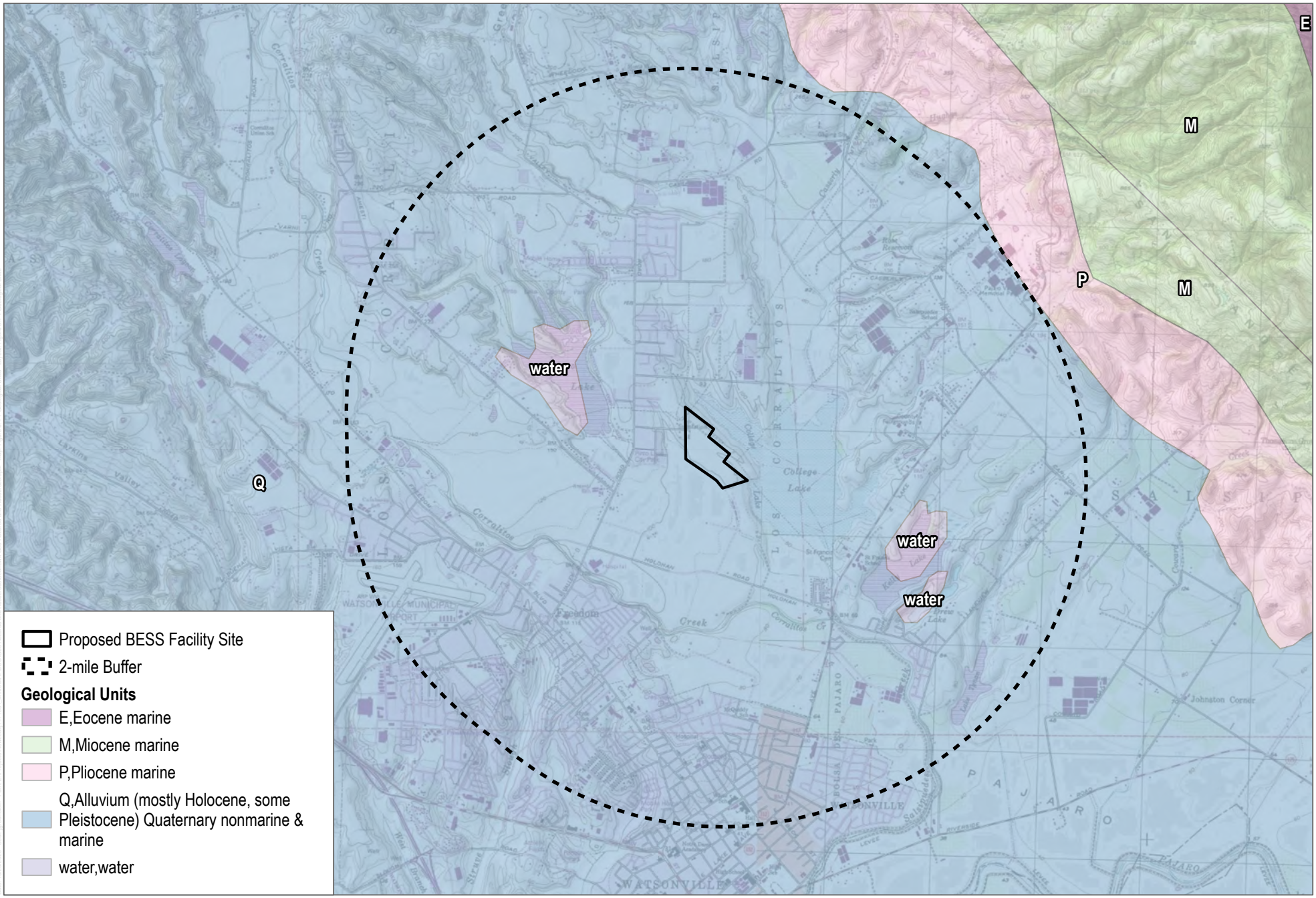
County of Santa Cruz. 2021. "Landslide Hazard Areas"[map]. January 2021. Accessed October 16, 2025. https://sccgis.santacruzcountyca.gov/mapgallery/Emergency%20Management/Hazard%20Mitigation/Landslide.pdf.

County of Santa Cruz. 2024. *General Plan and Local Coastal Program*. Effective March 18, 2024. https://cdi.santacruzcountyca.gov/Planning/PolicyPlanning/General,TownVillagePlans.aspx.

OPR (Governor's Office of Planning and Research). 1994. *Thresholds of Significance: Criteria for Defining Environmental Significance.* CEQA Technical Advice Series. Sacramento, California: OPR. September 1994.

PVWMA (Pajaro Valley Water Management Agency). 2014. *Basin Management Plan Update*. February 2014.

USGS (U.S. Geological Survey). 2025. "Areas of Land Subsidence in California" [map]. Accessed October 16, 2025. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html.



SOURCE: USGS

1:48,000

DUDEK

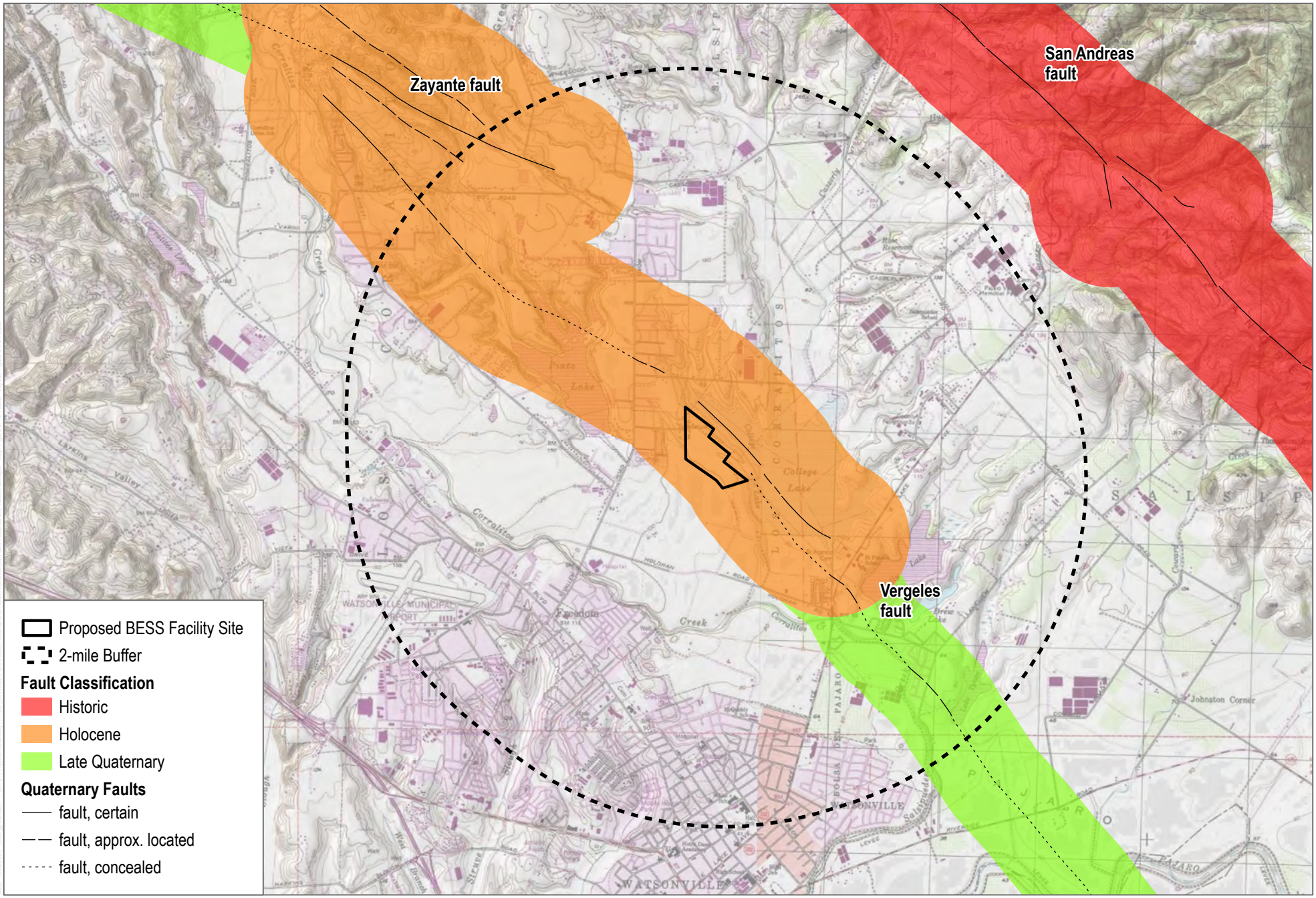
0 2,000 4,000 Feet

FIGURE 3.4-1

Geological Units

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: USGS; California Department of Conservation

1:48,000

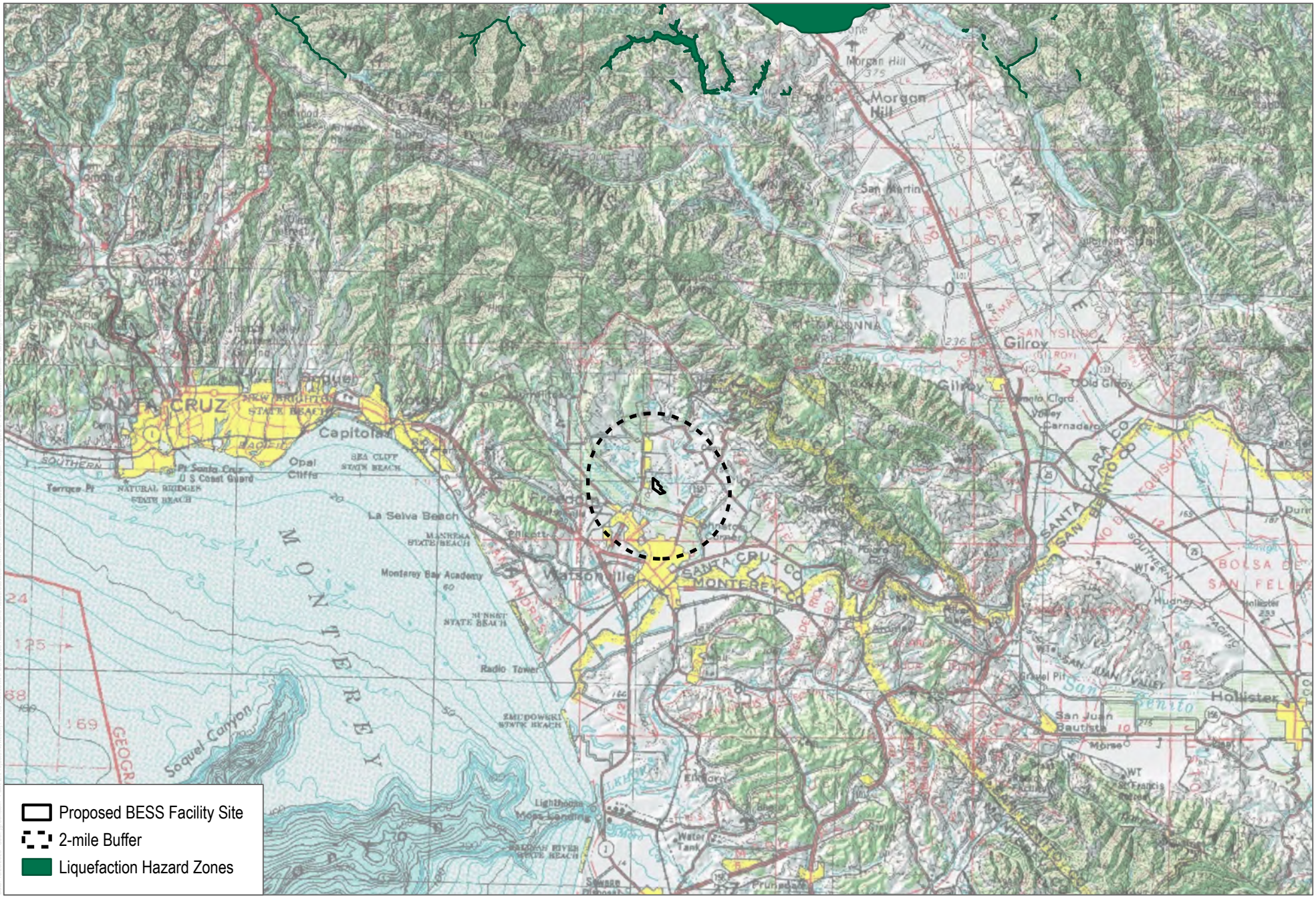
DUDEK

FIGURE 3.4-2

Faults

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: USGS; California Department of Conservation

1:250,000

DUDEK

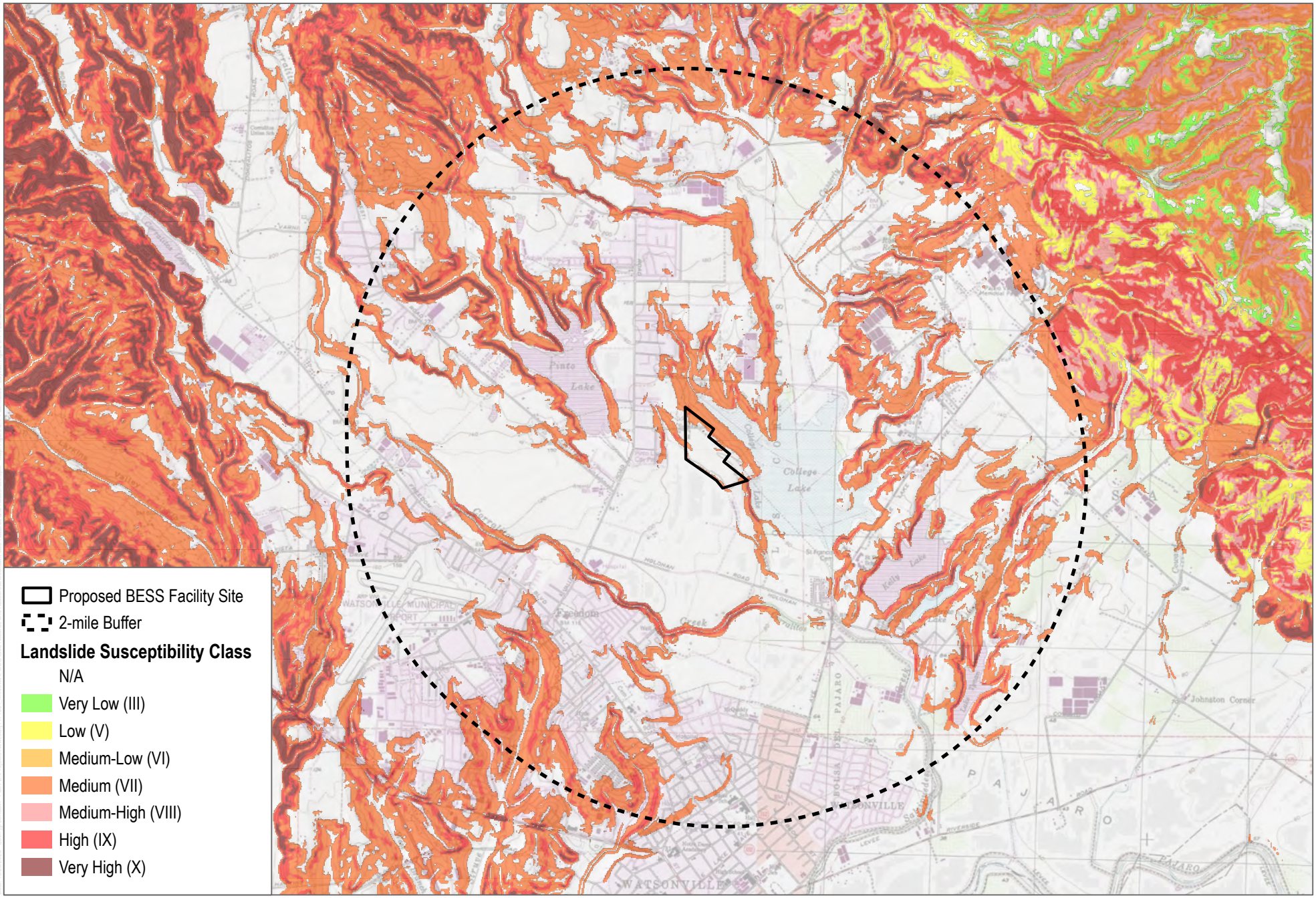
0 10,000 20,000 Feet

FIGURE 3.4-3

Liquefaction Potential

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: USGS; California Department of Conservation

1:48,000

DUDEK

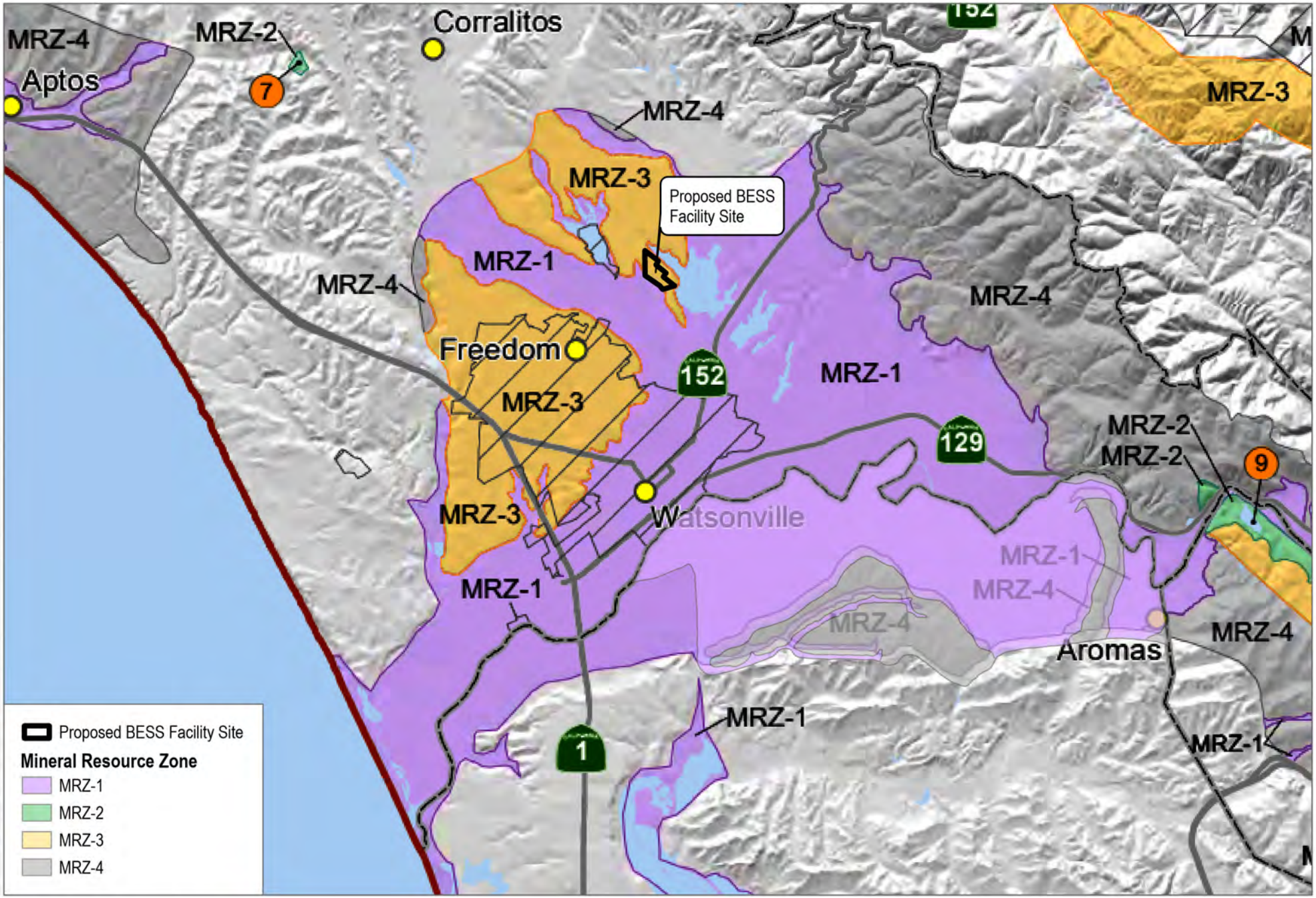
0 2,000 4,000 Feet

FIGURE 3.4-4

Landslide Susceptibility

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: California Department of Conservation; World Imagery

1:100,000

DUDEK

0 4,125 8,250 Feet

FIGURE 3.4-5

Mineral Resource Zones

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK

3.5 Hazardous Materials Handling

This section discusses the use and storage of hazardous materials associated with the Seahawk Battery Energy Storage System (BESS) Project (project) and the potential effects on human health and the environment. The project would consist of a 200-megawatt containerized (BESS) facility and associated interconnection facilities, including an on-site collector substation (project substation), inverters and transformers, a gen-tie line, a fire protection system, access improvements, and access roads. The BESS facility would consist of lithium-iron phosphate cells, or similar technology, installed in racks inside of prefabricated energy storage containers. The project would interconnect the existing Pacific Gas and Electric Company Green Valley Substation from the project substation via an approximately 0.21-mile, 115-kilovolt generation interconnect (gen-tie) line. The gen-tie line would cross Minto Road, run parallel to the Minto Road right-of-way, then route northwest and continue parallel to the boundaries of the Green Valley Substation until turning east to reach the Point of Interconnection at the Green Valley Substation. Proposed secondary access roads include three options, which would be evaluated as part of the project. The three options being considered would extend on-site access to the south, along the project's southern/southeastern boundaries. Options 1 and 2 would go through a property owned by the County of Santa Cruz (County) (Assessor's Parcel Number 051-101-59), which is currently operated by Pajaro Valley Unified School District as a transportation and maintenance yard (198 Grimmer Road). These roads would extend south along two different alignments as shown in Figure 2-1, Project Site Plan, to connect to Grimmer Road. Option 1 would extend through undeveloped land and a parking area, and Option 2 would extend from the project property through an existing parking area. Option 3 would extend southwest within Assessor's Parcel Number 051-101-78, cross into the southern-adjoining parcel (Assessor's Parcel Number 051-101-53), continue southeast before turning west, continue southeast, and terminate where the Grimmer Road public right-of-way starts. The evaluation of hazardous materials handling includes the following elements:

- Section 3.5.1 describes the existing environment that may be affected, including land use and hazardous use materials and storage.
- Section 3.5.2 identifies potential impacts to the environment and on human health during construction and operation.
- Section 3.5.3 discusses potential cumulative effects.
- Section 3.5.4 identifies project design and proposed mitigation measures that would be implemented to avoid or minimize potentially significant impacts.
- Section 3.5.5 presents laws, ordinances, regulations, and standards applicable to hazardous materials.
- Section 3.5.6 identifies agencies involved and provides agency contacts.
- Section 3.5.7 describes permits anticipated for the project.
- Section 3.5.8 provides all references used to develop this section.

The following environmental setting and impact evaluation is based in part on the following project-specific technical reports:

- Appendix 3.5A – Phase I Environmental Site Assessment, dated November 2025
- Appendix 3.5B – Hazardous Materials Business Plan Template
- Appendix 3.5C – Spill Prevention Control and Countermeasures Template
- Appendix 3.5D – Phase II Environmental Site Assessment, dated May 2026
- Appendix 3.5E – Contaminated Soil Mitigation Study, dated May 2026

A summary of the hazardous materials handling evaluation is provided in the table below.

		Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
1	Create a significant hazard to the public or environment through routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2	Create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
3	Emit hazardous emissions or handle materials, substances, or waste within 0.25 miles of an existing or proposed school?	☐	☐	☐	☒
4	Be included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and result in a significant hazard to the public or environment?	☐	☐	☒	☐
5	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency plan?	☐	☐	☒	☐

3.5.1 Affected Environment

3.5.1.1 Land Use

As described in the Phase I Environmental Site Assessment (ESA) (Appendix 3.5A), the project site (labeled as BESS Facility Site in Figure 2-1) is currently developed as an orchard with several structures on the westernmost portion of the property, including (from north to south) a residence, detached garage, small on-site office, and barn/storage building. Minto Road intersects the project site on the western side, runs parallel to the western project site border for approximately 280 feet, runs northwest–southeast through the northern portion of the project site for approximately 850 feet, then borders the eastern edge of the project site for approximately 815 feet before ending at an eastern-adjoining residence. The project site is adjoined by agricultural and residential properties to the northeast and southwest, a Pajaro Valley Unified School District transportation office to the southeast, and residential development and a Pacific Gas and Electric Company substation to the west. College Lake is located approximately 350 feet east-northeast of the subject property at its nearest point, and Pinto Lake is approximately 0.50 miles to the west at its nearest point. The project site is in unincorporated Santa Cruz County, north of the City of Watsonville.

The Phase I ESA, conducted by EBI Consulting, did not identify any recognized environmental conditions (RECs), conditional RECs, or historical RECs associated with the project site. The Phase I ESA did identify a business environmental risk associated with the past agricultural use of the project site (Appendix 3.5A).

As a results, soil sampling was conducted in February 2026. The study identified elevated concentrations of arsenic above background concentrations. Based on available data, the elevated arsenic concentrations do not appear to be naturally occurring. The soil study is discussed further under Criterion 3.5-2.

Asbestos has been specifically designated as a hazardous substance pursuant to Comprehensive Environmental Response, Compensation, and Liability Act Section 102. Many building materials commonly contained asbestos until the late 1970s, and a smaller list of building materials contained asbestos in the 1980s, such as drywall, joint compounds, vinyl flooring, roofing, asbestos-cement products, and stucco. At least a portion of the structures on the project site were constructed in or before the 1950s and therefore have the potential to contain asbestos. Additionally, there is a potential for lead-based paints to be present in the same structures (see Criterion 3.5-2).

Table 3.5-1 contains a list of schools, hospitals, daycare facilities, and long-term health care facilities within a 6-mile radius of the project site. Figures 3.5-1-1 through 3.5-1-4 show the location of these sensitive receptors.

Table 3.5-1. Schools/Daycare/Health Facilities Located Within 6 Miles of the Project Site

Facility Type	Facility Name	Distance to Project Site	Address
Nursing Facility	Rachelle's Home II[1]	0.13 miles west	109 Behler Road Watsonville, California 95076
School	Amesti Elementary	0.51 miles southwest	25 Amesti Road Watsonville, California 95076
School	Pacific Coast Charter	0.72 miles south-southwest	294 Green Valley Road Watsonville, California 95076
School	Lakeview Middle	0.80 miles southeast	2350 East Lake Avenue Watsonville, California 95076
School	Santa Cruz County Career Advancement Charter	0.98 miles south-southwest	229 Green Valley Road Watsonville, California 95076
School	Watsonville Charter School of the Arts	1.28 miles northeast	115 Casserly Road Watsonville, California 95076
School	T.S. MacQuiddy Elementary	1.28 miles south-southeast	330 Martinelli Street Watsonville, California 95076
School	Ann Soldo Elementary	1.48 miles southeast	1140 Menasco Drive Watsonville, California 95076
Daycare	Rosie's Daycare	1.48 miles south	321 Rogers Avenue Watsonville, California 95076
School	H.A. Hyde Elementary	1.54 miles south-southwest	125 Alta Vista Street Watsonville, California 95076
Nursing Facility	Watsonville Residential Care	1.65 miles south	311 Montecito Avenue Watsonville, California 95076
Daycare	Pajaro Valley Children's Center	1.71 miles south	234 Montecito Avenue Watsonville, California 95076

Table 3.5-1. Schools/Daycare/Health Facilities Located Within 6 Miles of the Project Site

Facility Type	Facility Name	Distance to Project Site	Address
School	Freedom Elementary	1.72 miles southwest	25 Holly Drive Watsonville, California 95076
School	Mintie White Elementary	1.77 miles south	515 Palm Avenue Watsonville, California 95076
School	Calabasas Elementary	1.81 miles west-southwest	202 Calabasas Road Watsonville, California 95076
School	Watsonville Prep	1.83 miles south	201 Brewington Avenue Watsonville, California 95076
Daycare	Zermeno Family Daycare	1.93 miles south	323 Madison Street Watsonville, California 95076
Daycare	Monica's Daycare	2.00 miles south-southwest	33 Peace Court Watsonville, California 95076
Nursing Facility	Watsonville Nursing Home and Post Acute Center	2.01 miles south	525 Auto Center Drive Watsonville, California 95076
Nursing Facility	Manresa Healthcare Center	2.02 miles south	919 Freedom Boulevard Watsonville, California 95076
Daycare	Hummingbird Daycare	2.11 miles southwest	48 Holm Road Watsonville, California 95076
Daycare	Diaz Daycare	2.14 miles south	207 Sudden Street Watsonville, California 95076
School	Rolling Hills Middle	2.15 miles south-southwest	130 Herman Avenue Watsonville, California 95076
Daycare	La Casita Infant Care	2.16 miles south	412 E Lake Avenue Watsonville, California 95076
Daycare	Mona's Small World	2.17 miles southwest	127 Herman Avenue Watsonville, California 95076
Daycare	Montes Daycare	2.21 miles south	127 Sudden Street Watsonville, California 95076
School	Watsonville High	2.26 miles south	250 East Beach Street Watsonville, California 95076
Hospital	Watsonville Community Hospital	2.30 miles southwest	75 Nielson Street Watsonville, California 95076
School	Cabrillo Community College	2.45 miles south	318 Union Street Watsonville, California 95076
School	Linscott Charter	2.47 miles south	220 Elm Street Watsonville, California 95076
School	Radcliff Elementary	2.55 miles south	550 Rodriguez Street Watsonville, California 95076
School	New School Community Day	2.56 miles south-southwest	165 Harkins Slough Road Watsonville, California 95076
School	Ceiba College Preparatory Academy	2.85 miles south	260 West Riverside Drive Watsonville, California 95076
School	Pajaro Valley High	2.93 miles southwest	500 Harkins Slough Road Watsonville, California 95076

Table 3.5-1. Schools/Daycare/Health Facilities Located Within 6 Miles of the Project Site

Facility Type	Facility Name	Distance to Project Site	Address
School	Bradley Elementary	3.16 miles west	321 Corralitos Road Watsonville, California 95076
School	Pajaro Middle	3.18 miles south	250 Salinas Road Pajaro, California 95076
Daycare	Buena Vista Daycare Center	3.84 miles southwest	113 Tierra Alta Drive Watsonville, California 95076
Nursing Facility	De un Amor	4.66 miles northwest	460 Eureka Canyon Road Corralitos, California 95076
School	Renaissance High Continuation	5.08 miles west-southwest	11 Spring Valley Road La Selva Beach, California 95076
School	Ohlone Elementary	5.20 miles south	21 Bay Farms Road Royal Oaks, California 95076
School	St. Abraham's Classical Christian Academy	5.82 miles east	1940 Bonita Drive Aptos, California 95003
School	Hall District Elementary	5.84 miles south-southeast	300 Sill Road Watsonville, California 95076
School	Aptos High School	5.91 miles east-northeast	100 Mariner Way Aptos, California 95003

Note:
[1] Rachelle's Home II is a residential care facility for up to 12 older adults (Mirador Living 2025). While the project site (parcel boundary) is located 0.13 miles from Rachelle's Home II, the battery energy storage system containers themselves would be located approximately 1,220 feet (0.23 miles) from Rachelle's Home II.

3.5.1.2 Hazardous Materials Use and Storage

Hazardous materials would be used during project construction and operation; the facility would comply with all applicable laws, ordinances, regulations, and standards. Proper use and storage of hazardous materials would minimize potential for accidental release. The following sections describe use, followed by general characteristics of hazardous materials.

During construction, operation, and decommissioning, all fuels, waste oils, and solvents would be collected and stored in tanks or drums within a containment area or areas consisting of an impervious floor and sidewalls. Hazardous materials, such as solvents and paints, would be stored in compatible containers within secondary containment, such as overspill pallets or inside sealed containers, in accordance with hazardous material business plan (HMBP) regulations. For oil and fuel storage, each containment area would be calculated and designed to be larger than the volume stored within to ensure containment (per Spill Prevention Control and Countermeasure [SPCC] rules [40 CFR 112], 110% capacity is required). Fuel would be stored in aboveground storage tanks. These tanks may either have a double wall or be placed within temporary containment skid or lined, earthen berms for spill containment. Upon the conclusion of construction and decommissioning phases, excess fuels would be removed from the site and any de minimis drips or surface staining resulting from fuel handling operations would be remediated.

The project is anticipated to require an HMBP (Appendix 3.5B) during construction, operation, and decommissioning because it is anticipated to have materials on site that are greater than the State of California thresholds for quantities of hazardous materials. Threshold quantities are hazardous materials at or above the reporting quantities of 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas. A list of the hazardous substances that qualify for reporting is maintained in California Occupational Safety and Health Regulations Chapter 3.2, Article 5, Section 339. The hazardous materials anticipated at the project are discussed below. A safe designated Hazardous Waste Storage Location would be determined closer to design finalization for storage of any hazardous materials and waste used or generated during construction, normal operations, and emergency actions. It is expected that the location would be within the construction laydown yard(s) during construction and within the operations and maintenance (O&M) area during operations. An HMBP template is provided in Appendix 3.5B.

The project is also anticipated to require a SPCC plan (Appendix 3.5C) during construction, operation, and decommissioning because it is anticipated to have aggregate aboveground oil storage greater than 1,320 gallons (in individual containers of 55-gallons or larger) (40 CFR 112). An SPCC template is provided in Appendix 3.5C.

3.5.1.2.1 Construction Phase

The hazardous materials used for construction would be typical of most construction projects of this type. Materials would include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliatives, herbicides, and welding materials/supplies. Petroleum, such as Diesel No. 2 or gasoline, may be stored on site during construction and decommissioning to fuel construction and decommissioning equipment, with minimal amounts of diesel anticipated to be stored on site during the operation of the project.

Hazardous material use would present relatively low public health risk but would have the potential to contaminate subsurface soils and/or groundwater if a release or incident were to occur. The use of best management practices (BMPs) would reduce the likelihood of potential incidents involving hazardous materials.

General industry health, safety, and environmental BMPs would be implemented by construction personnel. The following BMPs are designed to reduce incidents involving hazardous materials:

- Refueling and maintenance of equipment and vehicles would generally occur in designated areas that are designed to control potential spills. Designated areas would be bermed and/or covered by an impervious surface (asphalt or concrete) to control potential spills. Employees would be present during diesel refueling activities. When mobile diesel refueling is required, the diesel refueling vehicle would be equipped with fire extinguishers and spill containment equipment, such as absorbents. The facility and surface drainage systems are designed to manage stormwater runoff within the property bounds during construction in accordance with the Construction General Permit and stormwater pollution prevention plan.
- Only authorized personnel would conduct vehicle and equipment service maintenance.
- Only U.S. Environmental Protection Agency–approved pumps, hoses, and nozzles would be used to refuel equipment and vehicles.
- During servicing, catch-pans would be placed under equipment to catch potential spills or leaks.
- After servicing, disconnected hoses would be placed in containers to collect any residual fuel from the hoses.
- During refueling, vehicle engines would be shut off.

- Smoking, open flames, or welding would not be permitted in diesel refueling and service areas or hazardous waste storage areas.
- Refueling would be performed away from surface water or stormwater drains.
- Following refueling activities, service trucks would immediately leave the construction zone.
- All maintenance and refueling areas would be inspected monthly. Results of inspections would be recorded in a logbook that would be maintained on site.

3.5.1.2.2 Operations Phase

Limited amounts of hazardous materials would be stored or used on the project site during operations, including mineral oil to be sealed within the transformers and coolants in battery packs. As further discussed in Section 3.14, Waste Management, large quantities of hazardous wastes, specifically ethylene glycol, would be produced as part of operation of the proposed project. All wastes, including hazardous wastes, would be managed in accordance with federal and state rules and regulations, including Code of Federal Regulations (CFR) Title 40, Subchapter 1 (Solid Wastes), Parts 239 through 282 (Resource Conservation and Recovery Act), and California Health and Safety Code Division 20, Chapter 6.5 (Hazardous Waste Control Law). Appropriate spill containment and cleanup kits would be maintained during operation of the project. Fuels and lubricants used in operations would be subject to an SPCC plan to be prepared for the project (Appendix 3.5C). The project is within the Parajo Valley Fire Protection district, which has requested the installation of two fire hydrants. Water supply for fire defense would be provided via updated connections to the municipal water system that would serve the two on-site fire hydrants, each with a 1,000-gallon-per-minute flow rate. The BESS enclosures that are anticipated to be used at the project site are safe under normal handling and operating conditions. Fire protection systems would be incorporated in each individual BESS enclosure and would include remote monitoring, auto-shut off, and active, waterless fire suppression. The project's fire protection system would comply with all applicable standards, including the International Fire Code, the California Fire Code, the National Fire Protection Association (NFPA) Standard for the Installation of Stationary Energy Storage Systems (NFPA 550 and NFPA 855), Underwriters Laboratories (UL) 9540A, UL 1973, UL 1741, UL 9540, and the Institute of Electrical and Electronics Engineers (IEEE) C2. BESS enclosures would be UL listed, tested, and certified to the most rigorous international safety standards. UL independently tests equipment for compliance with the latest fire safety code requirements, and the methods were developed to minimize fire risk and safety concerns about battery storage equipment raised by fire departments and building officials in the United States.

3.5.2 Impact Analysis

Project construction and operation would involve the use of various hazardous materials. The use of hazardous materials and their potential to cause adverse environmental and human health effects are discussed in the following sections.

3.5.2.1 Methodology

The following information is based on site-specific engineering plans, a Phase I ESA, and readily available resources provided online. Potential direct and indirect project impacts related to hazardous materials handling were evaluated against the California Environmental Quality Act (CEQA) significance criteria and are discussed below. The impact analysis evaluates potential project impacts during project construction, operation, and decommissioning.

3.5.2.2 Impact Evaluation Criteria

CEQA Guidelines (14 CCR 15000 et seq.) Appendix G is a screening tool, not a method for setting thresholds of significance. CEQA Guidelines Appendix G is typically used in the initial study phase of the CEQA process, asking a series of questions. The purpose of these questions is to determine whether a project requires an environmental impact report, a mitigated negative declaration, or a negative declaration. As the Governor's Office of Planning and Research stated, "Appendix G of the Guidelines lists a variety of potentially significant effects, but does not provide a means of judging whether they are indeed significant in a given set of circumstances" (OPR 1994).

The answers to the CEQA Guidelines Appendix G questions are not determinative of whether an impact is significant or less than significant. Nevertheless, the questions presented in CEQA Guidelines Appendix G are instructive. With Respect to hazardous materials handling, CEQA Guidelines Appendix G asks, in part, whether the project would:

1. Create a significant hazard to the public or environment through routine transport, use, or disposal of hazardous materials.
2. Create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
3. Emit hazardous emissions or handle materials, substances, or waste within 0.25 miles of an existing or proposed school.
4. Be included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and result in a significant hazard to the public or environment.
5. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency plan.

3.5.2.3 California Environmental Quality Act Appendix G Assessment Criteria

Criterion 3.5-1 Would the project create a significant hazard to the public or environment through routine transport, use, or disposal of hazardous materials?

Construction and Decommissioning

Less than Significant. Construction and decommissioning of the proposed project, including the BESS facility, gen-tie line, and access road(s), would involve the routine transport, use, or disposal of hazardous materials. Most of the hazardous waste generated by the project would occur during the construction period and would consist of liquid waste, including cleaning fluids, dust palliative, herbicides, and solvents. Some solid hazardous waste, such as welding materials, may also be generated during construction. These materials would be transported to the project site during construction, and any hazardous materials that are produced as a result of project construction would be collected and transported away from the site for disposal in an approved off-site waste disposal facility. During project construction, material safety data sheets for all hazardous materials present on site would be made readily available to on-site personnel to ensure awareness and proper handling. Workers would be trained to properly identify and handle all hazardous materials.

Transportation of hazardous materials would be required during construction and decommissioning activities. All transportation of hazardous materials associated with the project construction and operation would comply with the following:

- U.S. Environmental Protection Agency
- U.S. Department of Transportation
- California Department of Transportation
- California Department of Toxic Substances Control
- California Highway Patrol
- California State Fire Marshal Regulations

Overall, the use of hazardous materials, and subsequent transport and disposal of such materials, during construction and demolition would be controlled through compliance with applicable regulations to limit releases of hazardous materials and wastes. Diesel fuel and lubricants used on field equipment would be subject to an HMBP and an SPCC plan, which include requirements for routine inspection, annual reporting, labeling, storage, secondary containment, spill prevention and response measures, employee training, and safety and security measures. The disposal of all oils, lubricants, and spent filters would occur in accordance with applicable local, state, and federal regulations. Recyclable materials, including wood, shipping materials, and metals, would be separated as feasible for recycling, and other hazardous wastes would be managed in accordance with federal, state, and local rules and regulations. Liquids and oils in the transformers and other equipment would be used in accordance with applicable regulations. As such, project construction is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be **less than significant.**

The project would implement the following additional measures to increase safety during BESS enclosure transportation and storage:

A. The project would follow the manufacturer's recommended transportation best practices, including, but not limited to, advanced route inspection to note road conditions, height limits, actual heights and widths, weight limits, traffic restrictions, potential obstructions, any potential weight limits on bridges, proper vertical transportation of the BESS enclosures, properly securing the BESS during transport, and transporting the BESS with cells at a state of charge of 30% or less.
B. The project would notice first responders along the route of the BESS deliveries and the duration of the delivery periods.
C. The project would require the freight company to have a contingency plan prepared for emergency situations (vehicle breakdown, accident, diesel spill, fire, explosion, etc.) during transportation of goods. Once the freight company is selected, a contingency plan would be reviewed and available in every transport truck and on site.
D. Subject to the requirements of the individual freight companies, a transportation contingency plan would be prepared and followed in the event of a vehicle breakdown, accident, or other event. The transportation contingency plan would be prepared in accordance with 49 CFR Parts 171–180.

Storage Best Practices

The project would implement the manufacturers' recommended storage best practices for any BESS enclosures that are not placed on their foundations/or piers within 30 days of arrival. Best practices include, but are not limited to, storing the BESS in areas that do not accumulate standing water during the rainy season; raising the container storage pad to a reasonable height based on geologic and meteorological conditions; storing the BESS on dry flat ground that does not exceed a slope of 5 degrees; ensuring all doors are closed and locked; limiting storage environment temperatures to between −30 degrees Celsius and 50 degrees Celsius; storing the BESS in an area with a relative humidity between 0% and 100%; covering air inlets and outlets with a protective film to reduce the potential for rain, dust, or sand entry; and inspecting the equipment every 14 days.

Operations

Less than Significant. O&M activities associated with a BESS facility and would require use of hazardous materials to maintain the BESS enclosures and transformers. Those that would be used would be stored on site in designated, secured areas with secondary containment. The BESS facility would be enclosed within a noise mitigation wall, which would double as a security wall, to prevent public access to any hazardous materials on site. Operational activities would be limited to monitoring facility performance and conducting scheduled or emergency maintenance of on-site electrical equipment and/or the gen-tie line. No heavy equipment would be routinely used during normal project operation. O&M vehicles would include trucks (i.e., pickup, flatbed), forklifts, and/or loaders for routine and unscheduled maintenance. Large heavy-haul transport equipment and cranes may be brought to the project site when needed for equipment repair or replacement. Long-term maintenance and equipment replacement would be scheduled in accordance with manufacturer recommendations. The project would also include operational and maintenance protocols that would be used to identify and remove damaged or defective battery modules as required. An HMBP and an SPCC plan would be prepared, which include requirements for handling, storage, employee training, site security measures, annual reporting, and routine inspections of facilities that store reportable quantities of hazardous materials associated with project operation. These operations would be conducted in accordance with standard practices to minimize potential exposure of workers or the public. As such, O&M of the project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be **less than significant**.

Criterion 3.5-2 Would the project create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Hazardous Materials Use

Construction and Decommissioning

Less than Significant. As discussed under Criterion 3.5-1 above, construction would involve storage and use of hazardous materials; regulatory controls and measures, along with BMPs and training, reduce the risks associated with the storage and use of hazardous materials.

Project construction and decommissioning activities could result in the transport, use, and disposal of hazardous materials, such as fuels, asphalt, lubricants, toxic solvents, pesticides, and herbicides. Although care would be used when transporting, using, and disposing of these materials, there is always a possibility that upset or accidental conditions may arise, which could release hazardous materials into the environment. Accidental releases of hazardous materials are those releases that are unforeseen or that result from unforeseen circumstances, while reasonably foreseeable upset conditions are those releases or exposure events that can be anticipated and planned for.

Project construction and decommissioning activities would occur in accordance with all applicable local standards set forth by the County, as well as state and federal health and safety requirements that are intended to minimize hazardous materials risk to the public, such as California Division of Occupational Safety and Health requirements, the Hazardous Waste Control Act, the California Accidental Release Protection Program, and the California Health and Safety Code. As noted above, the HMBP and SPCC would include spill prevention and control measures and training requirements. Also, the project would be subject to routine regulatory inspection by the California Energy Commission; therefore, protective measures are reviewed by agencies. The construction and decommissioning contractors would be required to implement such regulations relative to the transport, handling, and disposal of any hazardous materials, including the use of standard construction controls and safety procedures that would avoid or minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local and state laws.

Furthermore, a stormwater pollution prevention plan would be implemented to minimize potential hazards associated with construction and decommissioning site pollutants. The stormwater pollution prevention plan would include BMPs, such as covering and containing hazardous materials so that they are not in contact with precipitation or runoff, identifying the worst-case and most likely spill scenarios, and providing adequate response equipment to ensure that hazardous materials are not carried off site through stormwater runoff. The facility is anticipated to require an HMBP during construction, operation, and decommissioning because it is anticipated to have materials on site that are greater than the State of California thresholds for quantities of hazardous materials. The HMBP includes an emergency action plan, cleanup and containment provisions, and training and recordkeeping requirements.

While existing structures, due to their age, are likely to contain asbestos, demolition of these structures is not anticipated as part of the proposed project. As such, disturbance and subsequent release of asbestos is not anticipated and would not occur as part of the project.

Therefore, construction and decommissioning related project impacts would be **less than significant** with implementation of the required BMPs and training and compliance with applicable federal, state, and local requirements related to hazardous materials.

Operations Phase

Less than Significant. As discussed under Criterion 3.5-1 above, operation would involve use and storage of hazardous materials. Most of the hazardous materials used and stored on site would consist of lithium-ion batteries for project operations and mineral oil in transformers. Uncontrolled release of liquid chemicals could run off and drain into the stormwater system and potentially have harmful effects. However, the use

and storage of hazardous materials would pose less-than-significant risks for release if BMPs are adopted and regulatory requirements are adhered to, as detailed above.

The use and storage of hazardous materials would be contained in designated areas on site that would be outlined in the HMBP, which is required for construction and operation. The HMBP includes an emergency action plan, cleanup and containment provisions, and training and recordkeeping requirements. The risk of public exposure to hazardous materials, with appropriate BMPs, is low and would not be significant. All equipment (particularly equipment operating in or near a drainage or in a basin) would be maintained in good working condition and free of leaks. All vehicles would be equipped with drip pans during storage to contain minor spills and drips. Refueling and storage would take place in dedicated and established O&M areas. Spill kits would be located on site and in vehicles for use in spill response. In addition, all maintenance crews working with heavy equipment would be trained in spill containment and response.

Therefore, operation-related project impacts would be **less than significant** with implementation of the BMPs and training and compliance with applicable federal, state, and local requirements related to hazardous materials.

Accidental Release Hazards

Less than Significant. Without proper engineering controls, the public could be at risk of exposure to harmful vapors in the event of an accidental release during construction, operation, and decommissioning activities associated with the project, as incompatible chemicals have the potential to mix, causing vapors that could also have harmful effects. However, the project would implement California Fire Code (Articles 79 and 80) requirements for safe storage and handling of hazardous materials. The proposed project and the affiliated staff would use engineering controls to reduce the potential for release of hazardous materials and mixing of incompatible materials.

All transportation of hazardous substances would be with Department of Transportation–approved personnel and trucking/transport equipment. Project operations would not involve the handling of any other acutely hazardous materials that would have the potential to generate significant off-site consequences. However, release prevention measures are required under HMBP and SPCC rules and regulations, which would be implemented in the event hazardous materials and/or petroleum products are stored above reportable quantities. These measures, which include protections like secondary containment and accessible spill response kits, would further reduce the potential for accidental releases.

As such, construction, operation, and decommissioning impacts related to project implementation would be **less than significant** with implementation of the BMPs and training and compliance with applicable federal, state, and local requirements related to hazardous materials.

Fire and Explosion Hazards

As detailed in Section 3.16, Wildfire, the California Department of Forestry and Fire Protection's Fire and Resource Assessment Program database includes map data documenting areas of significant fire hazards in the state. These maps categorize geographic areas of the state into different Fire Hazard Severity Zones (FHSZs). As shown in Figure 3.16-2, Fire Hazard Severity Zones, the proposed project site and the surrounding area are located within a Local Responsibility Area but are not located within Local Responsibility Area FHSZ areas. The nearest FHSZ designations are State Responsibility Area Very High

FHSZ approximately 3 miles west, close to Corralitos Lagoon, State Responsibility Area High FHSZ approximately 1.90 miles northeast, nearby Pajaro Valley Memorial Park, and State Responsibility Area Moderate FHSZ 1.30 miles northeast, close to Rose Reservoir. The project site and the adjacent lands have a very low risk of fire due to the relatively flat terrain and the lack of combustible vegetation. See Section 3.16 for a discussion on impacts related to fire.

Less than Significant. Hazardous materials used and stored on site during project construction and operation would be stored in appropriate containers in compliance with federal and state regulations. Procedures for the use and handling of hazardous materials would be described within the project-specific HMBP (Appendix 3.5B), the Emergency Response Plan (ERP) (Appendix 3.16C), and the SPCC plan (Appendix 3.5C).

The ERP prepared for the project ensures compliance with OSHA regulations (29 CFR 1910.120[q] and 1926.35) and California Public Utilities Code (PRC Section 761.3). The ERP prioritizes the safety and awareness of workers, contractors, visitors, and the environment by minimizing risks from hazardous material spills, releases, or exposure (Fire and Risk Alliance 2025). The ERP would be provided to all local responders and on-site personnel associated with the project.

The ERP has been developed to assist the local emergency responders with important safety and emergency response information concerning the CATL EnerC+ lithium-ion BESS enclosures, intended for installation at the project site. The ERP and supporting material should be consulted prior to any fire service personnel performing firefighting operations at the BESS. The ERP would provide information about the following:

- Energy Storage System Information: The cell chemistry and operating characteristics, e-stop locations, smoke and heat detection systems, fire alarm control panel information, and gas detection information.
- Battery Management System Information: An autonomous control process that monitors a defined set of operating parameters within the battery container such as heat, voltage, and amperage. If equipment operates outside of their defined parameters, then an alarm is generated, and equipment is automatically isolated. The battery management system also interfaces with the Fire Alarm Control Panel. If heat, smoke, or hydrogen alarms are received, alarms are generated and equipment is isolated. Isolation occurs through the operation of the e-stops by the battery management system.
- Post-Incident Operations: Personal protective equipment, lock out/tag out, and air sampling.
- Communication Protocols: Protocols such as Using radios, alarms, or mobile devices to alert workers of incidents and posting emergency contact numbers (fire department, medical services) at multiple site locations.

In addition to the above information, the ERP would be applied during operations as follows:

- Communication Systems: Install permanent alarm systems and communication channels to notify employees and external responders (e.g., fire department) during incidents.
- Training and Maintenance: Provide annual refresher training on hazardous material handling and emergency response. Conduct regular inspections of safety equipment (e.g., spill kits, fire extinguishers).

The project would require the use of flammable materials, such as lubrication oil and diesel fuel. Fire extinguishers would be available on site, as noted in the HMBP and SPCC plan (Appendices 3.5B and 3.5C, respectively). Flammable materials would be handled in accordance with the HMBP and SPCC.

For emergency spills, hazardous materials, and fire-related incidents, Watsonville Fire Station 2 would first be called. For additional assistance, the closest fire station is the Pajaro Valley Fire Protection District Station 45, located at 562 Casserly Road, which is approximately 4 miles away from the project site. If a fire involves hazardous materials, Santa Cruz County Environmental Health can be contacted to direct fire stations equipped to handle hazardous materials. The HMBP and SPCC plan require emergency response procedures to be documented and available at the operating site. Contact information for applicable emergency response agencies must be included in these plans and posted in conspicuous locations at the site.

The applicant would use battery storage systems that are NFPA 855 code compliant and UL certified and when complete. The project would incorporate complementary fire prevention features that would minimize the risk that a fire could ignite any of the project components or that a fire in a project component could transition to a wildfire. These fire prevention features include pre-engineered fire protection systems, including fire, heat, and smoke detection systems; an inert gas fire suppression system; and explosion prevention systems. Each BESS enclosure would be installed on a non-combustible pad and surrounded by non-combustible material, including on-site access roads. Individual project components would be separated from each to allow room for radiant heat to escape and to meet CFC Section 1207 requirements. Project components would also be separated from nearby exposures (property lines, public streets, high-piled storage, combustible construction, etc.) to prevent fire or radiant heat from a BESS enclosure from igniting adjacent lands. Additionally, fire hydrants would be installed in accordance with the California Fire Code. As such, impacts would be **less than significant**.

Hazardous Materials in Soils

Less than Significant. As discussed in Section 3.5.1.1, Land Use, the Phase I ESA did not identify any RECs, conditional RECs, or historical RECs associated with the project site. A Phase II ESA report was completed in May 2026, which included soil sampling and analysis in accordance with regulatory guidance for evaluation of agricultural properties (Appendix 3.5D). The soil study identified arsenic in surface-level soils above regional background concentrations (Duvergé 2011). Available data indicates the elevated arsenic concentrations are not naturally occurring at the project site.

A contaminated soil mitigation study was completed to evaluate the level of contamination, exposure pathways, and options for mitigative measures that would reduce impacts associated with implementation of the project (Appendix 3.5E). The study concluded the following mitigation would be sufficient for the proposed project:

> **Encapsulation.** The proposed civil designs of the BESS would result in a completely impervious surface across the proposed areas of construction, which would include concrete pads for BESS structures and an impervious geomembrane beneath gravel surfaces. The civil designs would also include grading and stormwater capture in on-site biofiltration basins that are designed to retain all stormwater and would not infiltrate nor discharge (except for emergency conditions). Arsenic-impacted soil would be encapsulated, eliminating exposure to on-site workers and stormwater. A soil management

plan, operations and maintenance plan, and health and safety plan would be developed and implemented for the lifetime of the project.

Project Design Feature (PDF) HAZ-1, PDF-HAZ-2, and PDF-HAZ-3 outline the requirements for a soil management plan, O&M plan, and health and safety plan, respectively, that would be required to mitigate potential impacts associated with construction and ongoing operation and maintenance of the project. Civil designs include impervious surfaces and stormwater management features; therefore, no additional mitigation is required.

PDF-HAZ-1: Soil Management Plan. Prior to the issuance of a grading permit, the project applicant/developer or their designated contractor will retain a qualified environmental consultant to prepare a soil management plan (SMP) that outlines the proper screening, handling, characterization, transportation, and disposal procedures for arsenic-contaminated soils on site. The SMP will include on-site soil management requirements to avoid fugitive dust and stormwater runoff, including stockpile management, and response and reporting procedures in the event a release of contaminated soils or violation of air quality or water quality rules occurs (Monterey Bay Air Resources District and Central Coast Regional Water Quality Control Board, respectively). The SMP will be implemented by the applicant or their designated contractor for all confirmed and suspected contaminated soils that require excavation and off-site disposal. The SMP will include procedures to meet all applicable federal, state, and local regulations associated with handling, excavating, stockpiling, and disposing of contaminated soils; the proposed disposal facility that will accept the contaminated soils; and appropriate procedures, notifications, permitting requirements, handling, and disposal requirements for decommissioning any underground storage tanks.

PDF-HAZ-2: Operations and Maintenance Plan. Prior to certificate of occupancy or operation of the project site, an operations and maintenance (O&M) plan will be prepared that outlines monitoring and maintenance procedures required to maintain appropriate integrity and operation of the impervious surfaces and stormwater management features. The O&M plan will include inspection schedules, documentation requirements, maintenance procedures, and sampling procedures, as needed to ensure integrity of the impervious surfaces and stormwater retention features for the lifetime of the project. The O&M plan will also include a copy of the soil management plan (SMP) prepared under Project Design Feature (PDF) HAZ-1 to be implemented in the event site maintenance requires exposing or excavating arsenic-contaminated soil.

PDF-HAZ-3: Health and Safety Plan. All construction activities that take place on the project site will be completed under a health and safety plan, prepared by a health and safety professional in accordance with California Occupational Safety and Health Administration and federal Occupational Health and Safety Administration rules and regulations. The health and safety plan will account for exposure of workers to contaminated soil, dust, and runoff. The health and safety plan will include guidelines for appropriate safety measures, monitoring, and personal protective equipment as applicable for known contaminants of concern at the project site.

As noted in Section 3.5.1, Affected Environment, there is a potential for the on-site structures to contain hazardous building materials, including asbestos and lead-based paints. While these materials are present, the proposed project does not anticipate demolition or disturbance of the on-site buildings, and as such emission or release of the hazardous building materials would not likely occur.

With implementation of the PDFs, impacts would be **less than significant**.

Criterion 3.5-3 Would the project emit hazardous emissions or handle materials, substances, or waste within 0.25 miles of an existing or proposed school?

No Impact. As shown in Table 3.5-1, there are no schools within 0.25 miles of the project site. The nearest main highway for transportation of BESS enclosures and hazardous materials for construction is State Route 152, east of the project site. While State Route 152 transects through the City of Watsonville, where numerous schools, daycare facilities, and sensitive receptors are located, transportation rules and regulations require safety and contingency procedures be in place during transport of hazardous materials and battery enclosures. Emissions from these materials will not occur during transportation, as emissions are based on operations, and truck emissions would be similar to daily traffic. Once operational, the project site would not be within 0.25 miles of a school, and air emission rules and regulations do not allow harmful emissions that could impact human health or the environment. Due to the selected routes for hazardous material delivery and the distance relative to existing or proposed schools, there would be no impact.

Criterion 3.5-4 Would the project be included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and result in a significant hazard to the public or environment?

Less than Significant. The Phase I ESA (Appendix 3.5A) included a review of hazardous material release sites identified on regulatory databases, including Cortese List Data Resources compiled pursuant to Government Code Section 65962.5. While the main project site was not identified as a Cortese List site, the proposed access road, Option 1, would cross through the southern-adjoining leaking underground storage tank site, which classifies as a Cortese List site. This site is Roy Wilson Maintenance Yard, 198 Grimmer Road. Remediation activities, as agreed upon with the regulatory agency, Santa Cruz County Environmental Health Service, include monitoring natural attenuation of groundwater contamination. The most recent monitoring report, completed in June 2025, provided the following information (GeoSyntec 2025):

- Three former underground storage tanks were located in the center of the site, approximately 780 feet south of the BESS facility site. These underground storage tanks were removed in 1993 and 1995.
- Impacted soils were removed with underground storage tank decommissioning.
- Groundwater impacts were identified in 1995 following installation of groundwater monitoring wells. Depth to impacted groundwater is approximately 7 to 12 feet below ground surface. Groundwater monitoring began in 1995 and is ongoing.
- Groundwater flow on the site is variable but appears to flow southwestward and northwestward, toward the center of the site. This indicates groundwater from the project site would flow southwestward toward the leaking underground storage tank site.
- As of June 2025, groundwater impacts were limited to the former underground storage tank area, and contaminant concentrations are stable or decreasing.

Proposed construction across this site includes grading and paving an access road. This construction is primarily surface level and does not require extensive excavation. As soil impacts have been removed, and groundwater is at a depth of at least 6 to 7 feet below ground surface, it is not anticipated that construction would encounter contamination associated with this past release. Construction of the road must avoid disturbance of active groundwater monitoring wells, which are located near the proposed access road. It is noted that the Roy Wilson Maintenance Yard still maintains two aboveground fuel storage tanks, and construction should avoid any activity within proximity of these tanks. With available information, removal of soil contamination, and limited proposed construction in this area, impacts would be less than significant.

Criterion 3.5-5 Would the project Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency plan?

Less than Significant. The proposed project would not physically impede an existing ERP, emergency vehicle access, or personnel access to the project site. The project site is in an area with several alternative roadways allowing access in the event of an emergency. Access to existing roadways near the project site would be maintained throughout construction, operation, and decommissioning phases, and appropriate detours would be provided in the event of potential road closures. Therefore, no significant impacts related to impairment of the implementation of or physical interference with an adopted ERP or emergency evacuation plan would occur during project construction.

The limited size of the project's operational work force would not generate significant traffic volumes during an emergency evacuation scenario that could complicate area-wide emergency evacuation efforts. Driveways built to connect to existing local roads for direct site access would not affect designated emergency evacuation routes, as these are public roadways, and the driveways would not conflict with potential evacuation routes for surrounding land uses. As such, impacts would be less than significant.

3.5.3 Cumulative Effects

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project (PRC Section 21083; 14 CCR 15064[h], 15065[c], 15130, and 15355). The CEQA Guidelines further note that "[t]he cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative effects can result from individually minor but collectively significant projects taking place over a period of time" (14 CCR 15355).

Potential risks related to hazards and hazardous materials are typically localized in nature because they tend to be related to on-site existing hazardous conditions and/or hazards caused by a project's construction or operation. Cumulative projects were chosen based on proximity and similarity to the proposed project. These selection factors are appropriate in the context of hazards and hazardous cumulative impacts because generally there needs to be a direct nexus and similar hazard for a synergistic impact to occur, such as hazardous materials from multiple sites being carried into the same river via stormwater runoff. Accordingly, there is not a known existing significant cumulative impact related to hazards or hazardous material within this geographic scope.

The proposed project and other related infrastructure projects may involve the storage, use, disposal, and transport of hazardous materials to varying degrees. Impacts from these activities are anticipated to be less than significant because similar projects would also comply with federal, state, and local regulations and policies. For example, all

the identified projects would be required to implement safety measures and precautions necessary to minimize any potential disturbance of hazardous materials and prevent the creation of additional hazards that cannot be mitigated or contained properly. Furthermore, other storage facilities would also be equipped with secondary containment and fire suppressant technology to lessen the impacts of potential battery fires. In light of all of the evidence provided here, cumulative impacts related to hazards would be less than significant.

3.5.4 Mitigation Measures

Impacts are less than significant; therefore, no mitigation is required.

3.5.5 Laws, Ordinances, Regulations, and Standards

Storage and use of hazardous materials at the project site are governed by laws, ordinances, regulations, and standards established and enforced at the federal, state, and local levels. Applicable laws are addressed and described below and summarized in Table 3.5-2.

Table 3.5-2. LORS Applicable to Hazardous Materials Handling

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
Federal	40 CFR 112	Facilities that store oil in excess of 1,320 gallons aboveground or 42,000 gallons belowground, in containers 55 gallons or larger, must prepare a SPCC plan.	**Yes.** An SPCC plan would be prepared and implemented.	Criterion 3.5-1 Criterion 3.5-2 Section 3.5.5.1
Federal	40 CFR 260 through 273	Establishes requirements for the management of solid wastes, hazardous wastes, landfills, underground storage tanks, and some medical wastes.	**Yes.** Waste generated by the project would be characterized for disposal. If hazardous wastes are generated, they must be managed in accordance with the rules outlined in 40 CFR Part 262.	Criterion 3.5-1 Criterion 3.5-2 Section 3.5.5.1
Federal	29 CFR 1910	OSHA has multiple rules and regulations established for worker protections, health, and safety to be established in the workplace.	**Yes.** Personal protective equipment and training would be provided to workers handling hazardous materials and/or wastes. Fire protection systems and equipment are required for the workplace to protect against site-specific fire hazards. Additional fire protection requirements are	Criterion3.5-1 Criterion 3.5-2 Section 3.5.5.1

Table 3.5-2. LORS Applicable to Hazardous Materials Handling

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
			discussed in Section 3.16, Wildfire. Chemical products would include an SDS for downstream product users.	
Federal	49 CFR 172	Establishes standards for transportation of hazardous materials and wastes. These include labeling, packaging, shipping manifests, recordkeeping, and training requirements.	**Yes.** The project would comply with required standards for transportation of hazardous materials and wastes.	Criterion 3.5-1 Criterion 3.5-2 Section 3.5.5.1
Federal	40 CFR 68	A facility, defined in 40 CFR 68.3 is a "stationary source," that stores a hazardous material above its applicable threshold quantity is required to comply with emergency response coordination activities, implement an emergency response program, conduct emergency response training exercises, and implement applicable accident prevention measures as required by 40 CFR 68.10.	**Yes**. The project would not handle hazardous materials above threshold quantities.	Criterion 3.5-1 Criterion 3.5-2 Section 3.5.5.1
State	HSC Division 20, Chapter 6.11	California's Unified Hazardous Waste and Hazardous Materials Management Regulatory Program consolidates administration, permitting, inspection, and enforcement activities of several environmental programs at a local level. Duties are delegated to Certified Unified Program Agencies. Multiple programs are managed under the Unified Program, including the APSA, area plans for hazardous material emergencies, CalARP, HMBPs, hazardous materials management plans, hazardous materials inventory statements, hazardous waste permitting (tiered permitting), and underground storage tanks.	**Yes**. An HMBP would be prepared and implemented.	Criterion 3.5-2 Section 3.5.5.2
State	HSC Division 20, Chapter	A facility that handles a hazardous material, hazardous	**Yes.** The BESS facility would be required to	Criterion 3.5-2

Table 3.5-2. LORS Applicable to Hazardous Materials Handling

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
	6.95, Sections 25500 through 25519	waste, or mixture containing a hazardous material at any one time during the reporting year greater than or equal to 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas is required to prepare and submit an HMBP.	prepare and submit an HMBP for hazardous materials stored on site. HMBPs are submitted through the California Environmental Reporting System online; submittals then go to Santa Cruz County Environmental Health for review, approval, and further inspection. HMBPs are updated annually, or within 30 days of a change in hazardous material or waste storage at a facility.	Section 3.5.5.2
State	HSC, Division 20, Chapter 6.95, Article 2, Sections 25531 through 25543.3 (CalARP)	The purpose of the CalARP program is to prevent accidental releases of substances that can cause serious harm to the public and the environment and to minimize the damage if releases do occur. CalARP requires certain facilities (referred to as "stationary sources") that handle, manufacture, use, or store any regulated substances above threshold quantities to take actions to proactively prevent and prepare for accidental releases. Facilities subject to CalARP requirements must submit an RMP.	**Yes.** Approximately 1,355 pounds of H_2SO_4 (sulfuric acid) would be in the control house. The project would prepare and implement an RMP to proactively prevent and prepare for accidental releases.	Criterion 3.5-2 Section 3.5.5.2
State	HSC, Section 25270 through 25270.13 (APSA)	APSA regulations include aboveground petroleum storage tanks that are subject to SPCC regulations under 40 CFR 112, aboveground petroleum storage tanks that are larger than 1,320 gallons, and aboveground petroleum storage tanks in underground areas.	**Yes**. An SPCC plan would be prepared and implemented.	Criterion 3.5-1 Criterion 3.5-2 Section 3.5.5.2
Local	MBARD	Air monitoring, permitting, enforcement, air-quality planning, and informational activities	**Yes.** The project would apply for and adhere to all applicable	Criterion 3.5-1 Section 3.5.5.3

Table 3.5-2. LORS Applicable to Hazardous Materials Handling

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
		related to air pollution, as required by the California Clean Air Act and Amendments (HSC Section 40910 et seq.) and the Federal Clean Air Act and Amendments (42 USC Section 7401 et seq.).	MBARD rules, including 400 (Visible Emissions), 417 (Storage of Organic Liquids), and 424 (National Emission Standards for Hazardous Air Pollutants).	
Local	All-Hazards Mitigation Plan	Identifies and mitigates natural hazards.	**Yes**. The project would not physically impede an existing emergency response plan, emergency vehicle access, or personnel access to the project site.	Criterion 3.5-5 Section 3.5.5.3

Note: LORS = laws, ordinances, regulations, and standards; CFR = Code of Federal Regulations; SPCC = spill prevention, control, and countermeasure; OSHA = Occupational Safety and Health Administration; SDS = safety data sheet; HSC = California Health and Safety Code; SPSA = Aboveground Petroleum Storage Act; CalARP = California Accidental Release Prevention; HMBP = hazardous materials business plan; BESS = battery energy storage system; RMP = risk management plan; MBARD = Monterey Bay Air Resources District.

3.5.5.1 Federal

Clean Water Act (40 CFR 112)

The SPCC rule under the Clean Water Act is designed to prevent or contain the discharge or threat of discharge of oil into navigable waters or adjoining shorelines. Regulations (40 CFR 112) under the Clean Water Act require facilities to prepare a written SPCC plan if they store oil, and its release would pose a threat to navigable waters. The SPCC rule is applicable if a facility has a single oil aboveground storage tank with a capacity greater than 660 gallons, total petroleum storage (including aboveground storage tanks, oil-filled equipment, and drums) greater than 1,320 gallons, or underground storage capacity greater than 42,000 gallons. The SPCC rule is administered by the local Certified Unified Program Agency, which is Santa Cruz County Environmental Health.

Should this exceed 1,320 gallons total on site, measures consistent with Aboveground Petroleum Storage Act program guidance would be followed in preparation of the SPCC plan, which would be included in the HMBP.

Other related federal laws that address hazardous materials but do not specifically address their handling include the Resource Conservation and Recovery Act and the Occupational Safety and Health Act.

An SPCC plan would be prepared and implemented for the project (Appendix 3.5C).

40 CFR 260–273

The Resource Conservation and Recovery Act establishes requirements for the management of solid wastes, hazardous wastes, landfills, underground storage tanks, and some medical wastes. The following parts specifically apply to the project.

Part 261, Identification and Listing of Hazardous Waste, outlines the requirements for identifying, characterizing, testing, and listing hazardous wastes.

Part 262, Standards Applicable to Generators of Hazardous Waste, outlines the requirements that must be followed if hazardous waste is generated at a facility, including handling, labeling, containerization, reporting, disposing, and recordkeeping. Requirements vary based on the volume of hazardous waste generated.

Parts 263, 264, and 265 set forth rules and requirements for transportation, treatment, and disposal. The "generator," as defined and discussed in Part 262, is responsible for hazardous waste being transported and disposed of in accordance with these regulations.

Part 268, Land Disposal Restrictions, further requires that hazardous waste not be landfilled in non-hazardous waste facilities.

Part 273, Standards for Universal Waste Management, establishes requirements for management of specific waste identified as "universal wastes," including batteries, pesticides, mercury-containing equipment, lamps, and aerosols.

Waste generated by the project would be characterized for disposal. If hazardous wastes are generated, they must be managed in accordance with the rules outlined in 40 CFR Part 262. All project wastes must be characterized based on processes or chemical composition. Materials generated by the project that cannot be used as products and must therefore be disposed of must be characterized in accordance with these rules and regulations. Wastes that are not categorized as hazardous wastes must be managed as solid waste (e.g., disposal at municipal solid waste landfill).

29 CFR 1910

OSHA has multiple rules and regulations established for worker protections, health, and safety to be established in the workplace.

Subpart A requires employers to provide workers with personal protective equipment and training.

Subpart I establishes requirements for the type and use of personal protective equipment.

Subpart L establishes fire protection standards.

Subpart Z establishes rules regarding toxic and hazardous substances. Under Subpart Z, the Hazard Communication Standard requires chemical manufacturers, distributors, and/or importers to provide safety data sheets for each hazardous chemical to downstream users.

Personal protective equipment and training would be provided to workers handling hazardous materials and/or wastes. Fire protection systems and equipment are required for the workplace to protect against site-specific fire

hazards. Additional fire protection requirements are discussed in Section 3.16. Chemical products would include a safety data sheet for downstream product users.

49 CFR 172

The regulations for the transportation of hazardous materials and wastes (49 CFR 172) establish standards for transportation of hazardous materials and wastes. These include labeling, packaging, shipping manifests, recordkeeping, and training requirements.

The project would comply with required standards for transportation of hazardous materials and wastes.

40 CFR 68

A facility, defined in 40 CFR 68.3 as a "stationary source," that stores a hazardous material above its applicable threshold quantity is required to comply with emergency response coordination activities, implement an emergency response program, conduct emergency response training exercises, and implement applicable accident prevention measures as required by 40 CFR 68.10.

An ERP is not required, as the site would not store hazardous materials above the applicable threshold quantities listed in 40 CFR Section 68.130.

3.5.5.2 State

California laws and regulations relevant to hazardous materials handling at the facility include Health and Safety Code Section 25500 (hazardous materials), Health and Safety Code 25531 (regulated substances), and the Aboveground Petroleum Storage Act (petroleum in aboveground tanks).

California Health and Safety Code Section 25500 et seq.

California Health and Safety Code Section 25500 et seq. and the related regulations in 19 CCR 2620 et seq. require local governments to regulate local business storage of hazardous materials in excess of certain quantities. The law also requires that entities storing hazardous materials be prepared to respond to releases.

Those using and storing hazardous materials are required to submit an HMBP to their local Certified Unified Program Agency and to report releases to their Certified Unified Program Agency and the State Office of Emergency Services. The threshold quantities for hazardous materials are 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet for compressed gases measured at standard temperature and pressure.

The facility would be required to prepare and submit an HMBP for hazardous materials stored on site. HMBPs are submitted through the California Environmental Reporting System online; submittals then go to Santa Cruz County Environmental Health for review, approval, and further inspection. HMBPs are updated annually, or within 30 days of a change in hazardous material or waste storage at a facility.

An HMBP would be prepared and implemented to ensure compliance with these laws, ordinances, regulations, and standards (Appendix 3.5B).

California Health and Safety Code, Division 20, Chapter 6.95, Article 2, Sections 25531–25543.3

The purpose of California Accidental Release Prevention is to prevent accidental releases of substances that can cause serious harm to the public and the environment and to minimize the damage if releases do occur. California Accidental Release Prevention requires certain facilities (referred to as "stationary sources") that handle, manufacture, use, or store any regulated substances above threshold quantities to take actions to proactively prevent and prepare for accidental releases. Facilities subject to California Accidental Release Prevention requirements must submit a risk management plan. A risk management plan is a document prepared by the owner or operator of a stationary source containing detailed information including, but not limited to, the following:

- Regulated substances held on site at the stationary source
- Off-site consequences of an accidental release of a regulated substance
- The accident history at the stationary source
- The emergency response program for the stationary source
- Coordination with the local emergency responders
- Hazard review or process hazard analysis
- Operating procedures at the stationary source
- Training of the stationary source's personnel
- Maintenance and mechanical integrity of the stationary source's physical plant
- Incident investigation

Approximately 1,355 pounds of H_2SO_4 (sulfuric acid) would be in the control house. The project would prepare and implement a risk management plan to proactively prevent and prepare for accidental releases.

Aboveground Petroleum Storage Act

California Health and Safety Code Sections 25270 to 25270.13 ensure compliance with the Clean Water Act. The law applies to facilities that operate a petroleum aboveground storage tank with a capacity greater than 660 gallons, combined aboveground storage tanks capacity greater than 1,320 gallons, or oil-filled equipment where there is a reasonable possibility that the tank(s) or equipment may discharge oil in "harmful quantities" into navigable waters or adjoining shore lands. If a facility falls under these criteria, it must prepare an SPCC plan.

An SPCC plan would be prepared and implemented to ensure compliance with these laws, ordinances, regulations, and standards (Appendix 3.5C).

3.5.5.3 Local

Monterey Bay Air Resources District

Monterey Bay Air Resources District is responsible for addressing emissions from stationary sources through permits and local rules that reduce air emissions and improve air quality. These rules include 400 (Visible Emissions; MBARD 2012), 417 (Storage of Organic Liquids; MBARD 2001), and 424 (National Emission Standards for Hazardous Air Pollutants; MBARD 2008).

The project would comply with Monterey Bay Air Resources District rules for visible emissions, storage of organic liquids, and hazardous air pollutants.

Santa Cruz County General Plan

The Santa Cruz County General Plan includes a safety element that sets standards for land use within the county. Specifically, the following are applicable to hazards and hazardous materials for the project (County of Santa Cruz 2024):

Policy 6.9.1 Hazardous Materials Ordinance. Maintain the County's Hazardous Materials ordinance, placing on users of hazardous and toxic materials the obligation to eliminate or minimize the use of such materials whenever possible, and in all cases to minimize the release, emission, or discharge of hazardous materials to the environment, and properly to handle all hazardous materials and to disclose their whereabouts. Further, maintain the County's ordinance relating to ozone-depleting compounds. Ensure that any amendment of existing ordinance provisions is based on a finding that the amendments will provide protection to the environment and the community against toxic hazards that is equal to or stronger than the existing provisions.

Policy 6.9.2 County Use of Toxic/Hazardous Materials. Eliminate wherever possible, and minimize where elimination is not feasible, the use of hazardous and toxic materials in the operations and programs of County government.

Policy 6.9.3 Maintenance of Standards for Use and Control. Ensure that Santa Cruz County maintains standards for the use and control of hazardous materials which are at least equal in their protection for the environment and the community to measures imposed by other local governments within Santa Cruz County, and in adjoining counties.

Policy 6.10.1 Managing the County's Fair Share of Hazardous Waste. Any proposed facility shall be consistent with the fair share principle, and with any inter-jurisdictional agreements on hazardous waste management entered into by Santa Cruz County.

Policy 6.10.2 Sizing Facilities. Facilities shall be designed and sized primarily to meet the hazardous waste management needs of this County, or to meet any broader future commitments made as part of an inter-jurisdictional agreement, or upon a determination of the local body that the project meets local planning criteria and serves public needs.

Policy 6.10.3 Location of Facilities. Require any proposed hazardous waste management facility to be located only in those general areas identified in the Hazardous Waste Management Plan.

Policy 6.10.4 Conformance to Federal, State and Local Siting Standards. Require all hazardous waste land disposal facilities to conform to the siting standards contained in state statutes as well as conform to the General Plan and LCP Land Use Plan and Zoning ordinances of the County of Santa Cruz.

Policy 6.10.6 Depth to Groundwater. Require a minimum 20-foot distance between any hazardous waste facility and the highest anticipated elevation of the underlying groundwater. Proposed sites must be evaluated for consistency with this criteria by a registered geologist before permitting.

Policy 6.10.7 Mineral Resources Areas. Allow facilities to be sited only where they will not preclude extraction of minerals necessary to sustain the economy of the state.

Policy 6.10.8 Non-Attainment Air Areas (Federal Clean Air Act). Allow facilities to be sited within federally designated Non-Attainment Air Areas only under the following conditions:

(a) A risk assessment must be completed and shall consider physical and chemical characteristics of the specific types of wastes that will be handled and design features of the facility. The assessment must show that emissions will not significantly contribute to non-attainment of standards;

(b) The emissions generated must be mitigated; and

(c) The emissions generated from such facilities shall not be greater than those associated with the transportation of hazardous waste outside of the non-attainment area.

Policy 6.10.10 Distance From Residences.

(a) Require a Risk Assessment for the siting of a hazardous waste management facility and a 500-foot minimum buffer zone from the nearest urban and suburban density residentially zoned areas. The risk assessment shall consider the physical and chemical characteristics of the specific type of waste(s) that will be handled and any design feature necessary for the facility.

(b) Require any facility handling ignitable, volatile or reactive wastes to be sited a minimum of 2000 feet from the nearest residence unless the developer can show that the public is sufficiently safeguarded in the event of an accident.

Policy 6.10.11 Distance from Immobile Populations

(a) Require a Risk Assessment for the siting of a hazardous waste management facility and a 500-foot minimum buffer zone from an immobile population, which includes places where large numbers of people may gather and also includes schools, hospitals, convalescent homes, prisons, facilities for the mentally ill, or similar places. The risk assessment shall consider the physical and chemical characteristics of the specific type of waste(s) that will be handled and any design feature necessary for the facility.

(b) Require any facility handling ignitable, volatile or reactive wastes proposed to be sited within one mile of an immobile population, to prepare, at the developer's expense, a study detailing the maximum credible accident from a facility's operation.

Policy 6.10.12 Emergency Response/Safe Transportation Routes. Locate facilities of any type so as to minimize distances to major transportation services. Locate all facilities in areas where the fire departments are trained to respond to hazardous materials accidents. Road networks leading to major transportation routes should not pass through residential neighborhoods, should minimize residential frontages in other areas, and shall be demonstrated to be safe with regard to road design and construction, weight allowances, accident rates, excess traffic, etc.

Policy 6.10.13 Public Services. Limit all facility types to sites where public water and sewer and emergency facilities are available, except for existing landfill sites

The project would comply with County policies for hazardous materials siting, handling, and transportation.

3.5.6 Agencies and Agency Contacts

Applicable agency contacts for hazardous materials handling are shown in Table 3.5-3.

Table 3.5-3. Permits and Agency Contacts

Issue/Approval	Agency Contact	Applicability
Hazard materials business plan	Andrew Starder, Director Santa Cruz County Environmental Health 701 Ocean Street 3rd Floor – Room 312 Santa Cruz, California 95060 831.454.2022 andrew.strader@santacruzcounty.us	Hazardous materials compliance
Spill prevention, control, and countermeasure	Same contact as above	Hazardous materials compliance
Plan check approval	Joe Paquin Deputy Fire Marshal Santa Cruz County Fire Department 6059 Highway 9 Felton, California 95018 831.335.6748 SCCFDFireMarshal@fire.ca.gov	Fire protection compliance

3.5.7 Permits and Permit Schedule

The project would obtain appropriate HMBP and SPCC approvals as required. The project has been designed in coordination with Santa Cruz County Fire Department requirements and via consultation with the fire authority having jurisdiction.

3.5.8 References

County of Santa Cruz. 2024. "Public Safety Element Outside Coastal Zones." Chapter 6 in *General Plan and Local Coastal Program*. Effective March 18, 2024. https://cdi.santacruzcountyca.gov/Planning/PolicyPlanning/General,TownVillagePlans.aspx.

Duvergé, D.J. 2011. "Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region." Master's thesis; San Francisco State University; San Francisco, California. December 2011.

Fire and Risk Alliance. 2025. *Emergency Response Plan*. Revised August 26, 2025.

GeoSyntec. 2025. *2025 Annual Groundwater Monitoring Report, Roy Wilson Yard, Watsonville, California*. June 16, 2025.

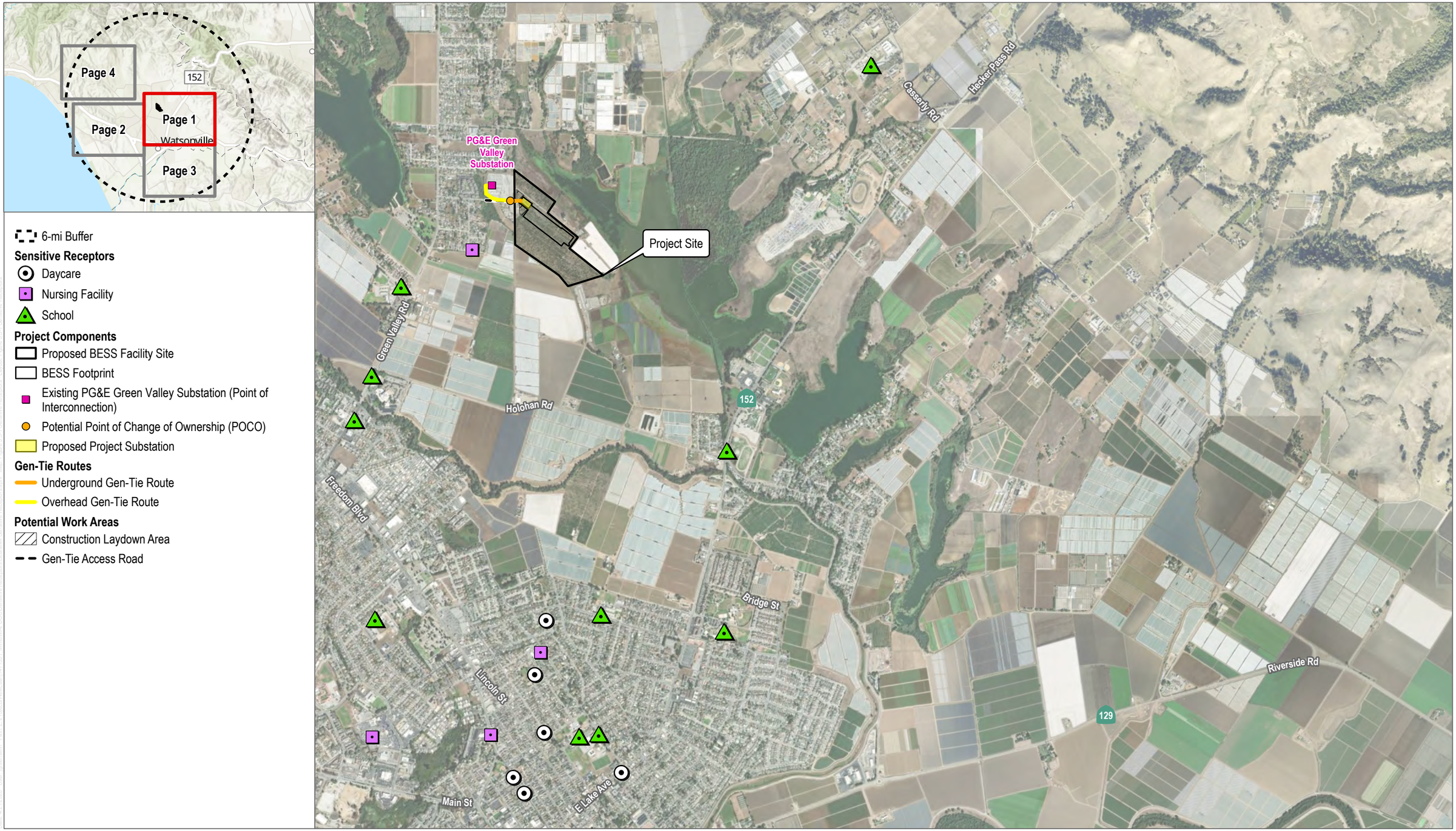
MBARD (Monterey Bay Air Resources District). 2001. "Rule 417: Storage of Organic Liquids." Revised December 19, 2001. Accessed November 17, 2025. https://www.mbard.org/current-rules#docaccess-1635b8ae92e2f8bd3b8b71019f3319a70c1a6871cb11dddca8fa52a63d767cb3.

MBARD. 2008. "Rule 424: National Emission Standards for Hazardous Air Pollutants (NESHAPS)." Revised November 19, 2008. Accessed November 17, 2025. https://www.mbard.org/current-rules#docaccess-62f616151ea9962b2b8cf8aaa3232de2f5870429e8b2891fccbe904760cad8a3.

MBARD. 2012. "Rule 400: Visible Emissions." Revised August 15, 2012. Accessed November 17, 2025. https://www.mbard.org/current-rules#docaccess-894947c1b3b0c0cdea417ee9b2f5d3f719b79f08c4c84855c80cf87cfa5bb8de.

Mirador Living. 2025. "Rachelle's Home II." Accessed December 30, 2025. https://www.miradorliving.com/assisted-living/california/watsonville/rachelles-home-ii.

OPR (Governor's Office of Planning and Research). 1994. *Thresholds of Significance: Criteria for Defining Environmental Significance*. CEQA Technical Advice Series. Sacramento, California: OPR. September 1994.



SOURCE: New Leaf Energy 2025; Vantor 2024; Open Street Map 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 3.5-1-1

Sensitive Receptors Within a 6-Mile Radius of the Project Site

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: New Leaf Energy 2025; Vantor 2024; Open Street Map 2023

DUDEK

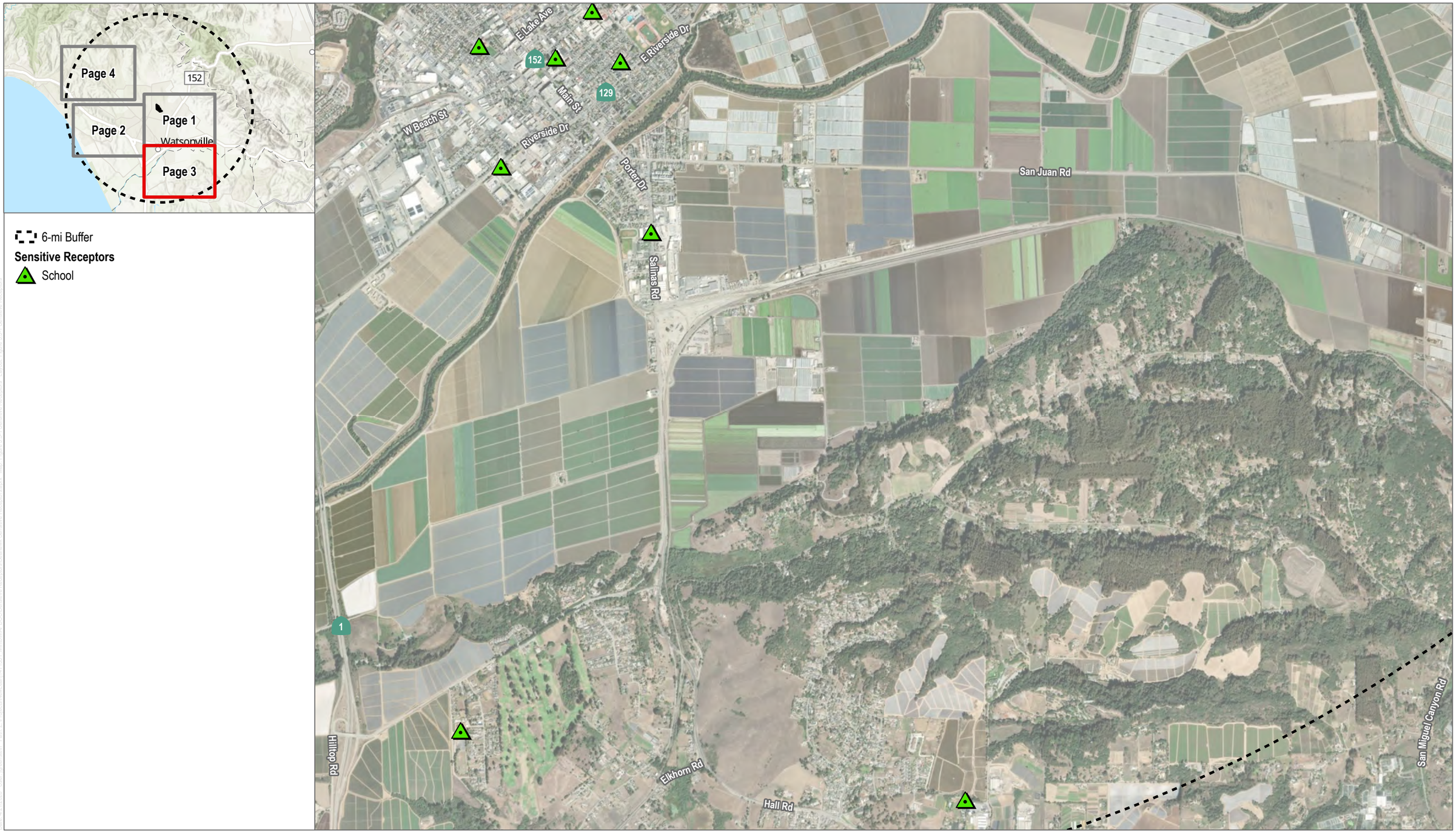
0 1,000 2,000 Feet

FIGURE 3.5-1-2

Sensitive Receptors Within a 6-Mile Radius of the Project Site

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: New Leaf Energy 2025; Vantor 2024; Open Street Map 2023

DUDEK

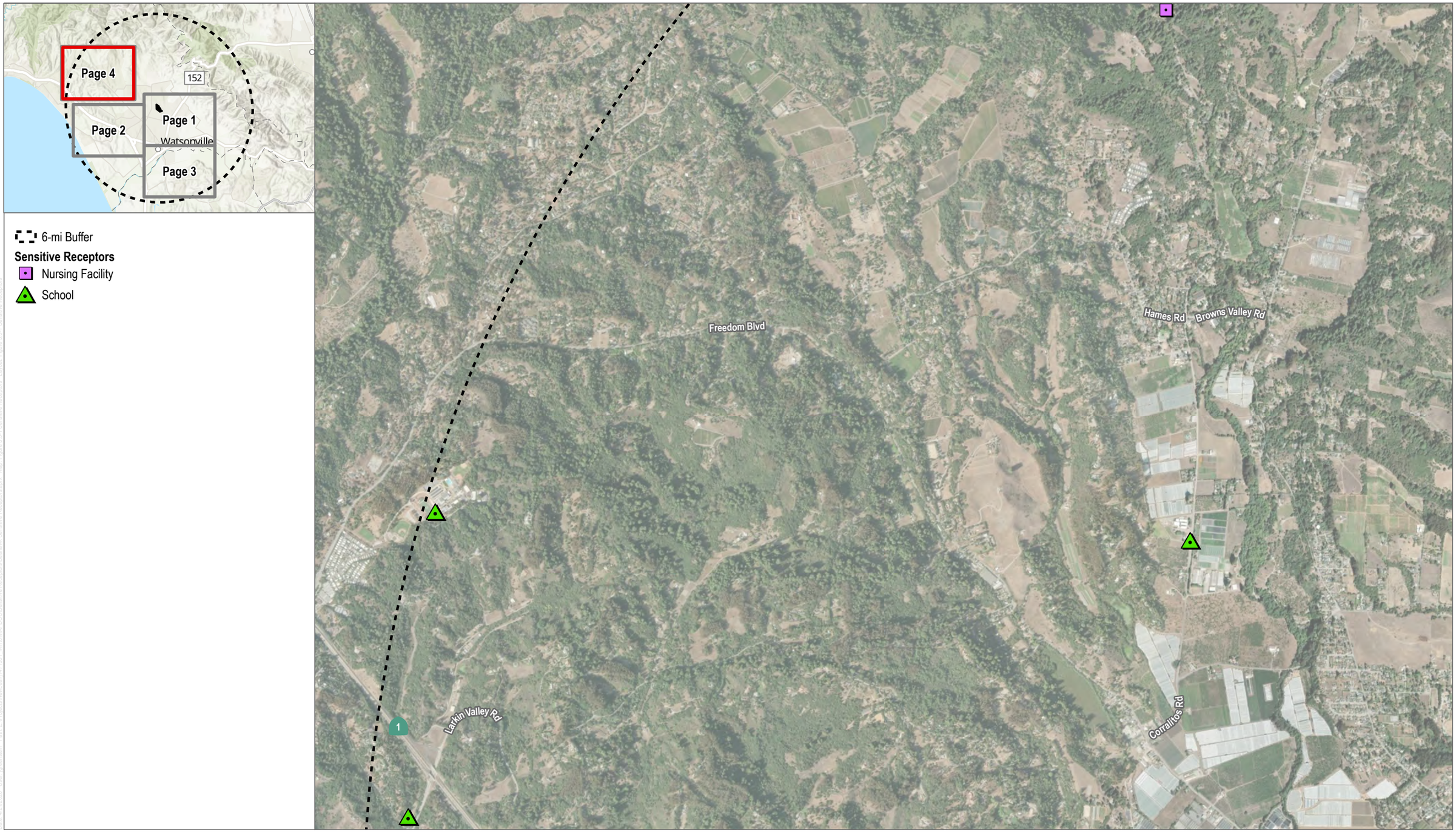
0 1,000 2,000 Feet

FIGURE 3.5-1-3

Sensitive Receptors Within a 6-Mile Radius of the Project Site

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: New Leaf Energy 2025; Vantor 2024; Open Street Map 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 3.5-1-4

Sensitive Receptors Within a 6-Mile Radius of the Project Site

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK

3.6 Land Use

This section provides an evaluation of land use within the study area and is based on review of local, regional, and statewide policies, regulations, and plans applicable to the Seahawk Battery Energy Storage System (BESS) Project (project) facility and the potential visual impacts associated with its construction and operation. The project would consist of a 200-megawatt BESS facility, an on-site collector substation, a 115-kilovolt overhead generation interconnect (gen-tie) transmission line, and interconnection to the adjacent Green Valley Substation owned and operated by Pacific Gas and Electric Company (PG&E).

This evaluation of land use includes the following elements:

- Section 3.6.1 describes the existing land use environment that could be affected by project implementation.
- Section 3.6.2 identifies potential environmental impacts that may result from project construction, operation, maintenance, and decommissioning.
- Section 3.6.3 discusses potential cumulative effects.
- Section 3.6.4 describes project design and mitigation measures that would be implemented to avoid or minimize potentially significant impacts.
- Section 3.6.5 discusses the applicable laws, ordinances, regulations, and standards.
- Section 3.6.6 lists the agencies involved and provides agency contacts.
- Section 3.6.7 discusses permits and permit schedules.
- Section 3.6.8 lists reference materials used in preparing this section.

The following environmental setting and impact evaluation is based in part on the following project-specific technical information, included as an appendix to this application:

- Appendix 3.6A – Land Use Inventory
- Appendix 3.6B – Site Control Documentation

A summary of the land use evaluation is provided in the table below.

		Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:					
1	Physically divide an established community?	☐	☐	☐	☒
2	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	
3	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the	☐	☒	☐	☐

		Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
	Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use, excepting those lands that would be expected to be converted or retired even without the project due to insufficient water resources for continued commercial agriculture, land subsidence due to historic groundwater over-pumping, soil contamination due to inadequate drainage, or the local weather effects of climate change?				
4	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
5	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☒	☐

3.6.1 Affected Environment

This section describes the existing land use environment of the project site, which comprises the approximately 16-acre BESS facility and associated gen-tie line route.

3.6.1.1 Regional Setting

The project site is located in unincorporated Santa Cruz County, California, outside of the City of Watsonville. The project site is within the Pajaro Valley Planning Area and within the South County Code Compliance Area.

3.6.1.2 Local Setting

The project would be located on Assessor's Parcel Numbers (APNs) 051-101-77 and 051-101-78, near 90 Minto Road. Development of the BESS facility would occur on up to 16 acres out of the 47 acres that comprise the total area of both parcels. APN 051-101-77 is part of the project site, which would contain the project's primary access road into the site (Figure 3.6-1, Project Site, and Figure 3.6-2, Assessor's Parcel Number [APN] Map). The gen-tie line would extend west from the project substation to the Point of Interconnection at the PG&E Green Valley Substation 0.21 miles west of the project. The project would be accessed by the portion of Minto Road located within APN 051-101-77.

The project site is currently an orchard and is surrounded by a mixture of uses, which include public utilities; large-scale commercial vegetable, berry, and nursery farming; and residential developments. Existing land uses adjacent to the project include the PG&E Green Valley Substation that the project would connect to. To the west of the substation are low-density residential and business buildings. To the north, east, and south of the PG&E Green Valley Substation, land use is primarily agricultural with dispersed residential uses and businesses. This land use

also exists beyond the areas adjacent to the project. The nearest residences are immediately northeast of the project site. Bodies of water close to the project site include College Lake (400 feet east), Pinto Lake (0.5 miles west), and the Rose Reservoir (1.5 miles northeast).

A land use inventory of residential, commercial, industrial, recreational, scenic, agricultural, natural resource protection, natural resource extraction, educational, religious, cultural, and historic areas, and any other area of unique land uses that are located within 1 mile of the BESS facility site and within 0.25 miles of the gen-tie line corridor has been completed. A land use inventory was completed by desktop using geographic information system data from the County of Santa Cruz (County) (2025a). For each APN within 1 mile of the BESS facility site, the following information is included (1) APN; (2) land use designations and zoning designations; (3) land use type and description; and (4) approximate distance from the project site. The land use inventory is included as Appendix 3.6A.

In addition, Table 3.6-1 presents a list of notable land uses within 1 mile of the BESS facility site. The list was generated using the abovementioned geographic information system land use inventory and Google Earth. The map keys provided in the list below correspond to Figure 3.6-3, Notable Land Uses.

Table 3.6-1. Land Uses Within 1 Mile of the BESS Facility Site

Map Key	Land Use	Land Use Type	Land Use Description	Location (Address and/or APN)	General Plan Land Use Designation	Zoning Designation
1	Green Valley Substation	Public Facility	Administrative offices, cemeteries, churches, community centers, fire stations, hospitals, libraries, nursing homes, parks, schools and colleges.	33 Minto Road, Watsonville, California 95076 APN: 051-091-03	P – Public Facility	PF-AIA – Public Facility, Airport Influence Area
2	Harvest Moon Market	Commercial	Animal grooming, banks, barber and beauty shops, small repair shops, print shops, shoe repair, offices (not exceeding 50% of the building area), fitness centers, restaurants, bookshops, bicycle shops, hardware stores, jewelry stores, pet shops, clothing stores.	518 Green Valley Road, Watsonville, California 95076 APN: 051-511-44	C-N – Neighborhood Commercial	C-1-AIA – Neighborhood Commercial, Airport Influence Area
3	Shapiro Knolls	Open Space; Residential	Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting. One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	33 Minto Road, Watsonville, California 95076 APN: 051-511-35	O-U – Urban Open Space; R-UH – Urban High Residential	PR-AIA – Parks, Recreation, and Open Space, Airport Influence Area; RM-2-R-AIA – Multi-Family Residential, Regional Housing Need, Airport Influence Area
4	Rachelle's Home II	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	109 Behler Road, Watsonville, California 95076 APN: 051-082-01	R-UL – Urban Low Residential	R-1-10-AIA – Single-Family Residential, Airport Influence Area
5	Ortega's Nursery	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	30 Paulsen Road, Watsonville, California 95076 APN: 051-521-13	R-UL – Urban Low Residential	R-1-10-AIA – Single-Family Residential, Airport Influence Area
6	El Capulin Nursery	Agriculture; Recreation	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling; community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	595 Green Valley Road, Watsonville, California 95076 APN: 050-151-13	AG – Agriculture; O-R – Existing Parks and Recreation	CA-AIA – Commercial Agriculture, Airport Influence Area; PR-AIA
7	Great Hands Massage and High Tech Therapies	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	25 Trembly Lane, Watsonville, California 95076 APN: 051-381-48	R-UL – Urban Low Residential	R-1-8-AIA – Single-Family Residential, Airport Influence Area
8	Lillian's Country Childcare	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	47 Fletcher Court, Watsonville, California 95076 APN: 051-391-70	R-UL – Urban Low Residential	R-1-6-AIA – Single-Family Residential, Airport Influence Area
9	Rillera Guest Homes	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	115 Gera Court, Watsonville, California 95076 APN: 051-381-76	R-UL – Urban Low Residential	R-1-8-AIA – Single-Family Residential, Airport Influence Area
10	Vallejo Street Dahlias	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	37 Paulsen Road, Watsonville, California 95076 APN:051-411-07	R-UL – Urban Low Residential	R-1-10-AIA – Single-Family Residential, Airport Influence Area
11	Cruz Brothers Hardwood Floors	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	21 Paulsen Road, Watsonville, California 95076 APN: 051-391-30	R-UL – Urban Low Residential	R-1-6-AIA – Single-Family Residential, Airport Influence Area
12	Tacos El Tigre	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	710 Green Valley Road, Watsonville, California 95076 APN: 051-331-58	R-UL – Urban Low Residential	R-1-6-AIA – Single-Family Residential, Airport Influence Area
13	Watsonville HVAC	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	105 Amador #3, Watsonville, California 95076 APN: 051-581-21	R-UL – Urban Low Residential	R-1-6-AIA – Single-Family Residential, Airport Influence Area

Table 3.6-1. Land Uses Within 1 Mile of the BESS Facility Site

Map Key	Land Use	Land Use Type	Land Use Description	Location (Address and/or APN)	General Plan Land Use Designation	Zoning Designation
14	Coyull Construction	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	225 Arroyo Drive, Watsonville, California 95076 APN: 051-543-31	R-UL – Urban Low Residential	R-1-6 – Single-Family Residential
15	Bonnie Plants Inc.	Agriculture	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling.	729 Green Valley Road, Watsonville, California 95076 APN: 050-141-10	AG – Agriculture	CA-AIA – Commercial Agricultural, Airport Influence Area
16	Green Land Nurseries	Agriculture	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling.	183 Paulsen Road, Watsonville, California 95076 APN: 051-012-29	AG – Agriculture	CA-AIA – Commercial Agricultural, Airport Influence Area
17	Virgen de Guadalupe	Recreation	Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	757 Green Valley Road, Watsonville, California 95076 APN: 050-141-11	O-L – Lakes/Reservoirs/Lagoons; O-R – Existing Parks and Recreation	PR-AIA – Recreation, and Open Space, Airport Influence Area
18	Pinto Lake County Park	Recreation	Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	757 Green Valley Road, Watsonville, California 95076 APN: 050-141-11	O-L – Lakes/Reservoirs/Lagoons; O-R – Existing Parks and Recreation	PR-AIA – Recreation, and Open Space, Airport Influence Area
19	Pinto Lake Disc Golf Course	Recreation	Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	679 Green Valley Road, Watsonville, California 95076 APN: 050-141-02	O-R – Existing Parks and Recreation	PR-AIA – Recreation, and Open Space, Airport Influence Area
20	Pinto Lake Mobile Estates	Open Space; Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	789 Green Valley Road 26, Watsonville, California 95076 APN: 050-041-50	O-U – Urban Open Space; R-UM – Urban Medium Residential	R-1-5-MH-AIA – Single-Family Residential Airport Influence Area
21	Mesa Village County Park	Recreation	Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	790 Green Valley Road, Watsonville, California 95076 APN:051-532-25	O-R – Existing Parks and Recreation	PR-AIA – Recreation, and Open Space, Airport Influence Area
22	Hydra Point Plant Growers	Agriculture	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling.	195 Paulsen Road, Watsonville, California 95076 APN: 051-012-28	AG – Agriculture	CA-AIA – Commercial Agricultural, Airport Influence Area
23	Valle del Pajaro County Park	Agriculture	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling.	188 Whiting Road, Mt. Madonna, California 95076 APN: 051-042-01	AG – Agriculture	CA – Commercial Agricultural
24	Transportation Office – Pajaro Valley Unified School District	Public Facility	Administrative offices, cemeteries, churches, community centers, fire stations, hospitals, libraries, nursing homes, parks, and schools and colleges.	202 Grimmer Road A, Watsonville, California 95076 APN: 051-101-59	P – Public Facility	PF-AIA – Public Facility, Airport Influence Area
25	Valley Public Cemetery	Agriculture	One single-family dwelling, one second dwelling unit, home occupations, small-scale agriculture, greenhouses, wineries, private stables and paddocks, schools, community facilities, open space and recreational uses.	2445 East Lake Avenue, Watsonville, California 95076 APN: 051-441-22	AG – Agriculture	RA – Residential Agricultural
26	Valley Catholic Cemetery	Agriculture; Public Facility	Administrative offices, cemeteries, churches, community centers, fire stations, hospitals, libraries, nursing homes, parks, schools and colleges. Agriculture, farm buildings, livestock raising, lumber mills, visitor accommodations, zoos and natural science museums. One single-family dwelling.	2401 East Lake Avenue, Watsonville, California 95076 APN: 051-441-30	AG – Agriculture; P – Public Facility	A-AIA – Agricultural, Airport Influence Area; PF-L-AIA – Public and Community Facilities, Airport Influence Area

Table 3.6-1. Land Uses Within 1 Mile of the BESS Facility Site

Map Key	Land Use	Land Use Type	Land Use Description	Location (Address and/or APN)	General Plan Land Use Designation	Zoning Designation
27	Our Lady Help of Christians	Agriculture; Public Facility	Administrative offices, cemeteries, churches, community centers, fire stations, hospitals, libraries, nursing homes, parks, schools and colleges. Agriculture, farm buildings, livestock raising, lumber mills, visitor accommodations, zoos and natural science museums. One single-family dwelling.	2401 East Lake Avenue, Watsonville, California 95076 APN: 051-441-30	AG – Agriculture; P – Public Facility	A-AIA – Agricultural, Airport Influence Area; PF-L-AIA – Public and Community Facilities, Airport Influence Area
28	St. Francis High School	Public Facility	Administrative offices, cemeteries, churches, community centers, fire stations, hospitals, libraries, nursing homes, parks, and schools and colleges.	2400 East Lake Avenue G, Watsonville, California 95076 APN: 051-501-16	P – Public Facility	PF – Public and Community Facilities
29	Lakeview Middle School	Public Facility	Administrative offices, cemeteries, churches, community centers, fire stations, hospitals, libraries, nursing homes, parks, and schools and colleges.	2350 East Lake Avenue, Watsonville, California 95076 APN: 051-501-12	P – Public Facility	PF – Public and Community Facilities
30	Farmers Market	Commercial; Open Space	Animal grooming, banks, barber and beauty shops, small repair shops, print shops, shoe repair, offices (not exceeding 50% of the building area), fitness centers, restaurants, bookshops, bicycle shops, hardware stores, jewelry stores, pet shops, clothing stores.	2202 East Lake Avenue, Watsonville, California 95076 APN: 051-191-17	C-N – Neighborhood Commercial; O-U – Urban Open Space	C-1-AIA – Neighborhood Commercial, Airport Influence Area
31	J E Farms	Agriculture	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling.	182 Holohan Road, Watsonville, California 95076 APN: 051-101-58	AG – Agriculture	CA-AIA – Commercial Agricultural, Airport Influence Area
32	Garrett Farms	Agriculture	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling.	1211 East Lake Avenue, Watsonville, California 95076 APN: 048-231-16	AG – Agriculture	CA-AIA – Commercial Agricultural, Airport Influence Area
33	Grazian Electronics Services	Agriculture	Agriculture, farm buildings, livestock raising, lumber mills, visitor accommodations, zoos and natural science museums. One single family dwelling.	1907 East Lake Avenue # C, Watsonville, California 95076 APN: 048-231-09	AG – Agriculture	A-AIA – Agricultural, Airport Influence Area
34	Little Cees Daycare	Open Space; Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	54 Beverly Drive, Watsonville, California 95076 APN: 051-281-12	O-U – Urban Open Space; R-UL – Urban Low Residential	R-1-6 – Single-Family Residential
35	Freedom Meat Lockers	Office	Administrative offices, cemeteries, churches, community centers, fire stations, hospitals, libraries, nursing homes, parks, and schools and colleges.	160 Hi Grade Lane, Freedom, California 95019 APN: 048-061-56	C-O – Office	PA-AIA – Professional-Administrative Office, Airport Influence Area
36	Safeway	Commercial	Animal grooming, banks, barber and beauty shops, small repair shops, print shops, shoe repair, offices (not exceeding 50% of the building area), fitness centers, restaurants, bookshops, bicycle shops, hardware stores, jewelry stores, pet shops, clothing stores.	2010 Freedom Boulevard, Freedom, California 95019 APN: 014-021-04	GC – General Commercial	CT – Thoroughfare Commercial
37	Plant Sciences	Agriculture	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling.	342 Green Valley Road, Watsonville, California 95076 APN: 051-101-79	AG – Agriculture	CA-AIA – Commercial Agricultural, Airport Influence Area
38	Amesti Elementary School	Public Facility	Administrative offices, cemeteries, churches, community centers, fire stations, hospitals, libraries, nursing homes, parks, and schools and colleges.	25 Amesti Road, Watsonville, California 95076 APN: 050-241-15	P – Public Facility	PF-AIA – Public and Community Facilities, Airport Influence Area
39	Berry Genetics	Agriculture	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling.	342 Green Valley Road, Watsonville, California 95076 APN: 051-101-79	AG – Agriculture	CA-AIA – Commercial Agricultural, Airport Influence Area

Table 3.6-1. Land Uses Within 1 Mile of the BESS Facility Site

Map Key	Land Use	Land Use Type	Land Use Description	Location (Address and/or APN)	General Plan Land Use Designation	Zoning Designation
40	West Spanish Seventh Day Adventist Church	Agriculture	One single-family dwelling, one second dwelling unit, home occupations, small-scale agriculture, greenhouses, wineries, private stables and paddocks, schools, community facilities, open space and recreational uses.	336 Green Valley Road, Watsonville, California 95076 APN: 051-101-67	AG – Agriculture	RA-AIA – Residential Agricultural, Airport Influence Area
41	Pajaro Valley Unified School District	Commercial	Animal grooming, banks, barber and beauty shops, small repair shops, print shops, shoe repair, offices (not exceeding 50% of the building area), fitness centers, restaurants, bookshops, bicycle shops, hardware stores, jewelry stores, pet shops, clothing stores.	294 Green Valley Road, Watsonville, California 95076 APN: 019-861-24	GC – General Commercial, EM – Environmental Management	CT, EM-0S: Thoroughfare Commercial, Env. Mgmt. Open Space-Private Land
42	Watsonville Family Orthodontics	Commercial	Animal grooming, banks, barber and beauty shops, small repair shops, print shops, shoe repair, offices (not exceeding 50% of the building area), fitness centers, restaurants, bookshops, bicycle shops, hardware stores, jewelry stores, pet shops, clothing stores.	270 Green Valley Road, Freedom, California 95019 APN: 019-861-03	GC – General Commercial, EM – Environmental Management	CO, EM-OS: Office, Environmental Management, Open Space-Private Land
43	ARCO	Commercial	Animal grooming, banks, barber and beauty shops, small repair shops, print shops, shoe repair, offices (not exceeding 50% of the building area), fitness centers, restaurants, bookshops, bicycle shops, hardware stores, jewelry stores, pet shops, clothing stores.	298 Green Valley Road, Watsonville, California 95076 APN: 019-0861-22	GC – General Commercial	CT – Thoroughfare Commercial
44	Watsonville/Aptos/Santa Cruz Adult Education	Commercial	Animal grooming, banks, barber and beauty shops, small repair shops, print shops, shoe repair, offices (not exceeding 50% of the building area), fitness centers, restaurants, bookshops, bicycle shops, hardware stores, jewelry stores, pet shops, clothing stores.	294 Green Valley Road #1, Watsonville, California 95076 APN: 019-861-24	GC – General Commercial, EM – Environmental Management	CT, EM-OS: Thoroughfare Commercial, Environmental Management Open Space-Private Land
45	MLM Window Cleaning	Residential	One single-family dwelling, one second dwelling unit, home occupations, not more than 2 cats and 2 dogs, community facilities.	9 Behler Road, Watsonville, California 95076 APN: 051-072-27	R-UL – Urban Low Residential	R-1-10-AIA – Single-Family Residential, Airport Influence Area
46	Pinto Lake City Park	Recreation	Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	451 Green Valley Road, Watsonville, California 95076 APN: 050-151-11	O-R – Existing Parks and Recreation	CITY-WAT-AIA – Airport Influence Area
47	Northern Pacific Rentals	Recreation	Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	451 Green Valley Road, Watsonville, California 95076 APN: 050-151-11, 050-151-07	O-L – Lakes/Reservoirs/Lagoons; O-R – Existing Parks and Recreation	CITY-WAT-AIA – Airport Influence Area
48	Murray's Piano Tuning	Agriculture; Recreation	Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting. Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling.	505 Green Valley Road, Watsonville, California 95076 APN: 050-151-16	AG – Agriculture; O-R – Existing Parks and Recreation	CA-L-P-AIA – Commercial Agricultural Historic Landmark, Agricultural Preserve, Airport Influence Area; PR-L-P-AIA – Parks, Recreation, and Open Space Historic Landmark, Agricultural Preserve, Airport Influence Area

Table 3.6-1. Land Uses Within 1 Mile of the BESS Facility Site

Map Key	Land Use	Land Use Type	Land Use Description	Location (Address and/or APN)	General Plan Land Use Designation	Zoning Designation
49	Peace Nursery	Agriculture; Recreation	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling. Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	304 Amesti Road, Watsonville, California 95076 APN: 050-421-03	AG Agriculture; O-R – Existing Parks and Recreation	CA-AIA – Commercial Agricultural Airport Influence Area; PR-AIA – Parks, Recreation, and Open Space, Airport Influence Area
50	Villas Del Paraiso Office	Agriculture; Recreation	Commercial agriculture, farm buildings, livestock raising, greenhouses, farm worker camps. One single-family dwelling. Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	340 Paraiso Drive A, Watsonville, California 95076 APN: 050-421-01	AG – Agriculture; O-L – Lakes/Reservoirs/Lagoons; O-R – Existing Parks and Recreation	CA-AIA – Commercial Agricultural Airport Influence Area; PR-AIA – Parks, Recreation, and Open Space, Airport Influence Area
51	Portuguese Hall of Watsonville	Specific Plan Area	Wholesale sales; storage; heavy commercial; transportation services; warehousing; construction; fabrication and trade shops; general manufacturing; good processing; and related services, businesses, and uses.	124 Atkinson Lane, Watsonville, California 95076 APN: 019-236-09	SPA – Specific Plan Area	IP – Industrial Park
52	Smart Construction Services	Residential	One single-family dwelling. Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	56 Blanca Lane, Watsonville, California 95076 APN: 019-951-16	RMD – Medium Density	RM-2 – Multiple Residential – Medium Density
53	MZ's Drywall	Residential	One single-family dwelling. Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	49 Blanca Lane # 621, Watsonville, California 95076 APN: 019-273-01	RMD – Medium Density, EM – Environmental Management	RM-2, EM-O: Multiple Residential-Medium Density, Environmental Management, Open Space-Private Land
54	Stephanie's Family Daycare	Open Space; Residential	Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting. One single-family dwelling. Community centers, open space uses, recreational facilities, visitor accommodations, and timber harvesting.	129 Pajaro Circle Apartment 206, Freedom, California 95019 APN: 048-041-55	O-U – Urban Open Space; R-UM – Urban Medium Residential	RM-4-GH-AIA – Multiple Residential
55	Quest Diagnostics	Commercial	Animal grooming, banks, barber and beauty shops, small repair shops, print shops, shoe repair, offices (not exceeding 50% of the building area), fitness centers, restaurants, bookshops, bicycle shops, hardware stores, jewelry stores, pet shops, clothing stores.	202 Green Valley Road Suite A, Freedom, California 95019 APN: 019-861-01	GC – General Commercial	CO – Office District

Note: BESS = battery energy storage system; APN = Assessor's Parcel Number.

3.6.1.3 Existing Land Use and Zoning

The project site is currently an orchard and is surrounded by a mixture of properties, which include public utilities; large-scale commercial vegetable, berry, and nursery farming; and residential developments. The project site has remained largely unchanged since the early 2000s based on aerial imagery (Google Earth 2025). The project site is within the Pajaro Valley Planning Area, and land use of the project parcels are designated as Agriculture (AG) (Figure 3.6-4, Existing Land Use). The zoning of the project parcels is Commercial Agriculture – Airport (CA-AIA) (County of Santa Cruz 2025a) (Figure 3.6-5, Existing Zoning).

Beyond the project site to the north and south, the zones and land use designations are predominantly agriculture and commercial agriculture. To the east and west, the zones are Public and Community Facilities – Airport (PF-AIA) and Single-Family Residential – Airport (R-1-6-AIA). The land use of the adjacent parcels are designated as Public/Quasi Public (P) and Urban Residential – Low Density (R-UL) (County of Santa Cruz 2025a).

3.6.1.4 Farmland and Williamson Act Contract

The project site currently consists of land designated as mostly Prime Farmland and Farmland of Statewide Importance, with small portions of Urban Land and Unique Farmland (DOC 2025a, 2025b). Additionally, surrounding lands consist of Prime Farmland, Urban Land, Grazing Land, Farmland of Statewide Importance, and Unique Farmland (Figure 3.6-6, Farmland Mapping and Monitoring Program Designations).

The California Land Conservation Act of 1965 authorizes local governments to contract with private landowners for the purpose of restricting specific parcels of land to agricultural, recreational, or open space uses, and compatible uses. These contracts are referred to as Williamson Act contracts. Per the California Williamson Act Enrollment Finder, the project site is not under any Williamson Act contract (DOC 2025c), nor are any adjacent parcels (Figure 3.6-7, Williamson Act Land Contract Status).

3.6.1.5 Site Control

Table 3.6-2 lists site control for each of the project parcels. The table shows the APN, contract type, expiration/exercise date, and type of supporting documentation provided to show project site control. Site control documents can be found in Appendix 3.6B.

Table 3.6-2. Project Site Control

APN	Location	Contract Type	Effective Date	Supporting Documentation
051-101-77	BESS site	Purchase option	3/1/2024	Purchase agreement memo (redacted)
051-101-78	BESS site	Purchase option	3/1/2024	Purchase agreement memo (redacted)

Note: APN = Assessor's Parcel Number; BESS = battery energy storage system.

3.6.2 Impact Analysis

3.6.2.1 Methodology

The potential impacts associated with the project were evaluated on a qualitative basis through a comparison of the existing land use and the proposed land uses and include consideration of applicable planning documents.

3.6.2.2 Impact Evaluation Criteria

California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) Appendix G is a screening tool, not a method for setting thresholds of significance. CEQA Guidelines Appendix G is typically used in the initial study phase of the CEQA process, asking a series of questions. The purpose of these questions is to determine whether a project requires an environmental impact report, mitigated negative declaration, or negative declaration. As the Governor's Office of Planning and Research stated, "Appendix G of the Guidelines lists a variety of potentially significant effects, but does not provide a means of judging whether they are indeed significant in a given set of circumstances" (OPR 1994).

The answers to the Appendix G questions are not determinative of whether an impact is significant or less than significant. Nevertheless, the questions presented in CEQA Guidelines Appendix G are instructive. With respect to land use, CEQA Guidelines Appendix G asks, in part, whether the project would:

- Physically divide an established community.
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.
- 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, excepting those lands that would be expected to be converted or retired even without the project due to insufficient water resources for continued commercial agriculture, land subsidence due to historic groundwater over-pumping, soil contamination due to inadequate drainage, or the local weather effects of climate change.
- Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

3.6.2.3 California Environmental Quality Act Appendix G Assessment Criteria

Criterion 3.6-1 Would the project physically divide an established community?

No Impact**.** The project site would not physically divide an established community. The project and gen-tie line are located on undeveloped property, and the gen-tie line would extend from the project site to the PG&E Green Valley Substation, which is located directly west of the BESS facility site. The project site is primarily surrounded by rural land uses, with the exception of the western boundary of the project site, which includes the Green Valley Substation and single-family residences.

The project would maintain all existing access routes in the area. However, the project gen-tie line would cross Minto Road to interconnect with the PG&E Green Valley Substation, which would require an encroachment permit pursuant to Santa Cruz County Municipal Code Title 9, Roads, Vehicles and Traffic, Chapter 9.70. The project would not result in the construction of new public roadways or the elimination of existing public roadways that could have the potential to isolate existing uses or create a division between existing local uses. There would be new private access roads internal to the project site, but they would not affect public roads. Additionally, a secondary emergency access roadway would be constructed in one of three locations being considered as discussed in Section 2.3.1.5, Access Improvements. The three options being considered for the secondary emergency access road would extend the on-site access to the south,

along the project's southern/southeastern boundaries. Options 1 and 2 would go through a County-owned property (APN 051-101-59) to the south along two different alignments as shown in Figure 3.6-3, to connect to Grimmer Road. Option 1 would extend through undeveloped land and a parking area to connect to Grimmer Road. Option 2 would extend from the project property through an existing parking area on the County's parcel to connect to Grimmer Road. Option 3 would extend southwest across APN 051-101-78, cross into the southern-adjoining parcel (APN 051-101-53), continue southeast before turning west, continue southeast, and terminate where the Grimmer Road public right-of-way starts. The proposed project would not impede the movement of goods or services to the surrounding residences because operational traffic demands would be almost negligible. Construction and decommissioning traffic would be temporary and short-term. Therefore, **no impact** would occur.

Criterion 3.6-2 Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant. As part of the opt-in application process, the California Energy Commission (CEC) would review the project for consistency with the County land use plans, policies, and regulations. Assembly Bill (AB) 205 expanded CEC's authority under the Warren-Alquist Act to establish a new certification program for eligible non-fossil-fueled power plants using emergency rulemaking authority provided by AB 205. As part of the opt-in application process established under AB 205, CEC would determine whether the project would conflict with the County's land use policies. However, on September 19, 2025, Senate Bill (SB) 254 was enacted, which, among other changes, eliminated the requirement that CEC determine conformance with land use and zoning designations and make findings for projects reviewed under the AB 205 process. Although CEC is no longer required to make a conformity finding, the project's conformity with the County's General Plan and Municipal Code is provided below.

Consistency with the County's General Plan

The project site is within the Pajaro Valley Planning Area and falls under the jurisdiction of the Santa Cruz County General Plan. The Santa Cruz County General Plan contains goals and policies that are designed to guide future development within Santa Cruz County.

The Santa Cruz County General Plan addresses goals, values and vision, land use, mobility, conservation and open space, public safety, services and facilities, economic development, community-specific land use concepts, and plan implementation (County of Santa Cruz 2024a).

Table 3.6-3 identifies the policies and details the project's conformity with the Santa Cruz County General Plan.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-1.1.1 (LCP) Maintain an Urban Services Line (USL). Maintain a USL to clearly delineate areas with full urban services that are appropriate for development. Discourage changes to the USL. Require that any proposal to expand the USL demonstrates that: ▪ Full urban services, including adequate water supply during drought years, sewage treatment and road capacity such that new development will not exceed LOS as described in Access + Mobility Policy AM-6.2.1, are available or planned to serve the expansion area; ▪ The proposed expansion will not have an adverse impact on service levels for existing development or future development within the existing boundaries of the USL as planned by the General Plan and LCP Land Use Policy; ▪ The proposed expansion will not result in the loss of agricultural resource lands as designated in the General Plan and Zoning Ordinance or have adverse effects either individually or cumulatively on environmental or natural resources, including coastal resources; ▪ No significant adverse impact on regional infrastructure, such as transportation corridors, will occur from the proposed expansion; and ▪ There are overriding public benefits from the proposed expansion that outweigh any identified unavoidable adverse effects on regional infrastructure and agricultural lands.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-1.1.2 (LCP) Maintain a Rural Services Line (RSL). Maintain a RSL to serve as a distinct boundary between rural areas and the following existing rural communities with urban densities: Davenport, Boulder Creek, Boulder Creek Country Club, Bear Creek Estates, Ben Lomond, Felton, Mount Hermon, Paradise Park, La Selva Beach, Place de Mer, San Dollar Beach/Canon del Sol, Sunset Beach, Pajaro Dunes North, and Pajaro Dunes South. Prohibit the expansion of the RSL.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-1.1.3 (LCP) Growth Rate. Require new urban development to locate within the USL/RSL. Establish and manage urban and rural growth rates appropriately based on the County's share of long-term regional and State-projected population and job growth and the level of existing and planned infrastructure and services.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-1.1.4 (LCP) Siting New Development. Require new urban residential, commercial, or industrial development to locate within, next to, or near existing developed areas with adequate public services and where development will not have significant adverse effects on agricultural land or natural resources.	**Applicable and consistent.** The project site is near existing developed areas.
Policy BE-1.2.1 (LCP) Coordinate Land Use and Transportation Planning. Coordinate land use and transportation planning such that high building intensity land uses are approved and constructed concurrently with supporting transportation infrastructure. Prioritize funding and seek grant funds to complete improvements of transportation corridors prior to or soon after development of such higher-intensity land uses.	**Not applicable.** The project site is not within an area of high building intensity. The project would not interfere with or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-1.2.2 (EJ) High-Quality Transit Corridor Land Use. In Sustainable Communities Strategy (SCS) opportunity areas located within one-half mile of high-quality transit corridors, encourage new development to include compact housing, infill development, mixed use commercial development, and commercial activity centers, with associated public facilities and public services land uses as needed. Do not support General Plan or zone map amendments in these transit corridor areas to less intensive land use designations or zone districts.	**Not applicable**. The project is not within a transit corridor.
Policy BE-1.2.3 Multimodal Corridor Land Use. Along multimodal corridors, encourage high building intensity residential and commercial land use designations with compact housing options, mixed use development, and diverse employment opportunities to support more frequent and convenient transit service.	**Not applicable**. The project is not within a multimodal corridor.
Policy BE-1.2.4 Active Connector Land Use. Along Active Connectors where pedestrians and bicycles are prioritized, encourage land uses to facilitate neighborhood trips and "last mile" commutes. Diverse housing options, neighborhood commercial and personal services, and small office land uses, as well as community facilities such as schools, religious institutions and parks, are appropriate.	**Not applicable**. The project is not along Active Connectors.
Policy BE-1.2.5 (EJ) Main Street Land Use. Along Main Streets where pedestrians are prioritized, encourage ground floor retail, restaurant, and other "active" commercial land uses that serve to enliven pedestrian activity. Encourage infill mixed-use development to increase building intensity and support economic vitality of Main Street businesses.	**Not applicable**. The project is not located along Main Street.
Policy BE-1.2.6 (LCP) (EJ) Monterey Bay Sanctuary Scenic Trail. New development adjacent to the Monterey Bay Sanctuary Scenic Trail (MBSST) should complement its recreational and transportation functions and should provide direct pedestrian access to the trail. Commercial development should be designed with public orientation toward the trail, or an option to modify the site to add this public orientation in the future.	**Not applicable.** The project site is not adjacent to the MBSST. The project would not interfere with or conflict with this policy.
Policy BE-1.2.7 (EJ) Mobility Hub Land Use. Encourage the economic viability and safety of mobility hubs by encouraging a diversity of high building intensity land uses that facilitate an active hub area during both the daytime and evening.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.3.1 Identify Activity Centers. Identify existing and potential neighborhood, community and regional-scale activity centers, which can include a variety of different land use types and configurations but should all include the following components: ▪ Mix of businesses, services, and gathering places that combine to create an appropriately-scaled destination. ▪ Pedestrian-centered core and pedestrian and bicycle connection to neighborhoods. ▪ Direct access to transit via Main Street, Active Connector, or Multimodal Corridor.	**Not applicable**. The project is not within an activity center.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-1.3.2 Mixed-Use Development. Encourage developments with a mix of land uses in appropriate locations where the combination of uses is complementary and contributes to establishing and enhancing activity centers.	**Not applicable**. The project is not a mixed-use development.
Policy BE-1.3.3 (LCP) Appropriate Density for Activity Centers. Within activity centers, prioritize land uses with higher residential and employment density than surrounding neighborhoods to allow for vibrant pedestrian cores, community amenities, and transit service.	**Not applicable.** The project site is not within an activity center. The project would not interfere with or conflict with this policy.
Policy BE-1.3.4 Employment Centers. Facilitate employment-focused activity centers along the Soquel Drive corridor, coordinated with provision and development of high-quality transit, pedestrian, and bicycle amenities, and complementary land uses such as multifamily housing, retail, and restaurants.	**Not applicable**. The project is not along the Soquel Drive corridor.
Policy BE-1.3.5 Village and Town Centers. Strengthen the role of historic villages and towns as activity centers by encouraging infill development and land use changes that foster active day and evening land uses while retaining and enhancing the unique historic character and charm of these places.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy BE-1.3.6 Shopping Centers as Activity Centers. Encourage redevelopment and rebranding of existing commercial shopping centers to vital and modern activity centers, through higher-intensity development, mixed uses, public gathering places, event programming, and reorientation of buildings and parking facilities to improve walkability and connection to transit.	**Not applicable**. The project is not an existing commercial shopping center.
Policy BE-1.3.7 Neighborhood Activity Centers. Promote local activity centers by encouraging neighborhood-appropriate infill and mixed-use development at major intersections, especially within the Live Oak Planning Area.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.4.1 Neighborhood Stores, Services and Gathering Places. Support the thoughtful integration of corner grocery stores, cafes, small personal health businesses such as yoga and fitness studios, and other neighborhood-serving commercial businesses into residential areas to improve local resident access to convenience goods and services and to foster neighborhood gathering opportunities. Discourage national retailers and encourage locally-owned businesses.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.4.2 Neighborhood Mobility Infrastructure. Encourage sidewalks, bike lanes, and bus routes that support a variety of transportation options within and between neighborhoods, with particular emphasis on routes to schools, parks, grocery stores, and gathering places.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.4.3 Public Facility Uses in Residential Land Designations. Allow public and quasi-public facility and service uses in residential designations with appropriate buffers and context-appropriate design for residential neighborhoods.	**Not applicable**. The project site is not designated as residential land use.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-1.4.4 (EJ) Physical Recreation Facilities. Support private gyms, studios, and public recreational facilities in neighborhood locations that are convenient and accessible by walking and bicycling.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.4.5 (EJ) Health Services. Support health services in locations that are convenient and accessible by walking, bicycling and public transit. Cluster major health facility land uses so that those seeking medical care can travel to one area for multiple medical services.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.4.6 (EJ) Access to Nature. In residential and commercial development areas, facilitate pedestrian and bicycle infrastructure connecting development to nearby public trails and parks, as well as alternatives to public parks such as parklets, temporary parks, and privately-owned public spaces.	**Not applicable**. The project site is not within residential or commercial development areas.
Policy BE-1.4.7 (EJ) Eliminate Food Deserts. Encourage small markets and grocery stores to locate in "food deserts" where there are not currently healthy food options within a one-half mile radius. If the market cannot support economic viability of a traditional grocery store within a one-half mile walkshed, encourage neighborhood corner stores, scheduled food truck visits, and farmer's markets selling fresh produce and other healthy foods.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.4.8 (EJ) Urban Agriculture. Allow ancillary food cultivation as part of park/recreation, residential, public/quasi-public, and commercial developments, where feasible and appropriate. Allow animal keeping with conditions dependent on parcel size and location, as well as type and number of animals. Encourage urban agriculture as an appropriate temporary use on vacant lots.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.4a (EJ) Map one-half mile walksheds from grocery stores, schools, health services, parks, gyms, and other neighborhood gathering places, with particular emphasis on disadvantaged communities. Identify gaps in pedestrian and bicycle infrastructure, neighborhood commercial land uses, healthy food options, and health and fitness opportunities. In areas where "15-minute neighborhoods" do not exist, redesignate/rezone parcels or apply a combining zone district to allow for neighborhood-scale nonresidential land uses, and identify grant opportunities to fund improved pedestrian/bicycle infrastructure and access to nature. (Responsibility: County Administrative Office, CDID, Planning Commission, Board of Supervisors).	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.5.1 (EJ) Regional Sustainable Communities Strategy and Metropolitan Transportation Plan. Coordinate with AMBAG and SCCRTC to maintain consistency between local land use and regional transportation planning objectives so that development occurs in transportation-efficient locations as identified in the regional Sustainable Communities Strategy/Metropolitan Transportation Plan (SCS/MTP).	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-1.5.2 Local Agency Plans and Projects. Be aware of development projects and plans from incorporated cities, adjacent counties, special districts and agencies, and review, comment, and coordinate when appropriate to avoid and mitigate adverse impacts and ensure compatibility with the County's General Plan.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE 1.5.3 Funding Coordination. Coordinate with other local agencies on grant applications for land use and transportation projects that benefit mutual planning goals.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.5.4 (LCP) Spheres of Influence and City Annexation. Adhere to special district and city spheres of influence set by LAFCO, and support expansion of spheres of influence and orderly annexation of urban areas to adjacent cities or districts only where consistent with the County's General Plan/LCP land use policies related to urban uses and annexations.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-1.5.5 (EJ) Public Facility and Service Extensions. Coordinate public service planning with cities, special districts, and LAFCO to ensure sufficient and efficient service delivery to all communities. Program the timing and location of public service capacity expansions or extensions to support projected levels of development and to maintain economic, social, and environmental quality.	**Not applicable**. The project is not a public services project.
Policy BE-1.5.6 Implementing State Planning Law. Stay informed about new and proposed state laws impacting local land use regulations, and coordinate with other local jurisdictions on a cohesive regional interpretation, implementation, and response to State requirements.	**Applicable and consistent.** The project would be in accordance with AB 205 and SB 254.
Policy BE-2.1.1 (LCP) Urban Residential Land Use Designations. Provide urban residential land use designations at a range of building intensities to accommodate single and multifamily development as indicated in Table 2-1 of the Built Environment Chapter of the General Plan. (Additional units per acre may be allowed for qualifying projects via a density bonus, using development agreements if necessary).	**Not applicable.** The project site is not a residential development.
Policy BE-2.1.2 (LCP) Urban Very Low Density Residential (R-UVL). The R-UVL designation characterizes residential development at one to five units per gross acre on lots within the USL or RSL served by a full range of urban services. R-UVL is appropriate for developments that may include detached single-family homes, or two attached single-family homes or duplexes in urban areas with significant environmental constraints or as a transition to rural residential development.	**Not applicable.** The project site is not zoned as R-UVL and is not a residential development.
Policy BE-2.1.3 (LCP) Urban Low Density Residential (R-UL). The R-UL designation characterizes residential development at four to ten units per gross acre within the USL or RSL on lots served by a full range of urban services. R-UL is appropriate for developments that may include detached single-family homes or two attached single-family homes, duplexes, and small lot single-family detached houses.	**Not applicable.** The project site is not zoned as R-UL and is not a residential development.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-2.1.4 (LCP) Urban Medium Density Residential (R-UM). The R-UM designation characterizes residential development at 7 to 15 units per gross acre in areas within the USL served by a full range of urban services, with neighborhood shopping facilities and with easy driving, bicycling, transit and/or walking access to activity centers. R-UM is appropriate for detached or attached single-family homes, small lot detached single-family homes, duplexes, patio homes, bungalow courts, row houses, townhomes, and mobile home parks.	**Not applicable.** The project site is not zoned as R-UM and is not a residential development.
Policy BE-2.1.5 (LCP) Urban High Density Residential (R-UH). The R-UH designation characterizes residential development at 11 to 30 units per gross acre in areas within the USL served by a full range of urban services, with neighborhood shopping facilities and with multimodal access to activity centers. R-UH is appropriate for developments that may include small lot detached single-family homes, attached single-family homes, duplexes, triplexes, quadplexes, townhomes, condominium units, mobile home parks, small apartment buildings, and senior communities.	**Not applicable.** The project site is not zoned as R-UH and is not a residential development.
Policy BE-2.1.6 (LCP) Urban High Density Flex Residential (R-UHF). The R-UHF designation characterizes residential development at 22 to 45 units per gross acre within the USL, served by a full range of urban services, located within or with easy access to activity centers, multimodal corridors, mobility hubs, and on key opportunity sites. R-UHF is appropriate for compact units in housing types such as quadplexes, apartment buildings, townhomes, and condominiums. Ground floor commercial use is allowed if compatible with surrounding land uses.	**Not applicable.** The project site is not zoned as R-UHF and is not a residential development.
Policy BE-2.1.7 (LCP) Urban Residential Infrastructure Requirements. New or redesignated parcels receiving an urban residential land use designation must have existing or planned (and available at the time of occupancy) required road standards, public water and sewer infrastructure, drainage/stormwater infrastructure and fire response times meeting current state and County requirements.	**Not applicable.** The project is not a residential development.
Policy BE-2.1.8 (LCP) Public Services, Environmental Constraints, and Density. Consider adequacy of roads, sewer and water service, drainage and stormwater infrastructure, terrain, presence of environmental resources, neighborhood land use, and public benefits in determining the number of units to be permitted for projects within each residential density range. Where adequate public services exist, development at the high end of the density range allowed by the land use designation is preferred and encouraged in order to maximize the utility of scarce land resources served by public infrastructure.	**Not applicable.** The project is not a residential development.
Policy BE-2.1.9 (LCP) Development Below the Minimum Density. A development on a site within the USL/RSL zoned for multi-family use cannot be approved at a density below the designated density range, except where written findings required by California Government Code Section 65589.5 have been made; or the approving body makes a finding that unusual site conditions exist that render	**Not applicable.** The project is not a residential development and is not within the USL/RSL zoned for multifamily areas.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
minimum density infeasible or that development at minimum density would conflict with regulations in SCCC Title 16 protecting the environment and protecting the public from hazards, or that the proposed development would conflict with policies and regulations in the LCP protecting coastal resources, and no alternate design and/or site layout that could achieve this minimum density would be feasible on the subject site. This shall not preclude redevelopment after natural disasters.	
Policy BE-2.2.1 (LCP) Rural Residential Land Use Designations. Provide rural residential land use designations at building intensities to accommodate low-density residential development as indicated in Table 2-2 [of the Built Environment Element of the General Plan].	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-2.2.2 (LCP) Mountain Residential Designation (R-MT). The R-MT designation characterizes residential development at 10 to 40 net developable acres per unit. R-MT is appropriate in areas unsuited to more intensive development due to the presence of physical hazards and development constraints, the necessity to protect natural resources and rural open space, and the lack of public services, adequate-width roadways and other facilities.	**Not applicable.** The project site is not zoned as R-MT and is not a residential development.
Policy BE-2.2.3 (LCP) Rural Residential Designation (R-R). The R-R designation characterizes residential development at 2.5 to 20 net developable acres per unit. R-R is appropriate on lands suitable for rural development with adequate fire protection and access from roads maintained to rural road standards. In R-R areas, more intensive development is restricted due to limited public services and facilities, physical hazards and development constraints including water availability and septic capability, and the desire to protect natural resources and to maintain rural character. On R-R parcels in the Bonny Doon Planning Area, minimum parcel size is five acres.	**Not applicable.** The project site is not zoned as R-R and is not a residential development.
Policy BE-2.2.4 (LCP) Suburban Residential Designation (R-S). The RS designation characterizes residential development at one to five net developable acres per unit. R-S is appropriate in areas with developable land, access from roads maintained to rural road standards, soils of good septic suitability, and fire protection. Public water service is desirable but not required.	**Not applicable.** The project site is not zoned as R-S and is not a residential development.
Policy BE-2.2.5 (LCP) Rural Density Matrix. Outside the USL and RSL, maintain a Rural Density Matrix to determine maximum residential density for development permits and tentative map approvals based on: physical development hazards or constraints present; natural resources to be protected and/or sustainably used or harvested; adequacy of access; and level of public services and facilities available. The maximum density calculated for a parcel using the matrix should be within the density range for the parcel's land use designation, with the following caveats: ▪ If fire response time is more than 20 minutes, development may only take place at the lowest density allowed for the parcel's land use designation. ▪ The matrix does not apply to school employee housing (a quasi-public use) or agricultural employee housing (an agricultural use).	**Not applicable.** The project would not interfere with or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
▪ Within the Coastal Zone, affordable housing projects cannot be approved below the minimum density allowed by the land use designation and zone district, and including density bonus provisions as applicable, unless findings are made per Policy BE-2.1.9: Development Below the Minimum Density.	
Policy BE-2.2.6 (LCP) Residential Land Use Designations and Density within the RSL. Residential parcels within the RSL should be designated R-UL or R-UVL, except if assigned an R-S land use designation in a town or village plan. On all residential parcels within the RSL where community sewage disposal systems are not available, density is determined by the Rural Density Matrix.	**Not applicable.** The project site is not zoned for residential. The project would not interfere with or conflict with this policy.
Policy BE-2.2.7 (LCP) Overriding Minimum Lot Size. Where other General Plan/LCP policies require a larger parcel size for adequate resource protection or risk management, those policies should override other policies regarding minimum lot size.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-2.2.8 (LCP) Averaging Parcel Sizes for Rural Land Divisions. Allow averaging of required minimum parcel sizes for new rural land divisions only under the following conditions: ▪ The development envelopes must be clustered as appropriate to minimize grading, impervious surfaces, and overall site disturbance; ▪ The maximum number of new parcels resulting from a land division cannot exceed the total number of parcels otherwise allowable without averaging, based on consistency with the Rural Density Matrix and all other applicable General Plan/LCP Land Use Plan policies and zoning regulations; and ▪ The resulting parcels from a clustered land division must be restricted by deed and conditioned to ensure that the acreage cannot be further divided.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-2.2.9 Small Rural Parcels. Recognize existing legal residential parcels outside the USL/RSL that are less than one acre in size as conforming with the General Plan/LCP (to be "grandfathered in" as compliant). Maintain and regulate these parcels using the site standards of the appropriate urban residential implementing zone district associated with the parcel size.	**Not applicable**. The project site is not designated as a residential land use.
Policy BE-2.3.1 (LCP) Accessory Dwelling Units (ADUs). Encourage the provision of context-appropriate ADUs associated with single-family and multifamily dwellings, recognizing that ADUs not only increase housing affordability (both for homeowners and tenants), but also create a wider range of housing options within neighborhoods, enable seniors to age in place, allow for extended families to live together, and facilitate efficient land use in established neighborhoods.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-2.3.2 Small Lot Single-Family Development. Within the USL and RSL, encourage detached and semi-detached single-family homes on small lots to support higher single-family densities and more attainable housing costs.	**Not applicable**. The project site is not within the USL or RSL.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-2.3.3 Multiple Units in Single Family Zone Districts. Allow multiple detached dwellings or up to two attached or semi-detached dwellings per single-family zoned parcel, subject to density and development standards.	**Not applicable**. The project site is not a residential development.
Policy BE-2.3.4 Missing Middle Housing. Allow and encourage "missing middle" housing types such as duplexes, triplexes, quadplexes, bungalow courts, patio homes and townhouses to provide infill development appropriate to the scale of existing established neighborhoods.	**Not applicable**. The project is not a residential development.
Policy BE-2.3.5 Small Units in Multifamily Zone Districts. Encourage smaller housing units in multifamily zone districts through zoning controls for building intensity and density.	**Not applicable**. The project is not a residential development.
Policy BE-2.3.6 Multifamily housing in non-residential areas. Encourage integration of multifamily residential development within non-residential areas through mixed-use development strategies.	**Not applicable**. The project is not a residential development.
Policy BE-2.3.7 (LCP) Density Bonus for Affordable Housing. In exchange for provision of deed-restricted affordable housing units beyond the County's inclusionary housing requirements, reward project applicants with increased density allowances and other incentives and concessions.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-2.3.8 Mobile Home Parks. Recognize the importance of mobile home parks as a housing type that is affordable by design and regulated at the state level. Preserve mobile home parks and discourage conversion of mobile home park properties to short-term visitor accommodations or other land uses.	**Not applicable**. The project would not interfere or conflict with this policy. The project site is not zoned as Residential.
Policy BE-2.3.9 Adaptive Reuse. Consider vacant or underutilized non-residential buildings for redesignation and rezoning to support conversion of sites to residential use at context-appropriate housing densities, while weighing other land use policies and considerations.	**Not applicable**. The project is not a residential development.
Policy BE-2.3.10 (EJ) Unpermitted Residential Structures. Recognize that there are existing unpermitted structures that are providing attainable housing for Santa Cruz County residents. Promote preservation of these structures through programs such as the "Safe Structures Program" (also known as the Limited Immunity Amnesty Program) to allow a legal pathway for health and safety upgrades to these units.	**Not applicable**. The project is not a residential development.
Policy BE-2.4.1 Small Businesses as Residential Accessory Uses. Encourage small businesses and cottage industries as residential accessory uses, recognizing that home businesses provide economic stability for property owners while adding to neighborhood land use diversity.	**Not applicable**. The project is not a residential development.
Policy BE-2.4.2 Regulation of Home Occupations. Maintain and administer SCCC regulations to allow home occupation activities while preventing adverse impacts on surrounding properties. Maintain clear performance standards for home occupations, and only require permits for businesses that propose to exceed the "by right" thresholds.	**Not applicable.** The project is not a residential development.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-2.4.3 Telecommuting. Encourage full or part-time telecommuting, recognizing that many jobs can be conducted remotely, and commuting to a physical office may not be necessary. Telecommuting can improve quality of life for workers with the co-benefits of reducing commute traffic and VMT. Typical home office work should not require a home occupation permit.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-2.5.1 (LCP) Short-Term Rental Regulation. Allow a limited number of vacation rental homes and "hosted rental" rooms within homes to be rented on a short-term (less than 30 day) basis, balancing potential impacts of rentals on neighborhoods with the benefits of extra revenue for homeowners and local businesses and additional lodging options for visitors. Short-term rentals require permits that are associated with the property owner and do not run with the property upon sale.	**Not applicable.** The project is not a residential development.
Policy BE-2.5.2 (LCP) Short-Term Rentals and ADUs. Do not allow short-term rentals in ADUs or on properties where ADUs are located, recognizing the importance of ADUs in addressing housing needs as small units that are affordable by design.	**Not applicable.** The project is not a residential development.
Policy BE-2.5.3 (LCP) Short-Term Rentals in Coastal Tourist Areas. Accommodate a stabilized level of short-term rentals in coastal tourist areas and other areas of the County, consistent with historic use and appropriate neighborhood thresholds of intensity, in order to balance visitor accommodation with preservation of neighborhoods and availability of housing.	**Not applicable.** The project is not a residential development.
Policy BE-3.1.1 (LCP) Commercial Land Use Designations and Building Intensity. Provide commercial land use designations at a range of building intensities to accommodate differing land uses as indicated in Table 2-3 [of the Built Environment Chapter of the General Plan].	**Not applicable.** The project site is not designated as commercial land use.
Policy BE-3.1.2 (LCP) Neighborhood Commercial (C-N). The C-N designation characterizes small-scale neighborhood or visitor-oriented retail sales, restaurants, recreational equipment sales, and personal services. This designation may also be appropriate for mixed-use commercial/residential development, small offices, community facilities including child care facilities, schools and studios, rental services, and similar types of retail, public/quasi-public and service activities. Within the USL/RSL, C-N parcels should be within walking distance of neighborhoods and/or visitor attractions. In rural areas, C-N parcels should be centrally located to serve rural communities, or on sites appropriate for neighborhood corner markets.	**Not applicable.** The project site is not designated as commercial land use.
Policy BE-3.1.3 (LCP) Community Commercial (C-C). The C-C designation characterizes concentrated commercial uses within the USL/RSL that serve the general shopping, entertainment, service, and office needs of community or region-wide market areas. C-C is appropriate for retail sales, personal services, offices, hotels, schools, restaurants, entertainment venues, and similar types of community and visitor-serving activities, as well as mixed-use commercial/residential development and public/quasi-public uses. C-C parcels should be located within existing or planned activity	**Not applicable.** The project site is not designated as commercial land use.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
centers. Amendments to land use designations to establish C-C parcels outside of activity centers require County approval of a master plan, specific plan, and/or planned unit development, in order to carefully review for consistency with County economic vitality objectives.	
Policy BE-3.1.4 (LCP) Professional and Administrative Offices (C-O). The C-O designation characterizes non-retail employment-based uses in buffer areas between residential neighborhoods and more intensive commercial development, as well locations where a demonstrated need for professional services exists, such as medical and employment activity centers. C-O is appropriate for professional and administrative offices, medical offices, research labs with high employment density, public/quasi-public uses, mixed-use commercial/residential development, and limited retail, restaurant, service, and other land uses that are secondary to, and supporting, office use.	**Not applicable.** The project site is not designated as commercial land use.
Policy BE-3.1.5 (LCP) Visitor Accommodations (C-V). The C-V designation characterizes overnight visitor accommodations and associated services located in activity centers and near tourist attractions. C-V is appropriate for motels, hotels, bed and breakfast inns, lodges, recreational vehicle parks, hostels, commercial camping, as well as limited associated services such as restaurants, visitor services, retail shops, health and sports-related uses, and child care.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.1.6 (LCP) (EJ) Service Commercial and Light Industrial (C-S). The C-S designation characterizes a range of commercial services and light industrial activities including assembly and manufacturing; commercial service facilities such as auto repair, contractors' yards, warehousing and storage; and outdoor sales facilities, such as nurseries, lumber yards, and boat and auto sales. Ancillary land uses are allowed including office and retail uses associated with items produced on site, and services for employees such as restaurants and cafes, personal services, and child care. C-S uses are generally most appropriate within the USL in locations with access to appropriate routes for freight and goods movement, where the impacts of noise, traffic, and other nuisances and hazards associated with such uses will not adversely affect other land uses. C-S uses with high employment density and managed impact to neighborhoods may be appropriate in employment-based activity centers. Low-impact C-S uses with large land requirements, and which do not rely upon urban infrastructure, may be more appropriate in rural areas along appropriate routes for freight and goods movement, outside of the USL/RSL.	**Not applicable.** The project site is not designated as commercial land use.
Policy BE-3.1.7 (LCP) (EJ) Heavy Industrial (I). The I designation characterizes heavy industrial activities such as lumber mills and major manufacturing plants. Such I uses are appropriate in locations with access to appropriate routes for freight and goods movement, separated from residential neighborhoods and activity centers, where it has been determined through environmental review that the noise, traffic, and other nuisances and hazards associated with such uses will not adversely affect other land uses.	**Not applicable.** The project site is not designated as industrial land use.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-3.1.8 (LCP) Commercial and Industrial Infrastructure Requirements. New or redesignated parcels receiving a commercial or industrial land use designation must have existing or planned road access meeting fire standards, adequate water and sewer infrastructure, and adequate transit service, unless the nature of the use does not rely upon urban services, has a lower employment density, and is more appropriate for location outside of the USL/RSL.	**Not applicable**. The project is not requesting redesignation to commercial or industrial land use designation.
Policy BE-3.2.1 (LCP) Residential Uses in Commercial Designations. In the C-N, C-C, and C-O designations, allow mixed-use residential and commercial developments with appropriate design considerations to ensure compatibility between land uses on site and with adjacent sites. Residential square footage (including common areas within residential portions of a structure) may account for up to 80% of building square footage. A higher percentage of residential square footage is allowed only via a waiver or concession associated with a density bonus project, per Policy BE-2.3.7. Residential density is per the R-UHF Land Use Designation, per Policy BE-2.1.6.	**Not applicable.** The project site is not designated as commercial land use, and the project is not a residential development.
Policy BE-3.2.2 Public Facilities Uses in Commercial Designations. Allow public and quasi-public facility uses in the C-N, C-C, C-O, and C-S designations when in the public interest, consistent with public health, safety and welfare.	**Not applicable**. The project site is not zoned or designated as commercial use.
Policy BE-3.2.3 Medical Mixed-Use. In targeted areas, encourage coordinated development of hospitals, medical offices, and clinics along with complementary land uses such as retail, restaurants, personal services, professional offices, congregate care, transitional and permanent supportive housing, assisted living facilities, and higher intensity "workforce housing" residential uses.	**Not applicable**. The project would not interfere or conflict with this policy. The project is not a mixed-use development.
Policy BE-3.2.4 Ground Floor Commercial Uses. In mixed-use developments in commercial land use designations, prioritize street-facing ground floor spaces for commercial use, especially in areas of pedestrian activity.	**Not applicable**. The project is not a mixed-use development.
Policy BE-3.2.5 Care Facilities. Skilled nursing facilities, continuing care retirement communities, residential care facilities for the elderly (also known as assisted living facilities), health care facilities and other institutional facilities that are licensed to provide residents with regular care services (assistance with daily living), and/or nursing or other medical services, are considered nonresidential uses and are allowed in the C-N, C-C, and C-O commercial designations. Senior rental housing offering services such as meals and social activities, but not licensed care and/or nursing services, is considered a residential use and is allowed in the C-N, C-C, and C-O designations per Policy BE-3.2.1, and in the PF designation per Policy PPF-1.1.3.	**Not applicable**. This project is not a care facility, and the project site is not within a commercial designation.
Policy BE-3.2.6 (LCP) Permanent Room Housing ("PRH") Uses in Commercial Designations. Regardless of commercial land use designation, with the exception of the Visitor Accommodations Designation (C-V) in the Coastal Zone, allow 100% residential use on properties within the PRH Combining District with an approved use permit.	**Not applicable.** The project site is not designated as commercial land use.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-3.2.7 (LCP) Converting Commercial to Residential Land Use. Recognize the importance of preserving and prioritizing the County's commercial land for accommodating consumer commercial and employment uses, while responding to changing market conditions that may increase demand for residential development and lessen demand for commercial development. Encourage mixed-use developments that preserve ground floor square footage for non-residential uses, with residential uses on upper floors. Any visitor accommodations that are converted to permanent occupancy residential use should conform to the requirements of the PRH Combining District.	**Not applicable.** The project site is not designated as commercial land use and would not be converted to residential land use.
Policy BE-3.3.1 Economic Vitality. Ensure that development regulations and proposed projects are aligned with the policies and priorities of the Santa Cruz County Economic Vitality Study (EVS) and Economic Development Vision and Strategy.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.3.2 Focused Employment Density. Encourage development with high employment density along the Soquel Drive Corridor as well as other major corridors and activity centers. Discourage businesses with low employment density in these locations.	**Not applicable**. The project would not interfere or conflict with this policy. The project site is not along the Soquel Drive corridor or other major corridors.
Policy BE-3.3.3 Integrated Workplace Development. Recognizing that workers need access to transit, restaurants, child care, and other goods and services, encourage the development of workplaces within walking distance to these land uses, and/or encourage development of transit and complementary land uses concurrently with new workplace development. Encourage employment activity centers. Discourage employment "islands" that require workers to drive in order to access food and services.	**Not applicable.** The BESS station would be unstaffed. The project would not interfere or conflict with this policy.
Policy BE-3.3.4 Flexible Work Spaces. Enable and encourage commercial development with built in flexibility to accommodate a variety of workplace functions including offices, retail, research and development, light assembly, and shipping/distribution.	**Not applicable**. The project is not a commercial development, and the BESS station would be unstaffed. The project would not interfere or conflict with this policy.
Policy BE-3.3.5 Flexible Work Formats. Enable and encourage employers to utilize flexible work schedules and telecommuting as strategies for business success, workplace safety, and reduced vehicle miles traveled.	**Not applicable**. The BESS station would be unstaffed. The project would not interfere or conflict with this policy.
Policy BE-3.3.6 Strategic Broadband Development. Identify geographic areas that offer opportunity sites for new employment activity centers appropriate for innovative technologies and prioritize broadband infrastructure development in those areas to support business needs.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.3.7 Small Business Growth. Encourage the preservation and growth of diverse small businesses, recognizing that small businesses are an essential component of Santa Cruz County's identity. Support entrepreneurs and business start-ups and accommodate incubator and coworking spaces.	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-3.3.8 Service Commercial and Light Industrial Development. Provide adequate land to enable the preservation, growth, and development of service commercial and light industrial land uses, especially in technology/innovation and other growth industries. Encourage continued operation of existing industrial uses and their reconstruction, modernization, and expansion to the extent compatible with adjacent uses and to the extent that environmental impacts can be mitigated.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy BE-3.3.9 (LCP) Service Commercial Development in Rural Areas. Allow development in rural areas with "land extensive" service commercial land uses that require a lot of land or acreage but have low employment density and minimal urban service needs, without impacting prime farmland.	**Not applicable.** The project site is not a commercial development.
Policy BE-3.3.10 (EJ) Food Processing Industry. Accommodate food processing, wholesaling, and distribution facilities within Santa Cruz County to connect local agriculture to markets such as retailers, restaurants, schools, hospitals, and other institutions.	**Not applicable**. The project is not related to food processing wholesaling and distribution facilities. The project would not interfere or conflict with this policy.
Policy BE-3.4.1 Consumer Commercial Growth. Encourage commercial development that accommodates resident and visitor demands for goods and services to be met within the County, in alignment with the County's Economic Vitality Study.	**Not applicable**. The project would not interfere with or conflict with this policy as the project is not a commercial development.
Policy BE-3.4.2 Customer Experience. Recognizing that many retail needs are met with online purchases, plan for retail success with shopping centers that incorporate programming and space planning for locally-focused products, services, studios, and special events.	**Not applicable**. The project would not interfere with or conflict with this policy as the project is not a commercial development.
Policy BE-3.4.3 Outdoor Seating, Mobile and Pop-Up Businesses. Provide a regulatory framework to allow and encourage outdoor seating as well as food trucks and other mobile and pop-up businesses to activate and complement temporary events and permanent land uses.	**Not applicable**. The project is not a mobile and pop-up business.
Policy BE-3.4.4 (LCP) Temporary Events. Provide a regulatory framework to encourage special events such as art programs, festivals, parades, races, weddings, and filming, while minimizing negative impacts to neighborhoods and communities. Recognize that special events often partner with local food, beverage, entertainment, lodging, and other businesses, contributing to community economic vitality.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.4.5 (LCP) Year-Round Attractions. Recognizing that the County's competitive tourism advantage wanes during the winter months, support conferences, business meetings, and other special events that draw visitors year-round, facilitating continued economic viability of tourism-based businesses.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.4.6 Heritage Tourism. Support the preservation and marketing of natural and built environments, artifacts, and activities as tourist attractions that authentically represent the diverse cultural influences in Santa Cruz County, such as native tribes, agriculture/food history,	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
explorer/settler history, natural history, surf culture, immigrant/ethnic heritage, as well as eccentric local attractions such as Mystery Spot and the SS Palo Alto.	
Policy BE-3.4.7 (LCP) Coastal Visitor Services. Encourage the provision of visitor-serving commercial services within certain Coastal Special Communities, as follows: ▪ Davenport: State Route 1 frontage. ▪ Seacliff Beach Area: Entire Special Community. ▪ Rio Del Mar Flats/Esplanade Area: Esplanade frontage to Stephen Road. ▪ East Cliff Village Tourist Area: East Cliff Drive (front portion of properties) between 12th Avenue and 17th Avenue. ▪ Harbor Area: Lower 7th Avenue between Brommer Street and Eaton Street.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.5.1 (LCP) Visitor Accommodations for All. Provide a variety of accommodation types including hotels, motels, bed and breakfasts, hostels, and organized camps and RV parks. Plan for a mix of accommodations serving visitors of all income levels. In particular, protect and encourage lower-cost visitor accommodations within the Coastal Zone.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.5.2 (LCP) Match Supply to Visitor Demand. Ensure that the County's commercial visitor accommodations meet modern tourist needs, so that the County does not lose tourist business due to mismatched supply and demand. Recognize that existing visitor accommodation businesses may need to be co-located with other businesses and services to remain economically viable year-round. Regulate short-term rental of residences to accommodate some visitors but limit the number of vacation and hosted rentals in order to preserve permanent housing supply and neighborhood character.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.5.3 Integrate Visitors into Commercial Areas. Encourage development of visitor accommodations in walkable areas with visitor-serving commercial uses, such as restaurants and entertainment, in addition to traditional attractions such as public beaches and recreational assets. Recognize that when overnight visitors can safely and conveniently access a variety of attractions, this improves the visitor experience with the co-benefits of adding value to visitor accommodation businesses, contributing to vibrant activity centers, and benefiting local businesses.	**Not applicable**. The project site is not within commercial areas.
Policy BE-3.5.4 Employment Center Visitor Accommodations. Plan for development of visitor accommodations in close proximity to existing and planned employment centers near State Route 1 and the Soquel Drive corridor, catering to traveling professionals as well as those visiting residents and medical patients.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.5.5 (LCP) Small-Scale Visitor Accommodations in Neighborhoods. In neighborhoods and rural areas, encourage small scale visitor accommodations such as bed and breakfasts and	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
boutique hotels, where the use is compatible with neighborhood character, available infrastructure capacity, resource protection, and adjacent land uses.	
Policy BE-3.5.6 (LCP) Time-Share Condominium Beach Development. Recognize condominium time-share beach development as a resource for visitor accommodations. Limit new development of beach-oriented housing for short-term visitor accommodations at urban densities to areas within the USL or RSL.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.5.7 (LCP) Accommodating Visitors in Rural Areas. Visitor-serving facilities that cannot feasibly be located in existing developed areas should be located in existing developments or at selected points of attraction for visitors, where adequate public services, such as water, public sanitation facilities, roads, and fire protection are available. Place limitations on special events as appropriate to maintain rural character. Allow for conversion of existing historic or other rural structures to small scale visitor accommodations.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-3.5.8 (LCP) Visitor Accommodations at Commercial Recreational Facilities. Allow development of appurtenant overnight visitor accommodations at appropriate commercial recreation facilities where such use is consistent with maintaining recreational use, and with other General Plan/LCP policies.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-3.5.9 (LCP) Climate Change and Visitor Accommodation. Plan for evolving visitor accommodation needs related to climate change, such as an increase in demand for ecotourism, climate-resilient design of visitor facilities, and an influx of visitors to the County from hotter inland regions during extended and more frequent heat waves.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-3.6.1 (LCP) Cannabis Business Licensing. Recognize the cannabis industry as a segment of the local economy and require cannabis dispensary and non-retail cannabis businesses to maintain state and County licenses and necessary permits to operate legally. Limit new cannabis dispensary licenses.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy BE-3.6.2 (LCP) Cannabis Dispensary Siting. Cannabis dispensaries are located on parcels with commercial land use designations and are prohibited in close proximity to residential zone districts, schools, other cannabis dispensaries, or alcohol/drug treatment facilities.	**Not applicable.** The project is not a cannabis dispensary.
Policy BE-3.6.3 (LCP) Non-Retail Commercial Cannabis Siting. Commercial cannabis cultivation, manufacturing, and distribution uses are most appropriate on parcels with agricultural or light industrial land use designations and zoning. Parcels with other land use designations and zoning may allow non-retail commercial cannabis use, subject to use and development limitations and licensing requirements. Disallow non-retail commercial cannabis businesses in environmentally protected areas or in close proximity to parks, schools, day care and youth centers, alcohol/drug treatment facilities, and other sensitive receptors. Allow re-use of existing structures and	**Not applicable.** The project is not related to cannabis cultivation, manufacturing, or distribution.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
development, but prohibit construction of new structures associated with non-retail commercial cannabis businesses within the Coastal Zone.	
Policy BE-3.6.4 (LCP) Ancillary Uses in Residential Areas. Require that any non-retail commercial cannabis activities on lands designated for residential uses be designed and of a scale that is ancillary to the primary residential use of the property. Disallow commercial cannabis cultivation on lands designated for residential uses within the Coastal Zone.	**Not applicable.** The project is not related to cannabis activities.
Policy BE-3.6.5 (LCP) Improve Existing Environmental Conditions. Impose conditions of approval on discretionary land use permits for commercial cannabis activities, where appropriate, to reduce environmental impacts from existing disturbed areas, including but not limited to restoration related to site work and to roadways.	**Not applicable.** The project is not related to commercial cannabis activities.
Policy BE-3.6.6 Cannabis Industry and Commercial + Industrial Diversity. In order to ensure that the cannabis industry does not create loss of healthy diversity in the economy, and ensure that commercial and industrial space is available for a variety of economic enterprises, monitor and evaluate the scale and location of cannabis enterprises to avoid overconcentration of cannabis sector activities.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-4.1.1 Objective Design and Development Standards. Maintain objective standards consistent with community character and design objectives, for the purpose of ensuring quality design of development projects.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-4.1.2 Design Review. Require design review for certain types of development projects for consistency with both objective and nonobjective design standards and guidelines set forth in the SCCC and Santa Cruz County Design Guidelines and Design Guidelines for specific geographic areas. All projects are encouraged to consider the Design Guidelines, to enhance design quality of developments.	**Not applicable.** No objective and nonobjective design standards and guidelines have been set forth in the SCCC and Santa Cruz County Design Guidelines and Design Guidelines for the specific geographic area the project is located in nor for BESS projects.
Policy BE-4.1.3 (LCP) Rural and Urban Character. Establish design and development standards that recognize and enforce differences in character among the County's rural areas, suburban communities, and urban corridors, so that development strengthens rather than stresses the character and qualities of each unique place. In rural areas, development standards and projects should protect sensitive coastal and environmental resources. Within the USL and RSL, as land use intensity and density increases, development standards should provide for an increasingly urban pattern and form for the built environment.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy BE-4.1.4 (LCP) Neighborhood Scale, Size, and Context. New residential development may be different from but must take into account the scale and size of the existing surrounding neighborhood, while allowing for infill development, innovative design, and creative expression.	**Not applicable.** The project is not a residential development.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Development projects that introduce a change in neighborhood character should provide appropriate building massing so as not to overwhelm or primarily shade adjacent properties, including appropriate setbacks and adequate and maintained landscape buffering to reduce the perception of bulk and height.	
Policy BE-4.1.5 (LCP) (EJ) Landscape Design. Establish standards for landscaping associated with new construction and major renovation projects. Landscape design should relate to the building and the site design, and trees and plants should be appropriate to the site conditions with consideration for growth pattern, solar access, maintenance, screening for privacy, safety, and water conservation. Existing mature trees and native vegetation should be preserved as appropriate. Fencing, walls, site furniture, and lighting should be integral and compatible elements of the site design.	**Applicable and consistent.** The project would include a landscape plan, which would be approved prior to construction.
Policy BE-4.1.6 Quality Open Space. All residential development projects should include areas for outdoor enjoyment. In multifamily projects, ensure that open space areas include both active and passive open spaces that are large enough to be functional.	**Not applicable**. The project is not a residential development.
Policy BE-4.1.7 (EJ) Residential/Nonresidential Transitions. Provide appropriate transitions and buffers between residential and nonresidential properties to protect residential access to light and air, and to consider privacy as feasible.	**Not applicable**. The project does not abut residential development except a portion of the gen-tie line at the Point of Interconnection with the PG&E Green Valley Substation.
Policy BE-4.1.8 Coordinated Development + Connectivity. Coordinate development between adjacent sites with similar uses, for the purpose of improving design, increasing development efficiency, consolidating or enhancing open space, and preserving natural features. Encourage shared parking and circulation, including bicycle and pedestrian pathways connecting to established routes and destinations. Where appropriate, encourage parcel mergers to allow for improved layout of buildings, infrastructure, and amenities.	**Applicable and consistent.** The BESS facility would be located directly adjacent to the Green Valley Substation, which would increase efficiency and limit the length required for a gen tie line.
Policy BE-4.2.1 (LCP) Climate Action and Adaptation Plan (CAAP) Coordination. Ensure that land use plans and development projects are aligned with the Santa Cruz County CAS policies and priorities.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy BE-4.2.2 (LCP) Site Design for Environmental Protection. Review new developments for compliance with SCCC Title 16 environmental ordinances. Siting and designs should minimize grading, avoid or provide mitigation for geologic hazards and sensitive habitats, reduce fire risk, conform to the physical constraints and topography of the site, and maintain natural drainage patterns. Streams should remain daylighted rather than piped, where possible, with development incentives or variances allowed to ensure feasibility and property owner support for open streams. Development on slopes should be low profile and step down the hillside. Unnecessary grading for the purpose of meeting building height restrictions is prohibited.	**Applicable and consistent.** The project has been sited and designed to avoid or mitigate geologic hazards and sensitive habitats, reduce fire risk, and conform to physical and topographic constraints. Discussions related to avoidance and mitigation of hazards and impacts to sensitive habits are provided throughout the AB 205 opt-in application.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-4.2.3 (LCP) Clustered Building Siting. Encourage clustering of buildings to preserve or enhance natural amenities, resources and open space. In rural areas on parcels where dwelling groups are allowed, require clustering as appropriate to minimize grading, impervious surfaces, and overall site disturbance.	**Applicable and consistent.** The BESS facility and gen-tie line would disturb approximately 16 acres of the 47-acre project site.
Policy BE-4.2.4 (LCP) Wildlife-Compatible Development. Limit reflectivity, glare, and artificial light pollution from buildings and sites as practicable in order to preserve dark skies and reduce impacts to wildlife, especially in rural areas and over marine waters. Encourage landscapes that provide habitat for birds and wildlife as appropriate based on the location and intensity of development. Encourage the use of native plants and discourage the use of invasive species.	**Applicable and consistent.** The project would not introduce components that would be a hazard to wildlife. The components would use matte colors and non-reflective metal surfaces. Lighting would be minimal and follow dark skies guidelines, including shielding and downward orientations. Impacts to wildlife are discussed in more detail in Section 3.2, Biological Resources.
Policy BE-4.2.5 (LCP) Stormwater Runoff Reduction. Encourage the use of design elements such as permeable pavers and bioswales, in order to minimize impervious area and to reduce and pretreat stormwater flowing off site into the public storm drain system, and to improve the quality of stormwater infiltrating into the groundwater supply both on- and off-site.	**Applicable and consistent.** The project would maintain all stormwater runoff in on-site detention basins. Construction activities would require a stormwater pollution prevention plan ensuring that stormwater runoff would be managed in accordance with applicable best management practices and laws, ordinances, regulations, and standards.
Policy BE-4.2.6 (LCP) (EJ) Water Conservation. Encourage development projects to conserve water with efficient fixtures indoors and sustainable site elements outdoors such as drought-tolerant plants, rainwater catchment systems, graywater irrigation systems, and other strategies.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy BE-4.2.7 (EJ) Energy Conservation. Development should enable passive solar heating and lighting through building location, orientation and massing wherever practicable. Passive solar should be a priority for energy conservation in building design. Further energy conservation should be achieved with energy-efficient building envelopes, lighting, heating, cooling, and ventilation systems, and renewable energy design components.	**Applicable and consistent.** The BESS facility would contribute to increased use of renewable energy in the County and region.
Policy BE-4.2.8 (EJ) Healthy Indoor Environment. Ensure that building regulations provide for safe and healthy indoor air quality though moisture control and ventilation and reduction of exposure to lead, mold and other indoor health hazards. Encourage the use of toxin-free building materials.	**Not applicable**. The project would not interfere or conflict with this policy. The project does not propose habitable buildings that would expose users to lead, mold, or other indoor health hazards. The project would be constructed pursuant to California Building Code. Discussion

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	of hazards related to battery components and energy storage can be found in the following opt-in application sections: ▪ Section 3.5, Hazardous Materials Handling ▪ Section 3.9, Public Health ▪ Section 3.17, Worker Health and Safety
Policy BE-4.2.9 (EJ) Construction Material Conservation. Reduce the volume of construction waste going to landfills through promoting retention and re-use of existing structures, efficient design and construction techniques, use of recycled-content materials, and structure deconstruction instead of demolition.	**Applicable and consistent.** Construction of the BESS facility would limit the amount of construction waste going to landfills as discussed in Section 3.14, Waste Management.
Policy BE-4.2.10 Solar Panels on Commercial Parking Lots. Encourage surface parking lots in commercial developments to be covered with solar panels to create energy-efficient covered parking.	**Not applicable**. The project is not a commercial development and would not have a permanent parking lot.
Policy BE-4.3.1 Pedestrian-Oriented Development. Along Main Streets, Active Connectors and Multimodal Corridors, orient commercial and mixed-use buildings to face the street. Encourage connected blocks with shorter block lengths or midblock pedestrian connections. Provide wayfinding signage where appropriate. Encourage dynamic, attractive, and engaging streetscapes through design strategies such as varied building heights, setbacks, building styles, architectural features, and materials; ground floor glazing; and outdoor landscaping and gathering spaces.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-4.3.2 Public Gathering and Placemaking. Encourage public gathering spaces both in public and private projects, including spaces such as parklets, pocket parks, plazas, sidewalk seating, and areas for outdoor dining that provide a sense of place. Locate gathering places so they are visible and accessible from public streets and connected to other pedestrian facilities.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-4.3.3 (EJ) Deprioritize Vehicles. Wherever possible, locate parking lots behind buildings. Screen parking lots located adjacent to residential parcels with fences, walls, and/or landscaping. Encourage bicycle storage, shared parking structures, and park and ride lots. Provide incentives to developers to provide alternatives to surface parking lots, such as underground garages, multi-story above-ground garages, and podium parking.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-4.3.4 (EJ) Accessible Streetscape. Along streets where pedestrians are prioritized, ensure that all Americans with Disabilities Act (ADA) requirements are met or exceeded and consider Universal Design Criteria as well as design strategies for those with hearing and visual or reading impairments. Provide ample seating and wider sidewalks to support streets that are safe, comfortable, and convenient for everyone.	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-4.3.5 (EJ) Public Safety and Community Design. Enhance public safety in neighborhoods, centers, streets, and public spaces by providing street-fronting uses ("eyes on the street"), adequate lighting and sight lines, and features that cultivate a sense of community. Provide adequate public space for social/physical distancing during public health emergencies.	**Not applicable**. The project is not a commercial development.
Policy BE-4.3.6 Active Ground Floor Uses. Encourage active ground floor uses such as retail stores and cafes in commercial and mixed-use projects along streets that prioritize bicycle and pedestrian travel in order to contribute to an active and engaging streetscape.	**Not applicable**. The project is not a commercial development.
Policy BE-4.3.7 (LCP) (EJ) Green Space. Encourage publicly accessible green plazas, landscaping, and open spaces to be incorporated into the site design of new development projects in order to improve aesthetics, create more shade, increase pedestrian activity, and promote sustainability through the application of on-site prefiltration of stormwater. Encourage residential projects to provide public plazas or other types of open spaces that are accessible to the public or contribute visually to the public sphere.	**Not applicable**. The project is not a public facility or residential development.
Policy BE-4.3.8 (LCP) Low Impact Streetscape Landscaping. Use low-maintenance native and/or drought-tolerant plant species in streetscape landscaping to minimize water consumption and maintenance. Install landscaping that is naturally drained, depressed and designed to filter and infiltrate stormwater where appropriate on sidewalks, medians, bulb-outs, quasi-public parks, and plazas.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy BE-4.3.9 (LCP) (EJ) Urban Greening of Streets, Parking Lots, and Development Sites. Incorporate street trees to soften the linear appearance of streets, sidewalks, and building planes and provide shade at regular intervals to improve the pedestrian experience and the scenic qualities of corridors. Select appropriate trees and locate to increase shade for parking areas, buildings, and the public realm. Use trees to visually break up building facades, screen private spaces, create buffers between streets and pedestrian areas, and soften scale differences between buildings, with the co-benefit of reducing the urban heat island effect.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy BE-4.3.10 Integrating the Arts. Encourage the inclusion of publicly visible and accessible murals, curbside art, decorative paving, sculpture, fountains, shade trees, and other features that provide character and community expression. Encourage private development projects to include artists as members of their design team. Encourage functional features such as bike racks and benches to be designed as public art.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-4.3.11 Connecting to Local History. Encourage public projects and private development to include interpretive information regarding the history of a site, neighborhood or community in public art displays, plazas, and courtyards to enhance the sense of community and convey the significance	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
of a particular place. Where appropriate, encourage building styles and forms that reinforce a sense of place through the adaptation of local architectural influences.	
Policy BE-4.4.1 Nonconforming Structures. Encourage legal nonconforming structures to be maintained and improved. Allow additions and renovations, with variable permit requirements depending upon whether the owner does or does not propose to increase the degree of structural nonconformity. Allow reconstruction after a catastrophic event. Require discretionary review for voluntary reconstruction of nonconforming structures, subject to appropriate findings and conditions to ensure that the proposed project will not be detrimental to public health, safety or welfare.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-4.4.2 Nonconforming Uses. Allow existing legal nonconforming uses in use for three or more of the previous five years (the threshold for "continuous history of property use") to continue and require discretionary review to reestablish a nonconforming use that has lapsed. Require discretionary review for expansion, changes, or intensification of legal nonconforming uses, subject to appropriate findings and conditions of approval to ensure that the change will not be detrimental to public health, safety or welfare. Maintain a process whereby the Board of Supervisors may terminate any nonconforming use that is significantly detrimental to public health, safety, welfare or the environment.	**Not applicable**. The project is not a legal nonconforming use.
Policy BE-4.4.3 (LCP) Nonconforming Signage. As new developments are proposed on sites with nonconforming signage, require that signage be brought into conformance with current County sign ordinance standards or otherwise be permitted in accordance with the SCCC, as a condition of the discretionary development permit.	**Not applicable.** The project site does not have existing nonconforming signage.
Policy BE-5.1.1 (LCP) Requirement for Development Permit. Development in the Coastal Zone shall be consistent with Local Coastal Program (LCP) policies and provisions.	**Not applicable**. The project is not located within the Coastal Zone.
Policy BE-5.1.2 (LCP) Priority of Uses within the Coastal Zone. Maintain a hierarchy of land use priorities within the Coastal Zone: ▪ First Priority: Agriculture and coastal-dependent industry. ▪ Second Priority: Recreation including public parks, visitor-serving commercial uses, and coastal recreation facilities. ▪ Third Priority: Private residential, general industrial, and general commercial uses.	**Not applicable**. The project is not located within the Coastal Zone.
Policy BE-5.1.3 (LCP) Maintaining Coastal Priority Uses. Discourage the conversion of any existing priority use or any existing priority use designation to another use or designation of lower priority. "Conversion" means (1) a redesignation and/or rezone from a higher to a lower priority LCP land use designation and/or zoning district; and/or (2) a change in use from a higher to a lower priority	**Not applicable**. The project is not located within the Coastal Zone.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
use (e.g., a conversion from coastal-dependent industrial (first priority) to general commercial (third priority) use). Prohibit conversion of coastal agricultural land to non-agricultural use, except where specifically allowed for a public/quasi-public use pursuant to policy ARC-1.3.1. In all cases, and in addition to any other requirements and findings, any conversion of agricultural land shall meet the requirements of Coastal Act Sections 30241, 30241.5, and 30242. Prohibit conversion of existing coastal-dependent industry unless three years have passed since cessation of industrial use. Prohibit conversion of visitor-serving commercial uses except if all of the following criteria are met: ▪ The proposed conversion will not adversely affect the ability of the County to provide appropriate locations for adequate amounts and/or types of visitor-serving commercial land uses, as demonstrated by remaining visitor-serving commercial land uses or land use designations in proximity to the proposed conversion; and ▪ Market analysis or land use analysis demonstrates that the existing priority use or priority use designation is no longer feasible or appropriate, and ▪ Any conversion of lower-cost overnight accommodations (defined as a room rate that is no more than 75% of the statewide average daily room rate) to residential uses is required to provide an equivalent number of units on-site, off site, and/or via an in-lieu fee deposited into an account held by the County that is adequate to provide for replacement of any such converted units. If converting any other type of overnight accommodations (i.e., not lower-cost) to a residential use, as mitigation, either (a) 100% of the new residential units shall be affordable, and the project shall also provide one or more community and visitor-serving benefits/amenities (e.g., a coastal trail segment, bike racks, publicly accessible parks/gardens, visitor-serving commercial facilities, etc.) or (b) an equivalent replacement shall be provided in the manner as explained above with respect to conversion of lower-cost units to residential uses. Particularly discourage conversions of existing developed visitor accommodation uses to other uses, and instead strive to provide incentives or other measures to help retain older visitor accommodation facilities for lower-cost visitor accommodations. New visitor-serving uses shall not displace existing lower-cost visitor-serving uses unless an equivalent replacement is provided.	
Policy BE-5.1.4 (LCP) Designation and Development of Priority Sites. Reserve specific sites for coastal priority uses as indicated in Appendix G and facilitate priority land use development of these sites, with priority allocations of any limited public services.	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-5.1.5 (LCP) Coastal Special Communities. Designate and maintain certain areas as Coastal Special Communities or Special Scenic Areas based on the presence of unique scenic, historic, and natural resources, and/or coastal tourism focus. These areas shall include but not be limited to: ▪ Bonny Doon special scenic area ▪ Rio Del Mar Esplanade special community ▪ Davenport special community ▪ Seacliff Beach area special community ▪ Harbor area special community ▪ Seascape Beach Estates ▪ Pleasure Point Community ▪ Swanton Road special scenic area	**Not applicable**. The project is not located within the Coastal Zone.
Policy BE-5.1.6 (LCP) Avoid Impacts to Environmentally Sensitive Coastal Habitats. Within coastal environmentally sensitive habitat areas, only allow resource-dependent development consistent with Coastal Act section 30240, such as trails, low-impact camping, educational signage and kiosks, research, and restoration projects.	**Not applicable.** This project does not have existing coastal habitats.
Policy BE-5.1.7 (LCP) Development and Coastal Access. Ensure that new development protects the public's right to coastal access and does not impact existing access. Allow owners to mitigate public access impacts through joint funding and provision of new or improved public coastal access facilities.	**Not applicable.** This project does not include existing coastal access.
Policy BE-5.1.8 (LCP) Low and Moderate-Income Housing in the Coastal Zone. Encourage the provision of housing for low and moderate-income households in the Coastal Zone. Restrict conversion or demolition of existing residential units occupied by persons or families of low or moderate income, unless provision has been made for replacement units for persons of lower or moderate income. If units that are converted or demolished are in the Coastal Zone, replacement units should be located elsewhere within the Coastal Zone, if feasible.	**Not applicable.** This project is not a residential development or within the Coastal Zone.
Policy 5.1.9 (LCP) Mixed-Use Commercial Development in the Coastal Zone. Prioritize visitor-serving commercial uses in mixed-use commercial developments in the Coastal Zone.	**Not applicable.** This project is not within the Coastal Zone.
Policy BE-5.1.10 (LCP) Industrial Development in the Coastal Zone. Recognize that it may be necessary for certain types of industrial developments to locate in the Coastal Zone. On sites designated for industrial land use in the Coastal Zone, prioritize coastal-dependent and coastal-related industrial development over other industrial development. Encourage multicompany co-use	**Not applicable.** This project is not within the Coastal Zone.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
of sites and facilities. Disallow oil and gas development. Designate new sites for coastal-dependent or light industrial use in the Coastal Zone only when: ▪ Alternative locations are infeasible or more environmentally damaging; ▪ There is a demonstrated need for new sites; ▪ The site is not suitable for or designated for a non-industrial coastal priority use; ▪ A compelling public need is demonstrated; ▪ Adverse environmental effects will be mitigated to the maximum extent feasible; and ▪ Development of the site is consistent with all General Plan and LCP Land Use Plan resource protection policies.	
Policy BE-5.1.11 (LCP) Davenport Cement Plant Reuse. Consistent with the Davenport Cement Plant (CEMEX) Coastal Reuse Plan, redevelop the CEMEX site in a manner that recognizes the natural resources and attributes of the area, is compatible with Davenport community character, accommodates creation of jobs, supports public infrastructure and services for the community, and welcomes visitors. (Responsibility: County Administrative Office, Planning Commission, Board of Supervisors)	**Not applicable.** The project would not interfere or conflict with this policy.
Policy BE-5.2.1 (LCP) Adopted Special Area Plans and Guidelines. Require new development to comply with adopted special area plans and guidelines. Encourage property owners and businesses to follow adopted special area guidelines for the design and development of the built environment.	**Not applicable**. The project site is not within an adopted special planning area. The project would not interfere or conflict with this policy.
Policy BE-5.2.2 (LCP) Consistency with General Plan/LCP. Special area plans and guidelines should generally align with the General Plan/LCP and Santa Cruz County Design Guidelines, and should provide more detailed guidance for design and development in specific geographic areas. Where there is a conflict between policies or implementation measures in the General Plan/LCP Chapters 2 – 8 and a provision of a special area plan or guidelines, the special area plan or guidelines take precedence unless a finding can be made that a provision in the special area plan or guidelines has been made obsolete by modern regulations or the passage of time.	**Not applicable**. The project does not include the development of a special area plan.
Policy BE-5.3.1 (EJ) Disadvantaged Community Definition. In Santa Cruz County, "disadvantaged communities" include communities that are defined as such by HSC section 39711, and by state agencies such as the California Air Resources Board, the California Environmental Protection Agency, and the State Water Resources Agency, or Census tracts where the majority of the population are low income, poverty, or minority as defined by Census data or local income surveys. Communities disproportionately impacted by unmapped environmental factors such as water quality impacts, low-efficiency/high-cost water and sewage treatment, and air pollution from woodburning fireplaces and stoves, or unmapped flood hazards may also be considered	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
disadvantaged. Fringe, legacy, and island communities may or may not be considered disadvantaged communities.	
Policy BE-5.3.2 (EJ) Protect Disadvantaged Communities. Ensure that future improvements in disadvantaged communities will not produce negative impacts on the community, such as an increase in toxic exposures, a net loss of affordable housing, loss of open space or access to parkland or community gardens, or the displacement of residents and local legacy businesses.	**Not applicable**. The project would not interfere or conflict with this policy. Per the SB 535 mapping tool, the project site is not designated as a disadvantaged community.
Policy BE-5.3.3 (EJ) Target Uses and Development. Encourage uses and development in disadvantaged communities that serve to improve circumstances for these communities, such as increased affordable housing, employment opportunities, environmental remediation, public infrastructure including the addition of parks and open space, and community services.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-5.3.4 (EJ) Services for Legacy Communities. For each legacy community identified as a disadvantaged community, ensure that water, wastewater, stormwater drainage, and structural fire protection needs are met. If these needs are not met, seek funding to extend services to these communities.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-5.3.5 (EJ) Services for Fringe and Island Communities. Encourage and evaluate where appropriate annexations of non-agricultural land for fringe and island communities to incorporated cities. Prior to annexation, the County should assist cities in provision of services for fringe and island communities within city spheres of influence.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-5.4.17 Military Considerations. Acknowledge the existence of a designated military flight path in South Santa Cruz County that is not a low-level flight path and does not impact land use or development. Recognize the potential for future changes such as military installations, special use airspace, or low-level flight paths that may require consideration of land use and development impacts to military readiness activities.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-5.5.1 (LCP) Urban/Rural Boundary – San Andreas Planning Area. Maintain a stable urban rural boundary and protect rural agricultural land, wetlands, and other environmentally sensitive habitat areas by ensuring that there will be no additional urban development outside the western boundary of the City of Watsonville, and by providing for concentrated urban development within City of Watsonville city limits. Any amendments to this policy, including revocation, require a super-majority vote of the Board of Supervisors. (Resolution No. 342-2003)	**Not applicable**. The project site is not within the San Andreas Planning Area.
Policy BE-5.5.2 (LCP) Prohibition on Utility Extensions – San Andreas Planning Area. Prohibit the extension of new wastewater and/or potable water utilities, emanating from within the City of Watsonville into the San Andreas Planning Area, except for one wastewater and one water line to serve permitted high school development on City of Watsonville Coastal Zone Area C, by establishing a Utility Prohibition Strip along and immediately adjacent to the City's boundaries west of Highway	**Not applicable**. The project site is not within the San Andreas Planning Area.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
One, so as to discourage additional urban development in the Coastal Zone west of the City of Watsonville. Any amendments to this policy, including revocation, require a super-majority vote of the Board of Supervisors. (Resolution No. 342-2003)	
Policy BE-5.5.3 (LCP) Minimize Utility Sizing – San Andreas Planning Area. Any new wastewater or potable water supply pipelines emanating from within the City of Watsonville City limits shall be limited in size to the minimum capacity necessary to serve the intended existing and/or proposed development so as to discourage additional urban development in the coastal zone west of the City of Watsonville. Any amendments to this policy, including revocation, require a super-majority vote of the Board of Supervisors. (Resolution No. 342-2003)	**Not applicable**. The project site is not within the San Andreas Planning Area.
Policy BE-5.5.4 (LCP) Watsonville Utility Pipeline Non-Access Strips – San Andreas Planning Area. In the San Andreas Planning Area, designate one-foot wide Pipeline Non-Access Strips along all sides of any existing or new: 1) wastewater or potable water supply pipeline easements granted to the City of Watsonville by the County; and/or 2) wastewater or potable water supply pipelines emanating from the City of Watsonville and crossing County right-of-way or other County land. The one-foot wide Pipeline Non-Access Strips shall completely surround any such pipelines and/or pipeline easements and will prohibit any future pipeline attachments and/or extensions to the affected pipeline, thus discouraging additional urban development in the Coastal Zone west of the City of Watsonville. Any amendments to this policy, including revocation, require a super-majority vote of the Board of Supervisors. (Resolution No. 342-2003)	**Not applicable**. The project site is not within the San Andreas Planning Area.
Policy BE-5.5.5 (LCP) Harkins Slough Road Improvements. Harkins Slough Road (including any Highway One overpass/interchange improvements) shall be limited to the minimum width/capacity necessary to provide for roadway, bikeway and/or pedestrian access: 1) to serve permitted high school development on City of Watsonville Coastal Zone Area C, and/or 2) as needed to meet minimum County or Caltrans design standards. Any such road improvements shall be designed in tandem with the development to be served by the road improvements in such a way as to minimize the linear extent of any such road improvements; Harkins Slough Road improvements not necessary to serve the permitted development to be served are prohibited. Any Harkins Slough Road improvements that (1) expand the roadway prism outside of the existing paved area; (2) constitute a major public works project; or (3) are necessary to serve permitted development located within City of Watsonville Coastal Zone Area C, shall provide enhanced habitat connectivity: 1) for Hanson Slough, if the Hanson Slough portion of the road is improved (e.g., by replacing the existing culvert within an alternative structure, such as a box culvert, that better connects slough resources on either side of Harkins Slough Road); and 2) between the west branch of Struve Slough north of Harkins Slough Road and the Department of Fish and Game reserve south	**Not applicable**. The project site is not on Harkins Slough Road.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
of Harkins Slough Road by replacing the culverts under Harkins Slough Road with a bridge of adequate span to provide for flood protection and habitat connectivity with regard to slough resources on either side of Harkins Slough Road, unless an alternative that is environmentally equivalent or superior to a bridge is identified. Fill of any portion of the west branch of Struve Slough, except for incidental public services, is prohibited. Any such road improvements to Harkins Slough Road shall include measures to protect habitat, and shall be sited and designed to minimize the amount of noise, lights, glare and activity visible and/or audible within the sloughs. Night lighting shall be limited to the minimum necessary to meet safety requirements and shall incorporate design features that limit the height and intensity of lighting to the greatest extent feasible; provide shielding and reflectors to minimize on-site and off-site light spill and glare to the greatest extent feasible; avoid any direct illumination of sensitive habitat areas; and incorporate timing devices to ensure that the roadway is illuminated only during those hours necessary for school functions and never for an all night period. Any amendments to this policy, including revocation, require a super-majority vote of the Board of Supervisors. (Resolution No. 342-2003)	
Policy BE-6.1.1 Customer Service. Foster a customer service-oriented culture where staff strives to provide information to applicants and to members of the public in a clear, concise, and transparent manner, through a variety of electronic and in-person methods.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-6.1.2 Development Project Review. Review ministerial and discretionary project applications in a timely, efficient, and consistent manner. Coordinate feedback from reviewing agencies. Help applicants plan for success by setting expectations regarding the scope, cost and time involved in the permit application process.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-6.1.3 Interdepartmental Coordination. Ensure consistency between long-range plans and implementation approaches related to land use across County departments and other reviewing agencies.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy BE-6.2.1 Environmental Review Required. Require environmental review per CEQA (California Public Resources Code, Title 13, Sections 21000–21178; and California Code of Regulations, Title 14, Sections 15000-15387) and associated guidelines for all non-exempt development projects, rezonings, and General Plan Amendments.	**Applicable and consistent.** CEC, through the AB 205 process, would conduct environmental review for the project pursuant to CEQA (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.).
Policy BE-6.2.2 Mitigation Measures Required. Require mitigation measures as identified through the environmental review process to be incorporated into all approved projects as conditions of approval or require adoption of statements of overriding considerations if mitigations cannot be implemented to reduce environmental impacts below significance thresholds.	**Applicable and consistent.** CEC, through the AB 205 process, would conduct environmental review for the project pursuant to CEQA (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.).

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	Applicable mitigation measures would be incorporated as needed.
Policy BE-6.3.1 Public Process. Maintain a robust public process for land use development projects. Public notification should be commensurate with the scope and scale of the proposed project and potential impacts and must be consistent with legal requirements. Public notification should clearly inform the public when and where public comment is encouraged, when and where public hearings will be conducted, and how decisions may be appealed.	**Applicable and consistent.** CEC, through the AB 205 process, would conduct environmental review for the project pursuant to CEQA (California Public Resources Code13, Section 21000 et seq.; 14 CCR 15000 et seq.). Opportunities for public comment and community meetings would be provided through the opt-in application and during the CEQA process.
Policy BE-6.3.2 (EJ) Community Meetings. Conduct community meetings to discuss pending special area plans, policy updates, and major development projects, with an emphasis on gathering public input at the beginning of the planning process to maximize opportunities for participation. Major development projects must provide evidence of neighborhood meeting(s) as part of application submittal.	**Applicable and consistent.** CEC, through the AB 205 process, would conduct environmental review for the project pursuant to CEQA (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.). Opportunities for public comment and community meetings would be provided through the opt-in application and during the CEQA process.
Policy BE-6.3.3 (EJ) Community Partnerships. Foster partnerships with community-based organizations to ensure that all affected members of the community learn about and have an opportunity to make public comments regarding development projects and policies. Partner with organizations that have relationships, trust, and cultural competency with target communities to outreach for local initiatives and issues.	**Not applicable**. The project would not interfere or conflict with this policy. However, the project applicant would enter into a community benefits agreement as part of the CEC permitting process. Please refer to Appendix 1D for the project's Community Benefits Plan.
Policy BE-6.3.4 (EJ) Accessible Public Engagement. Conduct outreach and public meetings with communication methods that convey complex and/or technical information in an easily understandable manner. To the extent possible, conduct outreach and meetings at times and places designed to engage a wide variety of participants. Facilitate meetings and workshops using diverse methods that can engage all participants and can appeal to multiple learning styles. Ensure that public meetings accommodate attendees with physical disabilities.	**Applicable and consistent.** CEC, through the AB 205 process, would conduct environmental review for the project pursuant to CEQA (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.). Opportunities for public comment and community meetings would be provided through the opt-in application and during the CEQA process.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy BE-6.3.5 (EJ) Alternatives to Public Meetings. Recognize that members of the public may not be able to attend public meetings or events in person. Ensure that alternative public comment and participation options are available, such as electronic platforms.	**Applicable and consistent.** CEC, through the AB 205 process, would conduct environmental review for the project pursuant to CEQA (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.). Opportunities for public comment and community meetings would be provided through the opt-in application and during the CEQA process.
Policy BE-6.3.6 (EJ) Targeted Outreach to Disadvantaged and Multilingual Communities. When a proposed development project or policy may impact a disadvantaged or multilingual community, conduct enhanced outreach to that community. In particular, consider outreach to these communities regarding topics such as affordable housing, employment opportunities, environmental remediation, and improved public infrastructure and services.	**Applicable and consistent.** CEC, through the AB 205 process, would conduct environmental review for the project pursuant to CEQA (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.). Opportunities for public comment and community meetings would be provided through the opt-in application and during the CEQA process.
Policy ARC-1.1.1 (LCP) Designation of Commercial Agricultural Land. Designate on the General Plan and LCP Resources and Constraints Maps as "Agricultural Resource" all lands that meet the criteria (as defined in the General Plan Glossary) for commercial agricultural lands.	**Not applicable.** The project does not propose redesignation of agricultural resource lands on the General Plan and LCP Resources and Constraints Maps. SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions to no longer require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.
Policy ARC-1.1.2 (LCP) Types of Agricultural Resource Lands. Maintain by County ordinance specific agricultural land type designations for parcels identified as commercial agricultural land based on the criteria set forth in the General Plan and LCP Land Use Plan* and maintain Agricultural Resources Maps to identify the distribution of the following types of Agricultural Resource Land in the County: Type 1A – Viable Agricultural Land – Prime and unique farmland, and prime rangeland; Type 1B – Viable Agricultural Land in Utility Assessment Districts – Prime farmland, unique farmland, and prime rangeland located in a utility assessment district;	**Not applicable.** The project does not propose changes to ordinances establishing agricultural land type designations for parcels identified as commercial agricultural land or Agricultural Resources Maps. SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions to no longer require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Type 2A – Limited Agricultural Land – Land in large blocks suitable for commercial agricultural use, with one or more factors that may limit productivity; Type 2B – Limited Agricultural Land-Geographically Isolated – Land suitable for commercial agricultural use that is geographically isolated from other agricultural areas; Type 2C – Limited Agricultural Land in Utility Assessment Districts – Land suitable for commercial agricultural use that located in a utility assessment district and has other factors that may limit productivity; Type 2D – Limited Agricultural Land Experiencing Use Conflicts – Land suitable for commercial agricultural use, but with limiting factors including pressure from residential land use; Type 2E – Vineyard Lands – These are agricultural lands that may or may not be located on lands zoned "Commercial Agriculture" (CA), and often occur in the rural residential (RR), special use (SU), and non-commercial agricultural (A, RA) zoning districts; Type 3 – Viable Agricultural Land Within the Coastal Zone – Prime farmland, unique farmland, and prime rangeland in the Coastal Zone that is protected by the Coastal Act.	
Policy ARC-1.1.3 (LCP) Land Use Designations for Agricultural Resource Lands. Lands designated as Agricultural Resource will be maintained in the Agriculture (AG) Land Use designation unless the property is included in a public/quasi-public park or biotic reserve, in which case it shall be assigned to the Parks, Recreation and Open Space (O-R), Resource Conservation (O-C), or Public Facility (P) land use designations.	**Not applicable.** The project does not propose removal or amendment of the project site's underlying AG Land Use designation. SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions to no longer require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.
Policy ARC-1.1.4 (LCP) Development Density and Intensity on Commercial Agricultural Land. Limit development density and intensity on commercial agricultural land in order to preserve the land for long-term commercial agricultural use, accordance with Table 5-1 [in the Agriculture, Natural Resources + Conservation Element of the General Plan].	**Applicable and inconsistent.** The project proposes to construct a BESS facility on land with a zoning designation of Commercial Agriculture. BESS facilities are not commercial agricultural use; therefore, the project would be inconsistent with Policy ARC-1.1.4. However, development of the project is limited to no more than approximately 16 acres of the overall approximate 47-acre site, the remaining approximately 31 acres of which would be

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	preserved in perpetuity through an agricultural conservation easement.
Policy ARC-1.1.5 (LCP) Zoning of Agricultural Resource Land. Maintain all lands designated as Agricultural Resource in the Commercial Agricultural (CA) Zone District, except as follows: land in agricultural preserves designated by the Agricultural Preserve (-P) Combining District on either A-zoned lands or CA-zoned lands; timber resource land zoned to the Timber Production (TP) Zone District; and public parks, public/quasi-public recreation uses and open spaces, and biotic conservation areas zoned to the Parks, Recreation and Open Space (PR) Zone District.	**Not applicable.** The project does not propose rezoning of the project site. SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions to no longer require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.
Policy ARC-1.1.6 (LCP) Principal Permitted Uses on Commercial Agricultural (CA) Zoned Land. Maintain a Commercial Agricultural (CA) Zone District for application to commercial agricultural lands that are intended to be maintained exclusively for long-term commercial agricultural uses, including farming and other limited uses and activities necessary to support the agricultural economy. Allow principal permitted uses in the CA Zone District to include agricultural pursuits for the commercial cultivation of plant crops, including food, flower, and fiber crops; raising of animals including grazing and livestock production; small-scale, ancillary agricultural support uses such as the marketing of products grown on site and agri-tourism events that are compatible with the primary agricultural use; Employee Housing Act (EHA) farmworker housing projects, and, outside the Coastal Zone only: Small Farmworker Housing Projects, Streamlined EHA Projects" one single family dwelling, and timber harvesting operations. While these uses are principally permitted, establishing the use may require other discretionary permits such as a Site Development Permit and/or Coastal Development Permit, pursuant to the SCCC.	**Not applicable.** The project does not propose to change principal permitted uses on CA zoned land. SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions to no longer require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.
Policy ARC-1.1.7 (LCP) Conditional Uses on Commercial Agricultural (CA) Zoned Lands. All conditional uses will be subject to standards that specify siting and development criteria, including: size, location, and density. Allow conditional uses on CA-zoned lands as identified in the Zoning Ordinance based upon the following conditions: 1. The use, if a primary use of the property, is directly related to necessary uses that support the commercial agricultural economy of Santa Cruz County; or 2. The use, if an ancillary, incidental, or accessory use to a primary agricultural farming or other use of the parcel, or is ancillary when taking into consideration the collective, multiple parcels owned or leased by the applicant for commercial agriculture operations, is directly related to necessary uses that support the commercial agricultural economy of Santa Cruz County; or 3. The use consists of a Small Farmworker Housing Project, as provided in Policy ARC-1.4.9 and defined in SCCC 13.10, and is proposed within the Coastal Zone to provide housing for four or	**Applicable and inconsistent.** The project proposes to construct a BESS facility on land with a zoning designation of Commercial Agriculture. BESS facilities are not a conditionally allowed use on CA zoned lands, and therefore, the project would be inconsistent with Policy ARC-1.1.7. However, SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions to no longer require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
fewer farmworkers in a manner that is ancillary, incidental, or accessory to a primary agricultural use of the parcel; or 4. The use consists of an Affordable Farmworker Rental Housing ("ARFH") Project pursuant to the Pajaro Valley Development Reserve established in Policy 1.4.9 below and is located outside of the Coastal Zone; or 5. The use consists of: I. An interim public use that does not impair long term agricultural viability, or consists of a permanent public use that will result in the production of recycled wastewater solely for agricultural irrigation, or other community or public facility use allowed in the CA Zone District use chart, and that minimizes and offsets the loss of agricultural land resulting from facility construction; or II. A landfill, materials transfer station, or similar facility, which the County has determined is necessary to address a compelling public health and safety or environmental concern and for which mitigation will be provided; and 6. The use is sited to avoid conflicts with primary agricultural activities on the property and in the area; and 7. The use is sited on the property to avoid and minimize removal of land from production and to preserve productive agricultural resource soils.	
Policy ARC-1.1.8 (LCP) Agricultural Land in State Parks. In processing State Parks and Recreation Department development plans and projects for park units within the Coastal Zone: 1. Retain the maximum amount of commercial agricultural land in agricultural production within each state park unit. 2. Require a site-specific justification demonstrating the overriding public access or recreational need, for removing agricultural lands from production or for not offering lands capable of farm production for lease; and favor public/quasi-public open space and recreation as use alternatives to active agricultural farming use.	**Not applicable**. The project is not located within a park or the Coastal Zone.
Policy ARC-1.1.9 (LCP) Coastal Access and Agricultural Uses in the Coastal Zone. Protect coastal access and access to public lands, while also protecting agricultural land uses in the Coastal Zone by minimizing coastal accessways through and adjacent to agricultural land to the extent feasible, clearly designating coastal accessways, providing physical buffering and separation between accessways and agricultural land, and other appropriate measures.	**Not applicable**. The project is not located within the Coastal Zone.
Policy ARC-1.1.10 (LCP) Biomedical Livestock Operations. Allow biomedical livestock operations as a Conditional Use on agriculturally zoned land, subject to all other provisions of the General Plan/LCP, to the provisions of the Zoning Ordinance applicable to agriculturally zoned land, and to standards	**Not applicable.** This project does not include biomedical livestock operations.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
which assure protection of the public health, safety and welfare, while prohibiting biomedical laboratories on agriculturally zoned land.	
Policy ARC-1.1.11 Agriculturally Oriented Structures. Allow only agriculturally oriented structures or dwellings on Commercial Agricultural Land, as either principally permitted or conditionally permitted uses. The following are considered agriculturally oriented structures: one residence and one accessory dwelling unit; farmworker housing of all types allowed by the zoning district; structures associated with recycled wastewater (i.e., tertiary treatment) facilities in the immediate proximity of existing municipal waste water treatment plants for the production of recycled wastewater to be used solely for agricultural irrigation; and other community or public facility use allowed in the CA Zone District use chart that the County has determined to be of significant benefit to the public health, safety and welfare. Prohibit non-agricultural residential land use when in conflict with the fundamental objective of preserving agriculture.	**Applicable and inconsistent.** The project proposes to construct a BESS facility on land with a zoning designation of Commercial Agriculture. BESS facilities are not an agriculturally oriented structure or dwelling, and therefore, the project would be inconsistent with Policy ARC-1.1.11. However, SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions to no longer require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.
Policy ARC-1.1.12 Location of Agricultural Support Facilities. Agricultural support facilities, where permitted, should be located off of agricultural resource soils, or when this is not feasible, should be sited to avoid and minimize loss of agricultural resource soils and impacts to farming operations.	**Not applicable.** The project would not construct agricultural support facilities.
Policy ARC-1.4.7 Accessory Dwelling Units on Commercial Agricultural Land within the Coastal Zone. Allow one accessory dwelling unit (ADU) on parcels in the Commercial Agriculture (CA) Zone District as accessory to a single-family dwelling, subject to locational requirements and other requirements in the Zoning Ordinance.	**Not applicable.** The project would not construct residential units.
Policy ARC-1.4.9 (EJ) Farmworker Housing Approval. Recognizing that farmworker housing is essential to the viability of local agriculture, and that there is a shortage of safe and affordable farmworker housing, allow standard Employee Housing Act (EHA) Projects, including Streamlined EHA Projects (outside the Coastal Zone only), within the Agriculture and Commercial Agricultural zone districts as principal permitted agricultural uses, consistent with the EHA and the licensing and permit approval procedures specified in SCCC 13.10. Allow Small Farmworker Housing Projects as a principally permitted use on CA and A parcels outside the Coastal Zone, and as a conditional use on parcels within the Coastal Zone, subject to applicable permit approvals provided in the SCCC. A. Require Site Development Permit review for all farmworker housing projects to ensure appropriate siting, buffering, and other objective development standards and conditions of approval as applicable.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-1.4.10 Farmworker Housing as an Agricultural Use. Farmworker housing projects, proposed on property within an agricultural zone district (CA and A) are considered agricultural land uses and are not subject to residential density determinations in the Rural Density Matrix. As an agricultural land use, farmworker housing proposed within agricultural zones is also not subject to	**Not applicable.** This project is not a residential development.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
provisions in the General Plan that limit residential density or require a minimum amount of land area per dwelling, including, policies within Objective BE-2.2: Rural Residential Designations, Policies ARC-4.2.6 (Land Division and Density Requirements in Water Supply Watersheds), ARC-4.5.2 (Land Division and Density Requirements in Primary Groundwater Recharge Areas), and ARC-4.5.9 (Development Densities With Poor Groundwater Availability). Except as indicated in the Zoning Ordinance for ARFH projects, which allow creation of a separate parcel for the project if needed to allow for ARFH project financing, any land division proposed in association with other types of farmworker housing (EHA or Small Projects), such as a parcel map, condominium or subdivision map, is subject to the minimum parcel size determinations in the Rural Density Matrix where applicable, to minimum parcel size requirements for the applicable zone district, and to minimum parcel size requirements in the above policies.	
Policy ARC-1.4.11 (EJ) Pajaro Valley Development Reserve for Affordable Rental Farmworker Housing (ARFH) Projects. For sites located outside of the Coastal Zone only, a Pajaro Valley Development Reserve has been mapped and established to allow development of no more than 200 total units of affordable, multi-family rental housing for farmworker households by qualified non-profit housing providers ("ARFH Projects") within certain qualifying agricultural areas of unincorporated Pajaro Valley, as further set forth in SCCC 13.10. The ARFH Projects may be allowed as a conditional use on qualifying agricultural lands in CA or A zoning districts subject to CEQA review and approval by the Board of Supervisors. The Board may in the future take action to adopt policy and regulatory amendments to increase the reserve to more than 200 units, if determined to be warranted and in the broader interests of support for the agricultural economy. Each ARFH project is estimated to consist of approximately 40 to 60 multi-family dwelling units, therefore the initial 200-unit capacity of the Development Reserve is expected to be sufficient for four to five ARFH projects in total. ARFH projects are not EHA Projects.	**Not applicable.** The project site is not located within the Pajaro Valley Development Reserve.
Policy ARC-1.1.12 Location of Agricultural Support Facilities. Agricultural support facilities, where permitted, should be located off of agricultural resource soils, or when this is not feasible, should be sited to avoid and minimize loss of agricultural resource soils and impacts to farming operations.	**Not applicable.** This project is not an agricultural support facility.
Policy ARC-1.1.13 (LCP) (EJ) Utility District Expansion. Prohibit the expansion of County-controlled sewer district boundaries, and oppose the expansion (through annexation) of special district, or municipal, sewer or water boundaries, onto Types 1 and 3 Commercial Agricultural Land , except under the following exceptional circumstances related to public health and safety; and where sewer and water lines are located well below tillable soil depths and with sufficient construction and buffers from pipelines to ensure public health and safety; and where consistent with Built Environment policies BE-5.5.1 through BE-5.5.5 regarding the San Andreas Planning Area:	**Not applicable.** This project does not propose expansion of a County-controlled sewer district or a special district, municipal, sewer, or water boundary.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
1. County sewer district boundaries may be expanded to serve existing development on commercial agricultural parcels with failing sewage disposal systems, where an enhanced on-site wastewater treatment system would be inadequate to serve the existing development, and where the expansion is limited in size to the minimum capacity necessary to serve the intended existing development so as to discourage additional urban development. 2. The County may support the expansion or annexation of water district boundaries to serve existing development on commercial agricultural parcels, on sites served by well water that does not meet minimum state drinking water standards, and where the expansion is limited in size to the minimum capacity necessary to serve the intended existing development so as to discourage additional urban development.	
Policy ARC-1.1.14 (LCP) Water and Sewer Lines in the Coastal Zone. Allow the placement of water or sewer lines on commercial agricultural lands in the Coastal Zone where the expansion is limited in size to the minimum capacity necessary to serve the intended existing or new development so as to discourage additional urban development, and only under the following circumstances and with safeguards (see Policy ARC-1.1.15) to ensure that such facilities will not impair agricultural viability, either through increased assessment costs or degraded air and water quality, of nearby agricultural lands or result in subsequent conversions of commercial agricultural lands to non-agricultural uses due to the utility extensions: 1. Allow water transmission lines from the North Coast to the City of Santa Cruz and allow service lines to be placed on commercial agricultural lands for the purpose of irrigation and related agricultural uses, which may include uses such as limited agricultural employee/farmworker housing as may be approved by the County. 2. Allow sewer transmission lines to and from the City of Watsonville sewage treatment plant to cross commercial agricultural lands without service to the affected parcels, except where necessary to allow for agricultural employee/farmworker housing as may be approved by the County. 3. Allow water and sewer lines to be placed on commercial agricultural lands to serve existing development which has failing wells and/or sewage disposal systems. 4. Within the area of the county served by the Pajaro Valley Water Management Agency, allow the placement of water lines on commercial agricultural land, if the purpose is to prevent saltwater intrusion, recharge groundwater basins, or provide tertiary treated wastewater for agricultural uses and purposes including irrigation and farmworker housing.	**Not applicable**. The project is not located within the Coastal Zone.
Policy ARC-1.1.15 (LCP) Protection for Water and Sewer Lines in the Coastal Zone. For the purposes of policy 1.1.14, safeguards shall include, but not be limited to:	**Not applicable**. The project is not located within the Coastal Zone.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
1. Prohibiting hookups to trunk lines through commercial agricultural lands, except where necessary to provide service in accordance with policies ARC-1.1.13 and 1.1.14; 2. Prohibiting the levying of assessment fees against commercial agricultural land for the construction of sewage transmission lines running through the commercial agricultural parcels, except that an appropriate service fee may be applied to an agricultural parcel to which sewage treatment service has been provided in accordance with policy ARC-1- 1-14.; and 3. Locating water and sewer lines on commercial agricultural land below the tillable soil depth, with buffers as may be advised by agricultural professionals.	
Policy ARC-1.2.1 (LCP) Type 1, 2 and 3 Land Division Criteria. Allow land divisions of Agricultural Resource Lands only for exclusive agricultural purposes, where post-division parcels are of sufficient size to allow for economic farming and comply with the minimum parcel size requirements, and where the division is consistent with other provisions of the Zoning Ordinance and the Agricultural Land Preservation and Protection Ordinance for land divisions.	**Not applicable.** This project does not involve a land division.
Policy ARC-1.2.2 (LCP) Dividing Off Non-Farmable Land. Land divisions involving commercial agricultural lands for the purpose of using the new parcel(s) for non-agricultural uses or for the purpose of dividing off land not usable for agriculture shall not be permitted, except as provided in Policy ARC-1.2.4 and other provisions of the Zoning Ordinance and the Agricultural Land Preservation and Protection Ordinance of the County Code.	**Not applicable.** This project does not involve a land division.
Policy ARC-1.2.3 (LCP) Division Must Not Hamper Long-Term Agriculture. No proposed division of CA lands shall be approved except where it is shown that such division will not have an adverse effect on or discourage long-term commercial agricultural operations in the area.	**Not applicable.** This project does not involve a land division.
Policy ARC-1.2.4 (LCP) Dividing Off Non-Designated or Non-Viable Land for Public/Quasi-Public and Related Purposes. Commercial Agricultural parcels may divide off portions of the land that are determined to not be commercially viable from the portion that is zoned as Commercial Agriculture (CA), or is identified as Type 1, 2 or 3 Agricultural Resource Land, only when the division is for a public/quasi-public community purpose, will not adversely impact agricultural activities of the commercial agricultural area, and is consistent with the Agricultural Land Preservation and Protection Ordinance and Policy ARC-1.2.1.	**Not applicable.** This project does not include a land division.
Policy ARC-1.3.1 (LCP) Conversion of Commercial Agricultural Lands. Consider conversion and/or development of commercial agricultural lands to non-agricultural uses only when all of the following criteria are met: 1. It is determined that the land is not viable for farming or for other allowable agriculture uses, and that it is not likely to become viable in the future (see policy ARC-1.3.2); and	**Applicable and consistent.** The project site is approximately 47 acres, and the proposed BESS and gen-tie line would cover approximately 16 acres of the project site. The remaining approximately 31 acres that would not be disturbed were observed to be generally more

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
2. Findings are made that new information has been presented to demonstrate that the conditions on the land in question do not meet the criteria for commercial agricultural land; and 3. The conversion of such land or use to non-agricultural uses will not impair the viability of, or create potential conflicts with, other commercial agricultural lands in the area; and 4. The conversion of such land is concentrated on the site or parcel to the minimum area necessary to achieve the objectives of the proposed conversion.	vigorous and uniform relative to the northern portion of the parcel that would be developed under the project (Rush & Duttle Consulting 2024). The agriculture feasibility report indicates that although the portion of the project site where the BESS facility and gen-tie line are proposed to be constructed has been commercially cultivated with an apple orchard since 1993, the orchard has large areas of missing trees and patterns of plant mortality, reduced vigor, and tree replacement. Previous attempts to cultivate berries and vegetables were unsuccessful. To ensure future agricultural production on areas of the project site mapped Prime Farmland and with highly suitable soils, approximately 19.4 acres of land within the project parcel mapped as Prime Farmland would be preserved in perpetuity through an agricultural conservation easement.
Policy ARC-1.3.2 (LCP) Determining Agricultural Viability. Require a viability study to be conducted in conjunction with an application that proposes to convert commercial agricultural and prime agricultural lands to non-agricultural land uses, to include but not limited to an economic feasibility evaluation which contains at least: 1. An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of filing the application. 2. An analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the area for the five years immediately preceding the date of filing the application. 3. An identification of the geographic area used in the analyses. The area shall be of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for the land stated in the application. Recommendations regarding viability shall be made by the Agricultural Policy Advisory Commission based on evaluation of the viability study and the following criteria: parcel size, sizes of adjacent parcels, degree of non-agricultural development in the area, inclusion of the parcel in utility	**Applicable and consistent.** The project site is approximately 47 acres, and the proposed BESS and gen-tie line would cover approximately 16 acres of the project site. The remaining approximately 31 acres that would not be disturbed were observed to be generally more vigorous and uniform relative to the northern portion of the parcel that would be developed under the project (Rush & Duttle Consulting 2024). The agriculture viability report indicates that although the portion of the project site where the BESS facility and gen-tie line are proposed to be constructed has been commercially cultivated with an apple orchard since 1993, the orchard has large areas of missing trees and patterns of plant mortality,

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
assessment districts, soil capabilities and topography, water availability and quality, and proximity to other agricultural use.	reduced vigor, and tree replacement. Previous attempts to cultivate berries and vegetables were unsuccessful. To ensure future agricultural production on areas of the project site mapped Prime Farmland and with highly suitable soils, approximately 19.4 acres of land within the project parcel mapped as Prime Farmland would be preserved in perpetuity through an agricultural conservation easement.
Policy ARC-1.3.3 (LCP) Conversion to Non-Agricultural Uses Near Urban Areas. Prohibit the conversion of commercial agricultural lands (changing the land use designation from Agriculture to non-agricultural uses) around the periphery of urban areas except where it can be demonstrated that the viability of existing commercial agricultural uses are already severely limited by conflicts with the urban uses, where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development, and where the conversion of such lands would not impair the viability of other commercial agricultural lands in the area. Within the Sphere of Influence of the City of Watsonville, no conversion of commercial agricultural land is allowed which would adversely affect the City's General Plan affordable housing goals, unless determined to be of an overriding public benefit.	**Applicable and consistent.** The project site is approximately 47 acres, and the proposed BESS and gen-tie line would cover approximately 16 acres of the project site. The remaining approximately 31 acres that would not be disturbed were observed to be generally more vigorous and uniform relative to the northern portion of the parcel that would be developed under the project (Rush & Duttle Consulting 2024). The agriculture viability report indicates that although the portion of the project site where the BESS facility and gen-tie line are proposed to be constructed has been commercially cultivated with an apple orchard since 1993, the orchard has large areas of missing trees and patterns of plant mortality, reduced vigor, and tree replacement. Previous attempts to cultivate berries and vegetables were unsuccessful. To ensure future agricultural production on areas of the project site mapped Prime Farmland and with highly suitable soils, approximately 19.4 acres of land within the project parcel mapped as Prime Farmland would be preserved in perpetuity through an agricultural conservation easement.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-1.4.1 (LCP) Agricultural Buffers Required. In order to prevent or minimize potential land use conflicts, nonagricultural habitable uses such as residences (excluding farmworker housing), habitable accessory structures and non-agricultural commercial businesses that are located on land adjacent to a parcel in the Commercial Agriculture or Agricultural Preserve zone districts are required to provide a 200-foot buffer setback to the property line of the adjacent commercial agricultural parcel, unless an exception, as provided in ARC 1.4.2, is approved to reduce the extent of the agricultural buffer.	**Not applicable.** The project does not propose nonagricultural habitable uses on land adjacent to a parcel in the Commercial Agriculture or Agricultural Preserve zone.
Policy ARC-1.4.2 (LCP) Reduced Agricultural Buffer Setbacks. Any reduction in the 200-foot agricultural buffer setback may only occur as approved by the APAC or other County decision-maker, as established by the Agricultural Land Preservation and Protection ordinance.	**Not applicable.** The project is not requesting a reduced agricultural buffer setback.
Policy ARC-1.4.3 (LCP) Agricultural Policy Advisory Commission Review. Require the following projects to be reviewed by the Agricultural Policy Advisory Commission for the purpose of recommending or approving an appropriate setback and/or buffer area for non-developable land adjacent to commercial agriculture lands, consistent with the Agriculture Preservation and Protection Ordinance: 1. New residential development within 200 feet of commercial agricultural lands. 2. Land divisions within 200 feet of commercial agricultural lands. 3. Density Credit will be given for the buffer area.	**Not applicable.** The project is not a residential development, land division, or Density Credit.
Policy ARC-1.4.4 (LCP) (EJ) Windbreaks. Windbreaks designed to reduce or eliminate the hazard of pesticide drift or other use conflicts based on the prevailing wind direction, should be incorporated into buffers, as warranted and feasible.	**Not applicable.** The project does not propose nonagricultural habitable uses on land adjacent to a parcel in the Commercial Agriculture or Agricultural Preserve zone that would require agricultural buffers incorporating windbreaks. Further, the project is not an agricultural use that would increase risk of pesticide drift, nor would the project remove an existing windbreak that was designed to reduce potential hazards from pesticide drift.
Policy ARC-1.4.5 (LCP) Siting to Minimize Conflicts. Structures shall be sited to minimize possible conflicts with productive commercial agricultural lands in the area. Where structures are located on commercial agricultural land, the structures shall be sited in such a manner to remove as little land as possible from production while still meeting supportable project objectives.	**Applicable and consistent.** The project site is approximately 47 acres, and the proposed BESS and gen-tie line would cover approximately 16 acres of the project site. The remaining approximately 31 acres that would not be disturbed were observed to be generally more

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	vigorous and uniform relative to the northern portion of the parcel that would be developed under the project (Rush & Duttle Consulting 2024). The agriculture viability report indicates that although the portion of the project site where the BESS facility and gen-tie line are proposed to be constructed has been commercially cultivated with an apple orchard since 1993, the orchard has large areas of missing trees and patterns of plant mortality, reduced vigor, and tree replacement. Previous attempts to cultivate berries and vegetables were unsuccessful. To ensure future agricultural production on areas of the project site mapped Prime Farmland and with highly suitable soils, approximately 19.4 acres of land within the project Parcel mapped as Prime Farmland would be preserved in perpetuity through an agricultural conservation easement.
Policy ARC-1.4.6 (LCP) Residential Single-Family Dwellings on Commercial Agricultural Lands Located within the Coastal Zone. Issue a residential building permit for one single-family dwelling pursuant to Policy ARC-1.4.12 in areas designated as commercial agricultural land and located within the Coastal Zone, only upon documentation that: 1. The residential use is ancillary to commercial agricultural use of the parcel (see criteria in Policy ARC-1.4.8) and residential development will be concentrated on the site or parcel to the minimum area necessary to avoid disturbance of prime agricultural land; or 2. The parcel is less than one net acre in size or has physical constraints other than size which preclude commercial agricultural use. In either case, single-family residential development shall be allowed only if the use does not conflict with on-site or adjacent commercial agricultural activities and the building site has approved agricultural buffer setbacks.	**Not applicable.** This project is not a residential development and is not located within the Coastal Zone.
Policy ARC-1.4.7 Accessory Dwelling Units on Commercial Agricultural Land within the Coastal Zone. Allow one accessory dwelling unit (ADU) on parcels in the Commercial Agriculture (CA) Zone District	**Not applicable.** The project would not involve the construction of a single-family dwelling or accessory dwelling unit.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
as accessory to a single-family dwelling, subject to locational requirements and other requirements in the Zoning Ordinance.	
Policy ARC-1.4.8 (LCP) Residential Use Ancillary to Commercial Agriculture. Utilize the following criteria for determining when a single-family residential use would be ancillary to commercial agriculture: 1. Documentation that the farmable portion of the subject parcel, exclusive of the building site, is large enough in itself to constitute a minimum economic farm unit for three crops – including within greenhouses – that are suited to the soils, topography, and climate of the area; or 2. Documentation that the owners have a long-term binding arrangement for commercial agricultural use of the remainder of the parcel by another party; and 3. Documentation that the home structure is sited in such a manner so as to minimize possible conflicts with commercial agriculture in the area, and to remove as little land as possible from production.	**Not applicable.** The project is not a residential use ancillary to commercial agriculture.
Policy ARC-1.4.9 (EJ) Farmworker Housing Approval. Recognizing that farmworker housing is essential to the viability of local agriculture, and that there is a shortage of safe and affordable farmworker housing, allow standard Employee Housing Act (EHA) Projects, including Streamlined EHA Projects (outside the Coastal Zone only), within the Agriculture and Commercial Agricultural zone districts as principal permitted agricultural uses, consistent with the EHA and the licensing and permit approval procedures specified in SCCC 13.10. Allow Small Farmworker Housing Projects as a principally permitted use on CA and A parcels outside the Coastal Zone, and as a conditional use on parcels within the Coastal Zone, subject to applicable permit approvals provided in the SCCC. A. Require Site Development Permit review for all farmworker housing projects to ensure appropriate siting, buffering, and other objective development standards and conditions of approval as applicable.	**Not applicable.** This project is not a farmworker housing development.
Policy ARC-1.4.10 Farmworker Housing as an Agricultural Use. Farmworker housing projects, proposed on property within an agricultural zone district (CA and A) are considered agricultural land uses and are not subject to residential density determinations in the Rural Density Matrix. As an agricultural land use, farmworker housing proposed within agricultural zones is also not subject to provisions in the General Plan that limit residential density or require a minimum amount of land area per dwelling, including, policies within Objective BE-2.2: Rural Residential Designations, Policies ARC-4.2.6 (Land Division and Density Requirements in Water Supply Watersheds), ARC-4.5.2 (Land Division and Density Requirements in Primary Groundwater Recharge Areas), and ARC-4.5.9 (Development Densities With Poor Groundwater Availability). Except as indicated in the Zoning Ordinance for ARFH projects, which allow creation of a separate parcel for the project if needed to	**Not applicable.** This project is not a farmworker housing development.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
allow for ARFH project financing, any land division proposed in association with other types of farmworker housing (EHA or Small Projects), such as a parcel map, condominium or subdivision map, is subject to the minimum parcel size determinations in the Rural Density Matrix where applicable, to minimum parcel size requirements for the applicable zone district, and to minimum parcel size requirements in the above policies.	
Policy ARC-1.4.11 (EJ) Pajaro Valley Development Reserve for Affordable Rental Farmworker Housing (ARFH) Projects. For sites located outside of the Coastal Zone only, a Pajaro Valley Development Reserve has been mapped and established to allow development of no more than 200 total units of affordable, multi-family rental housing for farmworker households by qualified non-profit housing providers ("ARFH Projects") within certain qualifying agricultural areas of unincorporated Pajaro Valley, as further set forth in SCCC 13.10. The ARFH Projects may be allowed as a conditional use on qualifying agricultural lands in CA or A zoning districts subject to CEQA review and approval by the Board of Supervisors. The Board may in the future take action to adopt policy and regulatory amendments to increase the reserve to more than 200 units, if determined to be warranted and in the broader interests of support for the agricultural economy. Each ARFH project is estimated to consist of approximately 40 to 60 multi-family dwelling units, therefore the initial 200-unit capacity of the Development Reserve is expected to be sufficient for four to five ARFH projects in total. ARFH projects are not EHA Projects.	**Not applicable.** This project is not a farmworker housing development.
Policy ARC-1.4.12 (LCP) Agricultural Notification Recordation for Land Divisions. Continue to require an Agriculture Notification statement to be included on the Final Map or Parcel Map and in each parcel deed for land divisions within 200 feet of commercial agriculture land in accordance with the Subdivision Regulations ordinance. The purpose of the statement is to inform property owners about adjacent agricultural practices and advise them to be prepared to accept inconvenience or discomfort from normal operations.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-1.4.13 (LCP) Agricultural Statement of Acknowledgment. In accordance with the Agricultural Land Preservation and Protection ordinance and the Subdivision Regulations ordinance, require the Recordation of a Statement of Acknowledgement for parcels within 200 feet of commercial agricultural land that informs property owners about adjacent agricultural practices and advises them to be prepared to accept inconvenience or discomfort from normal operations. Where a reduction of the 200-foot buffer is approved, such deed notice shall also state that the permanent provisions and maintenance of the specified buffer setback shall be required.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-1.4.14 Density on Parcels Adjacent to Commercial Agricultural Lands. Maintain, in rural areas, (i.e., areas outside the Urban Services Line [USL] and Rural Services Line [RSL]), minimum densities of 2.5 net developable acres for newly created residential parcels which adjoin	**Not applicable.** The project is not a residential development.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Commercial Agricultural Land except where the General Plan/ LCP Land Use Map provides for suburban densities, and 1. the new parcels constitute infill development within the mapped Suburban designation, 2. the resulting parcel sizes will be no smaller than the smallest existing conforming parcel within that designation which adjoins or is generally established nearby said agricultural lands, and 3. the Agricultural Policy Advisory Commission has recommended that parcel sizes smaller than 2.5 net developable acres will not conflict with or otherwise hamper or discourage long-term commercial agricultural uses of said agricultural lands.	
Policy ARC-1.5.1 Energy Efficiency and Resource Protection. Encourage energy-efficient and resource protection agricultural practices such as organic farming, integrated pest management, biodynamic cultivation, and utilization of agricultural wastes and crop residues for fertilizer and on-site energy production.	**Not applicable.** The project would not involve farming activities.
Policy ARC-1.5.2 (LCP) Composting Agricultural Wastes. Encourage the composting of agricultural wastes and the use of composts in agriculture production, as a means of reducing irrigation water demand and reducing solid waste disposal requirements. Allow the commercial composting of source separated organic material such as yard waste on agricultural lands with an approved development discretionary permit, including a coastal development permit in the Coastal Zone, subject to health and water quality requirements.	**Not applicable.** The project would not produce agricultural waste.
Policy ARC-1.5.3 (LCP) Encourage Water Conservation. Encourage water districts, resource management agencies, and all agricultural users to implement water conservation measures, especially in areas subject to overdraft. Support the efforts of the Resource Conservation District to provide water conservation assistance and education to growers.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-1.5.4 (LCP) Visual Mitigations for Large Agricultural Structures. Require large scale agricultural structures, such as greenhouses, packing sheds, and closed storage structures to minimize their visual impacts on designated scenic roads, beaches, or recreation facilities. Visual impacts shall be minimized by locating structures within or near existing groups of structures; using materials and colors which blend with the building cluster or the natural vegetative cover of the site; and/or using landscaping to screen or soften the appearance of structures. Do not approve new discretionary development permits that would allow location of such structures where they would block public ocean views. Shoreline facility structures shall be well screened.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-1.6.1 (LCP) Uses Allowed on Non-Commercial Agricultural (A) Zoned Lands (Agricultural Land Use Designation with Agricultural Zone District). On lands designated Agricultural on the General Plan and LCP Land Use Designation Maps, but not Agricultural Resource on the Agricultural	**Not applicable.** The project site is zoned as Commercial Agriculture.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Resources Maps, allow the following range of residential, agricultural, agricultural support and open space/recreational uses. 1. The following uses are compatible with agricultural activity and adjacent residential uses and are principally permitted: One residence and accessory uses including one accessory dwelling unit; agricultural uses including EHA Projects; Small Farmworker Housing Projects and Streamlined EHA Projects outside the Coastal Zone; non-commercial agricultural uses such as family gardening; small scale commercial agricultural uses and agricultural support uses and service establishments, open space uses; recreational uses, public/quasi-public uses, and community facilities where these uses can be shown to not conflict with any adjacent agricultural activity, and other similar uses as provided in the Zoning Ordinance for the Agriculture (A) Zone District. While these uses are principally permitted, establishing the use may require other discretionary permits such as a Site Development Permit or a Coastal Development Permit. 2. The following discretionary uses are allowed on property designated Agriculture and not zoned "commercial agricultural", where consistent with the Coastal Act within the Coastal Zone, and with development criteria provided in the SCCC to ensure that uses will be buffered and not conflict with adjacent commercial agricultural activity: residential dwelling groups; ARFH Projects outside the Coastal Zone and Small Farmworker Housing Projects inside the Coastal Zone; agricultural support facilities; agricultural service establishments; public/quasi-public, open space and recreational uses; and other appropriate uses; all subject to limitations and permit requirements as provided in the Zoning Ordinance for the Agriculture (A) Zone District.	
Policy ARC-1.6.2 (LCP) Non-Commercial Agricultural Lands in Urban Areas with Services. Within the Urban Services Line, allow organic agricultural farming on agriculturally productive land, where the activity does not adversely impact the adjacent residential neighborhood development.	**Not applicable.** The project site is zoned as Commercial Agriculture.
Policy ARC-1.6.3 (LCP) Non-Commercial Agricultural Land Division and Density Requirements in Rural Areas Located Outside of the Urban/Rural Service Line Boundaries. Encourage retention of large parcels and a minimum parcel size of 10-40 net developable acres, based on the Rural Density Matrix, for lands designated as Agriculture but which are not identified as commercial agricultural land, for properties located outside of the Urban/Rural Service Area boundaries. Utilize the following criteria for land divisions and residential development proposals on land designated Agriculture but not designated as commercial agricultural lands on the General Plan and LCP Resources and Constraints Maps, which are located outside of the USL/RSL:	**Not applicable.** The project site is zoned as Commercial Agriculture.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
1. Based on the Rural Density Matrix, the minimum parcel size shall be 10-40 net developable acres and the maximum residential density on an existing parcel of record shall not exceed one unit per 10-40 net developable acres. 2. Division or development of parcels may be allowed at densities of 2 ½-20 net developable acres under the following conditions*: I. The land has been determined to be non-viable for commercial agriculture, as determined by policies ARC-1.3.1 and ARC-1.3.2, and that continued or renewed agricultural use it not feasible; II. Adequate buffering can be provided between any proposed non-agricultural use and adjacent commercial agricultural uses, as specified in the County Code; III. All proposed building sites are within ½ mile of a through road that is maintained for public use; and applicable septic and fire code standards can be met; and IV. Less than 50 percent of the land area within ¼ mile of the subject property is zoned as commercial agricultural, and/or is designated Mountain Residential. *An exception to the minimum parcel size and conditions 1, 3 and 4 in subdivision (b) applies to the creation of a new parcel for an ARFH project where necessary to obtain financing for construction of the project. Such a parcel shall not be less than one acre in size, and shall not include a condominium map.	
Policy ARC-2.1.1 (LCP) Agriculture Inside Structures. Recognize that certain forms of agriculture require production of crops, livestock or related products to occur inside of structures (e.g., greenhouses, insectories, aquaculture, winery buildings) and may be a necessary part of an agricultural operation. Require such uses to comply with applicable regulations that ensure appropriate management and mitigation of potential impacts.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy ARC-2.1.2 (LCP) Runoff Retention. Require stormwater runoff from agricultural structures to be retained and percolated/infiltrated on site so that natural runoff rates are not exceeded, in compliance with applicable state and County design standards and criteria.	**Applicable and consistent.** The project design includes on-site detention basins, which would maintain stormwater runoff on site.
Policy ARC-2.1.3 (LCP) Preserving Prime Soil. Prohibit removal of indigenous prime soil used as a growing medium for container plants which are sold intact.	**Applicable and consistent.** The project site is approximately 47 acres, and the proposed BESS and gen-tie line would cover approximately 16 acres of the project site. The remaining approximately 31 acres that would not be disturbed were observed to be generally more vigorous and uniform relative to the northern portion of the parcel that would be developed

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	under the project (Rush & Duttle Consulting 2024). The agriculture viability report indicates that although the portion of the project site where the BESS facility and gen-tie line are proposed to be constructed has been commercially cultivated with an apple orchard since 1993, the orchard has large areas of missing trees and patterns of plant mortality, reduced vigor, and tree replacement. Previous attempts to cultivate berries and vegetables were unsuccessful. To ensure future agricultural production on areas of the project site mapped Prime Farmland and with highly suitable soils, approximately 19.4 acres of land within the project parcel mapped as Prime Farmland would be preserved in perpetuity through an agricultural conservation easement.
Policy ARC-2.1.4 (LCP) Limiting Impervious Surfaces. As feasible while also accommodating the needs of the agricultural enterprise, limit flooring or impervious surfacing within agricultural structure that could impair long-term soil capabilities to the minimum area needed for access, loading, and storage, prohibit the use of long-term sterilants under impervious surfacing, and require appropriate mitigation, management and restoration strategies that protect soil capabilities for the future to a reasonable extent.	**Not applicable.** The project would not include impervious surfacing within agricultural structures.
Policy ARC-2.1.5 (LCP) Maximum Energy Efficiency. Encourage the use of alternative energy sources such as passive and active solar design techniques to maximize energy efficiency.	**Applicable and consistent.** The project would encourage the use of alternative energy sources by providing energy storage solutions to allow renewable energy to be stored during times of low demand (daytime) and released to the electric grid during times of higher demand (evening).
Policy ARC-2.1.6 (LCP) Ventilation. Encourage open ventilation where feasible, and where exhaust fans are necessary, the fans should be located away from non-agricultural uses, and should maximize energy efficiency.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-2.1.7 (LCP) Water Conservation. Require irrigation systems to be water conserving, which reduces operational costs for the grower and conserves a valuable resource.	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-2.2.1 (LCP) Development Permit Required. Require new or expanded aquaculture operations to obtain a coastal development permit, and utilize the environmental review process, and the expertise of the California Department of Fish and Wildlife in reviewing any such permit.	**Not applicable**. The project would not involve aquaculture.
Policy ARC-2.2.2 (LCP) Siting of Coastal Dependent Facilities. Require that aquaculture facilities to be sited on or near the shoreline be coastal-dependent.	**Not applicable**. The project would not involve aquaculture.
Policy ARC-2.2.3 (LCP) Appropriate Land Use Designations. Permit new and expanded aquaculture facilities as a conditional use in the Agricultural (AG), Mountain Residential (R-MT), and Service Commercial and Light Industrial (C-S) land use designations if consistent with LCP policies.	**Not applicable**. The project would not involve aquaculture.
Policy ARC-2.2.4 (LCP) Prevent Adverse Impacts to Sensitive Habitats. Require aquaculture facilities to be sited and designed to prevent adverse impacts on areas designated as sensitive habitats.	**Not applicable**. The project would not involve aquaculture.
Policy ARC-2.2.5 (LCP) Protection of Riparian Habitats. Require that with aquaculture facilities development, natural vegetation buffer areas be maintained to protect riparian habitats.	**Not applicable**. The project would not involve aquaculture.
Policy ARC-2.2.6 (LCP) Beach Access. Require adequate provision for lateral beach access as a condition of approval for aquaculture facilities consistent with the provisions of Government Code Sections 65909(a) and 66475.4(b)	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-2.2.7 (LCP) Protection of Private Property. Allow aquaculture facilities adjacent to high use recreational areas to erect barriers designed to discourage public encroachment and protect public safety, with the condition that lateral beach access is protected.	**Not applicable.** The project is not an aquaculture facility.
Policy ARC-2.2.8 (LCP) Intake/Outfall Lines. Require that intake and outfall lines be placed underground unless underground placement is infeasible for the aquacultural activity or will result in geologic instability.	**Not applicable**. The project would not involve aquaculture.
Policy ARC-2.2.9 (LCP) Bonds Required. Require aquaculture operators to post a bond where aquaculture operations are to be located on a publicly used beach or shoreline area, or will affect sensitive habitat areas and/or public views. The bond shall be sufficient to ensure that all facilities constructed for an aquaculture operation which becomes inoperative, will be removed at the operator's expense.	**Not applicable**. The project would not involve aquaculture operators.
Policy ARC-2.2.10 (LCP) Support Aquaculture. Support the location of carefully designed aquaculture facilities in the Coastal Zone which can meet the LCP aquaculture policies.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-2.3.1 Wineries, Breweries, and Distilleries as Discretionary Agricultural Uses. Recognize the growing and processing of wine grapes and hops, as agricultural activities, and recognize Santa Cruz County as an area uniquely suited for the growing of premium quality wine grapes. Allow wineries, breweries and distilleries for spirits as discretionary agricultural uses where sited and designed to protect agricultural lands and uses, and to minimize impacts to adjacent sites.	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-2.3.2 Winery Locations. Support the continued operation of wineries which include the growing and processing of grapes in existing locations throughout the County and on-site marketing activities where compatible with adjacent land uses. Ensure that new winery locations, particularly where processing facilities or visitor serving uses are proposed, are consistent with environmental protection policies and compatible with existing neighborhoods.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-2.3.3 Vineyard Locations. Encourage the development of premium varietal wine grape vineyards on those lands within the County which, by virtue of their location and physical characteristics, are suited for grape production, especially within the Santa Cruz Mountains Viticultural Area which generally includes all lands above the 400-foot topographical contour. Ensure that vineyard locations are consistent with environmental protection policies and compatible with existing neighborhoods.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-2.3.4 (LCP) Cannabis Industry and Agricultural Diversity. In order to ensure a diverse and balanced agricultural economy, and to support a diversity of crops, livestock and fiber on County agricultural lands, monitor the location and scale of the cannabis industry to ensure that cannabis activities do not lead to over-concentration in the cannabis sector of the County's agricultural economy.	**Not applicable**. The project is not involved with the cannabis industry.
Policy ARC-3.1.1 (LCP) Sensitive Habitat Designation. Designate the following areas as sensitive habitats: (1) areas shown on the County General Plan/LCP Resources and Constraints Maps and as incorporated into the County GIS system; (b) any undesignated areas that meet the criteria provided in Policy ARC-3.1.2 and that are identified through the biotic review process or other means; and (c) areas of biotic concern as shown on the Resources and Constraints Maps that contain concentrations of rare, endangered, threatened, or unique species.	**Not applicable**. The project site is not designated as an area of biotic concern.
Policy ARC-3.1.2 (LCP) Definition of Sensitive Habitat. An area is defined as a sensitive habitat if it meets one or more of the following criteria: 1. Areas of special biological significance as identified by the State Water Resources Control Board. 2. Areas that provide habitat for locally unique biotic species/communities, including coastal scrub, maritime chaparral, native rhododendrons and associated Elkgrass, mapped grasslands in the coastal zone and sand parkland; and Special Forests including San Andreas Live Oak Woodlands, Valley Oak, Santa Cruz Cypress, indigenous Ponderosa Pine, indigenous Monterey Pine and ancient forests. 3. Areas adjacent to essential habitats of rare, endangered or threatened species as defined in (5) and (6) below.	**Not applicable**. Please see Section 3.2 for more information.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
4. Areas that provide habitat for Species of Special Concern as listed by the California Department of Fish and Wildlife in the Special Animals list, California Natural Diversity Database. 5. Areas that provide habitat for rare or endangered species that meet the definition of Section 15380 of the California Environmental Quality Act guidelines. 6. Areas that provide habitat for rare, endangered or threatened species as designated by the California Fish and Game Commission, United States Fish and Wildlife Service or California Native Plant Society. 7. Nearshore reefs, rocky intertidal areas, seacaves, islets, offshore rocks, kelp beds, marine mammal hauling grounds, sandy beaches, shorebird roosting, resting and nesting areas, cliff nesting areas and marine, wildlife or educational/research reserves. 8. Dune plant habitats. 9. All lakes, wetlands, estuaries, lagoons, streams and rivers. 10. Riparian corridors.	
Policy ARC-3.1.3 (LCP) Environmentally Sensitive Habitat Areas (ESHA). Evaluate sites proposed for development within the coastal zone for the presence of ESHA, within the categories of habitat areas described in ARC-3.1.2(d) through (j), and other categories that may meet the Coastal Act Section 30107.5 definition of ESHA. Areas confirmed to be ESHA may only be developed for uses dependent on such resources in these habitats within the Coastal Zone, unless the other uses are: 1. Consistent with sensitive habitat protection policies and serve a specific purpose beneficial to the public; 2. Determined through environmental review that any adverse impacts on the resource will be completely mitigated and there is no feasible less-damaging alternative; and 3. Legally necessary to allow a reasonable economic use of the land, and there is no feasible less-damaging alternative.	**Not applicable**. The project site is not within the Coastal Zone.
Policy ARC-3.1.4 (LCP) Sensitive Habitat Protection Ordinance. Implement protection of sensitive habitats and of ESHA through SCCC Chapters 16.32 Sensitive Habitat Protection, 16.30 Riparian Corridor and Wetlands Protection, and 13.20 Coastal Zone Regulations. Any amendments to this ordinance shall require a finding that sensitive habitats shall be afforded equal or greater protection by the amended language.	**Not applicable**. The project site is not within the Coastal Zone.
Policy ARC-3.1.5 (LCP) Land Division and Density Requirements in Sensitive Habitats. Allow land divisions in sensitive habitats only when the density and design of the proposed division are compatible with protection of these resources as determined by environmental assessment and	**Not applicable**. The project would not include a land division.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
applicable County land use, zoning, and Title 16 environmental regulatory standards and permit requirements. 1. Prohibit land division of native and mixed native grassland habitat mapped in the Coastal Zone unless the area to be divided has been determined by the county not to be sensitive habitat and is proposed for removal from the mapped habitat area by General Plan/LCP amendment. On parcels with existing mapped habitat that contains developable land outside those habitats, allow development at the lowest density of the land use designation and require that development be clustered and located outside the habitat areas. Allow one single-family dwelling unit per existing parcel of record. Where property owners upgrade habitat areas on their parcels outside of mapped areas through resource management activities, the prevailing General Plan densities shall not be reduced. 2. Special Forests – Prohibit land divisions within designated Special Forests unless the area to be divided is removed from the mapped special forests habitat area by General Plan-Local Coastal Plan amendment. On parcels with existing mapped special forest areas which contain developable land outside that habitat, allow development at the lowest density of the land use designation and require that development be clustered and located outside the habitat areas. Allow one single-family dwelling unit per existing parcel of record. Where property owners upgrade special forest areas on their parcels, outside of mapped areas, through resource management activities, the prevailing General Plan densities shall not be reduced.	
Policy ARC-3.1.6 (LCP) Development Within Sensitive Habitats. Sensitive habitats shall be protected against any significant disruption of habitat values, and any proposed development within or adjacent to these areas must maintain or enhance the functional capacity of the habitat. Reduce in scale, redesign, or, if no other alternative exists, deny any project that cannot sufficiently mitigate significant adverse impacts on sensitive habitats unless approval of a project is legally necessary to allow a reasonable use of the land.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.1.7 (LCP) Site Design and Use Regulations. Protect sensitive habitats against any significant disruption or degradation of habitat values in accordance with the Sensitive Habitat Protection ordinance. Utilize the following site design and use regulations on parcels containing these resources, excluding existing agricultural operations: 1. Structures, when allowed, shall be placed as far from the habitat as feasible. 2. Delineate development envelopes to specify location of development in minor land divisions and subdivisions. 3. Consider use of conservation or open space easements, deed restrictions, Conditions of Approval or equivalent measures to protect that portion of a sensitive habitat on a project parcel	**Applicable and consistent**. Please see Section 3.2 for more information.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
which is undisturbed by a proposed development activity or to protect sensitive habitats on adjacent parcels. 4. Limit or restrict outdoor access of domestic animals where they threaten sensitive habitats. 5. Limit removal of native vegetation to the minimum amount necessary for structures, landscaping, driveways, septic systems and gardens. 6. Maintain regulations and impose development permit conditions of approval as warranted, to limit landscaping with invasive or exotic species and to strongly encourage or require the use of characteristic native species, as well as consistency with the Water Efficient Landscaping Ordinance.	
Policy ARC-3.1.8 (LCP) (EJ) Chemicals Within Sensitive Habitats. Maintain regulations that restrict the use of insecticides, herbicides, or any toxic chemical substance in sensitive habitats, except when the habitat itself is threatened, an emergency has been declared, when a substantial risk to public health and safety exists, including maintenance for flood control by the CDID, or when such use is authorized pursuant to a permit issued by the Agricultural Commissioner. The responsible use of herbicides to eradicate invasive, non-native plants can be an appropriate management action in Sensitive Habitats.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.1.9 (LCP) Biotic Assessments. Within the following areas, require a biotic assessment as part of normal project review to determine whether a full biotic report should be prepared by a qualified biologist, and require biotic permits as part of application reviews as may be needed: (1) Areas of biotic concern, mapped; (2) Sensitive habitats, mapped and unmapped; and (3) For sites within the coastal zone, for the presence of ESHA.	**Applicable and consistent**. Please see Section 3.2 for more information.
Policy ARC-3.1.10 (LCP) Species Protection. Recognize that habitat protection is only one aspect of maintaining biodiversity and that certain wildlife species, such as migratory birds, may not utilize specific habitats. Require protection of these rare, endangered, and threatened species and continue to update policies as new information becomes available.	**Applicable and consistent**. Please see Section 3.2 for more information.
Policy ARC-3.1.11 (LCP) Santa Cruz Long-Toed Salamander Habitat. Support state and federal preservation of the Santa Cruz long-toed salamander habitat in various state parks and preserves.	**Applicable and consistent**. Please see Section 3.2 for more information.
Policy ARC-3.1.12 (LCP) Steelhead and Coho Salmon Conservation Strategy. Implement the policies and programs identified in the 2013 Steelhead and Coho Salmon Conservation Strategy and updates to this strategy to support the recovery of steelhead and coho salmon in Santa Cruz County. Priority actions include addressing streamflow, habitat complexity, sediment reduction, and migration passage.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.1.13 (LCP) Wildlife Resources Beyond Sensitive Habitats. For areas which may not meet the definition of sensitive habitat contained in policy ARC-3.1.2, yet contain valuable wildlife	**Applicable and consistent**. Please see Section 3.2 for more information.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
resources (such as migration corridors or exceptional species diversity), protect these wildlife habitat values and species using the techniques outlined in policies ARC-3.1.5 and 3.1.7, or prioritize for open space designation, and use other mitigation measures or strategies identified through the environmental review process or other conservation plans and programs of the County, State and non-profit agencies.	
Policy ARC-3.2.1 (LCP) Habitat Restoration with Development Approval. Require as mitigation and/or condition of development approval, restoration of any area of the subject property which is an identified degraded sensitive habitat, with the magnitude of required restoration to be proportional and commensurate with the scope of the project. -Restoration and monitoring plans must ensure sufficient detail to guide efforts through the duration of the restoration period and include success criteria. Project conditions may include erosion control measures, removal of non-native or invasive species, planting with characteristic native species, diversion of polluting run-off, water impoundment, and other appropriate means. The objective of habitat restoration activities shall be to enhance the functional capacity and biological productivity of the habitat(s) and whenever feasible, to restore them to conditions which can be sustained by natural occurrences, such as tidal flushing of lagoons.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.2.2 (LCP) Habitats Damaged from Code Violations. In all cases where a sensitive habitat has been damaged as a result of a code violation, require that restoration of damaged areas be undertaken in compliance with all necessary permits and that the size of the restored area be in compliance with California Department of Fish and Wildlife requirements. Such restoration shall include a detailed restoration plan with monitoring over time to ensure the success of the restoration effort.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.2.3 (LCP) Habitats Damaged Prior to Sensitive Habitat Ordinance. In cases where a sensitive habitat has been damaged from development occurring prior to the Sensitive Habitat Ordinance, provide technical guidance materials and work cooperatively with private property owners to enhance the quality and extent of the sensitive habitat. Encourage the Land Trust, Resource Conservation District or similar entity to establish a micro-grant program available to owners to carry out voluntary restoration work on their properties.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.2.4 (LCP) Removal of Invasive Plant Species. Encourage the removal of invasive species and their replacement with characteristic native plants, except where such invasive species provide significant habitat value and where removal of such species would severely degrade the existing habitat. In such cases, develop long-term plans for gradual conversion to native species providing equal or better habitat values. Support the responsible use of herbicides to assist with the removal of invasive plant species.	**Not applicable**. Please see Section 3.2 for more information.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-3.2.5 (LCP) Priorities for Restoration Funding. Use the following criteria for establishing funding priorities among restoration projects: 1. Biological significance of the habitat, including productivity, diversity, uniqueness of area, presence of rare, endangered, or unique species, or regional importance (e.g., waterfowl resting areas, etc.). 2. Degree of endangerment from development or other activities, and vulnerability to overuse or misuse.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.3.1 (LCP) Designation of Riparian Corridors and Wetlands. Designate and define the following areas as Riparian Corridors: 1. 50' from the top of a distinct channel or physical evidence of high-water mark of a perennial stream; 2. 30' from the top of a distinct channel or physical evidence of high water mark of an intermittent stream as designated on the General Plan maps and through field inspection of undesignated intermittent and ephemeral streams; 3. 100' of the high water mark of a lake, wetland, estuary, lagoon, or natural body of standing water; 4. The landward limit of a riparian woodland plant community (water-dependent woodland areas); and 5. Wooded arroyos within urban areas. 6. Designate and define the following areas as Wetlands: 7. Transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water periodically or permanently. Examples of wetlands are saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps mudflats, and fens. The U.S. Army Corps of Engineers, and other federal agencies utilize a "unified methodology" which defines wetlands as "those areas meeting certain criteria for hydrology, vegetation, and soils."	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.3.2 (LCP) Riparian Corridor and Wetland Protection Ordinance. Implement the protection of riparian corridors and wetlands through the Riparian Corridor and Wetland Protection ordinance to ensure no net loss and to encourage restoration and a net increase of riparian corridors and riparian wetlands. Any amendments to this ordinance shall require a finding that riparian corridors and wetlands shall be afforded equal or greater protection by the amended language.	**Not applicable**. Please see Section 3.2 for more information.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-3.3.3 (LCP) Activities Within Riparian Corridors and Wetlands. Development activities, land alteration, and vegetation disturbance within riparian corridors and wetlands and required buffers shall be prohibited unless an exception permit is granted per the Riparian Corridor and Wetlands Protection ordinance. As a condition of a riparian exception permit, require evidence of compliance with applicable permit or review requirements of the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and other federal or state agencies that may have regulatory authority over activities within riparian corridors and wetlands.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.3.4 (LCP) Riparian Corridor Construction Buffer Setback at Arroyos. Require a 10-foot construction buffer setback from riparian arroyo corridors in addition to the specified distances found in the definition of riparian corridor, due to slope and runoff considerations. Allow reductions to the buffer setback only upon approval of a riparian exception permit.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.3.5 (LCP) Setbacks from Wetlands. Prohibit development within the 100-foot riparian corridor of all wetlands. Permit exceptions to this setback only where consistent with the Riparian Corridor and Wetlands Protection ordinance, and in all cases, maximize distance between proposed structures and wetlands as feasible and mitigated. Require measures to prevent water quality degradation from adjacent land uses, as outlined in Goal ARC-4: Water Resources.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.3.6 (LCP) Compatible Uses with Riparian Corridors. Allow compatible uses in and adjacent to riparian corridors that do not impair or degrade the riparian plant and animal systems, or water supply values, such as non-motorized recreation and pedestrian trails, parks, interpretive facilities and fishing facilities. Allow development in these areas only in conjunction with approval of a riparian exception permit. Where the riparian corridor is already developed, support enhancement of riparian corridors with native plantings that increase and/or enhance the buffer qualities adjacent to streams.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.3.7 Stream Wood Retention. Promote the retention of large woody material or stream wood in County streams to provide multiple benefits to riparian and aquatic habitats, including sorting sediment, protecting stream banks and channel stability, and providing pools and refuges.	**Not applicable**. The project site does not contain any streams.
Policy ARC-3.3.8 (LCP) Environmental Review for Riparian Corridor and Wetland Protection. Require environmental review of all proposed development projects affecting riparian corridors or wetlands and preparation of a Biotic Report for projects that, as proposed, may have a significant effect on the corridors or wetlands. Compliance with County regulations is generally considered to prevent the possibility of significant environmental impacts, and any biotic and/or riparian exception permit process may involve project specifications and/or conditions that would also prevent the possibility of significant environmental impacts.	**Not applicable**. Please see Section 3.2 for more information.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-3.3.9 (LCP) Management Plans for Wetland Protection. Require development in or adjacent to wetlands to incorporate the recommendations of a management plan that evaluates: migratory waterfowl use from December 1 to April 30, native fish migration, compatibility of agricultural uses and biotic and water quality protection, maintenance of biologic productivity and diversity, flood protection and hydrologic value, and the permanent protection of adjoining uplands.	**Applicable and consistent**. Please see Section 3.2 for more information.
Policy ARC-3.3.10 (LCP) Development in Wetland Drainage Basins. Require development projects in wetland drainage basins to include drainage facilities or Best Management Practices (BMPs) that will maintain surface runoff patterns and water quality, unless a wetland management plan specifies otherwise, and will minimize erosion, sedimentation, and introduction of pollutants.	**Not applicable**. The project site is not within a wetland drainage basin.
Policy ARC-3.3.11 (LCP) Breaching of Lagoon, River, Stream, or Creek Sandbars. Do not permit breaching of lagoon sandbars unless the breaching is consistent with an approved management plan and applicable permits for that wetland, river, stream, or creek system.	**Not applicable**. The project would not involve breaching lagoons, rivers, streams, or creek sandbars.
Policy ARC-3.4.1 (LCP) Support the Monterey Bay National Marine Sanctuary. Support the mission of the Monterey Bay National Marine Sanctuary to facilitate the long-term management, protection, understanding, and awareness of its resources and qualities.	**Not applicable**. The project site is not located near the Monterey Bay National Marine Sanctuary.
Policy ARC-3.4.2 (LCP) Protecting Shorebird Nesting Sites. Discourage all activities within 100 feet of shorebird nesting sites during mating season (March-July). Prohibit dogs from beaches with nesting sites.	**Not applicable**. Please see Section 3.2 for more information.
Policy ARC-3.4.3 (LCP) Davenport Pier, Rock Cliffs, and Outcrops. Maintain low-intensity uses, such as nature observation and educational instruction, on and adjacent to the Davenport Pier, Rock Cliffs and rock outcrops.	**Not applicable**. The project site is not located near Davenport Pier, Rock Cliffs, or rock outcrops.
Policy ARC-3.4.4 (LCP) Coastal Dunes and Strand. Prohibit off-road vehicle use in the coastal dunes and strand and discourage other uses with the potential to degrade dune habitat. Where trails through dunes are permitted, utilize wooden boardwalks or other techniques to minimize damage to dune habitat.	**Not applicable**. The project site is not in the Coastal Zone or near the coastal dunes.
Policy ARC-3.4.5 Anadromous Fish Streams. Require new water diversions, dams, and reservoirs that are constructed on anadromous fish streams to be designed to protect fish populations and to provide adequate flow levels for successful fish production.	**Not applicable.** This project is not a water diversion, dam, or reservoir.
Policy ARC-3.4.6 (LCP) Marine Mammal Hauling Grounds. Prevent access to the bluff top observation points likely to cause disturbance to animals. Discourage access to immediately adjacent beach areas where necessary to minimize disturbance by roping off sensitive areas and posting explanatory signs along fence lines and restricted paths. Fence where necessary to prevent marine mammals from crossing Highway 1.	**Not applicable**. The project is not near a mammal hauling ground.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-4.1.1 (LCP) Protecting the Monterey Bay National Marine Sanctuary from Adverse Impacts. Prohibit activities that could adversely impact sensitive habitats of the Monterey Bay National Marine Sanctuary, including the discharge of wastes, plastics, litter, and hazardous materials. The main sources of concern are wastewater discharge, urban runoff, toxic agricultural drainage water, including that originating outside of Santa Cruz County, and the accidental release of oil or other hazardous material from coastal tanker traffic.	**Not applicable**. The project is not near the Monterey Bay National Marine Sanctuary.
Policy ARC-4.1.2 (LCP) Definition of Wastewater. Identify "wastewater" as all domestic and municipal sewage and other potentially toxic and/or hazardous materials or effluent resulting from industrial processes or other sources including brine from desalinization plants. Wastewater includes petrochemical compounds, "drilling mud" and associated potentially hazardous substances which may be directly or indirectly discharged into Monterey Bay or other coastal waters of Santa Cruz County as a result of exploratory or other oil drilling. Wastewater should not include storm water runoff, unless so determined by the California State Water Resources Control Board and the Central Coast Regional Water Quality Control Board.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-4.1.3 (LCP) Wastewater Discharges into Coastal Waters. Require a review of any new and/or increased wastewater discharge into the Monterey Bay or other coastal waters to address the potential marine water quality impacts and determine necessary mitigations.	**Not applicable.** The project is an unstaffed BESS facility and would not result in any new and/or expanded wastewater discharges into the Monterey Bay or other coastal waters.
Policy ARC-4.1.4 (LCP) Disclosure of Chemical and Biological Characteristics of Wastewater. Require full disclosure of the projected chemical and biological characteristics of all proposed new and/or expansion of wastewater discharges to the Monterey Bay or other coastal waters of Santa Cruz County. Require full disclosure of the projected chemical and biological characteristics of wastewater entering treatment and pretreatment facilities connected with new and/or expansion of wastewater discharges to Monterey Bay and other coastal waters of Santa Cruz County. Particular areas of concern include toxic chemicals, toxic metals, bacteria, virus, and other constituents identified as threats to the health and safety of coastal waters.	**Not applicable.** The project is an unstaffed BESS facility and would not result in any new and/or expanded wastewater discharges into the Monterey Bay or other coastal waters.
Policy ARC-4.1.5 (LCP) Levels of Wastewater Treatment. Require complete information on levels of treatment proposed at the treatment and pretreatment facilities to remove those constituents identified or anticipated in all proposed new and/or expansion of wastewater discharges to the Monterey Bay and other coastal waters of Santa Cruz County. This information shall also include reliability and efficiency data of the proposed treatment.	**Not applicable.** The project is an unstaffed BESS facility and would not result in any new and/or expanded wastewater discharges into the Monterey Bay or other coastal waters. Any wastewater produced during construction and operation of the project would be properly disposed of either through contracted sanitary services or through the existing septic system.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-4.1.6 (LCP) Monitoring Wastewater Treatment. Require a comprehensive monitoring plan for testing of wastewater at treatment and pretreatment facilities for critical constituents or indicators identified or anticipated in all proposed new and/or increased wastewater discharges into the Monterey Bay and other coastal waters.	**Not applicable.** The project is an unstaffed BESS facility and would not result in any new and/or expanded wastewater discharges into the Monterey Bay or other coastal waters. Any wastewater produced during construction and operation of the project would be properly disposed of either through contracted sanitary services or through the existing septic system.
Policy ARC-4.1.7 (LCP) Location and Methods of Wastewater Discharge. Require oceanographic studies to determine the most suitable location and methods for wastewater discharge into the Monterey Bay or coastal waters.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy ARC-4.1.8 (LCP) Baseline Tests for Wastewater Discharge Sites. Require tests of ocean waters at proposed wastewater discharge sites and surrounding waters to establish baseline or background levels of toxic chemicals, toxic metals, bacteria and other water quality constituents. These tests must be performed no more than one year prior to submittal of the proposal. Historical data may not be substituted for this requirement.	**Not applicable.** The project site is not located near a wastewater discharge site.
Policy ARC-4.1.9 (LCP) Toxicity Studies for Proposed Wastewater Discharges. Require toxicity studies to determine the impacts of the proposed wastewater discharges on marine life, as well as on recreational uses of the coastal waters.	**Not applicable.** The project site is not located near a wastewater discharge site.
Policy ARC-4.1.10 (LCP) New and/or Increased Wastewater Discharges. Approve new and/or increased wastewater discharges only if they will not degrade marine habitats; will not create hazardous or dangerous conditions; and will not produce levels of pollutants that exceed any applicable local, state or federal water quality standards.	**Not applicable.** The project is an unstaffed BESS facility and would not result in any new and/or expanded wastewater discharges into the Monterey Bay or other coastal waters. Any wastewater produced during construction and operation of the project would be properly disposed of either through contracted sanitary services or through the existing septic system.
Policy ARC-4.1.11 (LCP) Land Disposal of Wastewater. Encourage land disposal or irrigation with wastewater after adequate treatment to State wastewater treatment standards to assist in recharging groundwater aquifers and maintaining higher summer stream flows.	**Not applicable.** The project would not interfere with or conflict with this policy.
Policy ARC-4.1.12 (LCP) Disturbances of Coastal Waters, Wetlands, Estuaries and Lakes. Prohibit the diking, filling and dredging of open coastal waters, wetlands, estuaries, and lakes. Allow exceptions only for the following purposes and only where there is no other feasible, less environmentally damaging alternative:	**Not applicable.** The project is not located near coastal waters, wetlands, estuaries, or lakes.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
1. Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines. 2. Restoration purposes, including the protection and enhancement of existing harbors, and where the activity will maintain and enhance the functional capacity of the wetland or estuary as determined through the County environmental review process in conjunction with the California Department of Fish and Wildlife, and U.S. Army Corps of Engineers. 3. Nature study, aquaculture, or similar resource-dependent activities.	
Policy ARC-4.1.13 (LCP) Redistribution of Dredged Materials. Require the redistribution of dredged materials into the same littoral cell from which it was taken in an effort to continue beach replenishment as long as the materials are suitable and non-toxic, and the deposition of the materials will not adversely affect marine environments or recreational uses. The deposition of such materials must be timed and located so as not to interfere with shoreline processes, longshore current systems, and public beach use.	**Not applicable.** The project would not require any dredging.
Policy ARC-4.1.14 (LCP) Water Pollution from Urban Runoff. Review proposed development projects for their potential to contribute to water pollution via increased storm water runoff. Require all development and redevelopment projects to be designed to minimize the generation, transport, and discharge of stormwater pollutants by maintaining natural discharge and groundwater recharge rates. Design strategies shall include minimization of impervious areas, pollution prevention strategies, retention and percolation of stormwater, filtration or treatment of stormwater, or other appropriate stormwater best management practices.	**Applicable and consistent.** The project would include bioretention areas.
Policy ARC-4.2.1 (LCP) Water Supply Watershed Designation. Designate on the General Plan/LCP Resources and Constraints Maps and County GIS those watersheds that supply the County's water, as well as coastal watersheds (see Figure 5-3, Watersheds [of the Agriculture, Natural Resources + Conservation Element of the General Plan]).	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-4.2.2 (LCP) Least Disturbed Watershed Designations. Designate the following watershed areas that support the remaining clear running streams as Least Disturbed Watersheds: ▪ Waddell Creek Watershed, including Blooms Creek ▪ Scott Creek and Big Creek Watershed above their confluence, and Scott Creek tributaries below Swanton Road ▪ Jamison Creek Watershed ▪ Clear Creek Watershed • Fall Creek Watershed ▪ Newell Creek Watershed upstream from Loch Lomond ▪ Eagle Creek Watershed • Greenoaks Creek ▪ Ano Nuevo Creek	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
▪ Molino Creek ▪ Baldwin Creek and Peasley Creek: above Highway 1 ▪ Wilder Creek: above Highway 1 ▪ Laguna Creek and Majors Creek, designated corridors between Highway 1 and the City of Santa Cruz water diversions.	
Policy ARC-4.2.3 (LCP) Water Quality Constraint Area Designation. Designate the following areas located within one mile upstream of intakes used for public water supply as Water Quality Constraint areas: 1. City of Santa Cruz intakes on Reggiardo, Laguna, and Majors Creeks, and Liddell Spring; 2. Bonnymede Mutual intake on Reggiardo Creek; and 3. Davenport water system intakes on Mill and San Vicente Creeks.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-4.2.4 (LCP) Minimum Size for Existing Parcels in Water Quality Constraint Areas. Require 2½ net acre minimum parcel sizes for development of anything other than one accessory dwelling unit where a single-family home already exists on existing lots of record within Water Quality Constraint Areas. Allow exceptions to the 2½ net acre minimum parcel size only where consistent with the existing Sewage Disposal ordinance.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-4.2.5 (LCP) Minimum Size for Developing Existing Parcels of Record in Water Supply Watersheds. Require one acre minimum parcel sizes for newly proposed development of existing lots of record in water supply watersheds in the Coastal Zone, in the North Coast and Bonny Doon Planning Areas, and in the San Lorenzo Water Supply Watershed, in accordance with the Sewage Disposal ordinance. Incorporate as General Plan/LCP Land Use Plan requirements the provisions of the Sewage Disposal ordinance with respect to Kristen Park and Water Quality Constraint Areas. Allow an exception to the one-acre minimum parcel size, in recognition that density and areas of development will not substantially increase in these situations, for the creation of one accessory dwelling unit on parcels already developed with a single-family residence or for an existing parcel of record or for a parcel that has been developed with a single family home but a replacement home is proposed after destruction of the prior home in a natural disaster or fire, or for commercial uses within the RSL, that meet the following applicable criteria: 1. The parcel is an existing lot of record with a residential land use designation; or has a designation of Community Commercial, Neighborhood Commercial, Office, or Service Commercial. in the General Plan that was adopted on May 24, 1994; 2. It is to be developed for commercial use; or a new home is proposed to replace a home lost due to natural disaster or fire;	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
3. It is within the Rural Services Line if a commercial use; and 4. The proposed sewage disposal system, whether for commercial or residential use, will meet all technical standards of the Sewage Disposal Ordinance, and will utilize an enhanced treatment system in accordance with the Sewage Disposal Ordinance.	
Policy ARC-4.2.6 (LCP) Land Division and Density Requirements in Water Supply Watersheds. Outside the Coastal Zone, require new parcel sizes to be an average of at least 10 gross acres in existing or proposed Water Supply Watersheds and allow a maximum average residential density of one dwelling unit per 10 gross acres for parcels that are not divided. Maintain provisions of the SCCC that allow for appropriate clustering of allowed development potential. Inside the Coastal Zone, require new parcel sizes to be an average of at least 20 gross acres in existing and proposed Water Supply Watersheds and within the North Coast and Bonny Doon Water Supply Watersheds extending outside the Coastal Zone, and allow a maximum average residential density of one dwelling unit per 20 gross acres for parcels which are not divided. For new land divisions, encourage a range of parcel sizes consistent with the average parcel sizes noted above where appropriate to maximize protection to the watershed, and allow appropriate clustering of development potential consistent with the SCCC to protect resource values. These restrictions do not apply in the San Lorenzo River Watershed on lands: 1. Designated Urban Residential or Suburban Residential; or 2. Designated Rural Residential areas where the average parcel size within ¼ mile of the subject parcel boundary is less than 1 gross acre.	**Not applicable**. The project would not include a land division.
Policy ARC-4.2.7 (LCP) Land Division and Density Requirements in Least Disturbed Watersheds. Maintain Least Disturbed Watersheds in open space densities by requiring an average 40 gross acre minimum parcel size for new parcels within Least Disturbed Watersheds and permit land divisions only where consistent with open space protection and where beneficial to the public, such as parcels for public facilities including public well sites, fire stations, and utility rights-of-way. For new land divisions, encourage a range of parcel sizes consistent with the average parcel sizes note above where appropriate to maximize protection to the watershed. Allow a maximum average residential density of one dwelling unit per 40 gross acres for parcels that are not divided, and allow for appropriate clustering of development potential to protect resource values, consistent with procedures of the SCCC.	**Not applicable**. The project would not include a land division and is not within a Least Disturbed Watershed.
Policy ARC-4.2.8 (LCP) Allowed Uses in Water Supply and Least Disturbed Watersheds. In order to preserve the water supply, recreation, and wildlife support values, require uses in Water Supply and Least Disturbed watersheds to be compatible with watershed protection policies and limited to open	**Not applicable.** This project is not within a Least Disturbed Watershed.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
space uses or recreational and residential uses at the specified Watershed densities, unless otherwise exempted.	
Policy ARC-4.2.9 (LCP) Development Activities Within Water Supply and Least Disturbed Watersheds. Require all grading, building, and timber harvesting in Water Supply and Least Disturbed watersheds to meet strict standards for erosion control and protection of water quality as outlined in the Erosion Hazard and Drainage Facilities sections of this Plan and as identified in the San Lorenzo River Watershed Management Plan. Provide a higher level of protection within karst areas of Water Supply Watersheds.	**Not applicable.** This project is not within a Least Disturbed Watershed.
Policy ARC-4.2.10 (LCP) Retaining Undeveloped Lands in Watersheds. Encourage property owners in designated watershed areas to sign Open Space Easement contracts or pursue other mechanisms to retain undeveloped lands within Water Supply Watersheds.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-4.2.11 (LCP) Timber Harvest Review Process in Watersheds. Utilize the timber harvest review process to condition applications in Water Supply and Least Disturbed watersheds so that sustained yield programs are required to comply with restrictions or regulations on winter operations and other conditions to protect the watersheds.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-4.2.12 (LCP) Drainage Design. Require retention of stormwater runoff from impervious surfaces for all new development and redevelopment.	**Applicable and consistent.** The project would include bioretention areas. See Section 3.15, Water Resources, for more information.
Policy ARC-4.2.13 (LCP) Sewage Disposal for Publicly Owned Facilities. Permit installation of sewage disposal systems within an easement on another lot to serve a publicly owned facility where technical or minimum parcel size standards cannot be met for sewage disposal at the site of the facility.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
Policy ARC-4.3.1 (LCP) Minimum Stream Flows for Anadromous Fish Runs. Support programs, policies, and projects that protect and enhance dry-season minimum streamflows for anadromous fish runs to the greatest extent feasible.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-4.3.2 (LCP) Designation of Critical Water Supply Streams. Designate the following streams, currently utilized at full capacity, as Critical Water Supply Streams: Laguna, Majors, Liddell, San Vicente, Mill and Reggiardo Creeks and their tributaries; San Lorenzo River and its tributaries above the City of Santa Cruz; Soquel Creek and its tributaries; Corralitos Creek and Browns Creek and their tributaries upstream of the City of Watsonville diversion points. Oppose or prohibit as legal authority allows, new or expanded water diversion from Critical Water Supply Streams. Prohibit new riparian or off stream development, or increases in the intensity of use, which require an increase in water diversions from Critical Water Supply Streams. Seek to restore in-stream flows where full allocation may harm the full range of beneficial uses.	**Not applicable.** This project would not conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-4.3.3 (LCP) New Major Water Supply Projects. Ensure the development of new major water supply projects are adequately conditioned to protect beneficial in-stream uses and riparian habitat. For new major water supply projects located in the Coastal Zone, ensure that no development proceeds unless such projects are adequately conditioned to protect beneficial in-stream uses and riparian habitat with minimal reliance on technology-based mitigation measures (e.g., relying on hatchery-raised fish instead of maintaining spawning grounds).	**Not applicable.** This project is not a new major water supply project.
Policy ARC-4.3.4 (LCP) On-stream Storage Reservoirs. Prohibit the designation of Scott Creek, Waddell Creek, San Lorenzo River and its tributaries, and Aptos Creek as on-stream storage reservoirs.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-4.4.1 (LCP) Impacts from New Development on Water Quality. Do not approve new development adjacent to marshes, streams, and bodies of water if such development would cause adverse impacts on water quality that cannot be fully mitigated.	**Applicable and consistent.** The project would not cause adverse impacts on water quality. See Section 3.15 for more information.
Policy ARC-4.4.2 (LCP) Minimum Septic System Setback from Natural Waterways. Do not allow installation of septic tanks or leach fields within 100 feet of all natural waterways including perennial or intermittent streams, seasonal water channels (that flow for more than seven days after significant rainfall), and natural bodies of standing water. Exceptions may be made for the repair or upgrade of existing systems, if the 100-foot setback cannot be maintained, and adequate provisions are made for water quality protection.	**Applicable and consistent.** The existing septic system would be more than 100 feet away from any natural waterways.
Policy ARC-4.4.3 (LCP) Erosion Control for Stream and Lagoon Protection. For all new and existing development and land disturbances, require the installation and maintenance of sediment basins, and/or other strict erosion control measures, as needed to prevent siltation of streams and coastal lagoons.	**Applicable and consistent.** The project would include erosion control measures. See Section 3.15 for more information.
Policy ARC-4.4.4 (LCP) Protecting Riparian Corridors and Coastal Lagoons. Require drainage facilities to infiltrate, filter, or treat stormwater runoff as needed to protect water quality for all new development within 1,000 feet of riparian corridors or coastal lagoons. Encourage vegetative-based treatments where feasible.	**Not applicable.** The project is not located in a riparian corridor or coastal lagoon.
Policy ARC-4.4.5 (LCP) Maintaining Saltwater Inflow to Coastal Lagoons. Do not allow new development, site alteration, or road projects adjacent to coastal lagoons unless it can be demonstrated that such projects will not restrict, impound or otherwise interfere with the natural drainage patterns and tidal circulation. Require redevelopment projects to restore natural drainage patterns to the maximum extent feasible.	**Not applicable.** The project is not located in a riparian corridor or coastal lagoon.
Policy ARC-4.5.1 (LCP) Primary Groundwater Recharge Area Designation. Maintain designations on the General Plan/LCP Resource and Constraints Maps and County GIS system identifying areas	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
where local soil conditions and underlying geologic formations allow for infiltration and percolation of rainfall and runoff into groundwater basins.	
Policy ARC-4.5.2 (LCP) Land Division and Density Requirements in Primary Groundwater Recharge Areas. Require new parcel sizes to be an average of at least 10 gross acres for parcels with building sites located in primary groundwater recharge areas and allow a maximum average residential density of one dwelling unit per 10 gross acres for parcels that are not divided. Addition of Accessory Dwelling Units is not considered "density" as the living area is considered accessory to the primary dwelling. Allow exceptions only where the development is: 1. Located within the Rural Services Line or within the Urban Services Line; and 2. Served by a sewage disposal system operated by a County Service Area or public services district that provides at least secondary treatment with nitrogen removal or that disposes of effluent outside the primary groundwater recharge area.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-4.5.3 (LCP) Uses in Primary Groundwater Recharge Areas. Prohibit any land use in a Primary Groundwater Recharge Area that would allow the percolation of pollutants into the groundwater system.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-4.5.4 (LCP) Karst Protection. Seek funding for a study to map karst areas and identify management strategies. Within areas mapped or suspected to be underlain by marble or karst, the area within 200 feet of a proposed leachfield, leachfield expansion area, stormwater discharge system, structure, roadway or area of disturbance should be evaluated by a geologist familiar with karst landscapes prior to further development. Any new sewage or stormwater dispersal system shall be located at least 100 feet from any sinkhole or other karst feature that would rapidly transmit contaminated water.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-4.5.5 (LCP) Developing Groundwater Resources. Allow development of groundwater resources when consistent with sustainable yield, protection of streamflows, and maintenance of groundwater quality. Require water systems serving new development to meet applicable standards for yield to ensure a reliable water supply is provided to its users.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-4.5.6 (LCP) Well Construction Standards. Require new and rehabilitated wells to comply with State and local construction standards as specified in the County well ordinance to prevent contamination of groundwater supplies.	**Not applicable.** This project would not construct or rehabilitate wells.
Policy ARC-4.5.7 (LCP) Pajaro Groundwater Protection Zone Designation. Designate the appropriate areas within the boundaries of the Pajaro Valley Basin as the Pajaro groundwater protection zone. Apply special testing and construction standards to identify strata containing poor quality water and to prevent the movement of such water into other aquifers.	**Not applicable.** This project would not conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-4.5.8 (LCP) Wells with Poor Water Quality. Require all new wells found to be of unsuitable quality to be promptly sealed according to State standards and inspected by Environmental Health unless mitigating measures can be found to make the water potable and not adversely affect underlying groundwater quality.	**Not applicable.** This project would not construct or rehabilitate wells.
Policy ARC-4.5.9 (LCP) Development Densities with Poor Groundwater Availability. Limit new development densities through the use of a Rural Density Matrix in rural areas identified as having poor groundwater availability based on the best available data for the area and the site.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-5.1.1 (LCP) Designation of Visual Resources. Designate on the General Plan/LCP Resources and Constraints Maps (Appendix F) and define visual resources as areas having regional public importance for their natural beauty or rural agricultural character. Include the following areas when mapping visual resources: vistas from designated scenic roads, Coastal Special Scenic Areas, and unique hydrologic, geologic, and paleontologic features identified in Goal 6. Ocean views, agricultural fields, wooded forests, open meadows, ridgetops, and mountain hillside views are also public scenic assets that should be identified and considered during development review permit processes.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-5.1.2 (LCP) Development Within Visual Resource Areas. Recognize that designated visual resources of Santa Cruz County possess diverse characteristics that are worthy of protection. Require projects in visual resource areas to be evaluated against the context of their unique environments and regulate structure height, setbacks, materials, and design to protect these resources consistent with the objectives and policies of this section.	**Applicable and consistent.** There are no designated scenic vistas identified in the County General Plan, and there are no known or recognized public scenic vistas in the surrounding area. The site is also not within a General Plan Scenic Area as mapped by the County. See Section 3.13, Visual Resources, for more information.
Policy ARC-5.1.3 (LCP) Protection of Public Vistas and Scenic Assets. Protect significant public vistas and public scenic assets as identified in Policy ARC-5.1.1, even those that are not mapped and designated as visual resource areas, scenic roads, coastal special scenic areas, or other unique features, by minimizing disruption of landform and aesthetic character caused by grading operations, timber harvests, utility wires and poles, signs, inappropriate landscaping and structure design. Provide necessary landscaping to screen development that is unavoidably sited within these vistas. Proposed landscaping within public vistas should be sited and designed to retain existing public views of vistas and scenic assets especially for coastal designated visual resources.	**Applicable and consistent.** There are no designated scenic vistas identified in the County General Plan, and there are no known or recognized public scenic vistas in the surrounding area. The site is also not within a General Plan Scenic Area as mapped by the County. See Section 3.13 for more information.
Policy ARC-5.1.4 Preserving Natural Buffers. Preserve the vegetation and landform of natural wooded hillsides that serve as a backdrop for new development. Also comply with Policy ARC-5.1.8 regarding protection of ridgetops and natural landforms.	**Not applicable.** The project site does not contain any natural wooded hillsides.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-5.1.5 (LCP) Preserving Agricultural Vistas. Preserve the aesthetic value of agricultural vistas. Encourage development to be consistent with the agricultural character of the community. Structures appurtenant to agricultural uses on agriculturally designated parcels are considered compatible with the agricultural character of surrounding areas.	**Applicable and inconsistent.** The project would involve non-agricultural use on land designated for agriculture. Development would not be consistent with the agricultural character of the community.
Policy ARC-5.1.6 (LCP) Preserving Ocean Vistas. Where public ocean vistas exist, require these vistas be retained to the maximum extent possible as a condition of approval for any new development.	**Not applicable.** This project does not contain a public ocean vista.
Policy ARC-5.1.7 (LCP) Open Beaches and Blufftops. Do not permit or allow the placement of new permanent structures that would be visible from a public beach, except where allowed on existing parcels of record, or for shoreline protection, public beach access, or public ocean viewing, and where consistent with SCCC Chapter 13.11. Use the following criteria: 1. Allow infill structures (typically residences and accessory structures on existing lots of record) where compatible with the pattern of existing development. 2. Require shoreline protection and access structures to use natural materials and finishes to blend with the character of the area and integrate with the landform.	**Not applicable.** This project would not be visible from a public beach, public beach access, or public ocean viewing.
Policy ARC-5.1.8 (LCP) Protecting Ridgetops and Natural Landforms. Ensure that any development protects the scenic and visual character of ridgetops and prominent natural landforms such as cliffs, bluffs, dunes, rock outcroppings, and other significant natural features . In connection with discretionary review, apply the following criteria: 1. Development on ridgetops shall be avoided if other developable land exists on the property. 2. Do not approve development permits that allow the removal of trees when such removal would erode the silhouette of the ridgeline form. Consider the cumulative effects of tree removal on the ridgeline silhouette. 3. Restrict the height and placement of buildings and structures to prevent their projection above the ridgeline or treeline. Restrict structures and structural projections adjacent to prominent natural landforms. Ensure that any newly created parcel includes buildable locations such that new development can be integrated into the existing terrain and does not project above the ridgeline, in accordance with design review standards provided in SCCC Chapter 13.11. 4. Through review and approval of discretionary development permits, ensure that exterior materials and colors blend with the natural landform and tree backdrops.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-5.1.9 (LCP) Significant Tree Removal Ordinance. Maintain the standards in the County's regulations that require a permit for removal of significant trees and other major vegetation located	**Not applicable.** The project is not within the Coastal Zone.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
within the Coastal Zone, and provide appropriate protection for significant trees and other major vegetation in other areas of the County.	
Policy ARC-5.1.10 (LCP) Restoration of Scenic Areas. Require on-site restoration of visually blighted conditions commensurate with the size and scope of the project as a mitigating condition of approval for new development permits. Provide technical assistance for restoration of blighted areas.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-5.1.11 (LCP) Designation of Coastal Special Scenic Areas and Special Communities. Designate the following as Coastal Special Scenic Areas and Special Communities (see Appendix F: Natural Resource and Environmental Hazard Areas: Maps and Development Constraints) and require development to comply with the design criteria set forth in SCCC Chapter 13.20 Coastal Zone Regulations and Chapter 13.10 Zoning Ordinance: 1. Bonny Doon sandstone formations, generally found within the borders of Pine Flat Road, Laguna Creek, Ice Cream Grade, and Martin Road. 2. The area enclosed by the Swanton Road and Highway 1 scenic roads. 3. Davenport community. 4. Harbor area. 5. East Cliff Village tourist area. 6. Seacliff Beach area. 7. Rio Del Mar Esplanade. 8. Pleasure Point Community mapped residential and commercial areas. 9. Seascape Beach Estates.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-5.1.12 (LCP) Swanton Road Coastal Special Scenic Area. In the Swanton Road Coastal Special Scenic area, require new development to be hidden from public view to the greatest extent feasible. Where it is not possible to locate development out of public view, require dense vegetative screenings consistent with patterns and types of existing vegetation and comprised of indigenous species.	**Not applicable.** This project is not within the Swanton Road Coastal Special Scenic area.
Policy ARC-5.2.1 (LCP) Designation of Scenic Roads. The following roads and highways are valued for their vistas. The public vistas from these roads shall be afforded the highest level of protection. 1. State Highways Highway 1 - from San Mateo County to Monterey County Highway 9 – from Route 1 to Santa Clara County Highway 17 – from Highway 1 to Santa Clara County Highway 35 – from Highway 17 to San Mateo County	**Not applicable.** This project would not conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Highway 129 – from Highway 1 to San Benito County Highway 152 – from Highway 1 to Santa Clara County Highway 236 – from Highway 9 in Boulder Creek to Highway 9 at Waterman Gap 2. County Roads Amesti Road – from Varni Road to Browns Valley Road Beach Road – from Highway 1 to Palm Beach Bonita Drive and San Andreas Road – from Highway 1 to Beach Road Bonny Doon Road – from Highway 1 to Pine Flat Road Browns Valley Road – from Eureka Canyon Road to Hazel Dell Road Buena Vista Drive – from San Andreas Road to Larkin Valley Road Casserly Road – from Mile marker 1.75 to Highway 152 Corralitos Road – from Freedom Boulevard to Browns Valley Road Empire Grade – from the Santa Cruz City limits to the end of Empire Grade East Cliff Drive – from 33rd Avenue to 41st Avenue Eureka Canyon Road – from Highland Way to Corralitos Graham Hill Road – from Lockwood Lane to Highway 9 Hazel Dell Road – from Browns Valley Road to Mt. Madonna Road Highland Way – from Summit Road to Eureka Canyon Road Ice Cream Grade Martin Road – from Pine Flat to Ice Cream Grade Mt. Hermon Road – from Scotts Valley City limits to Graham Hill Road Mt. Madonna Road – from Gaffey Road to Hazel Dell Road Pine Flat Road – from Bonny Doon Road to Empire Grade Sand Dollar Drive Smith Grade Summit Road – from Highway 17 to Highland Way Sunset Beach and Shell Road Swanton Road – from Highway 1 at Davenport Landing to Highway 1 at Greyhound Rock	
Policy ARC-5.2.2 (LCP) Development Visible from Rural Scenic Roads. In the viewsheds of rural scenic roads, require new discretionary development, including development envelopes in proposed land divisions, to be sited out of public view, designed for compatibility with area character, and/or obscured by natural landforms and/or existing vegetation. Where proposed structures on existing lots are unavoidably visible from scenic roads, identify those visual qualities worthy of protection	**Not applicable.** The project site is not visible from the Highway 1 Scenic Highway Corridor or other designated scenic roads or corridors. See Criterion 3.13-2 in Section 3.13 for more information.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
and require the siting, architectural design and landscaping to mitigate the impacts on those higher value visual qualities.	
Policy ARC-5.2.3 (LCP) Development Visible from Urban Scenic Roads. In the viewsheds of designated urban scenic roads, require new discretionary development to respect, preserve or improve the visual quality through siting, architectural design, landscaping and appropriate signage.	**Not applicable.** The project site is not visible from the Highway 1 Scenic Highway Corridor or other designated scenic roads or corridors. See Criterion 3.13-2 in Section 3.13 for more information.
Policy ARC-5.2.4 Development Visible from the Highway Scenic Corridor. Require discretionary review for all development within the visual resource area of Highway 1, outside of the Urban and Rural Services Lines, as designated on the GP/LCP Visual Resources Map and apply the design criteria of the Coastal Zone Regulations ordinance.	**Not applicable.** The project site is not visible from the Highway 1 Scenic Highway Corridor. See Criterion 3.13-2 in Section 3.13 for more information.
Policy ARC-5.2.5 (LCP) Landscaping Requirements. Grading and land disturbance projects involving more than 1,000 cubic yards that are visible from scenic roads shall conform to the following visual mitigation conditions of a discretionary grading and/or coastal development permit: 1. Blend contours of the finished surface with the adjacent natural terrain and landscape to achieve a smooth transition and natural appearance; and 2. Incorporate only characteristic or indigenous plant species appropriate for the area.	**Not applicable.** The project site is not visible from the Highway 1 Scenic Highway Corridor or other designated scenic roads or corridors. The project would retain portions of the existing apple orchard, which would act as a visual buffer. Minor additional landscaping would be added to enhance and shield views of the project site from nearby residences.
Policy ARC-5.2.6 (LCP) Protecting Views in the North Coast and Bonny Doon. In order to preserve the agricultural and coastal grassland vistas of the North Coast and Bonny Doon Highway 1 view corridor, prohibit the division of all grassland habitat as mapped on the County's Resources and Constraints Maps.	**Not applicable.** The project site is not located near the North Coast or Bonny Doon Highway 1 view corridor.
Policy ARC-5.2.7 Design Review for Public Projects Visible from Scenic Roads. Require construction and development of any soundwalls and roadside amenities such as turnouts and vista points within or adjacent to Scenic Roads to be reviewed for consistency with the visual resource protection policies of this section and the Zoning Ordinance.	**Not applicable.** The project site is not visible from the Highway 1 Scenic Highway Corridor or other designated scenic roads or corridors. See Criterion 3.13-2 in Section 3.13 for more information.
Policy ARC-5.2.8 (LCP) Signs Visible from Scenic Roads. Actively discourage the placement of signs that will be visible from scenic roads; where allowed, require strict compliance with the County Sign ordinance to minimize disruption of the natural scenic qualities of the viewshed. Give priority to sign abatement programs for scenic roads.	**Not applicable.** The project site is not visible from the Highway 1 Scenic Highway Corridor or other designated scenic roads or corridors. See Criterion 3.13-2 in Section 3.13 for more information.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-5.2.9 (LCP) Highway 1 Signage in Rural Areas. In the rural Highway 1 corridor, allow only Caltrans standard directional, access, and business identification signs, except within the commercial area of Davenport.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-5.2.10 (LCP) Highway 1 Signage in Urban Areas. In the urban Highway 1 corridor, allow signage where consistent with the Sign ordinance and any applicable village, town, community, or specific plan.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-5.2.11 (LCP) Illuminated Signs Visible from Designated Scenic Roads. In accordance with the County Sign ordinance, allow illuminated signs to be visible from scenic roads only for state and county directional and information signs and in designated commercial and visitor-serving areas. Seek to eliminate all other non-conforming illuminated signs which are visible from scenic roads.	**Not applicable.** This project would not conflict with this policy.
Policy ARC-5.2.12 (LCP) Requirement for Sign Plans. Require new project submittal applications to include standard road sign designs for directional, access, and business identification and designate appropriate locations for these signs consistent with the County Sign ordinance and Caltrans requirements.	**Applicable and consistent.** The project would include proper signage for proposed roads on the project site consistent with the County Sign ordinance and Caltrans requirements.
Policy ARC-5.2.13 (LCP) Utility Service Lines. Require underground placement of all new utility service lines and extension lines to and within new residential subdivisions and major commercial developments within the Urban Services Line. Prioritize or require underground placement of all other new or supplementary transmission lines within views from scenic roads where it is technically feasible, unless it can be shown that other alternatives are less environmentally damaging or would have unavoidable adverse impacts on agricultural operations. When underground facilities are installed parallel to existing above ground lines, require the existing lines to be placed underground with the new lines if feasible. When above ground facilities are necessary, require that the design of the support towers or poles be compatible with the surroundings and that lines cross roadways at low elevations or curves in the road in accordance with California Public Utility Commission regulations for public utility facilities.	**Not applicable.** The project is not a residential or commercial development within the Urban Services Line. However, the gen-tie lines would be constructed underground to the extent feasible.
Policy ARC-5.2.14 (LCP) Access Roads for Transmission Lines. Require access roads for transmission line construction and maintenance within scenic corridors to be designed and constructed to parallel the contour of the land and to minimize grading and landscape alterations.	**Not applicable.** The project site is not within a scenic corridor.
Policy ARC-6.1.1 (LCP) Protection and Designation of Significant Resources. Protect significant geological features such as caves, large rock outcrops, inland cliffs and special formations of scenic or scientific value, hydrological features such as karst topography, major waterfalls or springs, and paleontological features, through the environmental review process. Designate such sites on the General Plan/LCP Resources and Constraints Maps where identified. Currently identified sites of	**Not applicable.** The project site does not include any caves, large rock outcrops, inland cliffs, or special formations of scenic or scientific value, hydrological features, or major waterfalls or springs.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Significant Hydrological, Geological, and Paleontological Features are as follows: Bonny Doon Planning Area: 1. Majors Creek Canyon: The cliffs and exposed rocks of this canyon to the east of Highway 1 are outstanding geologic and scenic features. 2. Martin Road: East and west of Martin Road, encompassed in the botanical sites, are unusual sandhill outcroppings. 3. Wilder Creek: This area contains a concentration of limestone caves worth protecting. 4. Table Rock: Highly scenic coastal rock formations (sedimentary intrusive bodies) can be found in the vicinity of Table Rock and Yellow Bank Creek.	
Policy ARC-6.1.2 (LCP) Protecting Significant Resources Through Easements and Land Dedications. Encourage and obtain where possible Open Space Easements or other forms of land dedication to conserve as open space those areas containing hydrological, geological, or paleontological features of significant scenic or scientific value.	**Applicable and consistent.** The project would include a conservation easement for the remaining approximately 31 acres of agricultural land on the project site.
Policy ARC-7.1.1 (LCP) Designation of Timberlands. Designate on the General Plan/LCP Resources and Constraints Maps (Appendix F) those timberlands that are devoted to and used for growing and harvesting timber and that are capable of producing an average annual volume of wood fiber of at least 15 cubic feet per acre.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-7.1.2 (LCP) Uses Within Timber Production Zones. Allow the following types of uses compatible with Timber Production (TP) zoned land and other uses where allowed in accordance with the Timber Production ordinance (a Site Development Permit may be required in some cases): 1. The growing and harvesting of timber and other forest products, including Christmas trees, in conformance with the provisions of the Timber Production Zoning ordinance and the Forest Practice Act. 2. (2) Watershed management. 3. (3) Fish and wildlife habitat. 4. (4) Grazing and other agricultural uses on that portion of the land not under timber production. 5. (5) Outside the Coastal Zone, one single-family dwelling and utilities, with one associated Accessory Dwelling Unit and/or habitable and non-habitable accessory structures, subject to locational requirements and other requirements in the Zoning Ordinance. 6. (6) Timber removal as necessary for the safe operation of public utility facilities. 7. (7) Accessory structures incidental to timber, agricultural, or residential uses.	**Not applicable.** The project is not within Timber Production zoned land.
Policy ARC-7.1.3 (LCP) Discretionary Uses Within Timber Production Zones. Allow the following types of uses with use permit approval, and other discretionary uses where allowed in accordance with	**Not applicable.** The project is not within Timber Production zoned land.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
the Timber Production ordinance. Discretionary uses must be consistent with the growing of a sustained yield tree crop, with the purposes of the Forest Taxation Reform Act of 1976 and the Timber Production zone district and should be supported by a timber management plan or compatibility analysis submitted to the County of Santa Cruz, pursuant to the County Code. 1. Mineral production and mining operations, in conformance with the provisions of the Mining Regulations Ordinance. 2. Erection, construction, alteration, and maintenance of water and transmission facilities. 3. Outdoor recreation, educational or religious activities, in conformance with the provisions of the County's organized camp zoning regulations which do not conflict with the management of the parcel's timber resources. 4. Conversion to agricultural uses not exceeding ten percent of the total of the timber area on the parcel. 5. On parcels inside the Coastal Zone, one single family dwelling and Accessory Dwelling Unit subject to locational requirements and other requirements in the Zoning Ordinance. 6. Residential dwelling groups. 7. Timber processing and other related facilities. 8. Commercial cannabis activities outside the Coastal Zone only, within non-timbered portions of a site, subject to discretionary review and approval pursuant to all requirements of the non-retail commercial cannabis licensing ordinances, zoning ordinance, environmental regulations, coastal regulations, building code, and other applicable regulations, which shall include any applicable environmental review pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code. A Timber Management Plan may be required as a requirement or condition of the Conditional Use Permit process.	
Policy ARC-7.1.4 (LCP) Land Division and Density Requirements for Timber Production Zoned Lands. For land divisions of TP zoned lands, require new parcel sizes to be at least 160 gross acres in the Coastal Zone and 40 gross acres in other areas of the County, except as noted in Policy 7.1.5 below. Where development envelopes are clustered, require new parcel sizes to be an average of 40 gross acres in the Coastal Zone and 10 gross acres in other areas of the County. For residential development on TP zoned lands where no land division is proposed, allow a maximum residential density of one dwelling unit per 160 gross acres in the Coastal Zone and 40 gross acres in other areas of the County. Where development envelopes are clustered, allow a maximum average residential density of one dwelling unit per 40 gross acres in the Coastal Zone and 10 gross acres in other areas of the County.	**Not applicable.** The project is not within Timber Production zoned land.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-7.1.5 (LCP) Conditions for Clustered Development Envelopes on Timber Production Zoned Lands. In addition to the conditions listed in Policy ARC-7.1.6, the following conditions apply to the creation of new parcels below the minimum parcel size with clustered development envelopes pursuant to Policy ARC 7.1.4: 1. The timberland shall be managed as one unit under an approved Timber Management Plan for all timber harvest operations. The creation of such parcels shall be consistent with all policies of this section and provisions of the County Code, and requires approval by a four-fifths vote of the Board of Supervisors; and 2. The remainder of the property not included within the area of clustered development envelopes shall be held in common ownership, and timber rights shall be held by a designated property owner or individual.	**Not applicable.** The project is not within Timber Production zoned land.
Policy ARC-7.1.6 (LCP) General Conditions for Development Proposals on Timber Production Zoned Lands. The following may be required in connection with any permitted development on Timber Production zoned lands in order to protect the timber production potential and ecological values of the site: 1. A Timber Management Plan, prepared by a Registered Professional Forester, submitted to and approved by the County for the entire land holding. 2. The individual designated as possessor of timber rights on the property shall enter into a binding contract with the Board of Supervisors to manage and harvest timber on the timberland and to abide by the provisions of the Timber Management Plan and/or Timber Harvest Plan.	**Not applicable.** The project is not within Timber Production zoned land.
Policy ARC-7.1.7 (LCP) Location of Development on Timber Production Lands. Locate all new development on TP lands on a non-timbered portion of the property.	**Not applicable.** The project is not within Timber Production zoned land.
Policy ARC-7.1.8 (LCP) Timber Resource Land Not Zoned Timber Production. Evaluate proposed land divisions and residential development permit applications on parcels larger than 20 gross acres designated Timber Resource on the General Plan and LCP Resources and Constraints Maps, but not zoned TP, for timber resource potential. Apply the TP land division and residential density requirement policies for any parcel found to have timber resources equivalent to TP parcels. Require, as a condition of any land division, rezoning to TP for parcels which have equivalent timber resources.	**Not applicable.** The project is not designated Timber Resource and is not a land division or residential development.
Policy ARC-7.1.9 (LCP) Rezoning Lands to Timber Production. Encourage timberland owners to apply for Timber Production zoning where appropriate. Such re-zonings must be in accordance with the procedures set forth in the TP ordinance.	**Not applicable.** The project does not contain timberland.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-7.1.10 (LCP) Rezoning Lands from Timber Production. Do not support rezoning of timberland from TP to alternate zone districts unless it can be shown that the rezoning is consistent with the Forest Taxation Reform Act of 1976 and the County TP ordinance.	**Not applicable.** The project does not contain timberland.
Policy ARC-7.1.11 (LCP) Review of Timber Harvests. Require review of all timber harvests and conversions for conformance with Section 926 of the California Forest Practice Rules and with County regulations regarding land clearing, Sensitive Habitat protection, and other applicable regulations. Require the approval of any applicable County permits prior to state approval of any timber harvest plan, to assure minimal environmental and neighborhood impacts. Deny all requests for "less than 3-acre conversions" as defined in Section 1104.1(a) of Title 14 of the California Code of Regulations that cannot meet these standards.	**Not applicable.** The project does not involve timber harvesting or associated operations.
Policy ARC-7.1.12 (LCP) Timber Statement of Acknowledgment. As a condition of approval for any new land division or other development permit, require a Statement of Acknowledgement be recorded, or evidence that the statement has been made part of the parcel deed, for parcels adjacent to lands designated as Timber Resources on General Plan/LCP Resources and Constraints Maps. The purpose of the statement is to inform property owners about adjacent timber practices, and advise them to be prepared to accept such inconvenience or discomfort from normal timber operations.	**Not applicable.** The project does not involve timber harvesting or associated operations.
Policy ARC-7.1.13 (LCP) Zone Districts Where Timber Harvesting is Allowed. Allow timber harvesting and associated operations, requiring approval of a Timber Harvesting Plan by the California Department of Forestry, only in the Timber Production (TP), Parks, Recreation and Open Space (PR) (except in the coastal zone), Mineral Extraction Industrial (M-3), and the Commercial Agriculture (CA) (except in the coastal zone) zone districts.	**Not applicable.** The project does not involve timber harvesting or associated operations.
Policy ARC-7.2.1 (LCP) Identification of Mineral Resource Areas. Areas classified by the State Geologist and designated by the State Mining and Geology Board as Regionally or Statewide Significant Mineral Resource Areas1 and areas classified by the State as MRZ-2 Zones (areas containing significant mineral deposits), excluding those areas with existing land uses and/or land use designations which conflict with mineral resource extraction, are shown on the General Plan/LCP Resources and Constraints Maps (Appendix F) as Mineral Resource lands.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-7.2.2 (LCP) Uses in Mineral Resource Areas. Lands within Mineral Resource areas, as identified on the County General Plan/LCP Resources and Constraints Maps, shall be planned and used in ways that support future mineral extraction. Development on Mineral Resource lands shall be limited to mining and mining-related uses and other uses compatible with mining. Uses compatible with future mining operations require a low public or private investment in structures and land improvements, facilitating future mining because of the low economic value of	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
the land and its improvements. Examples of such uses include large-lot rural development, recreation (public and commercial), agriculture and grazing, timber operations, and open space. Land uses inherently incompatible with mining require a high public or private investment in structures and land improvements inhibiting future mining because of the higher economic value of the land and improvements. Examples of incompatible uses include high-density residential development, public facilities, commercial uses, and extensive industrial uses.	
Policy ARC-7.2.3 Review of Incompatible Uses. Under special circumstances, the County may permit the development of incompatible uses on mineral resource areas. In such cases, the proposed use shall be reviewed to determine whether it would threaten future mineral extraction. Existing area development, existing and planned public infrastructure and other land use policies for the area shall be considered in making this determination. Buffer areas and visual screening may be required to mitigate impacts between mining and proposed adjacent land uses.	**Not applicable**. The project is not designated for mineral extraction.
Policy ARC-7.2.4 Minimizing Conflicts Between New Development and Mineral Resource Areas. Where a proposed land use has been determined to threaten the potential to extract minerals, the County shall require all reasonable and feasible mitigations to avoid or minimize conflicts between the proposed use and future development of the mineral resource. The County shall make written findings in support of its decision to permit such a use, in accordance with the requirements of the Surface Mining and Reclamation Act.	**Not applicable**. The project is not designated for mineral extraction.
Policy ARC-7.2.5 (LCP) Land Division and Density Requirements on Mineral Resource Land. Require a minimum size of 40 gross acres per parcel for land divisions, and allow a maximum residential density of one dwelling unit per 40 gross acres per existing parcel of record on Mineral Resource areas as designated on the General Plan/LCP Resources and Constraints Maps.	**Not applicable**. The project is not designated for mineral extraction.
Policy ARC-7.2.6 (LCP) Quarry (Q) Land Use Designation. The Quarry (Q) designation shall characterize sites where orderly extraction or reclamation of mineral resources is ongoing, while minimizing adverse impacts on environmental and scenic resources, and surrounding residential land uses. Implement the Quarry designation through the Mineral Extraction Industrial (M-3) Zone District.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-7.2.7 (LCP) Siting of Quarries. Identify on the General Plan/LCP Land Use Designation Maps, the sites of existing operating facilities for quarries (Figure 5-5, Quarry Sites). Any change in use or major expansion shall be subject to full environmental and economic analysis and review by the County for the adequacy and appropriateness of the site for the proposed use and shall be subject to a General Plan and LCP amendment.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-7.2.8 (LCP) Operation of Existing Quarries. Allow continued operation of existing quarries and allow expansion within areas designated as Mineral Resources including those located in the	**Not applicable.** This project is not an existing or new quarry.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Coastal Zone, where impacts of environmental and scenic resources and surrounding residential uses can be mitigated. Require that existing quarries meet the requirements of the County's Mining ordinance. Require that all mining operations maintain and implement a County approved reclamation plan as required under the California Surface Mining and Reclamation Act (SMARA) and ensure that the rehabilitation and future uses of depleted quarry sites are in accordance with conservation and open space values.	
Policy ARC-7.2.9 Environmentally Sound Quarry Operations. Require environmentally sound quarry operations through compliance with the County Mining ordinance. Require environmental impact assessments, implementation of approved reclamation plans, and posting of adequate financial security insuring the reclamation of mined areas.	**Not applicable**. The project is not a quarry operation.
Policy ARC-7.2.10 Protection of Riparian Corridors and Wetlands. Carefully control the impacts of mineral extraction or processing operations adjacent to riparian corridors in accordance with the provisions of the Riparian Corridor and Wetlands Protection ordinance.	**Not applicable**. The project does not include mineral extraction.
Policy ARC-7.2.11 New or Expanded Quarries. Require any new or expanded mining operation to obtain a Mining Approval, Mining Certificate of Compliance, and a reclamation plan, according to the requirements of the County's Mining ordinance and applicable provisions of state law.	**Not applicable**. The project is not a new or expanded mining operation.
Policy ARC-7.2.12 Environmental Review for New Quarries. Require full environmental impact analysis and amendment of the General Plan and LCP Land Use Plan to establish new quarries outside the areas designated as Mineral Resource Areas on the General Plan and LCP Resources and Constraints Maps. Do not allow new quarries in the Bonny Doon or North Coast Planning Areas.	**Not applicable**. The project is not a new quarry.
Policy ARC-7.2.13 (LCP) Resource Based Industry Within the Coastal Zone. Require an LCP amendment for any new resource-based industry within the Coastal Zone on land which is not designated for such use. Require that the following findings be met as conditions of any amendment. 1. The site is adequate and appropriate for the proposed use; 2. The project is compatible with available service infrastructure, surrounding uses, and the existing local economy; and 3. The development is consistent with all applicable LCP resource protection policies and use priorities.	**Not applicable.** This project is not within the Coastal Zone.
Policy ARC-8.1.1 (LCP) Evaluation of Native American Cultural Sites. Protect all archaeological resources until they can be evaluated. Prohibit any disturbance of Native American Cultural Sites, archaeological sites, or identified tribal cultural resources without an appropriate permit. Maintain the Native American Cultural Sites ordinance.	**Applicable and consistent.** The project would protect any inadvertent archaeological resources discovered on the project site through recommended measures. See Section 3.5 for more details.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-8.1.2 (LCP) Site Surveys. Require an archaeological site survey (surface reconnaissance) as part of the environmental review process for all projects with very high site potential within the Archaeological Sensitive Areas, as designated on the General Plan/LCP Resources and Constraints Maps (Appendix F [of the Agriculture, Natural Resources + Conservation Element of the General Plan]).	**Applicable and consistent.** The project would require an archaeological site survey prior to ground-disturbing activities. See Section 3.5 for more details.
Policy ARC-8.1.3 (LCP) Development Around Archaeological Resources. Protect identified archaeological resources from development by restricting improvements and grading activities to portions of the property not containing these resources, where feasible, or by preservation of the archaeological site through project design and/or use restrictions as determined by a professional archaeologist, and through tribal consultations where required.	**Applicable and consistent.** The project would protect any identified or inadvertent discoveries of archaeological resources on the project site through recommended measures. See Section 3.5 for more details.
Policy ARC-8.1.4 (LCP) Archaeological Evaluations. Require the applicant for development proposals on any identified archaeological site to provide an evaluation, by a certified archaeologist, of the significance of the resource and what protective measures are necessary to preserve important and unique archaeological sites and to mitigate any impacts of proposed development consistent with General Plan /LCP Land Use Plan objectives and policies and California state law. Avoidance shall be the preferred mitigation measure.	**Applicable and consistent.** The project would protect any inadvertent archaeological resources discovered on the project site through recommended measures. See Section 3.5 for more details.
Policy ARC-8.1.5 Accidental Discovery of Archaeological Resources. If archaeological resources or human remains are discovered accidentally during grading or construction, the activity shall cease and the property owner shall notify the proper authority in accordance with the Native American Cultural Sites ordinance.	**Applicable and consistent.** The project would protect any inadvertent discoveries of archaeological resources or human remains on the project site through recommended measures. Additionally, the project would be required to comply with PRC Section 5097.98 of the HSC Section 7050.5. See Section 3.5 for more details.
Policy ARC-8.1.6 (LCP) Environmental Review. Environmental review shall be required for any project with the potential to significantly impact archaeological or tribal cultural resources.	**Applicable and consistent.** The project would include ground-disturbing activities and could potentially impact archaeological or tribal cultural resources. However, the project would protect any inadvertent discoveries of archaeological resources or human remains on the project site through recommended measures. Additionally, the project would be required to comply with PRC Section 5097.98 of the HSC Section 7050.5. See Section 3.5 for more details.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-8.1.7 (LCP) Consultation for Discretionary Projects. The County shall consult with any California Native American tribe that requests notice of projects in the geographic area traditionally affiliated with the tribe prior to the release of a Negative Declaration or Environmental Impact Report, pursuant to Public Resources Code sections 21073 and 21080. If tribal cultural resources are identified, the County shall work with the affected tribe to identify appropriate mitigation measures to protect the resource.	**Applicable and consistent.** CEC would be required to comply with the AB 52 consultation process for the project.
Policy ARC-8.1.8 (LCP) Consultation for General Plan Amendments. The County shall consult with California Native American tribes as identified by the California Native American Heritage Commission (NAHC) prior to an amendment or update to the General Plan and prior to the designation of open space in order to identify and protect Native American cultural resources on land affected by the proposal, pursuant to California Government Code Section 65352.3.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-8.2.1 Historic Preservation Program. Maintain, update, and strengthen, where appropriate, the County Historic Resource Preservation ordinance with the assistance of the Historic Resources Commission in accordance with the State Office of Historic Preservation.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-8.2.2 Historic Resources Inventory. Maintain and update a County Historic Resources Inventory to describe those historic structures, objects, properties, sites, and districts which have been designated by the Board of Supervisors for protection of their heritage values.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-8.2.3 Development Activities. For development activities on property containing historic resources, require protection, enhancement, and/or preservation of the historic, cultural, architectural, engineering, or aesthetic values of the resource consistent with regulations in the Historic Preservation ordinance as determined by the Historic Resources Commission.	**Applicable and consistent**. The project site does not contain historic resources.
Policy ARC-8.2.4 Historic Resources Commission Review. Require that applicants for development proposals on property containing a designated historic resource submit plans for the protection and preservation of the historic resource values to the Historic Resources Commission for its review and approval; require an evaluation and report by a professional historian or a cultural resources consultant when required by the Commission. To expedite the review process, allow minor alterations to be reviewed by trained County Staff.	**Applicable and consistent**. The project site does not contain historic resources.
Policy ARC-8.2.5 Encourage Protection of Historic Structures. Encourage and support public and private efforts to protect and restore historic structures and to continue their use as an integral part of the community.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-8.2.6 Maintain Designation as a Certified Local Government. Support existing and further develop local historic resource programs in order to maintain the California State Department of Parks and Recreation's designation of Santa Cruz County as a Certified Local Government (CLG).	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-8.2.7 Historic Resource Property Maintenance. Encourage the maintenance and upkeep of historic resources to avoid the need for major rehabilitation and to reduce the risks of demolition, loss through fire or neglect, or impacts from natural disasters.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-8.2.8 Environmental Review. Environmental review shall be required for any project with the potential to significantly impact historic resources.	**Not applicable**. The project site does not contain historic resources.
Policy ARC-9.1.1 (LCP) Open Space Plan Content. Maintain an Open Space Plan consisting of General Plan/LCP policies and implementing SCCC regulations to preserve land that is designated or zoned as open space. The Open Space Plan consists of this Element; goals, objectives and policies in the Parks, Recreation and Public Facilities Element related to Parks and Recreation; and other policies and regulations protecting the open space value of other land that is essentially undeveloped and devoted to open space uses as identified in the County Open Space Inventory (Table 5-3). The Open Space Inventory includes land that is designated or zoned for open space uses; other privately or publicly owned land with open space easements; and mapped natural resource areas for natural resources conservation, sustainable resource management, outdoor recreation, and public health and safety.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-9.1.2 (LCP) Open Space for Natural Resources Conservation. Maintain policies that generally limit development within Environmentally Sensitive Habitat Areas to resource-dependent uses. Protect other sensitive habitats, requiring clustered development, open space easements where appropriate, limitation on land divisions, and other appropriate development guidance and limitations.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy ARC-9.1.3 (LCP) Open Space for Natural Resources Management. Limit allowable uses, development density and intensity, and maintain resource-appropriate minimum parcel sizes in new land divisions as necessary to support the long-term sustainable use and management of timber, mineral and water resource lands, including Least Disturbed Watersheds. Allow for low-intensity open space uses where compatible with sustainable management of the resource.	**Not applicable.** The project site does not include timber, mineral, or water resource lands.
Policy ARC-9.1.4 (LCP) Preserving Agricultural Lands for Open Space. Maintain policies that preserve commercial agricultural lands for agricultural use, require large minimum lot sizes, and restrict conversion of commercial agricultural lands to non-agricultural uses, in order to maintain open-space scenic character in rural areas.	**Applicable and inconsistent.** The project proposes to construct a BESS facility on land with a zoning code of Commercial Agriculture. Development of the project is limited to no more than 16 acres of the overall 47-acre site, the remaining approximately 31 acres of which would be preserved in perpetuity through an agricultural conservation easement. BESS facilities are not an agriculturally oriented

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	structure or dwelling, and therefore, the project would be inconsistent with Policy ARC-9.1.4. However, SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions to no longer require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.
Policy ARC-9.1.5 (LCP) Open Space for Outdoor Recreation. Support the acquisition and maintenance of parks and open space areas for outdoor recreation, with low-intensity land uses and facilities that enhance recreational opportunities and meet the needs of all community residents while maintaining the scenic and open space character of these areas.	**Not applicable.** This project is not a park or open space development.
Policy ARC-9.1.6 (LCP) Open Space for Public Health and Safety. Maintain policies and regulations to protect public health and safety in potentially hazardous areas, with special standards for development in or near fault zones, steep slopes, floodways, and fire hazard areas.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-9.1.7 (LCP) (EJ) Open Space for Tribal Resources. Consult with Native American tribes to identify tribal lands and cultural resources on public lands that may be appropriate to preserve as open spaces pursuant to Government Code 65560(b)(6), and to identify appropriate strategies to preserve confidentiality regarding the location and use of these resources. Consult with Native American tribes prior to designating any lands as open space.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-9.1.8 (LCP) Open Space for Scenic Resources. Maintain policies and regulations for development to protect the character of open space areas valued for their scenic qualities, including natural buffer areas and ridgetops; unique hydrological, palaeontologic, and geologic features; agricultural fields; forests; and ocean vistas, beaches and coastal bluffs.	**Not applicable.** The project is not designated as open space.
Policy ARC-9.1.9 (LCP) Open Space in Residential Neighborhoods. Maintain low development densities and intensities in rural residential neighborhoods and encourage clustered development to preserve open space and scenic character in rural areas. Establish and maintain appropriate standards for private and common open spaces for urban developments.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-9.1.10 (LCP) Supporting Open Space in Rural Areas. Support policies allowing for greater development intensity at appropriate locations within the USL and RSL, in order to preserve open space, reduce pressures to expand the urban and rural services lines, and to prevent leapfrog development outside of urbanized areas.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-9.2.1 (LCP) Development Density and Intensity on Designated Open Space Land. Limit development density and intensity on land designated as Urban Open Space (O-U), Resource	**Not applicable.** The project is not designated as any Open Space land designation.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Conservation (O-C), or Lakes, Reservoirs, and Lagoons (O-L), as shown in Table 5-4, in order to protect the open space character. Ensure that any development is consistent with policies protecting scenic resources, natural resources, and open space, and with the provisions of any open space contract or easement.	
Policy ARC-9.2.2 (LCP) Designation of Urban Open Space Lands (O-U). Designate Urban Open Space (O-U) areas on the General Plan/LCP Land Use Designation Maps to identify those lands within the Urban Services Line and Rural Services Line that are either not appropriate for development or are less suitable for development due to the presence of one or more of the following resources or constraints: 1. Coastal bluffs and beaches; 2. Coastal lagoons, wetlands and marshes; 3. Riparian corridors; 4. Floodways; 5. Wooded ravines and gulches which separate and buffer areas of development; 6. Slopes over 30 percent; and 7. Sensitive wildlife habitat areas and biotic resources areas.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-9.2.3 (LCP) Development on Parcels with Urban Open Space (O-U) and Other Land Use Designations. Allow development, including clustering of development potential, on portions of the parcel with a land use designation other than O-U, to the extent specifically provided for by the General Plan/LCP Land Use Plan policies governing natural resources and public health and safety.	**Not applicable.** The project is not located in an Urban Open Space area.
Policy ARC-9.2.4 (LCP) Development Within Urban Open Space Areas. Consider development within areas identified as Urban Open Space only when consistent with all applicable resource protection and hazard mitigation policies, and only in the following circumstances: 1. For one single-family dwelling or other limited-scale use consistent with the adjacent General Plan/LCP Land Use Plan designation on an existing parcel of record if the parcel does not contain other areas for development that are not designated O-U, and if it is not possible to relocate facilities elsewhere on the property. 2. For other activities when the use is consistent with the maintenance of the area as open space, such as recreational use, habitat restoration, public/quasi-public uses and facilities, or flood or drainage control facilities. 3. For the location of service infrastructure when it cannot be placed in other locations out of the protected use areas.	**Not applicable.** The project is not located in an Urban Open Space area.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy ARC-9.2.5 (LCP) Mitigating Development Impacts. Require full mitigation of all potential adverse impacts associated with developments located in Urban Open Space areas.	**Not applicable.** The project is not located in an Urban Open Space area.
Policy ARC-9.2.6 (LCP) Designation of Resource Conservation Lands (O-C). Designate Resource Conservation areas on the General Plan/LCP Land Use Designation Maps to identify those lands which are publicly or privately held for conservation purposes (See Appendix F: Natural Resource and Environmental Hazard Areas: Maps and Development Constraints). These preservation lands shall include significant open space lands in the rural areas of the County for the protection of natural resources and habitats, the managed production of resources, outdoor recreational opportunities and protection of public health and safety. Consider the following high priorities: 1. Expansion of established preserves, parks or open space areas and connections between existing preserved lands. 2. Areas with significant biological, scenic or other natural resource value which are not adequately protected by current County or other ordinances.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy ARC-9.2.7 (LCP) Density and Parcel Size Determination for Resource Conservation Lands. On privately owned lands designated Resource Conservation, allow residential development at the same densities allowed by Policy BE-2.2.2 for the Mountain Residential Land Use Designation, where consistent with any open space or conservation easement.	**Not applicable.** The project site is not designated Resource Conservation.
Policy ARC-9.2.8 (LCP) Designation of Lakes, Reservoirs, and Lagoons (O-L). Designate Lakes, Reservoirs, and Lagoons as O-L on the General Plan/LCP Land Use Designation Maps, and identify as areas not suited to development. Allow only resource-dependent uses which protect the water quality and habitat values.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy 6.1.1 Geologic Review for Development in Designated Fault Zones. Require a review of geologic hazards for all discretionary development projects, including the creation of new lots, in designated fault zones. Fault zones designated for review include the Butano, Sargent, Zayante, and Corralitos complexes, as well as the State designated Seismic Review Zones. Required geologic reviews shall examine all potential seismic hazards and may consist of a Geologic Hazards Assessment and/or a more complete geologic investigation report where required by the County. An assessment may be prepared by County staff under supervision of the County Geologist, or registered geologist at the applicant's choice and expense. Any Geologic Hazards Assessment or Geologic Investigation Report must be accepted by the County Geologist in order to use its findings and/or incorporate its mitigations into a proposed development project.	**Applicable and consistent**. The northeastern boundary of the project site just overlaps with the Alquist–Priolo Fault Zone for the Zayante-Vergeles Fault. As a result, a fault hazard investigation was conducted for the project site even though no structures intended for human occupancy are proposed at the site. To evaluate the potential for fault rupture hazards at the site, exploratory trenches were excavated at the site to determine any evidence of past displacement that would indicate a potential for future rupture hazards. Approximately 1,300 linear feet of exploratory trenches were advanced at the site,

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	and no evidence of past displacement was observed (Appendix 3.4B, Geologic Fault Investigation). As a result, the report concluded that there was a low likelihood that proposed improvements would be damaged by surface ground rupture due to tectonic faulting within the lifetime of the project (Appendix 3.4B). The project's site-specific geotechnical investigation determined that site conditions, including underlying soil characteristics and the depth to groundwater, indicated a potential for liquefaction. However, ground improvement measures would be incorporated into the proposed construction design and consistent with current County Building Code requirements. The proposed project would be constructed in accordance with the County Building Code, including current seismic design specifications, current CBC standards, and other regulatory requirements, which would reduce the potential for risks related to seismic ground failure. See Section 3.4, Geological Hazards and Resources, for more details.
Policy 6.1.2 Geologic Reports for Development in Alquist-Priolo Zones. Require a preliminary geologic report or full engineering geology report for development on parcels within Alquist-Priolo State-designated seismic review zones.	**Applicable and consistent**. The northeastern boundary of the project site just overlaps with the Alquist–Priolo Fault Zone for the Zayante-Vergeles Fault. As a result, a fault hazard investigation was conducted for the project site even though no structures intended for human occupancy are proposed at the site. To evaluate the potential for fault rupture hazards at the site, exploratory trenches were excavated at the site to determine any evidence of past displacement that would indicate a potential for future rupture hazards. Approximately 1,300 linear feet of

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	exploratory trenches were advanced at the site, and no evidence of past displacement was observed (Appendix 3.4B). As a result, the report concluded that there was a low likelihood that proposed improvements would be damaged by surface ground rupture due to tectonic faulting within the lifetime of the project (Appendix 3.4B). The project's site-specific geotechnical investigation determined that site conditions, including underlying soil characteristics and the depth to groundwater, indicated a potential for liquefaction. However, ground improvement measures would be incorporated into the proposed construction design and consistent with current County Building Code requirements. The proposed project would be constructed in accordance with the County Building Code, including current seismic design specifications, current CBC standards, and other regulatory requirements, which would reduce the potential for risks related to seismic ground failure. See Section 3.4 for more details.
Policy 6.1.3 Engineering Geology Report for Public Facilities in Fault Zones. Require a full engineering geology report by a registered geologist whenever a significant potential hazard is identified by a Geologic Hazards Assessment or Preliminary Geologic Report, and prior to the approval of any new public facility or critical structure within the designated fault zones.	**Applicable and consistent.** The northeastern boundary of the project site just overlaps with the Alquist–Priolo Fault Zone for the Zayante-Vergeles Fault. As a result, a fault hazard investigation was conducted for the project site even though no structures intended for human occupancy are proposed at the site. To evaluate the potential for fault rupture hazards at the site, exploratory trenches were excavated at the site to determine any evidence of past displacement that would indicate a potential for future rupture hazards. Approximately 1,300 linear feet of exploratory trenches were advanced at the site,

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	and no evidence of past displacement was observed (Appendix 3.4B). As a result, the report concluded that there was a low likelihood that proposed improvements would be damaged by surface ground rupture due to tectonic faulting within the lifetime of the project (Appendix 3.4B). The project's site-specific geotechnical investigation determined that site conditions, including underlying soil characteristics and the depth to groundwater, indicated a potential for liquefaction. However, ground improvement measures would be incorporated into the proposed construction design and consistent with current County Building Code requirements. The proposed project would be constructed in accordance with the County Building Code, including current seismic design specifications, current CBC standards, and other regulatory requirements, which would reduce the potential for risks related to seismic ground failure. See Section 3.4 for more details.
Policy 6.1.4 Site Assessment or Investigation Regarding Liquefaction Hazard. Require site-specific hazards assessment and/or investigation by a registered geologist and/or civil engineer of all development proposals in areas designated as having a moderate, high or very high liquefaction potential, and require mitigations identified by reports to be incorporated into project designs in order to meet building codes.	**Not applicable**. The project site BESS facility is primarily located within an area designated as "liquefaction hazard D – Low." Only a 100- to 200-foot-wide strip of the site where no development is proposed is mapped by the County as "liquefaction hazard B – High."
Policy 6.1.5 Location of New Development Away From Potentially Hazardous Areas. Require the location and/or clustering of development away from potentially hazardous areas where feasible, in order to avoid or minimize exposure to hazards. Review, revise, and/or condition project development permits as warranted, based on the recommendations of the site's Hazard Assessment or other technical reports.	**Applicable and consistent.** See the following opt-in application sections for discussions related to hazardous areas: ▪ Section 3.4 ▪ Section 3.5 ▪ Section 3.9 ▪ Section 3.17

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy 6.1.6 Siting of New Water Supply Reservoirs and Small Water Retention Facilities. Require a full engineering geologic investigation prior to the construction of new water supply reservoirs, and if an unmitigable hazard exists, deny the proposed reservoir. Require smaller water retention facilities to be sited and engineered in a manner that will avoid or mitigate potential hazards that could arise from failure of the facilities, especially to habitable structures and public and private access roads.	**Not applicable.** The project is not a water reservoir or small water retention facility.
Policy 6.1.7 Dam Safety Act. New dams shall be constructed according to high seismic design standards of the Dam Safety Act and as specified by structural engineering studies. Smaller reservoirs will be reviewed for potential seismic hazards as a part of the environmental review and/or building/grading permit review processes.	**Not applicable.** The project is not a water reservoir or dam.
Policy 6.1.8 Design Standards for New Public Facilities. Require all new public facilities and critical structures to be designed to withstand the expected ground shaking during the design earthquake on the San Andreas Fault, as well as projected hazards due to climate change and sea level rise.	**Not applicable.** The project is not a public facility or critical structure. The project would be designed to applicable seismic standards to withstand expected ground shaking and projected hazards due to climate change and sea level rise.
Policy 6.1.9 Recordation of Notice of Geologic Hazards, Acceptance of Risk, Liability Release, and Indemnification. As a condition of development approval and/or prior to the issuance of a building/grading permit for development/development activities and new and substantially improved structures in geologic hazard areas, require the owner of a parcel in an area of potential geologic hazards to record on the property/title deed, with the County Recorder, a Notice of Geologic Hazards, Acceptance of Risk, Liability Release, and Indemnification in a form approved by the County. The Notice shall include information about the nature of the hazard(s) as determined by the geologic and/or geotechnical investigation, provide that the current and all future owners and successors in interest accept the risks to people and property, and includes a release of liability of and waiver of claims against the County of Santa Cruz for any damages or injury in connection with the permitted development.	**Not applicable**. The project site is not located in a geologic hazard zone.
Policy 6.1.10 Siting, Design and Density Review of Proposed Development for Acceptable Risk Levels. Approve the final density and design of a development or building/grading proposal, and location of proposed development on a site, only as consistent with the recommendations of the technical reports. Deny the location or design of the proposed development if it is found that the hazards on the site cannot be mitigated to within acceptable risk levels for the nature of the development, as established by industry standards and as evidenced by property owner willingness to record on title a Notice of Geologic Hazards, Acceptance of Risk, and Liability Release.	**Applicable and consistent**. The northeastern boundary of the project site just overlaps with the Alquist–Priolo Fault Zone for the Zayante-Vergeles Fault. As a result, a fault hazard investigation was conducted for the project site even though no structures intended for human occupancy are proposed at the site. To evaluate the potential for fault rupture hazards at the site, exploratory trenches were excavated at the site

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	to determine any evidence of past displacement that would indicate a potential for future rupture hazards. Approximately 1,300 linear feet of exploratory trenches were advanced at the site, and no evidence of past displacement was observed (Appendix 3.4B). As a result, the report concluded that there was a low likelihood that proposed improvements would be damaged by surface ground rupture due to tectonic faulting within the lifetime of the project (Appendix 3.4B). The project's site-specific geotechnical investigation determined that site conditions, including underlying soil characteristics and the depth to groundwater, indicated a potential for liquefaction. However, ground improvement measures would be incorporated into the proposed construction design and consistent with current County Building Code requirements. The proposed project would be constructed in accordance with the County Building Code, including current seismic design specifications, current CBC standards, and other regulatory requirements, which would reduce the potential for risks related to seismic ground failure. See Section 3.4 for more details.
Policy 6.1.11 Setbacks from Faults. Exclude from density calculations for land divisions, land within 50 feet of the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. In addition, all new habitable structures on existing lots of record shall be set back a minimum of fifty (50) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. This setback may be reduced to a minimum of twenty-five (25) feet based upon paleoseismic studies that include observation trenches. Reduction of the setback may only occur when both the consulting registered geologist preparing the study and the County Geologist observe the trench and concur that the reduction is appropriate. Critical structures and facilities shall be set back a minimum of one hundred (100) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault traces.	**Not applicable**. The project does not involve a land division, new habitable structures, or critical structures and facilities that would require setbacks from faults. A geologic investigation was completed in accordance with County standards and identified no indication of tectonic faulting, no offset or truncation of units, no soil mixing or colluvial wedges, no clay partings or shearing, and no alignment of gravels.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy 6.1.12 Minimum Parcel Size in Fault Zones. Outside the Urban Services Line and Rural Services Line, require a minimum parcel of 20 gross acres for the creation of new parcels within state and County designated seismic review zones if proposed building sites lie within the fault zone. Require a minimum parcel of 10 gross acres for the creation of new parcels within the portions of the County designated seismic review zones that are not part of a State Alquist-Priolo Earthquake Fault Zone, and which lie outside the Urban and Rural Services Lines and Coastal Zone, if 25% or more of the parcel perimeter is bounded by parcels 1-acre or less in size. Inside the Urban Services Line and Rural Services Line, allow density consistent with the General Plan and LCP Land Use designation if all structures are to be set back at least 50 feet from fault traces and meet all other conditions of technical reports and of applicable provisions of the County Code.	**Not applicable**. The project does not propose the creation of new parcels within state and County designated seismic review zones.
Policy 6.3.1 Geologic Hazards Assessments, Soils/Geotechnical Report or Geologic Report for Development on and Near Slopes. Require a geologic hazards assessment, soils/geotechnical report or geologic report for proposed development, including grading and building permits, that is potentially affected by slope instability hazards that exist on or near the site, regardless of the slope gradient on which the development itself is proposed. Such assessment or reports may be prepared by County staff under supervision of the County Geologist, or by a registered geologist or civil engineer, as required by the County and at the applicant's choice and expense. Any Geologic Hazards Assessment, Soils/ Geotechnical Report or Geologic Report must be accepted by the County Geologist in order to use its findings and/or incorporate its mitigations into a proposed development, grading or building project.	**Not applicable**. The project site is not located on or near a slope potentially affected by slope instability hazards.
Policy 6.3.2 Engineering Geology Report or Soils/Geotechnical Report. Require an engineering geology report by a registered geologist and/or a soils/geotechnical engineering report prepared by a qualified professional when the hazard assessment identifies potentially unsafe geologic conditions in an area of proposed development.	**Applicable and consistent.** A geotechnical engineering report has been prepared for the project. See Section 3.4 for more information.
Policy 6.3.3 Conditions and Design Specifications for Development, Building, and Grading Permits. Condition development permits and ensure design/mitigation specifications have been incorporated into building and grading plans based on the recommendations of the Hazard assessment and other technical reports.	**Applicable and consistent.** Building and grading permits would be obtained prior to project construction.
Policy 6.3.4 Mitigation of Geologic Hazards and Density, Design and Location Considerations. Deny the location of a proposed development or permit for a grading or building project if it is found that geologic hazards cannot be mitigated to within acceptable risk levels for the nature of the proposed project; and approve development proposals or permits only if the project's density, design, and location reflects consideration of the degree of hazard on the site, as determined by technical information.	**Applicable and consistent**. Geologic hazards on site would be mitigated within acceptable risk levels for the nature of the proposed project. The northeastern boundary of the project site just overlaps with the Alquist–Priolo Fault Zone for the Zayante-Vergeles Fault. As a result, a fault hazard investigation was conducted for the

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	project site even though no structures intended for human occupancy are proposed at the site. To evaluate the potential for fault rupture hazards at the site, exploratory trenches were excavated at the site to determine any evidence of past displacement that would indicate a potential for future rupture hazards. Approximately 1,300 linear feet of exploratory trenches were advanced at the site, and no evidence of past displacement was observed (Appendix 3.4B). As a result, the report concluded that there was a low likelihood that proposed improvements would be damaged by surface ground rupture due to tectonic faulting within the lifetime of the project (Appendix 3.4B). The project's site-specific geotechnical investigation determined that site conditions, including underlying soil characteristics and the depth to groundwater, indicated a potential for liquefaction. However, ground improvement measures would be incorporated into the proposed construction design and consistent with current County Building Code requirements. The proposed project would be constructed in accordance with the County Building Code, including current seismic design specifications, current CBC standards, and other regulatory requirements, which would reduce the potential for risks related to seismic ground failure. See Section 3.4 for more details.
Policy 6.3.5 Slope Considerations for Land Division Calculations. Exclude land with slopes exceeding 30 percent in urban areas and 50 percent in rural areas and land with recent or active landslides from density calculations for land divisions.	**Not applicable**. The project site is not located on or near a slope potentially affected by slope instability hazards.
Policy 6.3.6 Location of Structures and Drainage Considerations in Unstable Areas. Require location and/or clustering of structures away from potentially unstable slopes whenever a feasible building	**Not applicable.** The project site is not located within a landslide hazard zone as designated by

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
site exists away from the unstable areas. Require drainage plans that direct runoff and drainage away from unstable slopes.	the County. See Section 3.4 and Section 3.15 for more details.
Policy 6.3.7 Location of Septic Leachfields. Prohibit the location of septic leachfields in areas subject to landsliding, unless investigation by a registered geologist and soils engineer demonstrates that such placement will not adversely affect slope stability.	**Not applicable**. The project does not include septic leachfields.
Policy 6.3.8 Recordation of Notice of Geologic Hazards, Acceptance of Risk, Liability Release, and Indemnification. As a condition of development approval and/or prior to the issuance of a building/grading permit for development/development activities and new and substantially improved structures in geologic and/or coastal hazard areas, require the owner of a parcel in an area of potential geologic hazards to record on property title/deed, with the County Recorder, a Notice of Geologic Hazards, Acceptance of Risk, Liability Release, and Indemnification in a form approved by the County. The Notice shall include information about the nature of the hazard(s) as determined by the geologic and/or geotechnical investigation, provides that the current and all future owners and successors in interest accept the risks to people and property, and includes a release of liability of and waiver of claims against the County of Santa Cruz for damages or injury in connection with the approved development.	**Applicable and consistent**. The northeastern boundary of the project site just overlaps with the Alquist–Priolo Fault Zone for the Zayante-Vergeles Fault. As a result, a fault hazard investigation was conducted for the project site even though no structures intended for human occupancy are proposed at the site. To evaluate the potential for fault rupture hazards at the site, exploratory trenches were excavated at the site to determine any evidence of past displacement that would indicate a potential for future rupture hazards. Approximately 1,300 linear feet of exploratory trenches were advanced at the site, and no evidence of past displacement was observed (Appendix 3.4B). As a result, the report concluded that there was a low likelihood that proposed improvements would be damaged by surface ground rupture due to tectonic faulting within the lifetime of the project (Appendix 3.4B). The project's site-specific geotechnical investigation determined that site conditions, including underlying soil characteristics and the depth to groundwater, indicated a potential for liquefaction. However, ground improvement measures would be incorporated into the proposed construction design and consistent with current County Building Code requirements. The proposed project would be constructed in accordance with the County Building Code, including current seismic design specifications,

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	current CBC standards, and other regulatory requirements, which would reduce the potential for risks related to seismic ground failure. See Section 3.4 for more details.
Policy PPF-1.1.3 Residential Development in Public Facility/Institutional Designated Areas. Permit new residential development or increases in intensity of use for existing residential uses only if determined to be ancillary to the existing Public Facility use. Allow building intensities as indicated in Table 7-2: equivalent to Urban Medium Density Residential (R-UM) within the Urban Services Line (USL)/Rural Services Line (RSL), and equivalent to Rural Residential Density(R-R) outside the USL/RSL, as determined by application of the Rural Density Matrix. Special allowances for affordable housing and school employee housing are detailed in Policy PPF-1.1.4 and Policy PPF-1.1.5, respectively.	**Not applicable.** The project is not a residential development and is not within a Public Facility/Institutional designated area.
Policy PPF-1.1.4 Affordable Housing. Recognizing that affordable housing serves a public purpose, allow 100% affordable rental housing projects as an ancillary or primary public/quasi-public discretionary use on P designated sites within the USL/RSL. The housing units must be affordable to lower-income households as defined in Title 25 of the California Code of Regulations. Allow building intensity up to Urban High Density Residential (R-UH) as shown in Table 7-2 of the Parks, Recreation + Public Facilities Element of the GP. Within the RSL, affordable housing is exempt from Policy BE-2.2.6 (Residential Land Use Designations and Density within the RSL).	**Not applicable.** The project is not a residential development. The project would not interfere with this policy.
Policy PPF-1.1.5 School Employee Housing. Recognizing that housing that is affordable to teachers and other school employees is essential to support education, yet is often in short supply in the County, allow multi-family rental housing for school employee households as an ancillary or primary public/quasi-public discretionary use on P designated sites that are owned by a private school or a public school district. Development of school employee housing must be consistent with the environmental carrying capacity of the parcel and adequate services and appropriate infrastructure must be available or provided concurrent with development. Allow building intensity up to Urban High Density Residential (R-UH) as shown in Table 7-2 of the Parks, Recreation + Public Facilities Element of the GP. Additionally, school employee rental housing is not subject to provisions in the General Plan that limit residential density or require a minimum amount of land area per dwelling, including the Rural Density Matrix.	**Not applicable.** The project is not a residential development. The project would not interfere with this policy.
Policy PPF-1.1.6 Public Facilities in Other Land Use Designations. Allow public and quasi-public facility uses in other land use designations where consistent with the policies specified for that land use.	**Not applicable.** The County considers the project use to be an “Energy Facility,” which is not an allowable use under the CA zoning designation. However, on September 19, 2025, SB 254 was enacted, which, among other changes,

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	eliminated the requirement that CEC determine conformance with land use and zoning designations and make findings for projects reviewed under the AB 205 process.
Policy PPF-1.1.7 Cooperative Planning of Public Facility/Institutional Uses. Encourage cooperative planning and Master Plan review between appropriate review agencies, such as the Regional Water Quality Control Board, Health Services Agency, the Monterey Bay Air Resources District, etc., to assure adequate assessment of public facility needs.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-1.1.8 Environmental Review of Major Public Facility/Institutional Developments. Encourage the development of master Environmental Impact Reports for major multi-phased public facility developments to guide and facilitate planning and permit processing for such projects.	**Not applicable.** The project is not a major multi-phased public facility development.
Policy PPF-1.2.1 (LCP) Parks, Recreation, and Open Space Uses (O-R). The O-R designation shall characterize land intended for outdoor recreation and the provision of open space for the purpose of facilitating healthy communities and the community's enjoyment of the natural setting of the County, including commercial recreation, County, state and federal parks, campgrounds, recreational vehicle parks, preserves and biotic research stations. O-R is appropriate for: ▪ Active recreation uses, such as golf courses, stables, swimming pools, sports courts, athletic fields, camping, picnicking areas, community centers, outdoor entertainment and historically themed parks that are compatible with rural and mountain settings and that provide expanded recreation opportunities to the public, provided that they are compatible with environmental resources. ▪ Low-intensity passive uses that are compatible with the scenic values and natural setting of the County for open space lands.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-1.2.2 (LCP) Intensity of Use. Recognize an intensity of use as shown in Table 7-1 for existing public and private parks and recreational uses. The building intensities shown reflect the range of low and high intensity recreational uses allowed in the O-R designation. Permit new development or increases in intensity of uses where consistent with infrastructure constraints, scenic, natural and agricultural resource protection.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-1.2.3 (LCP) Proposed Parks and Recreation Overlay Designations. Designate specific parcels proposed to be acquired in whole or in part for future public park sites as well as general areas in the County where parkland acquisition is needed for future park provision.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-1.2.4 (LCP) Complementary Overnight Visitor Accommodations. Allow development of appurtenant overnight visitor accommodations at appropriate commercial recreation facilities where such use is consistent with maintaining the recreation use and with other General Plan and LCP	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Built Environment Element policies. Permit new development or increases in intensity of uses at the building intensities shown in Table 7-3 [of the Parks, Recreation + Public Facilities Element of the GP].	
Policy PPF-1.2.5 (LCP) Environmental Considerations for Commercial Recreational Development Proposals. Regulate commercial recreational development through development permit controls to evaluate each development proposal on the basis of its particular site requirements, environmental impact, and appropriateness of the location for the proposed use. Encourage recreational uses in urban areas.	**Not applicable.** The project is not a commercial recreational development.
Policy PPF-1.3.1 (LCP) Rural and Mountain Residential Locations. Allow lower intensity organized camps and conference centers with recreational and education facilities to locate in Rural and Mountain residential areas, consistent with infrastructure capacity, natural and visual resource protection, protection of agriculture, and other LCP policies.	**Not applicable.** The project is not an organized camp or conference center.
Policy PPF-1.3.2 (LCP) Building Intensity and Development of Organized Camps and Conference Centers. Administer uniform densities for all organized camps and conference centers outside of the Visitor Accommodations (C-V) land use designation by applying residential intensity standards as shown in Table 7-3. This may differ from the building intensity allowed by the underlying land use designation indicated on the General Plan and Local Coastal Program Land Use Maps; however, it is intended to reflect the specialized service requirements and lesser development impacts of these facilities. If the use of the property is changed from organized camp or conference center, any other residential uses shall conform to the building intensity of the underlying land use shown on the General Plan and Local Coastal Program Land Use Maps.	**Not applicable.** The project is not an organized camp or conference center.
Policy PPF-1.3.3 Master and Resource Management Plan. Require each development proposal for organized camps and conference centers to include a master development plan and resource management program for the property involved.	**Not applicable.** The project is not an organized camp or conference center.
Policy PPF-2.1.1 Local Recreation Opportunities. Provide a variety of local recreational facilities, which serve all segments of the population with priority given to facilities that can be utilized for youth recreation programs.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.1.2 (EJ) (LCP) Access to Recreation Facilities. Provide physical access to all recreation facilities through provision of public transportation, trail system development, protection of prescriptive rights to beach and coastal access trails, and recreation programs.	**Not applicable.** The project site is not zoned for recreation or open space. The project would not interfere with this policy.
Policy PPF-2.1.3 (LCP) Park Maintenance and Accessibility. Maintain and update parks as well as coastal access to be safe, clean, and accessible facilities using consistent standards in order to encourage users of all abilities, ages, backgrounds and financial resources to use park facilities and programs.	**Not applicable.** The project site does not include an existing recreational facility, and the project does not include the construction of a recreational facility.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy PPF-2.1.4 (LCP) Park Financing. Include park site acquisition and development in the Capital Improvements Program Where appropriate, use private concessionaires at County facilities to offset maintenance costs.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.1.5 Sustained Park Funding Source. Develop dedicated and sustained funding source for park acquisition, development, operation, maintenance, and enhanced park and recreational services.	**Not applicable.** The project site is not zoned for recreation or open space. The project would not interfere with this policy.
Policy PPF-2.1.6 Sharing Parks and Recreation Facilities. Recognize the use of existing recreational facilities owned and/or operated by other agencies including the cities, recreation districts, and the school districts as serving the recreational needs of the community and partially meeting standards for community parks acreage. Cooperate in funding and sharing recreation facilities, and seek to maximize the availability of all such facilities for general public use commensurate with the needs and priorities of the other agencies through joint powers agreements addressing development, maintenance and operating programs, as allowed by budget constraints.	**Not applicable.** The project site does not include an existing recreational facility, and the project does not include the construction of a recreational facility.
Policy PPF-2.1.7 (EJ) Priorities for Park Development. Acquire, develop, and improve County parks according to the following priorities: 1. Creation of and investment in parks and open space in unincorporated areas that are underserved by parks. 2. Proposed parks that lie in the unincorporated area of the County and are outside the established sphere of influence of any incorporated city. 3. Proposed parks that lie in the unincorporated area of the County, but are within the sphere of influence of an incorporated city.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.1.8 Technical Assistance. Provide advice and technical assistance, to the degree possible, to independent recreation and park districts in their efforts to acquire, develop, maintain, and/or operate parks in the unincorporated areas of the County, within the boundaries of the special districts.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.1.9 Joint Park Development with School Districts. Within the priority system established above, cooperate and coordinate with the area school districts to the maximum degree possible, in acquiring and/or developing new, joint school/park facilities, where sufficient property is available for both purposes.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.1.10 Private Local Parks. Encourage continued use of private recreation facilities that have traditionally served local communities.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.1.11 Parks Strategic Plan. Reference the Parks Strategic Plan as a guiding document for parks projects, programs, and program development.	**Not applicable.** The project does not include a park project, program, or program document.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy PPF-2.1.12 Residential Open Space. Ensure that new development provides adequate public and private open space and recreational facilities to serve new residents.	**Not applicable.** The project is not a residential development.
Policy PPF-2.2.1 (LCP) Neighborhood Park Standard Acreage. Provide neighborhood parks, at a standard of three net usable acres per 1000 population, consisting of conveniently located, easily accessible parks serving local residential neighborhoods in the urban portion of the County. A park standard of four to six acres is considered adequate for a neighborhood park. Or, when a neighborhood park is combined with school grounds, two to three acres is sufficient. It should be recognized that park acreage standards are set as long-term goals rather than set objectives to be met.	**Not applicable.** The project site is not zoned for recreation or open space. The project would not interfere with this policy.
Policy PPF-2.2.2 (LCP) Neighborhood Park Locations. Locate neighborhood parks based on the general standard that most urban residences should be within one-half mile of a neighborhood park serving a population of 1,500 to 2,000 people.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.2.3 Mini-Park Sites. Consider the development of mini-park sites as an alternative to meet minimum park acreage requirements in the event that designated neighborhood park sites cannot be acquired.	**Not applicable.** Any undeveloped space on the project site would be dedicated to a proposed conservation easement.
Policy PPF-2.2.4 Neighborhood Park Siting Criteria. Provide neighborhood park and playground facilities developed, where possible, in conjunction with residential development or as improvements to school grounds.	**Not applicable.** The project is not a residential development.
Policy PPF-2.2.5 Community Parks. Provide community recreation facilities as a standard of 2-3 net usable acres per 1,000 population consisting of 10-25 acres of land, including parks, cultural centers, and community complexes, in central locations in the urban areas, which will serve as focuses for community social, organizational, cultural and/or recreational activities. Recognize that park acreage standards are set as long-term goals rather than set objectives.	**Not applicable.** The project site is not zoned for recreation or open space. The project would not interfere with this policy.
Policy PPF-2.2.6 (LCP) Community Park Locations. Locate community parks using a general distribution standard of one park for every 10,000 people located within three to five miles or 15 minutes of most urban concentrations. Facilities could include a swimming pool, gymnasium, sports courts, athletic and multi-use fields, picnicking and equestrian areas, restrooms, a building for community meetings and recreational programs, and neighborhood-serving facilities where appropriate.	**Not applicable.** The project site is not zoned for recreation or open space. The project would not interfere with this policy.
Policy PPF-2.2.7 (LCP) Priority for Community Parks. Assign high priority to the acquisition and development of Mid-County and South County community parks for local residents, including large athletic complexes. Recognize that acquisition of large acreage sites will be difficult.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.2.8 (LCP) Community Park Siting Criteria. Select community park sites based on the following criteria: accessibility, land availability, geographic relationship to the particular community,	**Not applicable.** The project would not interfere with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
attractive natural features on the site, ease of development, potential for natural resource conservation, and association with existing or proposed roads or trails and other city or state parks, and/or open space and beaches.	
Policy PPF-2.2.9 Establishing and Maintaining Community Centers. Establish and maintain community centers to include facilities for meeting halls, craft centers, day care centers, recreation facilities, senior activity centers, as well as educational and cultural programs, as a small-scale alternative to the community complex.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.2.10 Rural Parks. Provide recreational facilities at a standard of 5-6 net usable acres per 1,000 persons consisting of varying sizes depending on the recreational opportunities and resources available: includes parks, cultural centers, and community complexes, in the unincorporated rural areas of the County. These facilities serve as the focus for community, social, organization, cultural, and/or recreational activities for extended rural areas.	**Not applicable.** The project site is not zoned for recreation or open space. The project would not interfere with this policy.
Policy PPF-2.2.11 (LCP) Rural Park Standards. Establish local rural parks in the rural portions of the County, typically servicing an area within a four-to-five mile radius. Facilities could include open turf, sport fields, sports courts, basketball courts, picnic areas, parking, restrooms, tot lots, equestrian facilities, and a building for community meetings and recreational programs.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.2.12 (LCP) Rural Park Siting Criteria. Select rural park sites based on the following criteria: adjacent or close to existing complementary facilities such as schools, nature reserves, ball fields or playgrounds; accessibility, lands availability, geographical relationship to a particular community, attractive natural features on site, ease of development, potential for natural resource conservation, and association with existing or proposed roads or trails. New facilities should supplement existing facilities already in a planning area.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.2.13 (LCP) Regional Parks. Establish a system of regional parks that encompasses the most attractive and unique recreation features, provides a maximum variety of recreational environments, focuses on activities and natural features, and is not included in State Parks.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.2.14 (LCP) Regional Park Siting and Standards. Select park sites based on the unique resource opportunity and the suitability of the environmental characteristics for recreational use, rather than their relationship to population centers or acreage standards. Typical regional parks serve the entire County and are in the range of 50-500 acres, but larger or smaller sites based on the specific recreational opportunity and the potential for natural resource conservation should be considered.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.2.15 Uses Within Regional Parks. Provide facilities that include either resource-oriented improvements, such as trails, interpretive centers, streamside picnic areas, swimming facilities, and boat launching areas; or, in appropriate areas, high intensity facilities , such as equestrian centers,	**Not applicable.** The project site is not zoned for recreation or open space. The project would not interfere with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
sports fields, game courts, restrooms, and camping units. Where appropriate, provide neighborhood and community recreation facilities to serve the local residents.	
Policy PPF-2.2.16 Recreation Within Converted Quarries and Landfills. Develop abandoned quarries and closed sanitary landfill sites for recreational uses where appropriate.	**Not applicable.** The project site is not an abandoned quarry or closed sanitary landfill site. The project would not interfere with this policy.
Policy PPF-2.2.17 Recreation Within Watershed Reserves. Provide public opportunities for wilderness recreation experiences by allowing public access to major publicly owned domestic watershed reserves, where such use can be accomplished without harm to the watershed function of the areas. Develop trail systems, interpretive signing, and camping sites where feasible.	**Not applicable.** The project site is not a watershed reserve. The project would not interfere with this policy.
Policy PPF-2.2.18 Access to Major Inland Water Bodies. Provide for public access around the margins of all major natural inland water bodies sufficient to allow the development, where appropriate, of a safe equestrian, walking, and/or bicycle trail without major disturbance to the shoreline.	**Not applicable.** The project site is not located near a major inland water body. The project would not interfere with this policy.
Policy PPF-2.2.19 (LCP) Beaches as Parks. Support the continued availability and use of beach areas to serve as neighborhood and community recreational facilities for County residents, but do not credit beach areas toward satisfying neighborhood park acreage goals due to the seasonal availability of the resource, and the extensive regional demands placed on this limited coastal area. Recognize that the use of beach areas provide recreational opportunities and improve access where appropriate.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.3.1 Partnership. Partner with agencies, organizations, and landowners to provide an integrated regional approach to natural resource management.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.3.2 Cultural and Historical Resources. Protect cultural and historical resources throughout the parks system.	**Not applicable.** The project site is not a park within the parks system. The project would not interfere with this policy.
Policy PPF-2.3.3 Interpretive Programs. Provide interpretive programs and opportunities to increase awareness and appreciation of natural, cultural, and historical resources.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.3.4 Volunteering. Provide opportunities for volunteers in parks, facilities, and recreational programs.	**Not applicable.** The project site is not a park, recreational facility, or recreational program. The project would not interfere with this policy.
Policy PPF-2.4.1 Parks Facilities Maintenance. Maintain and update parks facilities and amenities to a consistent standard.	**Not applicable.** The project site does not include an existing recreational facility, and the project does not include the construction of a recreational facility.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy PPF-2.4.2 Accessibility. Make parks accessible to the populations most in need by reducing physical, economic, language, and cultural barriers to accessibility of parks facilities; providing the types of park amenities and programs that are most appropriate for the populations that they serve, and working to improve walking and bicycling routes to parks.	**Not applicable.** The project site does not include an existing park or park facility and does not include the construction of a park or park facility. The project would not interfere with this policy.
Policy PPF-2.4.3 Safe and Clean Parks. Ensure safety and cleanliness of parks facilities.	**Not applicable.** The project site does not include an existing park or park facility and does not include the construction of a park or park facility. The project would not interfere with this policy.
Policy PPF-2.4.4 Park Amenities. Upgrade parks and add park facilities, with priority to underserved areas.	**Not applicable.** The project site does not include an existing park or park facility and does not include the construction of a park or park facility. The project would not interfere with this policy.
Policy PPF-2.5.1 Open Space and Trail Easements. Encourage park agencies to acquire open space and trail easements that further the regional trail and open space networks in the County.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-2.5.2 (LCP) Development Priorities. Encourage partnering with park agencies to prioritize acquisitions and projects that are consistent with the needs of the regional park system.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.5.3 (LCP) Maintenance and Management Programs. Encourage provision of adequate maintenance and management programs concurrent with all partnering park development projects.	**Not applicable.** The project is not a park development.
Policy PPF-2.5.4 Working Lands. Support public and private land owners and partnerships in use of working lands, such as the Soquel Demonstration Forest, for research, education, recreation and demonstration of innovative timber harvesting, forestry techniques, and rangeland management while at the same time conserving and protecting the wildlife, fisheries, vegetation, soil, watershed and aesthetic values.	**Not applicable**. The project is not on working lands.
Policy PPF-2.5.5 (LCP) Day Use Facilities Enhancement. Where appropriate, request the provision of additional day use facilities at publicly owned beaches and bluff tops such as picnicking, viewpoints, restrooms, parking areas, and other day use facilities.	**Not applicable.** The project site is not a publicly owned beach or bluff top.
Policy PPF-2.5.6 (LCP) Tourist Commercial Concession. Encourage the provision of tourist commercial concessions at appropriate destinations.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.6.1 (LCP) Shoreline Access. Provide a system of shoreline access to the coast with adequate improvements to serve the general public and the coastal neighborhoods, which is consistent with the California Coastal Act, meets public safety needs, protects natural resource areas from overuse, protects public rights and the rights of private property owners, minimizes conflicts with adjacent land uses, and does not adversely affect agriculture. Maintain or provide access, including visual access, to every beach to which a granted access exists or to which the	**Not applicable.** The project site does not have shoreline access.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
public has acquired a right of access through use, as established through judicial determination of prescriptive rights, and acquisition through appropriate legal proceedings, in order to ensure one access to every pocket beach and convenient, well distributed access to long sandy beaches.	
Policy PPF-2.6.2 (LCP) Coastal Zone Acquisition Priorities. Set each of the following as acquisition objectives in the Coastal Zone: (1) Purchase for consolidation of existing holdings. (2) Purchase to protect threatened fragile resources. (3) Purchase to provide additional sites for high demand facilities including heavily used beaches where an excessive burden of maintenance and supervision is placed on private owners.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.6.3 (LCP) Recreational Boating. Encourage increased recreational boating opportunities for County residents by cooperating with the Port District and the cities of Capitola and Santa Cruz to provide dry storage facilities for small boats, and other uses and facilities supportive of the Port District's mission.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.6.4 (LCP) Provision of Open Water Moorings. Request the regulating agencies such as the U.S. Coast Guard and Army Corps of Engineers to permit open water moorings off suitable locations along the County's coastline taking into consideration the following factors: public safety concerns; disturbance to the marine environment; individual and cumulative visual impacts; other communities' experiences with open water moorings; and interference with other water-related uses.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.6.5 (LCP) Coastal Access Maintenance Responsibility and Liability. Open coastal access ways only after a public agency or private association agrees to installation and maintenance of directional signage and to accept responsibility for maintenance and liability of the access way, including regular garbage collection and recycling at the trailhead, along the trail, and at the beach destination. Notwithstanding the foregoing, it is the policy of Santa Cruz County to assist other public agencies or private non-profit groups to accept offers to dedicate coastal access, and to complete, open and maintain coastal access ways between the first public road and the shoreline as soon as it is feasible.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.6.6 (LCP) Access to Environmentally Sensitive Habitats. Obtain managed and controlled public access to environmentally sensitive habitats through master plans, grants, dedications of easements, or other means, including as a condition of new development approval, subject to Policy PPF-2.7.2: Trail Easements.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.6.7 (LCP) Shoreline Management Plans and Master Permits. To avoid having to apply for or issue multiple permits and to address sometimes competing policy guidance, as part of future Shoreline Management Plans and Master Permits, address issues concerning beach access, recreation, and wildlife preservation. Measures might include temporary closures for snowy plovers,	**Not applicable.** The project would not interfere with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
limits on beach grooming, seasonal restrictions on sandbar breaching, and rules for various recreational events.	
Policy PPF-2.6.8 (LCP) Off-Road Vehicle Use. Prohibit off-road vehicle use of shoreline accesses and beaches.	**Not applicable.** The project site does not have shoreline access or beaches.
Policy PPF-2.6.9 (EJ) (LCP) South County Beach Access. Identify and pursue opportunities to increase beach access in South County.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.7.1 (LCP) Trails Master Plan. Support the development of a regional Trails Master Plan that provides recreational opportunities in a variety of natural settings, supports implementation of the Monterey Bay Sanctuary Scenic Trail and California Coastal Trail, links County park facilities, connects to trail systems maintained by other agencies within the County and connects to trail systems in neighboring counties.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.7.2 (LCP) Trail Easements. Obtain trail easements by encouraging private donation of land, by public purchase, or by the dedication of trail easements, in full compliance with California Government Code Section 65909(a) for development permits and Government Code Sections 66475.4(b) and 66478.1 et seq. for land divisions, provided that state and federal constitutional rights of landowners are not violated.	**Not applicable.** The project would not interfere with this policy.
PPF-2.7.3 (LCP) Use of Existing Easements. Seek to use existing publicly owned lands where possible to implement the trail system, subject to Policy PPF-2.7.2: Trail Easements.	**Not applicable.** The project is not on existing publicly owned lands and would not implement the trail system.
PPF-2.7.4 (LCP) Greenways and Other Linear Trail Corridors. Seek opportunities to develop greenways as defined in Civil Code Section 816.52 and other trail corridors along linear features, such as creeks, rivers, levees for increased recreational opportunities.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.7.5 Coordinate with State and Local Agencies. Cooperate and coordinate with State Parks, local cities, and other partnering entities to develop trails with appropriate and consistent management and limitations for trail uses.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.7.6 Trail Funding and Construction. Seek trail funding for construction of trails as specified in a Trails Master Plan or community, town, and area plans.	**Not applicable.** The project would not interfere with this policy.
PPF-2.7.7 (LCP) Environmental Trail Design. Locate, design and develop trails so as to appropriately manage the impact on the habitats, resources, and buffers through which they travel.	**Not applicable.** The project would not design or develop trails.
PPF-2.7.8 (LCP) Accessible Trails. Design trails to be as accessible as possible to persons of all ages and abilities including people with disabilities, where resources can be protected, and to the extent feasible.	**Not applicable.** The project would not design or develop trails.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
PPF-2.7.9 (LCP) Environmentally Damaging Trails. Plan and maintain trail alignments and access to minimize deterioration of sensitive habitat and to address and avoid serious erosion problems.	**Not applicable.** The project would not design or develop trails.
PPF-2.7.10 (LCP) Unsafe Trails. Discourage public use of access trails that are hazardous because safety improvements have not been provided or cannot be built due to physical limitations.	**Not applicable.** The project would not design or develop trails.
Policy PPF-2.8.1 Funding for the Arts. Encourage the funding of arts programs and facilities through public/private partnerships and private non-profit art agencies.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.8.2 Performing Arts Facilities. Support performance venues at appropriate locations.	**Not applicable.** The project site is not a performance venue. The project would not interfere with this policy.
Policy PPF-2.8.3 (EJ) Making the Arts Accessible. Broaden access for diverse groups of the community to the performing and visual arts, including the disabled and other traditionally underserved populations. Promote public awareness of the value of the arts and culture; recognize the arts as a fundamental part of education.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-2.8.4 Economic Value of the Arts. Recognize the potential economic value of the arts industry and promote the County's cultural activities as an important economic resource. Promote Santa Cruz County as an arts destination, expanding inclusion of information on the arts and on arts activities in tourism marketing and promotion.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.8.5 Integrating the Arts into Development Projects. Encourage new development to include artists as members of their design teams, or art as part of their development, as appropriate and to include murals, sculptures, and other installations into site design as a form of placemaking.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-2.8.6 Public Arts Programs. Cultivate the arts and strengthen the culture and diversity of the County through public art programs, facilities, and events.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-2.8.7 Recreational Programs and Events. Provide recreational programs and events to meet community needs.	**Not applicable.** The project site does not include an existing recreational facility, and the project does not include the construction of a recreational facility.
Policy PPF-2.8.8 Youth Programs. Support local families and youth by providing after-school and summer offerings.	**Not applicable.** The project would not interfere with this policy.
PPF-3.1.1 (LCP) Public Infrastructure (Facility and Service) Standards for New Development. Allow new development or intensification of land use only where public service levels are adequate for the land use designation or zone district, including water supply, sewage treatment, drainage and flood control, and road capacity, where adequate services will be provided concurrent with development, or where appropriate impact and in-lieu fees will be paid prior to development. New development	**Not applicable**. The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges. It would also include bioretention areas. See Section 3.15 for

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
may be allowed if only limited expansion of services is proposed in order to appropriately locate land-extensive uses along the periphery of urbanized areas and to prioritize urban infrastructure for more intensive uses that require urban services.	more information. The project would not interfere with this policy.
Policy PPF-3.1.2 Focus Public Services and Facilities Within the Urban and Rural Services Line. Utilize the USL and RSL as the basis for coordinating the development of public services and facilities among the various jurisdictions and special districts and prioritizing the County's Capital Improvement Program.	**Not applicable.** The project is not a public facility.
Policy PPF-3.1.3 Capital Improvement Program. Maintain a 5-year Capital Improvement Program to schedule and program capital expenditures.	**Not applicable.** The project would not interfere with this policy.
PPF-3.1.4 (LCP) Reservation of Public Works Capacity for Coastal Priority Uses. In the Coastal Zone, reserve capacity in existing or planned public works facilities for Coastal Priority Uses.	**Not applicable.** This project is not within the Coastal Zone.
Policy PPF-3.1.5 (EJ) Coordinated Services. Coordinate with the planning efforts of other public agencies providing education, public health and safety services, community centers, library services, justice services, flood protection, energy, and technology and communications services, as appropriate.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-3.1.6 (EJ) Equitable Public Services. Ensure the equitable provision of public amenities and infrastructure that improve the quality of life for all, including the distribution of funding resources, with priority to underserved and disadvantaged populations.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-3.1.7 Countywide Capital Improvements Program. Encourage and cooperate with the cities and special districts in the development and continued operation of a countywide Capital Improvements Program for regionally significant projects for the purpose of establishing a regional mitigation bank to offset natural resource and transportation impacts.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-3.1.8 (EJ) Community Social Support Services. Provide access to preventative and intervention services as well as food and basic support through integrated health care and social services.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-3.1.9 (EJ) Improve Customer Experience. Provide customers of County government with equitable access to efficient, effective, and culturally responsive services through clear communication and engagement, and simplified processes to improve service delivery and customer satisfaction.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-3.2.1 Mitigating Child Care Impacts from New Development. Review development proposals with respect to impacts on child care; require, where appropriate, that proposed developments provide for mitigation of the impact of the proposed development on the need for child care facilities or services, as a condition of project approval.	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy PPF-3.2.2 Mitigating School Impacts from New Development. Prior to issuance of any building permit, require a written statement confirming payment in full of all applicable developer fees and other requirements lawfully imposed by each school district in which the project is located. Prior to approval of any land division or other discretionary development permit application for a project, which would authorize additional development, consider the impact of such action on each school district in which the project is located. Require feasible mitigation measures permitted by law to reduce any significant impacts on the school system or approve the project on the basis of a statement of overriding considerations. Prior to approval of any General Plan and/or LCP amendment, rezoning, or other legislative action, which would authorize additional development to occur as a matter of land use policies, consider the impact of such action on each school district within which the land is located. Either require feasible mitigation measures to reduce any significant impacts on each school district to a level of insignificance, deny the project if such mitigation measures are infeasible, or approve the project on the basis of a statement of overriding conditions. Mitigation measures may include, by way of example only, the reduction of residential densities or the controlled phasing of residential development within attendance areas of the school district having inadequate facilities or services.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-3.2.3 Locations of New Schools. Work with school districts and the County Office of Education to plan for additional new school sites to accommodate future population needs.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-3.2.4 School Financing. Work in cooperation with school districts to provide a method for financing school facilities necessitated by new residential developments causing conditions of overcrowding.	**Not applicable.** The project is not a residential development. The project would not interfere with this policy.
Policy PPF-3.2.5 Community Use of School Facilities. Encourage broad community recreational and cultural use of school facilities by taking full advantage of the role and services of the community schools, the University of California at Santa Cruz, and Cabrillo College as training, recreational, and cultural centers.	**Not applicable.** The project is not a school facility. The project would not interfere with this policy.
Policy PPF-3.2.6 Child Care Facilities with Parks. Consider the development of child care facilities within existing and future County parks.	**Not applicable.** The project site does not include an existing park, and the project does not include the construction of a park.
Policy PPF-3.2.7 Financing Child Care. Maintain a Child Care Fee for new and expanded development to finance child care facilities and services.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-3.2.8 (EJ) Exposure to Toxins. Reduce youth exposure to hazardous materials and pollutants.	**Applicable and consistent.** The project would include PDF-HAZ-1, Soil Management Plan, to

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
	reduce exposure to hazardous materials and pollutants. See Section 3.5 for more information.
Policy PPF-3.2.9 (EJ) Health and Nutrition for Youth. Encourage and support services and programs that promote the healthy development of youth.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-3.3.1 Siting Libraries. Locate libraries within community centers, adjacent to major commercial centers, or in other areas convenient for public use.	**Not applicable.** The project site does not include the construction of a library.
Policy PPF-3.3.2 Support and Expand Libraries. Support adequate library service in all parts of the County and continue to improve and expand services.	**Not applicable.** The project site does not include the construction or expansion of a library.
Policy PPF-3.4.1 Reviewing New Development for Fire Protection. Require review of new developments, including building permits involving intensification of use on existing parcels of record, by the County Fire Marshal or local fire agency, and require adequate access, water supply, location and mitigations with respect to fire stations, Critical Fire Hazard Areas, and project design requirements in order to ensure adequate fire protection.	**Applicable and consistent.** The project would be in compliance with CBC and CFC requirements to ensure adequate fire protection.
Policy PPF-3.4.2 Development to be Consistent with Fire Hazards Policies. Allow development approvals only if adequate water supply, access, and response time for fire protection can be made available in accordance with the Fire Hazards policies found in the Public Safety Element and appropriate design and mitigation strategies are provided.	**Applicable and consistent.** The project would be in compliance with CBC and CFC requirements to ensure adequate fire protection.
Policy PPF-3.4.3 Future Fire Station Sites. Coordinate with fire departments to plan for future fire stations or improvements to existing staffing levels, stations, and equipment as well as provide ease of access in and out of all fire stations.	**Not applicable**. The project is not a fire station.
Policy PPF-3.4.4 Annexation to Scotts Valley Fire Protection District. Future development outside of the Scotts Valley Fire Protection District boundaries, but inside of its sphere of influence, should be required, as a condition of project approval, to annex into the district.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-3.4.5 21st Century Policing. Foster strong, collaborative relationships between the Sheriff's Office and the community, maintain trust between citizens and deputies, and promote effective crime prevention through the six pillars of 21st Century Policing as described in the 2016 Final Report of the Santa Cruz County Sheriff's Task Force on 21st Century Policing: ▪ Building trust and legitimacy ▪ Policy and oversight ▪ Technology and social media ▪ Community policing and crime reduction ▪ Training and education ▪ Officer wellness and safety	**Not applicable.** The project would not interfere with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy PPF-3.4.6 Maintaining Adequate Levels of Policing Services. Provide adequate levels of policing service to protect County residents and businesses.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-3.4.7 Cost Effectiveness. Support all efforts directed at providing the best level of police protection services at the least cost.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-3.4.8 Emergency Response. Work with the Office of Emergency Services to be prepared for and participate in emergency responses to local hazards and natural disasters as outlined in the Local Hazard Mitigation Plan and Emergency Management Plan.	**Not applicable**. The project would not interfere or conflict with this policy. As required by SB 38, an Emergency Response Plan would be prepared, maintained, and implemented during operations.
Policy PPF-3.4.9 Local Justice. Increase public safety through practices, programs, partnerships, and transformative opportunities that respect victims and reduce recidivism.	**Not applicable**. The project would not interfere or conflict with this policy.
PPF-4.1.1 (LCP) Linking Growth to Water Supplies. Coordinate with all water agencies and water management agencies to ensure that land use and growth management decisions are linked directly to the availability of adequate, sustainable public and private water supplies.	**Not applicable**. The project would not interfere or conflict with this policy.
PPF-4.1.2 (LCP) Written Commitments Confirming Water Service Required for Permits. Concurrent with project application, or prior to issuance of a building permit as authorized by the Planning Director, require a written commitment from the water agency that verifies the capability of the system to serve the development. Projects shall not be approved, or building permits shall not be issued, in areas that do not have a proven, adequate water supply. A written commitment is a letter from the agency guaranteeing that the required level of service for the project will be or is available, prior to the issuance of building permits, or in the case of a subdivision, prior to filing the Final Map or Parcel Map. The County decision making body shall not approve any development project unless it determines that such project has adequate water supply available.	**Applicable and consistent.** The applicant would obtain the proper written commitments from the water agency prior to the issuance of a building permit.
PPF-4.1.3 (LCP) Impacts of New Development on Water Agencies. Review all new development proposals to assess impacts on municipal water systems, County water districts, or small water systems. Require that either adequate service is available or that the proposed development provide mitigation of its impacts as a condition of project approval.	**Not applicable.** The project would be an unstaffed BESS facility, which would require minimal water for construction and operation.
PPF-4.1.4 (LCP) Improvement of Water Systems. Support water system improvement programs for storage, treatment and distribution facilities to meet necessary water supply and fire suppression requirements.	**Not applicable**. The project would not interfere or conflict with this policy.
PPF-4.1.5 (EJ) (LCP) Groundwater Sustainability. Support the completion and implementation of groundwater sustainability plans for the Pajaro Valley, Santa Margarita, and Mid-County groundwater basins to protect the long-term security of water supplies and to safeguard groundwater quality and maintain stream baseflows.	**Not applicable**. The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
PPF-4.1.6 (LCP) Water Conservation Requirements. Utilize the best available methods for water conservation in new developments. Work with all water agencies to implement demand management programs and water conservation measures. Require the use of water-saving devices such as ultra low-flow fixtures and native drought-resistant planting in new development projects to promote ongoing water conservation.	**Not applicable.** The project would be an unstaffed BESS facility, which would require minimal water for construction and operation.
PPF-4.1.7 (LCP) Water Reuse. Encourage the reuse and recycling of water where feasible and where reuse will not have a negative impact on public health or the environment, including the use of greywater systems, and recycling of irrigation water for irrigation purposes as acceptable to Environmental Health, Mosquito and Vector Control, State Department of Health Services, and Regional Water Quality Control Board.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
Policy PPF-4.2.1 (EJ) Sewer Service, within the Urban Services Line. Concurrent with project application, require a written commitment from the service district. A written commitment is a letter, with appropriate conditions, from the service district guaranteeing that the required level of service for the project will be available prior to issuance of building permits, or in the case of a subdivision, prior to filing the Final Map or Parcel Map. The County decision making body shall not approve any development project unless it determines that such project has adequate sewage treatment plant capacity.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
Policy PPF-4.2.2 Sewage Disposal Systems, within the Rural Services Line. Allow new development to occur at designated urban densities within the RSL where served by a community sewage disposal system operated by a public agency or an operator under contract to a public agency. Community sewage disposal systems should be built in such a way as to allow potential tertiary treatment and reclamation for irrigation and shall be sized to serve only the buildout densities for lands within the RSL. For areas within the RSL that do not have community sewage disposal, new development shall meet individual sewage disposal system standards and densities shall be calculated using the Rural Density Matrix until a community sewage disposal system is provided, except that school employee housing and affordable rental housing in the Public Facility Zone District and farmworker housing projects (all project types defined in SCCC 13.10) in agricultural zones are quasi-public or agricultural land uses and are not subject to the Rural Density Matrix. Such projects, if located on a site with an individual septic system, are subject to approval of the proposed septic system by the Environmental Health Division of the County's Health Services Agency.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
Policy PPF-4.2.3 Sewage Disposal Systems, Outside of Urban and Rural Service Lines. Plan for intensities of use and density of development to be limited to those levels supportable by individual	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
sewage disposal systems where public sanitary sewer systems are not available. Allow the use of community sewage disposal systems only under the following conditions: 1. To allow for the continued operation of existing systems; and 2. To allow new systems in developed areas to correct existing disposal problems where individual sewage disposal systems are not suitable; and 3. To allow new systems to serve 100% affordable rental housing projects, Employee Housing Act (EHA) projects and Affordable Rental Farmworker Housing (ARFH) Projects as defined in SCCC 13.10, public facility/institutional uses such as schools, and to serve school employee housing as provided in Policy PPF-1.1.5 on sites owned by a public district or private school. 4. Allow systems under conditions 1., 2., and 3. only where approved by the Regional Water Quality Control Board, LAFCO, CDID, Environmental Health; and where operated by a public agency or private contractor to a public agency or a school, or for EHA and ARFH projects where the property owner enters into a recorded agreement with the County to provide for ongoing maintenance of the community sewage disposal system. Allow sewer service connections from community sewage disposal systems and size line extensions only to serve the following: 1. Public facilities/institutional uses such as schools, including school employee rental housing; or 2. EHA and ARFH projects permitted pursuant to SCCC 13.10; or 3. Existing development that conforms to the General Plan land use designation, and, which have failing septic systems not able to be repaired; or 4. One existing dwelling unit per existing parcel of record, which has a failing septic system not able to be repaired. 5. In no case shall such connections allow for additional density beyond that allowed by (1) through (4) above.	
Policy PPF-4.2.4 Minimum Parcel Sizes and Maximum Densities with Individual Sewage Disposal Systems. Where individual sewage disposal systems are used, require a minimum parcel size to be based on the Rural Density Matrix for the land use designation, but in no case smaller than one net acre for parcels created from new land divisions. Allow a maximum density based on the Rural Density Matrix and not to exceed one dwelling unit per net acre for such parcels.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
Policy PPF-4.2.5 Development Linkage to Downstream Sewer System Improvements. Require new development to pay its full fair share of downstream sewer system improvements needed. In areas where cumulative sewer capacity is a problem, as indicated by the CDID, require all development to	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
make required downstream improvements or be appropriately limited until downstream improvements are made.	
Policy PPF-4.2.6 (EJ) Sizing and Siting Sewer and Sewage Disposal Facilities. Require developers, including public agencies, to locate and size new systems to best serve all areas anticipated to require sewer service.	**Not applicable.** This project is not a new sewer system or sewage disposal facility.
Policy PPF-4.2.7 Sewage Disposal for Publicly Owned Facilities. Permit installation of sewage disposal systems within an easement on another lot to serve a publicly owned facility where technical or minimum parcel size standards cannot be met for sewage disposal at the site of the facility.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
PPF-4.2.8 (LCP) Enhanced On-site Wastewater Treatment Systems. Allow enhanced on-site wastewater treatment systems, which provide an environmentally acceptable level of treatment, as an alternative to conventional individual sewage disposal systems in rural areas. Such alternative systems must be approved by County Environmental Health.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
PPF-4.2.9 (LCP) Water and Sewer Lines in Agricultural Areas. Except under certain conditions, as defined in policies ARC-3.1.13 through ARC-1.1.15, prohibit the expansion or placement of new water or sewer lines on commercial agricultural lands.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
Policy PPF-4.2.10 Wastewater Disposal. Allow land disposal of wastewater after adequate treatment to State wastewater reclamation standards.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
Policy PPF-4.3.1 Wastewater Reclamation and Reuse Projects. Promote the reclamation and reuse of energy, water and nutrients in wastewater management, and give funding priority to reclamation and reuse projects in capital expenditures for wastewater management.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
Policy PPF-4.3.2 Wastewater Reclamation for Agricultural Use. Support the concept of building and upgrading sewage treatment facilities capable of producing reusable water, and the transporting of wastewater for reclamation and agricultural use within the Pajaro Valley or North Coast, when financially feasible, in order to reserve the limited groundwater primarily for domestic purposes.	**Not applicable.** The project is not a sewage treatment facility.
Policy PPF-4.3.3 Industrial Wastewater. Encourage private business and industry to initiate reuse of industrial wastewater, require separation of heavy metals and/or toxic pollutants from wastewater before discharge into sewage lines in order to facilitate sewage conversion for energy, nutrients, and water reclamation.	**Not applicable.** The project is an unstaffed BESS facility and would not require any new and/or expanded wastewater discharges.
Policy PPF-4.3.4 Reclamation for Energy Recovery. To the extent possible, require sewage treatment and solid waste disposal projects to utilize sewage and solid waste reclamation and conversion techniques that provide resource conservation and net energy benefit to the County.	**Not applicable.** This project is not a sewage treatment or waste disposal project.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
PPF-4.4.1 (LCP) New Development and Redevelopment. Require runoff levels to be maintained at predevelopment rates for a minimum design storm as determined by County Design Criteria by requiring projects to provide both on and off-site improvements, including on-site percolation methods. Utilize on-site detention methods only where percolation methods are not feasible. In addition, development and use permits shall comply with any and all relevant stormwater program requirements under the State Water Resources Control Board Agriculture, Cannabis Cultivation, Wastewater, and other regulatory programs.	**Applicable and consistent.** The project would include bioretention areas. See Section 3.15 for more information.
PPF-4.4.2 (LCP) Dry Weather Run Off. In order to protect water quality, prohibit non stormwater discharge from leaving private property, entering the storm drain system, entering the receiving waters of the County, or percolating into the groundwater.	**Applicable and consistent.** The project would include bioretention areas. See Section 3.15 for more information.
PPF-4.4.3 (LCP) Minimizing Impervious Surfaces. Require new development and redevelopment to limit coverage of lots by parking areas and other impervious surfaces, in order to minimize the amount of post-development surface runoff and maintain groundwater recharge rates.	**Not applicable**. The project would not have a permanent parking lot.
PPF-4.4.4 (LCP) Downstream Impact Assessments. For any proposed development or redevelopment project within the County, require the applicant to conduct a downstream impact assessment and submit a stormwater management plan. The assessment should analyze the design of any improvements needed to upgrade the storm drain system such that local flooding would be eliminated for the appropriate design rainstorm. Ensure the project is conditioned to make improvements and/or pay fair share of improvement costs.	**Applicable and consistent.** The project would include a stormwater assessment and management plan. See Section 3.15 for more information.
PPF-4.4.5 (LCP) Control Surface Runoff. Require new development and redevelopment to reduce the discharge of stormwater pollutants to the maximum extent practicable in order to protect surface and groundwater quality and watersheds. Condition development project approvals to provide ongoing maintenance for the stormwater management facilities associated with their developments.	**Applicable and consistent.** The project would include bioretention areas. See Section 3.15 for more information.
PPF-4.4.6 (LCP) Integrated Regional Water Management. Continue to support and participate in the Integrated Regional Water Management and related planning efforts for the Santa Cruz and Pajaro regions.	**Not applicable.** The project would not interfere or conflict with this policy.
PPF-4.6.7 (LCP) Stormwater Resource Plan. Support implementation and update of the Santa Cruz Storm Water Resource Plan to promote stormwater recharge projects.	**Not applicable.** The project would not interfere or conflict with this policy.
PPF-4.6.8 Mosquito Prevention. Design, inspect, and maintain water basins (wastewater basins, stormwater facilities, and other water facilities) to ensure that water infiltrates into the subsurface completely (recommended infiltration rate of 96 hours or less) and that vegetation is managed to prevent creating mosquito habitats.	**Applicable and consistent.** The project would include bioretention areas. See Section 3.15 for more information.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy PPF-4.5.1 Materials Recovery. Establish, in conformance with state law, materials recovery through recycling, reuse and composting, as the primary and fundamental strategy of solid waste management by the County, with landfill disposal as a secondary and essential component. Designate materials recovery and reuse projects as a funding priority in allocating capital expenditures for solid waste management.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.5.2 Zero Waste. Take into account the whole materials management system to achieve a zero waste goal by focusing on reducing and eliminating materials from entering into the waste stream first and foremost; as a secondary strategy focus on reusing materials; and as a tertiary strategy recycling and composting all remaining materials for their highest and best use.	**Applicable and consistent.** Construction of the BESS facility would limit the amount of construction waste going to landfills as discussed in Section 3.14.
Policy PPF-4.5.3 Materials Acquisition and Handling Practices. Require all County departments to develop materials acquisition and handling practices, which reduce the amount of waste generated in daily operations. Encourage, through education and technical assistance, all private and public developments to establish similar materials handling practices.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.5.4 Support Businesses. Recognize and support businesses, which manufacture using recovered materials or deal in reusable discards as important to the local economy and to County landfill diversion goals through the Green Business Program and other mechanisms.	**Not applicable.** The project does not manufacture using recovered materials or deal in reusable discards.
Policy PPF-4.5.5 Product Packaging Reform. Continue to use education programs, and mandatory phase-outs or bans to eliminate products with non-recyclable, non-biodegradable or excessive packaging.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-4.5.6 Economic Viability. Maintain the economic viability of the integrated waste management system through user-based and benefit-related funding.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-4.5.7 Increase Recycling Opportunities. Provide the opportunity for recycling to all residents and businesses in the unincorporated County in a convenient manner to maximize participation, including recycling collection services, curbside dropoff, buyback and source-separated collection through publicly provided service, as well as non-profit and private independent collection businesses.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.5.8 Address Illegal Dumping. Create a cooperative interdepartmental program to address illegal dumping, particularly in open spaces and riparian areas.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-4.5.9 Meeting State and Local Landfill Diversion Goals. Consider mandatory recycling or material-specific landfill disposal prohibitions if state and local landfill diversion goals are not met through the use of voluntary programs.	**Not applicable**. The project would not interfere or conflict with this policy.
Policy PPF-4.5.10 Storage Requirement for Recyclable Materials. Require all development projects, except single-family dwellings, to provide sufficient and accessible space for the storage and	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
collection of recyclable materials separate from, and in addition to, space for refuse storage and collection. Encourage owners of existing buildings to provide such space, where feasible.	
Policy PPF-4.5.11 Small-Scale Recycling Collection Facilities. Recognize small-scale recycling collection facilities as a compatible accessory use in all land use designations, subject to appropriate zoning standards.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.5.12 On-Site Yard Waste Composting. Allow properly managed on-site yard waste composting for materials generated on-site in all land use designations. Continue to provide support for on-site composting through education and technical assistance.	**Not applicable.** This project does not include on-site yard waste or composting.
Policy PPF-4.5.13 (EJ) Yard Waste Collection. Provide separate collection of yard waste, for off-site composting, from residential and non-residential generators and continue to phase in collection of food waste and other compostable material. Require new development to provide sufficient space for separate storage of yard waste for composting.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.5.14 Siting of Recycling and Composting Facilities. Provide publicly owned facilities of sufficient size, location and design to meet the processing requirements for all County - sponsored recycling and composting programs and for local city-sponsored programs choosing to participate. Ensure sufficient capacity and make said facilities available to process materials from local non-profit and private recycling and composting businesses.	**Not applicable.** This project is not a recycling or composting processing facility.
Policy PPF-4.5.16 Multi-jurisdictional Planning and Operations. Establish multi-jurisdictional and public-private cooperation as a primary principle in planning and operating recycling and composting processing facilities.	**Not applicable.** This project is not a recycling or composting processing facility.
Policy PPF-4.5.17 State Coordination. Work with state and regional permitting agencies, including the Regional Water Quality Control Board, the Monterey Bay Air Resources District, California Fish and Wildlife, California Coastal Commission, and CalRecycle, to approve a composting facility or provide an alternative means for the processing of organic waste.	**Not applicable.** This project is not a composting processing facility.
Policy PPF-4.5.18 Materials Recovery and Processing Programs. Include a public education and information component of materials recovery and processing programs to ensure public awareness and understanding of program participation requirements, program objectives and accomplishments and program costs and benefits.	**Not applicable.** The project would not interfere with this policy.
Policy PPF-4.5.19 Recyclable vs. Refuse Contracts. Ensure that solid waste collection contracts maintain a distinction between recyclable materials and refuse.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.5.20 Economic Incentives for Recycling. Establish a solid waste collection rate structure, which provides economic incentives for recycling more and disposing less.	**Not applicable.** The project would not interfere with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy PPF-4.5.21 (EJ) Land Use Compatibility with Waste Disposal. Ensure compatibility of land uses adjacent to County solid waste disposal and transfer facilities through zoning and the land use permit process.	**Not applicable.** The project is not adjacent to County solid waste disposal.
Policy PPF-4.5.22 Landfills and Environmental Protection. Ensure protection of the local environment, including air, groundwater and surface water resources through proper landfill design, construction, operation and on-going environmental monitoring.	**Not applicable.** The project is not a landfill.
Policy PPF-4.5.23 Hazardous Wastes and Environmental Damaging Compounds in Landfills. Prohibit the disposal of radioactive waste, hazardous waste and ozone depleting compounds in County landfills.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.5.24 Recyclable Materials in Landfills. Consider adoption of landfill disposal bans for specific recyclable or compostable materials where necessary to achieve County materials recovery and landfill diversion goals.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.5.25 Access to Landfills and Materials Recovery Facilities. Continue to provide access to individual self-haul vehicles either at the Ben Lomond Transfer Station, the Buena Vista Landfill or at future Materials Recovery Facilities for refuse disposal, household hazardous waste drop - off and recycling and other materials recovery.	**Not applicable.** The project is not located at the Ben Lomond Transfer Station or Buena Vista Landfill, nor is it a future Materials Recover Facility.
Policy PPF-4.5.26 Gas Capture Systems. Continue and improve systems and programs for the recovery of landfill gases, including methane, as funding becomes available.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.5.27 Reuse of Closed Landfill Sites. Provide for rehabilitation and reuse of closed landfill sites consistent with environmental protection requirements, while planning for the future solid waste needs of the County. Rehabilitation shall include mitigation of resource degradation, where possible.	**Not applicable.** The project is not a closed landfill site.
Policy PPF-4.5.28 Refuse Collection Standards. Maintain consistent standards of collection and ensure availability of collection service throughout the unincorporated County.	**Not applicable.** The project would not interfere or conflict with this policy.
PPF-4.6.1 (LCP) Undergrounding Lines. Require new power line distribution systems and service extensions to new development within the USL to be placed underground.	**Not applicable.** The project is not within the USL.
PPF-4.6.2 (LCP) Protecting Scenic Quality. Discourage new high-voltage overhead transmission line corridors that impinge upon the scenic quality of the County. Work with utility providers to place existing transmission lines underground, as feasible in accordance with County priorities.	**Not applicable.** The project's gen tie lines would be constructed underground to the extent feasible.
Policy PPF-4.6.3 Recreational Use of Utility Rights-of-Way. Encourage the use of utility rights-of-way for bikeways and hiking paths where appropriately located and where shown to be not hazardous to users.	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy PPF-4.6.4 Location of Public Utility Transmission Facilities. Public utility transmission and distribution facilities, including substations, shall be allowed in all land use districts, provided, however, that the routes or site plans of all proposed gas and electric transmission lines and substations shall be submitted to the CDID for review and recommendations prior to the acquisition of necessary land rights. No discretionary permit shall be required for a proposed land use, which is subject to the jurisdiction of the California Public Utilities Commission or the California Energy Commission.	**Not applicable.** The project is not a public utility transmission or distribution facility; however, it would connect to the existing adjacent transmission substation.
PPF-4.6.5 (LCP) Criteria for LCP Amendments for Energy Facilities. Establish the following criteria for amendments to the General Plan and LCP for permitting the location of energy facilities in addition to stated LCP policies: ▪ Adequate infrastructure and public services are available including, but not limited to, water, sewer, fire protection, road capacity, law enforcement and medical services. ▪ The use would provide full protection of sensitive habitat areas, commercial fishing, recreational and agricultural uses. ▪ The use would be visually compatible with and have minimum disruption of viewsheds. Consistency with federal, state, and local air quality regulations.	**Not applicable.** The project would not interfere or conflict with this policy as it does not require amendments to the LCP.
PPF-4.6.6 (LCP) Maintenance and Repair of Utility Facilities in the Coastal Zone. Allow utility repair or maintenance activities that do not result in an addition, or enlargement or expansion of, the utility facility. Coastal Development Permits may be required when methods of repair and maintenance involve a risk of substantial adverse environmental impact, and where repair activities take place in wetland areas.	**Not applicable.** This project is not within the Coastal Zone.
PPF-4.6.7 (LCP) Community Energy Systems. Allow the development of "Community Energy Systems" in locations where compatible with adjacent land use and with adequate mitigation of noise, emissions, and visual impacts.	**Not applicable.** The project would not interfere or conflict with this policy.
PPF-4.6.8 (LCP) Reusable Energy Sources. Consider the development of municipal solar utilities and other financing mechanisms, which increase public access to renewable energy sources and provide opportunities for small-scale, decentralized local facilities and controls.	**Applicable and consistent.** The BESS facility would contribute to increased use of renewable energy in the County and region.
PPF-4.6.9 Energy Efficiency. Support increased energy efficiency in new and existing buildings and public facilities.	**Applicable and consistent.** The BESS facility would contribute to increased use of renewable energy in the County and region.
Policy PPF-4.7.1 Communications Infrastructure. Support and facilitate the provision of communications infrastructure needed by high-tech, knowledge-based industries, and education facilities.	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-3. Project Conformity with the Santa Cruz County General Plan

Policy	Project Consistency
Policy PPF-4.7.2 (EJ) Universal Telecommunications. Promote universal and competitive services to residences, businesses, and schools.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.7.3 (EJ) Improving Access. Work with utility companies to retrofit areas that are not served by current telecommunication technologies and provide strategic long-range planning of telecommunication facilities for newly developing areas, as feasible.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.7.4 Local Innovation. Encourage local industries, higher educational institutions, and other entities to support innovation in the design and implementation of state-of-the-art telecommunication technologies and facilities.	**Not applicable.** The project is not a state-of-the-art telecommunication facility.
Policy PPF-4.7.5 Collocation. Encourage compatible collocation of telecommunication facilities. Work with utility companies to provide opportunities for siting telecommunications facilities on County-owned property and public right-of-way.	**Not applicable.** The project is not a telecommunication facility.
Policy PPF-4.7.6 Dig Once. Research and establish a dig once approach for utilities to install conduit for broadband in order to reduce the cost of deployment and reduce the impact on public infrastructure.	**Not applicable.** The project would not interfere or conflict with this policy.
Policy PPF-4.7.7 Improve Last Mile Service. Develop a roadmap plan with objectives and goals for addressing last mile gaps or poor last mile service.	**Not applicable.** The project would not interfere or conflict with this policy.

Sources: County of Santa Cruz 2024a, 2024b, 2024c. 2024d, 2024e.
Note: MBSST = Monterey Bay Sanctuary Scenic Trail; AB = Assembly Bill; SB = Senate Bill; SCCC = Santa Cruz County Code; BESS = battery energy storage system; County = County of Santa Cruz; gen-tie = generation interconnect; PG&E = Pacific Gas and Electric Company; CEQA = California Environmental Quality Act; CEC = California Energy Commission; LCP = Local Coastal Program; Caltrans = California Department of Transportation; PRC = California Public Resources Code; HSC = California Health and Safety Code; CBC = California Building Code; PDF = Project Design Feature; CFC = California Fire Code; USL = Urban Services Line.

Conformity with the County's Municipal Code, Title 13, Planning and Zoning Regulations

The project site is zoned as Commercial Agriculture – Airport Influence Area (CA-AIA) (County of Santa Cruz 2025a). A BESS is not expressly defined in the County's Zoning Code.

As directed by the Board of Supervisors, the County is currently developing an ordinance to allow and regulate BESS facilities as a "public/quasi-public community facility" on parcels greater than 10 acres that are adjacent to existing transmission substations. The County Zoning Code and Zoning Map would be amended to allow and regulate these facilities within an "Energy Storage Combining District." Impacts under the proposed ordinance must be analyzed under CEQA prior to adoption. The draft ordinance would require projects to obtain written approval from the local fire agency before approval. On January 13, 2026, the Board of Supervisors approved in concept a draft ordinance for an Energy Storage Combining District. From here environmental review per CEQA would occur followed by CEC hearings and decisions.

SB 254 was recently passed on September 19, 2025, which includes changes to AB 205. The bill removed the requirement of conformity findings with land use and zoning designations. Therefore, CEC is no longer required to make a finding of conformance to land use and zoning designations or adopt overrides for nonconforming uses. As such, the project is not required to conform to the CA-AIA zoning requirements.

Conformity with the County's Draft Battery Energy Storage Systems Ordinance

The County is considering a BESS ordinance to establish clear local rules that ensure these facilities are developed safely and responsibly. By doing so, the County aims to support clean energy goals, improve grid reliability, and protect public safety and neighborhood quality. The proposed Energy Storage Combining District Ordinance establishes local standards for where and how large-scale BESS facilities may be developed in unincorporated Santa Cruz County. It defines eligible sites, safety and environmental requirements, application procedures, and oversight responsibilities to ensure projects are designed, reviewed, and operated in a way that protects public safety, agricultural lands, and natural resources while supporting California's transition to renewable energy. Policies and standards identified in the Draft BESS Ordinance and the project's consistency with each are outlined below in Table 3.6-4 (County of Santa Cruz 2025b).

Table 3.6-4. Project Conformity with the County's BESS Ordinance

Policy	Project Consistency
13.10.408A. Energy storage systems on properties with the "ES" Combining District shall be subject to the following development standards in lieu of any development standards in the underlying zoning district: 1. The minimum parcel size shall be 10 acres. 2. The total development area, including all internal access and improvements, shall be located within a maximum 20-acre site area outside of the Coastal Zone. 3. Setbacks. I. Energy storage systems and all associated structures shall be set back a minimum of 100 feet from all roadways and property lines, except that no setback shall be required from the	**Applicable and consistent.** The project site is approximately 47 acres, and the proposed BESS and gen-tie line would cover approximately 16 acres of the project site. The remaining approximately 31 acres would not be disturbed. The project site is not located within the Coastal Zone. The energy storage systems and all associated structures would have a minimum setback of 105 feet to the parcel boundary. The maximum height of power poles on the project site and gen-tie is 60 feet. All other structures would be under 25 feet. All structures containing batteries would be set back 1,000 feet from any parcel containing an existing hospital, school, commercial

Table 3.6-4. Project Conformity with the County's BESS Ordinance

Policy	Project Consistency
transmission substation boundary. Perimeter fencing and drainage shall have no required setback. II. All structures containing batteries shall be set back 1,000 feet from any parcel containing an existing hospital, school, commercial day care center, or residential care facility for the elderly. 4. All structures, except for power poles and wires, shall not exceed 25 feet in height.	daycare center, or residential care facility for older adults.
13.10.408B. Environmentally sensitive resources shall be protected as required by SCCC Title 16. Any impacts to environmentally sensitive resources that cannot be protected shall be offset as required by SCCC Title 16, except as noted below. 1. Agricultural Resources I. Energy storage systems and all associated improvements, except perimeter fencing and drainage, shall be located a minimum of 100 feet from adjacent properties designated in General Plan maps as agricultural resource soil types, unless a lesser distance is determined to better accomplish the objectives of the agricultural buffering standards in SCCC Chapter 16.50, as approved by the Agricultural Policy Advisory Commission. II. Energy storage systems proposed on Commercial Agricultural (CA)-zoned parcels in the "ES" Combining District shall offset impacts to agricultural resource soils identified in an agricultural viability study. a. Where an energy storage system occupies a portion of a site with Types 1-3 agricultural resource soils, the remainder of the site shall be permanently protected under an agricultural conservation easement, regardless of a proposed land division. b. Where the agricultural easement on the remainder of the parcel does not equal the gross area of the facility, additional 1-3 resource land within the unincorporated county shall be identified and placed into a permanent agricultural conservation easement, such that the full impact is offset.	**Applicable and consistent.** The project would comply with SCCC Title 16. The project site is zoned Commercial Agricultural (CA). The BESS enclosures are set back approximately 105 feet from the parcel boundary; therefore, the nearest residence is approximately 210 feet away from the BESS enclosures. The project also includes an agricultural feasibility report (Rush & Duttle Consulting 2024). The project would include an agricultural conservation easement. Additionally, the project site is approximately 47 acres, and the proposed BESS and gen-tie line would cover approximately 16 acres of the project site. The remaining approximately 31 acres would not be disturbed under the agricultural conservation easement.
13.10.408C. All energy storage systems shall be subject to the requirements of SCCC Title 7, Chapter 7.100, including but not limited to SCCC Section 7.100.060 and SCCC Section 7.100.110.	**Applicable and consistent.** The project would comply with the requirements of SCCC Title 7, Chapter 7.100, which pertains to hazardous materials and hazardous waste. See Section 3.5, Hazardous Materials Handling, for more information.

Table 3.6-4. Project Conformity with the County's BESS Ordinance

Policy	Project Consistency
13.10.408D. Safety standards. 1. All energy storage systems shall meet or exceed all state standards for energy facilities, including applicable sections of the Public Utilities Code, the Public Resources Code, the California Building Standards Code, Public Utilities Commission general orders, and any regulations issued by the State Fire Marshal. 2. Energy storage systems shall be located in non-combustible, dedicated-use buildings or containers, or in outdoor installations. 3. Energy storage systems shall not utilize nickel manganese cobalt (NMC) chemistry. 4. Energy storage systems shall be equipped with a battery management system that features continuous monitoring and audio and visual alarm systems for smoke, heat, and hydrogen. 5. Fire protection standards. All energy storage systems shall meet, at minimum, the National Fire Protection Association (NFPA) Standard 1, Fire Code; NFPA 68 and 69, Explosion Protection; NFPA 70, National Electric Code; NFPA 72, Fire Alarm and Signaling Code; NFPA 800, Battery Safety Code; NFPA 855, Installation of Stationary Energy Storage Systems; as well as the California Fire Code and SCCC 7.92 (Fire Code). 6. Air quality monitoring. I. All energy storage system facilities shall include a PM2.5 sensor network around the perimeter of the facility. II. A meteorological station shall be installed at or close to the facility. 7. Testing. Prior to operation, energy storage systems shall undergo required UL9540 and UL9540A testing, UL 1973 testing, UL 1741 testing, large-scale fire testing, and incorporate NFPA 72 fire alarms. Training. Prior to operation, the fire district shall inspect the energy storage system, and staff from affected fire agencies and other responding agencies shall receive an initial response training, as well as annual table-top and on-site trainings.	**Applicable and consistent.** The project would meet all state standards for energy facilities. The energy storage systems would be located in non-combustible containers and would not use nickel manganese cobalt chemistry. The project would meet all fire protection standards and would undergo all necessary testing. The project would include necessary air quality monitoring networks. Prior to operation, the fire district would inspect the energy storage system and receive any necessary training.
13.10.408F. Aesthetic Impacts. 1. Landscaping and fencing. Except as modified by the fire code or fire district requirements, a 20-foot buffer of mature landscaping shall be provided along the perimeter of the energy storage system and associated improvements. Fencing and Landscaping shall include at least 50 percent	**Applicable and consistent.** The project would include a minimum of a 20-foot buffer of mature landscaping surrounding the BESS facility and an acoustic/noise mitigation wall. Additionally, the gen-tie line from the project substation to the POCO would be installed underground. The gen-tie line

Table 3.6-4. Project Conformity with the County's BESS Ordinance

Policy	Project Consistency
native or drought tolerant species and shall include 15-gallon sized shade trees which would provide coverage to at least 20 percent of the landscape area within 15 years. Landscaping shall be located 30 feet from any structures containing batteries and 10 feet from any roadways. Landscaping shall not obstruct the line of site at access roads and any gates. 2. Undergrounding. Where feasible, transmission lines and other associated lines connecting the energy storage system to the transmission substation shall be undergrounded.	from the POCO to the POI at the Green Valley Substation would be aboveground.
13.10.409A. Application and approval of energy storage projects in the "ES" Energy Storage Combining District. Applicants for proposed energy storage systems shall submit a Conditional Use Permit application and Conditional Site Development application for approval by the County of Santa Cruz Board of Supervisors, following a recommendation by the Santa Cruz County Planning Commission. Projects on CA land shall require a recommendation from the Agricultural Policy Advisory Commission to the Board of Supervisors. Public hearings, noticing, and community meetings shall be conducted according to the requirements for conditional use permits in SCCC Chapter 18.10.	**Not applicable.** Land use approval permits (i.e., Conditional Use Permit) from the County Planning Department would be superseded by CEC approval of the project under the opt-in application program.
13.10.409B. Applications for development of proposed energy storage systems shall be accompanied by the following: 1. Site plan, showing battery locations, setbacks from property lines, water source locations, and proper enclosure spacing based on burn test results; 2. Landscape plan, meeting standards contained in SCCC 13.10.408(F)(1) and SCCC 13.11. 3. Visual simulation of the fully constructed facility from any public viewpoint within 500 feet of the structures, and from each direction on any adjacent right-of-way; 4. If located on agricultural resource type land, an agricultural viability study confirming that the project minimizes the loss of highest quality resource type land; 5. Agreement with the substation operator authorizing the storage of energy; 6. Statement(s) from the local fire district responsible for fire suppression at the site confirming that the applicant met with and conferred with the district at least 30 days prior to submittal, discussed the energy storage system design, sought input on mitigating potential fire and life safety concerns,	**Applicable and consistent**. The project would include a site plan, landscape plan, visual simulations, an agricultural feasibility report (Rush & Duttle Consulting 2024), agreement with the Green Valley Substation, a statement from the local fire district, an alternatives analysis, technical reports, an emergency response and emergency action plan, an annual inspection, an augmentation plan, and a decommissioning plan.

Table 3.6-4. Project Conformity with the County's BESS Ordinance

Policy	Project Consistency
and sought input on the content of emergency action plans required by Section 761.3 of the Public Utilities Code, as amended. For applications submitted before the effective date of this ordinance, the applicant shall submit the statement(s) within 30 days of ordinance adoption. 7. Alternatives analysis. Memorandum describing: I. Alternative sites considered and reason(s) for eliminating these options. II. Alternative battery and chemistry analysis and reason(s) for the choice of battery and chemistry. 8. Technical reports. I. Report addressing noise and electromagnetic field exposure; II. Report addressing the community benefit, including climate resiliency, electrical grid stability, and direct benefits to Santa Cruz County residents; III. Geologic and geotechnical report, per SCCC Chapter 16.10; IV. Report(s) addressing any environmental resources, as defined by SCCC Title 16, that are potentially on site or impacted; V. A smoke drift/plume study to determine the potential travel pathways and communities potentially impacted in the event of a fire, given the type of batteries, scope of event, and atmospheric conditions, including a community risk assessment showing flammable and toxic extents for worst-case release scenarios; VI. Report(s) analyzing baseline air quality, surface water, groundwater, and soils within one mile of the energy storage system or within the distance analyzed in the smoke drift/plume study, whichever is greater. The report(s) shall address concentrations of relevant chemicals of concern as determined by the County Environmental Health Services Division and/or the California Department of Toxic Substances Control (e.g., nickel, manganese, cobalt, and polychlorinated biphenyls [PCBs], etc.). Soil samples must be analyzed on a dry-weight basis (analyzed for percent solid or moisture) and wet-weight basis, and compared to risk thresholds adopted under state law; VII. A hazardous materials management plan and material safety data sheets meeting the requirements of SCCC Chapter 7.100. VIII. Fire risk analysis and failure modes and effects analysis; and.	

Table 3.6-4. Project Conformity with the County's BESS Ordinance

Policy	Project Consistency
9. Emergency response and emergency action plan meeting the requirements of PUC 761.3(g), as amended, including applicable optional requirements of that section, and addressing all phases of the project, including construction, commissioning, operations, emergency response protocols, and decommissioning. The plan shall be coordinated with the County's Emergency Operational Area Coordinator (Office of Response, Recovery & Resilience) and responsible fire district(s), and take into account the County's Emergency Operations Plan and delineating communications during and after an emergency event. The plan shall be updated annually and submitted to the Office of Response, Recovery & Resilience and responsible fire districts. I. Annual inspection, testing, and monitoring plan. II. Augmentation plan that prioritizes replacement of battery packs with non-flammable, non-explosive technology as it becomes available. III. Decommissioning plan, which shall be updated prior to closure to meet standards and requirements in place at the time of closure. (12) Financial assurances, including liability insurance that includes thermal runaway events and other incidents, pollution insurance, environmental insurance, decommissioning bonds, and agreement indemnifying the County in the event of an incident. Insurance shall address all phases of the construction and development process.	
13.10.409C. Application review. Given the technical nature of energy storage systems, the County reserves the right to, at the applicant's expense, engage third-party reviewers of any application materials.	**Not applicable.** Land use approval from the County Planning Department would be superseded by CEC approval of the project under the opt-in application program.
13.10.409D. Findings. In addition to applicable findings in SCCC Chapter 18.10, approval of applications shall be based on the following findings: 1. That the community benefit of the proposed facility includes climate resiliency enhancing the County's ability to adapt to future climate change; 2. That any conversion of commercial agricultural land/soils is offset by the community benefits offered by the facility; 3. That public safety and environmental resource protection is addressed to the extent provided by state and local law; 4. The proposed project meets the criteria for the siting of energy facilities in General Plan Policy PPF-4.6.5, except that the "full protection" of	**Applicable and consistent.** The project would enhance the County's ability to adapt to future climate change. The conversion of commercial agricultural land would be offset by agricultural conservation easements and community benefits offered by the BESS facility. Public safety and environmental resource protection is addressed throughout the AB 205 opt-in application. The project would meet the criteria for the siting of energy facilities in General Plan Policy PPF-4.6.5, with the exception of the "full protection" of agricultural uses. Documented costs to respond to any potential thermal runaway incidents would be reimbursed to the County and or fire district/department.

Table 3.6-4. Project Conformity with the County's BESS Ordinance

Policy	Project Consistency
agricultural uses shall not apply to the conversion of agricultural lands necessary to site the facility but shall apply to remaining agricultural lands; and 5. Impacts to agricultural lands are proposed to be offset by the establishment of an agricultural conservation easement, as required by SCCC Section 13.10.408(B). 6. Documented costs to respond to a thermal runaway incident, including costs incurred by emergency management and fire district responders and post-incident environmental testing, recovery, and clean up, shall be reimbursed to the County and or fire district/department.	
13.10.409E. The Community Development and Infrastructure Department shall issue any required building or ministerial permits only upon approval of Conditional Use and Site Development Permits by the Board of Supervisors.	**Not applicable.** Land use approval permits (i.e., Conditional Use Permit) from the County Planning Department would be superseded by CEC approval of the project under the opt-in application program.
13.10.409F. Final inspection and occupancy shall be contingent upon submittal of operator's liability insurance that includes thermal runaway events and other incidents, pollution insurance, environmental insurance, decommissioning bonds, and agreement indemnifying the County in the event of an incident. Insurance shall address all phases of the development, and shall be maintained for the life of the project by the operator once the facility is operational.	**Applicable and consistent.** Prior to operation, the applicant would submit necessary operator's liability insurance, pollution insurance, environmental insurance, decommissioning bonds, and agreements.

Source: County of Santa Cruz 2025b.
Note: County = County of Santa Cruz; BESS = battery energy storage system; gen-tie = generation interconnect; SCCC = Santa Cruz County Code; POCO = Point of Change of Ownership; POI = Point of Interconnection; CEC = California Energy Commission; AB = Assembly Bill.

Conformity with the Watsonville Airport Land Use Compatibility Plan

The project site is located within an Airport Influence Area (AIA). An AIA is the area or areas in which current or future airport-related noise, overflight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on land use. According to California Public Utilities Code Section 21675(b), the AIA must encompass that land within 2 miles of the boundaries of the Watsonville Municipal Airport. However, the project site is located outside designated Safety Zones pursuant to Chapter 3 of the California Airport Land Use Planning Handbook.

Land use compatibility concerns to be addressed within the AIA fall under two broad headings identified in state law: noise and safety. However, for purposes of formulating compatibility policies and criteria, further dividing these basic concerns into four functional categories is more practical. These categories include (1) exposure to aircraft noise; (2) land use safety with respect both to people and property on the ground and the occupants of aircraft; (3) protection of airport airspace; and (4) general concerns related to aircraft overflights. Policies and standards identified in the Watsonville Airport Land Use Compatibility Plan, which is embedded in the Built Environment Element and in Appendix H of the County's General Plan, and the project's consistency with each are outlined in Table 3.6-5 (County of Santa Cruz 2022, 2024b).

Table 3.6-5. Project Conformity with the Watsonville Airport Land Use Compatibility Plan

Community Wide Standard	Project Consistency
BE-5.4.1 (LCP) Airport Influence Area. The Airport Influence Area (AIA) is defined as the area within two miles of the boundary of the Watsonville Municipal Airport.	**Applicable and consistent.** The project site is within 2 miles of the boundary of the Watsonville Municipal Airport.
BE-5.4.2 (LCP) Airport Land Use Compatibility. All land uses and development activity within the AIA must comply with the height, use, noise, safety, and density criteria that are compatible with airport operations as established by the latest version of the California Department of Transportation Division of Aeronautics Airport Land Use Planning Handbook (Handbook), and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with section 77.1) of Title 14 of the Code of Federal Regulations.	**Applicable and inconsistent.** The project would comply with height, noise, safety, and density criteria.
BE-5.4.3 (LCP) Safety Zones. Establish safety zones around the Watsonville Municipal Airport runways. Within each safety zone establish density standards for residential uses, and intensity standards for nonresidential uses compliant with the Handbook. Require that new structures or additions be sited to minimize potential safety conflicts.	**Not applicable.** The project would not interfere or conflict with this policy.
BE-5.4.4 (LCP) Land Use Limitations in Airport Safety Zones. New development within the airport safety zones must comply with the uses, densities, and intensities as established by the Handbook and federal law.	**Applicable and inconsistent.** The project is not within an Airport Safety Zone and would comply with densities and intensities established by the Handbook and federal law; however, the project land use designation does not explicitly allow the use of BESS facilities.
BE-5.4.5 (LCP) Creation of New Parcels in Airport Safety Zones. Density and intensity of new development must conform to the standards for each airport safety zone. Lot line adjustments cannot increase safety conflicts by placing potential building envelopes in a more hazardous area.	**Not applicable.** The project would not create new parcels or request lot line adjustments that would increase safety conflicts.
BE-5.4.6 (LCP) Existing Residential Parcels. The policies in this section do not prevent construction of a main dwelling, and an accessory dwelling unit, on an existing legally created parcel, in all areas of the AIA.	**Not applicable.** The project is not a residential development.
BE-5.4.7 (LCP) Existing Uses. These policies do not prevent the continuation of existing uses that do not change. Expansion of an existing use, conversion to a different use, or other development activities that require a ministerial or a discretionary permit and that create new or increased airport compatibility conflicts, are subject to these policies.	**Applicable and consistent.** The project would be a new use that would require a discretionary approval from CEC. CEC has authority to supersede local agency permitting authority, including conformity findings with land use and zoning designations.
BE-5.4.8 (LCP) Mixed Uses. All uses in a mixed-use development must meet Airport Land Use Planning Handbook and federal criteria for allowable uses, density, and intensity. Mixed-use developments involving residential and nonresidential uses should calculate intensity by converting allowable residential densities into intensity levels using current “persons per household” data from the best available data from State or regional planning agencies.	**Not applicable.** The project is not a mixed-use development.

Table 3.6-5. Project Conformity with the Watsonville Airport Land Use Compatibility Plan

Community Wide Standard	Project Consistency
BE-5.4.9 (LCP) Nonconforming Structures and Uses. Remodeling or expansion of existing nonconforming structures and uses within the AIA is subject to the Handbook, and to County policies and regulations on nonconforming structures and uses.	**Not applicable.** The project is not an existing nonconforming use or structure.
BE-5.4.10 (LCP) Airspace Obstructions. Limit the height of buildings, antennas, other types of structures, and trees so as not to pose a potential hazard to flight. The criteria for determining the acceptability of a project or other condition with respect to height is determined by the standards set forth in Federal Aviation Regulations Part 77, Subpart C, Objects Affecting Navigable Airspace; the United States Standard for Terminal Instrument Procedures; and applicable airport design standards published by the Federal Aviation Administration (FAA). Airspace protection surfaces for the Watsonville Municipal Airport are detailed in Appendix H: Airport Land Use Compatibility Requirements and County Strategy. Any object that penetrates one of these surfaces is, by FAA definition, deemed an obstruction.	**Applicable and consistent.** The project would conform to Part 77 height requirements.
BE-5.4.11 (LCP) Wildlife and Other Hazards to Flight. Land uses that may cause visual, electronic, or wildlife hazards, particularly bird strike hazards, to aircraft in flight or taking off or landing at the airport are allowed within the airport influence area only if the uses are consistent with the Handbook and FAA rules and regulations. Specific characteristics that are prohibited include: ▪ Sources of glare (such as from mirrored or other highly reflective buildings or building features) or bright lights (including search lights, lasers, and laser light displays); ▪ Lights that could be mistaken for airport lights; ▪ Sources of dust, steam, or smoke that may impair pilots' vision; ▪ Sources of steam or other emissions that cause thermal plumes or other forms of unstable air; ▪ Sources of electrical interference with aircraft communications or navigation; and ▪ Any proposed use that creates an increased attraction for wildlife and that is inconsistent with FAA rules and regulations including, but not limited to, FAA Order 5200.5A, Waste Disposal Sites on or Near Airports, and Advisory Circular 150/5200-33, Hazardous Wildlife Attractants on or Near Airports. Of particular concern are landfills and certain recreational or agricultural uses that attract large flocks of birds that pose bird strike hazards to aircraft in flight.	**Applicable and consistent.** The project would not include sources of glare, lights, dust, steam, electrical interference, or smoke that would interfere with flights or create an increased attraction for wildlife that is inconsistent with FAA rules and regulations, including, but not limited to, FAA Order 5200.5A, Waste Disposal Sites on or Near Airports, and Advisory Circular 150/5200-33, Hazardous Wildlife Attractants on or Near Airports.
BE-5.4.12 (LCP) Deed Recordation Acknowledging Aircraft Overflight. Require, as a condition to any parcel map, subdivision, discretionary permit or building permit for	**Applicable and consistent.** The project applicant would meet these requirements before obtaining a building permit. The project

Table 3.6-5. Project Conformity with the Watsonville Airport Land Use Compatibility Plan

Community Wide Standard	Project Consistency
expansion of any structure or the creation of any new structures in the AIA, that a statement be recorded on the deed for the parcel(s) acknowledging the property is located in an AIA, and describing the annoyances and inconveniences associated with proximity to airport operations, such as noise, vibration, or odors. Individual sensitivities to those annoyances can vary from person to person. Before purchasing the property, individuals should consider whether these annoyances are acceptable to them. Where disclosure is required, the State statutes dictate that the following statement shall be provided: "NOTICE OF AIRPORT IN VICINITY: This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you."	is an unstaffed BESS facility and would not include full-time staff on site.
BE-5.4.13 (LCP) Development within Airport Noise Contours. Limit development within airport noise contours as detailed in Objective N-2.2: Aircraft Noise [of the County General Plan].	**Not applicable.** The project site is not within the airport noise contours detailed in the airport land use compatibility plan.
BE-5.4.14 (LCP) Airport Expansion. Require a development permit and environmental review for any new air strip or airport or any proposed expansion of any air strip or airport over which the County has jurisdiction, including any increase in the number of flights that may increase the noise level of surrounding areas.	**Not applicable.** The project is not an air strip, airport, or expansion of an air strip or airport.
BE-5.4.15 (LCP) Private and Commercial Heliports. Prohibit private noncommercial heliport construction and helicopter use, and permit heliports and uses only in conjunction with emergency medical treatment, emergency law enforcement, commercial agricultural purposes , and other commercial purposes as may be approved by the County Board of Supervisors.	**Not applicable.** The project would not construct a private noncommercial heliport and would not interfere or conflict with this policy.
BE-5.4.16 (LCP) Private Air Strips. Allow the continued operation of existing private air strips in rural residential and agricultural areas, provided air strip use is restricted to the property owner's planes and those of an occasional guest, and is consistent with all use permit requirements for the private air strip.	**Not applicable.** The project would not interfere or conflict with this policy.
BE-5.4.17 Military Considerations. Acknowledge the existence of a designated military flight path in South Santa Cruz County that is not a low-level flight path and does not impact land use or development. Recognize the potential for future changes such as military installations, special use airspace, or low-level	**Not applicable.** The project would not interfere or conflict with this policy.

Table 3.6-5. Project Conformity with the Watsonville Airport Land Use Compatibility Plan

Community Wide Standard	Project Consistency
flight paths that may require consideration of land use and development impacts to military readiness activities.	

Note: BESS = battery energy storage system; CEC = California Energy Commission; County = County of Santa Cruz; FAA = Federal Aviation Administration.

In summary, the project would conform with the relevant development standards of the Watsonville Airport Land Use Compatibility Plan where feasible and would not conflict with the intent or implementation of the overlay district.

Entitlement History

On December 17, 2024, the applicant submitted an application (No. 241473) to the County to develop the project. The County has determined that the application is incomplete, and no action has been taken on the application. The applicant intends to rescind the application after filing the AB 205 application with CEC.

Based on the above analysis, implementation of the project would not conflict with an applicable land use plan, policy, or regulation. Therefore, impacts would be **less than significant**.

Criterion 3.6-3 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, excepting those lands that would be expected to be converted or retired even without the project due to insufficient water resources for continued commercial agriculture, land subsidence due to historic groundwater over-pumping, soil contamination due to inadequate drainage, or the local weather effects of climate change?

Less than Significant with Mitigation. The California Department of Conservation classifies and maps land throughout the state by its Farmland Mapping and Monitoring Program (DOC 2025a). The classification system combines technical soil ratings and current land use that is the basis for the mapping of important farmlands. The seven categories of land are Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing, Urban and Built Up, and Other, as defined in Section 3.6.5.3, Local, below.

The Farmland Mapping and Monitoring Program designations for the project site and a 1-mile buffer surrounding the project site are shown in Figure 3.6-6. The BESS facility, potential secondary access roads, and a portion of the gen-tie line are sited on lands categorized as Farmland of Statewide Importance, Prime Farmland, Grazing Land, and Urban and Built-Up Land (DOC 2025a, 2025b). Farmland of Statewide Importance, as defined in the Farmland Mapping and Monitoring Program, is land that has been irrigated for agricultural production within the 4 years prior to the Farmland Mapping and Monitoring Program map update and contains soils that meet the physical and chemical criteria for Farmland of Statewide Importance as determined by the U.S. Department of Agriculture Natural Resources Conservation Service. Farmland of Statewide Importance differs from Prime Farmland in that it contains soils of a lesser quality than Prime Farmland. Conversion of Prime Farmland and/or Farmland of Statewide Importance would be considered a significant impact pursuant to CEQA (PRC Section 21060.1).

The project would convert 15.43 acres of land mapped as Farmland of Statewide Importance, Grazing Land and Prime Farmland, as shown in Table 3.6-6, Impacts to Farmland, to a nonagricultural use.

Table 3.6-6. Impacts to Farmland

Farmland Category	Impacted Acres1
Farmland of Statewide Importance	14.34
Grazing Land	0.35
Unique Farmland	0.00
Prime Farmland	0.74
Non-Farmland Category	**Impacted Acres**
Other Land	0.00
Urban and Built-Up Land	0.375

Source: DOC 2025b.

1 The underground trenched portion of the generation interconnect line is expected to have a width of 2.5 feet. A 30-foot-wide trench corridor was examined to allow citing flexibility.

The portion of the project site where the BESS facility and gen-tie line are proposed to be constructed was analyzed for its continued agricultural feasibility. The agriculture feasibility report indicates that although the site has been commercially cultivated with an apple orchard since 1993, the orchard has large areas of missing trees and patterns of plant mortality, reduced vigor, and tree replacement. Previous attempts to cultivate berries and vegetables were unsuccessful (Rush & Duttle Consulting 2024). The project site is underlain with Watsonville loam, 2% to 15% slopes. These types of soils are highly hydric, with a hydric rating of 88%, and have an Irrigated Land Capability Classification of 3 with a Subclassification of "e" for its significant potential for erosion. Class 3 soils have severe limitations that reduce the choice of plants or require special conservation practices, or both. Hydric soils are defined as soils that form under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Hydric soils have conditions that can limit root growth and significantly favor development of highly damaging soil-borne plant pathogens. These circumstances significantly increase the potential for disaggregation, reduced fertility, increased salt accumulation, and erosion, which can be significantly increased with cultivation. The orchard condition reflects reduced vigor and crop failure normally associated with the subject soil unit.

The California Revised Storie Index is a widely known and accepted method of rating soils for agricultural potential in California that assesses the productivity of a soil from the following four characteristics: degree of soil profile development, texture of the surface layer, slope, and manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. While the soils in the project site are considered Farmland of Statewide Importance, the soils in this classification unit have a California Revised Storie Index value of Grade 5 (very poor) (Rush & Duttle Consulting 2024).

By contrast, portions of the project parcel outside of the project boundary are underlain by various soil units, with Pinto loam (2% to 9% slope) being the most prevalent. Pinto loam soils have an Irrigated Land Capability Classification of 2 with a Subclassification of "e" for its significant potential for erosion. Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices. The soils of this soil unit are considered Prime Farmland if Irrigated and have a Revised Storie Index rating of Grade 1 (excellent). The crop condition in this portion of the parcel was observed to be generally more vigorous and uniform relative to the northern, hydric portion of the parcel (Rush & Duttle Consulting 2024).

The project has been sited within the area of the project site that contains poor quality soils as evidenced by poor plant vigor and loss of trees. This placement would confine the energy storage facility to areas of the parcels that are not now, or likely to become, productive, sustainable, commercially viable, or profitable agricultural land in the foreseeable future. Use of these portions of the parcel for the proposed energy storage facility would provide a valuable, preferable use while mitigating the impact on agriculturally viable portions of the parcel (Rush & Duttle Consulting 2024).

To ensure future agricultural production on areas of the project site mapped Prime Farmland and with highly suitable soils, **Mitigation Measure (MM) LU-1** would require approximately 19.4 acres of land within the project parcel mapped as Prime Farmland to be preserved in perpetuity through an agricultural conservation easement. Further, at the end of the facility's useful life, the project would undergo decommissioning in accordance with then-applicable laws, ordinances, regulations, and standards. As part of the decommissioning activities, all site improvements that are no longer in use and cannot be repurposed would be removed from the project site, and the lands would be restored to a substantially similar condition in which they currently exist. With the above considerations, impacts to farmland would be considered **less than significant with mitigation.**

Criterion 3.6-4 Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract?

Less than Significant**.** The project site is not under any Williamson Act contract (DOC 2025c) (Figure 3.6-7). The project site is zoned as Commercial Agriculture (CA). The County considers the project use to be an "Energy Facility," which is not an allowable use under the CA zoning designation. SB 254 was recently passed on September 19, 2025. Therefore, CEC is no longer required to make a conformity finding for land use and zoning designations for projects going through the AB 205 process. As such, the project would have a **less-than-significant impact.**

Criterion 3.6-5 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?

Less than Significant. As discussed under Criterion 3.6-3, the portion of the project site where the BESS facility and gen-tie line are proposed to be constructed was analyzed for its continued agricultural feasibility. The agriculture feasibility report indicates that although the site has been commercially cultivated with an apple orchard since 1993, the orchard has large areas of missing trees and patterns of plant mortality, reduced vigor, and tree replacement. Previous attempts to cultivate berries and vegetables were unsuccessful (Rush & Duttle Consulting 2024).

As mentioned above, the project site is approximately 47 acres, and the proposed BESS and gen-tie line would cover approximately 16 acres of the project site. The remaining approximately 31 acres that would not be disturbed were observed to be generally more vigorous and uniform relative to the northern portion of the parcel that would be developed under the project (Rush & Duttle Consulting 2024). To ensure future agricultural production on areas of the project site mapped Prime Farmland and with highly suitable soils, approximately 19.4 acres of land within the project parcel mapped as Prime Farmland would be preserved in perpetuity through an agricultural conservation easement. The project would not impair the viability of, or create potential conflicts with, agricultural operations on the remaining areas of the site or other commercial agricultural lands in the area. The subject parcels are currently bordered to the northwest by an electrical infrastructure facility. This facility is currently operated in harmony and without impediments to the existing activity of the parcel and surrounding areas. The installation of the proposed project would

similarly not limit normal agricultural activities on the remainder of the parcel or surrounding agricultural community (Rush & Duttle Consulting 2024). Further, at the end of the facility's useful life, the project would undergo decommissioning. As part of the decommissioning activities, all site improvements that are no longer in use and cannot be repurposed would be removed from the project site, and the land would be restored to a substantially similar condition in which they existed. As such, the project would not involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use, and impacts would be **less than significant.**

3.6.3 Cumulative Impacts

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project (PRC Section 21083; 14 CCR 15064[h], 15065[c], 15130, and 15355). The CEQA Guidelines further note that the cumulative impact from several projects is the change in the environment that results from the incremental impact of a project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative effects can result from individually minor but collectively significant projects taking place over a period of time (14 CCR Section 15355).

Cumulative land use impacts could occur if development of the project and other related past, present, and reasonably foreseeable probable future projects would be inconsistent with applicable plans and policies or have other cumulative land-use-related impacts, such as the conversion of farmland. The project is not consistent with land use plans and policies but is compatible with adjacent uses (Green Valley Substation). To ensure future agricultural production on areas of the project site mapped Prime Farmland and with highly suitable soils, approximately 19.4 acres of land within the project parcel mapped as Prime Farmland would be preserved in perpetuity through an agricultural conservation easement. Therefore, the project would not contribute to cumulative impacts associated with land use compatibility. Moreover, there are no past, present, or reasonably foreseeable future projects proposed within the study area that would result in adjacent incompatible land uses (see Chapter 3, Environmental Analysis, for a list of cumulative projects).

Long-term cumulative impacts related to land use are not anticipated with implementation of the project and the listed projects because each project is required to comply with the CEQA Guidelines requirements for evaluating potential cumulative impacts and/or obtain approval from the lead agency prior to permitting and construction by demonstrating conformance to existing land use policies. For these reasons, the project would not cause a significant cumulative land use impact.

3.6.4 Mitigation Measures

MM LU-1 Prior to issuance of grading permits, the project owner shall cause to be recorded, an agricultural conservation easement on undeveloped portions of the project site parcels (Assessor's Parcel Numbers 051-101-77 and 051-101-78) to conserve, in perpetuity, 19.4 acres of Prime Farmland, 11.7 acres of Farmland of Statewide Importance, and 0.8 acres of Unique Farmland as classified by the Department of Conservation Farmland Mapping and Monitoring Program. The agricultural conservation easement shall be held by a qualified easement holder. Proof of recording shall be submitted to and approved by the California Energy Commission prior to issuance of grading permits.

3.6.5 Laws, Ordinances, Regulations, and Standards

This section lists and discusses the land use laws, ordinances, regulations, and standards that apply to the project. The project, including all its project components, is entirely within Santa Cruz County. Table 3.6-7 lists the potentially applicable federal, state, and local plans and policies.

Table 3.6-7. Laws, Ordinances, Regulations, and Standards Applicable to Land Use

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
Federal	14 CFR Part 77	Any person or an agent who intends to sponsor construction is required to submit notice to the FAA if the proposed construction or alteration meets notice requirements.	**Yes**. The project would comply with the requirements under 14 CFR Part 77.	Section 3.6.5.1
State	AB 205	Legislation that created and gives statutory authority to CEC.	**Yes.** As part of the opt-in application process, CEC would review the project for consistency with the County's land use plans, policies, and regulations.	Throughout this opt-in application
State	California Land Conservation Act of 1965 (Williamson Act)	Preserves agricultural land and encourages open space, Preservation, and efficient urban growth.	**Yes**. The BESS facility site and gen-tie corridors are not under any Williamson Act contract.	Section 3.6.1.4 Criterion 3.6-4 Section 3.6.5.2
State	CEQA	Requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the project and to reduce environmental impacts to the extent feasible.	**Yes.** Per CEC's certified regulatory program and the AB 205 opt-in application process.	Throughout this opt-in application
Local	Santa Cruz County General Plan	A document that provides a comprehensive policy framework guiding the long-term physical development and conservation of the unincorporated areas of Santa Cruz County. The plan includes elements such as built environment; access and mobility; housing;	**Yes**. AB 205 expanded CEC's authority under the Warren-Alquist Act to establish a new certification program for eligible non-fossil-fueled power plants using emergency rulemaking authority provided by AB 205. As part of the opt-in application process established under AB 205, CEC would determine whether the project would	Criterion 3.6-2 Table 3.6-3 Section 3.6.5.3

Table 3.6-7. Laws, Ordinances, Regulations, and Standards Applicable to Land Use

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
		agriculture, natural resources, and conservation; public safety; parks, recreation, and public facilities; and noise.	conflict with the County's land use and zoning policies. As such, the project would conflict with General Plan land use designations. However, SB 254 eliminated the requirement that CEC determine conformance with land use and zoning designations and make findings for projects reviewed under the AB 205 process.	
Local	Santa Cruz County General Plan, Watsonville Airport Land Use Compatibility Plan	Embedded within the Santa Cruz County General Plan. Establishes policies regarding areas that are within AIAs.	**Yes**. AB 205 expanded CEC's authority under the Warren-Alquist Act to establish a new certification program for eligible non-fossil-fueled power plants using emergency rulemaking authority provided by AB 205. As part of the opt-in application process established under AB 205, CEC would determine whether the project would conflict with the County's land use and zoning policies. As such, the project would conflict with General Plan land use designations. However, the project conforms with development limits applicable within the AIA pursuant to the ALUCP. SB 254 eliminated the requirement that CEC determine conformance with land use and zoning designations and make findings for projects reviewed under the AB 205 process.	Criterion 3.6-2 Table 3.6-5 Section 3.6.5.3
Local	Santa Cruz County Municipal Code, Title 13, Planning and Zoning Regulations	Establishes regulations and standards for land use and development in the unincorporated areas of Santa Cruz County. It includes Countywide provisions that apply to all areas,	**Yes.** BESSs are not expressly defined in the County's Zoning Code. The County considers the project use to be an "Energy Facility," which is not an allowable use under the Commercial Agriculture (CA) zoning designation.	Criterion 3.6-2 Criterion 3.6-4 Section 3.6.5.3

Table 3.6-7. Laws, Ordinances, Regulations, and Standards Applicable to Land Use

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
		such as general rules, zoning classifications, and development standards.	However, SB 254 was passed on September 19, 2025, which, among other provisions, eliminated the requirement that CEC determine conformance with land use and zoning designations and make findings for projects reviewed under the AB 205 process.	
Local	Santa Cruz County Municipal Code, Title 9, Roads, Vehicles and Traffic, Chapter 9.70	Establishes permitting requirements and procedures for activities that may alter, excavate under, obstruct, or encroach upon County-maintained roads and rights-of-way and ensure that road work within the rights-of-way of existing County-maintained roads in connection with development not otherwise bound by agreement with the Board of Supervisors through the subdivision ordinance or contract be constructed to the standards of the County.	**Yes.** The project would require an encroachment permit to allow the for the gen-tie crossing of Minto Road.	Criterion 3.6-1

Notes: LORS = laws, ordinances, regulations, and standards; CFR = Code of Federal Regulations FAA = Federal Aviation Administration;; AB = Assembly Bill; CEC = California Energy Commission; County = County of Santa Cruz; BESS = battery energy storage system; gen-tie = generation interconnect; CEQA = California Environmental Quality Act; SB = Senate Bill; AIA = Airport Influence Area; ALUCP = airport land use compatibility plan.

3.6.5.1 Federal

Title 14 of the Code of Federal Regulations Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace

The Federal Aviation Administration regulates aviation at regional, public, and private airports. The Federal Aviation Administration regulates objects affecting navigable airspace. According to Title 14 of the Code of Federal Regulations, Section 77.9, any person/organization who intends to sponsor construction or alterations must notify the Administrator of the Federal Aviation Administration about the following:

- Any construction or alteration exceeding 200 feet above ground level.

- Any construction or alteration:
  - Within 20,000 feet of a public use or military airport that exceeds a 100:1 surface from any point on the runway where the longest airport runway exceeds 3,200 feet in actual length.
  - Within 10,000 feet of a public use or military airport that exceeds a 50:1 surface from any point on the runway where the longest airport runway is less than 3,200 feet in actual length.
  - Within 5,000 feet of a public use heliport that exceeds a 25:1 surface.
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed the above standards.
- When requested by the Federal Aviation Administration.
- Any construction or alteration located on a public use airport or heliport regardless of height or location.

Failure to comply with the provisions of Federal Aviation Regulation Part 77 is subject to civil penalty under Section 902 of the Federal Aviation Act of 1958, as amended, and pursuant to 49 United States Code Section 46301(a).

As discussed in this application and in this section, the project complies with these requirements. The tallest structures associated with the gen-tie line and project substation would be approximately 60 feet tall.

3.6.5.2 State

Assembly Bill 205

Governor Gavin Newsom signed AB 205 into law on June 30, 2022. This legislative effort significantly expands CEC's jurisdiction and encourages the development of new clean energy projects. In short, AB 205 allows developers to opt in to a new streamlined environmental review and authorization process for certain solar, wind, and other qualifying clean energy projects under exclusive state jurisdiction. The law also provides new funding for qualifying generation and energy storage facilities. Before AB 205, CEC's siting authority was limited to thermal power plants with capacities of 50 megawatts or more. AB 205 expands CEC's siting authority to include non-thermal generating facilities and establishes a new siting certification process for the following eligible facilities:

- Solar photovoltaic and onshore wind generating facilities with capacities of 50 megawatts or more.
- Energy storage facilities capable of storing at least 200 megawatt-hours of energy.
- A stationary electrical generating powerplant using any source of thermal energy, with a generating capacity of 50 megawatts or more, excluding any powerplant that burns, uses, or relies on fossil or nuclear fuels.
- Facilities for the manufacture, production, or assembly of energy storage systems, wind systems, solar photovoltaic systems, or the components of those systems if the developer certifies the project would require a capital investment of $250 million over a period of 5 years.
- Transmission lines from the abovementioned generating or storage facilities to the first Point of Interconnection.
- A hydrogen production facility and associated on-site storage and processing facilities that do not derive hydrogen from a fossil fuel feedstock and that receive funding from specified sources.

AB 205 gives CEC exclusive siting authority over these eligible projects if a developer submits an application to CEC under this certification process instead of an application for entitlements from the jurisdiction in which the project is located. CEC's siting certification is in lieu of any permit, certificate, or similar document required by any state,

local, or regional agency, or federal agency to the extent permitted by federal law. It also supersedes any applicable statute, ordinance, or regulation of any state, local, or regional, or federal agency to the extent permitted by federal law, with limited exceptions. AB 205 specifically provides that the certification does not supersede the authority of an exclusive list of agencies: the California State Lands Commission, the California Coastal Commission, the San Francisco Bay Conservation and Development Commission, the California State Water Resources Control Board or the applicable Regional Water Quality Control Boards, local air quality management districts, or the California Department of Toxic Substances Control.

As part of the opt-in application process, AB 205 provides that CEC would review the project for consistency with the County's land use plans, policies, and regulations. However, SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions that require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.

California Department of Conservation Farmland Mapping and Monitoring Program

The California Department of Conservation developed categorical definitions of important farmlands for land inventory purposes, which are applied within the Farmland Mapping and Monitoring Program. Important farmlands provide the best opportunity for agricultural production. The following are the Important Farmland categories (DOC 2025a):

- **Prime Farmland:** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.
- **Farmland of Statewide Importance:** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.
- **Farmland of Local Importance:** Land of importance to the local agricultural economy as determined by each county's board of supervisors and local advisory committee. In some counties, Confined Animal Agriculture facilities are part of the Farmland of Local Importance but are shown separately.
- **Confined Animal Agriculture:** Lands used for confined animal agricultural facilities, including but not limited to, dairies, feedlots, poultry facilities, and fish farms. Although these uses do not qualify for the major agricultural categories, some counties include them in their Farmland of Local Importance definitions.
- **Unique Farmland:** Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the 4 years prior to the mapping date.
- **Grazing Land:** Land on which the existing vegetation is suited to the grazing of livestock.
- **Urban and Built-Up Land:** Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, and other developed purposes.
- **Other Land:** Land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing or confined livestock. Additionally, vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

The project site currently consists of land designated as mostly Prime Farmland and Farmland of Statewide Importance, with small portions of Urban and Built-Up Land, Grazing Land, Unique Farmland, and Other Land (DOC 2025a, 2025b). Additionally, surrounding lands consist of Prime Farmland, Urban and Built-Up Land, Grazing Land, Farmland of Statewide Importance, Unique Farmland, and Other Land (Figure 3.6-5, Farmland Mapping and Monitoring Program Designations).

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act, better known as the Williamson Act, has been the state's primary agricultural land protection program since its enactment in 1965. More than 16 million of the state's 30 million acres of farm and ranch land are currently protected under the Williamson Act. The Williamson Act creates an arrangement, whereby private landowners agree with counties and cities to voluntarily restrict land in designated Agricultural Preserve areas to agricultural, recreational, and open space uses, and compatible uses. In return, the landowner receives property tax assessments that are lower than normal because the assessments are based on the restricted uses rather than full market value. Local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971. Williamson Act contracts automatically renew each year for a new 10-year period, unless either party files a "notice of non-renewal" to terminate the contract before the end of the current 10-year period. During the ensuing 10-year non-renewal period following a "notice of non-renewal," property taxes are gradually raised to the applicable level for developable land.

The Williamson Act also authorizes cities and counties to establish Farmland Security Zones within existing Agricultural Preserves and to enter into Farmland Security Zone contracts with a minimum initial term of 20 years and annual renewal similar to a Williamson Act contract. To be eligible for a Farmland Security Zone contract, the subject land must be designated on the Important Farmland Series maps as predominantly Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance.

The BESS facility site is not under any Williamson Act contract (Figure 3.6-7) (DOC 2025c).

3.6.5.3 Local

Santa Cruz County General Plan

The Santa Cruz County General Plan outlines the policy framework for the growth and development of the unincorporated areas in Santa Cruz County. The plan includes goals, objectives, policies, and implementation strategies to guide future growth and development in a manner consistent with the quality of life desired by citizens. The California Planning and Zoning Law (Government Code Section 65300 et seq.) requires adoption of a comprehensive long-term General Plan to guide the physical development of a county. Certain elements are required by law to be included in the General Plan, including Land Use, Circulation, Housing, Conservation, Open Space, Public Safety, and Noise; other elements, such as Community Design, Parks and Recreation, and Public Facilities are optional. However, jurisdictions are given leeway to structure their general plans, as long as all required elements are covered and consistent with one another, as required by Government Code Section 65300.5. The Santa Cruz County General Plan chapters include Built Environment; Access and Mobility; Housing; Agriculture, Natural Resources, and Conservation; Public Safety; Parks, Recreation, and Public Facilities; and Noise. These focus areas collectively aim to create a balanced, sustainable, and resilient future for the County (County of Santa Cruz 2024a).

The project has a land use designation under the Santa Cruz County General Plan of Agriculture (AG). Per Table 5.1 of the Agriculture, Natural Resources, and Conservation Element of the Santa Cruz County General Plan, for non-

commercial agricultural lands, the maximum building height is 40 feet for agricultural structures and 28 feet for residential structures. The estimated lot coverage allowed is 0% to 20%, and the maximum residential density is one single-family dwelling per 2.5 to 40 net developable acres. As noted for Table 5.1 of the Agriculture, Natural Resources, and Conservation Element, "Lot coverage is provided as an estimate and is not a regulatory standard. Allowable lot coverage is determined by the provisions of any contract, site conditions, and development criteria for the zone district and use. Greenhouses and agricultural storage structures do not count toward lot coverage.... An accessory dwelling unit and residential accessory structures are considered accessory to a single-family dwelling and do not count toward residential density.... On non-commercial agriculture land, maximum residential density is determined through the rural density matrix" (County of Santa Cruz 2024c).

Relevant policies of the Santa Cruz County General Plan are identified in Table 3.6-3.

As part of the opt-in application process, CEC would review the project for consistency with the County's land use plans, policies, and regulations. AB 205 expanded CEC's authority under the Warren-Alquist Act to establish a new certification program for eligible non-fossil-fueled power plants using emergency rulemaking authority provided by AB 205. As part of the opt-in application process established under AB 205, CEC would determine whether the project would conflict with the County's land use and zoning policies. However, SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions that require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.

Watsonville Municipal Airport Land Use Compatibility Plan

The airport compatibility requirements are applicable to the AIA, which is the area or areas in which current or future airport-related noise, overflight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on land use. According to California Public Utilities Code Section 21675.1(b), the AIA must encompass that land within 2 miles of the boundaries of the Watsonville Municipal Airport. The project has a zoning designation as Commercial Agriculture – Airport Influence Area (CA-AIA). Use and development is subject to the Airport Combining Zone District Ordinance.

The basic function of airport land use compatibility plan in Santa Cruz County is to promote compatibility between the Watsonville Municipal Airport and existing and future land uses in the unincorporated areas of the County that surround it, to recognize the extent to which these areas may already be developed with incompatible uses, and to comply with state statutes, regulations, and other laws governing land uses surrounding the airport.

The California State Aeronautics Act (Public Utilities Code Sections 21670 et seq.) addresses establishment of an airport land use commission. Santa Cruz County qualifies for an exception in the State Aeronautics Act (Section 21670.1[e]) because the County "has only one public use airport that is owned by a (single) city." The County need not form an airport land use commission provided it incorporates the height, use, noise, safety, and density criteria that are compatible with airport operations as established by the California Airport Land Use Planning Handbook (Handbook) and any applicable federal aviation regulations, including, but not limited to, Part 77 (commencing with Section 77.1) of Title 14 of the Code of Federal Regulations, as part of the General and Specific P of the County. The County must adopt the Handbook's criteria and incorporate the criteria as part of the General Plan. This has been interpreted to mean that the County has no discretion as to which of the Handbook's criteria should be incorporated into the General Plan (Watsonville Pilots Association et al. v. City of Watsonville [2010] 183 Cal.App.4th 1059). Therefore, wherever the Handbook provides a range of criteria, the most restrictive criteria is adopted.

Land use compatibility concerns to be addressed within the AIA fall under two broad headings identified in state law: noise and safety. However, for purposes of formulating compatibility policies and criteria, further dividing these basic concerns into four functional categories is more practical. These categories include (1) exposure to aircraft noise; (2) land use safety with respect both to people and property on the ground and the occupants of aircraft; (3) protection of airport airspace; and (4) general concerns related to aircraft overflights.

The project site is not within a Land Use Safety Zone.

Relevant policies of the Watsonville Municipal Airport Land Use Compatibility Plan are identified in Table 3.6-5.

As part of the opt-in application process, CEC would review the project for consistency with the County's land use plans, policies, and regulations. AB 205 expanded CEC's authority under the Warren-Alquist Act to establish a new certification program for eligible non-fossil-fueled power plants using emergency rulemaking authority provided by AB 205. As part of the opt-in application process established under AB 205, CEC would determine whether the project would conflict with the County's land use and zoning policies. However, SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions that require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.

Santa Cruz County Municipal Code, Title 13, Planning and Zoning Regulations

Title 13 of the Santa Cruz County Code of Ordinances further refines the County's General Plan and provides additional detail pertaining to allowed and conditional uses and specific development standards for the various zoning districts. Chapter 13.10 Article I covers zoning requirements specific to the project site, which are the Agricultural Districts. The project site is zoned as Commercial Agriculture (CA).

A BESS is not expressly defined in the County's Zoning Code. The County considers the project use to be an "Energy Facility," which is not an allowable use under the CA zoning designation. The County-proposed SB 254 was passed on September 19, 2025, which, among other provisions, amended provisions that require CEC to make a finding of conformance to land use and zoning designations for projects going through the AB 205 process.

3.6.6 Agencies and Agency Contacts

Applicable permits and agency contacts for land use issues are shown in Table 3.6-8. Land use approval permits from the Santa Cruz County Planning Department would be superseded by CEC approval of the project under the opt-in application program.

Table 3.6-8. Permits and Agency Contacts

Permit or Approval	Agency Contact	Applicability
Site Certification for Opt-In Project (with environmental review under CEQA and Assembly Bill 52 Tribal Consultation)	California Energy Commission Siting, Transmission and Environmental Protection Division 715 P Street, MS-40 Sacramento, California 95814 916.352.0543 STEPsiting@energy.ca.gov	Land use entitlement

Table 3.6-8. Permits and Agency Contacts

Permit or Approval	Agency Contact	Applicability
Encroachment Permit	Matt Machado, Director of Public Works County of Santa Cruz Department of Public Works 701 Ocean Street, Room 410 Santa Cruz, California 95060-4070 831.454.2160 DPWEncroachments@santacruzcountyca.gov	For project components (collection lines, etc.) that would cross Minto Road

Notes: CEQA = California Environmental Quality Act.

3.6.7 Permits and Permit Schedule

An application for Conditional Site Development and Conditional Use Permits from the County was submitted to the County on December 12, 2024, and is to be rescinded after submittal of the AB 205 application to CEC. No other off-site work is anticipated to be required for interconnection of the project to the existing Green Valley Substation.

3.6.8 References

County of Santa Cruz. 2022. "Appendix H: Airport Land Use Compatibility Requirements + County Strategy." In *Santa Cruz County General Plan*. Accessed November 2025. https://cdi.santacruzcountyca.gov/Portals/2/County/Planning/SustainabilityUpdate/General_Plan/GeneralPlanAppendixH-AirportLandUseCompatibility_public_draft.pdf?ver=z8jb-b3wNFPjMDPql-6G1w%3d%3d.

County of Santa Cruz. 2024a. *General Plan and Local Coastal Program*. Effective March 18, 2024. https://cdi.santacruzcountyca.gov/Planning/PolicyPlanning/General,TownVillagePlans.aspx.

County of Santa Cruz. 2024b. "Built Environment Element." Chapter 2 in *Santa Cruz County General Plan/LCP*. Effective March 15, 2024. Accessed October 2025. https://cdi.santacruzcountyca.gov/Planning/PolicyPlanning/General,TownVillagePlans.aspx.

County of Santa Cruz. 2024c. "Agriculture, Natural Resources, + Conservation Element." Chapter 5 in *Santa Cruz County General Plan/LCP*. Effective March 15, 2024. Accessed October 2025. https://cdi.santacruzcountyca.gov/Planning/PolicyPlanning/General,TownVillagePlans.aspx.

County of Santa Cruz. 2024d. "Public Safety Element Outside of Coastal Zone." Chapter 6 in *Santa Cruz County General Plan*/LCP. Accessed October 2025. https://cdi.santacruzcountyca.gov/Planning/PolicyPlanning/General,TownVillagePlans.aspx.

County of Santa Cruz. 2024e. "Parks, Recreation + Public Facilities." Chapter 7 in *Santa Cruz County General Plan/LCP*. Effective March 18, 2024. Accessed October 2025. https://cdi.santacruzcountyca.gov/Planning/PolicyPlanning/General,TownVillagePlans.aspx.

County of Santa Cruz. 2025a. GISWeb Application Santa Cruz County, California [online database]. Accessed October 2025. https://sccgis.santacruzcountyca.gov/gisweb/.

County of Santa Cruz. 2025b. Approved Draft BESS Ordinance. Accessed February 2026. https://cdi.santacruzcountyca.gov/Portals/35/CDI/UnifiedPermitCenter/BESS%20Ordinance%20Page/Files/BOS%20Approved%20Draft%20ESCD%20GP-Code%20Amendments%201-16-26.pdf?ver=xtvnQpWI_rF1YCE6eLwMtQ%3d%3d.

DOC (California Department of Conservation). 2025a. "Important Farmland Categories." Accessed October 2025. https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx.

DOC. 2025b. California Important Farmland Finder [online database]. Accessed October 2025. https://maps.conservation.ca.gov/DLRP/CIFF/.

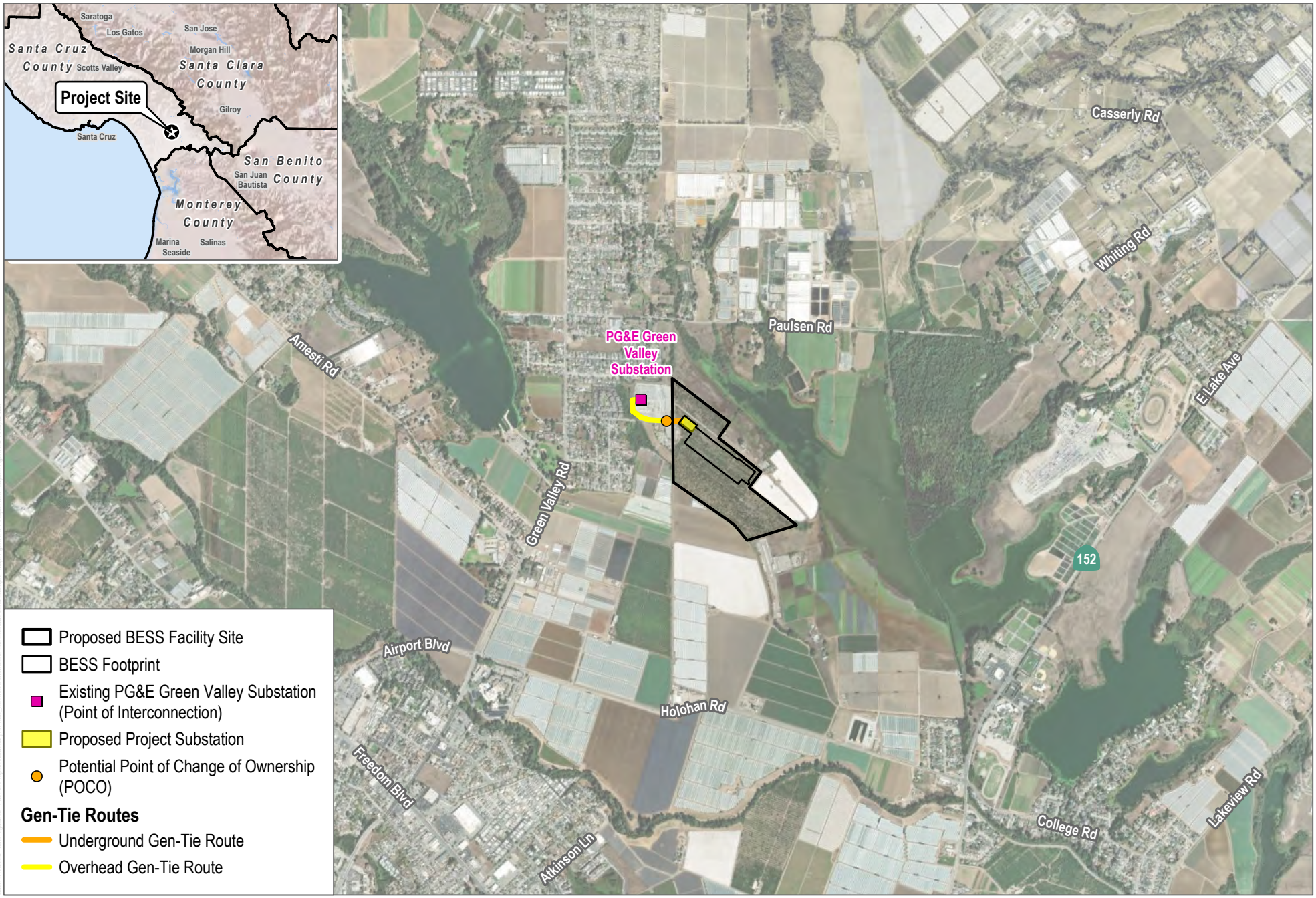
DOC. 2025c. Williamson Act Enrollment Finder [online database]. Accessed October 2025. https://maps.conservation.ca.gov/dlrp/WilliamsonAct/.

Google Earth. 2025. Historical imagery of the project site. Accessed October 2025. https://google.com/earth/versions.

OPR (Governor's Office of Planning and Research). 1994. *Thresholds of Significance: Criteria for Defining Environmental Significance*. CEQA Technical Advice Series. Sacramento, California: OPR. September 1994.

Rush & Duttle Consulting. 2024. *Agricultural Land Assessment of APN 051-101-77 and 051-101-78, 90 Minto Road, Watsonville, California*.

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; Open Street Map 2023

DUDEK

0 1,000 2,000 Feet

FIGURE 3.6-1

Project Site

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: County of Santa Cruz 2025; Maxar 2024; Open Street Map 2023

DUDEK

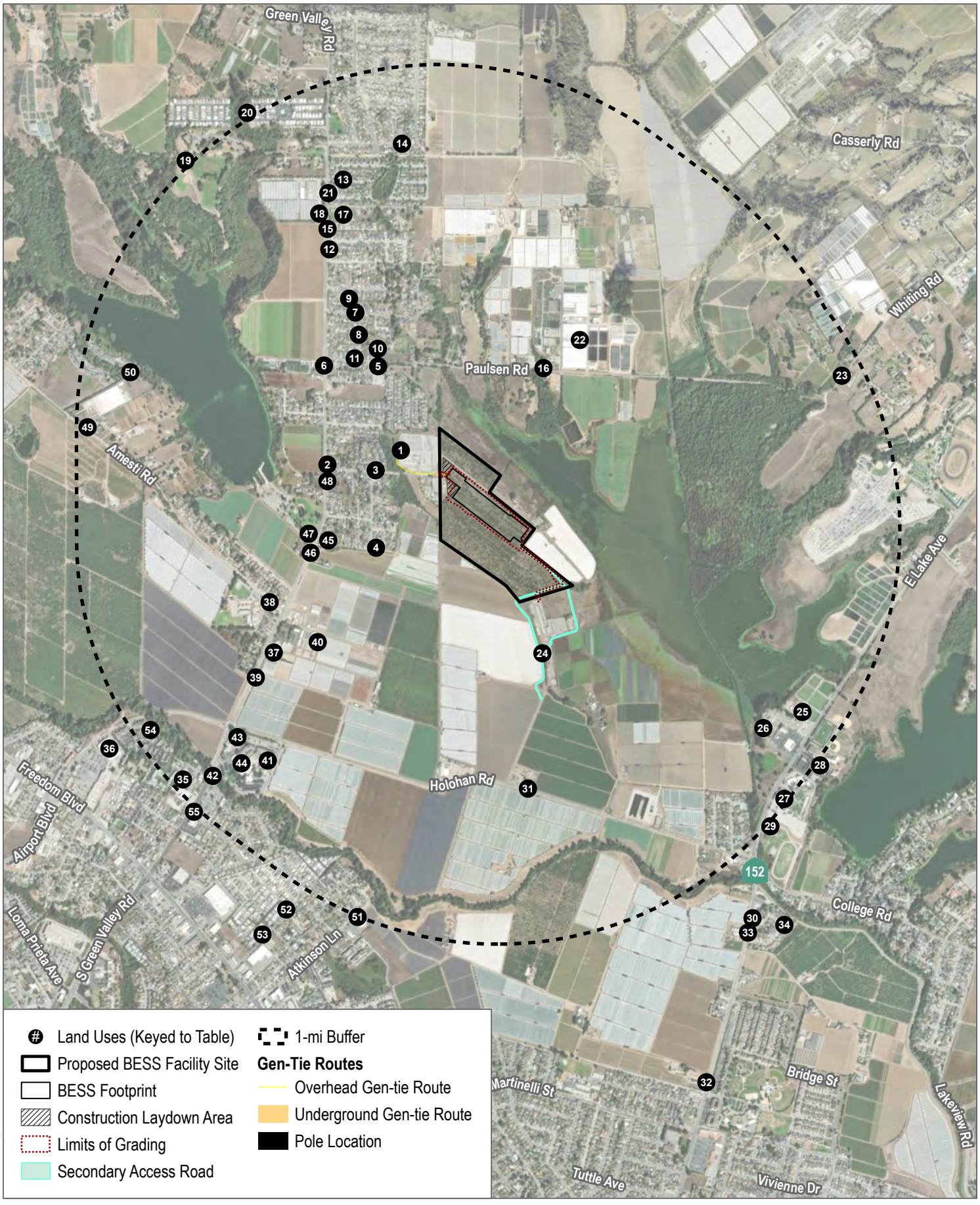
0 250 500 Feet

FIGURE 3.6-2

Assessor's Parcel Number (APN) Map

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; Open Street Map 2023

DUDEK

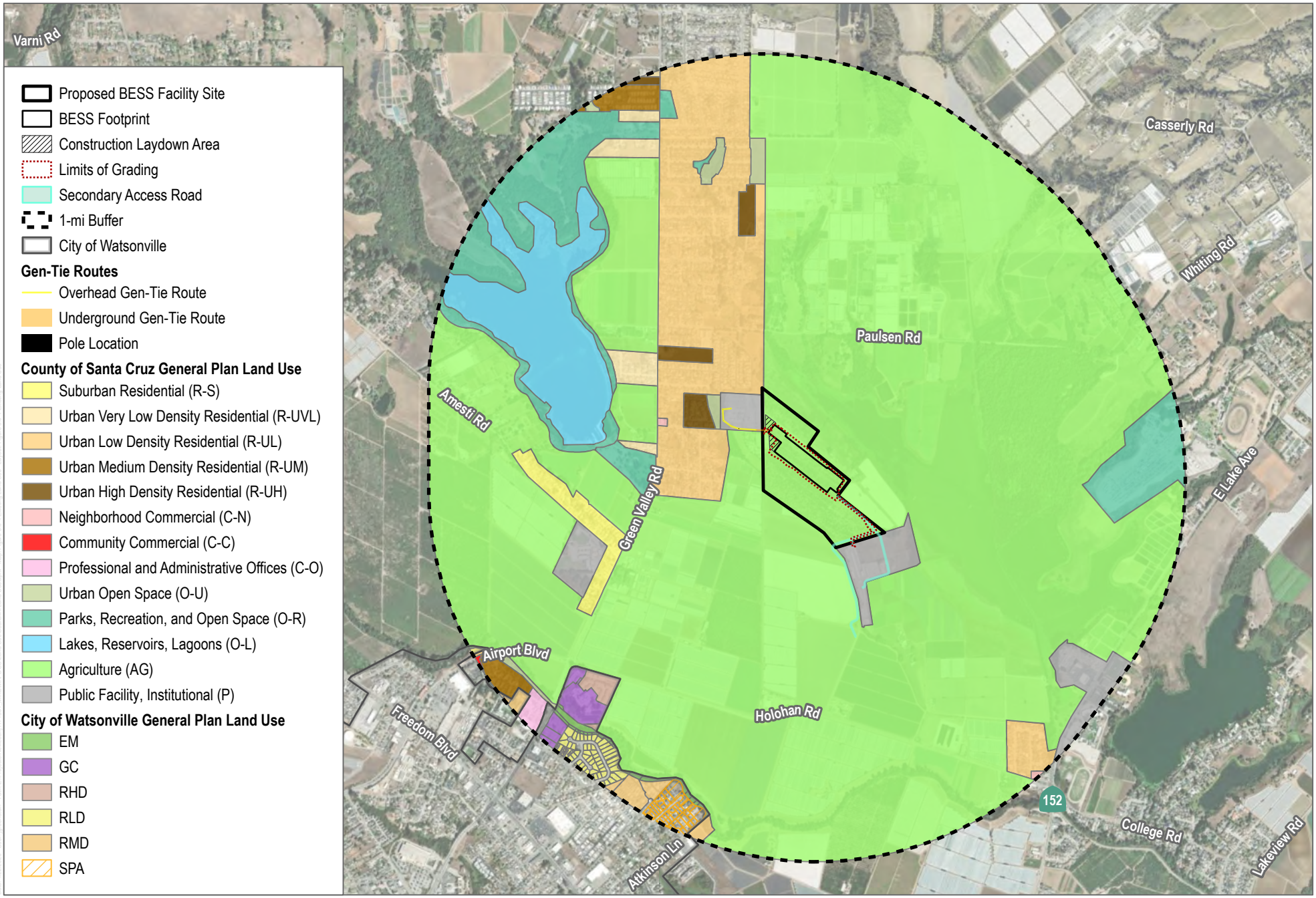
0 1,000 2,000 Feet

FIGURE 3.6-3

Notable Land Uses

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: County of Santa Cruz 2025; City of Watsonville 2025; Maxar 2024; Open Street Map 2023

DUDEK

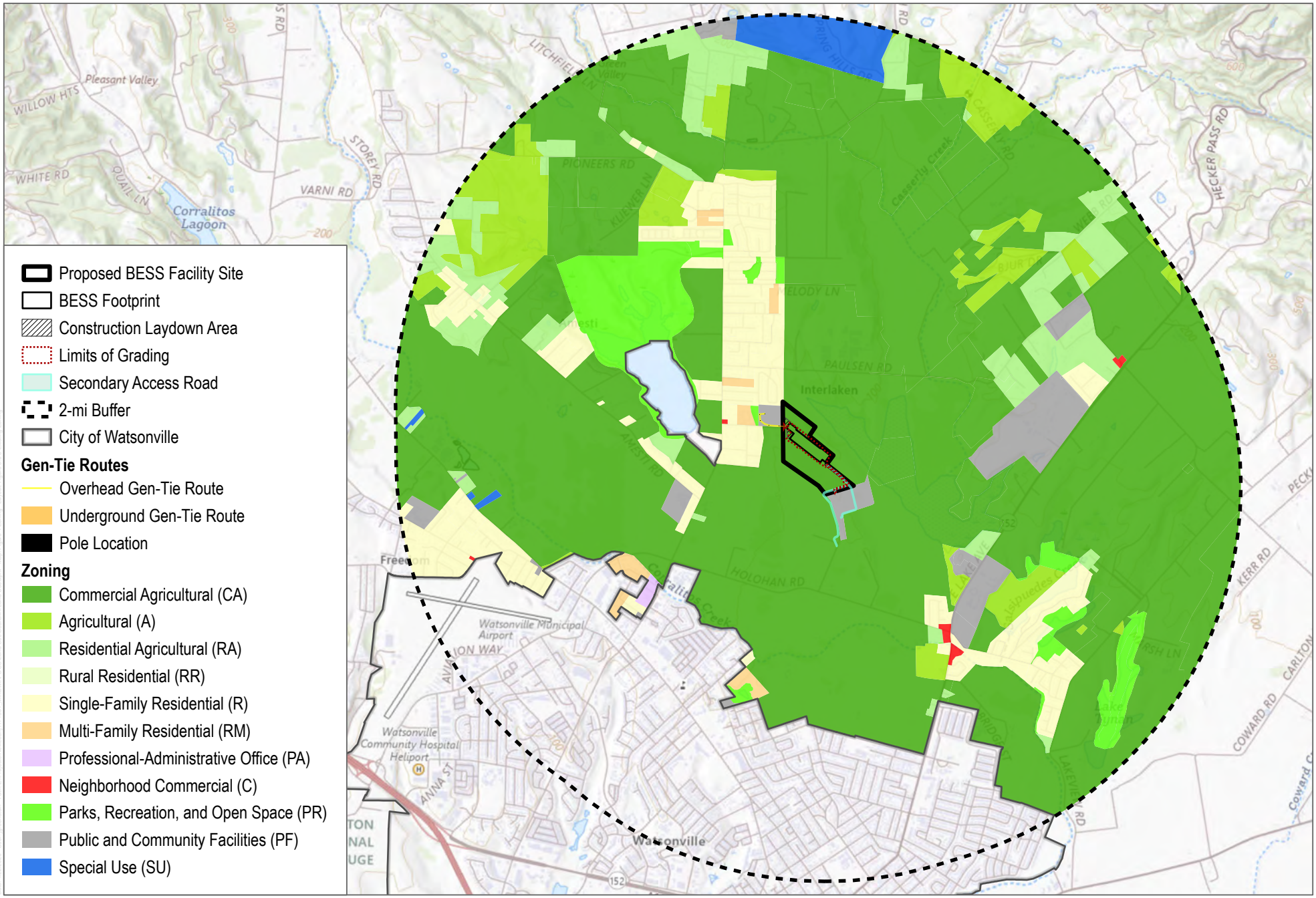
0 1,000 2,000 Feet

FIGURE 3.6-4

Existing Land Use

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: USGS National Map; County of Santa Cruz 2025

DUDEK

FIGURE 3.6-5

Existing Zoning

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; Open Street Map 2023; CA Dept. of Conservation 2022

DUDEK

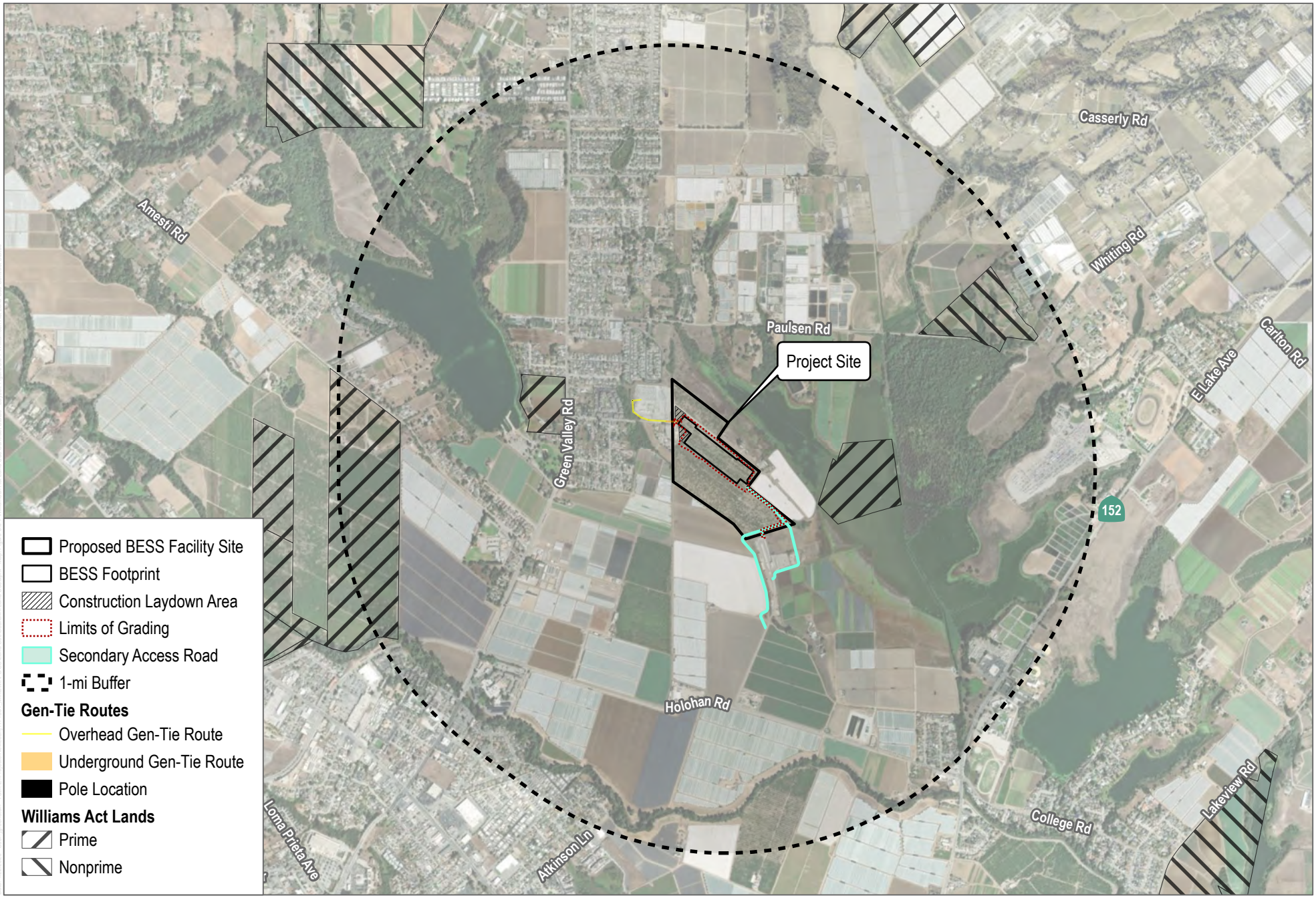
0 1,000 2,000 Feet

FIGURE 3.6-6

Farmland Mapping and Monitoring Program Designations

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 2024; Open Street Map 2023; CA Dept. of Conservation 2022

DUDEK

0 1,000 2,000 Feet

FIGURE 3.6-7

Williamson Act Land Use Contract Status

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK

3.7 Noise

This section describes the potential noise effects of the Seahawk Battery Energy Storage System Project (project) arising from the construction and operation of the project. The proposed project would consist of a 200-megawatt battery energy storage system (BESS) facility using lithium-iron phosphate batteries installed in racks inside of prefabricated energy storage containers. The project would include components such as an operations and maintenance building, an on-site collector substation (project substation), a fire protection system, a noise mitigation wall, and a supervisory control and data acquisition (SCADA) system. The project would interconnect from the on-site collector substation to the adjacent Pacific Gas and Electric Company (PG&E) Green Valley Substation via a 115-kilovolt generation interconnect transmission line. The line would be installed underground from the project substation to the Point of Change of Ownership at an overhead riser pole on the PG&E parcel, and an overhead line would connect to the Point of Interconnection at the PG&E Green Valley Substation.

This evaluation of noise includes the following elements:

- Section 3.7.1 describes the existing environment that could be affected, including fundamentals of acoustics, existing local sound sources, and sensitive receptors.
- Section 3.7.2 identifies potential environmental impacts and impacts to humans that may result from project construction, operation, maintenance, and decommissioning.
- Section 3.7.3 discusses potential cumulative effects.
- Section 3.7.4 describes project design and mitigation measures that would be implemented to avoid or minimize potentially significant impacts.
- Section 3.7.5 presents laws, ordinances, regulations, and standards applicable to noise.
- Section 3.7.6 identifies regulatory agency contacts.
- Section 3.7.7 describes permits required for the project related to noise.
- Section 3.7.8 provides references used to develop this section.

The following environmental setting and impact evaluation is based in part on the following project-specific technical analysis:

- Appendix 3.7A – Baseline Sound Measurement Field Data
- Appendix 3.7B – Construction Noise Model Inputs and Outputs
- Appendix 3.7C – Traffic Noise Modeling Worksheets
- Appendix 3.7D – Stationary Operations Source Inputs and Results
- Appendix 3.7E – Construction Vibration Calculations

A summary of the noise evaluation is provided in the table below.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
2) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

3.7.1 Affected Environment

This section provides a discussion of fundamental acoustic concepts and terminology, the local setting related to noise sources and noise-sensitive land uses, and the existing noise environment in the project site.

3.7.1.1 Sound, Noise, and Acoustics

Sound consists of three components: the sound source, sound path, and sound receptor. All three components must be present for sound to exist. Without a source to produce sound, there is no sound. Similarly, without a medium to transmit sound pressure waves, there is no sound. Finally, sound must be received; a hearing organ, sensor, or object must be present to perceive, register, or be affected by sound or noise. In most situations, there are multiple sound sources, paths, and receptors. Acoustics is the field of science that deals with production, propagation, reception, effects, and control of sound. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired.

3.7.1.2 Sound Pressure Levels and Decibels

The amplitude of a sound wave determines its loudness. Loudness of sound increases with increasing amplitude. Sound pressure amplitude is measured in units of micronewtons per square meter, also called micropascals. One micropascal is approximately one-hundred billionth (0.00000000001) of normal atmospheric pressure. The pressure of a very loud sound may be 200 million micropascals, or 10 million times the pressure of the weakest audible sound. Because expressing sound levels in terms of micropascals would be very cumbersome, and the sensitivity of human hearing to changes in micropascals is rather coarse (e.g., a doubling of micropascals is just audible to most people), sound pressure level in logarithmic units is used instead to describe the ratio of actual

sound pressure to a reference pressure squared. These units are called Bels. To provide a finer resolution, a Bel is subdivided into 10 decibels (dB).

3.7.1.3 A-Weighted Sound Level

Sound pressure level alone is not a reliable indicator of loudness. The frequency, or pitch, of a sound also has a substantial effect on how humans respond. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness, or human response, is determined by the characteristics of the human ear.

Human hearing is limited not only in the range of audible frequencies, but also in the way it perceives the sound in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 hertz and 5,000 hertz, and it perceives a sound within that range as more intense than a sound of higher or lower frequency with the same magnitude. To approximate the frequency response of the human ear, a series of frequency-dependent sound level adjustments is usually applied to the sound measured by a sound level meter. The A-scale weighting network approximates the frequency response of the average young ear when listening to ordinary sounds. When people make judgments about the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Noise levels are typically reported in terms of A-weighted sound levels. All sound levels discussed in this report are A-weighted decibels (dBA). Examples of typical noise levels for common indoor and outdoor activities are depicted in Table 3.7-1.

Table 3.7-1. Typical Noise Levels Associated with Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Flyover at 1,000 feet	105	
	100	
Gas Lawn Mower at 3 feet	95	
	90	
Diesel Truck at 50 feet, 50 miles per hour	85	Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime	75	
	70	Vacuum Cleaner at 10 feet
Commercial Area	65	Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
	55	Large Business Office
Quiet Urban Daytime	50	Dishwasher (in next room)
	45	
Quiet Urban Nighttime	40	Theater, Conference Room (background)
Quiet Suburban Nighttime	35	
	30	Library
Quiet Rural Nighttime	25	Bedroom at Night, Concert Hall (background)
	20	
	15	Broadcast/Recording Studio
	10	
	5	

Table 3.7-1. Typical Noise Levels Associated with Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Lowest Threshold of Human Hearing (Healthy)	0	Lowest Threshold of Human Hearing (Healthy)

Source: Caltrans 2020a.
Note: dBA = A-weighted decibel.

3.7.1.4 Human Response to Changes in Noise Levels

Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern changes in sound pressure levels of 1 dB when exposed to steady, single-frequency signals in the mid-frequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dB. A change of 5 dB is readily perceptible, and a change of 10 dB is perceived as twice (if a gain) or half (if a loss) as loud. A doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in sound level (Caltrans 2020a).

3.7.1.5 Noise Descriptors

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (L_{eq}), the minimum and maximum sound levels (L_{min} and L_{max}, respectively), percentile-exceeded sound level (L_{xx}), the day-night average sound level (L_{dn}), and the Community Noise Equivalent Level (CNEL). The following list provides brief definitions of noise terminology used in this report.

- **Decibel** (dB) is a unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals.
- **A-weighted decibel** (dBA) is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Equivalent sound level** (L_{eq}) is the constant level that, over a given time period, transmits the same amount of acoustic energy as the actual time-varying sound. Equivalent sound levels are the basis for both the L_{dn} and CNEL scales.
- **Maximum sound level** (L_{max}) is the maximum sound level measured during the measurement period.
- **Minimum sound level** (L_{min}) is the minimum sound level measured during the measurement period.
- **Percentile-exceeded sound level** (L_{xx}) is the sound level exceeded X% of a specific time period. L_{10} is the sound level exceeded 10% of the time.
- **Day-Night Average Sound Level** (L_{dn}) is a 24-hour average A-weighted sound level with a 10 dB penalty added each of the hourly average noise levels occurring in the nighttime hours from 10:00 p.m. to 7:00 a.m. The 10 dB penalty is applied to account for increased noise sensitivity during the nighttime hours.
- **Community Noise Equivalent Level** (CNEL) is the average equivalent A-weighted sound level during a 24-hour day. CNEL accounts for the increased noise sensitivity during the evening hours (7:00 p.m. to 10:00 p.m.) and nighttime hours (10:00 p.m. to 7:00 a.m.) by adding 5 dB to the recorded hourly average sound levels in the evening and 10 dB to the hourly average sound levels at night.

3.7.1.6 Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time; and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). For the purpose of a sound attenuation discussion, a "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically "soft" or absorptive site is characteristic of unpaved loose soil or vegetated ground. Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites (Caltrans 2020a). Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively (Caltrans 2020a). Sound levels can also be attenuated by human-made or natural barriers.

With respect to examples of this distance-attenuation relationship for exterior noise, a 60 dBA noise level measured at 50 feet from a tractor installing fenceposts within a packed earth feedlot site would diminish to 54 dBA at 100 feet from the source, and to 48 dBA at 200 feet from the source. This scenario is addressed by the point source attenuation for a hard site (6 dBA with each doubling of the distance). For the scenario where soft-site conditions exist between the point source and receptor, represented by natural vegetation, planted row crops, or plowed furrows adjacent to the work area, an attenuation rate of 7.5 dBA per doubling of distance would apply; the tractor noise measured as 60 dBA at 50 feet would diminish to 52.5 dBA at 100 feet from the source and to 45 dBA at 200 feet from the source, where soft ground exists between the sound source and the receptor location.

3.7.1.7 Groundborne Vibration Fundamentals

Groundborne vibration is fluctuating or oscillatory motion transmitted through the ground mass (i.e., soils, clays, and rock strata). The strength of groundborne vibration attenuates rapidly over distance. Some soil types transmit vibration quite efficiently; other types (primarily sandy soils) do not. Several basic measurement units are commonly used to describe the intensity of ground vibration. The descriptors used by the Federal Transit Administration (FTA) are peak particle velocity (PPV), in units of inches per second (in/sec), and velocity decibel that is based on a root-mean square of the vibration signal magnitude. Per the California Department of Transportation (Caltrans) Transportation and Construction Vibration Guidance Manual (Caltrans 2020b), the calculation to determine PPV at a given vibration source to receptor distance is as follows:

$$PPV_{distance} = PPV_{ref} * (25/D)^{1.1}$$

Where:

$PPV_{distance}$ = the peak particle velocity in inches per second of the equipment adjusted for distance

PPV_{ref} = the reference vibration velocity in inches per second at 25 feet

D = the distance from the equipment to the receptor

3.7.1.8 Local Land Use and Noise Sources

Existing potentially sensitive receptors in the vicinity of the project site consist of a pair of rural residential single-family uses located northeast of the project site, as close as 175 feet from the project boundary (R1 and R2 on Figure 3.7-1, Land Uses, Vicinity Receivers and Sound Monitoring Locations), and another pair of residential single-

family residences, as close as 275 feet from the project boundary (R3 and R4 on Figure 3.7-1). These residential receivers have the greatest potential to be impacted by construction and/or operation of the project. Other residential receivers in the project site include an existing single-family residential neighborhood located at a distance of approximately 900 feet to the west, a townhome development located approximately 1,000 feet to the northwest, and a single-family residential neighborhood located approximately 1,100 feet to the northwest (on the north side of the electrical distribution substation).

The project site is surrounded by other land uses, such as agricultural and substation land uses, that do not have the same noise sensitivity as residential use areas. Additionally, project-generated sounds attenuate as they propagate away from sound sources. As a result, off-site receivers that are more distant from the nearest noise-sensitive residences would be exposed to lower project-attributed noise levels. For these reasons, project sound level exposures found to be compliant with County of Santa Cruz (County) standards at the nearest residences studied herein would support a logical inference that compliance could thus also be expected at more distant off-site receptors and less sensitive land uses where such receptors have higher noise thresholds for compliance and impact significance assessment.

3.7.1.9 Background Sound Monitoring Survey

Sound pressure level measurements were conducted near the project site on September 13 and October 21 to 22, 2024, and on October 9 through 10, 2025, to quantify and characterize the existing outdoor background sound levels. Long-term sound level measurements were performed using SoftdB “Piccolo” model sound level meters (SLMs) equipped with windscreen-protected, 0.5-inch-diameter pre-polarized condenser microphones with pre-amplifiers. Short-term sound level measurements were conducted with a Rion NL-62 SLM equipped with windscreen-protected, 0.5-inch-diameter pre-polarized condenser microphones with pre-amplifiers. The Piccolo meets the current American National Standards Institute standard for a Type 2 (General Use) SLM and the Rion NL-62 meets conditions as a Type 1 SLM. The accuracy of the sound level meters was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Four long-term (LT) sound measurement locations (LT1–LT4) were selected to represent existing noise-sensitive receptors on and near the project site (see Figure 3.7-1). The primary sound source at all long-term locations was traffic. Sound measurements were taken over a continuous 25-hour period in 1-minute intervals, capturing L_{eq}, L_{10}, L_{50}, and L_{90} metrics. L_{eq} provides an overview of the overall sound exposure detected, while L_{90} serves as an indicator of background noise, filtering out brief disturbances. L_{10} reflects the upper range of fluctuating sound levels, and L_{50} represents the median sound level for the measurement period. A summary of the long-term equivalent and day-night measurement results is given in Table 3.7-2. Plots showing these metrics, along with field survey photos and weather data, are included in Appendix 3.7A, Baseline Sound Measurement Field Data.

Table 3.7-2. Results of Long-Term Sound Monitoring

Site: Location	Monitoring Period	Daytime Range $L_{eq\text{-}1hr}$ (dBA)	Daytime Average L_{eq}	Nighttime Range $L_{eq\text{-}1hr}$ (dBA)	Nighttime Average L_{eq}	CNEL/ L_{dn} (dBA)
LT1: Western Project Boundary	10/09/2025–10/10/2025	38–53	49	34–55	46	53

Table 3.7-2. Results of Long-Term Sound Monitoring

Site: Location	Monitoring Period	Daytime Range $L_{eq\text{-}1hr}$ (dBA)	Daytime Average L_{eq}	Nighttime Range $L_{eq\text{-}1hr}$ (dBA)	Nighttime Average L_{eq}	CNEL/ L_{dn} (dBA)
LT2: Northeastern Project Boundary	10/21/2025–10/22/2025	39–47	44	36–51	44	50
LT3 Minto Road West of Project	10/09/2025–10/10/2025	57–63	59	54–60	57	64
LT4: Behler Road West of Project	10/09/2025–10/10/2025	45–58	53	36–50	46	54

Notes: dBA = A-weighted decibel; L_{eq} = equivalent sound level; CNEL = Community Noise Equivalent Level; L_{dn} = day-night average sound level (of 24-hour period).

Five short-term (ST) measurement locations (ST1–ST5) were selected near residences along roadways providing access to the project site (see Figure 3.7-1). A short-term measurement was performed adjacent to residences along Holohan Road near Laken Drive (ST1) to establish ambient noise levels from traffic along Holohan Road. Short-term measurement ST2 was performed adjacent to residences along Green Valley Road to establish ambient noise levels from traffic along Green Valley Road. ST3 was completed adjacent to a residence on Behler Road (the closest residence to the southwest of the project and situated on a low volume street). ST4 was conducted adjacent to a residence along Minto Road to establish ambient noise levels from traffic along Minto Road. ST5 was conducted adjacent to another residence along Minto Road, on the opposite side of the street from the Green Valley Substation. See Figure 3.7-1 for the locations of all five short-term measurement locations.

These short-term measurements were primarily intended to characterize ambient noise levels from the roadways at vicinity residences and to collect data for calibrating the traffic noise model. The Dudek field investigator conducted manual traffic counts for vehicles passing the short-term measurement points for the duration of the measurements for the traffic model calibration.

Table 3.7-3 provides the location, date, and time at which the short-term baseline noise level measurements were taken. The L_{eq}, L_{90}, L_{50} and L_{10} noise levels measured at ST1–ST5 are also provided in Table 3.7-3. The primary noise source affecting the measurement locations was traffic along adjacent roadways, with lower average noise levels recorded at measurement locations along less traveled roadways. As shown in Table 3.7-3, the highest recorded average sound level over the measurement period was 73 dBA L_{eq} at ST2 (along a busy section of Green Valley Road). The second-highest recorded ambient noise levels occurred at ST1; the average sound level over the measurement period was 72 dBA L_{eq} (along a well-traveled portion of Holohan Road). At ST3–ST5, which were located along smaller roads with substantially less traffic, noise levels ranged from 50 dBA L_{eq} (ST3) to 53 dBA L_{eq} (ST5). Noise measurement data summarized in Table 3.7-3 are also included in Appendix 3.7A. Field investigator notes indicating traffic counts and weather conditions, as well as photos of the noise measurement locations, are also included in Appendix 3.7A.

Table 3.7-3. Results of Short-Term Sound Monitoring, September 13, 2024

Site: Location	Monitoring Period	L_{eq} (dBA)	L_{90} (dBA)	L_{50} (dBA)	L_{10} (dBA)	Primary Sound Source(s)
ST1: Holohan Road near Laken Drive	12:42 p.m. to 1:12 p.m.	72	58	70	76	Traffic
ST2: Green Valley Road near Amesti Road	1:30 p.m. to 2:00 p.m.	73	67	71	76	Traffic
ST3: Residence on Behler Road	2:09 p.m. to 2:39 p.m.	50	46	48	53	Distant Traffic
ST4: Minto Road west of Meidl Avenue	2:58 p.m. to 3:28 p.m.	51	40	43	54	Traffic
ST5: Minto Road south of substation	3:45 p.m. to 4:15 p.m.	53	43	45	58	Traffic

Notes: dBA = A-weighted decibel; L_{eq} = equivalent sound level; L_{90} = sound level exceeded for a cumulative 90% of the period; L_{50} = sound level exceeded for a cumulative 50% of the period; L_{10} = sound level exceeded for a cumulative 10% of the period.

3.7.2 Impact Analysis

3.7.2.1 Methodology

The information presented is based on a project-specific noise technical assessment. Project impacts related to noise were evaluated against the California Environmental Quality Act (CEQA) significance criteria and are discussed below. The impact analysis evaluates potential project impacts during project construction, operation, and decommissioning.

3.7.2.2 Impact Evaluation Criteria

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and the County's General Plan Noise Element Guidelines (County of Santa Cruz 2024a), and will be used to determine the significance of potential noise impacts. Such potential noise and vibration impacts to the community would be considered significant if the proposed project would result in the following:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Generation of excessive groundborne vibration or groundborne noise levels
- Expose people residing or working in the project area to excessive noise levels (for a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport)

In light of the above significance criteria, this analysis uses the following standards to evaluate potential noise and vibration impacts:

- On-Site Construction Noise – While the County has not adopted construction noise level limits for construction activities conducted during daytime hours, the General Plan Noise Element does recommend

that noise mitigation be employed if average construction noise levels would exceed 75 dBA L_{eq} at any existing residences in the project vicinity. Also, FTA has adopted a guideline for daytime construction noise exposure at residential land uses. The FTA guideline is a maximum of 80 dBA L_{eq}, which is averaged over a typical 8-hour construction day.

- **Off-Site Project-Attributed Transportation Noise –** For purposes of this analysis, a noise impact due to transportation noise would be considered significant if predicted noise levels exceeded the Federal Interagency Committee on Noise (FICON) thresholds noted in Section 3.7.5.1, Federal. More specifically, an impact due to the project contribution to existing and future predicted ambient noise levels would be considered significant if it meets the following criteria:
  - If outdoor ambient sound level without the project is less than 60 dBA L_{dn}, then a project-attributed increase of 5 dBA or more would be considered significant.
  - If outdoor ambient sound level without the project is between 60 and 65 dBA L_{dn}, then a project-attributed increase of 3 dBA or more would be considered significant.
  - If outdoor ambient sound level without the project is greater than 65 dBA L_{dn}, then a project-attributed increase of 1.5 dBA or more would be considered significant.
- **On-Site Stationary Operations Noise –** Santa Cruz County Municipal Code limits operational sound sources to 50 dBA L_{eq} during daytime hours (7:00 a.m. to 10:00 p.m.) and 45 dBA L_{eq} during nighttime hours (10:00 p.m. to 7:00 a.m.) for residential areas. Allowances are made for pre-existing measurable ambient sound levels, as described in the County code and summarized in Section 3.7.5.3, Local.
- **Construction Vibration –** Because Santa Cruz County Municipal Code does not include limits for vibration due to construction to protect against structural damage, this analysis applies the Caltrans thresholds for building damage risk. As discussed in Section 3.7.5.2, State, Caltrans guidance recommends that a vibration level of 0.3 in/sec PPV be used as the threshold for building damage risk to residential structures and 0.5 in/sec PPV be used as the damage threshold for non-residential structures. These thresholds are used in this analysis to determine vibration impacts.

3.7.2.3 California Environmental Quality Act Appendix G Assessment Criteria

Criterion 3.7-1 Would the project result in a generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Short-Term On-Site Construction Noise

Less than Significant. Noisy construction activities would not occur between the hours of 8:00 p.m. and 7:00 a.m. or at any time on weekends or federal holidays. Construction activities include temporary noise and vibration sources with emission levels varying from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor. Construction noise modeling was performed using a recognized Microsoft Excel–based noise prediction model. Input variables include the equipment type (backhoe, crane, truck, etc.), the number of equipment pieces, the duty cycle for each piece of equipment (i.e., percentage of each hour the equipment typically works), and the distance from the sensitive receptor. Sound source information was obtained from the Noise Source Database developed under National Cooperative Highway Research Program 25-49 (NCHRP 25-49), Development of a Highway Construction Noise Prediction Model (NASEM 2018).

Table 3.7-4 provides a list of the sound levels generated by various powered equipment that could be associated with construction of the project, measured at a distance of 50 feet using a "slow" response time constant (1 second). Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 3.7-4. Sound Levels of Typical Construction Equipment

Equipment	Maximum Sound Level (dBA L_{max}) – 50 Feet from Source
Air Compressor	67
Aerial Lift (Man Lift)	73
Backhoe	84
Compactor (Plate)	75
Compactor (Roller)	83
Concrete Mixer	82
Concrete Saw	88
Crane, Mobile	76
Dozer	86
Forklift	88
Generator	68
Grader	79
Horizontal Bore Drill	88
Loader	81
Paving - Asphalt	83
Paving - Concrete	88
Pump	74
Scraper	92
Flatbed Truck	74
Welding Machine	72

Source: NASEM 2018.
Notes: dBA = A-weighted decibel; L_{max} = maximum sound level.

Construction noise modeling was performed to predict worst-case construction noise levels at the closest noise-sensitive uses to the project site, including residences on the adjacent parcels to the northeast that would be approximately 175 feet from the closest boundary of the future construction zone for the project and residences on parcels to the northwest of the project site that would be approximately 275 and 315 feet from the closest boundary of the future construction zone for the project. The modeled construction noise prediction is a worst-case scenario because it assumes all the equipment in a given phase is operating along the construction zone boundary that is closest to the identified off-site receiver. The anticipated equipment to be used for construction of the project is shown in Appendix 3.7B, Construction Noise Model Inputs and Outputs.

The above minimum distance separation assumption would not be representative of more typical construction noise because in general the construction activities would not take place either at the nearest or at the farthest portions of the project site, but somewhere in between. Thus, the construction noise

analysis provides conservative, worst-case results in terms of construction noise exposure for the modeled off-site receivers. The final phase evaluated, decommissioning, addresses the process of removing all site development at the end of the useful life of the project.

Table 3.7-5 provides a summary of the construction noise modeling; detailed information is provided in Appendix 3.7B. Refer to Figure 3.7-1 for the location of the modeled residential receivers (R1–R4) identified in Table 3.7-5.

Table 3.7-5. Construction Noise Levels at Nearest Off-Site Receptors by Phase

Phase	Construction Noise Level $L_{eq\ 8\text{-}hr\ /\ 1\ hr}$ (dBA)			
	R1	R2	R3	R4
(1) Site Preparation	69	71	61	63
(2) Substation Site Preparation	49	53	62	62
(3) Civil Work and Grading	73	75	65	66
(4) Substation Civil Work and Grading	53	57	66	66
(5) Battery Enclosure/PCS Installation	60	63	53	55
(6) Project Substation Installation	46	41	59	60
(7) Gen-Tie Foundations and Structure Tower Erection [1]	44	47	75	64
(8) Gen-Tie Stringing and Pulling [1]	42	45	73	63
(9) Testing and Commissioning	51	53	44	46
(10) Decommissioning	71	73	64	66
Highest Noise Level Across All Phases	**73**	**75**	**75**	**66**

Source: Dudek (Appendix 3.7B).
Notes: $L_{eq\ 8\ hr}$ = equivalent sound level over 8-hour averaging period; $L_{eq\ 1\ hr}$ = equivalent sound level over 1-hour averaging period; dBA = A-weighted decibel; PCS = Power Conversion System; gen-tie = generation interconnect.
[1] PG&E Interconnection Facility Upgrades would occur as part of the Gen-Tie Foundations and Structure Tower Erection and Gen-Tie Stringing and Pulling phases.

While the County has not adopted construction noise level limits for construction activities conducted during daytime hours, the General Plan Noise Element does recommend that noise mitigation be employed if average construction noise levels would exceed 75 dBA L_{eq} at any existing residences in the project vicinity (County of Santa Cruz 2024a). Also, FTA has adopted a guideline for daytime construction noise exposure at residential land uses. The FTA guideline is a maximum of 80 dBA L_{eq}, which is averaged over a typical 8-hour construction day. Assuming construction activity intensity is similar across the 8-hour construction day, the L_{eq} value for the FTA 8-hour averaging period would be equal to the $L_{eq\ 1hr}$ value for any given hour within the 8-hour construction window (hence the labeling of $L_{eq\ 8\text{-}hr\ /\ 1\ hr}$ in the results columns of Table 3.7-5). As reported in Table 3.7-5, construction noise levels are not predicted to exceed the FTA recommended maximum of 80 dBA $L_{eq\ 8\text{-}hr}$ at any modeled noise-sensitive receiver nor the County guideline of 75 dBA L_{eq} limit (above which mitigation would be recommended). Thus, construction of the project would result in a **less-than-significant short-term noise impact**.

Table 3.7-6 provides a comparison of the highest construction-related noise levels from all construction phases to modeled daytime ambient traffic noise exposure at the closest noise-sensitive land uses.

Table 3.7-6. Highest Construction Noise Levels for Any Phase Compared to Daytime Ambient Noise Levels at Modeled Noise-Sensitive Receivers

Receiver	Noise Level $L_{eq\ 1\ hr}$ (dBA)			
	Highest Construction Noise Level	Daytime Ambient Noise Level	Ambient Noise Level Source	Increase
R1	73	45	LT2	28
R2	75	45	LT2	30
R3	75	60	LT3	15
R4	66	50	LT1	16

Source: Dudek (Appendix 3.7B).
Notes: $L_{eq\ 1\ hr}$ = equivalent sound level over 1-hour averaging period; dBA = A-weighted decibel.

As reported in Table 3.7-6, noise levels during the construction phase with the greatest intensity could result in a temporary increase of up to 30 dBA L_{eq} at the adjacent residences to the northeast and up to 16 dBA L_{eq} at residences to the northwest. This increase would be readily noticeable and could lead to instances of annoyance. However, for residents that may be outside during construction, noise levels of 75 dBA L_{eq} are not considered hazardous or harmful. (Hearing protection for construction workers is required for noise levels greater than 80 dBA L_{eq}.) Also, the construction noise would occur only during the day (avoiding sleep disturbance) and would be temporary, lasting only until construction is completed. In addition, indoor areas of the residences would experience noise levels approximately 25 dBA L_{eq} less than outdoor levels, or no greater than 50 dBA L_{eq}. These indoor construction-related levels would not be anticipated to interfere with conversation of other daytime indoor activities. Hence, while construction noise may result in annoyances when compared to existing ambient noise levels, because the maximum levels would not be harmful to outdoor receivers, would not interfere with indoor activities, and would be temporary in nature, short-term construction noise impacts would be **less than significant**.

Workers during construction and operation are anticipated to use hearing protection as required by the Occupational Safety and Health Administration. During construction, noise levels from the various pieces of heavy equipment would be similar to those listed in Table 3.7-4 but would likely be less depending on use and distance.

Off-Site Construction Traffic Noise

Less than Significant. Holohan Road between State Route 152 and Green Valley Road currently carries approximately 16,745 average daily trips (ADT), Green Valley Road north of Holohan Road currently carries approximately 7,197 ADT, and Minto Road east of Green Valley Road carries approximately 824 ADT. Dudek used these ADT volumes to model existing traffic noise levels. Refer to Appendix 3.7C, Traffic Noise Modeling Worksheets, for inputs and outputs of the traffic noise assessment.

The project is expected to generate a peak of 62 new ADT during the most intensive phase of the construction effort (the BESS installation phase), which would be expected to reach the site via Holohan Road, Green Valley Road, and Minto Road. This number of construction trips was added to Holohan Road, Green Valley Road, and Minto Road to evaluate potential increases in traffic noise exposure for residences from project construction traffic, as compared to existing ambient traffic noise levels.

Acoustic calculations using standard noise modeling equations adapted from the Federal Highway Administration noise prediction model were performed using the above ADT values for Existing and Existing Plus Project Construction Traffic. Table 3.7-7 presents the results of the traffic noise modeling; detailed information is provided in Appendix 3.7C.

Table 3.7-7. Project Construction Traffic Noise Levels Compared to Existing

Roadway Segment	Existing dBA CNEL	Existing Plus Project Construction Traffic dBA CNEL	Increase (dBA CNEL)	Noticeable Increase?
Holohan Road near Laken Drive	74.1	74.1	0	No
Green Valley Road near Amesti Street	69.0	69.0	0	No
Minto Road east of Green Valley Road	50.1	50.4	0.3	No

Source: Dudek (Appendix 3.7C).
Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level.

As indicated in Table 3.7-7, construction of the project would involve trip generation that would result in traffic noise level increases on area roadways of no greater than 0.3 dBA CNEL, which would not be a detectable change by the human ear. Consequently, construction traffic noise impacts would be **less than significant**.

Operational Sound Levels

Less than Significant. Prediction of operation noise attributed to the project involved creation of a sound propagation model using the CadnaA software program. CadnaA (Computer Aided Noise Abatement) is a commercially available computer-modeling program for calculation, presentation, assessment, and prediction of environmental noise. Estimated sound emission from the CATL model EnerC+ 266 Containers (i.e., noise from operation of the cooling units for the battery containers), SMA Power Conversion Systems (PCSs, which include inverter and medium-voltage transformer), and generator-step-up transformer were entered into the CadnaA computer model. The outdoor noise propagation formulas in CadnaA follow the International Organization of Standardization Standard 9613-2, "Attenuation of Sound During Propagation Outdoors, Part 2: Engineering Method of Calculation" (ISO 2024). Project features are input as sound sources in the CadnaA three-dimensional model space and defined with the following assumptions and available project design information (refer to Appendix 3.7D, Stationary Operations Source Inputs and Results, for plans illustrating this equipment layout):

- CATL model EnerC+ 266 Containers - CATL- provided sound test results for the EnerC+ 266 Containers with available sound reduction kit (referred to as a "soundproof cover" which consists of a sound baffle over the air intake and exhaust openings of the container). Dudek used the reported sound level for 50% fan speed, representing the highest expected average operating condition. The battery storage enclosures would not be always running under full load; therefore, the use of the 50% load sound generation value represents a conservative analysis. Testing results indicate a sound power level of level of 73.5 dBA L_W (sound pressure level of 65 dBA at 1 meter). This value was entered into CadnaA to represent each battery enclosure container.

- SMA MV Power Station 4600-S2 – This PCS includes a bidirectional inverter (SMA Sunny Central 3950 UP-US) and a medium-voltage transformer. SMA provided sound test results for the 3950-UP-US system. The reported reference sound level for the 3950-UP-US is 61 dBA L_{eq} at 10 meters (32.8 feet) with an available air-intake sound baffle. The air exhaust vents for the SMA inverter were not altered for the sound tests, but for similar inverter units, installation of custom silencers for the exhaust vents resulted in a sound attenuation of approximately 17 dB. To distribute sound control between perimeter noise barriers and silencers on equipment, Dudek assumed that the SMA inverters would be equipped with air exhaust silencers, and a net sound level value of 44 dBA L_{eq} at 10 meters (or 62 dBA L_{eq} at 1 meter) is used to represent each SMA inverter. For the medium-voltage transformer in each PCS, the sound pressure level is estimated to be 60 dBA (sound pressure level at one meter) based on assumed capacity and using the NEMA TR-1 table. Adding the sound generation level for the inverter to the transformer, the combined source sound level for a PCS would be 63 dBA L_{eq} at 1 meter. This value was entered into CadnaA to represent each PCS.
- Step-up Transformer – The A-weighted sound power level of the step-up transformer was estimated with guidance from the Edison Electric Institute (EEI 1984), using 110 megavolt amperes as the anticipated load at full project site capacity (sound pressure level of 89 dBA at 1 meter). The generator-step-up transformer sound power was input to the model space as a horizontal area source (roughly consistent with the footprint of the equipment on the available site plan).
- Noise Barrier – A proposed solid barrier around the site perimeter was also entered into CadnaA to evaluate the attenuation (sound reduction) of this barrier, which is located between the facility operational noise sources and closest receivers. The Seahawk BESS facility proposes to include a continuous facility perimeter barrier between 12 feet and 14 feet in height (refer to refer to Appendix 2C for project civil plans indicating location and height extent of the barrier).

Calculation parameters that establish how the CadnaA model predicts combined noise level from these above-listed project sources include the following:

- Sound propagation per International Organization of Standardization Standard 9613-2 (ISO 2024)
- Barrier attenuation per International Organization of Standardization Standard 9613-2 (ISO 2024)
- Default ground acoustical absorption coefficient = 0.5 (on a scale of 0 = reflective, 1 = absorptive)
- One order of reflection
- 68 degrees Fahrenheit, 70% relative humidity

With respect to the above parameters, a higher ground absorption value means that sound energy is absorbed to a greater degree as it travels away from the source, reducing the level of the sound at a given distance from the source. A value of 0.5 is used for a surface such as bare dirt, where the hardness and smoothness of the surface provides little energy absorption, while 1 is used for heavily vegetated ground cover or tilled earth. The 0.5 value used in the model is conservative and ignores a landscaping area within the project site. The one order of reflection means that sound levels from the model are reduced by sound waves that may be reflected back from the vertical surface of an adjacent battery container, potentially canceling out some of the energy of the sound waves leaving the sound source. The parameters above are therefore appropriately conservative for the analysis.

Potentially sound-sensitive uses in the vicinity of the project site include rural single-family residences located to the northeast and northwest of the project. Sound modeling included four discrete off-site

receiver points to represent each of the proximate residences (R1–R4) and three points along the subject property boundary (M1–M3) to represent each of the immediately adjacent residential properties. County Code specifies that project-generated noise be evaluated at the property line for residences, not at the residence itself, thus the inclusion of a property line model point for each of the adjacent residential lots (M1–M3). In addition, a rectangular grid plane of in-model calculation positions spaced 10 meters by 10 meters was set at a height of 1.5 meters (5 feet) above the ground surface, spanning the project site and its immediate surroundings.

Table 3.7-8 provides a comparison of the predicted operational noise levels at the closest noise-sensitive land uses to the County Code (Chapter 13.15) nighttime limits. Refer to Figure 3.7-1 for the location of the modeled receivers identified in Table 3.7-8.

Table 3.7-8. Predicted Operational Noise Levels at Noise-Sensitive Receivers Compared to Santa Cruz County Code (Chapter 13.15) Limits

Receiver	Description	Noise Level $L_{eq\ 1\ hr}$ (dBA)		
		Predicted Operations Noise Level	Nighttime Operational Noise Level Limit[1]	Complies With Standard?
M1	Property Line for R1	43	45	Yes
M2	Property Line for R2	45		Yes
M3	Property Line for R3/R4	45		Yes
R1	Residence	42		Yes
R2	Residence	44		Yes
R3	Residence	43		Yes
R4	Residence	44		Yes

Source: Dudek (Appendix 3.7D).
Notes: $L_{eq\ 1\ hr}$ = equivalent sound level over 1-hour averaging period; dBA = A-weighted decibel.
1 Nighttime limit is the most restrictive; because the facility would operate during the night and day, this more conservative limit is used in the analysis.

Table 3.7-9 presents the results of the operational noise modeling based on continuous operation of all project mechanical equipment across an hour and compares these operational noise levels to modeled ambient noise levels at the nearby receivers. Receiver locations listed in Table 3.7-9 are illustrated in Figure 3.7-1.

Table 3.7-9. Project Operational Noise Levels Compared to Ambient

Receiver ID	Ambient Monitor Reference	Modeled Existing Ambient Nighttime (dBA $L_{eq\ l\ hr}$)	Predicted Operational Noise Level (dBA $L_{eq\ 1\ hr}$)	Existing Plus Project (dBA $L_{eq\ 1\ hr}$)	Increase (dBA $L_{eq\ 1\ hr}$)
R1	LT2	44	42	46	2
R2	LT2	44	44	47	3
R3	LT3	57	43	57	0
R4	LT4	46	44	48	2

Source: Dudek (Appendix 3.7D).
Notes: dBA = A-weighted decibel; $L_{eq\ 1\ hr}$ = equivalent sound level over 1-hour averaging period.

As indicated in Table 3.7-9, the project would result in an increase of no greater than 3 dBA L_{eq} in the ambient noise levels at the modeled noise-sensitive receptors closest to the project site. This level of increase would not be discernible in the outdoor environment. In addition, the County General Plan Noise Element and County Code set an allowable increase of up to 5 dBA L_{eq} when existing ambient noise levels are less than 60 dBA L_{eq}; the existing ambient noise environment in the vicinity of the project site is no greater than 60 dBA L_{eq} during the daytime, and no greater than 57 dBA during the nighttime; therefore, up to a 5 dBA project-related increase would be acceptable, compared to a project increase of no greater than 3 dBA L_{eq}. Therefore, the project would result in a **less-than-significant increase in ambient noise level**.

CadnaA calculates the noise level across the entire grid that encompasses the project site and adjacent areas. Figure 3.7-2, Noise Contour Map from On-Site Operational Noise Level Predictive Modeling (Leq,dBA), graphically represents the noise model results, providing noise contours extending outward from the proposed project to illustrate the hourly noise level from operation of the project.

Transmission Line Noise Levels

Less than Significant. Audible noise is produced by the corona effect along transmission line conductors conveying electrical current. This corona effect results from dust or moisture on the conductor surfaces; hence, while sound may be generated from corona during dry, fair-weather conditions, it is louder and more likely to be audible depending on the outdoor background sound the proximity of the listener.

The project collector substation sends 34.5 kilovolts of electricity to the proposed adjoining switchyard, which would step-up the voltage to 500 kilovolts and connect to the regional grid via aboveground transmission lines, assumed herein (and based on project plan information to date) as a single circuit with three conductor wires (one per each of three phases). Assuming these alternating current conductors are aluminum conductor steel-reinforced "Bluebird" or "Drake," it is possible for them to emit audible noise under rainy conditions.

Based on the project civil plans (refer to Appendix 2C), the maximum audible noise at the edge of the right-of-way would range from 24.6 dBA to 30.1 dBA L_{eq} during fair weather and 49.6 dBA to 55.1 dBA L_{eq} during rain (Teplitzky et al. 1979), with noise levels diminishing to 45 dBA L_{eq} or less at vicinity residential property boundaries. During rainy conditions, the rain itself generates noise and people tend to stay indoors with windows closed. During periods of fair weather, sound from the transmission line would be well below the County Municipal Code daytime and nighttime limits and below measured ambient sound levels. The potential impact would be **less than significant.**

Criterion 3.7-2 Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant. Construction activity can result in varying degrees of ground vibration and groundborne noise at local receptors, depending on the equipment and methods used, distance to the affected structures, and soil type. Caltrans has been assembling data for vibration and groundborne noise levels generated by heavy construction equipment during the building of transportation projects for many years. The vibration and groundborne noise levels from use of such equipment are representative for other types of construction efforts, not just transportation projects, and are therefore widely employed to assess vibration and groundborne noise levels from heavy equipment use for any effort. According to Caltrans (2020b), the most important equipment relative to generation of vibration and groundborne noise, and the

vibration and groundborne noise levels produced by such equipment, is illustrated in Table 3.7-10. Impact pile driving would not be used as a method of construction.

Table 3.7-10. Vibration Velocities and Groundborne Noise Levels for Typical Construction Equipment

Equipment	PPV at 25 Feet (inches per second)
Sonic Pile Driver (Typical)	0.170
Vibratory Roller	0.210
Large Bulldozer	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003

Source: Caltrans 2020b.
Note: PPV = peak particle velocity.

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in Caltrans guidance (Caltrans 2020b) and described in Section 3.7.1.7, Groundborne Vibration Fundamentals.

To protect against structural damage, this analysis applies the Caltrans guidance thresholds for building damage risk (Caltrans 2020b), which establish a construction limit of 0.25 in/sec PPV for historic and old buildings, 0.3 in/sec PPV for older residential structures, and 0.5 in/sec PPV for new residential and modern commercial/industrial structures. The applicable threshold for project-attributed construction vibration would be 0.3 in/sec PPV at the closest residences and 0.5 in/sec PPV at the closest industrial building.

The closest non-residential structures to the project site are greenhouses located about 75 feet west from the project property line; the closest residential structure is located approximately 175 feet northeast from the project property line. Using the vibration source level of construction equipment provided in Table 3.7-10, the distance to the closest structures, and the equation supplied in the Caltrans (2020b) construction groundborne noise assessment methodology (above), Dudek calculated the project construction-related vibration levels shown in Table 3.7-11. Construction vibration calculations are included in Appendix 3.7E, Construction Vibration Calculations.

Table 3.7-11. Predicted Construction Vibration Levels at Nearest Off-Site Structures

Equipment	PPV at Nearest Residential Structure (175 feet)	PPV at Nearest Non-Residential Structure (75 feet)	Complies with Caltrans Standards?
Sonic Pile Driver (Typical)	0.009	0.033	**Yes**
Vibratory Roller	0.011	0.040	**Yes**
Large Bulldozer	0.005	0.017	**Yes**
Loaded Trucks	0.004	0.015	**Yes**
Jackhammer	0.002	0.007	**Yes**
Small Bulldozer	0.0002	0.001	**Yes**

Source: Caltrans 2020b; Dudek (Appendix 3.7E).
Note: PPV = peak particle velocity, in units of inches per second.

The applicable damage threshold for project-attributed construction vibration would be 0.3 in/sec PPV at the closest off-site residence and 0.5 in/sec PPV at the closest off-site commercial/industrial building. As shown in Table 3.7-11, project construction would result in vibration levels well below these thresholds. Potential vibration impacts of the project would therefore be **less than significant.**

Criterion 3.7-3 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less than Significant. The Watsonville Municipal Airport is located approximately 1.75 miles southwest of the project site. No residential units are included in the project, as the existing on-site residence would be used as a project office space; however, the project would be primarily operated and monitored remotely. Therefore, while project construction workers could be exposed to slightly elevated noise levels from aircraft operations, the project site is exposed to airport noise no greater than 55 dBA CNEL (per Figure H-2, Watsonville Municipal Airport 2020 Airport Noise Contours, of the Santa Cruz County Airport Land Use Compatibility Plan), which is considered acceptable for even noise-sensitive land uses (County of Santa Cruz 2024b). Airport noise exposure would be **less than significant.**

3.7.3 Cumulative Effects

Less than Significant. Implementation of the project and its component site-specific development, as well as unrelated development projects within its vicinity, would all be subject to applicable noise standards. On this basis, and because noise impacts with respect to relevant standards are predicted to be less than significant, the project would not contribute to cumulative exceedances of noise standards, and its incremental effect would be a **less-than-significant impact**. Specific potential cumulative impact discussions are included below.

Short-Term Construction Noise

The project would result in temporary noise increases during construction activities, as discussed in Section 3.7.2.3, California Environmental Quality Act Appendix G Assessment Criteria, above. The construction period of the project has the potential to overlap with the construction of other development projects in the County but would not be anticipated to worsen these construction noise estimates in light of the physical distance between such activities and different receivers that are closest to the different phase area boundaries.

At distances of at least 1,000 feet, aggregate noise emission levels from the nearest project under a cumulative noise analysis would attenuate due to the decrease in noise levels with distance and the presence of physical barriers (i.e., intervening buildings and topography). Hence, noise due to construction of other projects would not meaningfully combine with future development under the project to produce a cumulative noise effect during construction. By way of illustration, if there are two concurrent construction projects of comparable sound emission intensity, and the activity nearest to a studied noise-sensitive receptor is compliant with the aforementioned County threshold for construction noise as received by a residential property, then the other activity could be no closer than three times the distance of the receptor

to the nearest activity and not make a cumulatively measurable contribution to the total noise exposure level. If two concurrent projects were close to a receptor, the cumulative noise would be one of the following:

- The louder (in dBA) of the two concurrent activities
- A logarithmic sum of the two activity noise levels that, per acoustic principles, cannot be more than 3 dBA greater than the louder of the two individual noise-producing activities

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination would be no more than a barely perceptible difference (i.e., up to 3 dB).

Additionally, all future development under implementation of the project, as well as unrelated construction projects within County limits, would be required to comply with limits on allowable construction hours per relevant portions of the County's noise ordinance. Hence, for the above reasons, potential cumulative impacts due to cumulative construction noise would be **less than significant.**

Project Operations

Project implementation would include permanent on-site sound sources as addressed in Section 3.7.2.3 above. A cumulative impact could occur if sound produced from such sources due to implementation of the project were to combine with sound produced from the operation of other unrelated projects in the vicinity to create a cumulatively significant permanent increase in ambient sound levels. However, sound emission from project equipment attenuates with distance and can be occluded by structures and terrain. Additionally, the operation of the project, along with the operation of other unrelated projects, would be subject to applicable requirements from the County's noise ordinance, which limits the exterior noise levels at residences. Hence, for these reasons, potential cumulative impacts to outdoor ambient noise levels resulting from project stationary sources would be **less than significant.**

Vibration

Construction-related vibration from future development under the project is addressed in Section 3.7.2.3 above. Other foreseeable projects within the vicinity of the project site would not be close enough to create a combined excessive generation of groundborne vibration; therefore, potential cumulative impacts associated with excessive groundborne vibration would be **less than significant.**

3.7.4 Mitigation Measures

As analyzed above, project impacts related to noise were determined to be less than significant; thus, no mitigation measures are required.

3.7.5 Laws, Ordinances, Regulations, and Standards

Laws, ordinances, regulations, and standards discussed in this section were used to evaluate the project's noise impacts during construction and operation, are discussed briefly in previous sections, and are summarized in Table 3.7-12.

Table 3.7-12. LORS Applicable to Noise

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
Federal	Noise Control Act	Delegates authority to the states to regulate environmental noise and direct government agencies to ensure compliance with local community noise statutes and regulations.	**Yes.** The project would not exceed the Santa Cruz County Code Chapter 13.15 threshold for noise or the prescribed time limits on noise-generating activities.	Criterion 3.7-1 Section 3.7.5.1
Federal	Transit Noise and Vibration Impact Assessment guidance manual	Recommends a daytime construction noise level threshold when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project.	**Yes.** Project construction would not exceed the recommended construction noise threshold of 80 dBA L_{eq} over an 8-hour period.	Criterion 3.7-1 Section 3.7.5.1
Federal	1992 findings of the Federal Interagency Committee on Noise (FICON)	Provides guidance regarding the determination of a substantial permanent increase in ambient noise levels in the project vicinity above existing levels.	**Yes.** The project would not result in an increase in ambient noise that would create an annoyance based on the FICON guidance.	Criterion 3.7-1 Section 3.7.5.1
State	California Environmental Quality Act (CEQA)	Requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the project and to reduce environmental impacts to the extent feasible.	**Yes.** The CEC would serve as CEQA lead agency and evaluate potential noise impacts, per the CEC's opt-in application process.	Throughout this opt-in application
State	California Department of Health Services guidelines of community noise acceptability for use by local agencies	Provides guidance regarding normally and conditionally acceptable noise levels by receptor land use.	**Yes.** The project would not exceed the recommended noise thresholds at nearby sensitive receptors.	Criterion 3.7-1 Section 3.7.5.2

Table 3.7-12. LORS Applicable to Noise

Jurisdiction	LORS	Applicability	Project Conformity	Opt-In Application Reference
State	California Occupational Safety and Health Administration (Cal/OSHA); Division of Occupational Safety and Health under the California Department of Industrial Relations	Provides permissible noise exposure limits for worker safety related to noise-induced hearing loss.	**Yes.** Employee noise exposures would be limited in accordance with Cal/OSHA requirements.	Section 3.17 Section 3.7.5.2
State	California Department of Transportation and Construction Vibration Guidance Manual	Provides procedures for predicting and assessing noise and vibration impacts of proposed transit projects.	**Yes**. The project would not exceed vibration thresholds that would result in damage to structures or annoyance to nearby receptors.	Criterion 3.7-2 Section 3.7.5.2
Local	Santa Cruz County General Plan, Noise Element	Contains a goal and policies related to noise control, establishes noise and land use compatibility standards, and outlines goals and policies to achieve these standards	**Yes**. The project would not exceed recommended noise levels at nearby sensitive receptors.	Criterion 3.7-1 Criterion 3.7-3 Section 3.7.5.3
Local	Santa Cruz County Code Chapter 13.15	Establishes noise and vibration level limits "in order to control unnecessary, excessive and annoying noise and vibration in the county of Los Angeles."	**Yes**. The project would not exceed the ordinances threshold for noise or the prescribed time limits on noise-generating activities.	Criterion 3.7-1 Section 3.7.5.3

Notes: LORS = laws, ordinances, regulations, and standards; dBA = A-weighted decibels; L_{eq} = equivalent sound level; FICON = Federal Interagency Committee on Noise; CEQA = California Environmental Quality Act; CEC = California Energy Commission; Cal/OSHA = California Occupational Safety and Health Administration.

3.7.5.1 Federal

Noise Control Act

The Noise Control Act of 1972 and its subsequent amendments in the Quiet Communities Act of 1978 (42 United States Code 4901 et seq.) delegate authority to the states to regulate environmental noise and direct government agencies to ensure compliance with local community noise statutes and regulations.

The project would not exceed the Santa Cruz County Code Chapter 13.15 threshold for noise or the prescribed time limits on noise-generating activities.

Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment guidance manual, FTA recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an 8-hour period when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project (FTA 2018). FTA also recommends using a construction noise threshold of 75 dBA L_{dn} averaged over 30 days for residences exposed to construction noise lasting 30 days or longer. Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the state and local jurisdictional levels.

Project construction would not exceed the recommended construction noise threshold of 80 dBA L_{eq} over an 8-hour period.

Federal Interagency Committee on Noise Administration

Some guidance regarding the determination of a substantial permanent increase in ambient noise levels in the project vicinity above existing levels is provided by the 1992 findings of the Federal Interagency Committee on Noise (FICON 1992), which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON recommendations are based upon studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a qualitative measure of the adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

The rationale for the FICON recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of L_{dn}. The changes in noise exposure that are shown below are expected to result in equal changes in annoyance at sensitive land uses. Although the FICON recommendations were specifically developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to all transportation noise sources and permanent non-transportation noise sources.

- If outdoor ambient sound level without the project is less than 60 dBA L_{dn}, then a project-attributed increase of 5 dBA or more would be considered significant.
- If outdoor ambient sound level without the project is between 60 and 65 dBA L_{dn}, then a project-attributed increase of 3 dBA or more would be considered significant.
- If outdoor ambient sound level without the project is greater than 65 dBA L_{dn}, then a project-attributed increase of 1.5 dBA or more would be considered significant.

The project complies as it would not result in an increase in ambient noise that would create an annoyance based on the FICON guidance.

3.7.5.2 State

California Environmental Quality Act

CEQA requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the project and to reduce environmental impacts to the extent feasible. Appendix G of the CEQA Guidelines includes criteria for evaluating potential impacts related to noise.

The California Energy Commission (CEC) will serve as CEQA lead agency and evaluate potential noise impacts, per the CEC's opt-in application process. This section provides the foundational information for CEC's CEQA review.

California Department of Health Services Guidelines

The California Department of Health Services has developed guidelines of community noise acceptability for use by local agencies (OPR 2017). Selected relevant levels are listed here:

- **Below 60 dBA CNEL:** Normally acceptable for low-density residential use
- **50 to 70 dBA:** Conditionally acceptable for low-density residential use
- **Below 65 dBA CNEL:** Normally acceptable for high-density residential use and transient lodging
- **60 to 70 dBA CNEL:** Conditionally acceptable for high-density residential, transient lodging, churches, educational, and medical facilities

The project complies as it would not exceed the recommended noise thresholds at nearby sensitive receptors.

California Occupational Safety and Health Administration

Section 5096 of Subchapter 7, Group 15, Article 105 of the California Code of Regulations provides the permissible employee noise exposure limits for protection against the potential for noise-induced hearing loss. These limits are based on time-weighted averaged exposures of 90 dBA for an 8-hour work shift, increasing by a factor of 5 dBA with each halving of permissible exposure time (e.g., 95 dBA for 4 hours or 100 dBA for 2 hours each day), up to a maximum permissible exposure level of 115 dBA for any period of time. These limits are enforced by the California Occupational Safety and Health Administration (Cal/OSHA).

Employee noise exposures associated with the project would be limited in accordance with Cal/OSHA requirements.

California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual (Caltrans 2020b), Caltrans provides guidelines to assess the potential damage from ground vibration induced by construction equipment. These thresholds are presented in Tables 3.7-13 and 3.7-14.

Table 3.7-13. Caltrans Guidelines for Vibration Damage Potential

Structure and Condition	Maximum PPV (inches per second)	
	Transient Sources[1]	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/ commercial buildings	2.0	0.5

Source: Caltrans 2020b.
Notes: PPV = peak particle velocity.
1 Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 3.7-14. Caltrans Guidelines for Annoyance

Human Response	Maximum PPV (inches per second)	
	Transient Sources[1]	Continuous/Frequent Intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.10
Severe	2.0	0.4

Source: Caltrans 2020b.
Notes: PPV = peak particle velocity.
1 Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

The project complies as it would not exceed vibration thresholds that would result in damage to structures or annoyance to nearby receptors.

3.7.5.3 Local

County of Santa Cruz General Plan

The County of Santa Cruz 2024 General Plan (adopted in 2022) includes goals and policies related to noise and establishes noise compatibility guidelines and noise generation limits for different land uses. The following policies would be applicable to any proposed commercial or industrial development in Santa Cruz County.

9.2.1 Require acoustical studies for all new development projects that may affect the existing noise environment affecting sensitive land uses and receptors and that may not conform to the Normally Acceptable Noise Exposure in Table 9-2.

9.2.2 Require site-design and noise reduction measures for any project, including transportation projects, that would cause significant degradation of the noise environment due to project effects that could:

(a) Increase the noise level at existing noise-sensitive receptors or areas by 5 dB or more, where the post project CNEL or DNL will remain equal to or below 60 dB;

(b) Increase the noise level at existing noise-sensitive receptors or areas by 3 dB or more, where the post project CNEL or DNL would exceed 60 dB;

This policy shall not be interpreted in a manner that would limit the ability of the County to require noise related mitigation measures or conditions of approval for projects that may generate lesser increases than the above. Special consideration may also be applied to special events or activities subject to permit requirements, or to land use development permits for uses and activities exempted from County noise control regulations.

Table 9-2
Acceptable through Unacceptable Ranges of Noise Exposure by Land Use*
**Outdoor noise exposure measured at the property line of receiving land use*

	LAND USE	COMMUNITY NOISE EXPOSURE DNL or CNEL, dB					
		55	60	65	70	75	80
A	Residential/Lodging – Single Family, Duplex, Mobile Home, Multi Family,						
B	Schools, Libraries, Religious Institutions, Meeting Halls, Hospitals						
C	Outdoor Sports Arena or Facility, Playgrounds, Neighborhood Parks						
D	Office Buildings, Business Commercial and Professional						
E	Industrial, Manufacturing, Utilities, Agriculture						

NORMALLY ACCEPTABLE:
Specific land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements, and can meet the indoor noise standards.

CONDITIONALLY ACCEPTABLE:
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design to meet interior and exterior noise standards, where applicable.

NORMALLY UNACCEPTABLE:
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design to meet interior and exterior noise standards, where applicable.

CLEARLY UNACCEPTABLE: New construction or development should generally not be undertaken.

Based on Draft General Plan Guidelines published by the California State Office of Planning and Research, 2014.

9.2.4 For all new commercial and industrial developments which would increase noise levels above the normally acceptable standards in Table 9-2 or the maximum allowable standards in Table 9-3, the best available control technologies shall be used to minimize noise levels. In no case shall the noise levels exceed the standards of Table 9-3.

9.2.6 Require mitigation and/or best management practices to reduce construction noise as a condition of project approvals, particularly if noise levels would exceed 75 dB at neighboring sensitive land uses or if construction would occur for more than 7 days.

Table 9-3. Maximum Allowable Noise Exposure Stationary Noise Sources (1)

	Daytime(5) (7 AM to 10 PM)	Nighttime (2,5) (10 PM to 7 AM)
Hourly Leq – average hourly noise level, dB (3)	50	45
Maximum level, dB (3)	70	65
Maximum level dB – Impulsive Noise (4)	65	60

Notes:
dB = decibel
(1) As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures
(2) Applies only where the receiving land use operates or is occupied during nighttime hours
(3) Sound level measurements shall be made with "slow" meter response
(4) Sound level measurements shall be made with "fast" meter response
(5) Allowable levels shall be raised to the ambient noise levels where the ambient levels exceed the allowable levels. Allowable levels shall be reduced 5 dB if the ambient hourly Leq is at least 10 dB lower than the allowable level.

9.5.1 Limit single-family residential development to no more than one dwelling and an accessory dwelling unit on an existing parcel or lot of record where the existing or future aircraft noise exceeds 65 CNEL or L_{dn} (see Figure 9-4).

9.5.2 Require all residential and non-residential development proposed within the 60 CNEL or L_{dn} aircraft noise contour (see Figure 9-4) to mitigate interior noise to 45 (CNEL or L_{dn}) or less, and to limit the maximum A-weighted noise level of single aircraft overflights to 50 dB or less.

The project would comply with County General Plan goals and policies related to noise.

Santa Cruz County Code

The Santa Cruz County Code Chapter 13.15 (Noise Planning) addresses noise controls or limits for new noise-generating land uses (County of Santa Cruz 2019). The following sections of the Santa Cruz County Code would apply to the project.

13.15.040 Exemptions.

(A) Noise sources normally and reasonably associated with construction, repair, remodeling, or grading of any real property, provided a permit has been obtained from the County as required, and provided said activities take place between the hours of 8:00 a.m. and 5:00 p.m. on weekdays unless the Building Official has in advance authorized said activities to start at 7:00 a.m. and/or continue no later than 7:00 p.m. Such activities shall not take place on Saturdays unless the Building Official has in advance authorized said activities, and provided said activities take place between 9:00 a.m. and 5:00 p.m. and no more than three Saturdays per month. Such activities shall not take place on Sunday or a federal holiday unless the Building Official has in advance authorized such work on a Sunday or federal holiday, or during earlier morning or later evening hours of a weekday or Saturday.

13.15.050 General noise regulations and unlawful noise.

(A) No use, except a temporary construction operation, shall be permitted which creates noise which is found by the Planning Commission not to conform to the noise parameters established by Table 9-2 and Table 9-3 of the Santa Cruz County General Plan beyond the boundaries of the project site at standard atmospheric pressure.

13.15.070 Noise generating land use.

(A) New commercial and industrial development that would increase noise levels above the normally acceptable range in Table 9-2 or the levels in Table 9-3 of the Santa Cruz County General Plan Noise Element shall require acoustic studies to determine the noise reduction requirements to be included as conditions of approval. Noise levels shall not exceed the standards in Table 9-3, and require, as conditions of approval, site design and sound reducing measures if the project would:

(1) Increase the noise level at existing noise-sensitive receptors or areas by five dB L_{dn} or more, where the post-project L_{dn} would remain equal to or below 60 dB.

(2) Increase the noise level at existing noise-sensitive receptors or areas by three dB L_{dn} or more, where the post-project L_{dn} would exceed 60 dB.

(B) The standards in this section shall not limit the ability of the County to impose conditions of approval on projects that increase noise levels at existing noise-sensitive receptors or areas by any amount. [Ord. 5308 § 1, 2019].

The project would comply with the County Noise Planning code.

3.7.6 Agencies and Agency Contacts

There are no agencies that have wholesale jurisdiction over noise and vibration. See Section 3.6, Land Use, for discussions of permitting in Santa Cruz County.

3.7.7 Permits and Permit Schedule

No permit related to noise and vibration is required by any federal, state, or County agency during construction or operational activities.

3.7.8 References

Caltrans (California Department of Transportation). 2020a. *Technical Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects.* California Department of Transportation Division of Environmental Analysis. April 2020.

Caltrans. 2020b. *Transportation and Construction Vibration Guidance Manual*. California Department of Transportation Division of Environmental Analysis. April 2020.

County of Santa Cruz. 2019. *Santa Cruz County Code Chapter 13.15.* 2019.

County of Santa Cruz. 2024a. "Noise." Chapter 9 in *General Plan and Local Coastal Program.* Adopted November 15, 2022. Effective March 18, 2024. Accessed December 2025. https://cdi.santacruzcountyca.gov/Planning/PolicyPlanning/General,TownVillagePlans.aspx.

County of Santa Cruz. 2024b. "Appendix H: Airport Land Use Compatibility Requirements and County Strategy." *General Plan and Local Coastal Program.* March 18, 2024. Accessed December 2025. https://cdi.santacruzcountyca.gov/Portals/35/CDI/Planning/Policy/GeneralPlanTownPlans/General%20Plan%20Appendices/GP_AppH_AirportLandUseComp_FINAL.pdf?ver=O2rSEMBZMAr5Ws-1TBPYfQ%3d%3d&timestamp=1712077010697.

EEI (Edison Electric Institute). 1984. Electric Power Plant Environmental Noise Guide. 2nd edition. Volume I.

FICON (Federal Interagency Committee on Noise). 1992. *Federal Agency Review of Selected Airport Noise Analysis Issues*. August 1992. Accessed December 2025. https://www.faa.gov/fican/about_ficon_findings_1992.pdf.

FTA (Federal Transit Administration). 2018. *Transit Noise and Vibration Impact Assessment*. FTA Report No. 0123. September 2018.

ISO (International Organization of Standardization). 2024. *Standard 9613-2 (Acoustics – Attenuation of Sound during Propagation Outdoors – Part 2: Engineering Method of Calculation).* Geneva.

NASEM (National Academies of Sciences, Engineering, and Medicine). 2018. *Development of a Highway Construction Noise Prediction Model.* Final Report. Project No. 25–49. September 2018. Accessed December 2025. https://apps.trb.org/cmsfeed/trbnetprojectdisplay.asp?projectid=3889.

OPR (Governor's Office of Planning and Research). 2017. *State of California General Plan Guidelines*. July 2017.

Teplitzky, A.M., C.E. Hickman, T.J. Dubois, M.A. Trykoski, and R.C. Paladino. 1979. "Electric Power Plant Environmental Noise Guide," *Journal of the Acoustical Society of America* 65(103). Accessed December 2025. https://doi.org/10.1121/1.2016906.



SOURCE: ESRI World Imagery

DUDEK

0 335 670 Feet

FIGURE 3.7-1

Land Uses, Vicinity Receivers and Sound Monitoring Locations

Seahawk Battery Energy Storage System Project

INTENTIONALLY LEFT BLANK